

DECEMBER, 1941 - 25 CENTS
30 CENTS IN CANADA

AMERICAN BUILDER

AND BUILDING AGE

THE WORLD'S GREATEST BUILDING PAPER

TECHNOLOGY COPY
PUBLIC LIBRARY
DEC 12 1941
DETROIT



Merry Christmas

Open Letter to Builders:

THE CELOTEX CORPORATION

PLANT
NEW ORLEANS, LA.

CELOTEX
INSULATING CELL BOARD

Dear Mr. Builder:

Uncle Sam's soldiers will be warmer this winter because of Celotex-insulated barracks. Uncle Sam's bombers are, perhaps, being turned out just a little more rapidly because of increased efficiency possible in Celotex-insulated factories. And the men who work on those bombers --and on a thousand and one other defense industries --will be enjoying more winter comfort, too --because of the part Celotex Products play in numerous defense housing projects.

If you have a boy in the army, you are selfishly interested. If you haven't, you are concerned, anyway --as a patriotic American.

But, actually, you have a more direct stake than that in the big part Celotex Products have assumed in the emergency program:

Because untold thousands are now making first-hand acquaintance with Celotex Products for the first time. Good will is being built. And when the emergency is over, you as a builder will profit from that good will --because it will be so much easier to sell those Americans the better quality construction which Celotex Building Products represent!

Celotex Building Products are excellent products. That is why the government has bought so many of them. And that's why Celotex Products have been used --and are being used --to shelter so many millions of Americans in private life.

Your Celotex dealer is eager to cooperate in meeting your current needs. He will fill your orders for Celotex Products whenever he can, though there may be occasional delays. We are taking care of his orders just as fast as we can. You, as a builder, are tremendously important in our business, and we want to spare you all possible inconvenience.

The harder we all work together to get this defense job done, the sooner we can hope to be back to normal. By being patient with Celotex dealers --and with us --you are helping us to do our part.

Thank you!

Sincerely,

Marvin Greenwood
Marvin Greenwood
General Sales Manager

CELOTEX

REG. U. S. PAT. OFF.

BUILDING PRODUCTS

INSULATING SHEATHING, LATH, INTERIOR FINISHES

ASPHALT SHINGLES, SIDING, ROLL ROOFING

HARD BOARDS, ROCK WOOL BATTES, BLANKETS

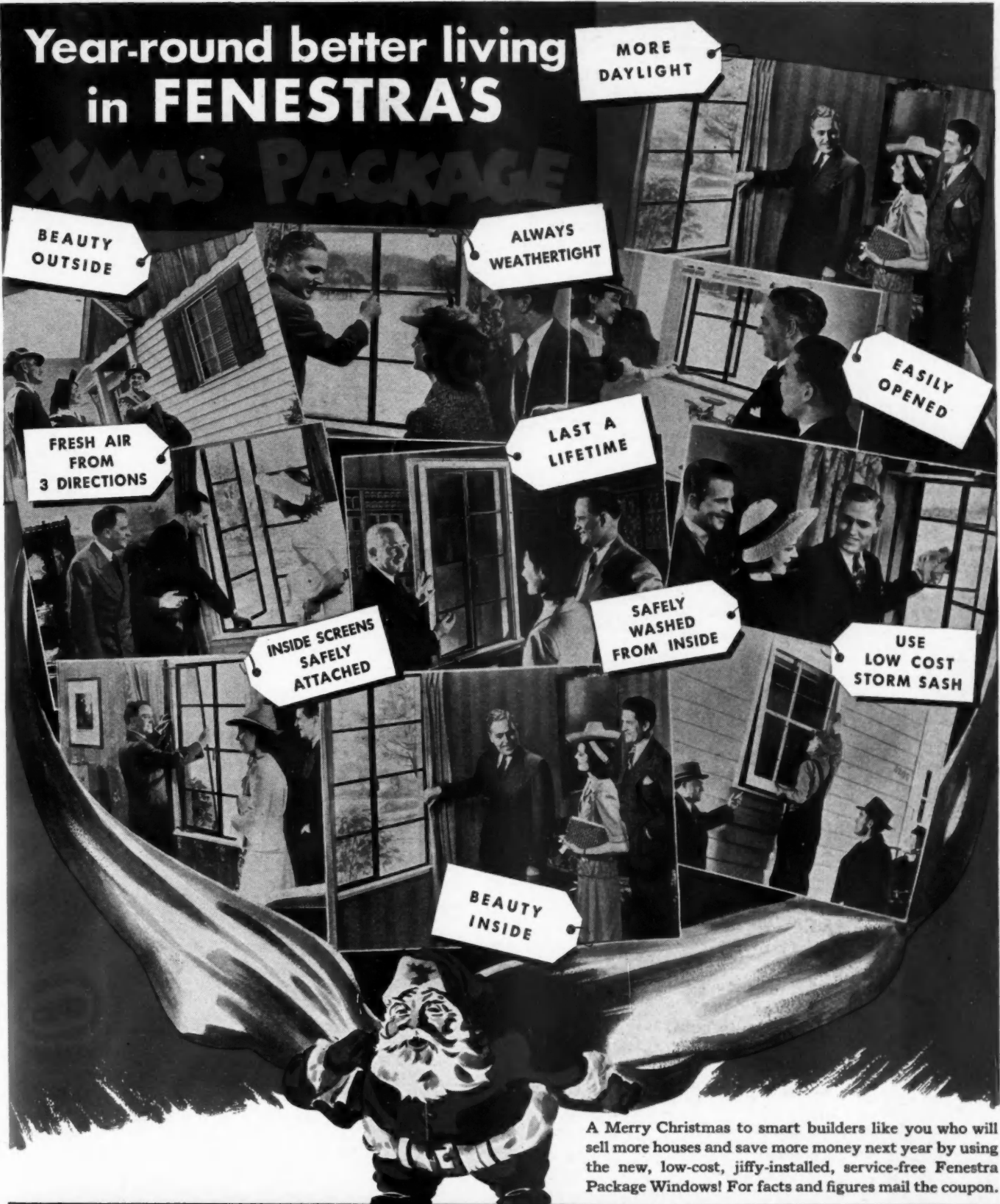
GYPSUM PLASTERS and LATH and WALL BOARDS

Sales Distributors Throughout the World

THE CELOTEX CORPORATION, 919 N. MICHIGAN AVE., CHICAGO, ILL.

Year-round better living in FENESTRA'S

XXMAS PACKAGE



A Merry Christmas to smart builders like you who will sell more houses and save more money next year by using the new, low-cost, jiffy-installed, service-free Fenestra Package Windows! For facts and figures mail the coupon.

THE NEW LOW-COST

Fenestra
PACKAGE WINDOW

DETROIT STEEL PRODUCTS COMPANY
2260 East Grand Boulevard, Dept. AB-12,
Detroit, Michigan

Please send me the new Fenestra Package Window Catalog and Price List.

Name _____

Address _____

City _____ State _____



**We're Building Better
Sidewalls... Faster...
Thanks to these FREE
CONSTRUCTION
BLUEPRINTS...!**

Detail Drawings of . . .

SHINGLE APPLICATIONS

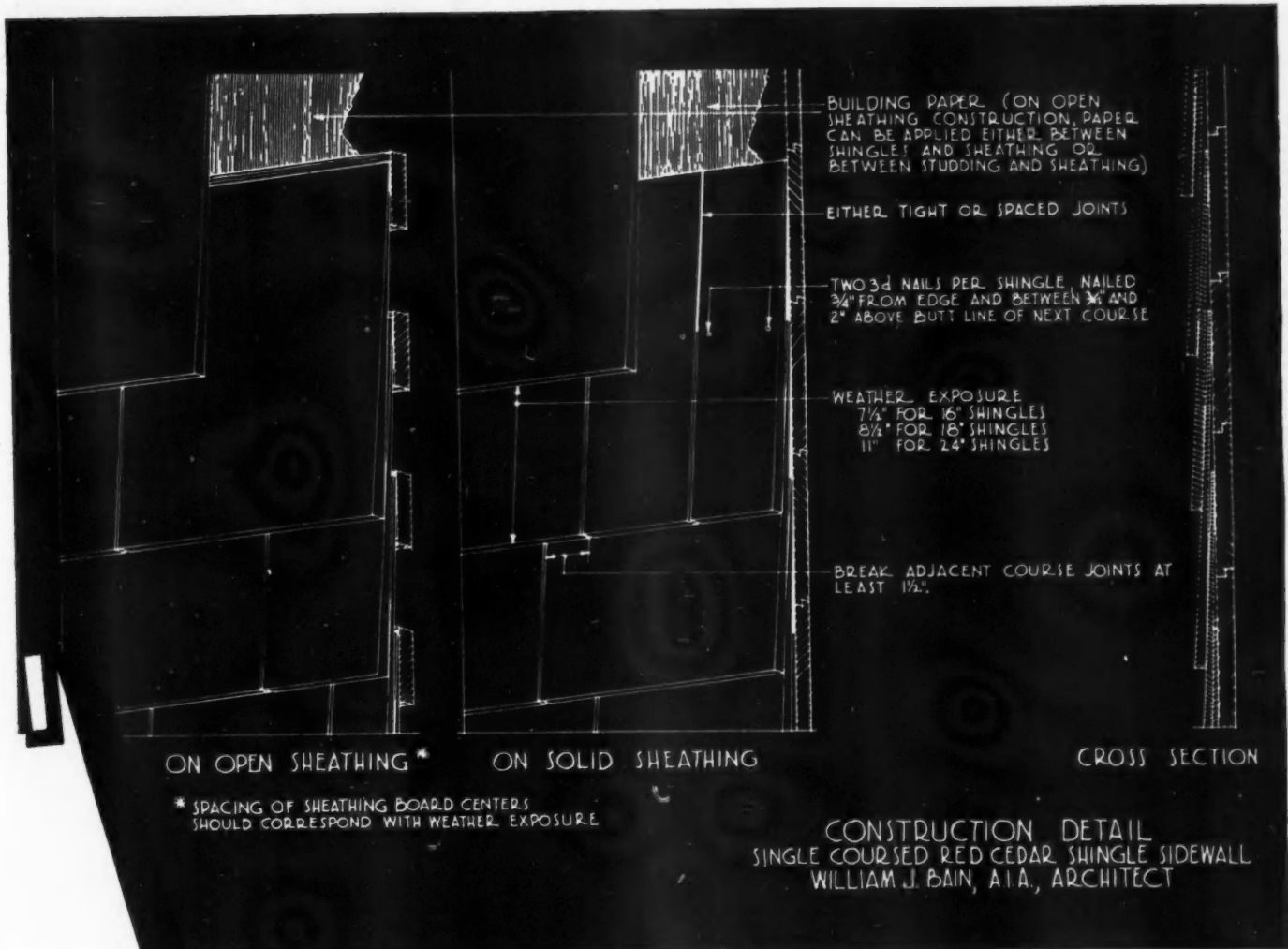
. . . Save Time and Money for You

"BUILD WELL AND BUILD FAST!" That's the responsibility Uncle Sam has given to Builders throughout America. Defense Housing is needed now—and wise Builders are taking advantage of every available method to complete their contracts in record time.

The demand for sidewalls and roofs of Red Cedar Shingles is increasing daily; and, to assist you in applying them quickly, economically and efficiently, a number of Blueprints have been prepared. These detail drawings illustrate the proper

methods for applying Double-coursed and Single-coursed sidewalls, the Standard Red Cedar Shingle Roof, the Staggered Roof, and Re-roofing over old roofs (an important feature for contractors who want to get their share of the defense remodeling business).

Using Red Cedar Shingles, the builder can produce a variety of different roof and sidewall styles by merely changing the method of application. These applications are fully explained in the Blueprint Series.



ON OPEN SHEATHING * ON SOLID SHEATHING CROSS SECTION

* SPACING OF SHEATHING BOARD CENTERS SHOULD CORRESPOND WITH WEATHER EXPOSURE

CONSTRUCTION DETAIL SINGLE COURSED RED CEDAR SHINGLE SIDEWALL WILLIAM J. BAIN, A.I.A., ARCHITECT

SINGLE-COURSING—One of the Many Styles of Red Cedar Shingle Application

Here is another blueprint guide to assist you in building better sidewalls of Red Cedar Shingles. The methods shown on this architect's drawing have been carefully designed to save steps for builders, to provide a standard application procedure that will help you build sturdier, more attractive Single-coursed sidewalls at greater economy and with time-saving efficiency

SINGLE-COURSING is one of the many Red Cedar Shingle Applications covered in our Free Blueprint Service. You will find all of the guides useful in your building business. All you have to do to receive the complete series is to fill in the coupon below, tear off and mail. Send for them today! You'll save steps—and that means saving dollars too!

RED CEDAR SHINGLE BUREAU
Seattle, Wash. Canadian Office: Vancouver, B. C.

CERTIGRADE
Red Cedar Shingles



SOLD EVERYWHERE BY LUMBER DEALERS

RED CEDAR SHINGLE BUREAU AB1241
5509 White Building, Seattle, Washington, U. S. A.
Gentlemen: Please send, free, a set of Architectural blueprints of Shingle Applications.

NAME _____
ADDRESS _____
CITY _____ STATE _____

YOU'VE BEEN

TO BUILD 300,000 DEFENSE HOMES...

Now Is the Time to Do the Job Right... So There
Will Be No Kick-Backs Later!

ALL OF US in the building business have been issued our marching orders. You've got to build 300,000 homes, not one of which can cost more than \$6,000. You've got to build those homes before the snow melts next spring. You've got to get defense workers into those homes — happily.

You've got the job of building 300,000 homes that will stay rentable or saleable, after the defense job is done, and peace is with us again. You can't build shoddily—you must build for the future.

Let's not short-change the public! Let's build defense homes fundamentally sound. Let's build good homes—with good foundations, with good structural framework, with good walls and roofs, with *good windows*.

The Andersen Corporation is ready to help you do this job right. We're making windows—windows you can put in your defense homes with the confidence that they'll satisfy, both from the standpoint of performance and cost.

A word or two further regarding cost. You can buy cheaper windows than Andersen. But you can't buy better windows. You can't buy windows that give you any more for your money. Andersen Windows have frequently been used successfully in low-cost homes. They were used exclusively in the original \$3,200 Design for Happiness homes, which cost owners only a dollar a day. Hundreds of other low-cost homes have been built using Andersen Windows. Their builders have built soundly, using good windows, without getting costs one speck out of line. These builders report that Andersen Windows are a big factor in the ready sale of these homes.

Don't take a chance on leaky, drafty, balky windows. Use windows you know are good. Use windows that don't deplete needed stocks of metals. Use windows that will save coal and oil needed for defense. Use windows that can be installed in a hurry. Use Andersen Lifetime Windows.

★ Andersen Horizontal Gliding Windows

Never before a window like this! It glides from side to side, not up and down, or in and out. No weights, no hinges, no springs. Sash lift right out for cleaning. Weathertight, leak-proof, weatherstripped, factory-fitted. Wood frame screen with 18 mesh bronze wire. Double glazing optional.

★ Andersen Narroline (Double Hung) Windows

This completely weather-stripped wood window unit is made of clear pine, toxic-treated to prevent decay and termite damage. Sash are easy to operate, and are counterbalanced the trouble-free way with flat weights hung on sash chains. Leak-proof frame, weathertight wide blind stop construction.

★ Andersen Casement Windows

The most weathertight window available today. Outswinging sash, equipped with inside screen and removable double glazing (optional). Completely weather-stripped. Toxic-treated clear pine, precision fitted at the factory. Sash operated by special hardware working independently of screen.

★ Andersen Basement Windows

A completely prefabricated, packaged basement window unit, protected against moisture decay and termite damage. Sash hung in frames. Opens to two positions. Completely weather-stripped. Equipped with screen and storm sash (optional). Sash glazed and hung in frames with all hardware in place.

Write Bayport for Details or
See Sweet's Architectural Catalog

Andersen Corporation

BAYPORT, MINNESOTA

DRAFTED



SUNNY, AIRY

Sunny homes, well ventilated homes, are built with generous window areas. Use Andersen stock-size window units in combinations to achieve maximum fenestration, economically.



INDIVIDUALITY

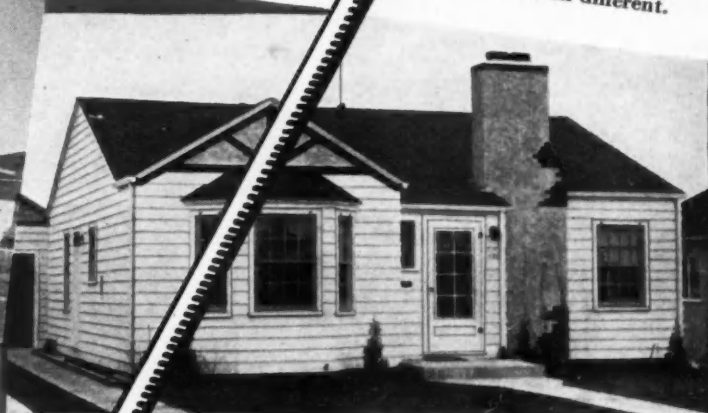
A home gains individuality by
With the same floor plan,—
window treatments and make

varying window treatments,
you can vary Andersen win-
small homes look different.



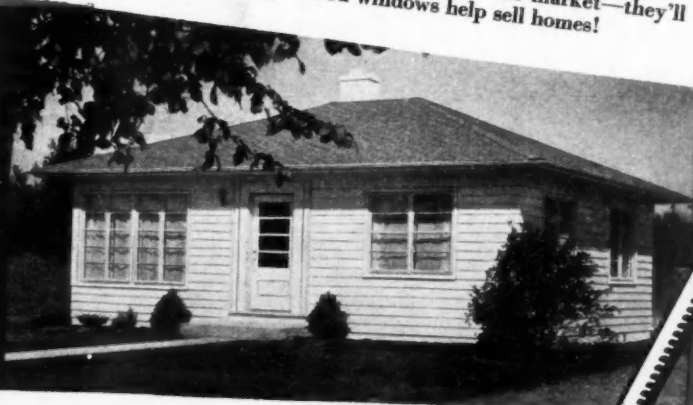
RENTABLE, SALEABLE

Andersen window units give a small home an attractive appearance. Attractive homes won't be a drug on the market—they'll sell or rent permanently. Good windows help sell homes!



ECONOMICAL

Coal and oil are vitally needed for defense industry. Andersen windows are completely and efficiently weather-stripped — save fuel. They're made to operate easily — for a lifetime! That saves on repair bills.



SAVE TIME

Andersen window units are completely prefabricated. Installation is a matter of minutes. Time-wasting, cut-and-try methods of installation are eliminated. When your labor supply is low—time is valuable!

★ WOOD WINDOWS NO DRAIN ON DEFENSE RESERVES

There is no shortage of lumber. When you use Andersen wood window units, you make no demand on metals urgently needed by defense industries.

ANDERSEN WINDOWS can be furnished by any established lumber and millwork dealer; are readily available in most sections from the stocks of near-by distributors.

Only the Rich CAN AFFORD POOR WINDOWS

AN ADVERTISEMENT THAT WILL HIT HOME WITH HOME BUYERS

● This ad is one of an eye-catching series that's selling GAS and Gas appliances to millions of prospective home buyers . . . many right in your neighborhood! Put Gas to work selling homes for you! Build it into your homes from now on . . . it's the most widely accepted modern fuel!

"Confidentially—He..."



"Jim has decided that he is the one to select our new range—so he's looking 'em over in a very big way! And what discovers the dear innocent is making about the economy and efficiency of Gas as a fuel . . . the cleanness of Gas—You'd think he was telling me something—Bless him!

I could have told him at the start we'd get a Gas range—because I want the speed of Gas . . . the instant high heat of Gas that starts things cooking in a jiffy . . . the flexibility of Gas that gives me any degree of heat I want—Because an up-to-the-minute Gas range will save me no end of time and work. Because, I've got the beauty I want all picked out—confidentially!"

"Confidentially—She..."



"JEAN needs a man's advice about important things—like this new range we're buying! Sure— I know modern Gas ranges have signal simmer burners . . . oven heat control . . . "smokeless," high-speed broilers . . . insulated ovens . . . automatic lighting . . . and dozens of stream-lined gadgets— Woman stuff!

What sold me is the fact that a Gas range will last for years . . . and won't need costly replacements— That Gas service is dependable—year in, year out—in any weather! Of course I have been thinking about the swell juicy steaks . . . the wonderful biscuits Jean could turn out on a new Gas range—confidentially!"



THIS SEAL certifies that the Gas range carrying performance standards established by the Gas industry. It stands for the "certified performance" of the range you buy—regardless of the make of the range. Today 24 of America's leading range manufacturers offer CP (certified performance) models. Look for the CP seal when you buy.



GAS



THE WONDER FUEL FOR COOKING

Show your husband (or wife) the new Gas ranges at your Gas Appliance Dealer's or Gas Company. The many exclusive advantages of modern Gas service have been made possible by the Gas utilities of America which, through their laboratories and other agencies, are constantly improving their service to you.

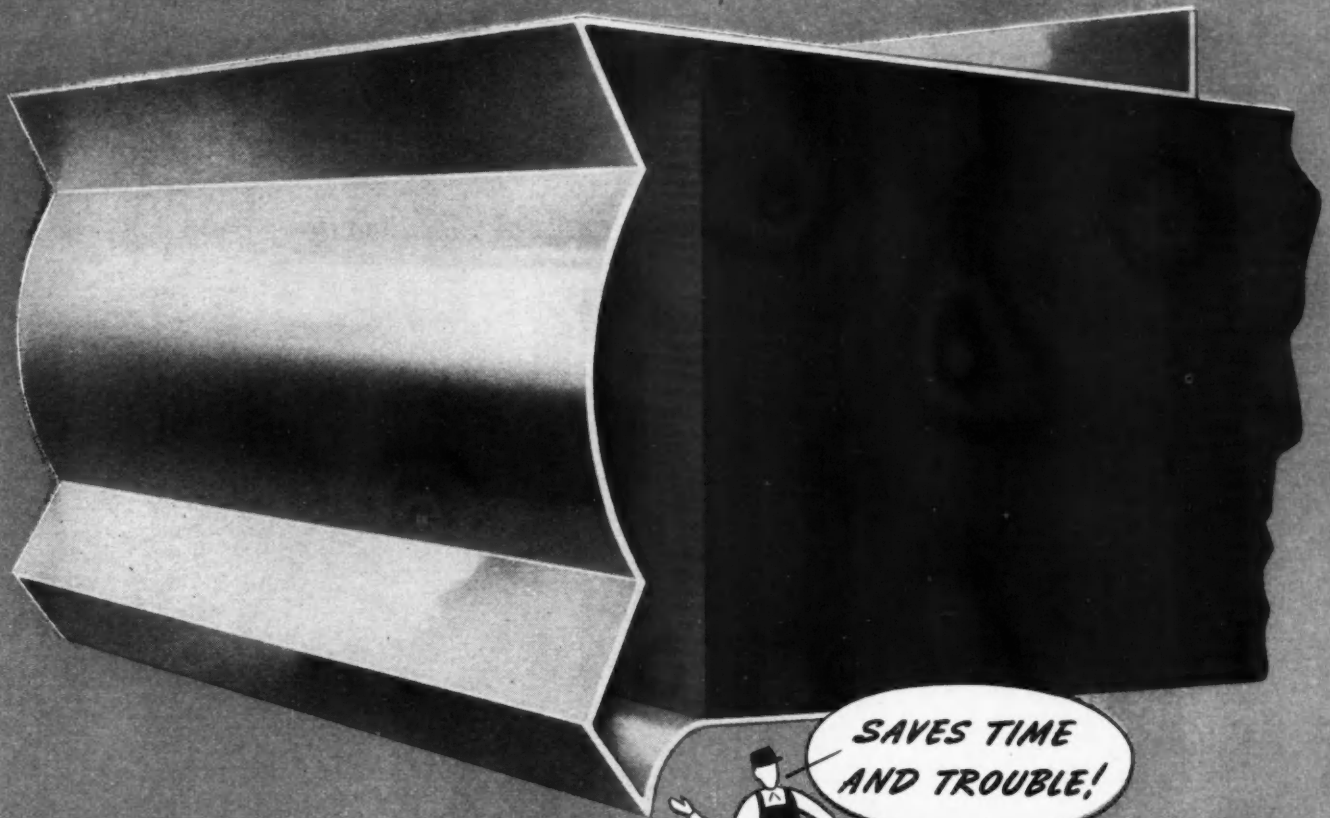
AMERICAN GAS ASSOCIATION

LET GAS DO THE BIG JOBS—COOKING • WATER HEATING • REFRIGERATION • HOUSE HEATING

AMERICAN GAS ASSOCIATION

FULL PAGE
FOUR COLOR
ADVERTISEMENTS
LIKE THIS
WILL APPEAR
IN—Life • Good
Housekeeping
Ladies' Home
Journal
McCall's
Better Homes
and Gardens
Woman's Home
Companion

FREE I
The Ka
The Ka



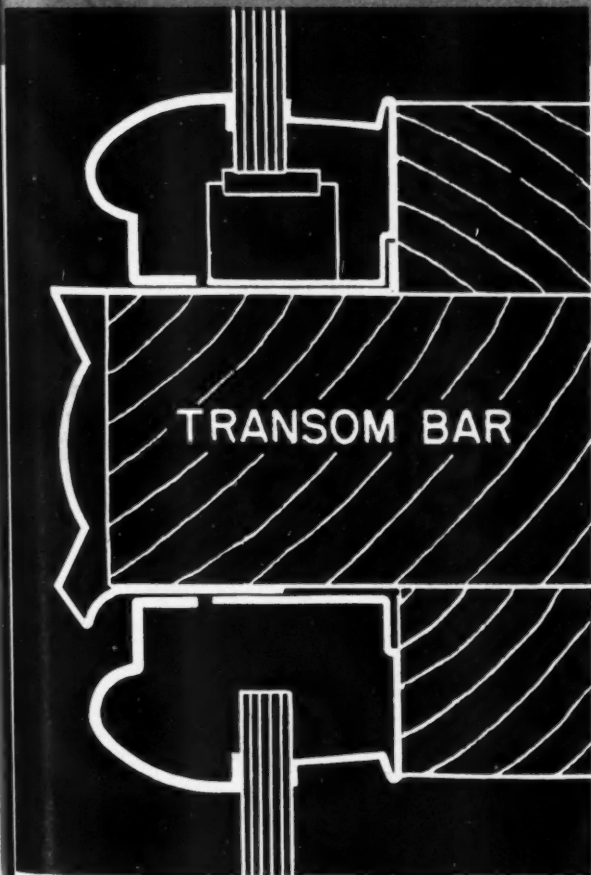
SAVES TIME
AND TROUBLE!

Kawneer MOULDINGS FIT STANDARD SIZES OF LUMBER

THE complete Kawneer line of Rolled Store Front Construction, long a helpful inspiration to store front designers, is designed to fit standard sizes of lumber. This is a feature of great value to both architect and builder—results in a definite saving of both time and trouble in planning, specifying, and installing.

Kawneer Rolled Store Front Construction meets every other requirement of today. Full resiliency eliminates glass breakage; bronze members assure lasting beauty, low maintenance and trouble-free service. Get latest data from Kawneer distributor, from SWEET'S, or by writing THE KAWNEER COMPANY, NILES, MICHIGAN.

Details at left show how Kawneer Moulding No. 7221 and Sash No. 85 are installed on standard lumber at transom bar.

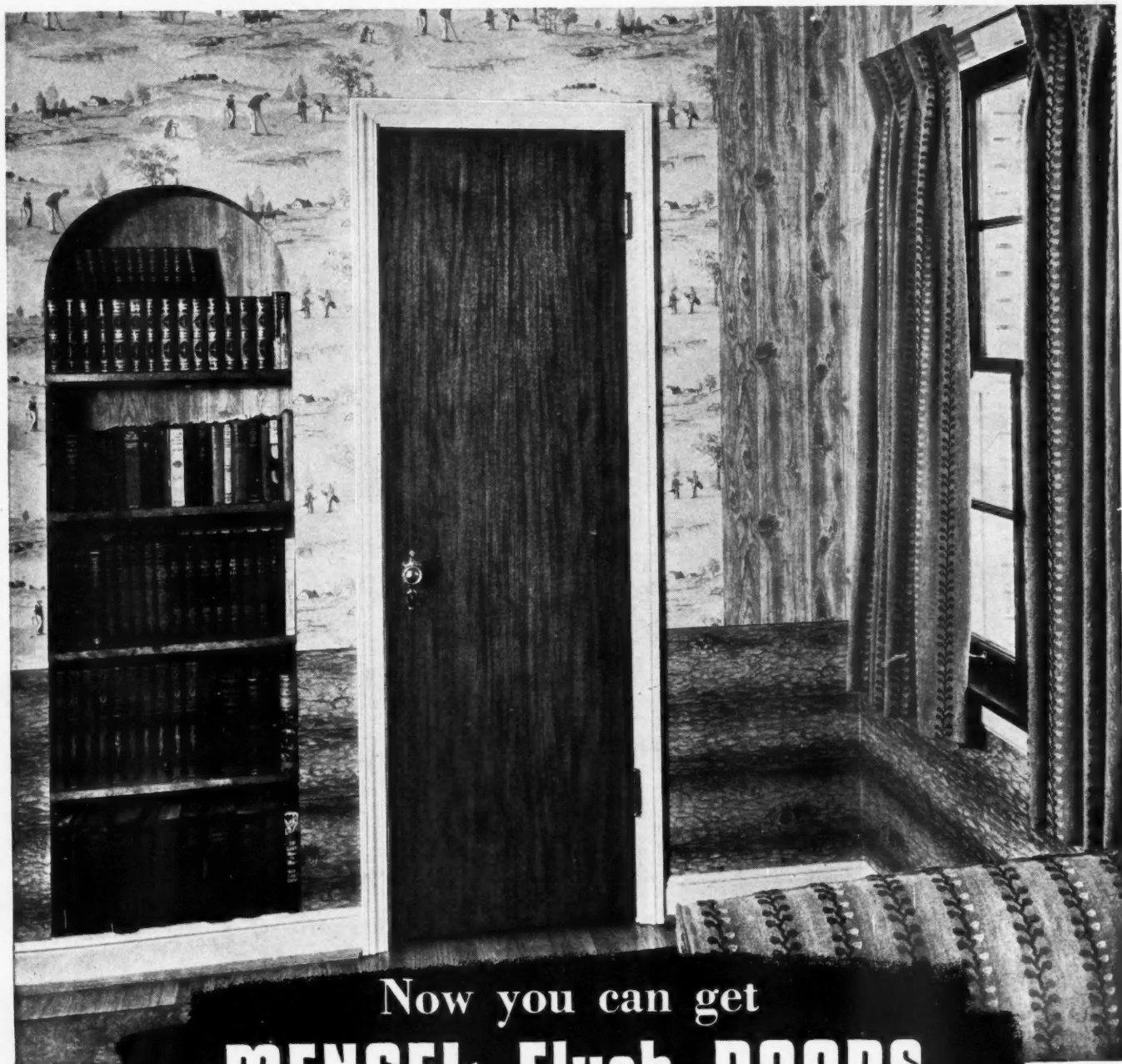


TRANSOM BAR

FREE ILLUSTRATED STORE FRONT MAGAZINE.
The Kawneer Front will be sent on request. Write to
The Kawneer Company, Niles, Michigan.

IT'S EASY TO DESIGN AND INSTALL

Kawneer
STORE FRONTS



Now you can get
MENGEN Flush DOORS
 PROMPTLY!

THREE months ago so many new friends were just discovering the advantages and economies of Mengel Flush Doors that we were *swamped* by the demand, and had to withdraw prices.

Since then we have almost doubled our production facilities . . . and you can now order Mengel Doors with the assurance of prompt delivery.

Mengel Flush Doors are beautifully-engineered, hollow-grid products, resin-bonded and permanently sealed against moisture—strong, light, durable and economical. And the faces are made with Mengel Veneers—veneers that have for years been preferred

by manufacturers of top-quality furniture, pianos, and architectural panelling.

Despite their unquestioned excellence, Mengel Flush Doors are *NOT* more expensive. Write for full information today. The coupon is for your convenience.

The Mengel Company, Incorporated
 1124 Dumesnil Street, Louisville, Ky.

Gentlemen: Please send me full information about Mengel Flush Doors . . . Also about Mengel Bord .

Name _____

Address _____

City _____ State _____

MAN! WHAT A BUY!
NEW 8 in. SKILSAW
only \$115



**INTRODUCING
 MODEL "825"**

This New SKILSAW, that cuts to a depth of 2 5/8 in., is an outstanding addition to the world's largest selling line of portable electric saws. SKILSAW MODEL "825" embodies every new improvement that makes for easier, faster and more economical sawing...that provides topnotch performance over a long span of years.

- 8 1/4 inch blade. Cuts 2 5/8 in. deep.
- Bevel-cuts 2 1/2 in. lumber at 45°.
- Only 18 in. long. Weighs 18 1/2 lbs.

SKILSAW MODEL "825" is more powerful, more efficient, more quickly adjustable for depth and bevel cutting. Ideal for wood, metal, stone, tile and concrete. Ask your dealer for a demonstration on your own work.

SKILSAW, INC. 5031 ELSTON AVE., CHICAGO

New York • Boston • Buffalo • Philadelphia • Cleveland
 Detroit • Kansas City • Atlanta • New Orleans • Dallas
 Los Angeles • Oakland • Seattle • Toronto, Canada



Put up
THE "FOR SALE" SIGN
 THAT
Comes down
IN A HURRY!

●
**Houses For Sale Don't Stay That Way
 Long When Equipped With Glass
 Designed For Happiness**

● If you'd like to see a record-breaking crowd at your next "Open House", simply install Libbey·Owens·Ford glass features Designed for Happiness—and let the fact be known.

Every family which has dreamed of having their own home undoubtedly has seen the forceful national advertising campaign of Libbey·Owens·Ford. In these advertisements they have admired the natural color photographs of unusual glass features. They have said "just-what-we-wanted" when they saw built-in mirrors which seem to double room areas. They have nodded approval at Window Conditioning storm sash, which cuts fuel bills as much as thirty per cent. They have thrilled at the beauty of bathrooms dressed in easy-to-clean, never-fading Vitrolite glass walls.

Wealthy? They don't have to be. For today, Libbey·Owens·Ford glass features Designed for Happiness are being used in homes of all price classes. Your local distributor or dealer will help you select the units best fitted to your particular homes. He has an operating manual which gives you suggestions of the best ways to publicize, advertise and sell your homes. Yes, and he will gladly furnish that "For Sale" sign too—the one you'll take down almost before you can get it up! Libbey·Owens·Ford Glass Company, Dept. AB1241, Nicholas Building . . . Toledo, Ohio.

IRRESISTIBLE is the word for these Picture Windows glazed with clear L·O·F Polished Plate Glass. Your feminine prospects will say—"I love this room."



LADIES MUST PRIMP, so this handy check-up station in the kitchen has a buy-appeal far greater than the cost of inclusion in homes you build.



L·O·F LIBBEY·OWENS·FORD
glass Designed for Happiness

9 BUYERS THE FIRST 10 DAYS

For These G-E Equipped Homes!



MELVIN H. JENSEN,
successful Salt Lake City builder.
Read his letter below!

JENSEN-MORGAN & CO.

BUILDERS
REALTORS
INSURANCE
RENTALS

27 FIRST NORTH TEMPLE
SALT LAKE CITY, UTAH

July 7, 1941

General Electric Home Bureau,
Bridgeport, Conn.

Gentlemen:

Last June I offered for sale the first nine of twenty-five completely equipped General Electric homes in my new Mountain View Park development. Tens of thousands of people inspected them and all were sold within ten days with prospects for many more which would assure me of at least 50 homes this year. In each case buyers were impressed with the completeness of livability, thrilled at the well planned General Electric kitchen which included an electric sink, disposal, range, refrigerator, steel cabinets and a wall clock. To complete the ensemble and remove all doubt in the buyers' minds as to the quality of my homes, General Electric Adequate Wiring and Winter-Air Conditioning were included.

In the future I will strive to develop and build a high quality complete General Electric equipped home to fit the requirements of people in the lower income brackets, because I know that this class of people must have high quality equipment such as General Electric to assure them of low monthly maintenance and operating costs.

I want to take this occasion to thank you and the General Electric Company for the valuable assistance you have given me in planning my kitchens, mapping out my advertising program, training my salesmen, and providing the missing link to my activity. I hope that other builders will recognize the value of the General Electric Home Bureau Program and join hands with me in providing all Americans with homes for "Better Living".

Yours sincerely,

Melvin H. Jensen
(Signed) Melvin H. Jensen, Builder
JENSEN-MORGAN & COMPANY



\$3900 TO \$6000 HOUSES



COMPLETE WITH G-E KITCHENS



AND G-E HEATING PLANTS

Why not let the General Electric Home Bureau help you as it is helping Melvin Jensen and hundreds of other builders today? You should have all the facts on the General Electric Home Bureau's complete House Merchandising Plan. Here's a free service that includes architectural engineering, promotional and advertising aids. The coupon will bring you complete information without obligation. Mail it today!

General Electric Home Bureau,
Dept. HB-11812
1285 Boston Avenue, Bridgeport, Conn.

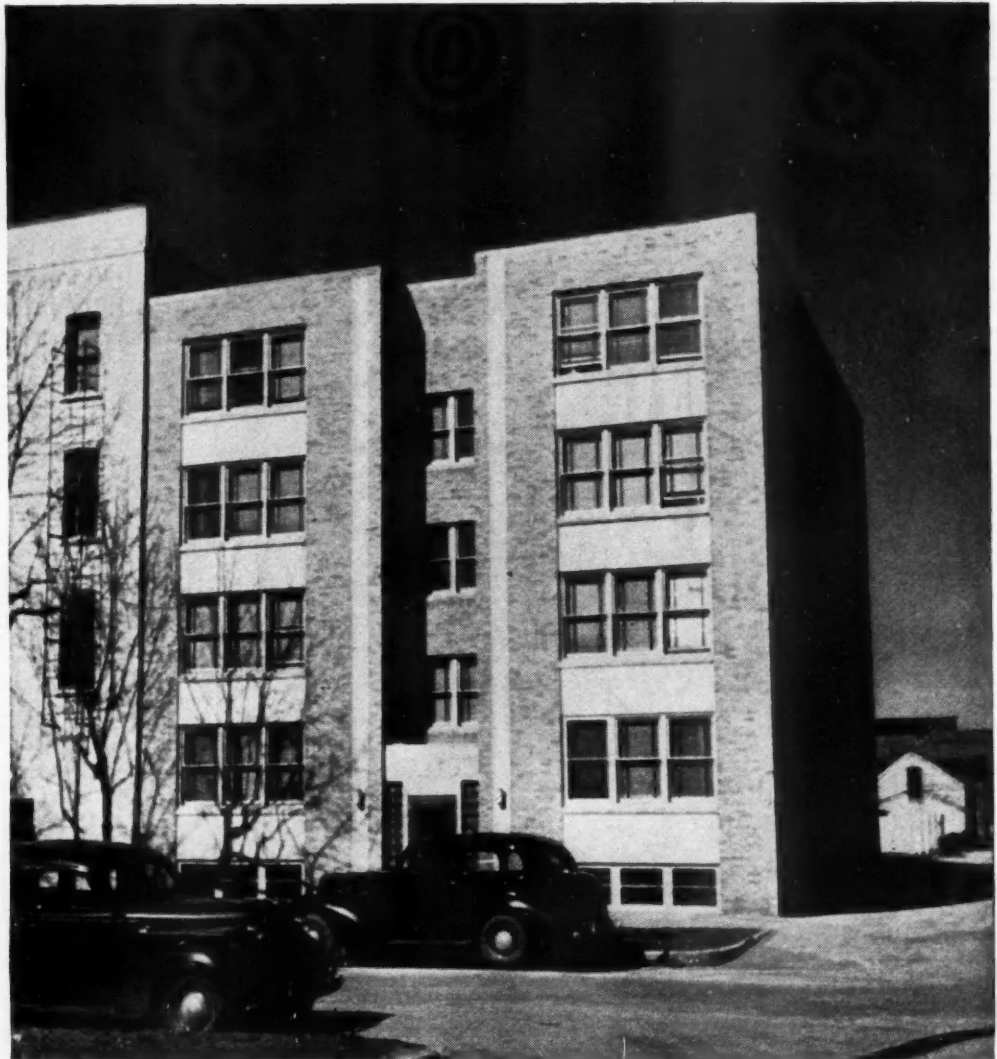
Please send information on House Merchandising Plan.

I am a builder for resale
I am an Architect
I am building my own home

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

GENERAL ELECTRIC

- **BURTON HOTEL** addition, Mankato, Minn.
- **OWNER:** Harry C. Gilbert
- **ARCHITECT:** Wick and Stanfield, Mankato, Minn.
- **CONTRACTOR:** G. Kleinschmidt and Son, Mankato, Minn.
- **DEALER:** Fowler and Pay, Mankato and Botsford Lumber Co., Mankato, Minn.



To men who pour concrete in freezing weather

In Minnesota winter is *WINTER*. Knowing they would have to work in temperatures below zero a year ago, the contractors made a smart move. They used Lehigh Early Strength Cement . . . 600 barrels in the superstructure. And, when the job was done, they were entitled to pat themselves on the back.

They saved 4 to 5 days in the construction of each floor, thus finishing three weeks ahead of time, giving the owner that much extra occupancy. Forms were removed 48 hours after pouring concrete, saving \$250 in forms alone. Plus a saving of \$250 in heat curing costs.

Besides saving on forms, curing time and overhead, Lehigh Early Strength Cement makes better, denser concrete. If you are building in winter, especially if you are working against time, you can't afford not to use it. Write the Lehigh Service Department for complete information.

Lehigh

EARLY STRENGTH CEMENT
for service-strength concrete in a hurry

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

PREFABRICATION IS PRACTICAL

and



is the rule with the leading prefabricators!

Every month, Douglas Fir Plywood is being used as a basic structural material in more than 1000 prefabricated buildings!

Prefabrication has come of age. In plants from coast to coast, houses are being produced on virtually a production line basis. For prefabrication speeds construction, minimizes overhead, permits greater accuracy and control, brings about substantial economies and provides better shelter.

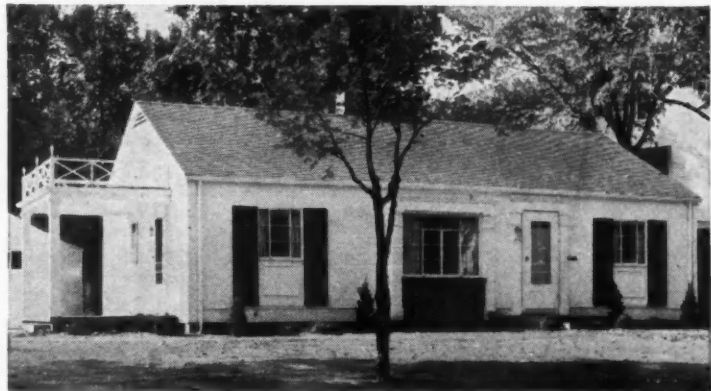
Why Plywood is used extensively

Douglas Fir Plywood is by far the favorite material for prefabricated structures. It is being used as the basic structural material on more than 1000 prefabricated buildings a month. The reasons for this are: (1) *Its physical properties.* Plywood combines toughness, durability, amazing strength and rigidity with light weight. It is virtually kick-proof and scuff-proof. It provides excellent insulation, shuts out wind and dust and effectively absorbs sound. (2) *Its large sizes, its many thicknesses and its variety of types and grades.* (3) *Its ability to take any desired finish.*

Send for "How to Build Houses Fast"

If you are a multiple-unit builder at present—or plan to be—you will be interested in the new 16-page booklet, "How to Build Houses Fast." This free manual tells the story of prefabrication with plywood and contains photographs of the operations and houses of the nation's leading prefabricators.

But even if you build only one house at a time, Douglas Fir Plywood can help you save man-hours and build better. A Dri-Bilt with Plywood manual, describing the use of plywood for traditional on-the-job construction, is yours for the asking. Remember, Dri-Bilt with Plywood homes are accepted by F.H.A. and approved in the Uniform Building Code. Write Douglas Fir Plywood Association, Tacoma, Washington.

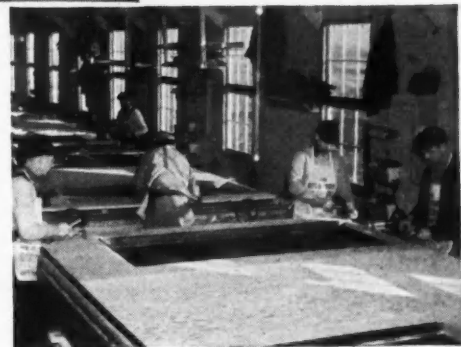


HOUSES OF EVERY SIZE can be prefabricated to good advantage. This particular house, one of the sixteen very attractive designs offered by the National Homes Corp., Lafayette, Indiana, is Douglas Fir Plywood inside and out.

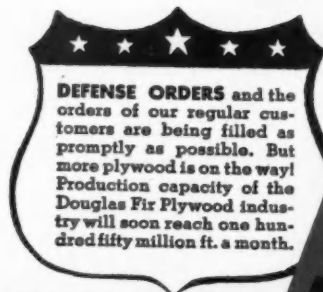


PLYWOOD INTERIORS are permanently beautiful—crack-proof, scuff-proof, kick-proof. This photograph shows the smart living room in one of the houses built by Bates Prefabricated Structures, Oakland, California.

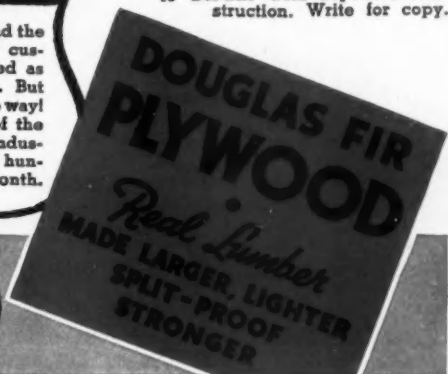
THE WALL SECTIONS of many prefabricated structures are quickly and accurately assembled on table jigs like these while the foundations are being laid. Because the bulk of the work is done indoors, no time is lost due to bad weather or cold. This scene was taken in the plant of National Homes Corp., Lafayette, Ind. "How to Build Houses Fast" describes construction methods more fully.



FREE PLAN BOOKLETS show how N.H.F. village and farm house plans can be adapted to Dri-Bilt with Plywood construction. Write for copy.



DEFENSE ORDERS and the orders of our regular customers are being filled as promptly as possible. But more plywood is on the way! Production capacity of the Douglas Fir Plywood industry will soon reach one hundred fifty million ft. a month.



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

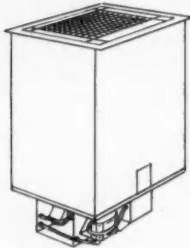


Here are SIX OIL FURNACES for DEFENSE HOME HEATING

14 Sizes—Heat Outputs from 46,000 BTU to 125,000 BTU



SIX UNITS... 14 SIZES

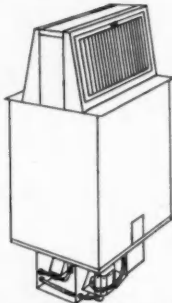


STANDARD REGISTER FLOOR FURNACES

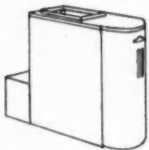
Low installed cost. Saves steel, saves labor, saves fuel. Factory assembled. Needs NO ducts, no basement. 46,000 BTU or 68,000 BTU register output. Exclusive full automatic control with electric ignition, or manual control.

DUAL WALL REGISTER FLOOR FURNACES

As above, but with warm air discharge through two registers for more uniform heat distribution. No ducts, no basement. 46,000 BTU or 68,000 BTU heat output. Available only with full automatic operation and electric ignition.



ALL H. C. LITTLE FLOOR FURNACES ARE LISTED BY THE UNDERWRITERS' LABORATORIES.

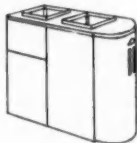
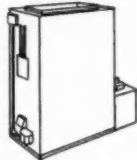


AUTOMATIC "COTTAGE"

Gravity warm air basement furnaces. Four sizes—50,000 to 95,000 BTU at bonnet. Minimum ductwork. Quiet operation, fully automatic, electric ignition.

MANUAL "COTTAGE"

Lowest in cost of any H. C. Little furnace. Very quiet operation. Manual control only.



SIZE A, TYPE AC

Small-home winter air-conditioning, basement type. 77,000 BTU at bonnet. Filters, blower, automatic operation, electric ignition.

SIZE B, TYPE AC

As above, but with 125,000 BTU output.



ALL UNITS LISTED BY UNDERWRITERS' LABORATORIES... ELIGIBLE FOR PREFERENCE ORDERS UNDER PM-1192.

AN OUTSTANDING UNIT

Eight times out of ten, you can solve one of your biggest problems—which is to provide modern oil heat at low installed cost in defense homes—by using H. C. Little oil-burning Floor Furnaces. Listen to C. Edgar Wood, sales agent for 112 small homes at Dundalk, Md., for which the builders chose H. C. Little Floor Furnaces: "We feel that the (H. C. Little Oil Floor Furnace) is the best heating unit for small homes on the market today... we do not hesitate to recommend your unit to anyone who is interested in heating a small home."

REASONS FOR SUPERIORITY

Pioneered by H. C. Little over nine years ago, the Oil Floor Furnace now has a record of thousands of successful installations. Here's why: Low first cost. Low-cost installation... compact, factory assembled... saves metal, no ducts... no basement needed. Low upkeep... burns cheap No. 3 furnace oil... compact vaporizing burner, no moving parts. Listed by Underwriters' Laboratories. Manual control or full Automatic operation, electric ignition and Thermostatic control. Single floor register or dual wall register models available. (See panel at left.)

OTHER SMALL-HOME FURNACES

Also designed exclusively for small homes are the other oil furnaces shown. Warm air, basement type, they feature low installed cost and money-saving operation. With them and the oil Floor Furnaces you have six time- and money-saving solutions to Defense Home heating.

MONEY-SAVING BURNER

All units are equipped with the trouble-free H. C. Little Burner... the only vaporizing burner with full automatic operation and electric ignition. Listed by the Underwriters' Laboratories... burns No. 3 oil... no moving parts to wear out... no pilot light to cause soot or carbon. Also available with Manual Control.



Send for Free Booklet!

Write for your free copy of "Six Low-Cost Oil Furnaces for Defense Homes." This 12-page booklet is chock-full of down-to-earth facts: specifications, installation diagrams and cut-away photos. Send for it today!

H. C. LITTLE BURNER CO.
San Rafael, California

Please send me free, "Six Low-Cost Oil Furnaces for Defense Homes."

Name _____

Address _____

City _____ State _____

H. C. LITTLE Burner Co.
Home Office: San Rafael, California

WAREHOUSE STOCKS and Direct Factory Representatives in Boston, Newark, Baltimore, St. Petersburg, Chicago, Des Moines, Seattle and Portland (Oregon)

THE MIRACLE OF DEFENSE CONSTRUCTION

by Frazier Hunt



FOUNDATIONS FIRST. Before the airplane hangar (right) could go up, the hard-working bulldozer (above) had to dig up and level out the foundation. The bulldozer, with its tractor tread and colossal roar, is the building industry's private "tank."

AMONG THE UNSUNG HEROES of America are the "bulldozers"—those giant machines which, like faith, can move mountains.

The whole story of American preparedness starts with those snorting monsters and with men with blueprints and steam shovels, cement mixers, pile drivers, and the thousand and one other tools that are used on any kind of a building job.

Because bombers don't grow on trees. And tanks don't bloom on rose bushes. And you don't dig TNT out of the ground as you do potatoes. All those weapons are made in great factories, giant plants—in buildings that have to be planned by engineers and architects, and built by carpenters, riveters, welders and roofers, working from sunup to sundown.

Before the tank, before the bomber, before the army, had to come the bulldozer-operators, the masons, the steel workers, the electricians, the plumbers, the painters and the whole construction gang . . . And what an almost inconceivable number of buildings are needed for National Defense! Around 1400 separate housing units in an average cantonment; close to a thousand separate buildings in a powder factory; hundreds of sheds and storage bins at a Navy Yard; houses for the workers near many new plants—ground to be cleared, streets to be laid out, roads built, water mains installed, whole cities built from the ground up. What is the construction business? Brother, it's everything you *don't see*—multiplied by ten! You see the tank on the ground or the plane up in the air, but if the construction industry hadn't done *its* job, there wouldn't be any tank and there wouldn't be any plane, either.

To realize how the building industry really

has performed miracles, you must realize that this industry had to start from scratch. Particularly was this true of those architects and large construction companies which, during the great American building era of the twenties, had sent beautiful edifices of steel, stone and cement soaring high into the sky. These builders of great new cities, of office buildings, of mammoth factories, of power plants, of bridges and transportation arteries that were the wonder of the world—these builders and the architects, designers and engineers had faced a famine since 1930. The genius was there. The will to build was there. But only through digging deep into their bank accounts had they been able to keep even a skeleton organization together. Only the courage born of free enterprise could have sustained them. About all they had left was one shirt to their backs . . . Yet these same men are performing the miracle of defense construction for America today.

These men might well have said, "Give us a year to get ready. Our staffs are scattered, our equipment rusty." But there wasn't any year. **THE TIME WAS NOW!**

The Building Materials Dealer

It wasn't only the big boys who rolled up their sleeves and went to work, either. The local building industry responded, too. The building materials dealers, many hard hit by the depression, instantly made their services available for National Defense housing and other construction. They did this often at a sacrifice because they were already short of materials for civilian needs (that's you and me). Despite the fact that building materials manufacturers have been working their plants 24 hours a day, seven days a week, the dealers

NOTE TO READERS:

The article reprinted here appears, as a Johns-Manville paid advertisement, on pages 121 and 122 of the December 13th issue of the *Saturday Evening Post*. It is one of a series by well-known writers, designed to help inform the public of the indispensable part American Industry is playing in our National Defense Program.

Because the spotlight of defense publicity has been on tanks, guns, ships and planes, too few people are aware of the miracle of construction which had to precede the production of these defense materials. Factories had to be planned and built. Workers had to be housed. Roads, bridges, air fields, fortifications, bases and a hundred other building jobs had to be started from scratch and completed "yesterday."

How this great building industry, recovering from the worst depression in its history, dug in and achieved the impossible is here recounted for the first time. It is our sincere hope that in presenting this story to millions of readers we are making a contribution to the entire construction industry and to each individual member of it.

Johns-Manville

are finding it increasingly difficult to furnish supplies with the speed the public has been educated—up to now—to expect.

These smaller companies have shown typical American initiative in meeting their difficulties despite delay in getting materials and shortage of skilled workers. They are particularly deserving of sympathetic understanding on the part of the American public at this time, and it is certainly to their credit that they are not only finding ways around their present difficulties, but are also planning for the future. For these are the men on whom Mr. and Mrs. Homeowner, U. S. A., must depend for the type of housing which will express the true American way of living when peace has come.

We writers and talkers are too deep in the forests of finished products that American genius has built, to be able to see the individual trees. We forget, sometimes, that Uncle Sam didn't furnish the bulldozers and the thousand and one necessary tools when

(Continued on next page)

This is the sixth of a series of advertisements sponsored and paid for by Johns-Manville. For more than 80 years this company has been serving America's basic industries.

How indispensable these industries are to the American Way in time of peace is generally recognized. This series is to help inform the public of the indispensable job these industries are doing in this time of great National Emergency.

Johns-Manville is proud of the contributions its products are making in helping the Construction Industry accomplish "The Miracle of Defense Construction" quickly and at the lowest possible cost.

JOHNS-MANVILLE

THE MIRACLE OF DEFENSE CONSTRUCTION

(Continued from preceding page)

the defense rush struck. These tools were furnished by the great and small building concerns and contractors who had kept alive for ten years only through their courage and ingenuity. Someday they knew they would be needed, and needed desperately. That day came when France fell, and America awoke to her peril. Overnight America demanded adequate defense—armies, training camps, guns, tanks, planes, shells, ships, TNT and powder. And when that call to duty came, not one miracle occurred, *but a thousand!* In a year—in two at the most—the builders HAD to do what Germany had taken seven, in some cases ten years to do.

And they did it! They are saving America by literally building a NEW America. They have conquered Time—they have laughed at Fate. They are winning! Today the bombers and the tanks and the big guns are rolling out of the factories which these men—these builders of the NEW America—have built.

The other day I stood on a spot where for a hundred years tall corn had grown. It was the heart of the broad Corn Belt of this rich land of ours—a single plot of 22,000 acres lying between the Kankakee and the Des Plaines Rivers, a few miles out of Joliet, Illinois. In this single great triangle, where for generations 146 Illinois families had grown corn, were all the basic requirements for a giant plant to make the high explosives for our bombs, shells and torpedoes. Here was plenty of water, excellent transportation, hard roads, safety from enemy bombing attacks and rolling land for protection against inside explosions.

One Miracle Among Many

So *this* was the spot for "the miracle of the corn fields." The construction company which did the job asked few questions when the government gave them the nod. Quietly they shipped in their key men, and then added workmen at the rate of 100 a day. The bulldozers grunted, the cement mixers groaned, the men sweated and swore—but where the tall corn had grown, there now sprouted chimneys, pipelines, buildings and shops. The sum total of these adds up to one of the biggest, most efficient and safest TNT plants in the world—all done ahead of schedule. That's easy to write about, but these men on the job, just as a starter, had to build 51 miles of standard-gauge railroad, with 117 loading and unloading stations; 44 miles of heavy-duty roads and 80 miles of ordinary highways; 85 miles of pipelines that ran from 4 inches to 42 inches—with 15 miles of sewage pipe thrown in for good measure (and good sanitation). Before this mighty TNT plant was completed, the construction company had put up 460 separate buildings.

The building of this plant is but one example of the job being done. So vast, so widespread is our defense construction a writer despairs, in a short article like this, of ever getting across to you its true magnitude. Maybe this would help: In the first nine months of 1941, we have used enough concrete in airport pavements alone to equal almost all the concrete used in road building in these 48 states in the same period. To pave these urgently needed airports, we have laid enough concrete to build a single-lane transcontinental highway from Charleston, South Carolina, to Los Angeles and back again East as far as Indianapolis, Indiana, or more than 5,000 miles.

America Does It Again

The blue eyes of hard-working, super-efficient, 49-year-old Brigadier General Brehon Somervell, Chief of the Construction Division of the Army Quartermaster Corps, twinkled with pride when he talked to me in his Washington office about the all-important part the building industry is playing. "You can't exaggerate what has already been accomplished," he said to me. "It's like the statement made by the great General Goethals about the building of the Panama Canal, '*Birds were singing in the trees one week and ships sailing by the next.*' Americans, working for America, have done it again! The whole building industry has come forward in unbelievably fine shape . . . The results speak for themselves. The efficiency and patriotism of these splendid men have been inspiring. They have tackled what looked to be impossible jobs and they have driven them through, and in many cases ahead of schedule. Labor, too, has, on the whole, been fine . . . We have almost completed our first great program and are deep in our second now. I can't say too much for these men of this fundamental industry."

I don't want to bog you down with figures, but it is fascinating to take hold of one or two items involved in the single business of Army-cantonment construction. We've used enough lumber in our Army camps to nail a 12-inch plank, 1 inch thick, eight and three-quarters times around the world. In building camps and Army cantonments alone we've employed more than 490,000 workers, and a billion dollars' worth of lumber. A score and more of our great civilian building contractors simply rolled up their sleeves, spat on their brawny hands, and dared bad weather and hard luck in their drive to get finished, in time, camps that would be snug and habitable for our expanding army.

How the Job Was Laid Out

The whole enormous job really breaks up into three separate divisions—and behind each stands the vast civilian building industry, with its trained men, its tools and its high patriotism. The Army & Navy Corps and Bureaus developed their specifications and then turned them over to the trained civilian architects and engineers of the country. These men, with their first-hand knowledge of materials and design, did the original planning. They worked night and day, adapting civilian methods and techniques to the new field of construction necessary to our national defense.

All of them did—and are doing—their work in three main divisions because all military construction was split into three parts. *First:* To the Construction Division of the Quartermaster Corps went the job of building the plants for Army training, and ordnance and soldier supplies. *Second:* To the Army Corps of Engineers went the task of laying out the construction of fortifications, camouflage works and all Army Air Corps projects and bases, including the nine great air bases acquired in the Atlantic from the British and the new Alaskan air fields. *Third:* To the Bureau of Yards and Docks of the Navy went the complicated job of building naval air bases in the Pacific and Atlantic, as well as at home, and the whole varied and multiple tasks of Navy construction, from shipyards to training schools.

Behind each of these three divisions stood, in phalanx, the great building indus-

try. Architects, engineers and contractors furnished the brains and the muscle to drive the nails in our far-flung fortresses of safety. Also, hundreds of our finest construction brains were willingly drafted to serve as reserve Army and Navy engineers and Constructing Quartermaster officers. From the Philippines to Puerto Rico is ten thousand miles; from Dutch Harbor, Alaska, to Samoa, in the South Seas, is roughly five thousand miles. So the picture of our preparedness program covers a canvas five thousand by ten thousand miles square. Over this great expanse of land and sea, American engineers, builders with saw and hammers, contractors with fantastic bulldozers and pile drivers, have swarmed like busy bees.

A billion dollars was assigned to the Engineer Corps of the Army. There were bomber and fighter factories and assembly plants to be constructed, air bases to be rushed to completion . . . Altogether 54 great groups of buildings and bases.

Almost overnight a new base is born; a new pearl added to our priceless necklace of national defense—Guam, Wake, Midway, Palmyra, Johnson—these are a few of the names.

Groups of sturdy, daring contractors banded together on most of these jobs, and they found they had to build from the coral and sand up. These new Magellans, modern Vasco de Gamas had to tote everything with them, including drinking water!

People Back Home

And (to get back home) in this year of 1941, despite the heavy demands of war, our builders have found time somehow to build many of the new homes needed in defense areas. Next year they will build more. But many materials that might go into homes will have to go to defense plants, powder mills, air schools and shipyards, and so We the People must be patient. When our nation is fully armed and strong we can go ahead and build our new homes once again, without let or hindrance.

And in the meantime we can also thank our building-material manufacturers for having the courage, good sense and patriotism to keep intact their organizations, their research laboratories and their staffs when the going was tough and uncertain. Many had to draw deeply on their reserves, but when the crisis came and the building industry had to really perform "the miracle of defense construction," it was ready with new products, more efficient production, to tackle *and finish* the job. Once again, private industry had proved it could "take it."

So why should any of us complain if, during this coming year, the great effort and the continued need of turning out vast quantities of war goods leave us short-handed in men and materials for home building? The sacrifice and the temporary hardships will be well worth the cost, it seems to me. For what is a home worth if it be not secure, free and decent?

That's what we're struggling for and arming for, isn't it? And, when we get there, don't forget the defense job had to be done *from the ground up*—that private industry was ready to do it—and that the roar of the bulldozers was the first signal of ultimate victory for our democratic way of life.

This is the sixth of a series of advertisements sponsored and paid for by Johns-Manville and designed to tell the American people how indispensable our basic industries are for National Defense.



THIS FAMILY FUN CENTER BEGAN WITH THE FLOOR



Here are the facts about low-cost, moisture-resistant basement floors of Armstrong's Asphalt Tile

TRANSFORMING any ordinary cellar into a spritely recreation room is easy with Armstrong's Asphalt Tile.

The 41 striking plain and marble colorings available lend themselves to the creation of the most beautiful designs and color combinations. Special insets can be added for very little extra.

Armstrong's Asphalt Tile withstands severest traffic without showing its age.

Even the scuffing feet of dancers and table tennis players can't mar its surface or dim its "all the way through" colors. It resists both moisture and alkali, so it's perfectly safe for use over concrete subfloors in direct contact with the ground.

This floor is a budget-stretcher, too. It's surprisingly low in first cost. Also, many hundreds of home owners are money ahead on floor care because this asphalt tile

HERE'S A GRAND PLAY FLOOR AND DANCE FLOOR . . . in the basement recreation room of the Walter M. Green residence, Omaha, Nebraska. Three distinctive colorings in Armstrong's Asphalt Tile were used—Florentine Marble, Tennessee Marble, and Burdandy. Architect and Contractor: Bert Hene. Floor was installed by Midwest Carpet & Linoleum Company.

is so easy to keep in perfect condition. Write today for free booklet—"Low-Cost Floors for Modern Basements." Armstrong Cork Co., Resilient Tile Floors Dept., 1233 State Street, Lancaster, Pennsylvania.



ARMSTRONG'S
Asphalt Tile

THE LOW-COST
FLOOR WITH
THE LUXURY
LOOK!



CRANE . . . BEST KNOWN OF ALL PLUMBING BRANDS

Here is the ideal sink for installation in linoleum or tile counter tops — the All-American.

Made of gleaming, acid-resisting porcelain enamel on cast iron, the All-American has a "comfort angle" control panel with a swinging mixing spout and retractable hose spray

equipped with a plastic, non-heat handle. The twin basins are ideal when washing dishes or preparing vegetables. An All-American in the kitchen is an added feature which will lend sales appeal to your houses. Ask your plumbing contractor or see your nearest Crane Branch.

CRANE

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

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

PERFORMANCE IN MORE THAN 150 LONG ISLAND HOMES PROMPTS
THE BUILDERS TO WRITE THAT



"It gives our customers better floors," says S. Nelson, Bradley distributor, Richmond Hill, N. Y.

Bradley

STRAIGHT-LINE
OAK FLOORING

contributes much to
Profitable Selling

FLOWER HILL
ESTATES

TELEPHONE
MANHASSET 2747

Flower Hill Building Corporation

9 COUNTRY CLUB DRIVE

PORT WASHINGTON, L. I.

September 12, 1941

Mr. R. W. Hanly
Manager, Hardwood Flooring Sales
The Bradley Lumber Company of Arkansas
Warren, Arkansas

Dear Mr. Hanly:

Having used Bradley Oak Flooring in the completion of more than 150 Long Island homes, we feel that we not only are qualified to pass on its merits, but also should commend you on turning out such a consistently excellent product.

As our building program includes homes of varying size and design, we use both your plank and strip flooring. Regardless of pattern, size or grade, we can depend on Bradley Oak Flooring for uniform texture, proper seasoning and precision manufacture. Credit is also due your Eastern distributor, S. Nelson Flooring Company, and your shipping department for expediting deliveries.

Your STRAIGHT-LINE feature is a splendid improvement. It has been long needed in hardwood flooring manufacture, especially in eliminating crook. Tongue and groove match easily and snugly without forcing or nailed-in tension. It follows that, with Bradley Straight-Line Oak Flooring, we keep our laying and finishing costs low without sacrificing perfection in the finished floor.

Needless to say, we shall continue using this flooring which contributes so much not only to profitable selling, but also to the lasting satisfaction and contentment of our customers.

With best wishes,

Cordially yours,

FLOWER HILL BUILDING CORPORATION

By

Vice-President

WGU:DTM



One of more than 150 Flower Hill homes using Bradley Oak Flooring.

Here, again, are first-hand reasons why Bradley Oak Flooring has the outspoken approval of the nation's leading home builders. Thank you, Mr. Uhl!

Any Bradley Hardwood Flooring installation can be matched for color, texture and quality with Bradley's Oak and Gum Trim and Mouldings.

Just ask your local dealer.



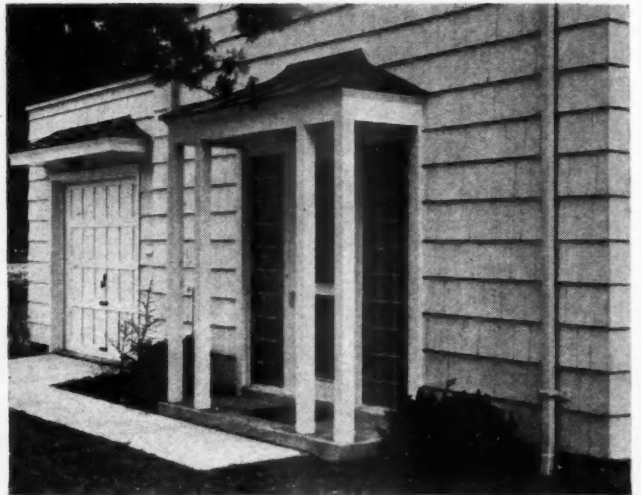
BRADLEY LUMBER COMPANY of Arkansas
WARREN, ARKANSAS

For Quicker Sales...
**DRESS UP
 SMALL HOMES
 With INSULUX
 GLASS BLOCKS**

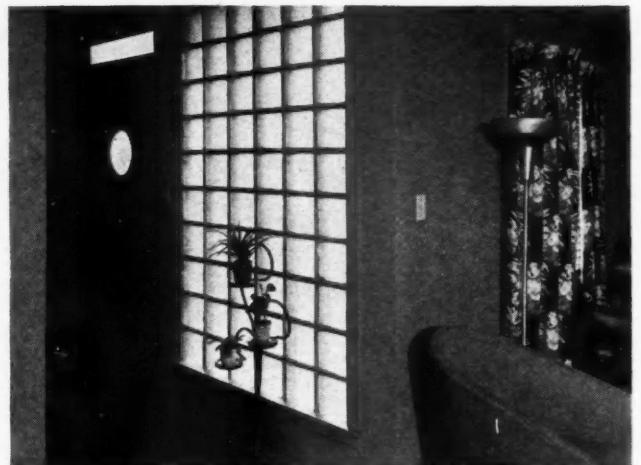
Inexpensive panels of INSULUX Glass Blocks installed in kitchens, stairways, dinettes, bathrooms, make the most modest homes look *more luxurious*.

INSULUX provides softly diffused daylight, with complete privacy. INSULUX Glass Blocks are weathertight—prevent drafts. They are easy to clean, never need painting. These features make sense to small home buyers. *And that means faster-selling houses!*

INSULUX panels are inexpensive to install—they save the material and erection cost of sash, screens, and painting. Send the coupon today for further facts and suggestions on using this modern, money-saving building material in small homes. Owens-Illinois Glass Company, INSULUX Products Division, Toledo, Ohio.



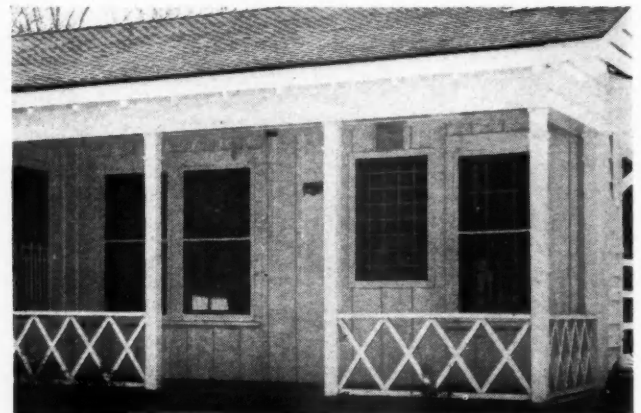
INSULUX Glass Blocks harmonize with every type of home design. Panel sidelights provide pleasing lighting for hallway—look impressive at night.



For a very few extra dollars, entrances can be “dressed-up” with a panel of INSULUX, as shown—a sales feature that registers with prospects at a glance.



INSULUX panel in kitchen at front of house gives additional light, full privacy. Women like the easy-to-keep-clean advantages of INSULUX Glass Blocks.



Panels of INSULUX are easy and inexpensive to install. You save the cost of sash, screens, and painting. Work is done quickly by the same mason who does the other masonry work on the house.

OWENS-ILLINOIS
INSULUX
Glass Blocks

THERE ARE PLACES IN EVERY HOME THAT NEED INSULUX

OWENS-ILLINOIS GLASS COMPANY, INSULUX Products Div.,
 15th Floor, Ohio Building, Toledo, Ohio
 Please send free literature showing practical INSULUX ideas that
 will help sell homes.

Name _____

Address _____

City _____ State _____

MAKE THIS TEST -
Prove **BRIXMENT IS BEST!**



1

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

2

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

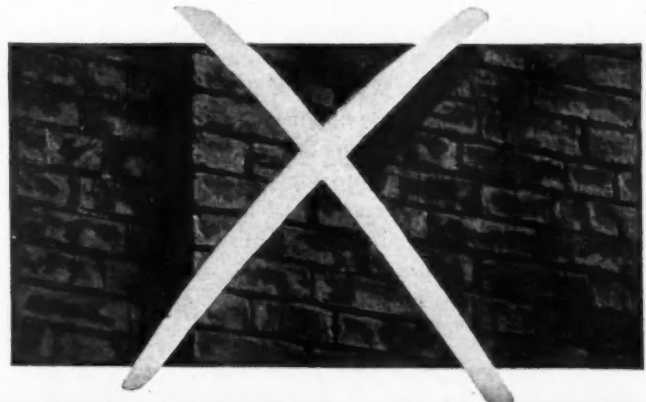
BRIXMENT *Makes* **More DURABLE Mortar!**

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

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

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

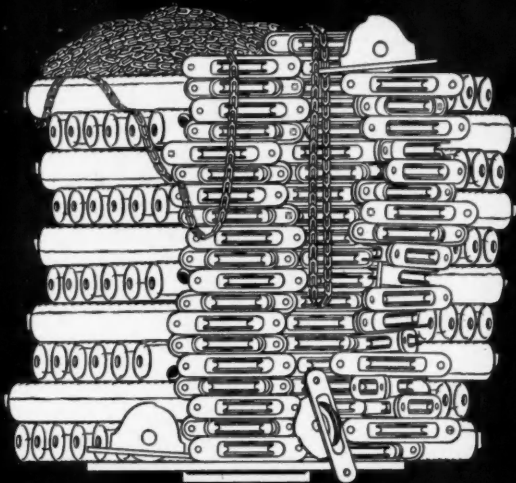
parapet walls and chimneys, where exposure is particularly severe, Brixment mortar will almost never require re-pointing.



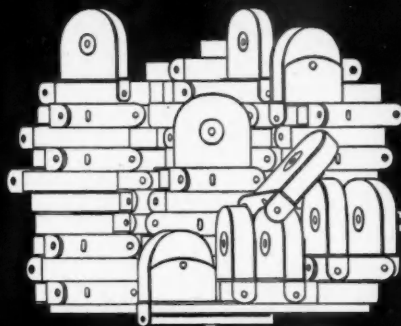
BRIXMENT **For Mortar and Stucco**

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

... TO USE MINIMUM QUANTITIES OF SCARCE MATERIALS ...



375 POUNDS



41 POUNDS

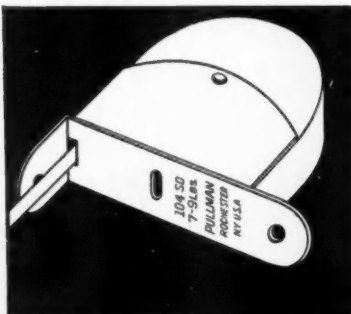
DOUBLE HUNG WINDOWS TAKE IRON AND STEEL ... BUT HOW MUCH ?

BUILDERS of 200,000 privately financed defense housing units are promised priority assistance in securing delivery of scarce building materials. But it is specified that "it must be demonstrated that such housing will be built in such a way as to use minimum quantities of scarce materials." Pullman Balances for an average 1 5-window-opening house job weigh 41 pounds. Weights, chain and pulleys for the same job weigh 375 pounds. By use of Pullman Balances for the 200,000 houses the saving on sash weights alone would provide 37,500 tons of scrap iron, enough to process 95,000 tons of steel. (It is stated that the 90,000,000 tons of steel planned for the year can be produced *only* if 36,000,000 tons of scrap are available.)

MODERN LOW-COST WINDOW UNITS ARE PULLMAN-BALANCED

It's patriotic to use Pullman Balances. It's smart building practise too. House for house, the cost is lower. Pullman-balanced windows permit modern narrow trim, provide smooth counterbalanced operation, serve faultlessly for the life of the building.

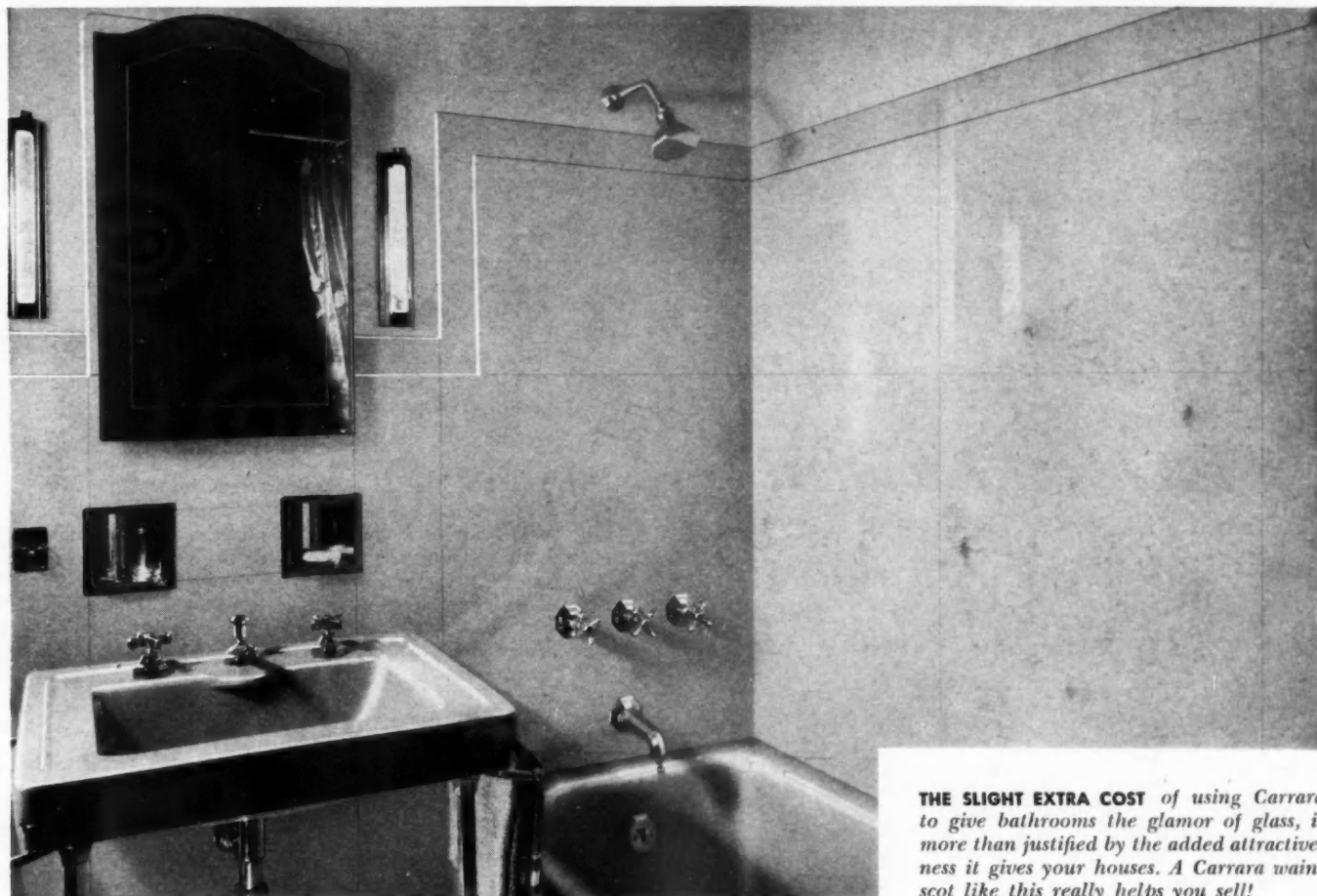
A demonstration unit of a Pullman-balanced window shows home owners *what* they're getting, *why* it will give best performance. Every prospective home builder should be shown.



Specify Window Units with
PULLMAN
Sash Balances



and a Carrara Bathroom did the trick!



THE SLIGHT EXTRA COST of using Carrara to give bathrooms the glamor of glass, is more than justified by the added attractiveness it gives your houses. A Carrara wainscot like this really helps you sell!

IT happens again and again. A bathroom with walls or wainscot of Carrara Structural Glass proves the decisive factor in selling or renting a house. A Carrara bathroom is so smart, attractive, and appealing to prospects, that it frequently pushes them over the borderline of indecision, and gets their name on the dotted line.

Carrara's smooth, polished surfaces make a bathroom seem larger

and brighter. The rich colors of Carrara catch the eye and please the most particular taste. Carrara walls or wainscots are permanent, non-absorptive, impervious. They won't fade, stain, check or craze. And they're a cinch to keep clean . . . just an occasional wiping with a damp cloth is all they need.

Here is a material that helps you sell. For a modest expenditure, Carrara Glass can give the houses you

build or handle a real treatment of sales appeal. It's good for use in kitchens, pantries, dressing rooms, powder rooms, as well as bathrooms. It makes fine sill covers, niche linings, fireplace trim, stove backing, splashboards, shelves. Send the coupon today for our free literature giving complete facts about Carrara.

"PITTSBURGH"
stands for Quality Glass and Paint

CARRARA
The modern Structural Glass
PITTSBURGH PLATE GLASS COMPANY

Pittsburgh Plate Glass Company
2016-A Grant Building, Pittsburgh, Pa.
Please send me, without obligation, your free literature on the use of Carrara Structural Glass in the home.

Name.....

Address.....

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

For 1942—

8 1/2 Billion Dollar Building Market Forecast

*Such is the prediction of the Research and Statistical Bureau of OPM. That is more business than the building industry had in 1940, a good building year totaling \$6,850,000,000.

Yes, 1942 will offer a big market for building men—but unlike preceding years, there will be a new set of requirements which must be met in order to take advantage of that market.

There are the dictates of priorities, to begin with. In this connection, it is important to remember (as was pointed out in the October and November issues of **AMERICAN BUILDER**) that priorities do more to encourage the building and remodeling of homes and farm structures than they do to deter it. The essential requirement, is to fully understand priority regulations—and to keep abreast of possible changes.

Accordingly, the 1942 building market will require continuous adjustment and readjustment in your activities. You may have to seek new areas in which to operate. You may have to enter new fields of construction. You will have to know the possibilities and limitations of both. You may have to conform to certain requirements of design, price, and materials. Emphasis on speed of construction, the introduction of substitutes, may require new methods. These are among the many requirements to which you may have to adapt your plans and work—and when you do, it will have to be done *accurately and quickly*.

☆ *In What Types of Building?*

☆ *What About Priorities?*

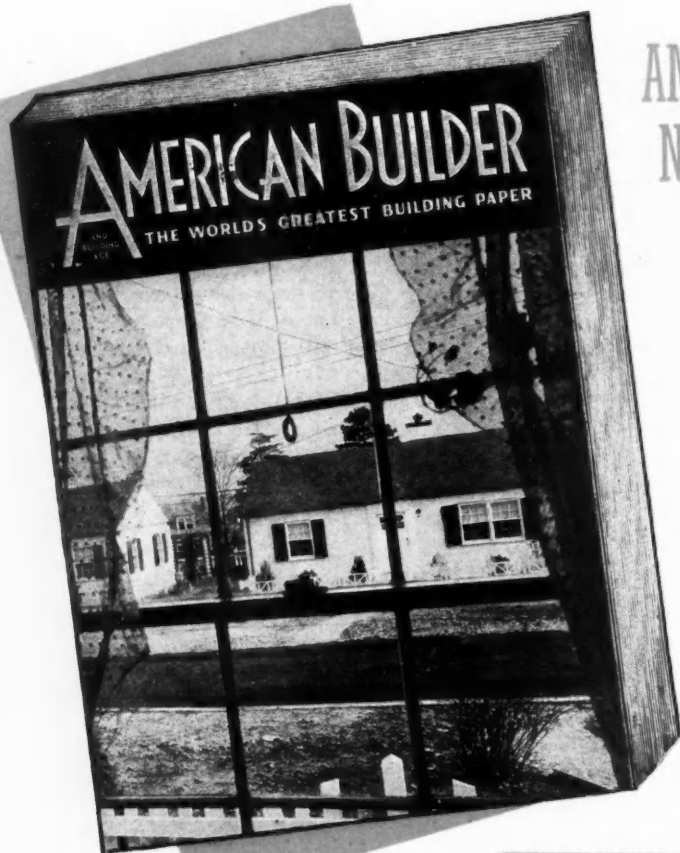
☆ *How Should You Adjust Your Activities?*

AMERICAN BUILDER Will Be Your Guide Now — And at Every Turn in 1942!

AMERICAN BUILDER was quick to point out the inaccuracies of scare news stories which ran rampant upon the announcement of the SPAB priority order. Through direct contact with official Washington sources, our Washington representatives were able to offer a thorough, authentic interpretation of the new priority order. Our front-line building experts showed why fears were unwarranted, and proceeded at once to help **AMERICAN BUILDER** subscribers to qualify for priority ratings, where necessary—and stressed the fact that builders in non-defense areas who could get materials were free to build as always.

In the weeks and months to come, you can depend on **AMERICAN BUILDER** to guide you in your activities with the same accuracy—with the same practical assistance found so invaluable among successful builders all over the country.

If you want to be sure about what can and cannot be done within and outside of defense areas, now and later . . . if you want to know about the availability of materials . . . if you want to have at your disposal, at all times, the best in exterior and interior design, the most efficient and economical methods of construction . . . if you want to know about the most successful means of selling . . . about any phase of Government home building financing—you should, *by all means*, be a subscriber to **AMERICAN BUILDER**.



AMERICAN BUILDER

Two Big Reasons!

There are two big reasons for subscribing to **AMERICAN BUILDER** now. The first is that you will be doing so in time to receive the 1942 FORECAST AND PREVIEW NUMBER. The second is that you will be entitled to receive along with your subscription a copy of our 180-page book **SECURITY HOMES**, without additional charge.

CLIP AND RETURN THIS COUPON NOW!

AMERICAN BUILDER
30 Church Street, New York, N. Y.

Enclosed is \$.....for which enter my subscription for { One year \$2
Two years \$3
New Renewal

and include with my subscription at no extra cost a copy of the new 1941 Plan Book, "SECURITY HOMES"

NameStreet.....

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

OccupationThis offer is good in U.S., its Possessions and Canada
12-41

Announcing:

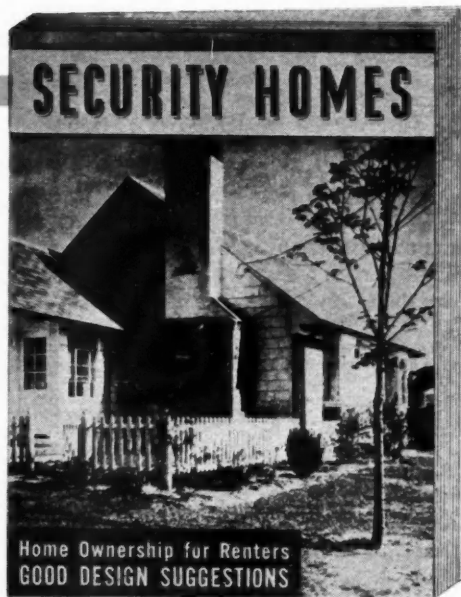
JANUARY
ISSUE

1942 Forecast and Preview Number, American Builder

One of the Most Important Issues of the Year

DOUBLY IMPORTANT—NOW!

* PARTIAL CONTENTS *



For Today's Requirements

AMERICAN BUILDER offers, *without extra charge to you*, a copy of this 180-page book of quickly salable home designs, mailed with every AMERICAN BUILDER new or renewal subscription, accompanied by \$2 for one year, \$3 for two years.

The homes presented in this volume are especially suited to today's requirements. They are complete with exterior and interior views, floor plans, elevations, and construction details.

PURPOSE AND SCOPE: In this statistical Forecast and Preview Number, AMERICAN BUILDER will provide the building industry with a guide to its operations during the coming year. In addition to presenting estimates of building volume, it will present valuable new data on trends in construction methods, types of houses and design.

ANNUAL STATISTICAL OUTLOOK and FORECAST: The number of residential units built, location, value of homes, and estimate of volume for the coming year. Statistical records of non-residential building, including light load bearing commercial and business building.

TRENDS IN ARCHITECTURAL STYLES: Most popular in various parts of the country. Trends in style, color and equipment of homes.

HOMES THAT SELL: Analysis of sales prices, room sizes, materials, and other features of speculative and contract houses.

WHERE AMERICA LIVES: Analysis of U. S. Census figures showing the need for homes, population trends and the building market in terms of new population changes.

THE MEN WHO BUILD AND SELL: Showing the huge number of men involved in the building industry revealed by the recent census of construction, manufacturing and distribution.

TRENDS IN BUILDING COSTS: Labor rates and material supplies.

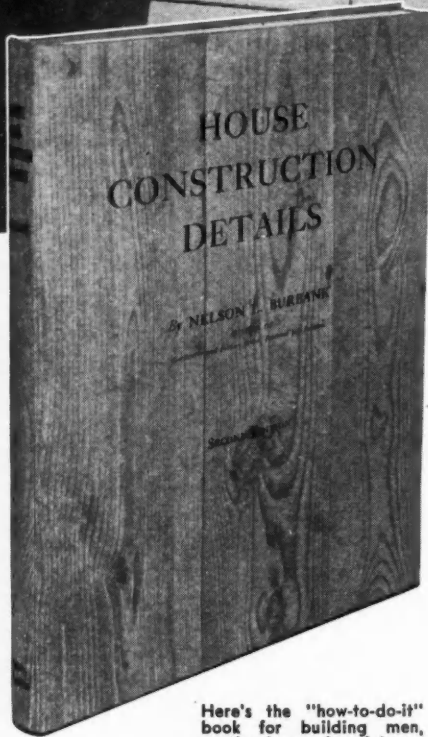
**Private Building vs. Government Operations . . .
Market by Metropolitan Areas . . . Trends in 1942
Home Designs, Equipment and Materials.**

The World's Greatest Building Paper

30 Church St., New York



**JUST WHAT
WE WANT!
YOU GET
THE JOB**



Here's the "how-to-do-it" book for building men, another in a series of American Builder self-help books.

That's what satisfied owners and prospects say to the building man who knows how to alter a floor plan. Success often depends on your ability to suggest alternate materials, or on knowing how to handle some detail that has an owner confused. *The man who knows how* is the man who gets most of the jobs.

You too can be *The man who knows how*. It's easy, because you can read and learn at home or in your spare

time. *House Construction Details*, by Nelson L. Burbank can help you become *The man who knows how*. Here is the "how-to-do-it" book for building men, crammed with ideas, 1,500 illustrations, details and scale drawings, with short, clear explanations.

It's easy to find what you want in *House Construction Details*, because all drawings and details are grouped in construction sequence, beginning at the foundation and carrying through step-by-step to painting and finishing. Look over the table of contents below and see how well the book has been arranged.

There is a gold mine of ideas and practical information in *House Construction Details*—for the beginner who wants to learn or for the veteran who needs workable methods or saleable ideas *right now*.

Send the coupon today for your copy of "House Construction Details." With it you'll receive FREE the 1942 Book Guide—your guide to profitable reading.



FILL OUT THIS GUARANTEED ORDER FORM

American Builder and Building Age,
30 Church Street, New York, N.Y.

Enclosed find \$3.00 for which send me a copy of the New Second Edition of *House Construction Details*, and a copy of the American Builder Book Guide FREE. If I do not find the book entirely satisfactory I will return it within 5 days of receipt and you will refund my \$3.00.

Name

Address

City and State
A.B. 12-41

**Contents of
The New Edition**

- Floor Plans
 - Set of House Plans
- Excavations
 - Foundation Forms
 - Foundations
- Outside Walls
- Inside Walls
 - Wall Sheathing
 - Ceiling Joists
- Roof Construction
 - Bay Construction
 - Roofing
- Cornices and Porches
- Exterior Wall Construction
- Interior Wall Coverings
 - Interior Trim
- Stair Construction
- Windows
- Doors
- Hardware
- Closets
 - Shelves
 - Built-In Equipment
- Finished Flooring
- Chimneys and Fireplaces
- Scaffolds
- Garages
- Heating
 - Air Conditioning
- Elements of Electric Wiring
- Insulation
 - Sound Proofing
- Gates
 - Garden Furniture
- Shoperafter's Corner
- Camps
 - Cabins
 - Cottages
- Farm Buildings
- Wood Connectors
- Pre-fabrication
 - Modern Building Materials
- Painting and Finishing
- Modern Homes
- Index

**SAVED
2 SETS
OF
FORMS—
72 DAYS**



United Carbon Company
Office Building, Charles-
ton, W. Va. Architect,
Walter F. Martens; Con-
tractor, H. B. Agsten &
Son—both of Charleston.

How Atlas High-Early cement helped to reduce costs and speed construction of this 12-story building

HERE'S a story of large savings in money and concreting time on this new office building. In reporting these savings after a careful study of his records, contractor H. B. Agsten & Son stated that Atlas High-Early cement helped in these ways:

TIME SAVED: 6 to 7 days concreting time on each floor. Total saving, 72 to 84 days!

FORMS SAVED: 2 complete sets of

forms because Atlas High-Early cement permitted earlier stripping and reuse of forms.

FUEL COSTS: Saved \$24 per floor for coke used to heat concrete during curing, a total of \$288 on fuel.

Whenever speed in construction is necessary or economical, it will pay you to consider Atlas High-Early cement. Send for a copy of the booklet "Case Histories of Days and Dollars." It shows how many contractors have

produced serviceable concrete in much less than the usual time—how it has saved them time and money on all kinds of jobs! Universal Atlas Cement Company (United States Steel Corp. Subsidiary), Dept. AB-12, Chrysler Bldg., N. Y. C.

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

AB-H-35

ATLAS HIGH-EARLY CEMENT

A UNIVERSAL ATLAS PRODUCT



OPM flashes green light for

200,000 PRIVATELY BUILT HOMES



**GET YOUR SHARE WITH
WELL-DESIGNED SMALL HOMES
FROM THIS WONDERFUL PLAN BOOK**

Every plan proven by actual erection in many parts of the United States. Most of them cost under the \$6,000 defense limit. Blueprints immediately available from your retail lumber dealer . . . no delay, no red tape. All designs qualify for FHA and private lending requirements.

No other single book provides you with as many small-house plans of equal merit. Published by the manufacturers of Arkansas Soft Pine, the all-purpose, extra soft textured building and finishing lumber. Good variety in design to cover wide range of owners' tastes or meet defense housing needs. Prompt securing of blueprints equips you to start construction without delay.

To get your copy of this money-making book, fill out the coupon order below and mail today.

**ARKANSAS SOFT PINE BUREAU
1241 Boyle Building, Little Rock, Ark.**

Enclosed find 25 cents for copy of your plan book, "Modern Homes for Modest Incomes," sent postpaid.

NAME

STREET ADDRESS

CITY & STATE

WHY IT WILL PAY YOU TO BUILD WITH ARKANSAS SOFT PINE



Extra soft texture, free from resin, cuts easily, nails without splitting, works fast.



Exterior siding, trim and mouldings take paint and hold it with no later bleeding.



Big-mill manufacture exclusively. Standard working . . . correct seasoning and moisture content . . . framing stays put.



Satin-like Interior Trim takes paint, enamel and stain without raised grain or discoloration.



Trade and Grade Marked, Arkansas Soft Pine protects your workmanship; gives lasting satisfaction. Ask your favorite lumber dealer.

AMERICAN BUILDER

and Building Age

CONTENTS FOR DECEMBER, 1941

Publisher's Page—Unnecessary Government Spending That Is Ruining Business—by Samuel O. Dunn..... 33

Editorials 36
 Why Builders Protest Present Set-up
 Two Fair Tax Proposals

Aroused Builders Protest 37
 Home Builders Meeting in Detroit Takes on Nature of Old-Time Revival as \$25,000 Fund Is Raised for Emergency Committee

Homes Can Be Built; the "Extensible House" Saves Critical List Materials 39

A-2 Priority Speeds Pine Acres Homes..... 40
 Good Design, Sound Construction Featured in OPM-Approved Homes Priced at \$4,670 to \$5,670

Presenting an "Extensible House"—..... 44

Extensibility Found in Detroit Homes..... 46

No Priority Limit on Smart Ideas..... 48

Index to 1941 House Designs and Plans..... 52

How Stackhouse Speeds Title VI Production..... 53
 Power Precutting of Framing, Use of Four Basic Plans with Variation of Detail, Millwork Shop on Site and Specialized Crews Among Methods Used in Alabama Defense Project

An Operative Builder Sells Fine Homes in Southwest..... 56

Den and Library Are Key to Extensible California Plan..... 58

Plan Drive-In Restaurant to Take Care of Large Trade..... 59

Southern Variations in Modern Planning—Both from Texas..... 60

Emergency Plumbing Standards for Defense Housing..... 63

Service to Readers Department..... 64

On & Off the Record..... 68

Review of the News..... 70

Producers Tell Us—..... 77

Practical Job Pointers and Building Data..... 84

Letters from Readers..... 86

Advertisers' Index..... 98



63rd Year Vol. 63, No. 12

AMERICAN BUILDER and BUILDING AGE, with which are incorporated National Builder, Permanent Builder and the Builder's Journal, is published on the first day of each month by the

SIMMONS-BOARDMAN PUBLISHING CORPORATION, 105 West Adams Street, Chicago, Illinois. New York Office: 30 Church Street

WASHINGTON, D. C. National Press Building
CLEVELAND, OHIO Terminal Tower
SEATTLE, WASH. 1038 Henry Building
SAN FRANCISCO, CAL. 550 Montgomery Street
LOS ANGELES, CAL. 530 West Sixth Street

Samuel O. Dunn, *Chairman of Board*; Henry Lee, *President*; Bernard L. Johnson, Robert H. Morris, *Vice-Presidents*; J. S. Crane, *Eastern Manager*; Roy V. Wright, *Secretary*; Elmer T. Howson, *Assistant Secretary*; John T. DeMott, *Treasurer*.

Subscription price in the United States and possessions and Canada, 1 year, \$2.00, 2 years, \$3.00; foreign countries, 1 year, \$4.00, 2 years, \$7.00. Single copies 25 cents each. Address H. E. McCandless, Circulation Manager, 30 Church Street, New York, N. Y.

Member of the Associated Business Papers (A. B. P.) and of the Audit Bureau of Circulations (A. B. C.) PRINTED IN U.S.A.

BERNARD L. JOHNSON

JOSEPH B. MASON
Eastern Editor

Editor

JOE SANDERS
Marketing Editor

R. E. SANGSTER
Managing Editor

ROBERT H. MORRIS
Business Manager

LYMAN M. FORBES
Research Editor

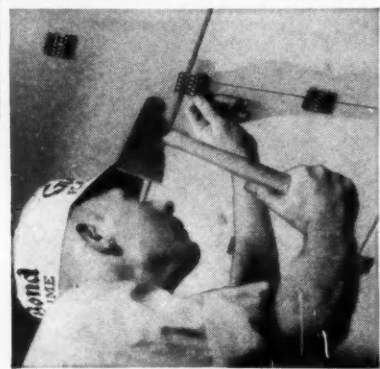
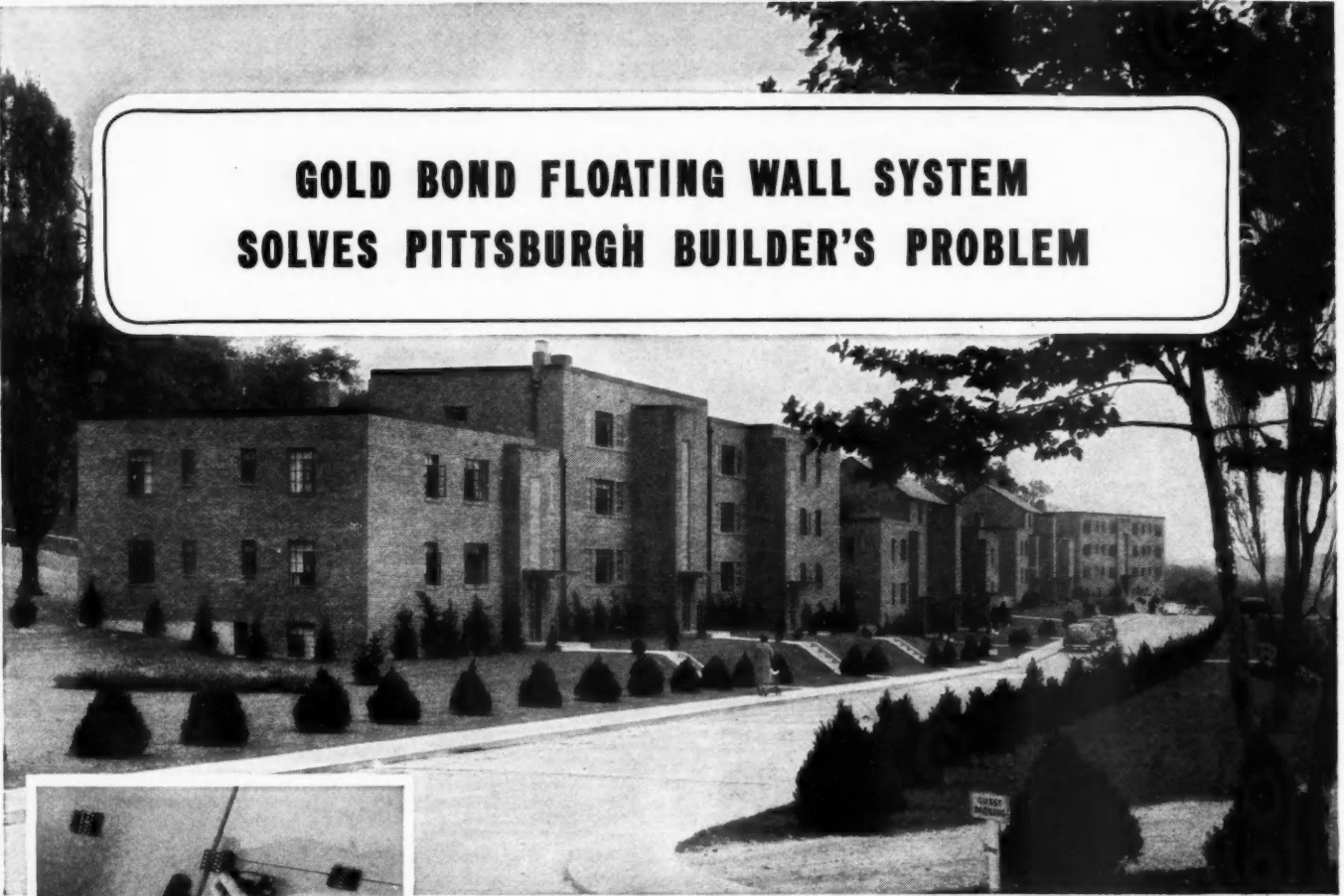
DOLA PARR
Associate Editor

L. E. ARENT
Art Editor

Advertising: F. A. CLARK, W. F. COLEMAN, L. B. CONAWAY, J. S. CRANE, J. C. JONES, C. E. PAULSON, E. J. REICH, C. J. WAGEMAN.

Field Staff: C. L. CONLEY, J. H. FREE, CHARLES R. HARTUNG, WOODROW JAMES, WILLIAM L. TAYLOR, DICK WHITTINGTON

GOLD BOND FLOATING WALL SYSTEM SOLVES PITTSBURGH BUILDER'S PROBLEM



AT BRENTSHIRE VILLAGE APARTMENTS IN PITTSBURGH, the Gold Bond Floating Wall System has given Builder Kovach insurance against plaster cracks plus a fireproof barrier that reduces noise transmission between floors. As shown at left, any lather can easily apply the patented nails between panels of gypsum lath, and plastering is done in the usual manner. With all these advantages, the only extra cost is the price of the nails.

LICKING sound transmission between apartment floors used to worry Pittsburgh builder Stephen E. Kovach, Jr. . . . until he used the new Gold Bond Floating Wall System for ceilings in smart Brentshire Village apartments. 100 families waiting for vacancies at Brentshire Village is proof that tenants appreciate quieter apartments . . . and that Mr. Kovach has found the right answer to his problem.

The Gold Bond Floating Wall System does a lot more than reduce room-to-room noise. It provides a one-hour fire rating, and eliminates nine-tenths of the causes for plaster

cracks—thanks to the patented Floating Wall nail. With all these advantages, Floating Wall System costs so little it can be used even in defense housing projects.

Another Gold Bond "First"

This outstanding development is only one example of getting the best things first from Gold Bond. National Gypsum Company's busy research laboratories have developed more than 150 better Gold Bond products for every wall and ceiling use . . . including plaster, wall-board, lime, sheathing, gypsum and metal lath, wall paint, insulation and sound control materials. 300 trained Gold Bond representatives are at your service—and when Gold Bond is specified exclusively, architects, builders

and owners get the extra protection of having the responsibility for *all* products centered with *one* organization—the world's largest exclusive manufacturer of wall and ceiling materials. Write today for detailed specifications on the new Gold Bond Floating Wall System. NATIONAL GYPSUM COMPANY, BUFFALO, NEW YORK.



Producing units at:

NEW YORK, N. Y. . . . CLARENCE CENTER, N. Y. . . . AKRON, N. Y. . . . PORTSMOUTH, N. H. . . . NATIONAL CITY, MICH. . . . FORT DODGE, IA.
MEDICINE LODGE, KAN. . . . ROTAN, TEX. . . . SAVANNAH, GA. . . . LUCKEY, O. . . . BELLEFONTE, PA. . . . YORK, PA. . . . ORANDA, VA.
SALTVILLE, VA. . . . NILES, O. . . . MOBILE, ALA. . . . NEWBURGH, N. Y. . . . ALEXANDRIA, IND. . . . DUBUQUE, IA. . . . DOVER, N. J.

PUBLISHER'S PAGE

Unnecessary Government Spending That Is Ruining Business

THE MOST IMPORTANT problems confronting American business, especially *small business*, are (1) government expenditures and taxation, and (2) government regulation of the production and distribution of materials. They are largely *the same problem*, because the way our local, state and federal governments are handling problem (1) is largely creating problem (2).

Total *local* and *state* expenditures in 1940 were 9 billion 300 million dollars—the *largest in history*, exceeding by 6 billion those made in 1920 and by 1 billion 260 million those made in 1930. And this although between 1930 and 1940 *federal* expenditures were increased 6-1/3 billion annually almost solely for *civilian* purposes. And now, to *total* local, state and federal expenditures which increased from 11 billion in 1930 to 19 billion in 1940, we are *adding* federal expenditures for defense that will increase that *total* to 40 billion in 1941—double what it was in 1919, when it reached its previous peak due to our participation in the first World War.

WHAT HAVE these expenditures to do with production and distribution of materials? Every dollar spent by *any* government consumes one dollar's worth of labor and MATERIALS. Consequently, the more we increase *any* government expenditure, the less labor and MATERIALS are left for ordinary *private* business.

And to date *no kinds of government expenditures*—state, local or federal—are being reduced. Even the federal government, while so vastly increasing its expenditures for defense, is *not reducing its expenditures for solely civilian purposes*. Congress right now actually is considering, and probably will pass, the biggest "pork barrel" bill in all history

to appropriate 1 billion dollars for rivers and harbors.

Expenditures of local and state government could easily be reduced over 1 billion dollars—to what they were in 1930. It has been demonstrated by the National Economic League, by the administration's own Director of the Budget and by its own Secretary of the Treasury Morgenthau that the purely *civilian* expenditures of the federal government could be reduced 2 billion dollars. That total reduction of 3 billion a year in local, state and federal expenditures for *civilian* purposes would be a life-saver for many businesses, especially *small businesses*. It would not interfere with defense. It would release a vast amount of *materials* that many businesses need in order to carry on. It would enable them to produce many things—especially *homes*—that the people need. It would reduce the people's tax burden 3 billion a year and make it possible to use the money in creating *tax-paying private property* instead of *tax-eating government property*.

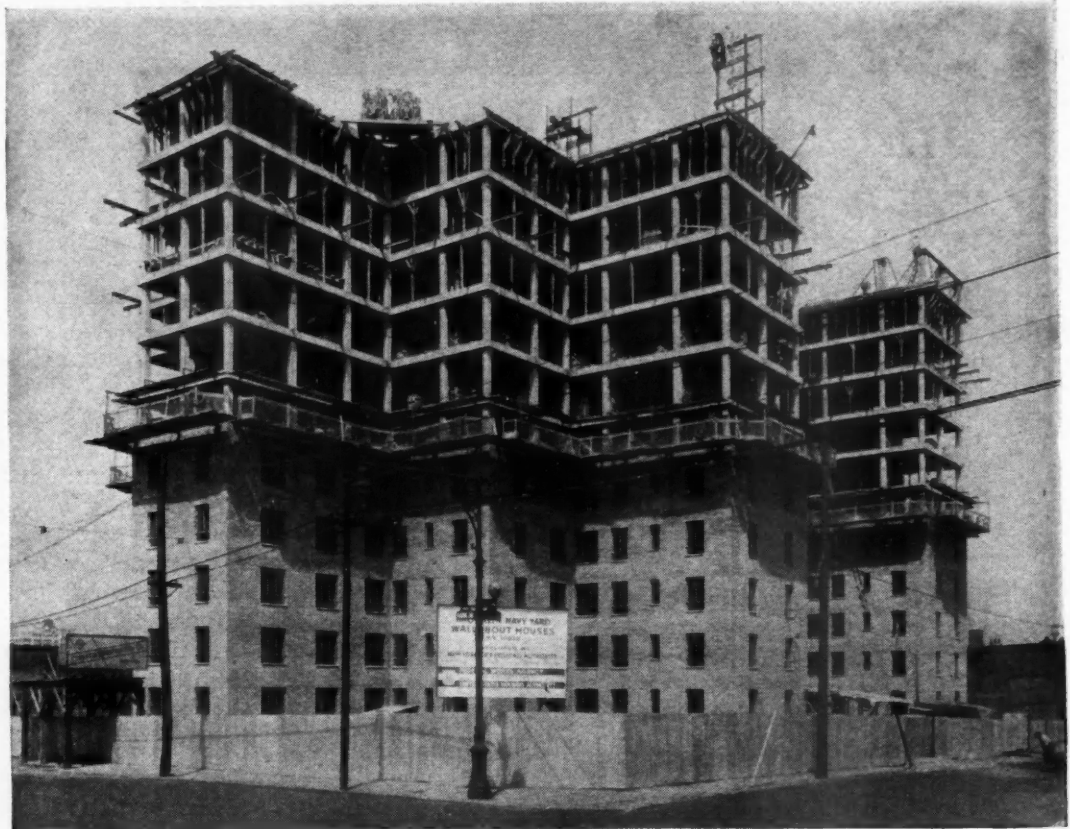
THE PREVAILING policy of *actually increasing* other government expenditures, while spending unprecedentedly on armament, is *economic insanity*. The American people can stop it; for this is still a democracy. But they can stop it *only* by making it *bad politics* for those who continue it.

It is up to YOU, Mr. Citizen. If you don't want your country ruined, and to be ruined with it, start raising hell, locally and nationally, individually and in organizations, for every practicable reduction of *every* kind of government expenditure—state, local or federal.

Samuel O. Dunn,

SIMMONS-BOARDMAN PUBLISHING CORPORATION: SAMUEL O. DUNN, CHAIRMAN OF THE BOARD; HENRY LEE, PRESIDENT; BERNARD L. JOHNSON AND ROBERT H. MORRIS, VICE-PRESIDENTS; ROY V. WRIGHT, SECRETARY; E. T. HOWSON, ASSISTANT SECRETARY; JOHN T. DE MOTT, TREASURER; EXECUTIVE AND EDITORIAL OFFICES: 105 WEST ADAMS STREET, CHICAGO; 30 CHURCH STREET, NEW YORK CITY.

CONCRETED IN 37 WORKING DAYS



HIGH-SPEED WITH 'INCOR' ON THIS 13-STORY NAVY HOUSING PROJECT



QUALITY PAYS... INSIST ON
LONE STAR AND 'INCOR'

THIS 13-story reinforced-concrete apartment building, 11,500 sq. ft. per floor, was erected in 37 working days—2 floors a week. Noteworthy speed on New York City's first defense housing project, for enlisted Navy personnel, near Brooklyn Navy Yard. Outstanding value, too—completed fire-safe structure, ready for occupancy, at about 40¢ a cu. ft.

Using 'Incor' 24-Hour Cement, ready-mixed concrete was poured at night, avoiding traffic congestion. Next morning, carpenters were on the freshly-placed floors. With 125 columns per floor, erection was by no means simple. *But good job planning with 'Incor' saved 2 work weeks.* 'Incor's excellent workability produced clean surfaces for exposed ceilings and floors.

Get speed like this the year around . . . use 'Incor'* this Winter . . . save 2 to 3 days' heat protection on each pour . . . cut form costs in half . . . high speed with economy. Write for copy of "Cold-Weather Concreting." Lone Star Cement Corporation, Room 2234, 342 Madison Avenue, New York.

*Reg. U. S. Pat. Off.

Brooklyn Navy Yard Wallabout Houses: New York City Housing Authority, for U. S. Housing Authority. Architect: Hohauser, Vollmer & Wefferling, New York. Contractor: Corbetta Construction Co., New York.

LONE STAR CEMENT CORPORATION

Offices: ALBANY • BIRMINGHAM • BOSTON • CHICAGO • DALLAS • HOUSTON • INDIANAPOLIS • KANSAS CITY • NEW ORLEANS • NEW YORK • NORFOLK • PHILADELPHIA • ST. LOUIS • WASHINGTON, D. C.

AMERICAN BUILDER

AND BUILDING AGE

Why Builders Protest Present Set-up

BUILDERS and building men are up in arms the country over because they feel their businesses are being arbitrarily and unnecessarily destroyed without helping national defense.

Like swarms of angry hornets who have been rudely disturbed, the small business men of the building industry are buzzing over what they consider the injustice and lack of intelligence displayed by government officials in handling the problem of priorities, prices and public housing.

In many decades of publishing, *American Builder* has never seen the builders, material dealers, subcontractors and other men of the industry so aroused. A typical illustration was the Home Builders Institute meeting in Detroit, which took on the nature of an old-time revival and at which \$25,000 was raised by popular subscription to set up an emergency committee to gather information and data to submit to Washington officials.

At one stage of this meeting an official representing the Federal Works Agency's Defense Housing Division was hardly able to continue his address, due to interruptions from the floor by builders who made caustic comments on the effect of public building projects in their communities.

Don't Like "Two-Penny Pipsqueaks"

Throughout the land the millions of persons who depend for their livelihood on private residential building and related construction are so aroused that they are, for the first time in their history, getting together in associations, pressure groups and Washington committees to "do something."

Why this uproar—this near revolt of small business men?

The answer, to our minds, is clear:

1. Defense officials have not presented sufficient justification for the drastic steps taken, *or rumored that will be taken.*

2. Many officials have definitely conveyed the impression that they don't know much about the residential building industry or don't care. In fact, one individual told a group of building men that "there is no residential building industry."

When building men representing various groups in the industry go to Washington they have difficulty finding someone in a responsible position before whom they can present their case. As one builder put it, "We're tired of talking to two-penny pipsqueaks who don't know our industry and who can't do anything about our requests anyway."

Also, the minor officials in charge of various phases of housing and home building are changed so frequently that it is almost impossible to find out who is making a policy or who is responsible for an action or a proposed program or policy.

Organize for Action

Obviously this is a situation that must be corrected in order to carry on the war in which we now seem to find ourselves. Far more unity and co-operation are needed.

The home building industry is making a start by organizing responsible committees in Washington. At the Detroit meeting, the Home Builders Institute appointed a group of the most prominent builders in the country to direct their Emergency Committee. At a previous conference the National Home Builders Association took similar steps. It is believed that other building industry organizations, such as the National Retail Lumber Dealers Association, the Producers' Council, and the trade associations representing manufacturers and subcontracting groups will co-operate with the builders.

On its part, the government should reorganize and simplify its housing setup and should place in key positions men who not only know what makes up this far-flung industry, second only to agriculture in size, but who are sympathetic to private building enterprise.

Given the opportunity, private enterprise can supply the bulk of the housing needed in this country without cost to the Federal treasury. In doing so, private building enterprise will contribute vast sums in taxes to the cost of the defense program.

\$6,000 Ceiling Held "Unintelligent"

Perhaps the most frequently heard complaint of private builders is that the placing of a blanket nation-wide \$6,000 ceiling on the sales price of houses is a completely unintelligent and arbitrary method of controlling the use of critical materials.

There is no justification for the inclusion of such variable factors as land costs and labor rates under this \$6,000 ceiling. It places the builder with high-priced, desirable land at a disadvantage over the one who uses the cheapest, swampiest property available. It places the builder who employs skilled labor at high wages at a disadvantage over the one who uses the cheapest kind of labor at starvation wages. Most unjust of all, it, in effect, tells the builder operating in severe northern climates that he must erect a house with costly heating equipment and materials at the same cost as the builder

operating in Florida or California or along the gulf.

Surely a way can be found by OPM to control or curtail use of critical metals and materials on a *quantity* basis rather than by an overall ceiling price including land, which has no relation to material shortages.

Deliberate "Squeeze Play"

A second important, and to our minds justified, complaint of builders is that FHA has for the most part refused to recognize recent price increases in making mortgage commitments. How builders are expected to continue to erect and sell houses at the same price while labor and material costs have sharply risen, is not explained.

On the other hand, U. S. housing officials say that if private builders do not rush into the market to meet the demand, the government will do the building. It looks to many builders as though they are being deliberately squeezed out. They see government financed projects coming into their communities under the pretext of national defense, and it looks suspiciously to them as though things are being made tough for them so that the "public housers" will have an excuse to come in and take over.

Third in the serious complaints are those of builders who are in nondefense areas. These men point out, with some logic, that housing, like food and clothing, is essential to welfare. They say that if there were a shortage of food or clothing the government would not arbitrarily cut off the entire supply of these basic necessities in non-defense areas. They think it is just as unfair to arbitrarily cut off housing completely in nondefense areas. They feel that provision should be made for needed home building wherever it can be demonstrated, and this includes rural and farm areas as well as many towns and cities which have not been classified as defense areas.

Builders also vigorously object to the sensational and misleading fashion in which the October 9 Supply Priorities and Allocations Board statement of construction policy was made, which conveyed the impression to many people that home building in nondefense areas was completely "banned." In a later statement, as reported in the November *American Builder*, Donald Nelson admitted that this was not a blanket stop order; but by that time damage had been done to thousands of small firms.

Builders wonder whether Washington officials realize the terrible potency of words—the words they spread to the nation which disrupt and destroy the livelihoods of thousands of business men and their employees.

Some OPM men have indicated that the SPAB policy announcement was merely the forerunner of an actual stop order which would prohibit any further nonessential civilian construction *whether the builders had the materials available or not*. Naturally such a rumor has caused still further consternation among builders, and such consternation is fully justified. Such an order would again illustrate that defense officials have resorted to an arbitrary and unintelligent action because they are unable to figure a reasonable way to achieve the end that all of us desire, namely, conservation of critical materials to permit the most effective pursuance of the national defense program.

The arbitrary curtailing of all construction, whether it interferes with defense or not, is not necessary to that end, and in fact, because of the ill feeling and undue hardship it would create will do much to defeat the very program to which the nation is committed.

TWO FAIR TAX PROPOSALS

WHEN A HOME OWNER sells his home at a price higher than the purchase price he pays a Federal income tax on the gain. In case he sells his home at a loss he should, therefore, in fairness be allowed to take a deduction for the loss. The National Association of Real Estate Boards in resolutions adopted at its annual convention just closed in Detroit points this out and expresses its belief that in the interest of tax equity, the Federal Revenue Act should be amended "to provide for and permit a home owner to deduct his or her loss in case a home is sold at a loss."

Also, in furtherance of home ownership, encouragement of which has been a fundamental American policy since the inception of our Government, the Association asks for "homestead" amendment of our inheritance tax laws. It expresses the belief that in case of decease by death of one spouse a homestead occupied by man and wife should be exempted from all inheritance taxes if left to the surviving spouse.

A Builder "Protest"—One of Many Received

Shreveport, La.

To the Editor:

We find it unnecessary to continue our subscription to your valuable publication due to the fact that the FHA has run us completely out of the residential field.

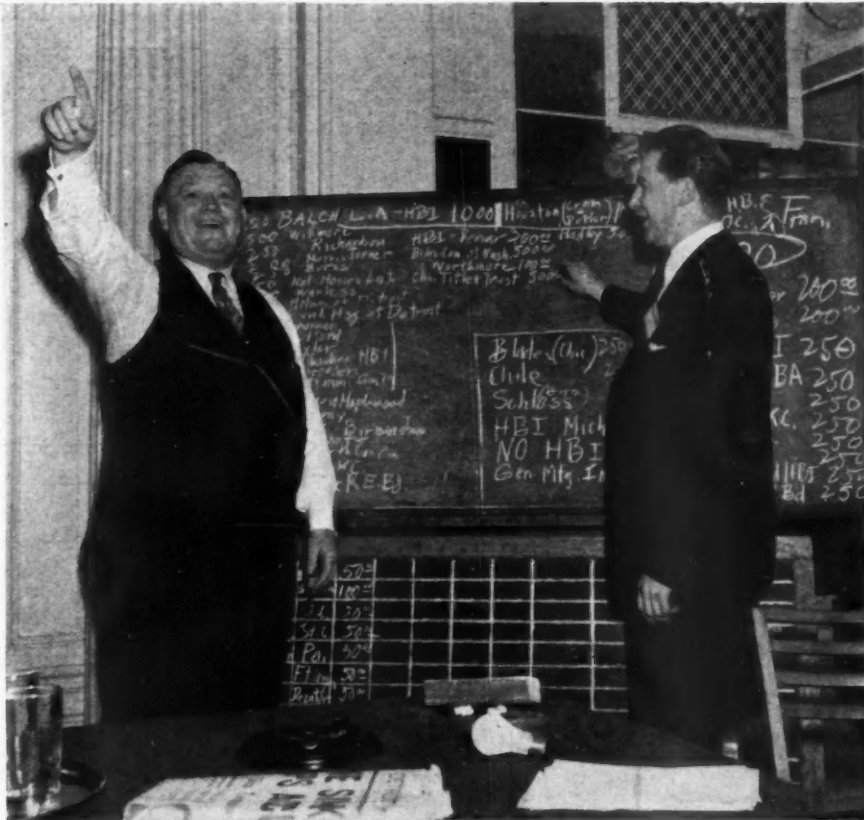
They call anybody with a hammer or a screwdriver "a general contractor" and show no distinction whatever between a fly-by-night, who owes everybody in three states and has numerous liens against him, and an established firm who can make a decent financial

statement. It just happens that we have been in business here for nearly 35 years and have an established clientele and are now doing enough commercial work to keep busy, because we cannot bring ourselves to do the shoddy work being turned out by that FHA bunch and are generally beaten from 15 per cent to 25 per cent on every bid we put in on a residence.

If there is anything we can do to help you fight that menace we will be glad to know what it is.

STRUBBE McCONNELL

McConnell & Whitaker, Building Contractors.



CYRUS CRANE WILLMORE of St. Louis calls for contributions as Albert Balch, Seattle, chalks up the amounts on the blackboard.

Aroused Builders Protest

Home Builders meeting in Detroit takes on nature of old-time revival as \$25,000 fund is raised for Emergency Committee. Hugh Potter, Wm. Levitt, J. C. Nichols, George Miller, John Mowbray, Waverly Taylor, Ellis Stoneson to serve. Other building groups active

THE temper and state of mind of the home building industry were well illustrated late last month by the Home Builders Institute meeting held at Detroit in conjunction with the National Association of Real Estate Boards Convention.

The several hundred builders present left no doubt of the aroused state of their minds concerning priorities, prices, material shortages and government housing.

Like similar meetings of building groups throughout the country these building men unmistakably feel that their livelihood is being threatened by arbitrary and unintelligent actions from Washington. They feel that the cause of national defense is not helped by the blanket \$6,000 ceiling, including land, on house prices. They are all willing to make sacrifices but they believe that they should have more convincing proof than thus far that the destruction of their business is necessary to national defense.

Willmore Goes To Town

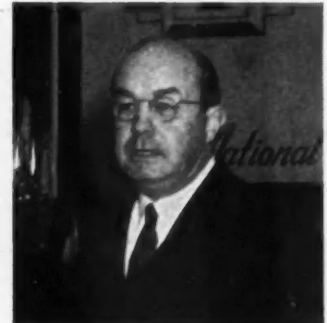
How strongly home builders feel about such matters was dramatically illustrated the second day of the Home Builders Institute meeting, when \$25,000 was raised by subscriptions from the floor in a half hour's time. The session took on the nature of an old-time revival meeting with Cyrus Crane Willmore of St. Louis on the platform calling out sums subscribed, which were then noted on a large blackboard. Subscriptions ranged from \$50 to \$1,000, several of the latter being made by builders' associations.

The goal set by David D. Bohannon, president of HBI, at the opening of the meeting was \$15,000 to be raised at once. Actually, \$15,600 was subscribed during the course of this one session, and it was then announced that the National Real Estate Boards had agreed to contribute an additional \$5,000 and the Mortgage Bankers Associa-

tion subscribed a like amount of money to this fund.

This sum, with additional funds which will undoubtedly be subscribed by other builders and by other building industry organizations, is to be used to establish a strong home builders' representation in Washington, governed by a committee on prices, priorities and materials to be known as the Home Builders Emergency Committee. The principal purpose of this committee will be to gather facts and information about the home building industry to present to the proper officials to aid them in making more informed decisions.

Heading this Washington committee will be Hugh Potter of Houston, Texas, the prominent and well known developer of River Oaks. Serving with him will be J. C. Nichols of Kansas City; John McC. Mowbray of the Roland Park Corp., Baltimore; Waverly Taylor of Washington, D.C.; George Miller, prominent Detroit Builder; William E. Levitt, of Long Island; builder Ellis Stoneson of San Francisco, and Herbert U. Nelson, NAREB secretary. (Continued to next page)



HUGH POTTER of Houston (left) heads Washington committee, while E. L. Crain, also of Houston, becomes the new HBI president.

PROMINENT BUILDERS ATTEND HBI CONVENTION—DISCUSS PRIORITIES, PRICES, PRESSING PROBLEMS



JOHN C. TAYLOR, Kansas City, and **Robert Gerholtz**, Flint, Mich., are pleased by success of fund drive.



ON CONVENTION FLOOR: Fritz B. Burns, Los Angeles; David D. Bohannon, San Francisco; S. C. Hadley, Detroit; John McC. Mowbray, Baltimore; Cyrus Crane Willmore, St. Louis; Herbert U. Nelson, Chicago; George Miller, Detroit.



BUSY BUILDERS: Albert Balch, Seattle; James Irvine, Philadelphia; Walter Durham, Philadelphia; Joseph Meyerhoff, Baltimore.



SERIOUS CONFERENCE: George Nixon, Skokie, Ill.; George Miller, Detroit; Charles S. Wanless, Springfield, Ill.; Harold Cheel, Ho-Ho-Kus, N. J.



DAVE BOHANNON, retiring president, welcomes new Milwaukee Chapter to Home Builders Institute.

A permanent staff will be employed, to be managed by Milton W. Morris, able executive director of the San Francisco Home Builders Association. Permanent headquarters will be maintained at the Ambassador Hotel in Washington.

This group will undoubtedly give the home building industry a strong, intelligent and responsible representation in Washington, and the calibre of the men selected is such as to warrant the confidence of government officials.

The HBI sessions were attended by the largest number of builders in the history of the organization. Speakers on such topics as priorities, prices, FHA appraisals and

defense housing encountered lively attention. The critical question of FHA's position with regard to increased building cost was discussed by Curt C. Mack, Director of FHA's Underwriting Division. Mr. Mack stated that FHA's policy is that its valuations will not reflect increased construction costs "unless such costs are clearly stabilized." This sounded to builders very much as though they were being told that they would have to get larger down payments from home buyers.

"FHA has a long-term position," Mr. Mack declared. "Therefore, temporary increases in costs cannot be carried over into valuations for long-term mortgage loans."

Thus, if Mack's words are a true statement of FHA's policy, they mean that 90 per cent FHA mortgages are a thing of the past.

Object to Public Housing

Another high point of the HBI meeting was the situation that developed when R. M. Little of the Federal Works Agency arose to speak on the subject, "How Builders Can Qualify for Government Defense Home Building." It was immediately obvious that most of the builders present were more concerned with how to keep unwanted government housing projects from being forced onto their communities than they were with hearing how to get such jobs. Several fiery speeches from the floor were made which drew far more applause than Little's remarks.

(Continued to page 92)

HOMES CAN BE BUILT

To Avoid "Critical List" Shortages

The "EXTENSIBLE HOUSE" Utilizes Planned for, But Postponed, Extra Items of Home Equipment

Plan and Build Homes NOW of Proper Size and Design, Using Mostly NON-Critical List Materials—Later Finish Off Additional Rooms and Add the Wanted Refinements of EXTRA Equipment

IN THE BELIEF that a careful and extended study of potential difficulties confronting the home building industry is now mandatory, *American Builder* has concluded that the industry must be prepared to solve its own problems through the use of materials and equipment currently available, and through exercise of the utmost ingenuity and resourcefulness to do its part in providing homes and shelter for civilian requirements. Homes of considerable comfort and market appeal can be planned and built, this publication believes, with a minimum use of "critical list" materials and with extra equipment provided for, *but postponed for installation at a later date.* The *American Builder* staff has referred to this type of house as "extensible," or capable of being extended, added to, or enlarged, especially as to its equipment.

The Extensible House has been described to key officials in Washington who have assured us that it will be fully eligible for insured financing, provided all structural provisions now required by FHA are met.

What Is An Extensible House?

As conceived by the Staff, the Extensible House is one that is so skillfully designed that it can be built and lived in today, but the purchase and installation of *extra* convenience equipment *can be postponed.* Extra conveniences can be installed when they are available. The Extensible House is different from one that has been designed to "grow" through the subsequent addition of extra rooms, wings, or an upper story. Instead, the Extensible House is designed and built to include or provide space for all rooms and extra conveniences that ultimately will be installed and used. For example, an Extensible House would be designed and built to provide extra bedrooms on the second floor, or an extra bath and powder room that would be only partially equipped and finished at the time of construction. The necessary plumbing and finishing materials for completion of these extra rooms would be added when available. Much ingenuity can be shown in devising easily removable panels and access openings for the later installation of pipes to serve such postponed fixtures.

Many families in America want or need something better than a \$6,000 home. The Extensible House will go a long way toward solving their problems. It will enable them to have what they basically need in size and living space while complying with the limitations currently placed on new homes by the defense shortages.

An important feature of this plan is that Extensible Houses could be built in the higher priced subdivisions. The exteriors of these houses would conform to neighborhood standards already established by the builder-developer. High grade structural materials suitable for better type houses would be used throughout, but equipment would be installed in complete conformity with defense standards.

Protests Price Limit on Homes

Senator Robert Taft, of Ohio, made an effective plea for the better type of home building, and by inference for the Extensible House, when he addressed the Senate on November 5. He said:

"Mr. President, on October 9 the Supply Priorities and Allocations Board announced that no public or private construction projects could be started which used critical materials, such as steel and copper, unless these projects are necessary for national defense or essential to the health and safety of the people. Taken in connection with the order of September 22, this order completely prevents the construction of residential units costing more than \$6,000. Undoubtedly the order will throw thousands of workmen out of work. It brings to a close the business of nine-tenths of the architects. It will seriously affect the clay products and concrete industries.

"There seems to be no reason for such an arbitrary ruling. Placing a limit on the size of a family unit has no direct relation to the use of critical materials. It would seem much more reasonable to provide that no more than a certain amount of iron, steel or copper shall be used for any family unit than the minimum required for small homes. Many homes costing \$8,000 or \$10,000 can be built with just as little critical material as homes costing \$6,000.

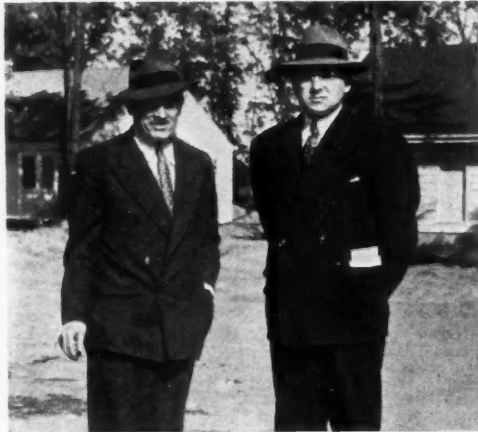
"The attempt to impose a cost limit on homes to be built is something which seems a direct interference with the liberty of the individual home owner. It creates all kinds of inequities. A much better house can be built for \$6,000 in states where the climate is mild than in colder sections. A man with a family of five children can have no more room than a man and his wife without any children. Since the cost of the house must be held within \$6,000, it will force the use of cheaper materials . . . and prevent the use of brick and concrete. It happens that the brick and concrete industries are not running at all full, and there seems no reason why they should not be encouraged in lieu of other industries which are necessary for defense.

"The arbitrary limit on the value of a house includes the value of the land. The result is that a cheaper house must be put on a lot costing a thousand dollars than can be put on a lot costing \$200, because only \$5,000 is left for the house instead of \$5,800. Of course, the better

(Continued to page 95)



WORK IS BEING RUSHED on one hundred 31' x 25' defense homes for workers in nearby East Hartford airplane plants.



P. A. BATCHKER, treasurer, (left) and I. R. STICH, president of Manchester (Conn.) Homes Corp., who received first priority order in their area.

A-2 Priority Speeds Pine Acres Homes

Good design, sound construction featured in OPM-approved homes priced at \$4,670 to \$5,670

By Joseph B. Mason

PINE Acres development at Manchester, Conn., is a lively illustration of the kind of home building that is booming—with the aid of priorities—in defense areas.

Located within easy reach of Hartford's airplane plants this job was one of the first in the area to get a priority preference rating—an A-2 rating. The preference rating order, which bears the astronomical number 77-017-000003, was effective October 10 and had already been put to effective use by the builders when I visited the job.

With the aid of this A-2 priority order, the Manchester Corporation has been able to obtain materials for 178 houses, including such vital items as boilers, radiators, oil burners, hardware and wiring.

One of the first uses made by the builders was to help the local utility company get wire for a new part of the project and to help the local water company get much needed water pipe.

It is quite a novel experience for a builder to be in a position to be "helping the utilities," rather than at their mercy as they usually are. The priority order will also be of value to the builders in obtaining refrigerators, stoves

or other equipment which prospective home buyers may have trouble obtaining.

Why and how were the builders of Pine Acres able to get such prompt action from OPM? This is the question I kept asking as I inspected the houses and talked with Irving R. Stich, president of the Manchester Corporation, and Phillip A. Batchker, treasurer.

Why They Got Action

The answer as given here takes only a few brief paragraphs:

1. First of all, Hartford is a highly important defense area where there is a great shortage of housing. Pine Acres is ideally situated in a small, attractive town within easy reach of the defense plants.

2. The builders have done a splendid job of constructing sound, well-designed houses in the \$4,600 to \$5,300 class, and have a good reputation and a good financial standing.

3. The houses are of two basic sizes, namely, 31' x 25' and 31' x 24' in size, of good design (see page 43 for

A-2
RA
use
ma
sm
hor
ast
ber

BECC
porte
plan
lack
the
is u
A-2.
clud
radic
hard
critic
effec
tober

com
ford

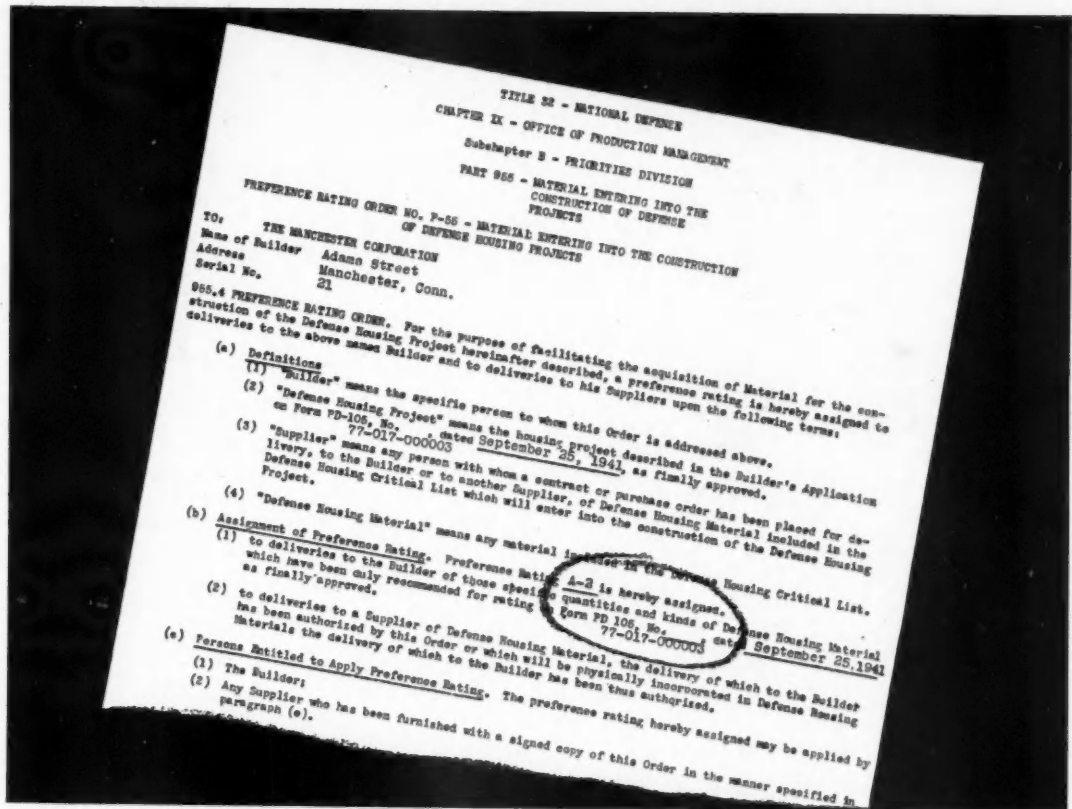
4.
Stic
buil
of a
busi
his o
5.
had
whic
able
taile
A



STREET of 5-room Pine Acres homes of type given A-2 priority preference by OPM at Manchester, Conn.

A-2 PREFERENCE RATING order used in obtaining materials for 178 small defense homes. Note the astronomical number—77-017-000003.

BECAUSE of the importance of the airplane industry and the lack of housing nearby, the Pine Acres priority is unusually high—an A-2. The materials include steel boilers and radiators, oil burners, hardware and other critical materials. The effective date was October 10.



complete plans and elevations of smaller one by Hartford Architect Joseph E. Kane).

4. The builders are aggressive and on their toes. Irving Stich, president, is probably the youngest large-scale builder in the country—only 28 years old. He is the son of a highly respected builder who learned his father's business, went to college and then went into business on his own. His partner, Batchker, has financial background.

5. Manchester Corporation was a going concern and had built a large number of houses of the same type on which they obtained priority assistance. Thus, they were able quickly to submit complete plans, specifications, detailed lists of materials and other data required by OPM.

Also, because of the successful job that they had per-

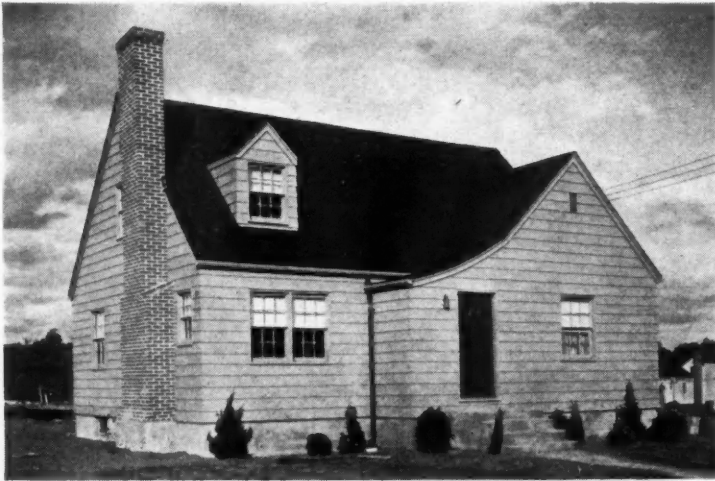
formed they had the co-operation and endorsement of local FHA representatives.

These in brief are the reasons why Pine Acres is moving ahead so rapidly. When I visited the job late in the fall 100 houses were in various stages of construction, and speed was the essence of the day in order to get foundations in before freezing and in order to get as many houses enclosed as possible.

A large amount of material had already been delivered to the job and was stored in several old tobacco sheds which had been on the property when it was purchased. The builders had found it necessary to add several additional men to the staff to supervise the storing and handling of materials. A power saw and paint spraying



HIGHER PRICED Pine Acres models have dormers permitting two additional rooms upstairs. Joseph E. Kane of Hartford is the architect.



ADDITIONAL VARIATIONS of the standard 31' x 24' floor plan shown on opposite page. OPM approved priority order for materials for 178 houses.

Priority Approved Defense Homes

machine were installed in the shed to cut as much lumber as possible inside and to apply prime coat. The shed space was also useful on rainy days to enable at least some of the men to build various standard items used in the houses.

The builders plan to erect a total of 240 houses on the first 40 acres, or roughly six houses to the acre, on 60 x 120 foot lots. They have an additional 80 acres available for further expansion.

More than 75 per cent of the buyers of Pine Acres houses are aircraft workers, but, strangely enough, most of the buyers, according to Irving Stich, have lived in the Hartford area for at least several years. In other words, the people who are buying houses are not the floating or transient type of worker—they are the kind of family that expects to be permanently located in this area. Due to the efficient construction methods and to low taxes, the overall carrying charge of these houses is very low. It ranges from \$32 to \$35 a month, with a 10 per cent down payment. This puts these houses within easy reach of defense workers, most of whom are making good salaries.

For this \$32 to \$35 a month the Hartford defense worker gets an unusually attractive four-room house with a full basement, hot water, oil burning system with Capitol boiler

A
an
fir
sp
m
do
sp
A
de
fo
31
tia
an
me
du
pr
sh
pr
eq
ing
YO
den
DET.

and Bell & Gossett circulating pump, finished stairs to attic where there is space for an additional room. In the more expensive models second-floor dormers are added which would provide space for two additional rooms upstairs. A wide variety of exteriors has been developed by Architect Joseph E. Kane for the two standard basement sizes, 31' x 25' and 31' x 24'.

The Pine Acres houses are substantially built, using well seasoned lumber and the most substantial construction methods. Irving Stich believes in producing the best possible house at the price established and insists that there should be no extras over the advertised price.

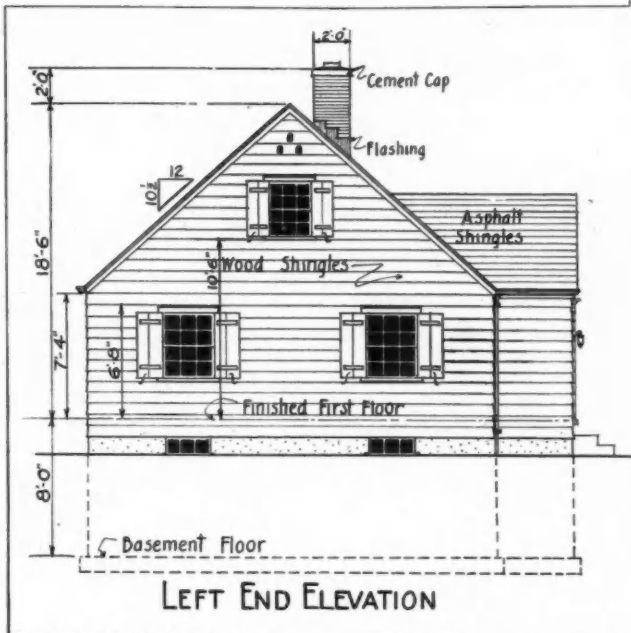
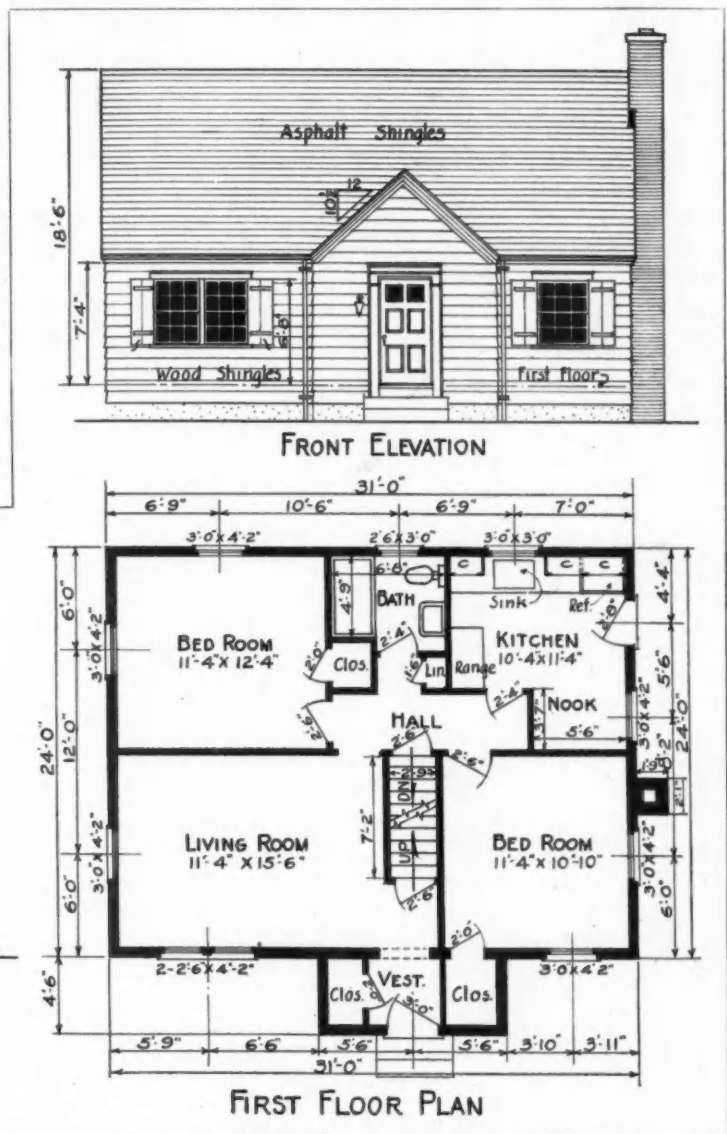
The present models of houses are equipped with copper flashing and piping and make use of some steel and
(Continued to page 95)



PLENTY OF WINDOWS, simple design, compact plan are features of the Pine Acres defense homes. Similar to front cover home.



YOUNGEST BUILDER—Irving R. Stich, president of Manchester Corp., is only 28 years old.



DETAIL PLANS of A-2 defense home designed by Architect Joseph E. Kane show many good features. Houses have full basement, hot water heat with oil burner, insulation, good-sized rooms.

Presenting an "Extensible House"—

By R. E. Sangster

Analysis of current type of small home to provide good, needed shelter while conserving critical materials

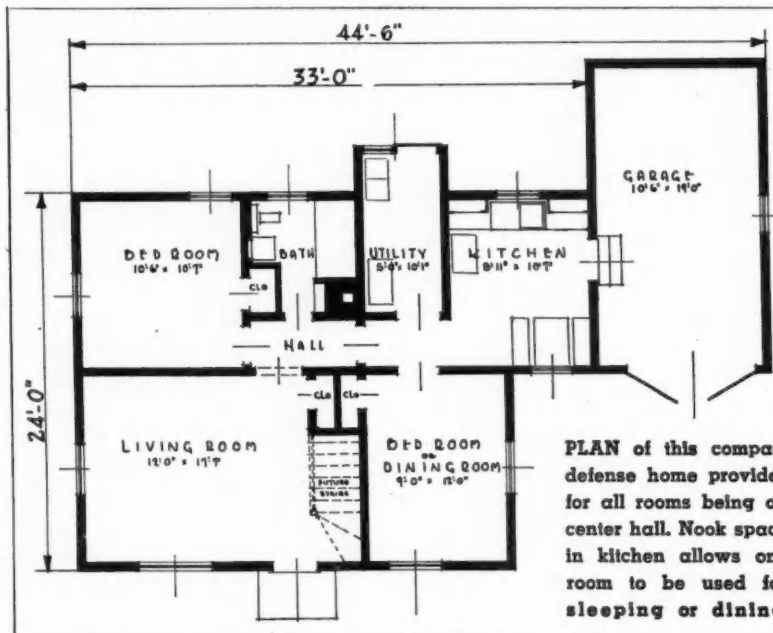
THE Fred J. Walsh Company started the first large-scale home building program in the Chicago area under FHA back in the middle 30's with its "Small Farms" security home development south of the city. Following up this precedent of taking early advantage of expanding operations to meet the ever-changing building program, the company was one of the first in the Middle West to announce a Title VI defense home program. And now, it so happens that the planning phase of Walsh's defense home program will, further on in this article, provide the basic example for the initial appearance of *American Builder's* "Extensible House"

idea—an industry aid to help builders meet the priority situation on materials, trim costs where necessary to qualify for Title VI, and offer suggestions in the creation of better homes to be built and lived in today with the possibility of extending their usefulness after the emergency is over.

The four-room design shown below is one of several models Walsh opened for public inspection and, of the various models available, it has proved the most popular. Although this house and the others being offered were originally planned to be built as defense housing by limiting the number of accessories and some of the



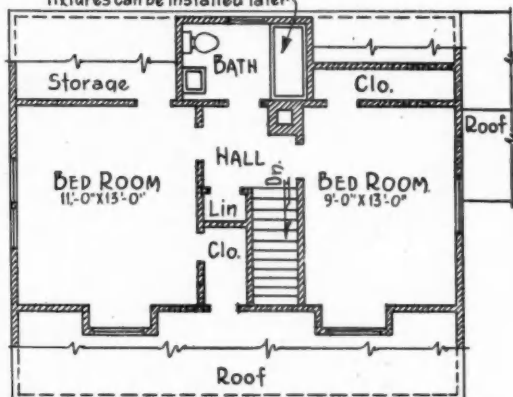
AN attractive defense house in the Chicago area by Fred J. Walsh, which provides for additional living facilities to be installed within its present superstructure when present restrictions are lifted—a truly extensible house.



PLAN of this compact defense home provides for all rooms being off center hall. Nook space in kitchen allows one room to be used for sleeping or dining.

THE extensible second floor plan below will allow expansion later at reasonable cost. Alternate ideas are presented opposite.

2nd Fl. Bath on same Stack as 1st Fl. Fixtures
If Bed Rooms needed immediately fixtures can be installed later.



EXTENSIBLE SECOND FLOOR PLAN

refinements which have been subsequently made, it was discovered that many of the prospects for this type of home eventually built under regular Title II provisions rather than to take advantage of such low down payments as \$100 which would be possible under Title VI. A group of these homes lining both sides of the street for more than a block is now occupied or completed. The plots of land included or available are large enough for ample gardens, which appeal to buyers in this income group.

In plan, this attractive little home has four rooms, bath, utility room, and attached garage compactly and conveniently arranged on the first floor. The plan allows for a future stairs to space for two additional bedrooms on the second floor. In the model home pictured opposite, the stairs were built in so that this space could be inspected, the attic being floored and the rooms marked off for size and shape; heating stubs were also extended. This proposed extensible second floor plan is illustrated on the opposite page and the bath can be equipped at a later date if the extra bedrooms are finished immediately.

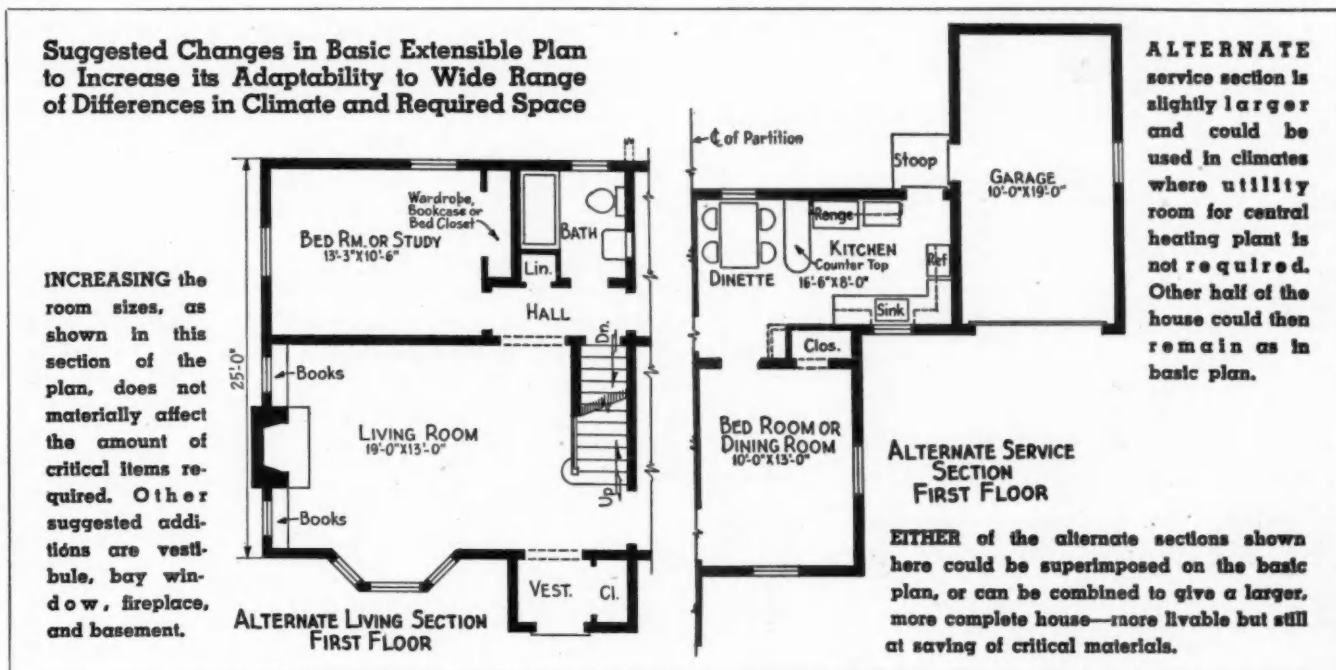
One of the four rooms is planned either as a dining

of critical equipment items entering into its construction.

Approximately four feet longer and a foot deeper, the relationship of the rooms to one another and the basic framing remain the same. A vestibule with convenient guest closet, living room bay window and fireplace are refinements that add to both exterior appearance and interior livability.

Another change from the basic plan which will be noted is provision for a larger closet off the bedroom or study (this is possible because of the four feet added to the length); this change allows greater flexibility inasmuch as, if properly framed, this closet can be converted later on, when the second floor bedrooms are added, to a library bookcase or a folding bed closet—a handy feature if this room is used as a combination guest room and study.

Changes in the rear hall include a larger linen closet possible through the elimination of the flue if fireplace is used (bathroom fixtures have been reversed). It is supposed that a basement is provided under at least this half of the house; closet space under the stairs is then



room or sleeping quarters, a closet being provided. This closet and the guest closet which backs up to it offer one of the interesting features of this house: large garment capacity in a shallow space. This is accomplished by the installation of a special rack on the door which holds between 16 and 18 pieces of clothing and folds up when the door is closed.

There is no basement; a utility room houses the U. S. Radiator boiler and laundry trays. The hot water heating uses Weil-McLain Snug radiators and copper tubing. Other materials and equipment include a 4'-6" poured foundation, frame with clapboard on exterior, and Sheetrock joined with Perfatap and wallpapered on interior, Texolite finished ceilings, Linowall in bath, USG 3-in-1 asphalt shingles, red oak floors except Armstrong linoleum on kitchen, bath, and hall floors.

To extend further the application of the basic four-room plan, as built by Fred J. Walsh Co., the author and *American Builder's* architectural staff have worked out alternate arrangements with suggestions for their use in all sections of the country. The variation of the living section of the first floor, as shown above, provides increased livability without materially adding to the amount

replaced by basement stairs. In some southern areas, this revised portion of the plan can be used without basement if floor furnaces provide heat; in that case, space under stairs to the second floor would provide additional storage.

Above is shown an alternate first floor plan of the service section of the house. Former utility room area is made part of the kitchen and provides dinette space. The bedroom or dining room is a foot wider than in the original plan, and provides for a closet to replace the one under the stairs. If at a later date this room should be used for dining only, the door can be switched to the kitchen and the space used as a small pantry. (Broken lines show extension to pantry or separate broom closet.) If house is built basementless, laundry tray can be put in kitchen or in an enclosed service porch.

These suggested changes are just a few of the many which could be made in this livable, extensible floor plan. A connecting porch between kitchen and garage, a living porch off either the living room or rear bedroom, or different kitchen arrangement are others. The main feature of the house is its adaptability to present conditions while retaining basic advantages in any of its stages.

Extensibility

FO



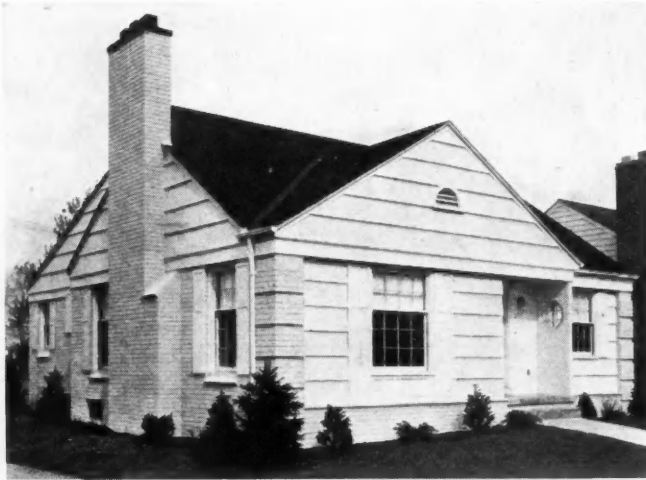
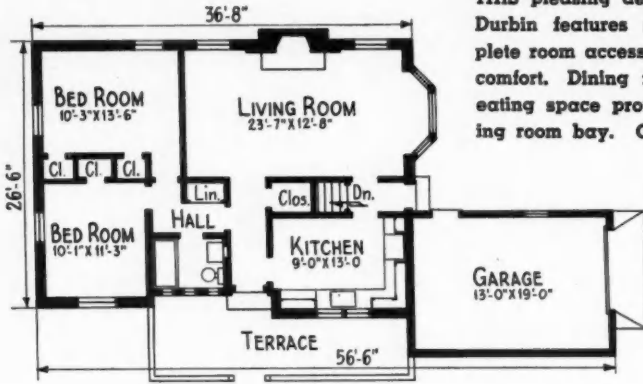
IN Detroit, industrial defense center No. 1, builders have been solving some of the problems which are today confronting other builders throughout the country in connection with costs, small home planning and saving of materials.

Increasing costs over the period of the last two years have here necessitated the redesigning for the small home market, as Detroit had been an area in which a well built, properly equipped, generously proportioned home could be sold complete for just under \$6,000. As costs rose, it was necessary to cut

down on quantity rather than quality in this price class, and consequently many of the features of what has been termed extensible planning were adopted to meet the mass market in this range.

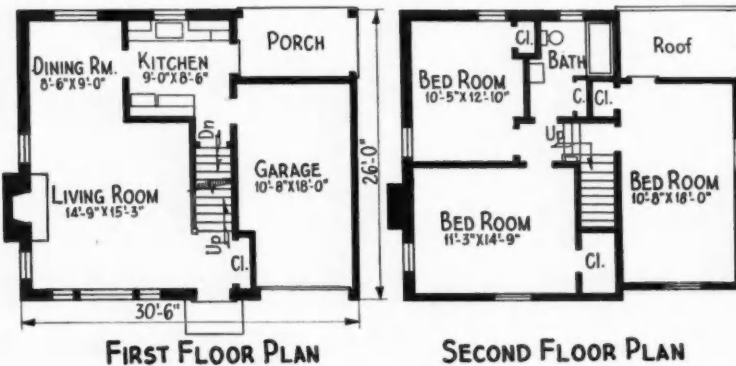
For instance, some Detroit builders found that omitting the garage, which could be later built by the owner, provided the necessary margin. Or perhaps a lavatory was

THIS pleasing design by Builder Harry J. Durbin features sound construction, complete room accessibility necessary to living comfort. Dining room is eliminated, with eating space provided in kitchen and living room bay. Good access to basement.



BUILDER and designer Milo F. Genser exhibited his 1941 model, as shown at the left. Here again, a separate dining room is replaced by space combined with living room and a breakfast nook. Center hall provides unusual small home accessibility to living, sleeping, working areas. Stair leads from point near bath to future attic rooms. Breakfast bar, built-in bath vanity and wardrobes are included.

AT the right, a three-bedroom home by Clare E. Snell is about as compact an arrangement as could be had, with practically no hall space. Included are attached garage, rear porch, roof deck. Thorough insulation, winter air conditioning and wood-burning fireplace add to coziness. G-E Disposall in kitchen.



FO
tra
hom
C.
Cyr
are
typ
are
flo
tion
ins
mer
feat
rang
the
con
the
ed

Found in Detroit Homes

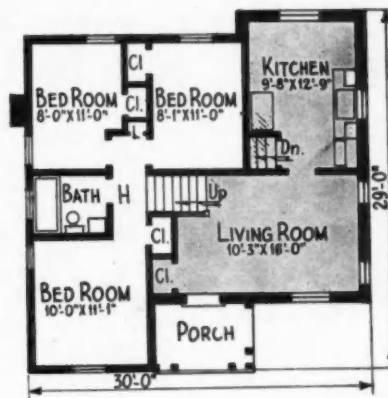
replaced by an extra closet. In other instances, the master bedroom and bath on the second floor of the five-room story and a half design were left unfinished. More compact floor plans allowed less expensive, narrower sites; this idea would be useful in extensible planning where every third lot could be left vacant and later sold in halves to the adjoining owners. Porches can, of course, be added later by owners if planned for originally.

The 1941 demonstration home project of the Builders Association of Metropolitan Detroit, "Models on Parade," reflected much of this type of planning. Six of these homes are shown here, and because of the wide diversification of arrangement and styling, they demonstrate many usable ideas. At the top of the page opposite, the four-room home of Builder Harry J. Durbin is compact, livable, attractive. Bath is handy to all parts of the house, thereby making a lavatory on the same floor non-essential. Garage might be omitted, design turned lengthwise for inside lot.

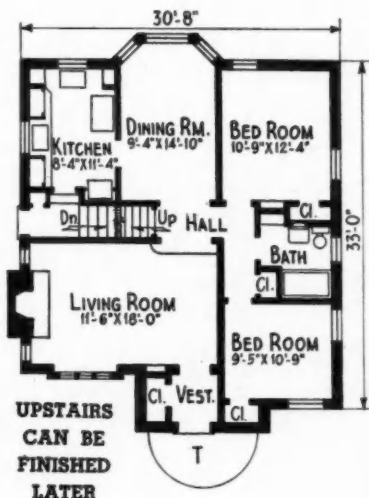
At the bottom opposite, the model of Clare E. Snell would allow the third bedroom, over garage, to be left unfinished. The same would be true of the three-level design of Greater Michigan Homes, Inc., above, at right.



THE Greater Michigan Homes, Inc., design above presents an unusual arrangement for which copyright has been applied. It is claimed that three bedroom size is possible at five-room bungalow cost. Notice how the third bedroom is worked in. A storage room occupies a space in the front gable to the right of the bedroom over living room.



FOR the person who likes traditional styling, the home at the right by John C. Gerken is appealing. Cypress, brick and stone are combined in English type exterior. Inside there are five rooms on the first floor, with plenty of additional space above. Built-ins and complete equipment add appreciated features. The hall arrangement in the center of the house is placed for convenience and opens up the plan to the well lighted dining room at the rear.

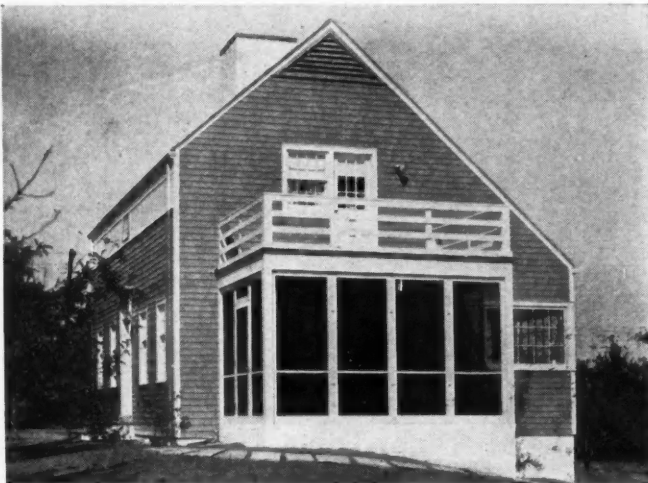


F. F. Hannan, Inc., presented the model below, which has a first floor den, with adjoining powder room, that will serve as a guest room. Stairs from the rear hall lead to two good sized bedrooms and bath. First floor lavatory can be left as closet space temporarily.





LARGE SMALL "HOUSE OF IDEAS" is designed in Early American salt-box style to fit sloping hillside. Victor Civkin, architect.



STORY AND A HALF at front—two stories at rear.

No Priority Limit On Smart Ideas

32,000 visitors to Southport, Conn. house show that public is still keenly interested in ideas for better living. "Extensible house" and modernizing suggestions illustrated



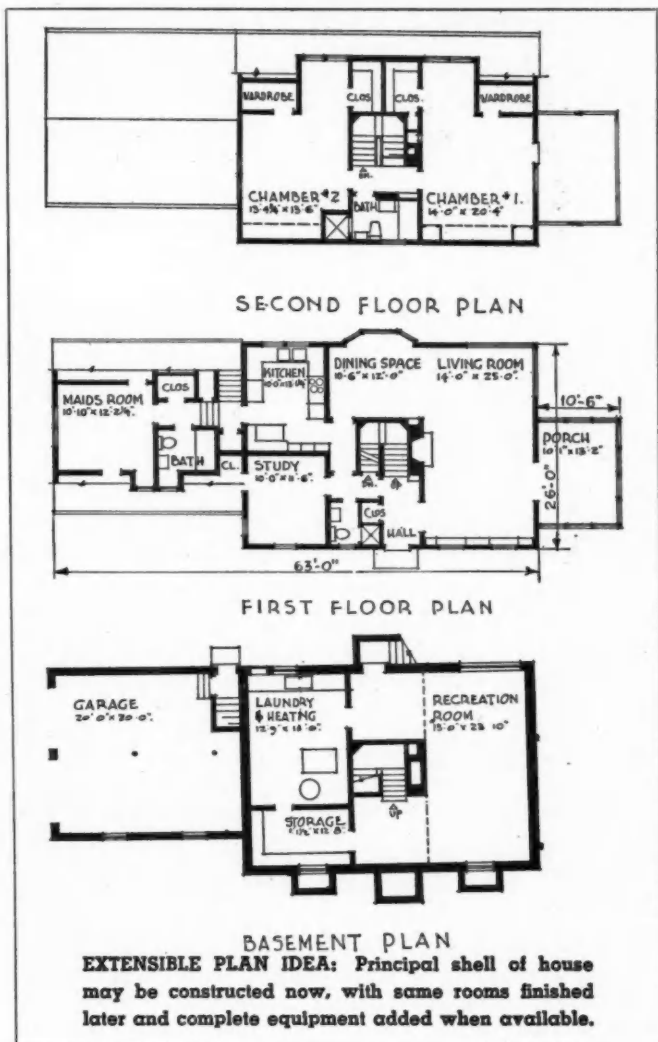
CORNER WINDOWS of living room command hillside view.



ALCOVE accommodates united twin beds.



PINE paneled living room has built-in shelves, distinctive Vermont marble fireplace, ample electric outlets.



A HIGH water mark in planning, constructing and equipping a "large small home" was set in this salt box Colonial at Southport, Conn.

Built by L. E. Tucker from plans by Architect Victor Civkin, the house graphically illustrates what the building industry can do toward providing the maximum of convenience and comfort in modern American living. It was started before present shortages began to appear, and while many of the items of equipment are not now immediately available in some areas, it is still full of ideas for builders—ideas that will apply to defense housing, modernizing and all kinds of modern homes.

In studying the plan, construction and equipment of this house, it becomes apparent that it also illustrates what *American Builder* has characterized as the "Extensible House" idea. In other words, such a house as this can be built with the exterior shell complete but leaving some of the rooms unfinished and omitting a considerable part of the equipment and special devices that are scarce, due to defense requirements.

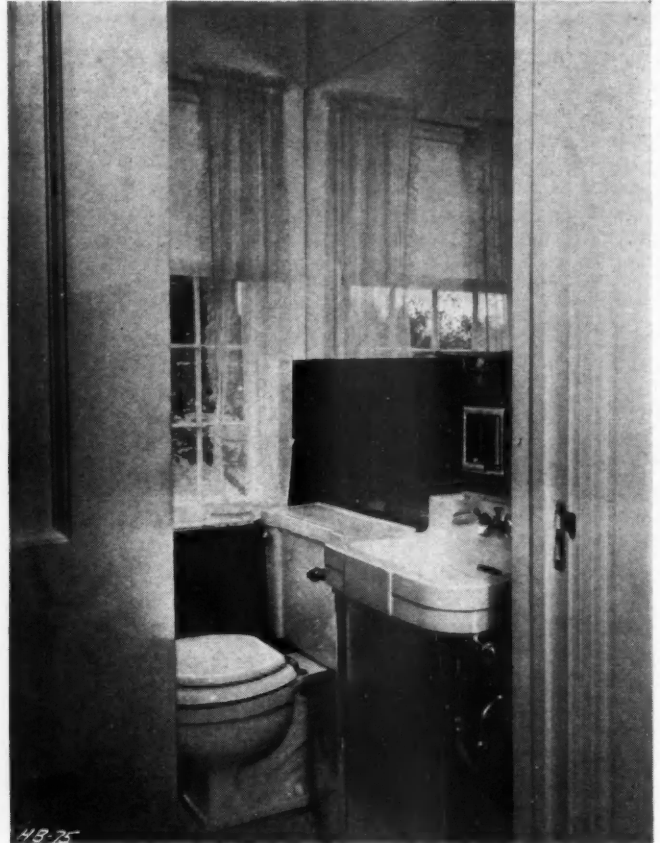
Such a house can be built at reasonably low cost and without a serious drain on "critical list" materials. Provision is made for the later addition of the type of electrical equipment and time and labor-saving devices that have become so important in the American way of life.

During the time that it was opened to the public, 32,000 visitors, counted by an electric eye, passed through, illustrating clearly the interest of the public in modern living ideas. Following the public showing, it was purchased and is now occupied by C. W. Stuart, manager of the General Electric Home Bureau, under whose direction it was built. A thorough-going student of modern home planning and equipment, Stuart became so enthusiastic about the house that he decided he must own it.

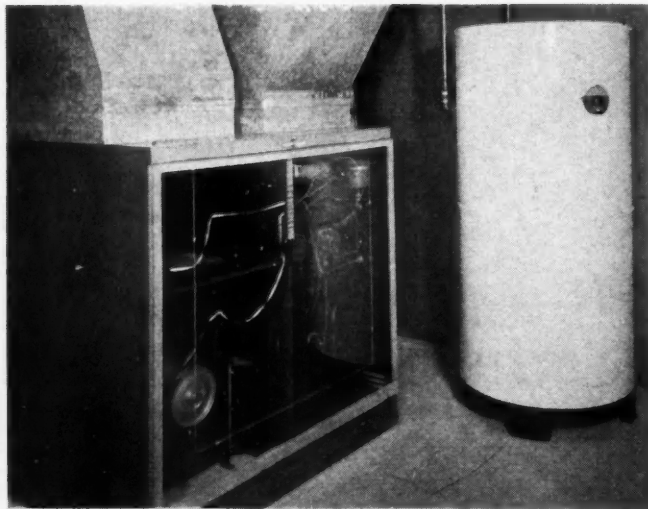
Traditional New England architecture of the Early American salt-box style was selected to fit the New England hillside. From the front it is a story-and-a-half



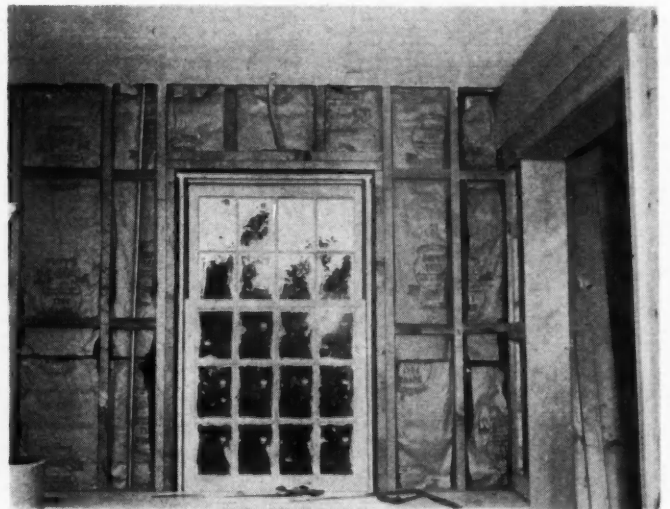
ELECTRIC KITCHEN with indirect lighting, U-shaped plan.



GLASS and modern fixtures beautify the bath.



AUTOMATIC winter air conditioner and electric water heater.



MINERAL WOOL BATTS provide scientific insulation.

house, but fullest use is made of the basement for living space, and due to the slope of the ground toward the rear the rear entrance is a half story between the basement and first floor.

The two-car attached garage is also a half-story below the first story of the house, and the maid's quarters above the garage fall between the first and second story.

The house clapboard is a grey-blue. The brick garage is painted white, and the house trim is also white.

The "House of Ideas" became packed with ideas for home owners because the G-E Home Bureau sought to build into it every possible feature for the most in living. It carries out the theme that the most economical home to build and live in is made and equipped with high quality materials because the operating economies

of high quality materials and equipment more than offset any increased original cost.

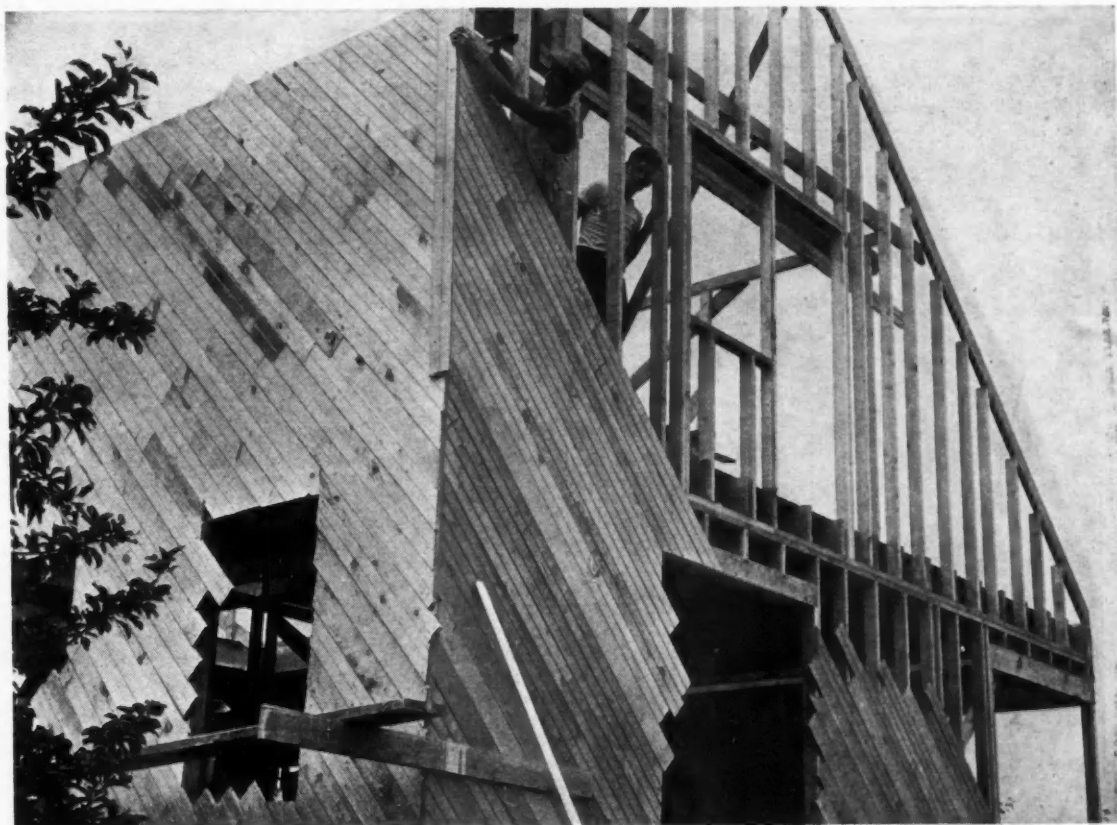
Every square inch has been put to work as living space. Corridors are kept to a minimum, rooms are planned for versatility and the most spacious effect, built-in features multiply normal living space and convenience of use, and the storage problem has been tackled to answer for all time the home owner's first "peeve"—inadequate closet space.

Part of the story of the true economy of the "House of Ideas" is the protection it affords against obsolescence and deterioration. High quality materials and the latest operating equipment pay a two-fold dividend—first, while they are being used, and second, in the future. Planning adequately for future needs is an accompanying

No Lumber Shortage

SUPPLIES of lumber and other basic materials in the country are ample—there's no reason for restricting them. Under the "Extensible House" plan, the shell of the house is built large enough to accommodate requirements of the average family.

AT RIGHT—application of end-matched sheathing applied diagonally with great speed and a minimum amount of cutting. L. E. Tucker, builder; Fairfield (Conn.) Lumber & Supply Co. furnished the materials.



SEASONED, grade and trademarked lumber of highest quality.



RED CEDAR SHINGLES, packaged siding, guide-line framing on job.

necessity, of which the wiring of this house is a good example. Throughout the house are 225 electrical outlets, more than double the 100 usual for this size house.

During the public inspection, the house told its own story, for it was a "talking house." This was accomplished by a tricky device which makes the walls of the house itself seem to speak up to the visitors and explain its interesting features.

But a regular part of the equipment, and no trick, is the device whereby a voice may greet you when you come to the front door and ring the chime bell. A loud-speaking arrangement at both front and rear doors permits two-way conversation with a visitor.

Entering the house, the living room to the right gives an immediate feeling of spaciousness. Looking diagonally across the room, a view of the Sound and valley opens

(Continued to page 89)

Plan Now for Future Equipment

SHORTAGES of a few critical metals should not be used as an excuse to build houses of inadequate size or of unsound structure. The house illustrated in this article represents the fullest development of the modern American space-saving, time and energy-saving home.

INDEX TO 1941 HOUSE DESIGNS AND PLANS

All house designs with floor plans published in the American Builder during the year 1941 are listed and classified in this index. Date and page number on which each house appears are given opposite name of type, such as Colonial, English, French, Modern, etc.

1 STORY HOUSES—

- 3 ROOM—{ LOW COST—Apr., p. 175.
COTTAGE—May, p. 71.
- 4 ROOM—{ COLONIAL—Mar., pp. 62, 63; Dec., p. 46.
FLORIDA—Aug., p. 60.
LOW COST—Jan., pp. 38, 39, 47; Feb., pp. 100, 101; Mar., p. 61; Apr. pp. 84, 173, 181, 182; May, p. 67; Sept., p. 120; Oct., pp. 76, 79; Nov., pp. 47, 49; Dec., pp. 43, 44, 45, 54, 55.
- 5 ROOM—{ COLONIAL—Jan., p. 37; Feb., p. 69; Mar., pp. 71, 73; June, pp. 62, 63, 64; July, pp. 55, 60; Nov., p. 59; Dec., p. 46.
NORTHWEST COLONIAL—Apr., p. 115.
CALIFORNIA—June, p. 83; July, p. 62; Dec., p. 58.
FLORIDA—Apr., pp. 100, 190, 191; May, p. 60; July, p. 42; Sept., p. 73.
HAWAIIAN—Mar., p. 64.
ENGLISH—Feb., p. 98; June, p. 80; Dec., p. 47.
MODERN—Nov., p. 54; Dec., p. 60.
LOW COST—Feb., p. 67; Apr., p. 180; May, pp. 64, 65; June, p. 76; Sept., p. 61; Oct., pp. 81, 83, 87, 88, 144, 147; Dec., pp. 54, 55.
- 6 ROOM—{ COLONIAL—Jan., p. 43; Feb., p. 70; July, p. 63.
FLORIDA—July, pp. 43, 44, 45; Aug., p. 59.
HAWAIIAN—Mar., p. 131.
ENGLISH—Apr., p. 117.
MODERN—June, p. 73; Dec., p. 61.
LOW COST—Mar., p. 125; Oct., pp. 72, 73, 83, 87.
- 7 ROOM—{ ENGLISH—Apr., p. 117.
- 8 OR MORE ROOMS—{ HAWAIIAN—Mar., p. 65.

1½ STORY HOUSES—

- 5 ROOM—{ COLONIAL—Nov., pp. 60, 61, 106; Dec., p. 47.
- 6 ROOM—{ COLONIAL—Jan., p. 41; Feb., p. 77; Mar., pp. 70, 72, 76; May, pp. 63, 68, 69; July, p. 93; Aug., pp. 56, 57; Oct., p. 85.
DUTCH COLONIAL—Aug., p. 67.
- 7 ROOM—{ COLONIAL—June, pp. 137, 139; Aug., pp. 66, 71; Oct., pp. 71, 85; Dec., p. 49.
LOW COST—Mar., p. 75; Sept., p. 64.

2 STORY HOUSES—

- 5 ROOM—{ COLONIAL—Jan., p. 42; Feb., p. 98; Apr., p. 114; June, p. 122.
DUTCH COLONIAL—Mar., p. 74.
- 6 ROOM—{ COLONIAL—Feb., pp. 62, 63, 99; Mar., p. 69; Apr., pp. 105, 109; May, p. 82; June, p. 75; July, p. 61; Nov., p. 63; Dec., pp. 46, 47.
GEORGIAN—Feb., p. 64; Mar., p. 74; July, p. 55.
MODERN—Jan., p. 36.
- 7 ROOM—{ COLONIAL—Feb., p. 65; Mar., p. 68.
GEORGIAN—July, p. 40.
- 8 OR MORE ROOMS—{ COLONIAL—Apr., pp. 102, 103; Dec., p. 56.
GEORGIAN—Mar., p. 59.
FRENCH—Feb., p. 59; Dec., p. 57.

MISCELLANEOUS DESIGNS—

- Apartment—Jan., p. 52; Feb., p. 61; May, p. 80; June, pp. 68, 69; Aug., p. 65; Sept., pp. 66, 67; Oct., p. 89; Nov., p. 68. Modernization—Feb., p. 75; Oct., p. 91. Restaurants—May, p. 75; Dec., p. 59. Row Houses—Aug., pp. 53, 63; Nov., p. 53. Service Stations—May, p. 73; July, p. 57. Stores & Offices—Mar., p. 81; Apr., p. 118; July, p. 53; Aug., p. 65. Tourist Cottages—May, p. 77; July, p. 49. Two-Family—Jan., p. 51; Feb., p. 73; Mar., p. 78; Sept., p. 69.



ENTRANCE to Birmingham, Ala., defense project, Seales Park, built by Stackhouse, Inc.

How Stackhouse Speeds Title VI Production

Power Precutting of Framing, Use of Four Basic Plans with Variation of Detail, Millwork Shop on Site and Specialized Crews Among Methods Used in Alabama Defense Project

QUANTITY production methods including the machine precutting of all framing—in fact everything but the roofing and flooring—were used recently by Stackhouse, Inc., in building 59 low-cost houses in Birmingham, Ala., under Title VI (defense housing section) of the FHA.

Four primary plans were used in building the houses (shown on following pages), further variety being achieved by reversing the plans, by slight changes in front elevation and by color variety in the roofing, painting and trim. The distance each house was set back from the street was also varied slightly so as to avoid a row effect. The development is known as Seales Park.

The houses were financed with \$3,200 loans payable over 20 years and sold at \$3,350 to \$3,600 by Jackson Securities & Investment Co., exclusive financing and sales agency. Monthly payments ran from \$29.92 to \$39

per month, determined by the amount of cash paid down. Where necessary the builders took a small second mortgage for balance due, but under Title VI the amount of the loan is largely designed to cover the builder's cost, plus a fair profit.

The houses were built on a 12-acre tract which was more or less in the rough, but located close to schools and transportation. L. D. Stackhouse, president, said that explosives and a tractor with bulldozer were used to clear the land of trees, rocks and other obstructions, including an old greenhouse and boiler. The concern did its own surveying, laying off and blacktopping the streets and arranged for all utilities including sewage.

"We purchased the lumber, some 1,000,000 feet, from a nearby sawmill," explained Mr. Stackhouse. "We set up a power saw at one end of property, and precut the framing for one house at a time. The operator was fur-



BUILDER L. D. Stackhouse runs his own shop where power equipment is used to turn out mantels, kitchen cabinets, etc., as shown at left.

CONCRETE SLABS for stoops and walks are precast in a form, as shown in the view at the right, taken at site of operations—Seales Park, Birmingham, Ala.



nished with patterns with the number to be cut marked on each one. Thus he did not have to refer to any chart or blueprint, but only to the pattern before him. As materials for each house were cut they were moved to the immediate job. In this way there was no mixup of the framing of one house with another.

“In addition to the precision cutting of framing, we also manufactured in our own woodwork shop in another location all kitchen cabinets, fireplace mantels, door and window frames and screens, also front porch columns. This shop, with less than a half dozen regular employees, turned out an average of four cabinets and four mantels per day and handled the whole job in three months. This included, for instance, building 541 window frames.”

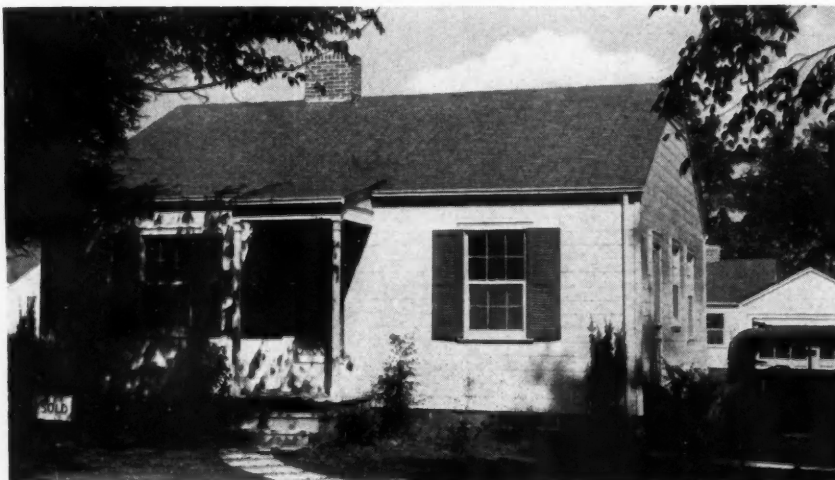
Machines used on the job included a Carter lock mortiser and a Walker-Turner radial saw. In the woodwork shop equipment included the following (by Delta), a combination rip saw and joiner, a shaper, band saw and mortising machine.

“In order to speed up operations on the job,” contin-

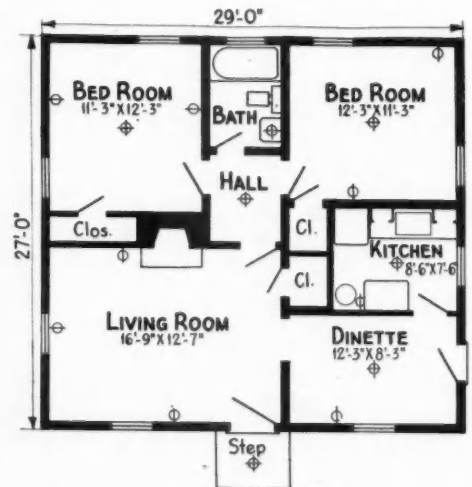
ued Mr. Stackhouse, “we divided the carpenters into crews. One crew of 3 put up sills, joists and girders. Another crew of 2 put down subflooring and tracks. Another crew of about 6 raised framing and doubled plates, and still another of about the same size put on rafters and decking. Each crew was required to handle two houses a day. Other crews caught up odds and ends. We had one crew for instance which did nothing but build garages, most of the houses having detached garages. By

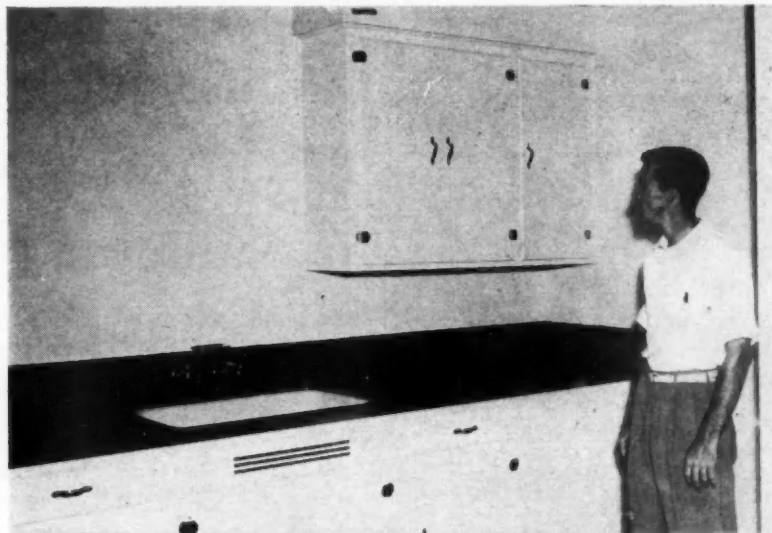


THE FIRST of the four basic houses in this Title VI subdivision is shown above; four rooms and bath with dining space in kitchen.



TYPE B house in Seales Park subdivision includes a separate dinette in addition to the four rooms provided in the plan above.





R. D. STACKHOUSE, a member of the firm building these Title VI houses, is here inspecting the kitchen cabinet installation of units produced in own plant.

210-pound, thick-butt Texas Co. composition shingles, laid over 15-pound waterproof felt, Unique sash balances in all windows; metal termite shields and tile hearth and mantel facing. Heating is by means of a Coleman floor furnace in the hallway. There is also a flue for a circulating heater, a fireplace in the living room, Crane fixtures, Crawford garage door and an automatic gas water heater in the kitchen. Hot and cold water pipes are of copper. All interior walls are plastered on Gold Bond rocklath and tinted.

As the first houses were completed, one of them was furnished completely by a downtown department store and made the field office by the real estate concern. Twelve of the houses were sold on opening day and the others sold readily over a 90-day period, activity being spurred by considerable national defense spending in Birmingham and environs.

The Stackhouse brothers who make up the firm of Stackhouse, Inc., have erected some 500 houses in Birmingham within the past 10 years. They are E. G. Stackhouse, president; R. D. Stackhouse, secretary; and L. D. Stackhouse, who superintends actual construction.

doing this one thing they were able to speed up production. We also precast the concrete for the steps and stoops."

The houses are located on lots 60 by 113 feet and materials used in their construction include the following: perforated rock lath, No. 1 yellow pine for sills, joints and girders; tongued and grooved sub-floors and roof decking; 13/16 select plain red oak flooring; standard gauge inlaid linoleum floors in kitchens and baths;



THE ABOVE DESIGN is similar to the one opposite, below, except that the rooms are turned to face differently and closets rearranged.

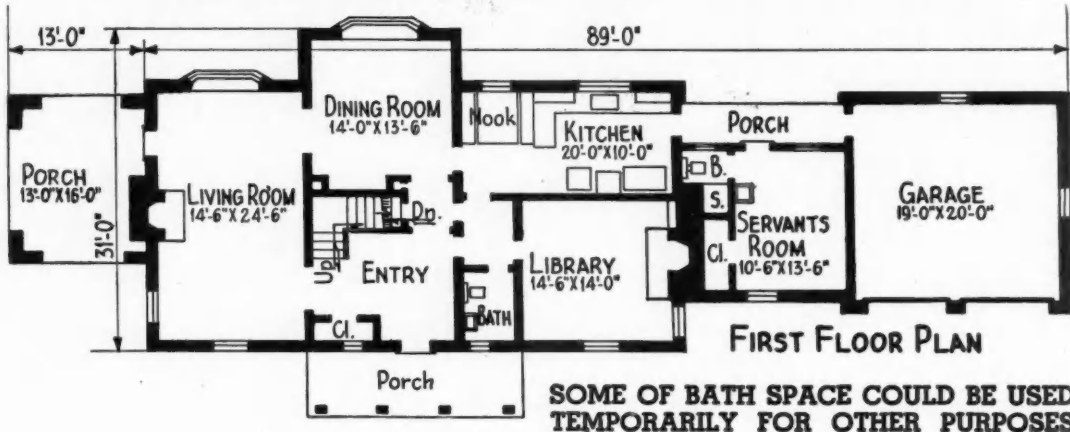
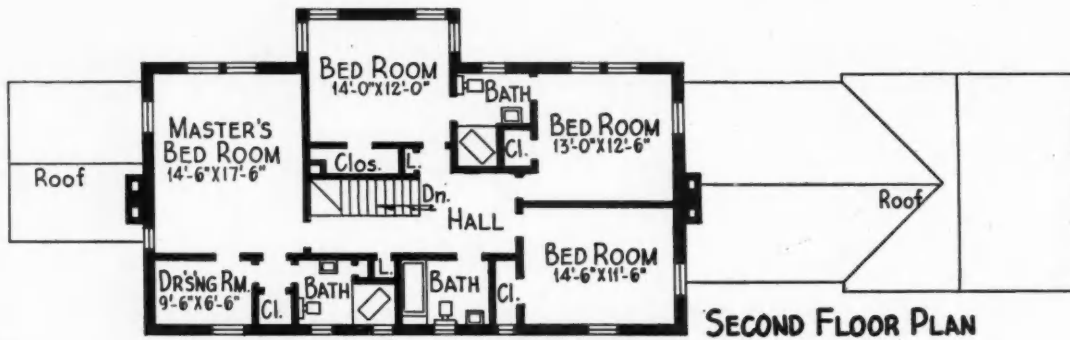


AN ATTACHED GARAGE has been added to this design, which otherwise is like Type A in number of rooms; all have fireplaces.

An Operative Builder Sells Fine Homes in Southwest



THE beautiful home shown on this page, built and sold in the speculative market in Tulsa, Okla., by the Jeff P. Nix Building Co., has nine rooms, three full and two half-baths, paneled club room in basement, mahogany paneled library with fireplace.



ANOTHER view of this stately southern home is shown below, as seen looking through driveway gates. Servant's room connects two-car garage to house, which has four spacious bedrooms on second floor.



th
to
N
ro
si
fo
sp
m

TH
Nix
som
sho
thre
an'
room
full
rary
base

MA
hous
conc
mon
lath,
floor
ond
and
Inter
and
club
cypre
Lenn
Stand
Elect
Other
room
electr
attic

THE TWO fine homes illustrated on these pages may seem to represent a temporarily lost market in some areas, but nevertheless are interesting because of the way they were built and marketed—also something to dream about until after the “emergency.” The Jeff P. Nix Building Company of Tulsa, Okla., specialists in fine residential development, acquired twenty high class, good sized lots about two years ago and proceeded with plans for appropriate houses. The first two were started on speculation, and both sold during construction. Five more followed on the same basis, all in the \$18,000 to

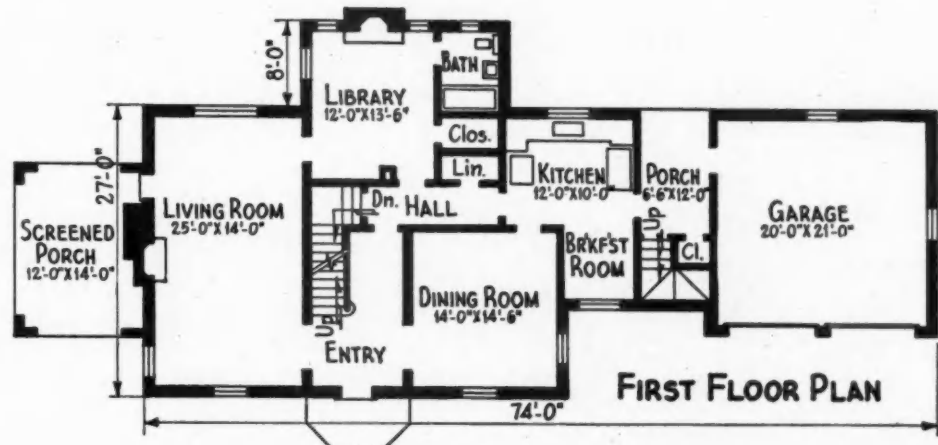
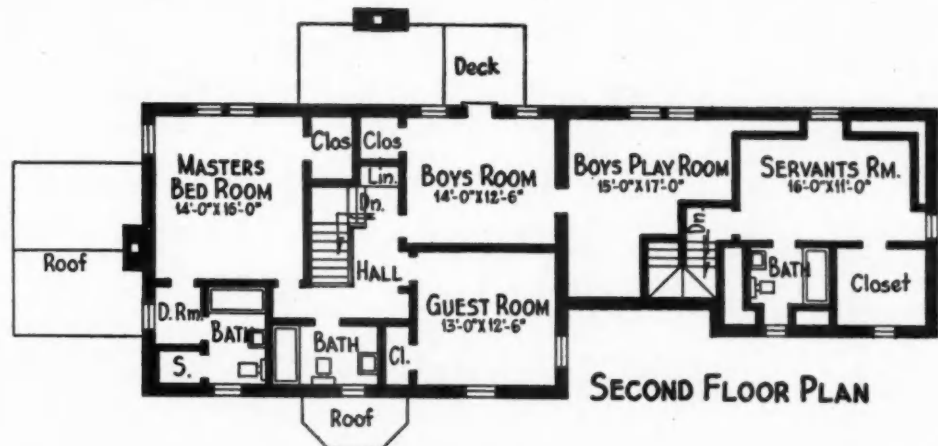
\$25,000 price range, complete with landscaping and Venetian blinds. By that time the character had been set and the remaining sites sold to other builders and prospective owners for contract building of homes of a similar nature.

Leemon W. Nix of the company stated, “If we had waited until we had building contracts for lots, we might never have cleaned up this development and realized a substantial profit. We supervise our own construction; our houses are designed by our staff; we have built close to 350 houses in Tulsa.”



THIS home, also built by Jeff P. Nix Co. in its Tulsa development, is somewhat smaller than the one shown opposite but has eight rooms, three and a half baths, and servant's room over the garage. A playroom and a deck off the boy's room, full bath and closet adjoining library to allow use as guest room, and basement game room are features.

MATERIALS and equipment in these houses include poured ready-mixed concrete foundations, painted common brick veneer plaster on Rock-lath, J-M asbestos shingles, oak floors, 4-inch Balsam-Wool over second floor ceilings, Curtis millwork, and Silentite and Soule windows. Interior walls are finished with paint and paper over canvas; basement club rooms are paneled with pecky cypress and have asphalt tile floors; Lennox gas-fired conditioning units, Standard plumbing and General Electric equipment were installed. Other items include built-in dining room cabinets, kitchen exhaust fans, electric wall heaters in bath, chimes, attic fans, and glass shower doors.



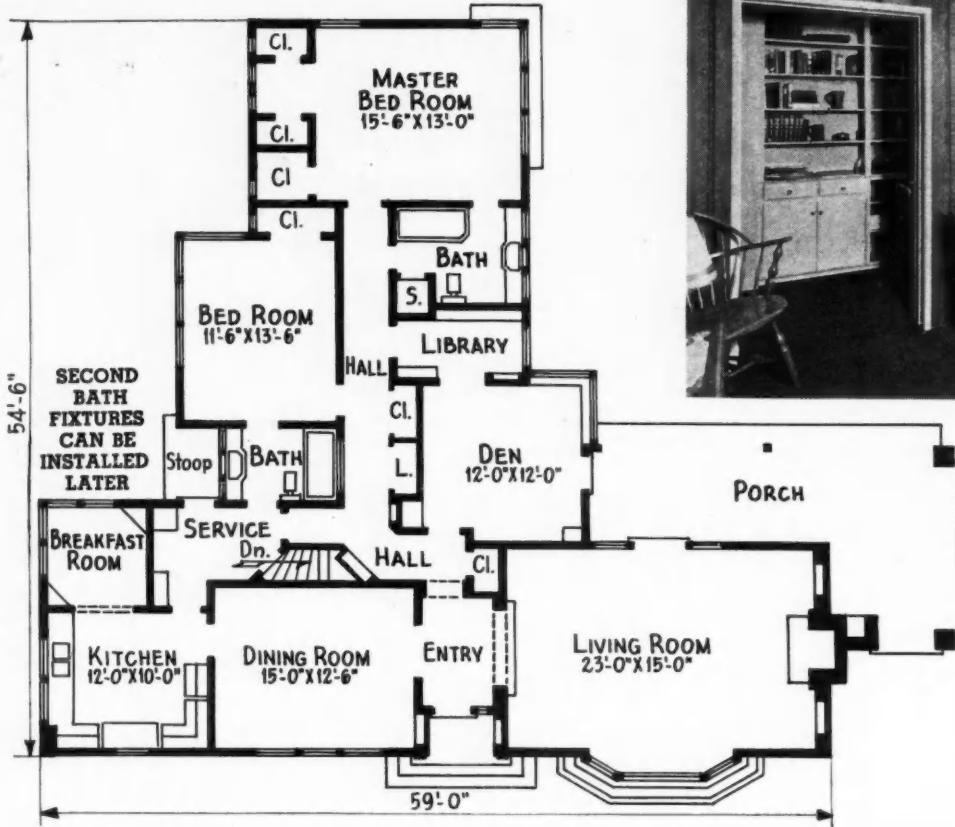
Den and Library Are Key to Extensible California Plan

THE den with library in this Glendale, Calif., home is the point of plan interest and on it hinge the readily adaptable "extensible" planning possibilities. A good five-room design could be obtained by omitting the master bedroom at the rear and either building an additional closet across the end of the hall leading to it, or temporarily putting a window in this doorway. The direct access to the master bath would, of course, have to be sealed up for the time being. The other bath would be used as a dressing room for this second bedroom, fixtures to be set in place later on. The den then becomes the second

bedroom, the library a dressing room. With these changes the house would have a remarkably generous amount of closet space in its initial state.

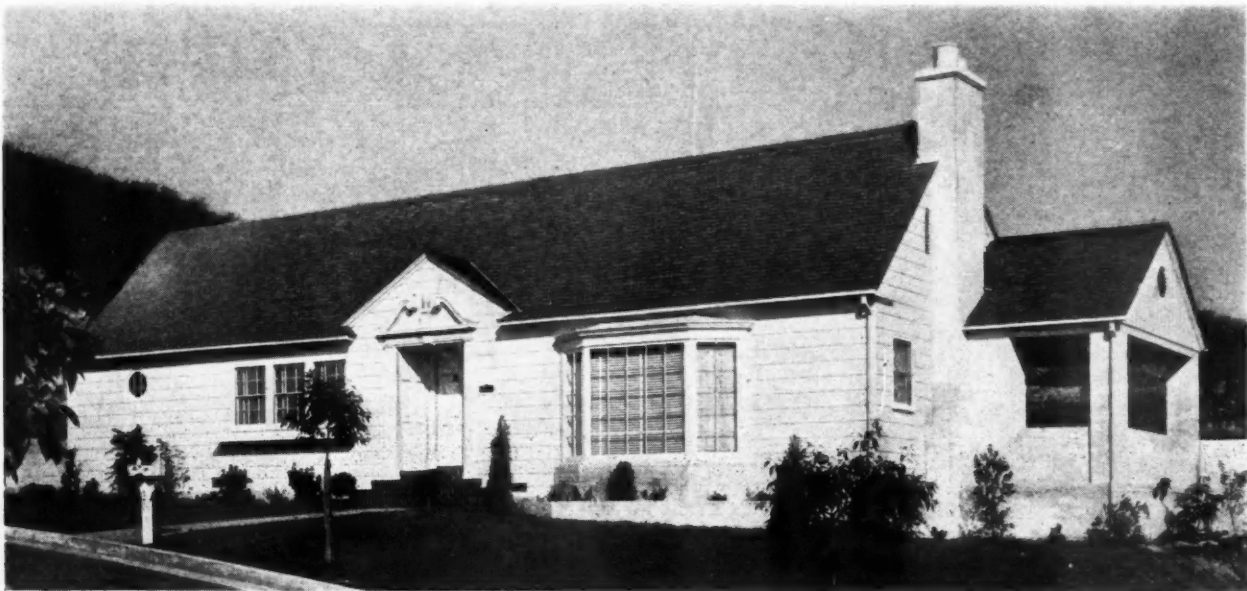
The den and library, as built, appears below, done in natural finished redwood paneling. Other features of this attractive California Colonial home, designed by Architect Kurt Meyer-Radon, include combination brick and redwood exterior, red cedar shingles, oak floors, tiled baths, Standard fixtures.

A feature of the plan is the fact that the hall arrangement allows access to all principal rooms from at least two points, giving unusual circulation. The large living porch and breakfast room add to the livability.



THE well engineered California type plan at the left has an unusual arrangement which centers around the den and library pictured above. Kurt Meyer-Radon, architect, Glendale, California.

THE exterior has been given a modified Colonial styling with recessed front entrance and attractive bay. The covered porch off den and living room adds to livability of this six-room home.





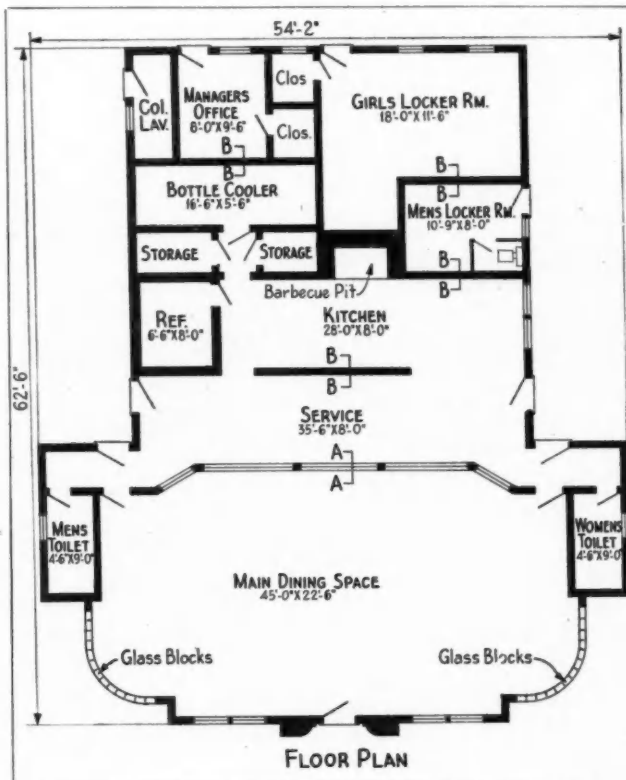
ABOVE: Left, one end of main dining room in Birmingham, Ala., restaurant showing construction and equipment; right, pre-cooler.

Plan Drive-In Restaurant to Take Care of Large Trade

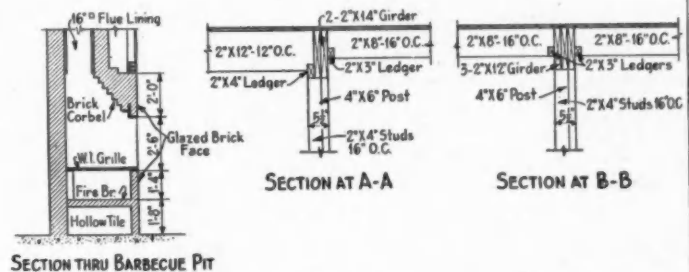
ILLUSTRATIVE of the drive-in establishment which features easy parking and car service is the new Thomas Drive-In Restaurant recently opened in Birmingham, Ala. This concern boasts of 80,000 square feet of parking space and 30 pretty uniformed girls to wait on the trade and is strategically located, about five miles from the heart of the city and near the junction

of two main highways. It is of stucco and hollow tile, constructed with rounded corners of glass brick to give it a stream-lined appearance. The roof is of flat built-up construction. The building is marked by a large neon sign on top and in addition is brilliantly floodlighted at night in alternating colors of blue, green and amber and red. Neon signs also mark the way at the highway entrances. J. L. Gatling was the architect; Marbury-Boriss Construction Co., builders.

While car service is featured the restaurant has a dining room with a seating capacity of 50. The inside walls are done in random width pine paneling in natural
(Continued to page 91)



GLASS AREAS and stucco were used in the modern styling of the restaurant. The floor plan at the left indicates facilities, and details below show inside barbecue pit and roof framing.

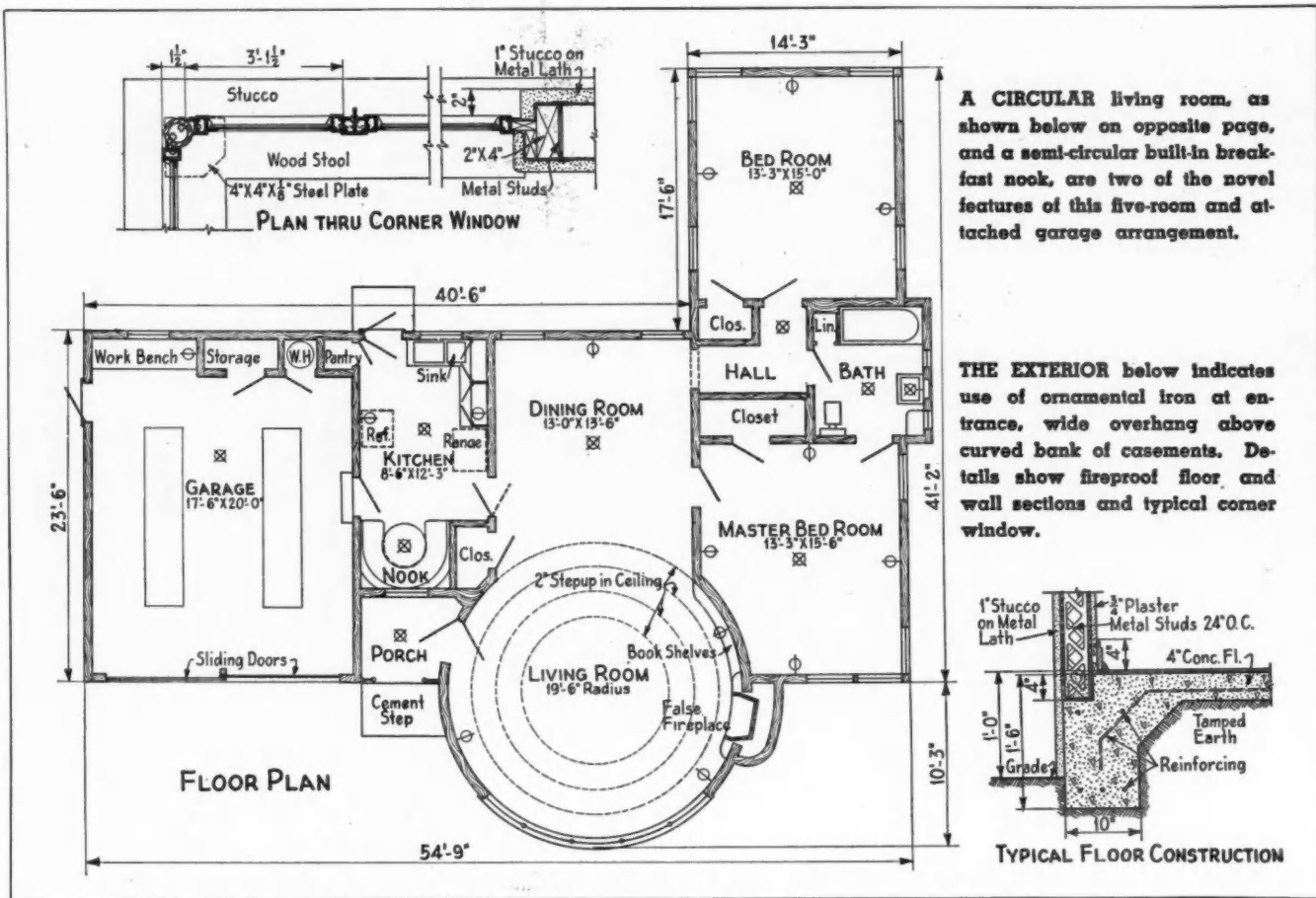


Southern Variations in Modern Planning—

ALTHOUGH traditional Colonial styling and variations of it in the smaller homes of the South are generally thought of as typical, the large-scale building program around Houston, Texas, includes some decidedly modern designs planned for the particular conditions found in that area. Two such examples are illustrated here, the one below being the work of Architect T. E. Lightfoot.

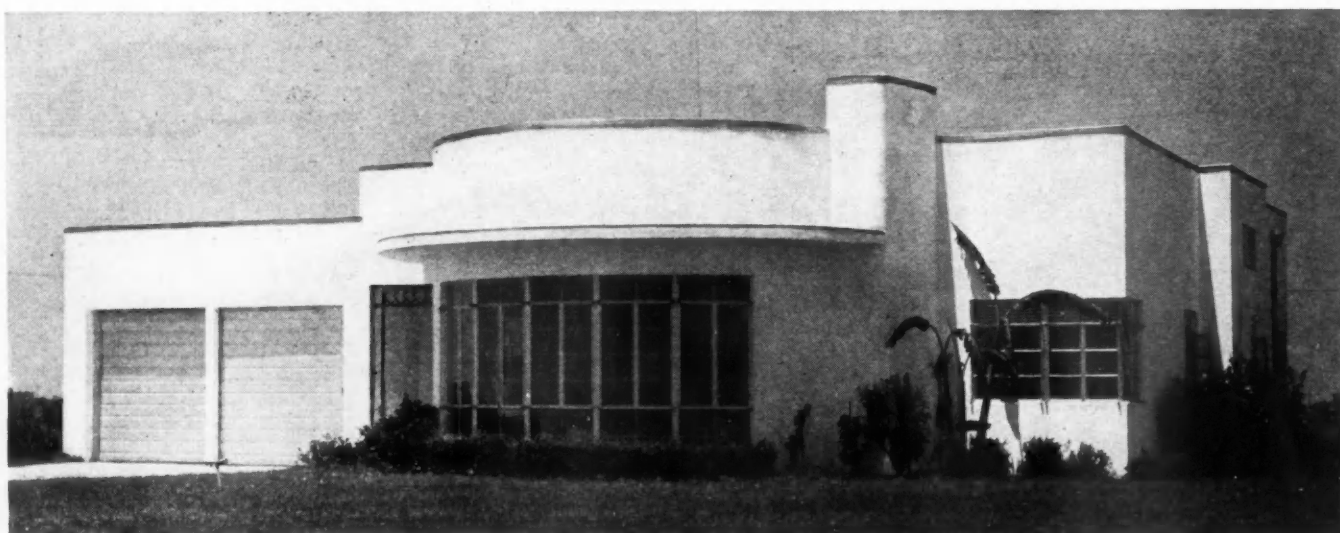
Its unusual construction features include a combination living-dining room, of which the living portion is circular

with a stepped-up ceiling. The framework is erected on a reinforced concrete slab and consists of steel Z-studs, 24 inches o.c. This is covered with metal lath and finished outside with 1-inch stucco, inside 3/4-inch plaster. An asphalt and gravel 20-year roof has been used. The large window areas are fitted with Soule steel casements; the corner window arrangement is detailed below. The floors are covered with Azrock floor tile; Kohler fixtures are used. The architect points out that this is one way of achieving termite-proof construction in that area.



A CIRCULAR living room, as shown below on opposite page, and a semi-circular built-in breakfast nook, are two of the novel features of this five-room and attached garage arrangement.

THE EXTERIOR below indicates use of ornamental iron at entrance, wide overhang above curved bank of casements. Details show fireproof floor and wall sections and typical corner window.



Both from Texas

The second Houston home, shown on this page, was built by the University Oaks Lumber Company and designed by its architectural staff. Brick veneer across front resting on a 10 by 18 inch concrete beam extends up to the sill line; vertical fir siding and battens constitute the balance of the exterior wall. The built-up roof with white crushed stone surfacing, as on this hip roof, is a southern development, the use of which is spreading. The ventilating cupola is part of the attic fan installation, another feature widely found in Texas homes. Interior walls

have a base of USG Star Liner. Other equipment features include General Electric fluorescent lighting, red oak flooring finished with Lignophol, NuTone chimes, and Insulux glass block lighting panels.

In plan, the six rooms are symmetrically arranged in a "T" plan, with the three bedrooms to the rear, the inside bedroom being connected with the screened porch. Both the larger bedrooms have two closets.

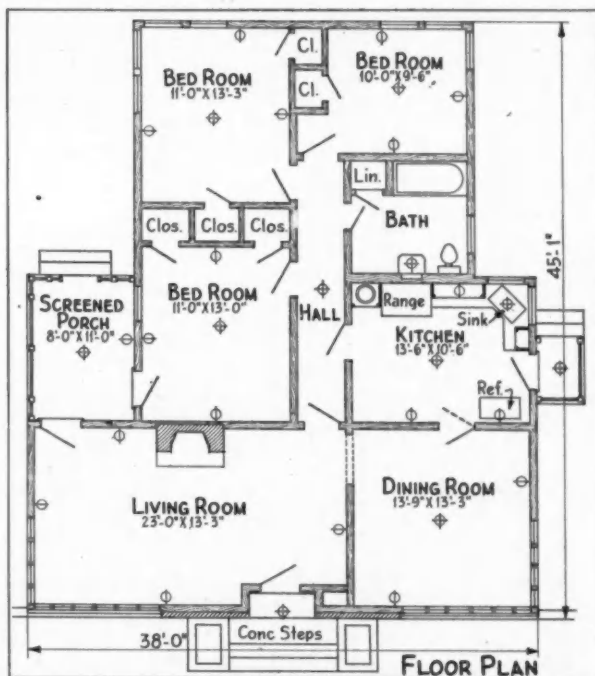
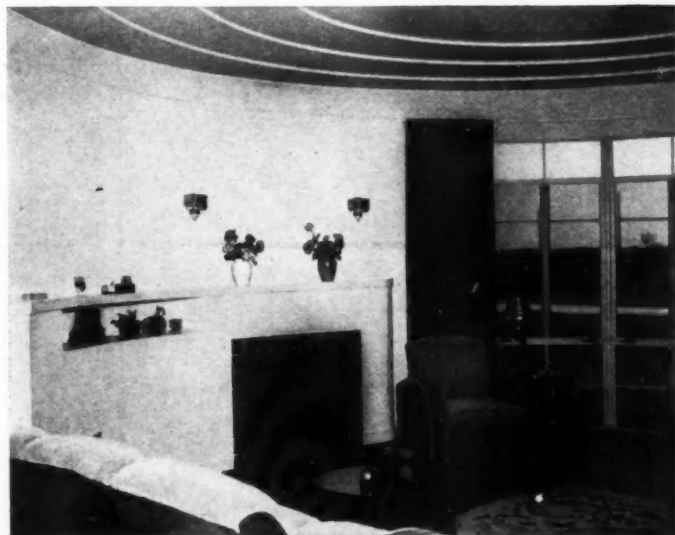
The use of corner windows on all outside corners gives good wall area, ventilation and light; wide overhanging eaves protect the large glass areas from direct sun rays, and with the additional use of Venetian blinds, reduce the amount of heat entering the house.

Kitchen facilities are compactly arranged along one side, with the sink placed diagonally across the well lighted



THE ABOVE Houston home, designed and built by the University Oaks Lumber Company, makes use of brick veneer for the lower portion of the front wall, with wings extending at the sides to align with the overhanging eaves. Vertical boards and battens break up strong horizontal lines.

THE mantel is curved to pick up the wall line of this circular living room in house opposite. Note step ceiling and treatment of window.



corner to solve a planning problem frequently encountered on inside kitchens. The opposite corner of the room is used as a breakfast nook space.

These two unusual homes will undoubtedly provide planning ideas and construction pointers for the home planner and builder in many northern areas as well as for those whose work is typically southern. They are adaptable to any type of styling.

Emergency Plumbing Standards for Defense Housing

OPM, in conference with plumbing industry leaders, to issue new code relaxing present standards so as to reduce use of critical materials

ANNOUNCEMENT is made in the October official organ of the National Association of Master Plumbers of the results of a series of conferences in Washington between government men and the plumbing industry to establish a simplified code for defense housing. Bringing a week of consultations with representatives of the National Association of Master Plumbers, the United Association of Journeymen Plumbers & Steamfitters and others, to a close, the Office of Production Management, it is stated, will move swiftly to place a plan in operation to conserve critical materials in the plumbing industry. The plan will apply first to government owned, or financed, defense projects. Later it will apply to civilian plumbing needs in designated defense areas. Faced with the need for conserving critical materials used in the plumbing industry, the OPM took the sensible course of talking the situation over with the people who knew most about the problem from the industry point of view—the master plumbers and the journeymen plumbers.

Existing plumbing codes are said to be "dear to the hearts" of both contractors and journeymen. Codes were developed over a period of years with health protection as their object. The quantity and kinds of materials needed to afford full health protection were a secondary consideration. In the present national emergency, health is just as precious as it ever was; but conservation of critical materials is also important. So, instead of imposing on the industry one or more of the plumbing codes the government has in its files, the authorities decided to develop what will be called "Emergency Plumbing Standards for Defense Housing." These Emergency Standards are, in reality, a temporary plumbing code without legal subtleties, and streamlined as far as possible.

Examples Shown on Opposite Page

On the opposite page are unofficial examples of some of the diagrams which will be a part of the new standards. Here are the highlights of the text which accompanies the diagrams:

- Cast iron screw pipe—not to be used.
- Brass and copper pipe—not to be used.
- Brass and copper tubing—not to be used except brass tubing for traps.
- Sheet copper and brass—not to be used.
- Only "P" and drum traps permitted.
- Grease and oil interceptors permitted.
- Interconnections, cross-connections and back-flow possibilities to be guarded against, as previously.
- Pressure relief valves on hot water tanks required.
- Rigid inspection and tests required.
- Quality workmanship required.
- Re-inspection authorized on suspicion of defective system.

The complete diagrams and text of the Emergency Standards will be available to the industry shortly. Those

who study the document will see that, while adequate health protection is provided, certain relaxations from normal design and installation standards are evident. Shortages are acute, the OPM men held; and so drastic actions had to be taken.

In any event, the Emergency Plumbing Standards are temporary in nature. They will be in effect only during the present emergency. When the emergency is over, the industry's plumbing code structure will remain unimpaired. The Emergency Standards will have the approval of the OPM, the NAMP, the United Association and others for the duration of the emergency.

Will Apply First to Government Housing

The new standards will apply first to *government owned* housing. There are no existing legal barriers to its immediate use for this purpose. As rapidly as possible, the OPM wishes to apply the new Emergency Standards also to civilian housing in defense areas. Existing plumbing codes in many of these areas make immediate application to civilian needs impossible. In such areas, the OPM proposes to ask regulatory bodies to pass emergency ordinances or laws permitting the Emergency Standards to supersede existing plumbing regulations for the period of the existing emergency only.

Questions on the Emergency Plumbing Standards for Defense Housing should be addressed to the Conservation Unit, Division of Purchases of the Office of Production Management, Washington, D.C.

It was reported to the conferees that approximately 500,000 housing (one family) units are contemplated during the next year. It was pointed out that a saving of only 100 pounds of metal per dwelling unit would result in both conservation of critical materials and create an opportunity to increase the number of units to be built—thus increasing employment and profit possibilities.

One notable characteristic of the conference was the emphasis the government representatives place on health protection. On moot questions the decisions were not based alone on the amount of material that could be saved, but also on whether or not health protection would be provided.

A detailed plan to provide plumbing and heating materials for repair and maintenance all over the country is rapidly taking practical shape. In essence, the plan will consist of the issuance of a form which will be signed by both the consumer and contractor on repair and maintenance work. The form, when signed, will be turned over to the source of supply who will furnish the materials. The source of supply will, in turn, pass the forms on to his source of supply when he wishes to replenish his stock. In short, there will be no drawn-out procedures, a minimum of paper work, and no long distance communications with Washington. The plan shows evidence of the practical viewpoint of the men in charge of this phase of conservation.

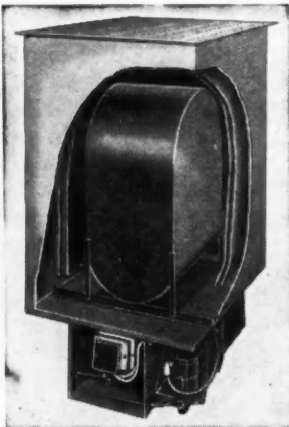
SERVICE TO READERS

EACH ITEM in this department is numbered for convenience of readers. Please use the coupon on page 66 for requesting further product information or new catalogs. Mail coupon to American Builder Reader Service, 105 W. Adams St., Chicago; or write direct to manufacturers at addresses given, mentioning your profession, occupation or business connection with building industry.

WHAT'S NEW IN BUILDING MATERIALS

AB784 "Zonolite," a scientifically roasted and expanded mica or vermiculite material, is being actively promoted by the Universal Zonolite Insulation Co., Chicago. Two recent broadsides of special interest and informational value to builders, architects and dealers cover the fields of plaster and of wall-fill insulation. "We All Like All-purpose Plaster" is a 6-page illustrated data sheet, while "Zonolite, The World's Most Remarkable Insulation" is a large, illustrated wall hanger type broadside.

AB785 New model oil-burning floor furnaces especially adapted to heating defense homes have been announced by the H. C. Little Burner Co., San Rafael, Calif. These units, which are of simple, sturdy construction, are extremely easy to install. They do not require a basement, and an attractive grille is all that is visible in the living room. They save both metal and time, because they elimi-



NEW floor furnace.

ate the use of warm air ducts or cold air return pipes. The furnaces come in two sizes with outputs of 46,000 BTU and 68,000 BTU per hour at the register. They are available either with manual control or with full automatic operation, thermostatically controlled with patented C. I. electric ignition. The burner has no moving parts.

AB786 A new 4-page data sheet, attractively presented comes from the Frantz Mfg. Co., Sterling, Ill., featuring "Over-the-Top" garage doors. These are now offered in three sizes, the No. 10 for openings 8' wide by 7' high, No. 7 for openings 8' wide by 6' 6" high and No. 21 for openings 16' wide by 7' high. All three are illustrated and described.

AB787 The Fiberglas specialties of the Owens-Corning Fiberglas Corp., Toledo, are illustrated and explained in a new series of brochures. "Dust-top Air Filters & Frames" are demonstrated in a 12-page brochure; while "Permanent Form Insulation," which solves many industrial insulating problems and heat duct coverings in buildings, is featured in a 6-page folder. Moulded pipe coverings and Fiberglas finishing cement are also covered with full information.

AB788 The current edition of the United States Plywood Corp.'s well known "Plywood Catalog" is being issued under the new name, "The Weldwood Catalog of Plywood and Allied Products." It is going out to 40,000 lumber yards, industrial plywood users and architects from the Corporation's offices at 616 W. 46th St., New York City. It is a beautiful book of 32 pages and illustrates a great variety of imported and rare wood plywood. Lists show sizes carried in stock, together with prices.

AB789 "Big Trees" for Nov. 1941, which is issued to a large mailing list by the West Coast Lumbermen's Assn., Seattle, Wash., presents very timely information on poultry houses, barns, hog houses and grain storage buildings. The importance of such improvements in today's defense economy is stressed and helpful details of construction are given for builders and farmers.

AB790 The new Marlite general catalog has been received from Marsh Wall Products, Inc., Dover, O.—12 pages, size 8½ by 11 inches. Numerous photographs of actual installations in black and white and full colors are shown. The use of actual color-matched chips is a new feature in this booklet. These reproduce 24 different plain colors in which Marlite is available. Helpful drawings show recommended practice for installing Marlite panels.

AB791 Four new leaflets have been prepared by the Southern Pine Assn., New Orleans, for lumber distributors and consumers, presenting information in favor of wood sheathing. These are entitled, "\$50 Now or \$500 Later," "If It Has This Mark, It's Dry," "Lifetime Protection for Your Home with Southern Pine Sheathing," and "On a Night Like This—Insulation Alone Is Not Enough."

AB792 "Shadowline Aluminized Fir Gutters" is a 4-page data sheet from Long Fir Gutter Co., Cadiz, O. It shows details of fir gutter installation including full sized contours of the five stock sizes. Wood gutters are now much in demand as the metals grow more scarce.

AB793 The Metal Lath News, published from time to time by the Metal Lath Mfrs. Assn., 208 S. La Salle St., Chicago, has an attractive new format. The October issue, which is a special "Salute" to the building industry, is an illustrated booklet of 16 pages, size 5½ by 8½ inches. One of the important articles shows how "metal lath adds value to remodeled property."

AB794 The Josam moderator mixing valve, perfected by Josam Mfg. Co., Cleveland, O., removes the danger of accidental scalding. It is simple in design and inexpensive. It is an improvement that will further speed the trend toward shower baths for the present day home.



NEW shower mixing valve prevents accidental scalding.

AB795 Fixtite expanding cement, developed by Lemore Corp., Jackson, Mich., is demonstrated in a neat little folder. This expanding cement repairs cracks in concrete walls, breaks in concrete and terrazzo floor fissures, etc.

AB796 A new booklet of 24 pages from Joseph T. Ryerson & Son, Inc., Chicago, simplifies the SAE and AISI analysis comparison as applied to carbon and alloy steel bars. Because the AISI standard steels are recognized as "here to stay" industry finds itself struggling with the interpretation of the new standard AISI steels in terms of the old SAE. This new Ryerson pamphlet presents official data for both of these systems.

Readers Service Department Continued to Page 66

FOR QUICK, CONVENIENT SERVICE, USE COUPON, PAGE 66



Ro-Way is *Ready!*

Ready WITH EASY OPERATING,
CONVENIENT, ATTRACTIVE OVERHEAD
TYPE DOORS FOR DEFENSE HOME
GARAGES

Ready WITH STURDY, HEAVY
DUTY OVERHEAD TYPE DOORS FOR
SERVICE IN THE NATIONAL DEFENSE
INDUSTRIES

WRITE FOR FOLDERS AND NAME
OF DISTRIBUTOR NEAREST YOU

ROWE MANUFACTURING CO.

738 HOLTON STREET

GALESBURG, ILL., U.S.A.

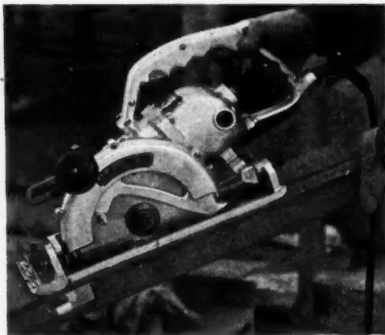
There's a Ro-Way for every Door way!

SERVICE TO READERS

EACH ITEM in this department is numbered for convenience of readers. Please use coupon on this page for requesting further product information or new catalogs. Mail coupon to **American Builder Reader Service, 105 W. Adams St., Chicago;** or write direct to these manufacturers mentioning your profession, occupation or connection with building industry.

NEW TOOLS, DEVICES AND EQUIPMENT

AB797 Heavy duty, portable, motor-driven saws for easy cutting and easy handling in the shop and on the job are offered by Stanley Electric Tool Div., New Britain, Conn. They save builder's time when used to pre-cut stair stringers, bevel cutting for roof framing, cutting off sheathing, ripping floors and



STANLEY safety saw in use on the job.

many other jobs. Duplex handle with two gripping positions and two switch triggers makes a Stanley safety saw especially easy to handle in any position. Safety guards keep cutting edge of blade covered at all times.

Simple wing nut adjustment for depth of cut. Operates on AC or DC. Stanley W-7 saw cuts from 0" to 2½", has tilting base for bevel cuts up to 17½° at 45 degrees. Stanley W-8 saw cuts from 0" to 2¾", has tilting base for bevel cuts up to 2 1/16" at 45 degrees. Either saw furnished with rip and crosscut blade, wrench, lubricant and metal carrying case.

AB798 Radial cut-off machines, as developed by the Walker-Turner Co., Inc., Plainfield, N.J., are offered in an impressive new folder showing this equipment in use for metal, wood and plastic. Standard operations include cross-cutting, ripping, mitering, dadoing, shaping, routing, tenoning, etc.

AB799 "Atkins Tools for the Filing Room," issued by E. C. Atkins & Co., Indianapolis, is a 32-page catalog showing a very complete line. "Saws in the Filing Room," a well known and popular guide of 92 pages, pocket size, is now out in its fourth edition, revised as of August 1, 1941. This covers circular saws and band saws, not hand saws.

AB800 A new catalog of plumbing fixtures for industrial plants, public buildings and schools has been issued by the Kohler Co., Kohler, Wis. The catalog, a 24-page, 8½ by 11", book, is printed in two colors. The complete line of Kohler industrial fixtures is shown including lavatories, singly and in batteries.

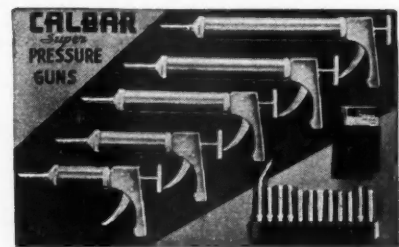
AB801 "Permutit, Your Answer to Any Water Trouble" is the challenging title of a new 16-page catalog from The Permutit Co., 330 W. 42nd St., New York City. It demonstrates the importance of softened water in the home, as well as in industry, and explains the latest water softening equipment on the market.

AB802 Seven attractive folders and leaflets packed with facts have just been issued by the American

Radiator & Standard Sanitary Corp., Pittsburgh, on gas-fired equipment. Four of these cover the line of Empire standard American gas-fired boilers, while the other three, printed in full color, are devoted to automatic storage water heaters. These folders are envelope size with space available for imprinting dealer's name and address.

AB803 "The Door to Your Chance of a Lifetime" is a unique publication of 16 pages, presenting "the twenty questions" having to do with satisfactorily heating a home and their "twenty answers." A careful perusal of these questions and answers is calculated to clear up much of the present day confusion and conflicting claims in the house heating field. This pamphlet is distributed by Taco Heaters, Inc., 342 Madison Ave., New York.

AB804 The Calbar pressure guns, offered by Calbar Paint & Varnish Co., 2622 N. Martha St., Philadelphia, Pa., are known for their ability to speed up work in caulking, sealing, tuck



DISPLAY of Calbar pressure guns.

pointing, glazing, etc. They are being displayed by many dealers on an attractive board, 2 x 3 feet, which holds five assorted sizes together with twelve various types of nozzles. A handy metal holder contains a supply of literature.

AB805 The Hoffman controlled-heat furnace, automatic oil-fired for low cost homes, is offered attractively in a 4-page data sheet from Hoffman Specialty Co., Inc., Indianapolis, Ind. Two models are offered: a basement unit, a two-stage burner of 75,000 BTU capacity, and a utility room unit, which is more compact with capacity of 70,000 BTU.

AB806 "Taps or Reveille?" is a timely 4-page brochure of strong patriotic flavor prepared by Surface Combustion Corp., Toledo, O., manufacturers of Janitrol gas heating equipment. It analyzes the nation's defense program and suggests some things which private industry and the public can do to strengthen the nation's economic and business fabric.

AB807 "Four New Savings Plus Conditioned Air With a Rudy Forced Air Unit" is the title of an attractive new 4-page data sheet from The Rudy Furnace Co., Dowagiac, Mich. It gives the latest data and description of the Rudy forced air unit. These units are quickly installed in connection with any furnace.

AB808 "Diffused Warmth" is a new booklet from The National Radiator Co., Johnstown, Pa., giving complete, good, concise information on how to size, select and install unit heaters.

CLIP AND MAIL TO CHICAGO

Readers Service Department
American Builder,
105 W. Adams St., Chicago, Ill.

(Dec. 1941)

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

Numbers.....

.....

Name.....

Street.....

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

OCCUPATION*.....

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

Just as good as ever!



ALREADY OLD . . . but always young. Trinidad Native Lake Asphalt has been serving mankind as a weather and waterproofer since its discovery in 1595. Its inherent life has been maintained through the magic of Nature's own "tempering" process.

It is well known that the addition of Trinidad to a roof helps to add years of faultless service and protection. And that, after all, is what people are interested in these days. Trinidad Native Lake Asphalt, with its unique mineral filler, combines toughness with unusual ductility.

Today, with so many materials so difficult to obtain, remember that you can still protect the homes you build with the only roofs that contain Trinidad Native Lake Asphalt . . . *Barber Genasco Roofs. There is no need to compromise with roof quality now.*

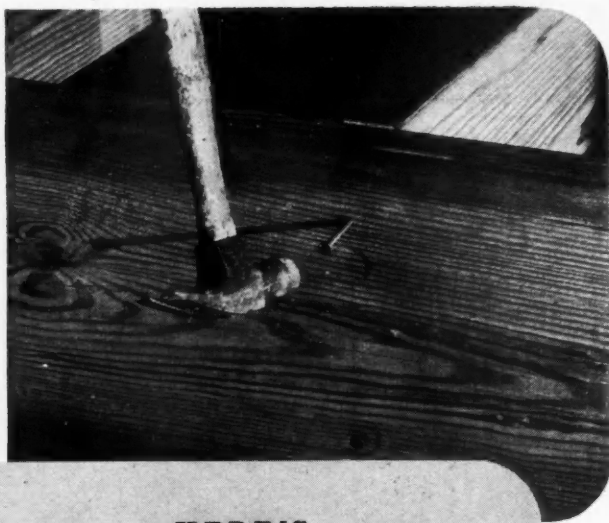
Barber Genasco Roofs are "fire-safe," and available in a wide range of attractive colors and designs. They are easy and inexpensive to apply. In the case of remodeling, they can often be laid right over the old roof. Your local Barber dealer or applicator has all the facts. You'll find his name in your classified telephone directory. Barber Asphalt Corporation, Barber, New Jersey.



BARBER

MEANS A GOOD ROOF!

SHINGLES • SIDINGS • ROLL ROOFINGS • BUILT-UP ROOFINGS



HERE'S

Another Plus

FOR WOLMANIZED LUMBER*

Long life is the first plus; a fact proved on the toughest of jobs by millions of feet of Wolmanized Lumber. "But what about the nails and bolts—or timber connectors—that hold the construction together? Is the metal attacked by the wood preservative?" And here's another plus for Wolmanized Lumber.

Wolman Salts* preservative, driven deep into the cells of the wood by the vacuum-pressure method, furnishes active protection against termites and the fungi that cause decay. *But it does not attack metals.*

What a combination! Long-lived lumber, which offers no unusual erection problems, giving you long-lived construction. And the wood is clean, odorless and paintable.

Wolmanized Lumber is produced at many plants throughout the country, under the control of one central laboratory. It is distributed through retail lumber dealers, under the one name, Wolmanized Lumber. AMERICAN LUMBER & TREATING COMPANY, 1645 McCormick Building, Chicago, Illinois.

*Registered Trade-Mark

Wolmanized

LUMBER



ON & OFF the RECORD

Views and Comments

by *Structor*

BUILDERS' STOCKS—Home builders in nondefense areas are damned if they do and damned if they don't buy materials in advance.

Those that don't are in danger of not being able to get what they need; those that do are equally worried. Many who have put everything they had into materials for houses they expect to build next year are now worried for fear the OPM will issue an order banning all nondefense building. In fact an OPM official told one group of builders in my presence that the SPAB's October 9 statement of construction policy could be taken as a definite forerunner of an actual order banning non-defense construction whether the builders had materials or not.

It may be that the SPAB announcement was a trial balloon. If it was, it ought to be punctured sharply for such an outright ban would be most unwise and unfair. But it's a possibility builders ought to bear in mind.

FLOATING PREFABS.—The choicest housing story out of Washington is the one about FWA's Indianhead, Md., village of 586 prefabricated houses. It seems that they got to building them so fast that they erected 186 too many—or did someone just miscalculate slightly? Anyway, FWA has announced it will accept bids to float 186 of the houses across the Potomac River to the Marine Base at Quantico, Va., where they say a serious shortage exists. Yes, things move fast these days in public housing.

HOUSTON'S LINE—For some reason no one could determine, defense housing officials drew a line through the center of Houston, Texas, and said that on one side defense housing was eligible for priority assistance while on the other, it was not. Some of Houston's most eligible home communities, including that of E. L. Crain, the new president of Home Builders Institute, were on the wrong side of the line.

To these builders there was no justification for elimination of home building on their side of the line. They went to Washington with all the support they could muster—and that was considerable, since Houston is the home of some important national administration figures.

Even so, it took a long time to get any action on their request that the line be changed. Word came through during the course of the HBI meeting at Detroit, however, that it had been, thus remedying a most capricious injustice.

I mention the incident only to show that hardly any of us these days can get along without strong representation in Washington, and this incident multiplied a thousand times over indicates the need builders have for a powerful body to speak for them there.

BALLOON HOUSE—Another experiment in housing we've been hearing about sounds pretty fantastic, but I have it on good authority that it is actually being worked on. This is the "balloon" house now being built by a firm near Washington.

Check me if I'm wrong, but as I understand it, a large balloon of tough material is inflated, over which a layer of wire reinforcing is thrown. Then, concrete is blown on a thin layer over the entire surface. When it has hardened the balloon is deflated, and what is left is said to be a house—latest candidate for some government housing agency with plenty of taxpayer's dough to try out something new. (*Current News-reel shows this house actually being built—Ed.*)

ROSENMAN RUMORS—Last month I mentioned the possibility of a housing shakeup as a result of an investigation by Judge Samuel Rosenman, F.D.R.'s close friend and adviser. Well, no announcement was made, but there has been plenty of shaking and quaking. Rosenman has a tough job sorting out the claims of the various housing heads and also in determining the merits of public versus private building. An interesting fact is that his wife, Dorothy Rosenman, is an active

student of public housing and is head of the National Committee on the Housing Emergency.

At this writing it looks as though John Carmody of the Federal Works Agency is definitely out and will be replaced by General Philip Fleming. Nathan Straus' resignation has been rumored but in the meantime he has been getting wholesale publicity accusing every other housing agency of conspiring against him. He accused Housing Coordinator Palmer of having "the erroneous notion that private industry could do a large part of the defense housing job." Palmer has also been criticized by other housing agencies, but who wouldn't be — — — trying to act as "coordinator" of that crowd. Each housing agency is trying to extend its own sphere of activity. The USHA crowd has been most active in this respect, and it's charged that the USHA field men are public housing promoters rather than impartial investigators.

The one certain thing about the whole situation is that private industry, if given a chance, can and should do the bulk of the nation's permanent housing.

MOVED FOR REPAIRS—In Newark, N. J., Mrs. A. LaPorte had the misfortune of owning a house so close to her neighbors that she couldn't repair it without getting their permission. This was doubly unfortunate because she and the neighbors were distinctly unfriendly.

This problem was neatly solved by Mrs. A. LaPorte by having the three-story frame house jacked up and moved several feet away. She expects to have the repairs made and then put her house back in its original spot.

CURRIER DUCKED—It looks as though the big national union issue of Currier Lumber Company's bid for a Detroit housing project will be neatly ducked by U.S. Housing officials. They have reported that so many private builders have expressed a willingness to provide additional houses for Detroit's defense workers that this particular project may not be necessary.

Currier is going ahead with private plans for meeting the housing shortage in his own way and with his own C. I. O. workers. The firm plans to erect 270 houses during the winter.

EMERGENCY COMMITTEE—In picking a committee to represent the home building industry at Washington, the Home Builders Institute did a remarkable job of getting nationally-known figures who not only know the industry, but will command the respect and attention of Washington officials.

Hugh Potter, the chairman, has a sound legal background, a remarkably keen and agile mind and a personality that is hard to resist. The job he did at River Oaks in Houston stands as a prominent testimonial to sound home building practices.

Vice-Chairman of the Committee is William Levitt whose Strathmore home communities on Long Island have made him probably the best-known home building figure in the country. He is the kind of man who gets things done without wasting too much time talking, and at present is busily engaged in winding up his higher-priced communities and laying plans for a new low-priced defense home job that will set some new records.

John McC. Mowbray is the able and experienced head of the Roland Park Company of Baltimore and is a man of breadth and intelligence who has already done strenuous and effective service for the building industry as head of HBI's temporary committee on priorities and prices.

J. C. Nichols, nationally known builder of the Kansas City Country Club district, has served as an official of OPM and resigned only recently to return to the conduct of his own business. He knows official Washington and commands the respect of his former associates there.

Waverly Taylor is a prominent Washington home builder who has a close picture of affairs in that city of cross currents and politics.

George Miller of Detroit is one of the largest builders of small and moderate priced houses in the country and is not the kind of man that will back down at any tough job.

The Committee will have the experienced services of Milton W. Morris, executive secretary of the San Francisco Home Builders Association who will set up a permanent office in Washington.

Yes, it is a committee that should do an able and intelligent job for the industry.

A NEW TREATMENT FOR OLD (OR NEW) WALLS



THE COLORFUL WORK-SAVING walls in this modern bathroom are gleaming Armstrong's De Luxe Monowall erected with smart decorative strips and edgings. Note the distinctive marbled effect in the stall shower.

Here's why new **DELUXE MONOWALL** belongs in your buildings

WHETHER you're building new rooms or remodeling old ones, here's a wall and ceiling material that deserves your serious consideration. It's Armstrong's De Luxe Monowall . . . an improved, hardened wood-fibre board which comes factory-finished in four design types (plain colors, tile-, marble-, or wood-designs) and 33 attractive colors.

Yes, Monowall belongs in your buildings . . . residential or commercial. Its gleaming beauty makes a big hit with prospects and clients alike. Low in cost, light but strong, it has a tough, glass-smooth surface for long wear. Monowall is made in large-sized boards, which reduce the number of joints to a minimum and permit fast, "one-piece" installations.

Rounded score lines in the tile colorings (10 in all) give a realistic appearance of having been built up, block by block. These scorings also make cleaning easy because they can't catch and hold dirt.

Free, color-illustrated literature

If you're not already using Monowall, get acquainted with it now. We'll be glad to send you our latest booklet, a sample, and directions for installation. Write now to Armstrong Cork Co., Building Materials Div., 979 Concord St., Lancaster, Pa.



ARMSTRONG'S MONOWALL

Temlok Insulation — Sheathing, Lath, De Luxe Interior Finish

**Chisels need
LESS STONING
when you work with the
WESTERN PINES***



Time out for tool-sharpening costs you money. Save that time and save that money with the help of the Western Pines! For instance, chamfering . . . gaining . . . and other cutting dulls a chisel's edge *less* when it bites through the even grain and soft texture of these woods!

And that grain and texture speed every phase of the job. For they are what enable the Western Pines to work up so quickly!

Seasoned, milled and graded to high standards, the Western Pines have the reputation of *guarding your reputation*. Ask for and get Western Pines from Association mills!

WESTERN PINE ASSOCIATION

YEON BUILDING



PORTLAND, OREGON

*Idaho White Pine *Ponderosa Pine *Sugar Pine

***These Are The Western Pines**

REVIEW of the NEWS

Statistics, Associations, Agencies

October Residential Volume About Equals September; Well Ahead of October 1940

THE MONTH of October residential construction total of \$171,772,000, according to Dodge figures, did not reflect the chaos of that month, as this almost equalled September's \$175,713,000 and still was over \$23,000,000 ahead of the same month last year.

Statistics for the four classes of construction are as follows:

	October 1941	October 1940	September 1941
37 Eastern States Residential	\$171,772,000	\$148,469,000	\$175,713,000
Non-Residential	269,553,000	136,405,000	218,288,000
Public Works	94,563,000	73,220,000	131,123,000
Utilities	70,461,000	24,975,000	98,168,000
Total	\$606,349,000	\$383,069,000	\$623,292,000

Home Modernizing Picks Up

THE HOUSE that has echoed the footfalls of two or more generations of families appears to be coming into its own—as a consequence of the current boom in many areas and scarcity of materials for new construction.

That home-seekers are checking the possibilities of filling their needs by buying older dwellings is indicated in a Federal Home Loan Bank System report. It shows that during the first eight months of this year the volume of mortgages of savings and loan associations to finance the "purchase of homes" rose by nearly one-third over the same months in 1940, twice as large an increase as that of the total of their home loans for all purposes. Their home purchase loans amounted to nearly \$300,000,000 alone.

Aside from houses constructed in the past quarter century, there still remain thousands of well-built properties on the market that deserve consideration of the family seeking a home of its own, James Twohy, Governor of the Federal Home Loan Bank System, pointed out.

"These homes are usually larger than houses built in recent years and especially suitable for families with several children," he said. "Often a few hundred dollars in alterations will remove their 'dated' appearance and add definitely to their value. In many houses, unused space—in attic or spare rooms—can be converted into additional living quarters, from which the owner can earn a rental income. This is of direct importance to the defense program in cities handicapped with insufficient housing for newly arrived workers in armament industries. The home owner who wants to so convert his home, or to modernize it, will find abundant sources of low cost financing.

"Between 1890 and 1910, it is estimated that nearly six and one-half million dwelling units were built in this country. As the present trend continues, thousands of these properties will be taken over by families bent on home ownership and many will go through a rejuvenation process that will enhance the attractiveness of their neighborhoods."

No Priority on Small Farm Structures

THE U. S. DEPARTMENT of Agriculture pointed on on Nov. 7 that farmers do not need to secure priorities for ordinary, small farm structures which do not use critical metals.

"There is no priority control on lumber, concrete, stone, brick and glass, and about 70 per cent as many nails as in 1940 are available. Farm structures using these materials alone are not affected by the recent housing order," David Meeker, assistant director of the Office of Agricultural Defense Relations, said.

"Farm structures which require materials under priority control should not be planned at this time, unless a clear-cut case can be made that the structure is essential to the defense program.

"In other words, a farmer should have no trouble getting materials to build a chicken house or small barn, but any structure using plumbing or central heating equipment or structural steel or similar scarce materials would have to be examined very carefully under recent OPM orders," Mr. Meeker said.

Costs Up 13.2% In Past Year

MATERIAL and labor costs involved in construction of a standard six-room house in September, 1941, stood in total 13.2 per cent above such costs for the same period of 1940, economists of the Federal Home Loan Bank Board announced on Nov. 22.

While building supply costs during the 12-month period rose but 12.3 per cent as against a 15.2 per cent increase in those for labor, Bank Board figures for the last 30-day period reported upon—August-September—indicate a continued though slight reversal of that relationship: materials gained 1.5 per cent against 0.6 for labor from July to August, and 1.6 per cent to labor's 0.6 per cent for September.

The base of the construction cost index employed by the Board's Division of Research and Statistics is the average month of 1935-1939. The index now stands at 116.5—the corresponding 1940 period's was 102.9.

Of cities which have reported six-room cost estimates for the October period, 18 registered increases of more than \$200 for the past quarter, with the largest increase—\$900—occurring at Camden, New Jersey. In the district of the Federal Home Loan Bank of New York, costs have risen \$1,000 to \$1,500 since last year.

Bank Board economists point out that recent U. S. Department of Labor statistics show that the greatest wholesale price gains have occurred in lumber—up almost 21 per cent—paint and paint materials, up 13 per cent, and plumbing and heating supplies, up 8 per cent.

Curtis Announces Change in Silentite Window Unit

H. H. HOBART, Vice President, Curtis Companies Incorporated, Clinton, Iowa, recently announced to the trade an important change in the Curtis Silentite "Insulated" Window. The change, necessitated by the defense program, wholly regards the weatherstripping of the Silentite Window Unit. Curtis is now using a wood weatherstrip. This was developed by Curtis engineers and is an exclusive Curtis product. Patents have been applied for.

In his letter to the trade, H. H. Hobart stated, in part: "Some people will call it the *new* Silentite, because of the new weatherstrip. But there is no change in the milling of the Silentite window. Every item—window or frame—can be used with the new weatherstrip. All other important sales features of Silentite, which have appealed to the public for years, remain unchanged.

"Others may call it the *improved* Silentite. Laboratory tests show that the new weatherstripping is tighter in high winds than the old strip. Even high humidities do not affect its smooth operation, and it will not corrode. Accelerated tests equal to more than 10 years of normal use indicate its long life and durability. Installation is speeded up. A better balance results.

"It is easy to see why the unit may be called the *improved* Silentite. But here at Curtis we prefer to call it just Silentite—a name which stands for unquestioned excellence. And this means that Curtis stands squarely behind it, with the same guarantee that is one of Silentite's major sales advantages."

Curtis introduced their nationally-known Silentite Pre-Fit Window Unit in 1932. This marked the first major improvement in double-hung windows in nearly 300 years and Silentite soon became known everywhere as a new and vastly improved window unit.

"The change in weatherstrip," Mr. Hobart stated, "has been enthusiastically received everywhere. Our men have changed hundreds of sample windows from the old to the new weatherstrip to demonstrate its merits. Dealers, architects, builders and the general public have voiced unanimous favor."

G. H. Smith Advanced

G. H. SMITH has been appointed general sales manager of the Hotpoint Company (Edison G. E. Appliance Company, Inc.) of Chicago. He has been general merchandising manager for the past two years. As general sales manager, he will direct all Hotpoint sales and merchandising activities, covering the Hotpoint lines of electric ranges, refrigerators, water heaters, home laundry equipment and kitchen equipment.



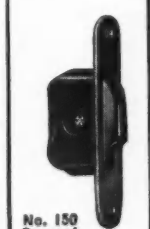
CHECKS with STRICTEST STANDARDS



- ✓ **EASY TO INSTALL**
No machining of frames . . . no cuts in sash except stile grooves . . . no blocks to fasten on jambs. Complete, clear, illustrated directions on each carton.
- ✓ **NO ODD SIZES**
Use same size balance for both upper and lower sash. If top sash is stationary, balances can be used on another bottom sash. Completely interchangeable. 10 sizes meet 95% of residential requirements.
- ✓ **THOROUGHLY PROVED**
User experience and independent tests prove that the GRAND RAPIDS INVISIBLE is amazingly durable. Smooth, quiet, easy, and dependable operation.
- ✓ **FULLY GUARANTEED**
When installed according to simple, illustrated instructions, we unconditionally guarantee GRAND RAPIDS INVISIBLE sash balances. Remember, this is the ONE balance that is actually INVISIBLE in all window positions. No exposed tape, tubes, or cables. Only one moving part.



No. 155 Overhead 1 1/2" Wheel Pulley



No. 150 Covered 1 1/2" Wheel Pulley



No. 151 Open 1 1/2" Wheel Pulley

COMPLETES THE GREAT "GRAND RAPIDS" LINE

A worthy member of the famous "GRAND RAPIDS" line . . . the line that has set the standard for 40 years. Included in this great line are pulley types (overhead and standard) for narrow trim and conventional installations.

Write for

Catalog Section 41-SB-1, illustrating and describing the "GRAND RAPIDS INVISIBLE," with detail drawings of window installations with and without weatherstripping.

Also available—Catalog "K," featuring narrow trim, standard and heavy duty sash pulleys.

GRAND RAPIDS HARDWARE CO.
GRAND RAPIDS - MICHIGAN

"GRAND RAPIDS" The Standard for 40 Years





It Can Make or Break Sales!

Successful builders give special attention to the styling and arrangement of the bathroom. For when prospects go over the house, the woman studies this room closely.

When you've installed *Formed Iron Plumbing Ware*, you can please her with smartly designed fixtures in white porcelain enamel or in gay colors. The high-luster surfaces are lastingly beautiful, easy to clean, and are acid-resisting at no extra cost.

If your *Formed Iron Ware* is porcelain enameled on ARMCO Ingot Iron, you can assure your prospects of the finest basic quality. They will *know* it, because twenty-seven years of national advertising have created a ready acceptance for this "world's standard enameling iron."

And here is another "house seller"—a new hot-water tank porcelain enameled *inside* on ARMCO Ingot Iron. The smooth, hard glossy surface keeps clear water *clear!* Write for the facts. The American Rolling Mill Company, 1121 Curtis Street, Middletown, Ohio.



Prefab. Conference Held

A NATIONAL conference of manufacturers of demountable prefabricated homes was held in the offices of the Division of Defense Housing, Federal Works Agency, in Washington, November 17 to discuss methods of improving basic design and other factors concerning this phase of the national defense program.

All demountable designs available at present were reviewed and demountable construction jobs completed to date were studied at the conference. Livability of the demountable house was a major point of discussion.

Since the beginning of the defense housing program, twelve manufacturers have been awarded contracts for demountable housing. As this type of housing becomes an increasingly important factor in the program, the need of improvement in design and for more manufacturers to participate has become evident.

Insulated Masonry Walls Used for Bomb-Proof Plant

THE 13-INCH masonry wall which rises to a height of 12 feet around the base of all buildings at the Fort Worth Aircraft Assembly Plant is composed on an inner wall of hollow acoustic block, backed up by 1 inch of fibreglas insulating board, common brick and an exterior surface of sand-finished face brick. The wall is reinforced every fourth course with trussed rods which provide the rigidity which makes it shatter-proof.



The fibreglas shown here and used throughout the specially insulated steel walls and roof of this plant and its twin at Tulsa was produced by Owens-Corning Fibreglas Corp., and is being furnished by U. S. Gypsum Company. Photo courtesy of The Austin Company, Engineers and Builders.

Condensation Problem Solved

THE ENGINEERING Experiment Station of the University of Minnesota has issued a useful 70-page bulletin entitled "Condensation of Moisture and its Relation to Building Construction and Operation." Presenting the complete results of over 3 years intensive work, financed to the extent of over \$50,000 by the National Mineral Wool Association, the bulletin tells the building profession how to prevent condensation both with and without insulation. The research demonstrated that houses can be safely constructed with full thick Mineral Wool Insulation using a moisture vapor barrier and with provision for adequate attic ventilation, and that insulation can be installed in existing houses to the full thickness of the stud space without any danger, provided that intelligent control of interior relative humidity is exercised. Such control involves no expense to the householder. It only requires the maintenance of healthful living conditions by avoiding over-humidification through mechanical means or simply through proper housekeeping. The research was conducted by Professors Frank B. Rowley, Axel B. Algren and Clarence E. Lund. In a summary of their work they list ten general conclusions that are of vital importance to home owners, builders and architects. Single copies of the bulletin (No. 18) are available from the University of Minnesota, Minneapolis, at 40c each; ten or more copies, 30c each.

Armstrong Improves Lining Felt

A NEW IMPROVED semi-saturated lining felt having advantages of both dry and saturated felts has been released by the Floor Division of the Armstrong Cork Company, Lancaster, Pa. Known as Armstrong's Lining Felt, this product has unusually high resistance to splitting caused by seasonal subfloor movements. Linostrips and Linosets can be cut-in wet without pulling away any of the material. Because all its fibers are partially impregnated with asphalt, linoleum paste can penetrate this material only deeply enough to assure a maximum bond, thus helping to save paste.

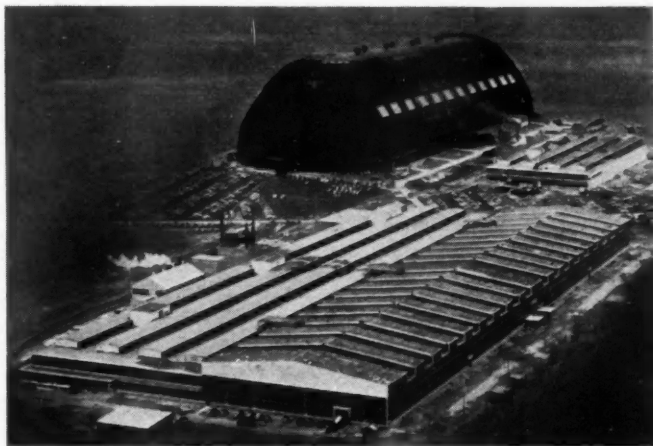
This new product helps save time since its increased flexibility minimizes necessary rolling. An ordinary linoleum knife is the only tool required for its cutting and fitting. Armstrong's Lining Felt combines increased resistance to scuffing with strength to hold up under faster handling without tearing. It is easy to remove when the linoleum is taken up.

Finally, this new felt offers increased resistance to disintegration and bunching when installed over floors subject to severe foot traffic or the constant rolling of office furniture.

Huge Construction at Akron

RAPIDLY approaching completion at the Akron, Ohio, Municipal Airport is the vast three-unit manufacturing works of the Goodyear Aircraft Corp., which within a few months will employ a total of more than 10,000 workmen, turning out various airplane sub-assemblies and airships for America's armed forces. On April 15, 1941, construction began on this 400 by 1,000 ft. Defense Plant Corporation building and on May 24 work was started on the new Goodyear airplane building, adjacent to the great expanse of the "airship dock" or former immense dirigible hangar, the interior of which had already been put into active production of aircraft products, or was undergoing tooling for this ultimate purpose.

Today, with the dock literally crowded with activity, exteriors of both the Defense Plant building and the aircraft parts building are virtually completed; tools and machinery are being installed by a large corps of construction workers and engineers; new workmen are being initiated to their assignments as the vast undertaking gains momentum.



GOODYEAR defense plant nears completion.

Amendments to Critical List

AMENDMENTS to the Defense Housing Critical List and to Interpretation No. 1 of this list, just announced by the Priorities Division, and effective November 15, restore to good standing the use of oil burners in defense housing construction on the eastern seaboard.

The Priorities Division has found it desirable further to encourage construction for rent, rather than for sale, and this has been done by assigning higher preference ratings than formerly to houses which will be rented by defense workers, since the Priorities Division feels that rental is better suited than purchase to their needs. This amendment became effective also November 15.

A revised list of Defense Housing Critical Areas, announced at the same time as the amendments, includes three additional areas. These are: Sacramento, Calif.; Marion-Carbondale (Crab Orchard Lake), Ill.; Bonham, Texas.

BRUCE STREAMLINE FLOORING HELPS UNCLE SAM SPEED DEFENSE HOUSING!



Millions of Feet Used on 74 Projects in 21 States!

Bruce Streamline Flooring is a real boon to architects and builders working on low cost housing. Completely finished and waxed at the factory, it is ready for use the instant it's laid. No expensive sanding, no finishing on the job! Lays fast, because every strip of 3/4" Streamline covers 44% more area than 2 1/4" flooring. In all, Bruce Streamline Flooring saves from 3 to 5 days' time on every job. What's more, Streamline is a more beautiful floor with an amazing finish that penetrates the pores of the wood—resists scratching, chipping, peeling, yet usually costs less than commonplace flooring.

Available in Oak, Maple and Beech. Three sizes: 25/32' x 3/4', 1/2' x 2 1/2', or 3/8' x 2". Nationally advertised. Mail coupon for full information.



AMAZING "SCRATCH TEST"

Here's proof. Half of panel is finished "Bruce-Way"; other half ordinary way. Scrape a coin across both surfaces. Ordinary finish chips away—"Bruce-Way" finish is unharmed!

E. L. BRUCE CO., 1473 Thomas St., Memphis, Tennessee



FACTORY-FINISHED
STREAMLINE HARDWOOD
FLOORING

Trade-Mark Reg. U. S. Pat. Off.
FLOOR FINISHES • TERMINIX • LUMBER PRODUCTS

MAIL COUPON!

E. L. Bruce Co., 1473 Thomas St., Memphis, Tenn.
Gentlemen: Please send full details about Bruce Streamline Flooring.
Name.....
Address.....
City..... State.....

Sawyer In Charge of G-E Home Bureau Advertising

WILLIAM E. SAWYER has been named to take charge of advertising, promotion and related activities of the General Electric Home Bureau, Bridgeport, Conn., it was announced recently by C. W. Stuart, manager of the Home Bureau. Sawyer, who has been associated with the advertising activities of the G-E appliance and merchandise department for several years, takes over duties formerly performed by F. A. Parnell and Paul E. Whitney, resigned.

A graduate of the University of Buffalo, Sawyer joined General Electric in 1934 after working for three years in consumer research for the American Psychological Corp. He served first with the G-E radio advertising section, where he started and edited the Bandwagon Radio Magazine. In 1935 he became assistant advertising manager of the home laundry section. The following year he was appointed advertising manager for G-E vacuum cleaners, a position he held until his present appointment.

H. E. Merrill has relinquished his duties as advertising manager of the General Electric construction materials division, Bridgeport, Conn., and has been appointed to the new post of product promotion manager, where he will have the immediate responsibility for the sales development of fluorescent devices for both the accessory equipment and the wiring devices sales section, it has been announced by T. D. Foster, manager of accessory equipment sales.

The change has brought about the appointment of Andrew Doremus as construction materials advertising manager by J. H. Crawford, manager of the Construction Materials Division with the approval of Boyd W. Bullock, general advertising manager for the G-E appliance and merchandise department. Doremus was formerly assistant to Merrill.



W. E. SAWYER

New Chart Summarizes All Types of Plaster Bases

A NEW CHART which has been prepared by the Technical Department of the United States Gypsum Company, Chicago, summarizes basic facts about all types of plaster bases. It is printed on an attractive buff paper and may be mounted on the wall, placed under glass top of desk, or folded to fit a standard file for ready reference.

The wide range of plaster bases covered by this chart carries through from wood lath to Trussteel, hollow metal lath partitions, and includes various types of resilient soundproof systems as well as the Bridjoint System and various masonry plaster bases.

The summary provides data on fire resistance, average sound transmission loss, recommended plaster grounds, normal partition thickness, approximate weight of wall, materials recommended in addition to lath, quantity of lath required, as well as the quantity of other plastering materials.

Approval of Metal Lath Simplification Given By U. S. Dept. of Commerce

ANOTHER step in the Metal Lath Simplification Program was announced at the last meeting of manufacturers of expanded metal lath. The final report was submitted by W. B. Turner, executive of Milcor Steel Company, chairman of the industry's Standardization Committee.

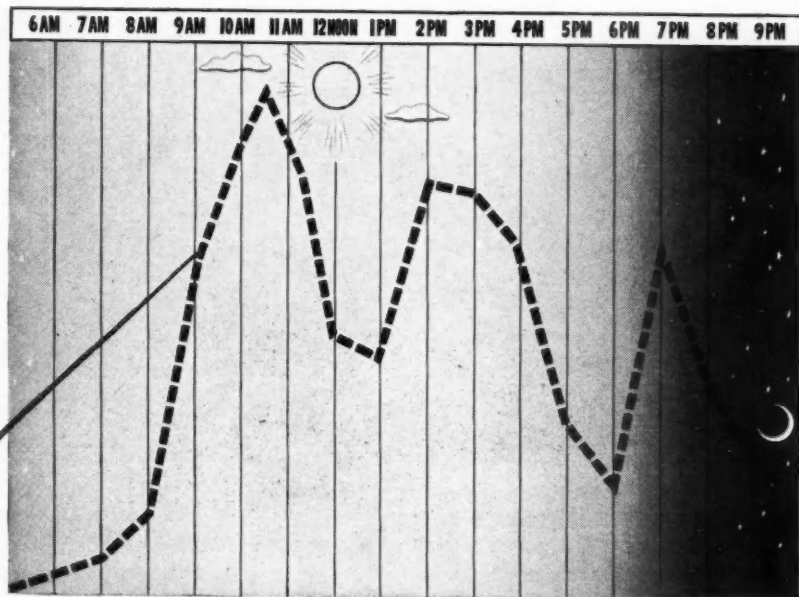
"We are pleased to cooperate with the Division of Simplified Practice of the U. S. Department of Commerce," advises Arthur J. Tuscany, Commissioner of Metal Lath Manufacturers Association, Chicago. "A further reduction in sizes and varieties of Metal Lath and accessories has been agreed upon, effective immediately. Our constant aim has been to render every possible assistance to the Nation's Defense Program."

The final report will be designated as Simplified Practice Recommendation R3-41; printed copies will be made available by National Bureau of Standards, Washington, D. C.

What are the best times for your Long Distance calls?



"THE TELEPHONE HOUR" is broadcast every Monday evening over the N. B. C. Red Network.



THE chart shows the ebb and flow of Long Distance telephone calls during an average day.

Notice the sharp peaks in mid-morning and mid-afternoon.

That's when the people you want to reach are busiest.

See the third peak at 7 P. M.

That's when other people are most likely to be telephoning, too.

If you avoid these three peak periods, you'll get better service and find folks more free to talk.

It's a simple suggestion — but worth remembering these days when defense puts such a load on telephone facilities.

Long Distance
helps unite the nation

Ruberoid Advances Byrd

W. C. BYRD, formerly sales representative of The Ruberoid Co., New York City, in western North Carolina with headquarters at Charlotte, has been appointed Sales Manager of the company's entire Baltimore Division to succeed the late Hugh C. Foster. "Chap" Byrd, as he is known among his many friends in the trade, is a native of Norwood, Ga., and a graduate of Warrenton High School. During the first World War he enlisted in the first officers' training camp at Fort Logan Root, Arkansas, and in 1918 served overseas as First Lieutenant and Personnel Officer in the 87th Division. He has been with Ruberoid 16 years, having joined the organization as a salesman in 1925.



Plumbing and Heating Prices Up Less Than Five Per Cent in Year

DESPITE a strong demand for plumbing and heating equipment both for governmental and private construction, prices have advanced less than 5 per cent in the last twelve months, according to the Plumbing and Heating Industries Bureau.

The official United States Bureau of Labor Statistics index number for wholesale plumbing and heating prices for the week ending September 13 was 85.5 as compared with 80.5 a year ago. The index number for the week ending August 16 was 85.2.

In computing the wholesale price index numbers for commodities, the United States Bureau of Labor Statistics uses the prices prevailing during the year 1926 as basic, that is, the 1926 price is 100.

Thus prices of plumbing and heating staples today are still nearly 15 per cent below the 1926 price level. General commodity prices have advanced more rapidly than plumbing and heating prices, according to government figures. The government index number for wholesale prices of all commodities was 91.6 for the week of September 13 as compared with 89.6 for the week of August 16 and 78 for the month of September a year ago.

Adopt Standard Sizes in Boilers and Radiators to Conserve Defense Metals

IN THOSE industries which are large consumers of metals, standardization and simplification is an aid to national defense.

The manufacturers of cast iron boilers and radiators have devoted their attention for the last two years to effecting a reduction in the number of sizes of radiators and more recently have undertaken a similar program with respect to boilers, says the Plumbing and Heating Industries Bureau.

In 1940 The Institute of Boiler and Radiator Manufacturers sponsored the issuance by the National Bureau of Standards of simplified practice recommendation R174-40 which made effective a reduction of nearly 50 per cent in the number of sizes of radiators which previously had been on the market. During the last three months the Institute in cooperation with the National Bureau of Standards has perfected plans which will further reduce the number of standard sizes of radiators by another 30 per cent.

Thus by January 1, 1942, the number of sizes will be approximately 20 instead of more than 50 which had been produced prior to 1940. The manufacturers unanimously are supporting this program and the assistance of various specifying agents, particularly government departments, is being enlisted in order to give prompt effect to this movement.

The problem of reducing the number of boilers is somewhat more complicated than the radiator situation, but action which is currently under way on the part of each of the individual manufacturers will result, within the next few months, in a substantial reduction in the variety of cast iron boilers which will be introduced. The program will be carried out in such a way that the needs of the building industry will be fully served by the variety of boilers which will still be available.



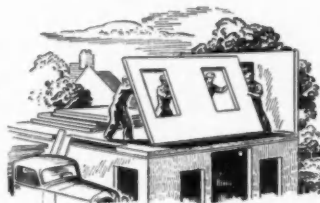
PREFABRICATION

*predicts its costs,
insures your profits*



sheets are essential to satisfactory prefabrication.

Precision-Built Homes are quiet, comfortable buildings which stay "new" longer. They are thoroughly insulated, with low maintenance costs... require only the smallest heating units. When you build with Precision-Built Construction, you *know* your final costs—as well as your *profits*—before each job begins.



Home construction has taken a tremendous forward stride with the development of National Defense Housing. Efficiency and speed have been combined in *prefabrication*—producing, throughout the country, thousands of livable homes for defense workers—both civilian and military. Defense housing has familiarized home owners—and potential home owners—with prefabrication, and has created a market of live prospects for builders featuring this construction method.

Obvious leader in the prefabricated construction field is Precision-Built Construction—the system pioneered in 1935 by Homasote Company, and already used in \$6,000,000 of architect-designed *private* homes. Precision-Built Construction is definitely superior in speed... quality... economy... permanence. It has been tested by the Bureau of Standards. Homasote—the oldest and strongest insulating and building board on the market is featured throughout Precision-Built Construction, eliminating the dangers and annoyance of chipping and cracking plaster. Homasote is supplied in large sheets—up to 8' x 14'—a factor which prevents ugly wall joints and batten strips. Experience proves these big

On completion of the Defense Program, 67 fabricating plants throughout the country will supply builders with Precision-Built Construction for private homes. Improvements devised during the emergency period will have been incorporated and passed on to builders. Then, more than ever before, Precision-Built Construction will represent increased earnings, with lower costs, servicing an ever-broadening market.

Although our capacity is exceeded at present by emergency orders for Precision-Built Construction, we are rapidly increasing our facilities to cope with the situation. Homasote wholesalers and retailers are cheerfully cooperating—at personal sacrifice—in the interest of National Defense. HOMASOTE COMPANY, Trenton, N. J.



Weatherproof
HOMASOTE
Insulating and Building Board

HERE'S
JUST WHAT
CALCIUM CHLORIDE
DOES FOR
**COLD WEATHER
CONCRETE!**

1—REDUCES COST—Cuts delays between operations . . . saves on fuel, heaters and canvas . . . permits quicker finishing and earlier release of forms.

2—CUTS SETTING TIME—National Bureau of Standards tests show actual time of initial and final set are reduced $\frac{2}{3}$ when calcium chloride is used.

3—PRODUCES HIGH EARLY STRENGTH—For example, calcium chloride increases one day strength of 40 degree concrete by 300% as compared to same concrete without calcium chloride . . . increases 3 day strength 117%, 7 day strength 75%.

4—INCREASES FINAL STRENGTH—National Bureau of Standards and P. C. A. tests show calcium chloride increases ultimate strength by from 7 to 12%.

5—ADDS EXTRA PROTECTION—Solvay Calcium Chloride in the mix gives *extra* protection against frozen concrete by speeding set and increasing early strength!

6—PROVIDES DEPENDABLE CURING—Assures positive, uniform curing in all concrete, including paving, structural and products.

7—SHORTENS PROTECTION PERIOD—by speeding set and increasing early strength, Solvay Calcium Chloride cuts winter protection period in half . . . shortens danger period.

8—PERMITS LESS FORMS—Earlier release of forms permits quick reuse . . . fewer needed.

9—INCREASES DENSITY AND HARDNESS—Solvay Calcium Chloride permits reduction of water-cement ratio . . . means fewer water voids, denser, more moisture—resistant concrete.

48 PAGE BOOK GIVES NATIONAL BUREAU OF STANDARDS AND OTHER TESTS . . . MAIL COUPON FOR FREE COPY.

use **SOLVAY CALCIUM CHLORIDE**
with all
PORTLAND CEMENTS

SOLVAY SALES CORPORATION - 40 Rector St., New York, N. Y.
Gentlemen: Kindly send me your 48 page book
"Calcium Chloride and Portland Cement."

Name.....

Affiliated with.....

Address.....

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

34-1241

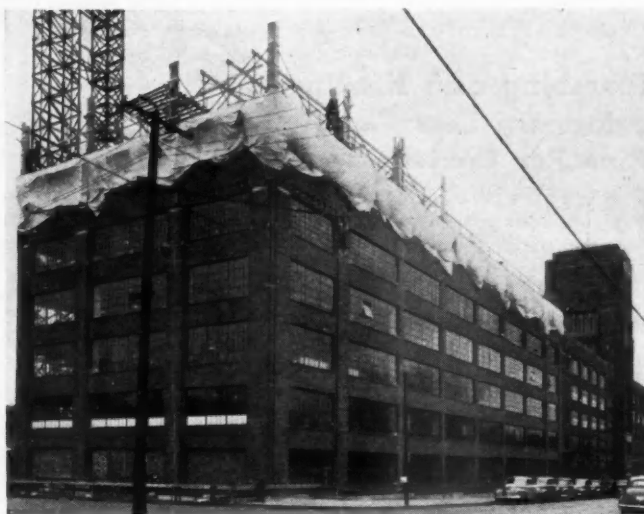


Construction Begins on M-H Plant Addition

FOR THE FOURTH time in five years Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., is building an addition to its plant. Rising four stories above the north wing completed last year, the 65,000 square feet of added floor space is necessary because of recent defense orders and to maintain the service to its customers.

C. B. Sweatt, Vice President, is in charge of sales.

H. W. Sweatt, President of the company, has been named a member of the Plumbing and Heating Industry Defense Advisory Committee, OPM.



ABOVE: Minneapolis-Honeywell's Pres. Sweatt and plant addition.

Exposition to Show 250 Heat Exhibits

MORE than 250 exhibits already are projected for the 7th International Heating & Ventilating Exposition, scheduled for January 26 to 30 next, in Philadelphia. They will cover the entire field of heating, ventilating and air conditioning for industry, as well as human comfort in places of business and other institutions, and in homes. Firm names which comprise the bedrock of the industry constitute the principal listing on the roster, which also includes a number of newcomers, whose products are being given a wider introduction.

Recognizing the broad base on which the exposition is founded and the many interests co-operating in its success, Charles F. Roth, manager, announces that the Advisory Committee, which was organized some time ago has been enlarged to include representation of other leading organizations in the field.

Walter L. Fleisher, president of the American Society of Heating and Ventilating Engineers, is chairman of the entire Committee, to which the following new members have been added under the affiliations shown: C. F. Ames, Jr., Insulation Board Institute; Wharton Clay, National Mineral Wool Association; Theodore Irving Coe, American Institute of Architects; George C. Diehl, American Institute of Consulting Engineers; W. R. Hainsworth, American Society of Refrigerating Engineers; Wm. B. Henderson, Air Conditioning & Refrigerating Machinery Association; William A. Herr, National District Heating Association; Frank Hoke, Stoker Manufacturers Association.

Also R. A. Locke, Steel Heating Boiler Institute; Arthur F. Nass, Heating, Piping and Air Conditioning Contractors National Association; Albert J. Nesbitt, Industrial Unit Heater Association; H. S. Sharp, National Warm Air Heating and Air Conditioning Association; E. Szekey, National Association of Fan Manufacturers; R. S. Waters, Institute of Boiler and Radiator Manufacturers; E. C. Wentz, Acoustical Society of America; J. W. West, Jr., American Gas Association, and Ray G. Whipple, Oil Burner Institute.

As in the case of all previous heating and ventilating expositions, this one is under the management of the International Exposition Company, with permanent headquarters at Grand Central Palace, New York.

PRODUCERS TELL US—

About Products, Personnel, Plants

Improved Installability and Permanence with Kimsul's New Tough Flexible Cover

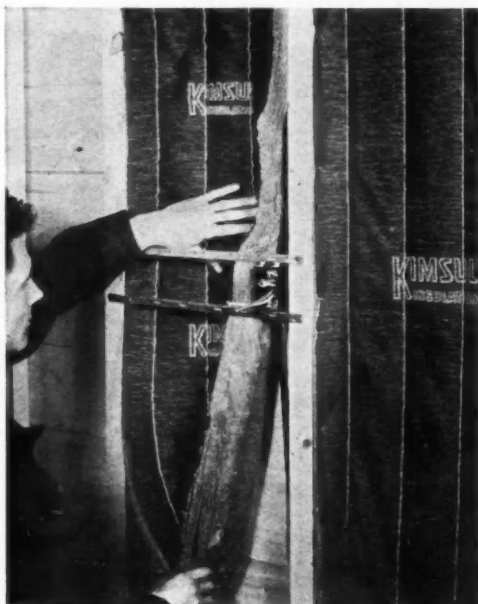
TO SATISFY a definite preference on the part of many builders and contractors for a form of Kimsul insulation that would permit rough handling and greater speed in installing, a modified product has been added to the regular Kimsul Blanket line, according to announcement of the manufacturer, Kimberly-Clark Corp., Neenah, Wis.

The new product differs from the regular Kimsul Blanket only in that a tough, flexible, asphalted fiber cover especially developed for the purpose has been added to one surface. However, a number of interesting characteristics are found in the new product, notably: it has the necessary toughness to permit stapling it to the sides of studs, rafters and joists without the use of wood or fiber cleats or hazard of tearing loose; it is self-protected from the elements wherever it is temporarily exposed awaiting inside plaster, or permanently exposed, as in the case of unfinished attic floors and sloping roofs; to facilitate accurate precutting while still in compressed form, the trade mark "Kimsul Insulation" is printed in white at 24-inch intervals on the tough, flexible cover.

The development of the tough, flexible cover on the blanket was in itself a noteworthy achievement. Because of Kimsul's "compressibility" (it is packaged for shipment and storage at high density, then expanded for installation on the job to five and one-half times its compressed surface area), the job of fitting a properly conformable cover was not simple.

Matching the regular Blanket in all specifications, the new asphalted fiber covered blanket is available in nine convenient numbers: widths of 16, 20 and 24 inches; and in three thicknesses: Commercial (about 1/2 inch), Standard (about 1 inch), and Double Thick (about 2 inches).

Another innovation announced by the manufacturer is the packaging of the new Kimsul Protected Blanket in compressed roll form, eliminating the use of solid fiber boxes used on the regular blanket. The substantial saving of fiberboard, which is an important critical material in the defense economy, is only one benefit of the new package. Wrapped in heavy shipping paper, the new compressed roll is designed for greater compactness, ease of handling and conserving of storage and trucking space.



INTERFERENCES don't bother the installer of the new Kimsul Protected Blanket. The toughness and flexibility of the waterproof cover permit it to be pulled behind pipes, wiring, etc., with little hazard of tearing or puncturing and leaving unprotected areas.

*Thank YOU
for making*

1941

*the Biggest year
in our History!* ^{BY FAR}

More carloads of MESKER Steel Sash rolled out of our plant during 1941 than during any previous year in our history.

You've helped make it possible. You've recognized a high quality product; taken advantage of service unexcelled by any manufacturer of steel sash; profited substantially as a result of our fair price structure.

We're grateful. So much so, that, for 1942, we'll redouble our efforts to make it even more to your advantage to think of MESKER when you think of steel sash.

INDUSTRIAL
DOORS
•
METAL
SCREENS
•
DETENTION
WINDOWS



CASEMENT
WINDOWS
•
MONUMENTAL
WINDOWS
•
INDUSTRIAL
WINDOWS

MESKER BROTHERS • ST. LOUIS, MO.

KNAPP ACCESS PANELS

Simple
and
Easy
to
Install

Knapp Flush Access Panels are made by the manufacturers of Knapp Corner Beads.

FOR FURTHER
INFORMATION



HERE'S an access panel that becomes a part of the decorative treatment of the wall in which it's mounted—plastered in, it forms a neat flush-fitting surface. The sturdy, pre-assembled Knapp Flush Access Panel is quickly and easily installed. Cam latches and pivot hinges are in non-corrosive metal. And the captive pin feature of the hinges permits quick removal of the door, without loss of small parts.

In Knapp metal access panels you'll find the same ruggedness and high quality that's characteristic of all Knapp products. There is a variety of standard sizes to choose from, and special sizes may be had on order.

Write today for complete specifications.

KNAPP METAL TRIM

KNAPP BROS. MANUFACTURING CO.
GENERAL OFFICES • JOLIET, ILLINOIS

New Plastic Closet Tank Float

PRIORITIES do not affect the production of the new plastic closet tank float, now being made by the American Molded Products Corporation, 1753 North Honore Street, Chicago. The company is in a position to assure manufacturers, plumbers, engineers, contractors, builders, reconditioners, and all specifiers of this essential equipment that their production of floats for private residential buildings, factories, or institutions will not be interrupted. Stock of these floats will be maintained for immediate deliveries. Thus the problem of replacements as well as new business that has been affected by priorities on other materials may be promptly taken care of.

The use of Tenite for the closet tank float is one of the conspicuously successful developments of this tough, resistant, lasting, and odorless cellulose acetate plastic.



PLASTIC float.

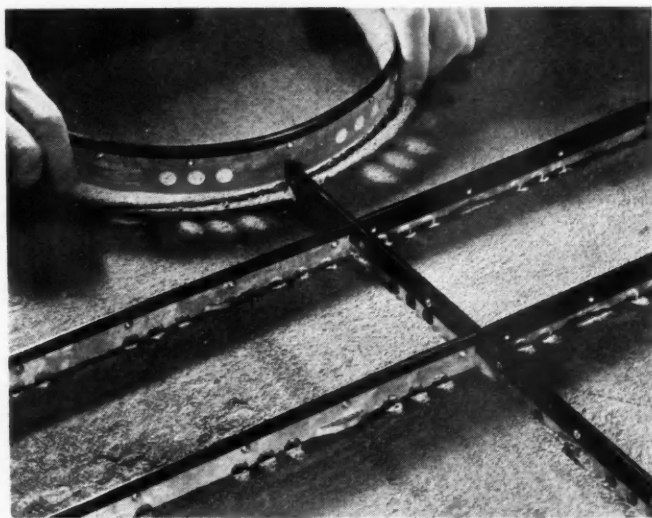
Plastic Terrazzo Strips Offered

A NEW architectural use for a plastic has been developed for blocking off sections of terrazzo flooring. Strips of plastic tenite attached to ribbons of galvanized iron are used as an outline of the design to be followed in laying the floor. The tenite part remains visible after the terrazzo has been surfaced. The strips localize minor cracks which occur when terrazzo floors settle or contract in hardening. Instead of appearing as an irregular split, the cracks tend to run evenly along the strips.

Since the plastic can be produced in an unlimited number of colors, builders are allowed a correspondingly great freedom in design. Terrazzo strips have hitherto been made almost exclusively of metals. The shortage of zinc and brass drew the attention of designers to the possibilities of applying tenite. Tests were conducted, and as a result the plastic strips have permanently replaced metal ones in a number of applications.

The tenite pieces are more economical to manufacture than brass or zinc strips. They are installed in the same manner as metal ones and when in place will not wear faster than the flooring. An ordinary tin shears can be used to cut the pieces into the desired lengths. They can be bent into various designs with ease.

These plastic strips are molded by Extruded Plastics, Inc., Norwalk, Conn., for the Manhattan Terrazzo Brass Strip Co., Inc., New York City. Tenite is manufactured by the Tennessee Eastman Corporation, Kingsport, Tenn.



SETTING new plastic terrazzo strips.

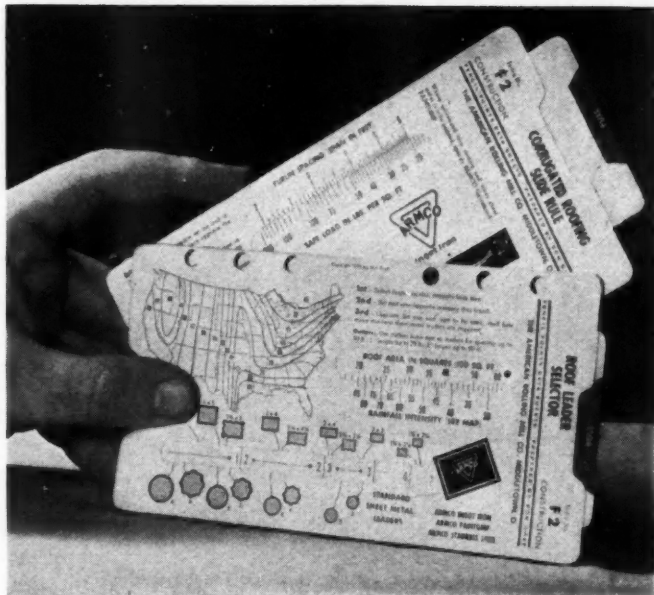
Roof Leader Figurer Offered Free

WHEN SHEET METAL is becoming scarce because of defense requirements, architects, contractors and sheet metal workers want to make every pound go as far as possible. An aid to this is the corrugated roofing slide rule and roof leader selector offered by The American Rolling Mill Company.

By writing to the company at Department 24, 703 Curtis Street, Middletown, Ohio, readers of *American Builder and Building*

Age may obtain one of these valuable rules without cost or obligation.

The first step in using the roof leader selector is to find out the rainfall intensity in the locality where the work is to be done. A glance at the special map on the rule itself will determine the rainfall intensity. Knowing the number of squares in the roof area, the user sets the slide so that the number of squares appears above the rainfall figure. This gives the number of leaders necessary for an adequate installation.



RULE aids in figuring and saving sheet metal.

The other side of the rule aids in the selection of purlin spacing on a corrugated metal roof. The load in pounds per square foot of roof surface is set opposite the purlin spacing or span in feet. The gauge of the metal required is read opposite the size of corrugation. If the size of corrugation and gauge of metal have been determined, the safe purlin spacing can be learned by reversing the procedure.

Mueller Introduces "Season-stat"

SEASON-STAT is a new control developed by the L. J. Mueller Furnace Company, Milwaukee, as a positive, inexpensive, simple and trouble-free answer to one of the problems of automatic heating—"Cold 70." It is applicable to gas, oil or coal-fired automatic heating equipment.

This control keeps the heating plant in step with the weather by slowing it down in mild weather and stepping it up in colder weather. By controlling the heat produced—smaller amounts in milder weather and larger amounts in colder weather—this device makes possible the circulation of heat over practically as long periods in mild weather as it does in cold weather, resulting in comfort at any outdoor temperature.

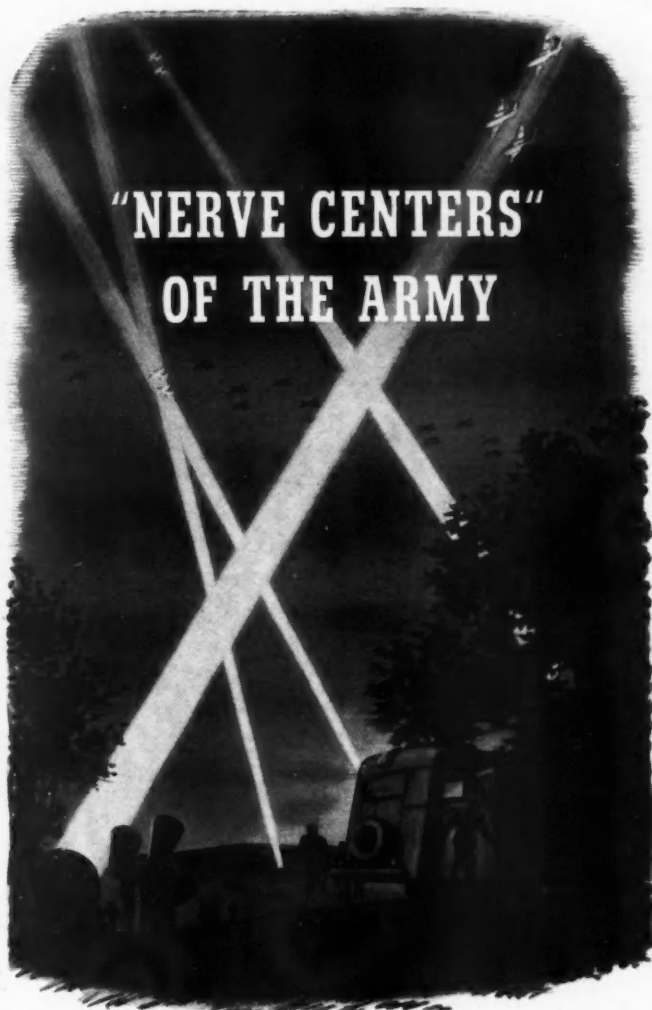


NEW automatic heating equipment control.

Free Pitch Card and Roof Estimating Data

A NEW PITCH CARD that contains complete instructions for use, as well as condensed estimating data, has just been prepared by the United States Gypsum Company, Chicago. It is sent free to all who request it.

With this pitch card, roofs of $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{8}$, $\frac{1}{2}$ and $\frac{3}{4}$ pitch are readily identified. The tables contained on the card enable the user to determine many common rafter lengths immediately after the width of the roof and its pitch are obtained. Simple instructions for determining area of the roof to be covered are given.



In modern battle formation, the "nerve centers" of army field operations are trailers that house mobile radio units. These trailers must be built of material both strong and light weight . . . something that can withstand salt air,

sand, heat, snow or rain—and still be adaptable to high-speed production. Tempered Presdwood*—a Masonite* wood-fibre hardboard—has passed all these severe tests and is now being used to build U.S. Signal Corps trailers.

MASONITE PRESWOODS are right in the thick of our National Defense program for the very same reasons so many builders have used them for walls, ceilings and cabinet-work in homes they have built.

Tough and durable, these boards have unusual structural strength. They can quickly and easily be cut or sawed, with ordinary wood-working tools. They are grainless and moisture-resisting. Properly applied, they will not warp, chip, split or crack. Their marble-smooth surface readily lends itself to varnish, lacquer, paint, enamel or wax finishes, opening up unlimited decorative possibilities.

The demand for Masonite Preswoods in National Defense increases daily. Because Masonite Corporation puts the needs of our country first, there may be occasions when your normal requirements cannot be filled as promptly as in the past.

It's Right
MASONITE

MASONITE PRESWOOD PRODUCTS

INC. U. S. PAT. OFF.
MASONITE CORPORATION, Dept. AB-12, 111 W. Washington St., Chicago, Ill.

Please send me **FREE** sample and more information about Masonite Tempered Presdwood.

Name _____

Address _____

City _____ State _____

If you live in Canada, write Masonite Company of Canada, Ltd., Gaitheau, Quebec.

*TRADE-MARK REG. U. S. PAT. OFF. "MASONITE" IDENTIFIES ALL PRODUCTS MARKETED BY MASONITE CORPORATION. COPYRIGHT 1941, MASONITE CORP.

You can depend on

TRU-FIT

Durable Douglas Fir Entrance Doors

...Superior in every respect!

● In strict accordance with U. S. Commercial Standard CS91-41, Tru-Fit Douglas Fir Entrance Doors are made in 27 architecturally correct designs to suit every style and size of home. They are manufactured only from all-heartwood, vertical-grain, old-growth Douglas fir—the wood made durable by nature—by skilled craftsmen and precision tools. They leave the mill pre-fitted, ready to hang*—scuff-stripped—packaged—and trade-marked. Because of mass-production economies, these quality entrance doors cost no more than ordinary entrance doors. Use a Tru-Fit Durable Douglas Fir Entrance door on the next home you build. See how it adds the final touch so vital to easy selling and happier living.

*You can order all stock Douglas fir doors pre-fitted at slight extra cost and grade-marked.



Remember!
NATURE makes
Douglas Fir
Durable!

They're
MORE DURABLE
FACTORY-FITTED
SCUFF-STRIPPED
TRADE-MARKED
PACKAGED

THE
DOORWAY
TO
HAPPINESS

FREE DOOR CATALOG
Selecting the right fir door for every opening is easy when you have the Fir Door Institute's color catalog. Send for your copy. It's free. Fir Door Institute, Tacoma, Wash.

NEW FIR DOOR MOVIE! This new 30-minute, 3-reel, 16-mm natural color sound movie shows how fir timber is logged, how stock fir doors are manufactured and used to best advantage. Arrange for showing at your luncheon club, lodge, school or company meeting. Film is lent free, but 4 weeks' notice in advance of the date you wish it must be given. You must provide your own projector and screen. Fir Door Institute, Tacoma, Washington.

New Hotpoint Kitchen Equipment

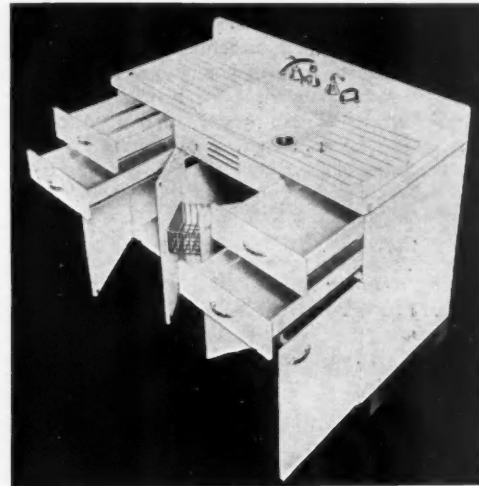
HOTPOINT has revised its line of standard steel kitchen cabinets, to include two new Hotpoint steel cabinet sinks. The total number of models in the line has been reduced, to facilitate production of popular models, and the new sinks, and to control production to the point where prices may be reduced.

According to Howard J. Scaife, Manager, Hotpoint Kitchen Sales Division, the availability of the new sinks makes it possible for the average family to proceed with needed kitchen modernization without financial strain. He said, "With the installation of a new Hotpoint cabinet sink alone, the average family can now take a long step toward complete kitchen modernization. Additional matching cabinets can be added a few at a time, as the budget allows. When it becomes practical to purchase other Hotpoint kitchen appliances, they will blend with the sink and cabinets."

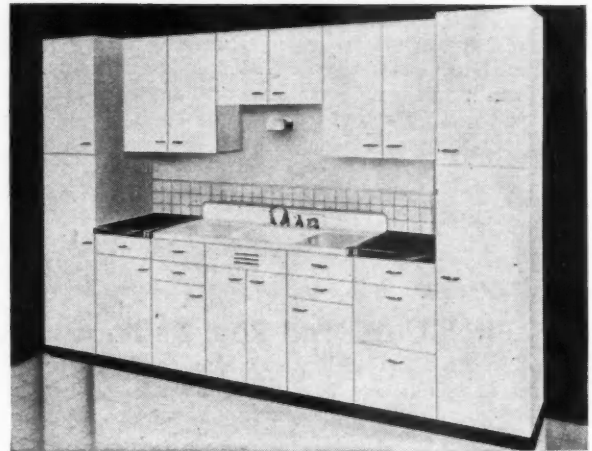
The new cabinet sinks are available with two or four drawers. Both have three storage cabinets. They have grooved, double drainboards, with soap dish and level deck at the back for goblets. Other convenience features include a utility basket, hung on the left front door, and a linoleum-lined cutlery drawer. Altogether, each sink has 22 cu. ft. of cabinet storage space.

Heavily coated in stain- and acid-resisting porcelain enamel, the new Hotpoint sinks are 54 in. long and 25 in. deep, with 36 in. work surface height, and 4-inch panelled back splash. Bowls are 7 in. deep, with 3½-in. drain openings, to accommodate installation of the Hotpoint Disposall, when desired. Sink decks are drilled for installation of the most modern ledge-mounted faucets with spray attachment.

The revised line of Hotpoint standard steel kitchen cabinets provides wall and base cabinets, which can be assembled in a variety of combinations, to meet the kitchen requirements of any home. Accessories are optional.



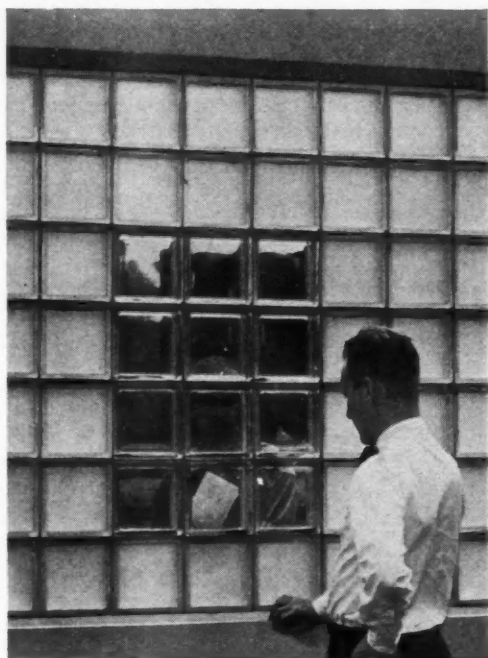
NEW line of Hotpoint kitchen cabinets includes wide size ranges in both sink and wall units.



"Vue" Glass Block Is New

THE DEVELOPMENT of a transparent glass building block that affords almost window-like vision has been brought out by Pittsburgh Corning Corporation, Pittsburgh, Pa. Called the "Vue" glass block, it will be used where some outside vision is

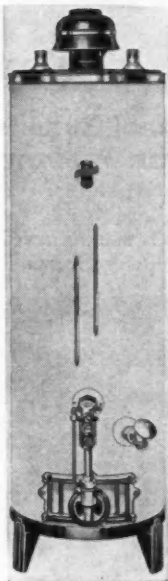
desired through panels of non-transparent glass blocks. The new "Vue" block permits sufficient general vision of large objects or movements beyond the panel to prevent a "Shut-in" feeling although the visibility of sharp detail is not possible under most conditions.



With this visual quality the Vue block combines the insulation properties of the usual glass block. Like other PC blocks, it contains a partial vacuum, a dead air space, which results in the glass block panel having approximately the same insulation value as a solid masonry wall eight inches thick, and more than twice the insulation value of ordinary single-glazed windows.

Glass-Lined Tanks Available

THE accompanying illustration shows the Hotstream Heater Company's Model "A" automatic storage water heater with porcelain enameled tank. This tank is commonly referred to as Glass-Lined. In view of the scarcity of materials from which galvanized, copper and other non-ferrous tanks are fabricated, and because of the ability of this prominent Cleveland concern to secure the porcelain enameled tanks, this particular model comes into new prominence. The company hopes to be able to supply these automatic heaters (guaranteed for 20 years) in sufficient volume to take care of the present requirements of those who are pressed for delivery of automatic storage water heaters.



AUTOMATIC heater has porcelain enameled tank.

New Asphaltic Sealers

TWO ASPHALTIC sealing compounds, hot pouring and cold troweling types, have been announced by Keystone Asphalt Products Company, 43 East Ohio Street, Chicago. They have been designed for use as caulking compounds in roofing and other applications where a water-proof sealing compound is required, and for use in joining sewer pipe.

The hot pouring type presents a mixture of petroleum asphalt and finely ground mineral filler in a ratio designed to retain flexibility in cold weather, and to prevent erosion and flow in hot weather. A heavy cardboard container replaces the conventional steel drum for packing the compound in 200-pound units. The package is sufficiently small to permit its full use in the average kettle or melting pot, eliminating all possibility of obtaining an improper mix between asphalt and filler. The cardboard container is easily stripped from the hardened cake of compound, facilitating handling on the job.

The cold troweling type is designed for use on smaller jobs where a kettle for a hot pouring compound is not practical.

In Canada, too— it's BARCLAY



NEWEST, MOST MODERN HOTEL IN CANADA'S CAPITAL CITY—THE LORD ELGIN. Its Manager, Redverse F. Pratt says: "... The attractive finish and durability of the Barclay Tileboard we feel is outstanding. One particular feature which impressed us so much is the sanitary condition which is created where Barclay Tileboard is used. The two-tone color finish creates that atmosphere which is so desirable in the modern bathroom of today."

ability of the Barclay Tileboard we feel is outstanding. One particular feature which impressed us so much is the sanitary condition which is created where Barclay Tileboard is used. The two-tone color finish creates that atmosphere which is so desirable in the modern bathroom of today."

Redverse F. Pratt.

Yes, in Canada as well as in the United States, architects, builders and users are voicing their approval of Barclay Tileboard, Panelboard and Stream-Lined. Its modern plastic-coated surface gives years of service. Its beautiful lustrous finish does not fade and needs only a damp cloth to keep it clean. The new modern Lord Elgin Hotel is justifiably proud of its 400 Barclay Bathrooms.

PLASTIC-COATED UNITS— FOR WALLS AND CEILINGS

Barclay is the ideal material for walls and ceilings, manufactured in pre-fabricated wall-size units, it's extremely simple and fast to install... and once installed, there's no more periodic repairing and painting—no "loose tiles" to fall out—the perfect material for walls and ceilings in Bathrooms, Kitchens and Playrooms. For commercial interiors, too, BARCLAY'S Lustrous Finish adds much to cocktail lounges, cafeterias.

BARCLAY MFG. COMPANY, Inc.



BRONX NEW YORK



SAVE TIME... ELIMINATE WASTE

Trimpak—America's highest quality packaged window and door trim—saves approximately 44% installation time.

Today, with time more precious than ever, the busy builder welcomes this time-saving feature of Trimpak. He also appreciates that Trimpak saves waste of materials by providing precision cut trim—enough to do the job—no more, no less.

Get the full story on Trimpak from your local lumber dealer. See the new lock-joint mitred trim that saves time and assures perfect joint. For literature write direct to Dept. AB-12, Trimpak Corporation, 44 Whitehall Street, New York City.

TRIMPAK

"THE ULTIMATE IN TRIM"

HOW COUNTRY KITCHENS CAN HAVE "CITY WAYS"

Building homes with modern kitchens beyond the gas mains is no problem today. These kitchens can have all the convenience, cleanliness and economy of real city gas service. Just install "Pyrofax" Gas Service!

"Pyrofax" Gas burns just like city gas—and uses the same type of appliances. There's no soot, no dirt, no smelly fumes. Cooks a meal for the average family for about 3 cents! Dependable supply assured by more than 20 years of unfailing service by one of the world's largest manufacturers of compressed gases.

Send for all the facts on "Pyrofax" gas as well as specification sheets on installation. Write to Dept. A, "Pyrofax" Gas Division, Carbide & Carbon Chemicals Corporation, 30 East 42nd Street, New York City.

PYROFAX

TRADE-MARK



SUPERIOR GAS SERVICE

COOKING • WATER HEATING
REFRIGERATION
BEYOND THE GAS MAINS



Novel Combined Door and Grille

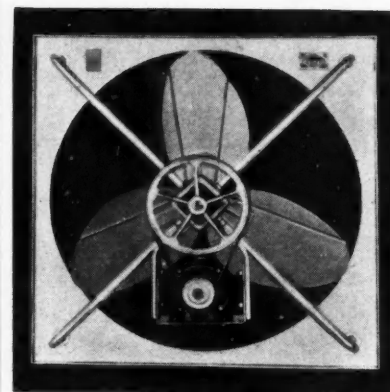
PHOTOGRAPH shows a novel combination of rolling door below and grille above, furnished and installed by Cornell Iron Works, Inc., for a defense plant in Buffalo. The entire structure coils up overhead around the steel tube carrying counterbalanced springs. The operation is from either inside or outside by means of a hand crank shaft running through the wall and indicated in the picture. The rolling grille allows of free circulation of air, while still presenting a secure protection. The rolling door section prevents unauthorized people from seeing into the plant. It can be made any height desired.



ROLLING Door and grille combined

Steel Tube Mount Improves Fan Performance

ENHANCED appearance and operating improvement were achieved by redesign of fan mountings in the air cooling systems manufactured by Autovent Fan and Blower Division of The Herman Nelson Corp., Chicago, Ill, to use welded steel tubing,



$\frac{3}{4}$ ", 1" or 1 $\frac{1}{4}$ " outside diameter, depending upon the size of the fan, by 0.065-inch wall, bent as shown, with the tube ends flanged and spot welded to the sheet steel front plate and at the center to the bearing spacer box. Formerly this structure comprised flat bar arms bolted to cast iron plate. The new construction was worked out first of all to improve appearance by giving a streamline effect and providing a satisfactory surface for high lacquer finish. A secondary but desirable result is that the round tubing reduces wind resistance and turbulence.

REDESIGNED fan mounting, improving appearance and operation of Coolvent fan.

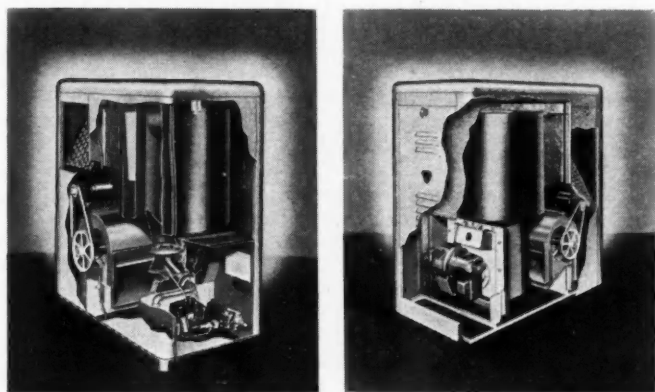
Use is made of this structural feature in the several cooling systems manufactured by the Autovent Division, which include: the Allvent, for commercial, public and industrial buildings; the Coolvent, for residences; and the Apartvent for apartment use. These systems all operate on the principle of providing an adequate amount of air movement for the conditions, with a minimum of noise and power consumption. The fan mounting illustrated is that of the Coolvent fan, and is typical of the design used in all three systems. The fans and housings are of varying sizes and design to suit the separate conditions for which they are intended.

Two New Rybolt Conditioners

THE RYBOLT Heater Company announces two winter air conditioner units—one gas-fired and one oil-fired. Besides having other special advanced features these units are unusually compact and designed to fit into limited space. This makes them particularly well adapted for defense housing or for other small houses now so much in vogue.

The new Rybolt Series RS Gas-Fired Winter Air Conditioner embodies many improved features to insure comfortable, even heat with convenience and economy. Double protection gas valve control guarantees safe operation under all conditions. If pilot fails, diaphragm gas valve can be operated manually. When power returns, automatic action resumes. This double protection control prevents overheating of unit and simplifies operation.

Complete with quiet-running blower, automatic humidifier, room thermostat and Dust-Stop filters. The cabinet is handsomely finished in hammerloid enamel. Shipped completely assembled which materially reduces handling time for jobbers and dealers. Also means big saving of installer's time because he will not have to assemble unit on the job.

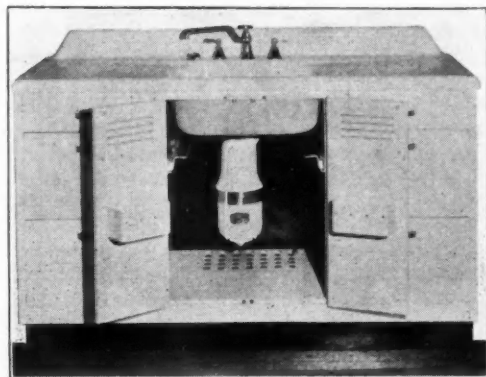


LEFT: Rybolt gas-fired winter air conditioner, and right, oil-fired unit.

The new compact Rybolt Oil-Fired unit is sized to fit into minimum space with no sacrifice of efficiency or high quality performance. It is completely automatic, quiet in operation and fully dependable. The oil burner itself can be pulled out in front of the unit making it extremely easy to service. Burner controls and blower are completely concealed, yet easily accessible. The unit is complete with quiet-running blower, Dust-Stop filter, automatic humidifier and room thermostat. Handsome cabinet finished in hammerloid enamel.

"In-Sink-Erator" Puts Garbage Down the Drain

THE IN-SINK-ERATOR Mfg. Co., Racine, Wis., contributes a well engineered device to help the housewife do away with the garbage pail and provides builders with a built-in electric device for the kitchen that has definite sales appeal to home buyers. This food waste disposer attaches to the drain of the kitchen sink and is installed easily by the plumber to any type of sink. It is equipped with an automatic reversing motor and rotor shredder which is self-sharpening and self-cleansing. It shreds, grinds and pulverizes all food wastes, including bones, scraps, peelings, parings, rinds, ash tray contents, etc.—everything but metal or crockery. Everything is finely ground and flushed away with water from the tap into the sewer system.



IN-SINK-ERATOR for garbage disposal the electrical way.



Prevent
"Sleeping Car Windows"
with Laux

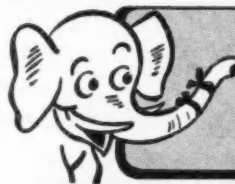


Rez
TRADE MARK REG. U. S. PAT. OFF.

PROTECT THE HOUSES you build against the vexatious and destructive binding, swelling and warping that beset ordinary sash, doors, millwork, etc. . . . TREAT WITH LAUX REZ, the scientific sealer and wood preservative.

Applied in the shop or on the job, this modern synthetic resin sealer penetrates into the wood cells, seals out destructive moisture, controls dimension and grain raise.

Today, many government projects are requiring this treatment as low cost "life insurance," and the growing practice in jobs, large and small, is to specify this inexpensive LAUX REZ treatment.



Don't Forget...
REZ is to Wood
as
Rustproofing is to Metal

REZITING—Industrial Preservative Wood Treatment.

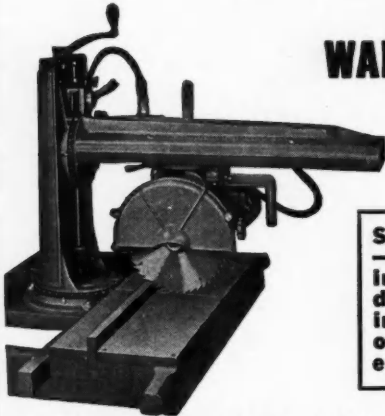
FREE to manufacturers of sash, doors, plywood, and other wood products . . . a descriptive brochure of Laucks complete series of low-cost wood treatments for "plant" application . . . among them water-repellent, toxic preservatives that meet requirements of National Door Manufacturers Association and Western Pine Association. Write today to your nearest Laucks office.

I. F. LAUCKS, Inc.

Seattle, 911 Western Ave., Div. B Los Angeles, 859 E. 60th St., Div. B
Chicago, 6 N. Michigan Blvd., Div. B
Portsmouth, Va., Commerce and Broad Sts., Div. B
Vancouver, B. C., Granville Island, Div. B

FOR **fast** FRAMING

it's the
**WALLACE No. 1
RADIAL
SAW!**



Saves time—money—labor; and turns in greater profits, dollar for dollar invested, than any ordinary sawing equipment.

Eliminate pencil-work—the Wallace No. 1 Radial Saw uses stops to gauge the length and angles on material, cutting framing stock faster than it can be marked for handsawing! The exclusive Wallace Angulator quickly locates any two rafter angles without repeated measuring—plate, plumb and heel cuts are made with just one handling on the table!

Precision adjustments made with lightning speed—rafters, jacks, studs, joists, bridging, etc., fit together as accurately as cabinet-work and trim and with less time and trouble. The Wallace Radial Saw makes it easier to do work right, than wrong!

The Radial Saw also does beautiful shaping, rabbeting, dadoing, grooving, routing, and other milling jobs. Write today for free bulletins—don't delay!

J. D. WALLACE & CO.
136 S. California Ave. Chicago, Ill.

BUSINESS IS NOT "AS USUAL"

With

EDWARDS

SHEET METAL BUILDING MATERIALS

For almost 40 years we have prided ourselves upon our ability to make prompt deliveries of steel roofing, shingles, ceilings and sidings. The national emergency has changed all this. So much of our resources of materials and manpower has been diverted to the production of products essential to the National Defense that we have little to offer to our regular customers. So long as our reserve stocks last we shall make every effort to take care of your most urgent requirements. We welcome your inquiries subject to these conditions.

THE EDWARDS MANUFACTURING CO.
542-562 Eggleston Avenue, Cincinnati, Ohio

PRACTICAL JOB POINTERS AND BUILDING DATA

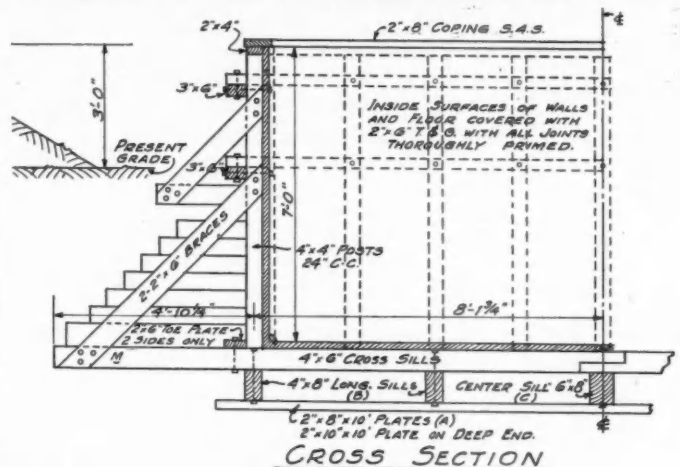
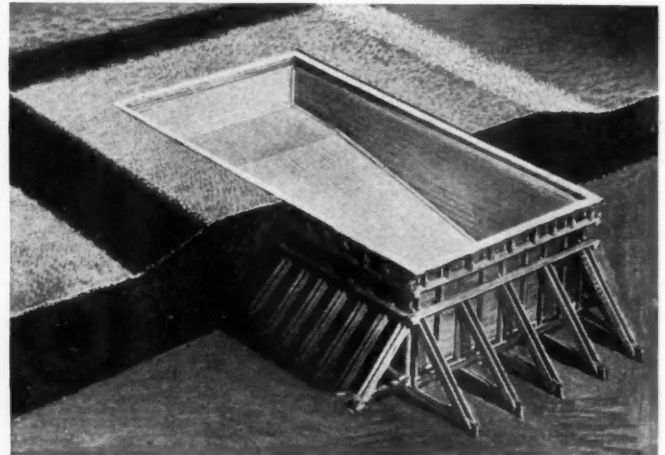
AN EXCHANGE of ideas and methods in building practice. For individual contributions, two dollars or a year's subscription to American Builder is paid when published; state occupation.

Redwood Swimming Pool

AN INVITING swimming pool of California Redwood is now within the means of the many home owners who have the desire and the space for such a convenience but who have foregone the pleasure because of the high cost of putting in pools of conventional material and design.

How this smart, economical home swimming pool, 32 feet long, 16 feet wide, 3 feet deep at shallow end, and 7 feet deep at the deep end, can be built absolutely leak-proof by any contractor from material obtainable at local lumber yards is described in fullest detail in a bulletin just released for distribution by the California Redwood Association, San Francisco.

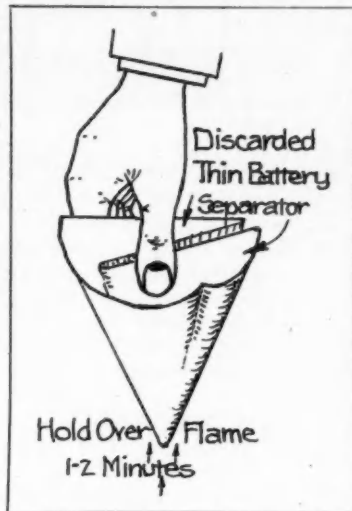
The pool, designed by Redwood Association engineers, with the aid of Government agencies, is constructed entirely of durable Redwood lumber. It was planned to utilize standard sizes and lengths of lumber carried in stock by most lumber yards. The proportions of the pool described are such that it may be scaled up or down in size with the minimum of waste material. The bulletin contains a complete material list for the pool, discusses the problems of its location and the necessary excavation, and carries detailed working drawings.



HOME swimming pool can be built leak-proof of California redwood.

Inexpensive Paint Strainer

WHEN the builder has paint to strain, a simple and effective strainer can be made from a discarded thin rubber battery separator. Ask at the service station for a few of these and keep them on hand. Fold one of these into a cone shape, hold it over a flame for a minute or two (to soften the rubber). Then hold it a couple more minutes while it cools in the cone shape. Use this to pour the paint through; it is just porous enough to do a good job of straining the liquid. Since it costs nothing, it can be thrown away soon after use.—MORRIS A. HALL, White Plain, N.Y.



HOLC Repairs Analyzed

WITH its staff technicians ready to take over the job of advising home owners how to convert vacant space into housing units for defense workers, the Home Owners' Loan Corporation recently released a report on its eight-year reconditioning experiences and an analysis of its "reconditioning dollar."

Painters got the largest share of the \$166,000,000 which was spent for repairs on 550,000 homes, under the direction of the HOLC, from 1933 to April 1, 1941, according to the report. Of the \$52,000,000 spent for both exterior and interior paint jobs, labor got about \$33,800,000 and about \$18,200,000 went for materials.

The complete breakdown of the reconditioning dollar follows:

	Per-cent to each trade (\$166,000,000)	Labor	Materials
Masonry	4.2%	60%	40%
Carpentry and millwork	19.2	55	45
Roofing and sheet metal	14.8	40	60
Plastering and stucco	3.4	65	35
Exterior painting	20.6	65	35
Heating, plumbing, electrical work	12.4	45	55
Interior painting (wall and trim)	10.7	65	35
Papering	5.5	60	40
Refinishing floors	3.3	65	35
Stoves and ranges	.4	10	90
Landscaping, walks, drives	.4	45	55
Miscellaneous (linoleum, shades, hardware, cleaning)	5.1	55	45
Totals	100%	55%	45%

Approximately \$91,000,000 of the money expended for all reconditioning under the direction of the HOLC went for labor and \$75,000,000 for materials. Millions of dollars worth of work, not represented in the labor costs, was done by home owners themselves, according to the report.

"Every dollar spent and every job done helped to protect property values," said Donald H. McNeal, deputy general manager in charge of reconditioning for the HOLC. "The work not only encouraged owners of neighboring properties to make improvements but educated the public generally to the value of reconditioning and modernization."

The lesson is now being more widely applied. Homes Registration Offices under the Defense Housing Coordinator are listing all properties with vacant space which can be converted into rooms and apartments for defense workers crowded into defense areas. The HOLC will furnish technicians to advise those who are willing to repair and modernize their homes for that purpose, giving cost estimates without charge. The HOLC has been granted an appropriation of \$100,000 from the President's emergency funds to employ fee architects and technicians when its salaried staff cannot handle the applications received from local Homes Registration Offices.

How You Can Solve HIGH PRICES and SHORTAGES



In essential materials used daily in tremendous volume by the building industry.

We equip you with special line production machinery—using local low-cost raw materials—only modest investment required—balance easy monthly payments.

Scores of established manufacturers have proven the quality and salability of product, as well as the earning power and stability of this business. (Names on request)

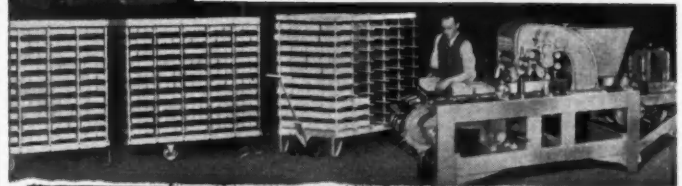
This opportunity offered only one man in each community to make this proven low-cost material. (Samples furnished)

Act now while your territory is still open. Write or wire for Free Books and learn how you, too, can own one of these profitable businesses.

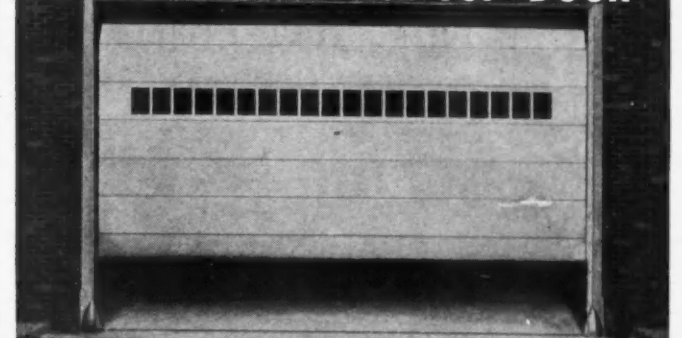
W. E. DUNN MFG. CO.

450 W. 24th Street

Holland, Mich.



KINNEAR STEEL ROL-TOP DOOR



**MOTOR OR
MANUAL
CONTROL**

**ANY NUMBER
OF WINDOW
SECTIONS**

**GALVANIZED
ALL-STEEL
CONSTRUCTION**

**EASY
UPWARD
ACTION**

An all-steel, sectional, upward acting door that gives you everything! And built by KINNEAR—the makers of the famous Kinnear Steel Rolling Door—the originators of the interlocking steel slat construction! This Kinnear Steel Rol-TOP door is backed by 44 years of specialized experience in building rugged, durable, efficient doors. Any size . . . easy to install. Write for details today! The Kinnear Mfg. Company, 1560-80 Fields Ave., Columbus, Ohio.

**SAVING WAYS
IN DOORWAYS**

**KINNEAR
ROLLING DOORS**



* Doing
 Our Part
 in
 Production
 for Defense

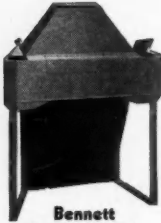
ONE SATISFIED CUSTOMER TELLS ANOTHER . . .

BENNETT Fireplace Equipment is designed to give satisfaction to your customers . . . and therefore, to YOU! Complete units . . . or minor fireplace accessories . . . if it's BENNETT equipment, you *know* it is built for years of trouble-free service.

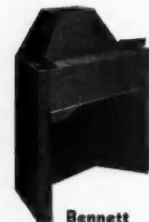
BENNETT FRESH AIR UNIT

Important because this unit overcomes frequent cause of smoking—especially in small tight homes.

Complete construction supplies—Fresh Air Unit, Recirculating Unit, Expansip Throat Dampers, Ash Dumps, Arch Bars and FLEXSCREEN.



Bennett Fresh Air Unit



Bennett Recirculating Unit

BENNETT
FIREPLACE COMPANY

1241 MARKET ST., NORWICH, N. Y.

Write for
FREE Catalog!

CHARGE It the Easy SMITH Way!

Select either Feed Chute or Batch-hopper for Faster and Easier Loading.



3 1/2-S

SMITH TILTER

—the **ONLY** small tilter equipped with a feed chute. 31" wide and only **WAIST HIGH**. It provides a big roomy target for the shovel man.

STEP UP CONCRETE PRODUCTION with a Smith 5 1/2 foot Gated Batch-hopper. Enables you to get one batch ready while the previous one is being mixed and discharged. Speeds up the job materially.

MORE FOR YOUR MONEY — Convenient loading — "End-to-Center" mixing action — faster "Tilt and Pour" discharge. You get them **ALL** with a Smith 3 1/2-S, yet you pay very little more. Write for literature.

THE T. L. SMITH COMPANY
 2849 N. 32nd St. Milwaukee, Wis.

SMITH MIXERS
 THE BOULDER DAM MIXERS

Handy
FEED CHUTE

5 1/2 cu. ft.
BATCHHOPPER

LETTERS from Readers on All Subjects

Facts, Opinion and Advice Welcomed Here

Building Outlook Improving in Canada

Winnipeg, Canada.

To the Editor:

Conditions in Western Canada have been reasonably good in 1941 in spite of a control which keeps the domestic retailer at the bottom of the list insofar as supplies are concerned. Prices in all branches of the trade are also controlled. About two months ago the supply situation was particularly bad, but this has eased somewhat lately, and we are hoping that the Canadian government requirements in 1942 will not be nearly so large. If we can get the material, prospects are that we can do a good deal of business.

W. Y. STRACHAN, Editor,

The Prairie Lumberman,

Official Organ of the Western Retail Lumbermen's Assn.

Norfolk (Va.) Offers Free Home Sites

Norfolk, Va.

To the Editor:

Our fair city is getting a lot of unfavorable publicity because of the acute home shortage here. The local builders have built 2,900 houses in the last year trying to help house the influx of defense workers to Norfolk, but it is out of the question for local builders and developers to build them fast enough to keep up, as Norfolk's population has increased from 119,000 to 222,000 in two years.

A few wealthy, patriotic, public spirited citizens have purchased 5,000 lots to give away to any out of town builders that will build homes in groups of 50 or more at a time; we want them to help Norfolk get the 10,000 new homes we have promised the Navy Department we would build during the next six months. We figure that local builders can build 5,000 and, by giving absolutely free 5,000 lots to out of town builders, that we can get enough out of town builders to build the other 5,000 so we can keep our word to the Navy and get the 10,000 new homes to house the defense workers and stop the unfavorable publicity Norfolk is now getting.

When the Navy recently started building two new shipyards we promised the 10,000 new homes with the aid of FHA; and we want the public to know that Norfolk is doing everything possible to keep its word.

W. B. SHAFER, JR., Chairman,
 Emergency Housing Committee

Not Patriotic to Remain Silent

Bridgeport, Conn.

To the Editor:

Whether you edit a newspaper or magazine, manufacture, sell or apply building material, are employed in any capacity by those who do, whether you have savings in a bank or building and loan association, own stocks or bonds in a public utility, have a life insurance policy or are just a humble income tax payer, you are affected by the Priorities now in force that are strangling the building industry.

The writer submitted a "brief" before a Congressional Committee composed of Representatives Frank W. Boykin, chairman of the sub-committee of the House Buildings and Grounds Committee; William S. Hill, Earl Wilson, Pehr C. Holmes, James A. Wright, C. W. Bishop, Carter Manasco and Leroy Downs when they visited this city Tuesday, October 21st, while on a coast to coast inspection tour of public housing. The purpose was to see whether or not they will recommend an additional \$300 million appropriation under the Lannihan Act for low cost and defense housing.

The writer took the opportunity to discuss this "brief" as well as to present it to this committee. You will note it is not a plea for one locality alone but for these entire United States.

Since this was presented, the copper situation has descended upon us . . . and other metals are to be added. This copper

restriction says, "No person may use or apply copper or copper base alloy sheet, strip or screening for any purpose in connection with building construction except for minor repairs or maintenance (but not replacement) on existing buildings where the existing installation is copper or copper base alloy and no substitute can be used."

It says a great deal more, too, but that alone is a death knell. No one wants to build a home, especially on the salt air seacoast, and flash with a substitute that will have to be torn out and replaced in a relatively short time. No one wants to use exterior hardware that will not stand up in the elements. No one today wants to use water pipes that will soon have to be torn out again.

This is critical for all listed in the first paragraph for reasons stated herein and in the "brief." Things are rapidly becoming worse and many voices are needed to protest against conditions. It is not a case of being unpatriotic; it is a case of being practical as well as patriotic.

If we consider that unlimited home construction will use but an average of 5 per cent of all critical metals, the slow down in defense would not be more than one week in twenty. That does not begin to compare with the slow downs caused by strikes and labor troubles. The latter is 100 per cent loss; whereas, if only one week in twenty is lost to keep 20 millions of mouths fed, then we have accomplished something . . . the nation will have been helped, not have become downtrodden and oppressed. After all, in this great fight for the democracies of the world, there is such a thing as sane judgment and an over-all view.

Here in the United States we do rate some consideration. It is one thing to give our all and by so doing find it to be a short-sighted policy that defeats itself in the final analysis. It is quite another thing to work and give of our production in an orderly and rational way that permits industry, both in and out of defense work, in the United States to live, work, help and let live to help some more.

We offer these thoughts with the hope that you can and will take up the matter and spread, if you see fit, some gospel of moderation in this Priority set up as it affects the building of homes and multitudinous allied interests.

You can use the material in any way you choose, as your own thoughts or otherwise. This is no publicity stunt, no desire to push any person or company to the fore. All names can be eliminated if you so desire. All we ask is that the benefits result to all concerned directly and indirectly, among these the press whom we always must look to for help in reaching people.

As an example of indirect but directly traceable benefits: We believe no home was ever built without the purchase of many things from furniture and department stores. We know, too, that the press reaps a fair share of advertising from these sources. We also know that in some sections developers of real estate use advertising space to tell the public where new homes are being developed and are on sale.

In closing, may we quote from an editorial that appeared in The Bridgeport Post on October 30: "We are all asked to be patriotic but it is not patriotic to remain silent in the face of mismanagement. Washington at this moment is thronged with persons, many of them with no experience in such matters who are issuing orders affecting the daily lives and habits of hundreds of thousands of their fellow countrymen. The inability of such persons to function effectively for national defense is only beginning to be realized.

"Congress is the sole protector of the public against this kind of government inefficiency. It must continue to function and to prevent bureaucracy from running hog-wild in America."

May we suggest you write your senators and members of Congress at once.

ARTHUR CLIFFORD, Asst. to the President,
The A. W. Burritt Co.

Job of Interpreting

Chicago, Ill.

To the Editor:

I want to congratulate your editorial department on the fine job it did on the current (October) issue of the *American Builder*, also the release of the Building Outlook Letter. The building picture did look pretty black to me before I had an opportunity to read this letter. Believe you've done a swell job of interpreting the OPM release.

W. G. KAISER, Manager,
Cement Producers Bureau,
Portland Cement Assn.

Used with Redwood siding, there's nothing like CRD Redwood cornice materials, mouldings and trim, to give style to a home. You'll find they're carefully detailed, accurately milled. They are highly durable . . . stay put well . . . and are unexcelled in paint-holding power. CRD Redwood for all exterior uses gives a house the "dress" that helps it sell. In stock with most reputable lumber dealers.



CALIFORNIA REDWOOD DISTRIBUTORS, LTD.

Member: Durable Woods Institute

35 EAST WACKER DRIVE, CHICAGO
122 E. 42nd STREET, NEW YORK CITY
810 CARONDELET BUILDING, NEW ORLEANS

WAGNER TRACKS AND HANGERS

NO. 100 TRACK	NO. 15 TRACK	A complete modern line for every purpose. No. 1500 series Roller Bearing Hangers operate in both No. 100 and No. 15 Track. One Hanger—two tracks. Simplifies installation. Assures satisfaction. Write for literature.
NO. 1503 HANGER	NO. 1500 HANGER	

NEW FOLDING ALL-METAL SAW HORSE LEGS!

One of the most USEFUL items ever developed for the building industry. These all-metal legs fold for easy transportation—never wear out—set up in seconds with any 2x4 or 2x6. Save material—save time. Alligator grip holds legs securely. 2 heights—24" and 30". Ideal for temporary tables, stands, counters, etc. Hundreds of uses.



WAGNER MANUFACTURING COMPANY
DEPT. AB-1241, CEDAR FALLS, IOWA

5 USES on every job...






Standardize on This One BEST BUILDING PAPER...

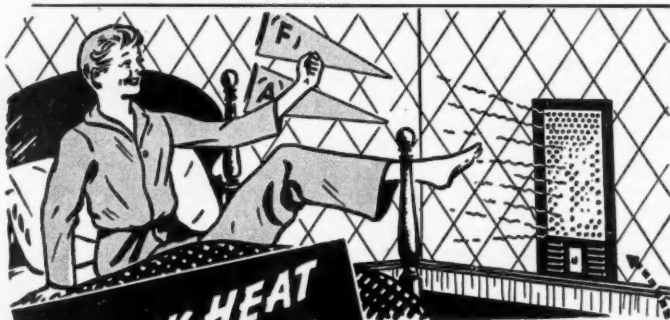


SISALKRAFT was developed as the BEST building paper that could be made — amazingly tough, air and moistureproof — resistant to shrinkage and dry rot. Use it for these 5 uses on every job—it gives greater satisfaction to the owner, saves time and material — is a quality feature that builds reputation.

The SISALKRAFT Co.
205 W. WACKER DR., CHICAGO, ILLINOIS
New York San Francisco



-  Over Sheathing
-  Under Roofing
-  Under Floor
-  Protecting Concrete
-  Covering Materials



QUICK HEAT IS THERE WHEN NEEDED!

ELECTRIC

QUIKHETER

This auxiliary heater for bathrooms, bedrooms, children's playrooms, adds to the comfort of any home. For chilly days, when not cold enough to operate the furnace, the built-in

is ideal. On extra cold days, when the furnace is pushed to the limit, this moderately priced, efficient heater again proves its worth. A flip of the switch—and there is quick, safe heat.

Flush with the wall, the heater is up off the floor, out of the way. Its attractive grill is chrome finished.

In modernization and New Construction

install the **QUIKHETER**. When planning a new home, include it in the plans.

There is a Wholesaler Near You

who can supply you from stock—in 1000, 1250 or 1500 watt sizes. Write for his name—and for descriptive circular.

Frank Adam
ELECTRIC COMPANY
ST. LOUIS

A Constructive Advertisement

New York, N.Y.

To the Editor:

Back in May, Johns-Manville began a series of advertisements in the *Saturday Evening Post* designed to help inform the public of the indispensable part America's basic industries are playing in the National Defense Program. Each advertisement has been in the form of an article by a well-known writer, the only reference to Johns-Manville being a brief sponsorship note. Perhaps you read Lowell Thomas' article on the Steel Industry or the Fulton Lewis, Jr., story of Oil or Frazier Hunt's report on Ship-building.

Of special interest to you, I am sure, will be the sixth in the series which recounts the amazing achievements of the Construction Industry. An advance proof is attached. "The Miracle of Defense Construction" will appear as a J-M paid advertisement in the *Saturday Evening Post* issue of December 13th. Because we believe it will be of particular interest to your readers, it is also scheduled as a two-page J-M advertisement in the December issue of the *American Builder*.

We believe Mr. Hunt has done a fine job of reporting on a great story and it is our hope that it will make a helpful contribution in informing the public of the vital part this Building Industry of ours is playing in our preparedness program.

H. M. SHACKELFORD, Vice President,
Johns-Manville

Another American Builder Service Appreciated

Great Falls, Mont.

To the Editor:

I want to take this opportunity particularly to thank you for the copy of "Building Outlook" which was received today.

This information is very valuable and the service you are performing will do a great deal to put the proverbial oil on the troubled waters. I hope you can see your way clear to continue this very timely and valuable service.

C. L. BRIGGS, Sales Manager,
Monarch Lumber Company

Plan to Increase Building Efficiency

New York, N.Y.

To the Editor:

A few months ago we put into operation a service which we believe will be of interest to buyers of construction everywhere. Our organization provides custom built, certified and fully guaranteed construction of any type and style, on a fixed cost and fee basis having the flexibility of "cost plus" and the rigidity of "lump sum" contracts, without their disadvantages. In this we cooperate with architects, engineers and owners for a definite fee without sacrificing good construction to gain compensation or unwarranted profits. All economies are passed on to owner.

The CMC furnishes a competitive estimate of construction costs, including "superattendance," based upon the lowest prevailing prices for material and labor. Advisory consultation and preliminary information are also available.

When the CMC proposal is accepted, a simple agreement is drawn up between the owner and CMC specifying the service to be rendered and the fixed fee.

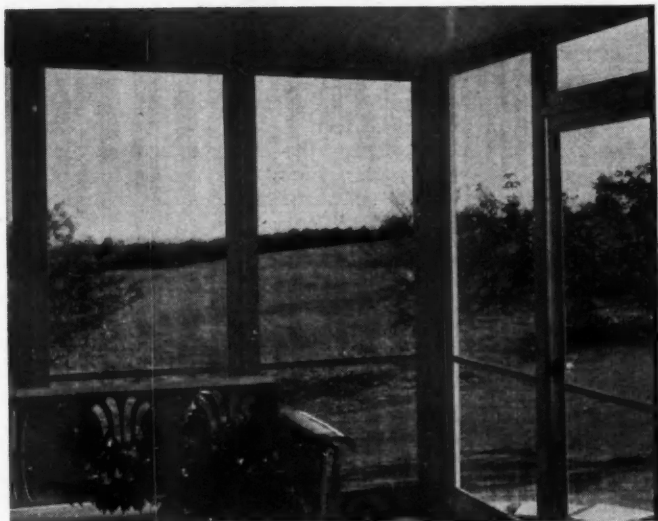
The CMC then provides a carefully prepared construction quantity and quality analysis to the specializing contractors on each division of work, as a purchase requisition. The bids are submitted to the owner or representative for selection. The economies resulting from scientific competition created by the CMC, reducing costs below the original estimate, automatically revert to the owner. The cost of building is definitely fixed before start of construction.

Upon instruction to proceed with operations, the CMC awards contracts for all work involved and places a competent construction manager in the field to "superattend" the work.

Payment for construction, including the pro-rata CMC fee, is made monthly upon work completed by the various contractors during preceding month.

When the work is completed, the various contractors guarantee the construction and a certificate of value is issued by the CMC.

G. J. CICHETTI,
Construction Management Company



KOOLSHADE SCREENS used on porch of this Southport, Conn., house shut out sun's glare and heat—keep porch 10 to 15 degrees cooler.

No Priority Limit On Smart Ideas

(Continued from page 51)

up through the modern corner-window treatment. The living room runs the full width of the house and, with the dining space at the rear, it opens up into one large "L" shaped room. The dining space enjoys the advantage of the living room's corner window and another view towards both the valley and Sound through its own bay window.

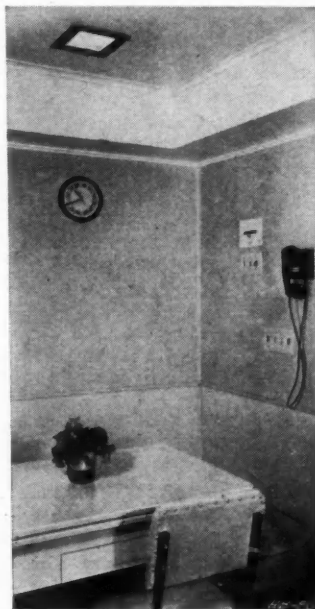
Double doors in the living room open onto a sitting porch facing the Sound view. This arrangement and novel Koolshade screens which keep out the direct rays of the sun make the porch another room for summer living.

The west end of the living room has two windows which are at the front of the house. Walls around these windows are paneled in knotty pine, with built-in bookcase shelves and built-in cabinets below the windows. Between the hall entrance and the dining room, the north wall is also paneled around a Vermont marble fireplace. The fireplace is equipped with a Heatilator which, when the fire is lighted, circulates warm air on the first floor.

The dining room wall opposite the bay window also has knotty pine panelling. Other walls of the living room and dining room are painted.

Fluorescent lighting strips are built in over the west windows of the living room and the dining room's bay window, show-

(Continued to page 90)



BEHIND-THE-SCENES wiring picture shows installation details of clock, doorbell and private house telephone system, which brings every room within arm's reach.

FOR GREATER FLOOR SAFETY **SUN RAY** **FOR RICHER FLOOR BEAUTY**

FLOOR-MACHINE WOOLERS

FLEXIBLE, long-wearing pads—made exclusively for floor finishing and maintenance. No braiding. No tying. Use with any disc-type floor machine—for cleaning, dry-scrubbing and wax-finishing floors of all kinds. Made of finest quality steel wool, these smooth-working Woolers cut off excess wax—harden wax film—reduce slipperiness to a minimum. Ask your supplier—or write direct for valuable Floor Maintenance Bulletin.

THE WILLIAMS COMPANY
 25 West First Street London, Ohio

U. S. Patents:— Re. 20,002
 Re. 20,919

Save
50% OR MORE
 OF FINAL COSTS ON
WOOD FLOOR FINISHING
With
LIGNOPHOL

LIGNOPHOL COSTS LESS THAN 1 CENT PER SQUARE FOOT
Applied in one application with a long handled brush—reducing labor to the minimum.

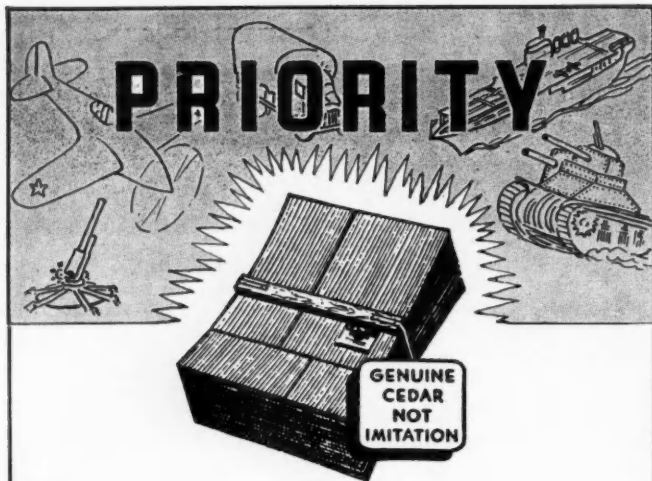
LIGNOPHOL BEAUTIFIES YOUR FLOORS!
LIGNOPHOL LEAVES NOTHING TO WEAR OFF!
Shellac and varnish, surface treatments, wear off!
 Do as thousands of contractors are doing: Enjoy more profits, attain greater job satisfaction and save 50% or more by using LIGNOPHOL to preserve and finish your floors.

FIND OUT MORE ABOUT LIGNOPHOL

MAIL THIS COUPON TODAY!

Dept. B-12
 L. SONNEBORN SONS, INC., 88 LEXINGTON AVENUE, N. Y. C.

Your Name _____
 Address _____
 City _____ State _____



**Builders with priority
Want roof superiority,
So shingles by McNair
they specify.
These long-life Red Cedars
Have proven roof leaders,
For thirty years or more,
they'll keep you dry!**

Members Red Cedar Shingle Bureau—See
Advertisement—pages Four and Five

ROBERT McNAIR SHINGLE CO.
VANCOUVER, BRITISH COLUMBIA
"OVER 400 DEALERS TO SERVE YOU"

Want more Jobs this Winter?



WRITE FOR THIS FOLDER!

*See how a
WALKER-TURNER
RADIAL SAW
can help you!*

To get the variety of jobs and the volume of work that a Walker-Turner Radial Saw produces in extremely small space, you would need several other machines, costing much more. Look what it does! It crosscuts, rips, miters, dadoses, shapes, routs, tenons—in fact makes every cut necessary to build a house. Use it this Winter

to prepare screens, window sash, stair stringers and treads, for all odd sizes and special mill-work. Do the work in your shop and carry the ready-cut pieces to the job. Builders, wood-working shops, lumber yards are enthusiastic about the space-saving, time-saving and money-saving features of these versatile, low-cost Walker-Turner Radial Saws. **WRITE TODAY** for descriptive folder and prices.

WALKER-TURNER CO., Inc.

10121 Berckman St.,
Plainfield, N. J.

walker-turner WALKER-TURNER WOODWORKING MACHINES
 SPINDLE SHAPERS • BENCH SAWS
 BAND SAWS • DRILL PRESSES
 JOINTERS • LATHES • JIG SAWS
 TILTING ARBOR SAWS • RADIAL SAWS

(Continued from page 89)

ing window drapes to fullest advantage at night as well as by day.

The full length of the living room is more than 24 feet. Its width of 14 feet opens in the "L" formed with the dining space to a width of more than 26 feet.

A versatile room at the left of the entrance door may be used permanently as a study and also as a spare bedroom for a guest. The lavatory and powder room is equipped with a metal shower stall.

The second floor has two large bedrooms, similar in their planning to achieve maximum use of the space available. Beds are recessed under the eaves with recessed fluorescent lighting over the bed head. At either side, the under-the-eaves space is also utilized for shelves and storage space. Each bedroom has a total wardrobe and storage space of more than 48 square feet. Shelves and drawers are built in the larger closets and both closets and wardrobes are equipped with K-Veniences—special racks for hats, shoes, ties, etc., to make the most of every inch.

The upstairs bathroom is large and has two wash basins, a large one and a smaller one with its own mirror for shaving.

All of the bedrooms, including the maid's bedroom over the garage, enjoy cross ventilation. The master bedroom opens onto a large sundeck, surrounded by a railing, over the sitting porch.

The kitchen may be entered directly through a small corridor from the entrance hall, from the dining room, or from the rear entrance. The all-electric kitchen equipment—refrigerator, electric sink with dishwasher and Disposall for food waste, and electric range—is installed in the convenient U-shape with a continuous, lighted working surface of Parkwood (basket weave impregnated in plastic). All-steel cabinets provide an unusual amount of kitchen storage space. On the wall opposite the U-shaped kitchen arrangement are more steel cabinets and a built-in corner-seating arrangement with upholstered seats.

Like the living room, the recreation room in the basement runs in length for the width of the house, and it, too, "L's" into a smaller room which leads to the completely equipped home laundry and furnace room. Laundry chutes carry the laundry from upstairs into one of the laundry's built-in steel cabinets. The electrified home laundry includes a washer, tumbler dryer, and flatplate ironer.

An electric water heater of 110-gallon capacity assures a plentiful supply of off-peak hot water for all uses.

Insulated sheet metal ducts carry the winter air conditioning of the automatic oil furnace. Both temperature and humidity are controlled automatically, day and night, in the winter time, and in the summer the system may be used to filter and circulate fresh air.

Some of the important ideas demonstrated include: silent mercury switches that never click; "step-saver" switches which can be controlled at doors and staircases; circuit breakers to eliminate fuses; underground cable for lights, power and telephone, an inter-communicating telephone for upstairs, kitchen, dining room, and recreation room, the loudspeaking system at front and rear doors, a package receiver with a light in the kitchen to signal when a package is delivered, floodlighting control of all the grounds surrounding the house, a flagstone outdoor terrace below the sitting porch, an asphaltic-concrete driveway approach to take advantage of the corner lot by using both roads, roll-up garage doors to open easily under all conditions and make the most of garage space.

For convenience, comfort and permanence, too (and with them all, economy), the "House of Ideas" has fireproof mineral wool insulation, decorative insulating boards for ceilings and walls in basement; metal weatherstripping; all-weather windows equipped to interchange winter storm panels and summer screens; copper water tubing; and termite protection through chemically treated lumber at the danger points.

Materials and equipment include:

Wolmanized lumber by American Lumber and Treating Co.; Chamberlin All-Weather Insulated Windows; Johns-Manville fireproof mineral wool insulation, decorative insulating board and Hardboard; Pittsburgh Plate Glass, Carrara and mirrors; Bridgeport Brass Company copper water tubing; Crane Company bathroom fixtures; Edwards & Company communication system; Fiat shower stalls; Heatilator fireplace unit; Borg-Warner's Koolshade screens by A. F. Henrichsen; K-Venience

closet fixtures; Lightolier Lighting fixtures; Miami bathroom cabinets; Mosler fire-resistive wall safe; Stanley Roll-Up garage doors; Tuttle and Bailey grilles, registers and intakes; Vermont Marble fireplace; Weyerhaeuser Lumber; Yale & Towne door hardware and locks; Trumbull Electric multi-breakers.

The local building problems were handled by L. E. Tucker, builder; Fairfield Lumber & Supply Company; John Candelora, plumber; Andrew Kuhar, electrician; L. C. Kelley Sales Company, G-E heating equipment; ABC Sheet Metal Shop, duct work; The Conlin Company, Inc., paint and wall paper; Lindquist Hardware Company, finishing hardware; Frank J. Scallon, porch roofing; Seabury A. Lyon, lawn and landscaping; Silliman & Godfrey Co., driveway and walks; Rings End Fuel Co., flagstones; S. J. Ullman, painter and decorator; A. W. Bilyard, masonry.

* * *



SERVICE counter and fountain in Thomas restaurant.

Drive-In Restaurant—

(Continued from page 59)

finish to give a home-like atmosphere. The ceiling is of fibre board and floors of asphalt tile on concrete slab. Heating is by means of ceiling-suspended Janitrol unit gas heaters.

White fluorescent illumination is provided for the dining room, there being 8 fixtures with two 48" tubes to each fixtures. The furniture is of metal frame with leatherette upholstery in blue.

One feature of the building of which W. E. Thomas, proprietor, is particularly proud is the built-in walk-in cooler for the pre-cooling of beer and other bottled drinks. It is 6 by 16 feet in size with a 9 foot roof, being insulated with two inches of cork and equipped with blower type refrigeration.

The value of this pre-cooler is that case goods coming in off the trucks may be placed in it for cooling before being moved up front into the bottle cases for service. This makes it unnecessary to put hot goods right into the service cases, thereby heating up everything inside. In addition the pre-cooler enables the establishment to sell drinks by the case for picnics and parties, that is drinks already cooled.

Besides the pre-cooler other refrigeration equipment includes the two 9-foot bottle cases from which drinks are served, an 9 by 6 walk-in cooler for meats and other provisions, a 4-door grocery box and two water coolers.

The kitchen equipment is all-electric except for the gas range and steam table and includes a dish and glass washer, potato peeler, deep fat fryer, toaster and griddle. The concern features "Southern fried chicken" as well as steak, sandwiches and other delicacies.

The dining room is equipped with a Liquid carbonic soda fountain, four ticket checking machines, two National cash registers, two hat and coat checking stands and an automatic music machine with remote control coin slots at each wall table.

Other facilities include a girls' locker room of 60 lockers and a men's locker room of 12 lockers, also public toilets. The manager's office opens on the rear and is entirely separate from the rest of the establishment.

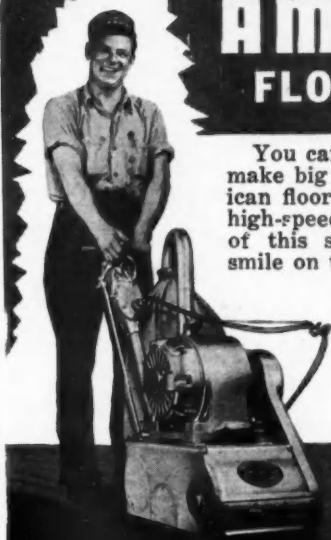


Adequate ventilation, through the speedy removal of stale air, cooking odors and smoke, is the one purpose of the Victor In-Bilt ventilator. This fresh, free movement of air can be planned for any room. In every home you build to sell, In-Bilt ventilators in kitchen, bath, or rathskellar are an important sales feature. They add perceptible value to any home at small cost. Write today for your In-Bilt Catalog. Address Dept. IB-222.

VICTOR ELECTRIC PRODUCTS, INC.
2950 Robertson Road, Oakley
CINCINNATI, OHIO



MAKE BIG MONEY With This AMERICAN FLOOR SANDER



You can be your own boss and make big money with this American floor sanding machine. The high-speed and ease of operation of this sander will light up a smile on the face of anyone who runs it. Features that will put money in your pockets —that's—

AMERICAN

Investigate the wonderful possibilities of this work today. Be sure to sign and send in the coupon below for complete details and prices—no cost or obligation to you.

THE AMERICAN FLOOR SURFACING MACHINE CO.
511 So. St. Clair Street • Toledo, Ohio

Gentlemen:
Send complete free details on how I can make big money with an American floor surfacing machine — no obligation.

Name _____
Street _____
City _____ State _____

PECORA THE MOST ECONOMICAL CALKING COMPOUND YOU CAN USE

Whether you build, repair or modernize, don't leave the job unfinished. Calk all joints with PECORA, the time-tested material that is cheapest in the end. For PECORA is made to a special formula that insures permanency, and will not dry out, crack or chip when properly applied. Every owner is interested in avoiding leaks and drafts, and in saving money on fuel by having the real weather protection you can give him with PECORA. And you can save time and money by using the handy High Pressure Calking Gun illustrated. Send for an outfit today.

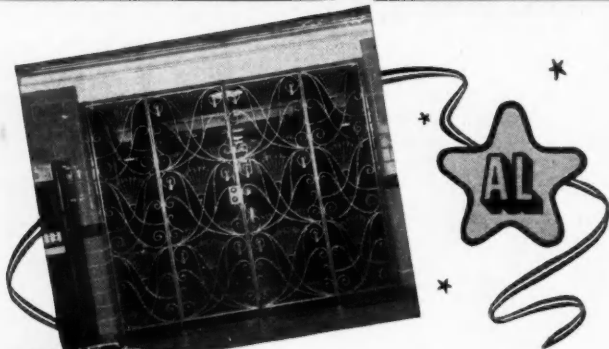


This With 3 Nozzles and 4 Cartridges of approx. 1 qt. each Shipped Express \$7.00 Collect for Gun Terms: 2% disc. net cash with order. To approved credits 2% 10 days. 30 days net. F. O. B. Philadelphia, Pa.

Write for illustrated folder

Pecora Paint Company, Inc.
 Member of Producers' Council, Inc.
 Established 1862 by Smith Bowen
 Fourth St. & Reading R. R. Philadelphia

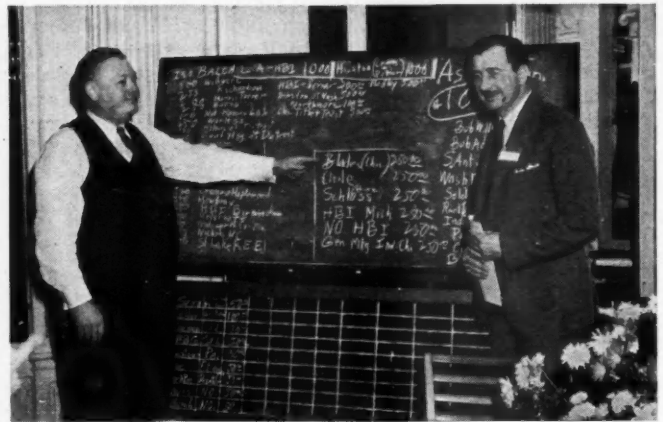
ALSO MORTAR STAINS • SASH PUTTIES • ROOF COATING
 PECOMASTICS FOR STRUCTURAL GLASS INSTALLATION



INSPIRATIONS IN *Stainless*

★ To men who plan and build, Allegheny Stainless is a metal of ideas and achievement. Today its great strength and long life are essential in many types of Defense equipment. To help conserve it, investigate Ludlite Bord (stainless on rigid mineral board)—the modern, economical form of Allegheny Stainless for general building purposes. For full data, write Department S-158

ALLEGHENY LUDLUM STEEL CORPORATION
 GENERAL OFFICES: PITTSBURGH, PA.
 BRANCH OFFICES IN PRINCIPAL CITIES



CONGRATULATIONS are extended to "Cy" Willmore and Dave Bohannon at conclusion of whirlwind fund-raising drive. Builders' subscriptions ranged from \$50 to \$1,000.

Aroused Builders Protest

(Continued from page 38)

Albert Balch, prominent Seattle home builder, declared from the floor that public projects prevent or kill off more housing than they make. He said that in Seattle private builders had constructed more than the required quota of houses as indicated by government surveys, but that in spite of that, government projects were now being promoted, and that land had already been acquired in disregard of the wishes of the City Council, the Planning Board and the wishes of the residents of the neighborhood. He denounced in vigorous terms the "investigators of USHA" who, he said, were nothing more than promoters.

Other builders volunteered from the floor suggestions that cutting down the size of government projects would make them do less harm to neighborhood communities and perhaps permit



C. EARL COLOMB, of New Orleans, proudly receives new charter for Home Builders Institute chapter.



ORIN WOODBURY (left) of Salt Lake City inspects convention display of Briggs lightweight plumbing fixtures with new plastic mouldings.

local residential builders to undertake such work. Several builders stated that the threat of big government housing projects holds back countless private jobs in any community.

Vermilya on New Materials

Howard P. Vermilya, director of FHA's Technical Division, listed the savings possible in the use of metals now on the critical list. Without lowering standards, he said that as against the



WAVERLY TAYLOR, member of the Home Builders Emergency Committee, photographed in front of one of his attractive Dumbarton homes in Washington.

amounts consistently used in recent years, builders can save the following:

- "10% (by weight) in the amount of steel and iron
- 62% in the amount of copper
- 28% in the amount of zinc
- 1% in the amount of lead

"But considering the structural part of the house alone (and this is where 82 per cent of the savings can be made), study indicates we can safely leave out of the average house

- 99% of the copper
- 55% of the zinc
- 23% of the iron and steel"

The above applies to savings without any change in the size of the house. But it is estimated, he said, that under the present \$6,000 price ceiling on defense housing the average house built during the emergency will drop in size by approximately 300 square feet of floor area.

He listed possible savings in design by omitting steel lintels, using masonry piers and posts and installing insulation to reduce the size of heating plants. He said that building codes are the biggest stumbling blocks to savings of materials. A new OPM plumbing code approved by the Master Plumbers Association will be issued shortly, he indicated, which will be of considerable help.

\$600 Per House Saved

Milton W. Morris, executive secretary of the San Francisco Home Builders Association, gave a convincing description of the savings and benefits that accrue to builders through an active local home builders association. He estimated that the San Francisco group by concerted organized action had saved its members \$600 on each house erected. He illustrated this point with the following achievements of the association:

(Continued to page 94)



Defense Jobs Demand Speedmatic SAWS
Because They're **FAST & TOUGH**



Ask your Porter-Cable representative (name in phone book) for a free demonstration. Learn why Speedmatic holds the record for replacing other makes. Drop a post card to the factory direct today for a free copy of "Newest Sawing Methods."

When rush jobs carry a completion bonus or a penalty clause, you can be sure Speedmatic Saws will never let you down. Shift after shift, day after day of continuous operation! That's the kind of work Speedmatic's built for. Its over-size motor has power to spare. Its helical gear drive is long wearing, 98% efficient. Its extra-wide shoe gives steady balance and protection from strain. Exclusive reasons why Speedmatic in every test proves to be the world's most dependable, portable electric saw—and the biggest producer. When you buy a Speedmatic, you buy guaranteed performance.

PORTER-CABLE MACHINE CO. 1721-12 N. SALINA ST. SYRACUSE, N. Y.
Representatives in Principal Cities in U.S.A.

NON-TILTING PLASTER-MORTAR KWIK-MIX 6-P

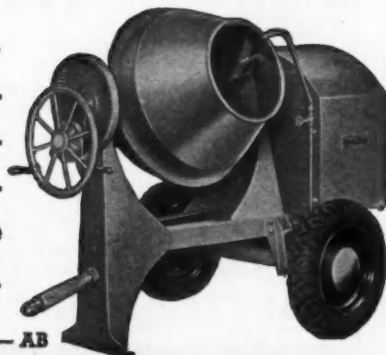


Fast discharge — 7 seconds — no tilting necessary — weighs only 850 pounds — air-cooled engine — V-belt and worm drive.

WRITE FOR BULLETIN NP — AB

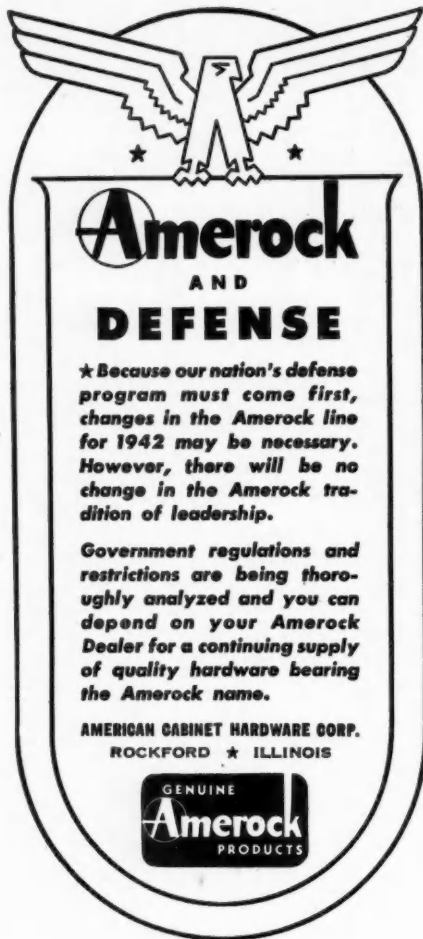
3 1/2-S TILTING KWIK-MIX

Side discharge — anti-friction bearings — welded construction — discharge either side — spring mounting.



WRITE FOR BULLETIN SD — AB

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




Amerock
AND
DEFENSE

★ Because our nation's defense program must come first, changes in the Amerock line for 1942 may be necessary. However, there will be no change in the Amerock tradition of leadership.

Government regulations and restrictions are being thoroughly analyzed and you can depend on your Amerock Dealer for a continuing supply of quality hardware bearing the Amerock name.

AMERICAN CABINET HARDWARE CORP.
ROCKFORD ★ ILLINOIS




GET ROOF ON FASTER

● Costly delays and building hazards due to cold, damp weather can be greatly reduced by pre-cutting house framing members indoors with a MALLSAW. In addition, like pieces can be ganged on a bench and cut at one time—bundled, tagged and marked for location with surprising savings in time, labor and material. More than this, you'll find these powerful MALLSAWS take all of the head and arm aches out of notching rafters and joists, making bevel and compound mitre cuts, dadoing, grooving and other every-day jobs that eat up profits when done by hand methods. Every MALLSAW is perfectly balanced for SAFE ONE-HAND USE, easily adjusted for depth and bevel cuts to 45 degrees, and easy to use. Try a MALLSAW on your next job—without obligation—Mail Coupon below for full information.

MALL TOOL COMPANY 7737 South Chicago Ave. Chicago, Illinois

Please send free folder on MALLSAWS, MALL RADIAL SAW ARM, MALL DOOR MORTISERS, DOOR PLANES and DRILLS A1241

Name

Street

City State

Aroused Builders Protest

(Continued from page 93)

Defeated an unnecessary termite-proofing ordinance that would have cost \$160 per house.

Stopped a law requiring a registered architect on each home, which would have cost \$100 per house.

Held frequent meetings with FHA to work out economies and prevent unwise or unnecessary building requirements.

Defeat Pressure Group Proposals

Simplified arrangements for filing plans and permits.

Defeated a proposal by the bricklayers union requiring extension of chimneys from ground floor to basement. The builders threatened to eliminate all fireplaces unless the union withdrew demand.

Through group insurance policy secured a cash dividend of 37½ per cent for builders, also obtained lower rates on auto and truck insurance through "fleet policies."

Defeated a local ordinance requiring larger plots.

Put into effect a watchmen's system for all member jobs, and posted signs.

Staged an annual home show and co-operative advertising and publicity activities which greatly benefit the individual builders—particularly the smaller builders.

He closed his remarks by saying that if the builders of the country had a national association that could perform in national affairs the job done locally by the San Francisco Association, the industry "wouldn't be in the position it is today."

New Chapters Accepted

A feature of the meeting was the awarding by President Bohannon of charters to a number of new chapters, including the cities of Houston, Milwaukee and New Orleans.

E. L. Crain of Houston, Texas, builder of the famous Garden Oaks community, was elected president of HBI for the coming year. Other officers include the following:

Vice Presidents:

- Great Lakes Region: George F. Nixon, Skokie, Ill.
- South Central Region: H. C. Thorman, San Antonio, Texas.
- North Central Region: George L. Faber, Milwaukee, Wis.
- Central Atlantic Region: Harold W. Cheel, Ho-Ho-Kus, N.J.
- Southeast Region: Earnest Shepherd, Birmingham, Ala.
- New England Region: Arnold Hartmann, Boston, Mass.
- Northwest Region: Albert Balch, Seattle, Wash.
- Southwest Region: Matt Flynn, Los Angeles, Calif.

Board of Directors:

(term expiring December 31, 1944)

- Waverly Taylor, Washington, D.C.
- Cyrus Crane Willmore, St. Louis, Mo.
- John C. Taylor, Kansas City, Mo.
- David D. Bohannon, San Francisco, Calif.
- Hugh Potter, Houston, Texas.
- Wm. T. Richardson, Van Nuys, Calif.
- Charles S. Wanless, Springfield, Ill.
- Orin Woodbury, Salt Lake City, Utah.
- John McC. Mowbray, Baltimore, Md.
- Fritz B. Burns, Los Angeles, Calif.

(term expiring December 31, 1943)

- John H. McClatchy, Upper Darby, Pa.
- Jesse L. Schroeder, Omaha, Nebr.
- C. Earl Colomb, New Orleans, La.
- Charles Joern, Chicago, Ill.
- Reg. F. Dupuy, Long Beach, Calif.
- James H. March, Tacoma, Wash.
- George Miller, Detroit, Mich.

(term expiring December 31, 1942)

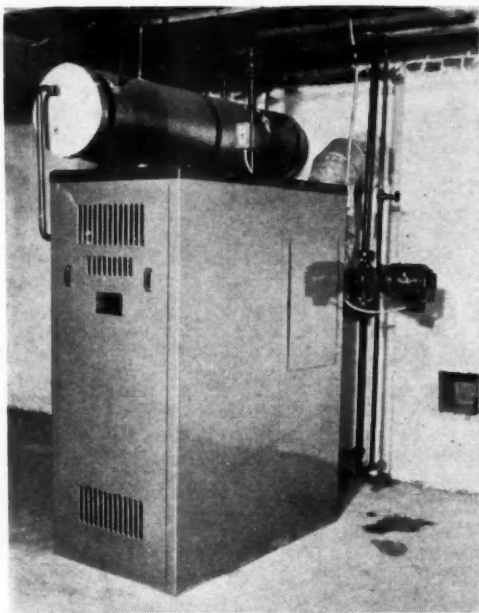
- R. B. Whitaker, Kenosha, Wis.
- James Irvine, Philadelphia, Pa.
- Robert Jemison, Jr., Birmingham, Ala.
- Grover King, Whittier, Calif.
- Hugh Prather, Jr., Dallas, Texas.
- Robert Gerholtz, Flint, Mich.
- Irvin Blietz, Wilmette, Ill.
- Robert Adams, Tulsa, Okla.
- E. M. Loftus, Los Angeles, Calif.

A-2 Priority Speeds Pine Acres Homes

(Continued from page 43)

other metals in which there is expected to be a shortage. If the shortages of materials continue, Stich plans to make changes as necessary. He has been able to obtain lead flashing and is using that and also wrought-iron water pipe. He may be forced to use brick piers instead of steel lally columns, and will undoubtedly change to wood gutters instead of copper. Thus far there have been no changes in the heating system which is an unusually high quality hot water system with circulating pump and oil burner and built-in tankless heater. With this efficient system the houses cost only \$65 to \$70 a year to heat including the cost of the domestic hot water supply.

In other words, in spite of the difficult problems surrounding the building business these builders are giving buyers a high quality small home at a price well within their means. They are establishing a permanent community in which the home owners will enjoy a satisfactory place to live for many years during and after "the present emergency."



HOT WATER heating plant with oil burner and circulating pump is part of standard equipment installed in Pine Acres homes.

* * *

Homes Can Be Built to Avoid "Critical List" Shortages

(Continued from page 39)

house should be placed on a more expensive lot.

"There are many improvements in a house which can be made without increasing the use of critical metals. Why should a man who wishes hardwood floors be denied that right because such floors run the cost over the \$6,000 limit? Why should he be denied a garage, or properly finished yards, driveways and walks? Why should he be prevented from having his bathroom tiled?"

"I do not know whether anyone in the government is considering the socialization of the building industry, but this order seems to move in that direction. I believe that if the Director of Priorities would prescribe the amount of critical materials which may be used in each family unit, it will accomplish every purpose of national defense, and restore to work thousands of men who now face unemployment and hardship."

With reference to the problem, as mentioned by Senator Taft, of having to include the cost of the building site within the \$6,000 limit, the Extensible House idea also may include this device—as tried out currently by a prominent suburban builder: he figures into each deal only the land *the house stands on*, reserving an easement on the open side-yard spaces for a supplemental purchase contract later.



Homelite has heard and answered the call for defense. Twenty-four hours a day—every day of the week—Homelite Portable Generators, Pumps and Blowers are pouring from production lines into the service of Armies and Navies of all countries defending democracy.

Defense demands for Homelite Units are great—so great that we can respect orders from our regular customers on a priority basis only. This is unfortunate—but not without compensation. Our increased manufacturing facilities and our marked product improvements will bear important profits for our regular customers in the normal times to come.

HOMELITE CORPORATION

1912 Riverdale Ave., Port Chester, N. Y.

TECO AIDS FOR *Increased* LUMBER SALES

FOR NEW HOME CONSTRUCTION
SELL YOUR TRADE

TECO TERMITE SHIELDS

... the new scientific protection against subterranean termites in infested regions. FHA designates shields a preferred protection—as Teco dealer in your area, profit by this easy selling "package item".

For light and heavy frame buildings sell your trade the

TECO CONNECTOR SYSTEM

Get TECO Connector typical designs into the hands of your local builders and building committees; turn their minds to timber for that ball park grandstand, water tower, school gym, loading dock, bridge, bus station—get the "how" of it from TECO today. The "why" of it is MORE lumber sales for you.

Timber Engineering Company, Inc.

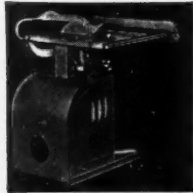
Dept. H-12, 1337 Conn. Ave.
Washington, D. C.

Timber Engineering Company, Inc.
Dept. H-12, 1337 Conn. Ave., Wash., D. C.
Send us free sales literature on Teco Connectors and Teco Termite Shields.

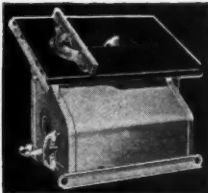
Individual _____
Firm _____
Street _____
City _____ State _____

KOST KUTTER POWER SAWS

NEW SPEED—NEW ACCURACY



Left—Kost Kutter Jr. Fast, powerful, built to last. 3.6 H. P. Briggs & Stratton Engine. Cuts up to 3 3/4" stock. Right—Kost Kutter Sr. Husky, streamlined, saw-dust proofed. Cuts up to 4" stock. Has 6 H.P. air-cooled engine or electric motor. Write for new CMC catalog of latest Mixers, Pumps, Saws, Hoists, Carts and Barrows.



CONSTRUCTION MACHINERY CO., WATERLOO, IOWA

SAVUTIME AUTOMATIC HOT WATER SYSTEM Ideal Installation For Defense Housing



Savutime offers an unbeatable combination of features for 1942.

1. Highest Quality
2. Low Operating Cost
3. Lower Original Cost
4. Easy, Fast Installation
5. Long Dependable Service
6. Proven Profit Record

One of the best quality features you can offer, Savutime cuts gas consumption 30 to 66%—gives automatic hot water convenience.

Write for complete facts. Cash in on Savutime's profitable market. Act now.

SAVUTIME SALES COMPANY
115 Manhattan St. Rochester, N.Y.

SAVUTIME
GAS WATER HEATER
PUSH-BUTTON CONTROL



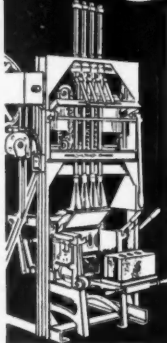
For Cutting Costs and Man-Hours on the Job, Insulate with... FLEXIBLE, LOW-COST

Its compressed form makes it easy to ship, store and handle. One man can usually install. Write for information.

KIMSUL
INSULATION

KIMBERLY-CLARK CORPORATION
(Building Insulation Division)
Established 1872 Neenah, Wisconsin

Profit in MANUFACTURING Start at Low Cost

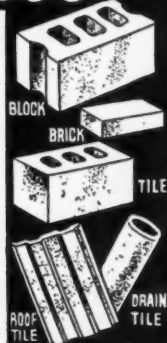


Own a business. Build it by supplying more for less. Eliminate all unnecessary expense. Manufacture and deliver direct to job. You profit by reducing costs.

Learn how you can make your own materials or supply building trade in your territory. We supply low cost machine and equipment for making any permanent material.

Write today for free catalog containing low factory prices and liberal terms. Act now and see how easily you can make this profit.

Concrete Equipment Co.
514 Ottawa Ave. Holland, Mich.



2 1/2 Years of Home Building Analyzed

AMERICA'S best two and a half years of home building since the 1920's, i.e., the period starting with 1939 and ending June 30, 1941, "before Priorities," and what they suggest for post-war housing plans, are analyzed by the United States Savings and Loan League, Chicago, in a study of these fruitful years for home ownership recently completed.

Paul Endicott, Pomona, Calif., president of the League, points out from the study that 1,323,808 new family units were provided in non-farm areas of the United States during this 2 1/2 year period. Of this number, 1,121,000 were in one-family and two-family units.

Where the money came from with which to build them was one of the principal questions explored by the League, and three major classifications of funds were used in the analysis: Group 1, lending institutions' or individuals' funds without any government guarantees or assistance, which provided money for 744,606 of the new units, more than half of all the new ones built in the past two and a half years; savings, building and loan associations did a substantial part of this lending; Group 2, the FHA insured loans of private lending institutions, financed 395,456 units, a little more than half as many as in the first group; and Group 3, public funds, which built 183,746 units.

"Thus traditional and long-standing sources of money continued to dominate the home construction scene in our post-depression revival although considerably supplemented in many areas by new devices," said Mr. Endicott. "This performance gives ground for the belief that post-war housing can use the same sources as the backbone of financing, completely independent of public assistance in the form of guarantees to the lender or of outright financing by a government agency. In this coming era as in the past two and a half years, some situations may be best resolved by the supplementary devices of Groups 2 and 3 but there will be no more reason for them to be the chief reliance four or five years from now than there was the past two and a half years."

He pointed to the probability of increased funds being available in home lending institutions after the war because of some slowing down of lending demand anticipated in the thick of the War Economy. Down payments for homes will be more plentiful because of the increased thrift practices of people in this scarcity-of-goods era, he anticipates, and consequently there should be less need for high percentage financing of homes even among the relatively low-income families in the post-war era than there has been in the 1939-1941 period.

"The first six months of 1941 were the bright flower of this post-depression home building revival," Mr. Endicott continued. "Stimulated in many sections by defense industries, the production of new family units in the country's non-farm areas rose to 318,808, according to United States Department of Labor figures. This was a gain of 31 per cent over the same period of 1940 and of 43 per cent over the first half of 1939. Of this record number of units, 51.8 per cent were built without any government assistance; 31.3 per cent by private funds insured by FHA; and 16.9 per cent by public funds. In the last group, 74 per cent of the new units were for families of defense workers, and of officers and enlisted men.

"One and two-family homes played a larger part in the home building volume of this year than in the previous two. During the January-through-June 1941 period, 87.8 per cent of the units newly supplied were in these two types of dwelling structures. Comparisons with other years show that the dominance of the field by the one-and-two-family home has increased steadily since 1938. This is contrary to the experience of the 1920's when the growing number of apartments was really the key to the rising home building volume as a whole. F. W. Dodge Corporation figures on the boom years of the 1920's show that nearly fifty per cent of the home building contracts they reported were in the form of apartments and hotels."

Send for Catalogs **MONCRIEF**

Furnaces and Winter Air Conditioners
COMPLETE LINE FOR Coal·Gas·Oil

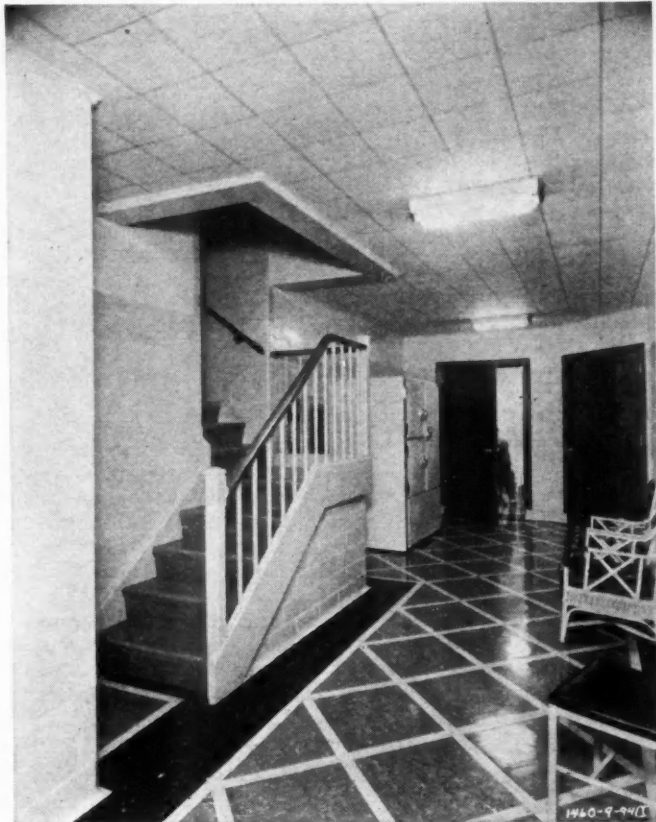
THE HENRY FURNACE & FDRY. CO., 3479 E. 49th ST., CLEVELAND, OHIO



Rubber Flooring and Stair Treads in Rochester Hospital

AMONG recent outstanding rubber flooring installations may be included that of the new medical unit at St. Mary's hospital, Rochester, Minn., an institution nationally known as one of the principal operating hospitals for famed Mayo Clinic.

Installation in the new hospital unit approximated 50,000 square feet of Goodyear Wingfoot rubber flooring of three-sixteenths-inch gauge, laid in corridors, nursery, laboratories, offices, emergency and various other rooms, in good taste and

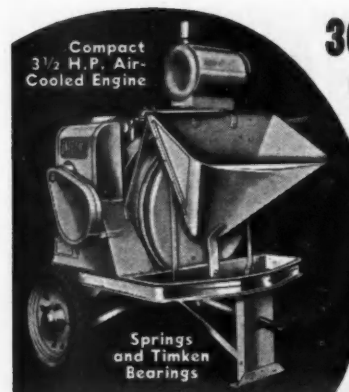


GOODYEAR Wingfoot flooring and molded rubber stair treads in a laboratory section of the new medical unit of the St. Mary's hospital, Rochester, Minn.

harmony with the modern architecture of this attractive new building.

Operated by the Sisters of St. Francis, the new medical unit of St. Mary's is said to be one of the most efficiently designed buildings in its field erected in the United States in recent years.

Installation of floors was by W. S. Nott Company, of Minneapolis. Architects were P. M. O'Meara & Associates of Minneapolis, St. Louis and Detroit. General contracting for the project was McGough Brothers, of St. Paul.

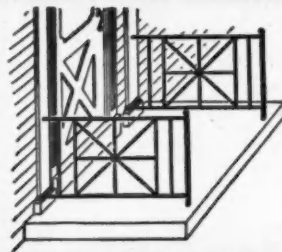


30% to 40% MORE CONCRETE with this MIXER!

Load the Measuring Batch Hopper (12" lower) while you mix and discharge — fast as power loader. Criss-Cross "Re"-Mix Drum, Accurate Measuring Tank (siphon type). End discharge design. Get catalog, prices. The Jaeger Machine Co., 521 Dublin Ave., Columbus, Ohio.

JAEGER 3 1/2 SPEEDLINE

IRON RAILING for BEAUTY & PROTECTION



Write For Illustrated Folder Indicate Your Requirements

Also manufacture Window Guards, Cellar Doors, Area Gratings, Pipe Railing, Chimney Ornaments, Weather Vanes, Overhead Arches, Iron Fence, etc.

OFFICE & FACTORY
3411 Spring Grove Ave.

CINCINNATI IRON FENCE CO. INC.
CINCINNATI OHIO

Set of BLUE PRINTS and Free BOOK "HOW TO READ BLUE PRINTS"



This Free Trial Lesson on "HOW TO READ BLUE PRINTS," and a set of blue prints plans—sent to show you how this 37-year-old School for Builders makes it easy for men in the building industry to lay out and run jobs, read blue prints, estimate costs, superintend construction, etc. Drawing of plans included if wanted.

LEARN AT HOME IN SPARE TIME

Men with this training are needed now to handle expanding business in building construction. This knowledge leads to promotion. Building contractors urge employees to get this training. For Free Trial Lesson address:

CHICAGO TECH COLLEGE

5-129 Tech Building 2000 S. Michigan Ave., Chicago, Ill.

4 Coats of Paint BAKED ON FABRIC



DOUBLE • PURPOSE WALL DECORATION appeals instantly to Home-buyers who recognize the all-important feature of low upkeep cost over a long period of years.

Long-wearing, durable, abuse-resistant SANITAS is a real selling point where active, growing children are concerned. Mild soap and water keeps SANITAS spotless. Its Fabric base is a permanent structural reinforcement.

Just a few cents more per month for the term of the mortgage pays for all the extra advantages of nationally-known SANITAS... the permanently washable fabric wall covering that PROTECTS WHILE IT DECORATES.

feature

DOUBLE • PURPOSE WALL DECORATION for plaster or dry wall house jobs in all price ranges.

DOES A WALLPAPER JOB without using wallpaper!
DOES A PAINT JOB without using Paint!

★

SANITAS X-RAY

See how 5 successive processing steps (1) start with a strong cotton fabric base; (2) impregnate it; (3) coat it to render it stain-proof; (4) strengthen it... and (5) finally give it the decorative character that makes everyone agree "SANITAS is winning a new name for BEAUTY."

Sanitas FABRIC WALL COVERING

STANDARD COATED PRODUCTS CORP.
40 Worth Street, New York, N. Y.

Send the SANITAS X-RAY, free samples, and information to:—

Attention of: _____
NAME _____
ADDRESS _____
CITY _____ STATE _____



See this X-RAY

AB-12

WEISWAY

Cabinet Showers

BUILD added sales appeal into every home you construct—large or small, simple or luxurious—by using these modern, leak proof cabinet showers. Extra baths easily possible in small space. Patented Foot-Grip. No-Slip floor of vitreous porcelain. Send now for details and specification data, without obligation.

HENRY WEIS MFG. COMPANY, INC.
1201 OAK STREET, ELKHART, INDIANA



PAINÉ ANCHORS

Hold Woodscrews



IN TILE • CONCRETE • STONE MARBLE
ALSO OTHER HARD AND SOFT MATERIALS

Big time and labor savers over old-fashioned wooden plugs—easier to install—hold firmer—last longer and eliminate chance of fracturing material.

Fig. 956—FIBER WOODSCREW ANCHOR. Comes in 11 different diameters in Braided and Standard Types to fit woodscrews No. 5 to 5/8" lag in popular lengths.

Fig. 950—LEAD WOODSCREW ANCHOR. Comes in 15 different sizes from 1/8" diam. by 1/2" length to 3/4" diam. by 2 length.



Fig. 956

Ask your Hardware Dealer TODAY.

Fig. 950

THE PAINE CO.

2959 Carroll Ave.
Chicago, Ill.

SPRAYING WATERPROOFED COLORED STUCCO

OFFERS BIG EARNINGS

Buildings everywhere need this permanent surfacing and resurfacing process. It fuses a water-proofed plastic mixture on all masonry. It fills cracks and checks and can be applied in any thickness desired, and in 30 colors and shades. Time proven by over 13 years actual use the world over.

With Colorcrete spraying machine you can supply a permanent decorative surface in any shade at amazingly low cost. Operators report costs of 2c and up per sq. ft. and sell up to 7c. Some have paid for their equipment from first few jobs. Machine capacity up to 1,000 sq. ft. per hour. Get the facts. Learn about Colorcrete and its big money making possibilities. Two Colorcrete books tell the whole story. Write today.

COLORCRETE INDUSTRIES, INC.

500 Ottawa Ave. Holland, Michigan

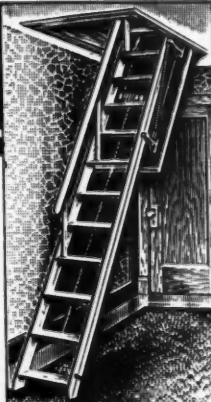
QUALITYBILT DISAPPEARING STAIRWAY

Here's the stairway to sell. Every home owner wants a Qualitybilt Attic Stairway! For new homes or old, easily installed, easily operated. Strong, rigid, safe—perfectly balanced. Adds many times its cost to value of the home.

QUALITYBILT PRODUCTS

Sash—Doors—Blinds—Frames
Screens—Mouldings—Cabinets
Stairs—Ask Your Dealer or
Address Dept. AB-1241

GET
DETAILS
Today



FARLEY & LOETSCHER MFG. CO.

DUBUQUE, IOWA

INDEX TO ADVERTISERS DECEMBER, 1941

A

Adam Electric Company, Frank.....	88
Allegheny Ludlum Steel Corp.....	92
American Builder.....	26-27-28
American Cabinet Hardware Corp.....	94
American Floor Surfacing Machine Company.....	91
American Gas Association.....	8
American Lumber & Treating Co.....	68
American Rolling Mill Company, The.....	72
American Telephone & Telegraph Co.....	74
Andersen Corporation.....	6-7
Arkansas Soft Pine Bureau.....	30
Armstrong Cork Company.....	19-69

B

Barber Asphalt Corporation.....	67
Barclay Manufacturing Co.....	81
Bennett Fireplace Co.....	86
Bradley Lumber Company of Arkansas.....	21
Bruce Co., E. L.....	73

C

California Redwood Distributors, Ltd.....	87
Carbide and Carbon Chemicals Corporation.....	82
Carnegie-Illinois Steel Corporation.....	100
Celotex Corporation, The.....	2
Chicago Tech College.....	97
Cincinnati Iron Fence Co., Inc.....	97
Colorcrete Industries, Inc.....	98
Columbia Steel Company.....	100
Concrete Equipment Co.....	96
Construction Machinery Co.....	96
Crane Co.....	20

D

Detroit Steel Products Company.....	3
Douglas Fir Plywood Association.....	15
Dunn Mfg. Co., W. E.....	85

E

Edwards Manufacturing Co., The.....	84
-------------------------------------	----

F

Farley & Loetscher Mfg. Co.....	98
Fir Door Institute.....	80

G

General Electric Home Bureau.....	13
Grand Rapids Hardware Co.....	71

H

Henry Furnace & Foundry Co., The.....	96
Homasote Co.....	75
Homelite Corporation.....	95

J

Jaeger Machine Co., The.....	97
Johns-Manville.....	17-18

K

Kawneer Company, The..... 9
 Kees Manufacturing Co., F. D..... 99
 Kimball Bros. Co..... 99
 Kimberly-Clark Corporation..... 96
 Kinnear Manufacturing Company, The..... 85
 Knapp Bros. Manufacturing Co..... 78
 Kwik-Mix Concrete Mixer Co..... 93

L

Laucks, Inc., I. F..... 83
 Lehigh Portland Cement Company..... 14
 Libbey-Owens-Ford Glass Company..... 12
 Little Burner Co., H. C..... 16
 Lone Star Cement Corporation..... 34
 Louisville Cement Company, Incorporated..... 23

M

Mall Tool Company..... 94
 Masonite Corporation..... 79
 McNair Shingle Co., Robert..... 90
 Mengel Company, Incorporated, The..... 10
 Mesker Brothers..... 77

N

National Gypsum Company..... 32
 National Manufacturing Company..... 4th Cover

O

Overhead Door Corporation..... 3rd Cover
 Owens-Illinois Glass Company..... 22

P

Paine Co., The..... 98
 Parks Woodworking Machine Co., The..... 99
 Pecora Paint Company, Inc..... 92
 Pittsburgh Plate Glass Company..... 25
 Porter-Cable Machine Co..... 93
 Pullman Mfg. Corp..... 24

R

Red Cedar Shingle Bureau..... 4-5
 Rowe Manufacturing Co..... 65

S

Savutime Sales Co..... 96
 Sisalkraft Co., The..... 88
 Skilsaw, Inc..... 11
 Smith Company, The T. L..... 86
 Solvay Sales Corporation..... 76
 Sonneborn Sons, Inc., L..... 89
 Standard Coated Products Corp..... 97

T

Tennessee Coal, Iron & Railroad Company..... 100
 Timber Engineering Company, Inc..... 95
 Trimpak Corporation..... 82

U

United States Steel Corporation Subsidiaries..... 29-100
 Universal Atlas Cement Company..... 29

V

Victor Electric Products, Inc..... 91

W

Wagner Mfg. Company..... 87
 Walker-Turner Co., Inc..... 90
 Wallace & Co., J. D..... 84
 Warren-Knight Co..... 99
 Weis Manufacturing Co., Inc., Henry..... 98
 Western Pine Association..... 70
 Williams Company, The..... 89

SPEEDY!
 8 machines in one . . . each full-sized . . . each independently operated. Does the complete job. Write!



NEW MODEL "A" PLANING MILL SPECIAL
 22" band saw, 12" jointer, tenoner, hollow chisel, mortiser and borer, rip and crosscut saw, cut-off saw and reversible spindle shaper and sand disc. Send for catalog.

Complete line of individual and combination machines
Good Woodworking Machines Since 1887
THE PARKS WOODWORKING MACHINE CO.
 Dept. BL-12 1524 Knowlton St., Cincinnati, Ohio



KIMBALL LIGHT ELECTRIC ELEVATORS
 A line of powerful light electric elevators built for every purpose. Sawn, drilled and fitted for rapid assembly—strong—efficient and easy to install. Cost little to operate.

FREE Engineering Data
 Present your elevator problem to us and let our engineers help. Descriptive literature on request.

KIMBALL BROS. CO.
 915-989 Ninth St., Council Bluffs, Ia.

MR. KEES SAYS: NOW YOU CAN GET KEE'S METAL BUILDING CORNERS FOR 8" DROP SIDING!



Here's a new pattern of Kees Metal Siding Corner that's especially designed to fit Pattern No. 105 Drop Siding (nominal width 8"), Pattern No. 106, and California Redwood Association Pattern No. 271. An attractive corner finish that looks like a mitred corner. The corner joint can't spread or open. Saves carpenter's time. Eliminates corner boards. Made of galvanized sheet steel, chemically treated to take and hold paint. Write today for Free sample.

F. D. KEES MANUFACTURING CO.
 Box 193 Beatrice, Nebraska

10 Day Trial No Deposit

WARREN-KNIGHT TRANSIT-LEVEL



This instrument is made for the Contractor who knows that he can work more efficiently with up to date equipment. This instrument gives you what you have always wanted in a low priced instrument—high power telescope—close focus—vertical arc with clamp and tangent—sensitive level—compass—plate level—protected circle—easier reading to one minute—extra large shift—sturdy construction—low maintenance costs. **SAVE TIME** in making layouts and in giving lines and grades. **SAVE MONEY** by reducing labor costs. For complete details write for new Bulletin F-612 Liberal allowance for your old instrument.

WARREN-KNIGHT CO.
 136 N. 12th St. PHILADELPHIA, PENNA.

Patented Transit-Level No. 38-B \$160.00
 Made also without compass and arc at lower prices.



... bought double rust resistance for this duct work

IT'S U·S·S COPPER STEEL

U·S·S Galvanized Copper Steel duct work in this six-room house cost only 95 cents more than plain galvanized steel and actually less than pure iron. The owner got a heating system with 2 to 3 times the usual rust resistance—plus the assurance that it would not rust out before the house was paid for.

Modern humidified air heating systems need this extra protection against rust. U·S·S Copper Steel furnishes it at a cost so low that most contractors will install it in homes without any change in the contract price. In larger buildings, copper steel adds only a fraction of 1% to the cost of the heating system—and

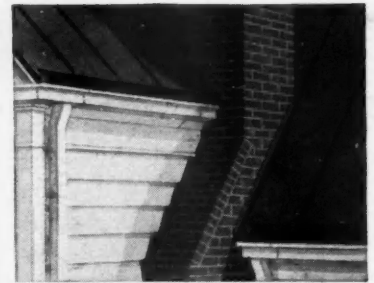
in return assures duct work that will stand up under the ravages of moisture and corrosive atmosphere.

In smoky cities, the sulphur in the air combines with moisture to form a dilute acid. This attacks metals, paint and even the mortar in buildings, causing them to disintegrate faster. Under these conditions, tests show that U·S·S Copper Steel gives better service than any other ferrous metal in the same price range. For proof of this see the accompanying corrosion chart.

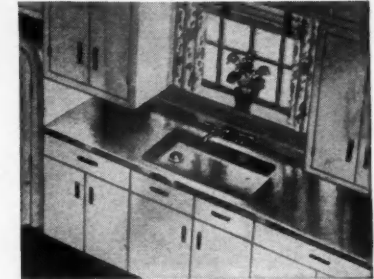
When specifying other steel work subject to corrosion, such as roofing, siding, gutters, downspouts, area walls, remember that U·S·S Copper Steel gives the same advantages of durability.



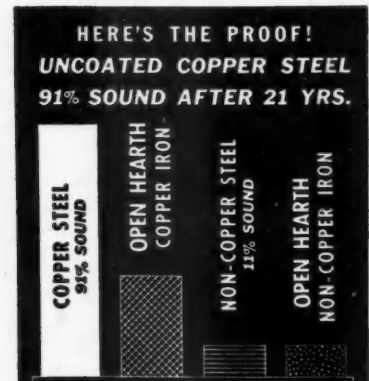
STEEL AREA WALLS for basement windows let in more light, are faster and cheaper to install, don't pull away from the wall. U·S·S Copper Steel gives them added resistance to rust.



U·S·S PAINTBOND is the new, improved material for gutters and downspouts. It's Bonderized so that paint grips the galvanized steel better, does not chip off, can be painted immediately, saving a trip. In the South and West, specify U·S·S Dul-Kote.



ALL STEEL KITCHENS take the "slavery" out of housework. No home is truly modern without one. Steel will be the style for years to come. It means better resale value.



This chart compiled from inspection reports of the Committee on Corrosion of Iron and Steel, A.S.T.M. Proceedings 1937, shows results of tests carried on at Annapolis, Md. from 1916 to 1936. After 21 years' exposure, 91% of COPPER STEEL sheets remained "sound" (unperforated). Other materials were decidedly inferior.



U·S·S COPPER STEEL SHEETS

CARNEGIE-ILLINOIS STEEL CORPORATION, Pittsburgh and Chicago

COLUMBIA STEEL COMPANY, San Francisco

TENNESSEE COAL, IRON & RAILROAD COMPANY, Birmingham

United States Steel Export Company, New York

Scully Steel Products Company, Chicago, Warehouse Distributors

UNITED STATES STEEL

