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AMERICAN BUILDER

JUNE, 1944
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WORLD'S GREATEST
BUILDING PAPER



100 UNITED STATES SAVINGS BOND
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ISSUE DATE WHICH IS THE FIRST DAY OF
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HOMES
Tomorrow**

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STYMIED BY MATERIAL SHORTAGES?

Build with Proved Celotex Products AVAILABLE NOW!



PLENTY of jobs—but no materials? Take a tip from contractors who are keeping busy and maintaining profits. They're using newly developed Celotex products—some to replace traditional materials. They often do a better job as proved in countless farm, factory and housing projects.

No need to delay or lose *your* jobs. You can keep busy profitably—with these and other Celotex products—which are available right now.

CELO-SIDING

The Multiple-Function Material That Does 3 Jobs

SHEATHING
SIDING **INSULATION**

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

CELO-ROK BOARDS

For Interior and Exterior Construction

CELO-ROK Wall Boards . . . These gypsum wall boards meet the rigid Celotex tests for quality. Available in $\frac{1}{2}$ ", $\frac{5}{8}$ " thicknesses for conventional interior wall construction. $\frac{3}{8}$ " and $\frac{1}{2}$ " have square, recessed or beveled edges. $\frac{1}{4}$ " thickness has square edge only.

CELO-ROK WEATHER-PROOF SIDING
A fire-resistant gypsum wall board. This one structural material will serve in place of both sheathing and siding. Both sides and all edges are treated with a weather-proof compound. Exterior side is finished in attractive green and requires no painting. Available in 1-inch and $\frac{1}{2}$ -inch thicknesses, 24 inches wide, in 6-, 8-, 9- and 10-foot lengths.

ASPHALTED SHEATHING

A Celotex board for insulation, with all surfaces and edges impregnated with asphalt for dependable sealing against moisture. A very useful board for farm buildings, industrial structures and for repair work. Available in $\frac{1}{2}$ -inch thickness, 4 feet wide and in lengths up to 12 feet. Large areas can be covered quickly.

CELOTEX

REG. U.S. PAT. OFF.

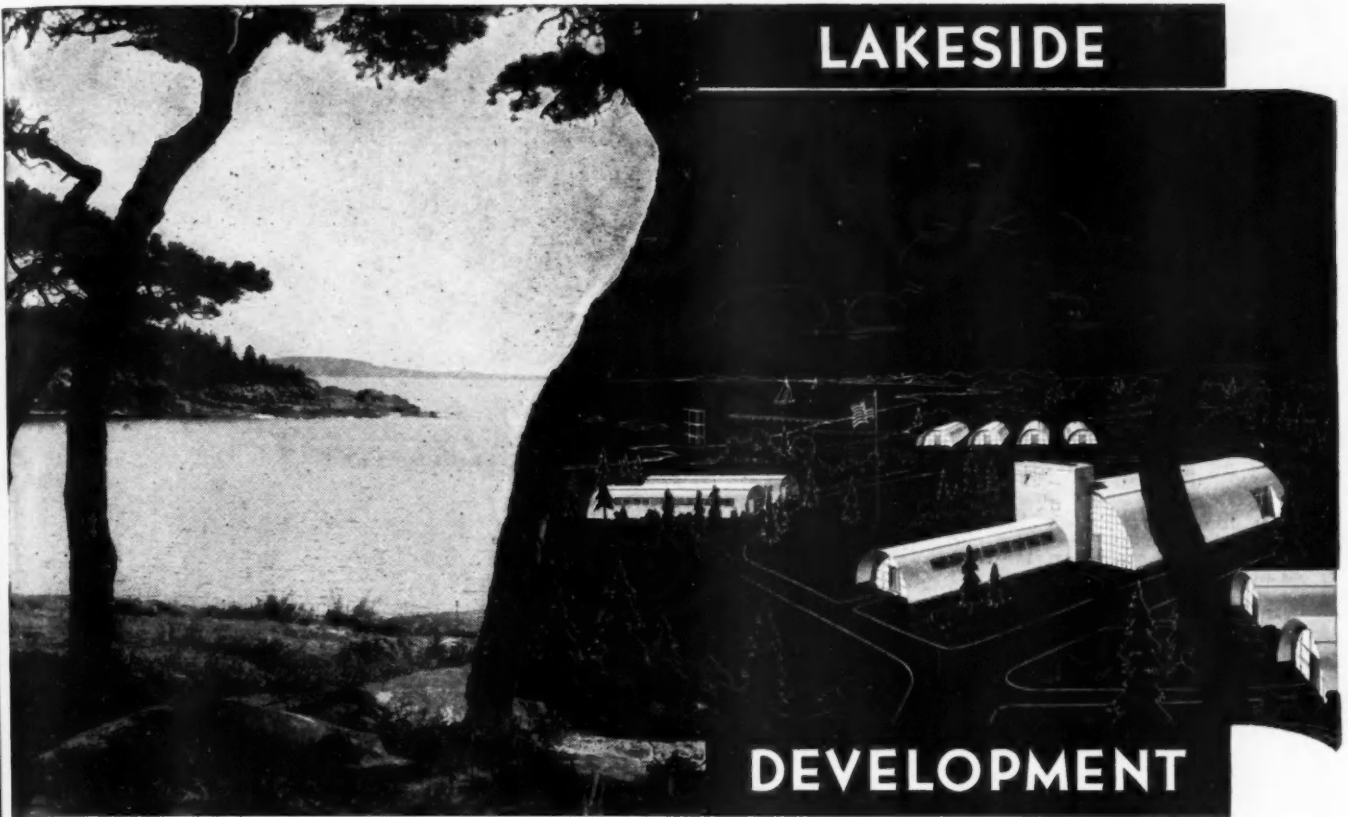
BUILDING PRODUCTS

THE CELOTEX CORPORATION . . . Chicago 3, Illinois



Now is the time to Insulate with CELOTEX ROCK WOOL BATTS

Home owners should insulate now for summer comfort and to save fuel next winter. Celotex Rock Wool Batts provide insulation of proved efficiency at moderate cost—but with fine profits for you. Urge prospects to insulate *now*—Celotex Rock Wool Batts are available right now. New, easier FHA financing on insulation jobs.



The range of usefulness of Stran-Steel framing systems by no means ends with industrial and municipal buildings, multiple dwellings, group housing projects and other large units . . . but extends into the field of smaller structures—cottages, boat houses, cabins, summer houses and the like.

This light-gauge steel has certain characteristics which serve equally well in all types of construction. It forms a rigid framework which will not sag—resists termites and dry-rot—and is light-weight enough to handle easily in transporting and erecting. A special patented nailing groove for applying collateral materials, plus other unique advantages, makes possible economies of time, labor and materials. As a structural medium, it is flexible and adaptable—affording the architect wide latitude in design.

Current production of large and small military buildings combines with this company's broad peacetime activities to provide a fund of specialized experience on which the construction industry may draw in developing its postwar plans.

Manufacturer of the U. S. Navy's
Famous Quonset Hut



STRAN-STEEL

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

UNIT OF NATIONAL STEEL CORPORATION

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What keeps these "home fires" burning?

It's coal—bituminous coal.

For example, one ton of bituminous is needed to produce enough steel for making one 2,000-pound aerial bomb; 32,000 tons for steel enough to build a modern superdreadnaught.

And the world knows what an overwhelming volume of war items our nation is turning out every day to deliver the knockout punch to the Axis.

But helping to double the production of steel is only *one* of the burdens laid upon the bituminous coal industry by war.

In spite of man-power short-

ages and other hampering factors, our mines have managed to keep coal flowing and furnaces roaring.

Mark that to the credit of men who work in the mines, and the mine proprietors who have invested \$400,000,000 during the past twenty years in mechanical equipment that has added greatly to the safety, the efficiency and the economy of mining.

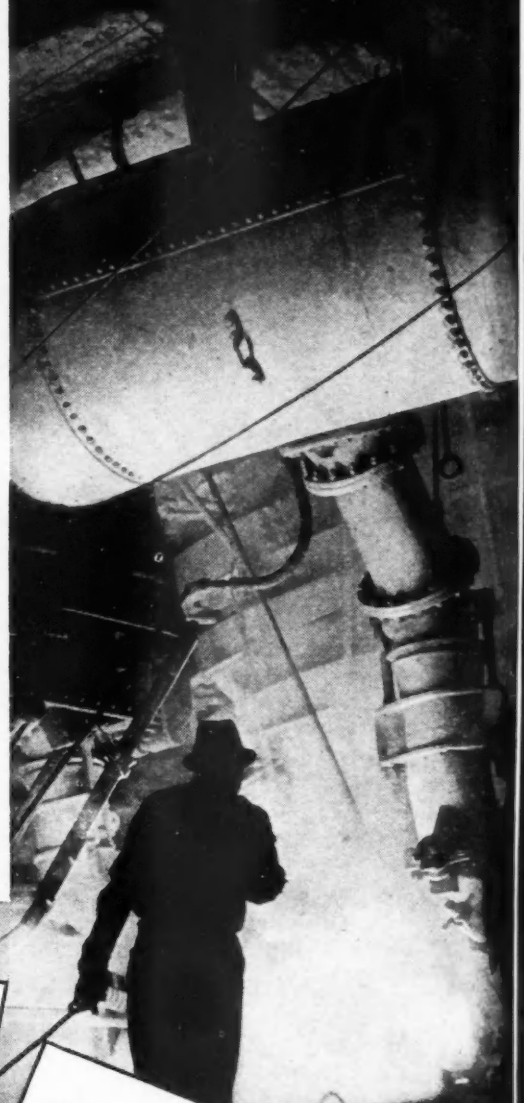
Bituminous coal is America's chief source of power and energy.

In peace or war, we can't get along without it.

BUY MORE WAR BONDS

BITUMINOUS COAL *Institute*

60 East 42nd Street, New York 17, N. Y.



Why should anyone want to work in a coal mine?



For one thing, coal miners are well paid, their average earnings being higher than the average for all industrial workers. Thousands of coal miners make \$300, \$400, and some even \$500 a month. For another, their work surroundings are not unpleasant by any means. Mine temperatures range between 62 and 72 degrees with fresh air circulating continuously. That miners like their work is shown by the fact that mining has a lower labor turnover than the average for all manufacturing industries. Many who do leave, come back to the mines.

How long before all the coal will be mined?



It is estimated that there is enough coal in our mines to last at least 3,000 years. In view of the progress that is constantly being made in the development of more efficient, more economical firing equipment and combustion methods, 3,000 years is probably far too conservative a figure.

What chemical value has bituminous coal?



Plenty, as you will see. Most of our synthetics and plastics are made, wholly or in part, from bituminous coal. These include such diverse commodities as perfumes, aspirin, safety glass, dyes, fabrics, synthetic rubber, fertilizers, disinfectants, plastics and a thousand and one other products. In addition, coal products furnish the four most important war chemicals and materials for all high explosives. Bituminous has helped to create new industries, open up new jobs, and make available new products which contribute to our convenience and health.

"WHAT WOULD YOU LIKE TO KNOW ABOUT COAL?"

Here are a few of our answers to the questions you have asked about coal, and the men who mine it.

Reprints of this illustration available on request.



or straight-thinking about that building boom ?

TOP BUILDING MEN who ought to know say a lot of builders are just talking double-talk about that building boom.

"America will need billions of houses after the war," these dreamers babble, "so—whoosh! the houses will be built."

As if need alone ever built as much as a pup tent! The Chairman of the National Committee on Housing, Inc., Mrs. Dorothy Rosenman, puts it this way:

"Ballyhoo will bubble out and leave the soldier without a job, real-estate operators without a tenant, the builder without a buyer. We must have a plan that can work and that can obtain public support."

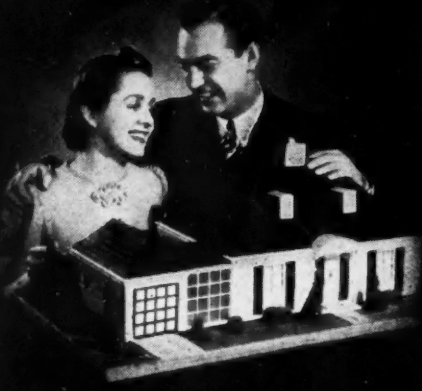
To make sure plans like these don't go up in pipe dreams, they must be sold to the kind of people (1) who can buy homes and the building materials that go into them and (2) who have a strong influence over what other people buy.

These are the people builders think of when they think of the readers of *TIME*—the million most influential family heads in America*—the people other people copy.

*Among the heads of these households are executives and engineers, government officials, mayors, bankers, architects, and 22 other groups of leaders who recently voted *TIME* "America's most important magazine."



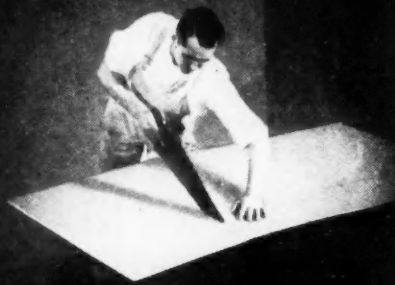
GATEWAY TO THE BUILDING MARKET



For the Walls and
Ceilings of the Home
the Johnsons Are
Waiting to Buy.

For Covering the
Cracked Ceilings That
Must Be Repaired in
Mrs. Smith's Home.

For Charming Tile
Effects Mrs. Thompson
Wants in Her Kitchen
and Bathroom.



For the 1001 Uses of
durable Upson Panels
in Homes, Farms, Stores
and Factories.

STRONG-BILT PANELS—approximately $\frac{3}{8}$ " thick—for new construction.
KUVER-KRAK PANELS— $\frac{1}{4}$ " thick—for covering cracked plaster. **UPSON PROCESSED BOARD**— $\frac{3}{16}$ " thick—for miscellaneous uses. **DUBL-THIK FIBRE TILE**—for kitchen and bath.

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

No "blue sky" promises!

But this much can be said about what is coming in Upson Panels. For peacetime requirements, the building industry can well look to Upson Panels for better fulfillment of many job requirements in new construction and repair.

As a result of heavy war demands involving many millions of feet, and the necessity for great speed in emergency construction, building techniques have advanced at an accelerated pace.

Upson research, responsible for many important developments in the past, has again stepped ahead.

Postwar plans, laid by the same management which has guided The Upson Company for 32 years, are based upon continuing high standards of quality, adherence to a 100% dealer policy and national advertising to maintain consumer acceptance.

Dealers, builders and architects who are analyzing and planning their own postwar future will find skilled assistance in the counsel of our representatives. The Upson Company, Lockport, New York.

UPSON

SPECIALISTS IN PANEL BOARD

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LETTERS

To the Editor

Prefabricator, please note

To the Editor: Can you give us a list of the manufacturers of prefabricated houses who are located within economical shipping distance of Pittsburgh, Pennsylvania?

We are interested in the various floor plans that it is possible to secure in the prefabricated type of home. We want to contact the manufacturers to study their products and find out if prefabricated houses are practical where a prospective buyer wants a house plan a little bit different.—J. G. FULLMAN, Georgian Construction Co., Glenshaw, Pa.

Association competition

To the Editor: I have covered the April issue of the *American Builder* very thoroughly and think it is one of the finest issues that you've yet published.

It might interest you to know that quite a discussion developed here in regard to the plan, as outlined by Randolph Evans, with houses laid out around a traffic-safe cul-de-sac street. I'm sure you would have enjoyed the discussion which developed, and I think that some of the boys feel that a group of such arrangements might be conducted by members of this Association on the same plan. It would be interesting to witness the keen competition that would develop from such a project, for I'm sure we would find each builder would be attempting to out-do the other as to quality, design and speed of construction.—JOE HAVERSTICK, Montgomery County Builders Assn., Dayton, Ohio.

Keeps us well informed

To the Editor: The article concerning our project at American Fork, Utah, was certainly arranged and written in most excellent form. I have had considerable favorable comment concerning it, and it has been very helpful to me in placing occupants in our homes.

You have built a fine reputation in this community, not only through this article, but many others that you have written, and I am sure that if you continue on your present basis your paper will continue to hold number one position in the home building field. We read your articles and your paper from cover to cover and feel that we are well-informed by so doing. We were very much pleased to see you took up Bob Gerholz's idea of co-operation among builders to build a large subdivision. I think the cities of the United States could stand a good deal more of this type of information.

I would like to see some articles showing how the builders arrange their program so that a division of the costs of the property and the expenses of roads, etc. are handled.—ALAN E. BROCKBANK, President, Federal Homes, Inc., Salt Lake City, Utah.

Sorry, none now planned

To the Editor: The writer was wondering if in your blueprint series you might be showing a blueprint of a hospital in some of your later issues of *American Builder*. Our town and community intends to build a new modern 50- or 60-bed hospital early next year, taking in the surrounding municipalities to form a Union Hospital set up.

When this war is over, and possibly before, there is

(Continued to page 124)

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FOUNDED—187

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JUNE

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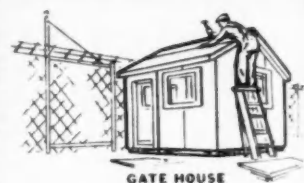
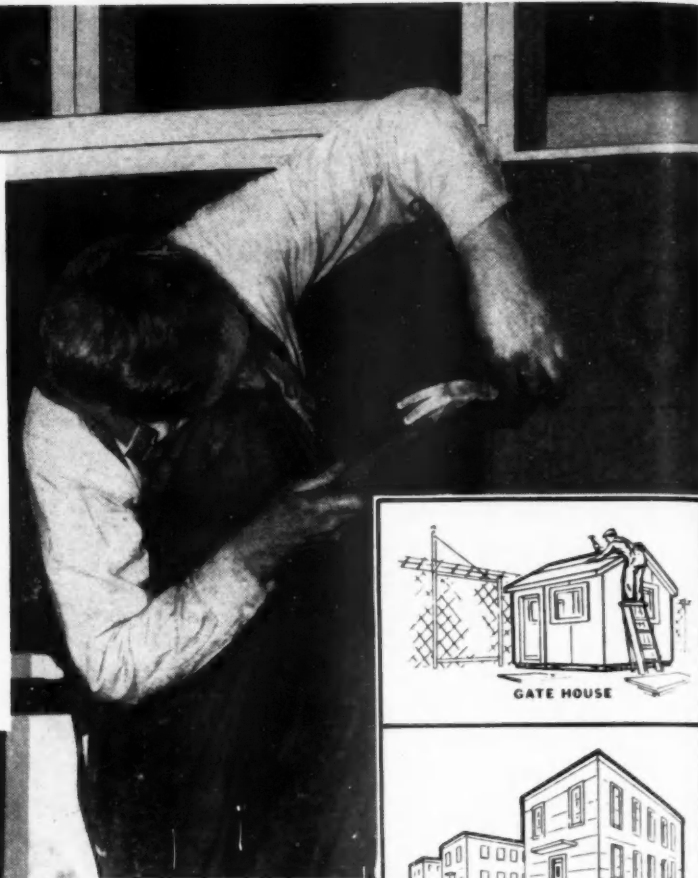
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GOLD BOND
GYPSUM BOARDS
BEAT WARTIME
LUMBER
SHORTAGES!**



GATE HOUSE



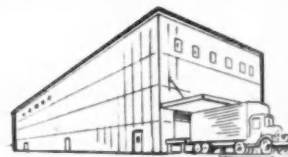
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TEMPORARY OFFICE



WAREHOUSE

—and they saw and nail like lumber!

*D*O you have jobs to do—and no lumber to do them with? Then investigate Fireproof Gold Bond Gypsum Boards. They nail and saw like lumber, cover large areas fast and provide sturdier construction. Different kinds are available in several styles. In the first place there is Gold Bond Gypsum Roof Plank that builds flat or pitched roof decks in a hurry—ready for the roofing material. Then there are the Exterior Boards that build sheathing and finish in one operation! When you use these Gold Bond products, the only lumber you need is for the framework! And there's no shortage of Fireproof Gold Bond Gypsum Boards. Your dealer has all you need in stock!

The pictures show only a few of the many different types of jobs for which these boards have been used by industry and Government. Any further information you require is yours for the asking at your Gold Bond Dealer's. Ask him about them today!

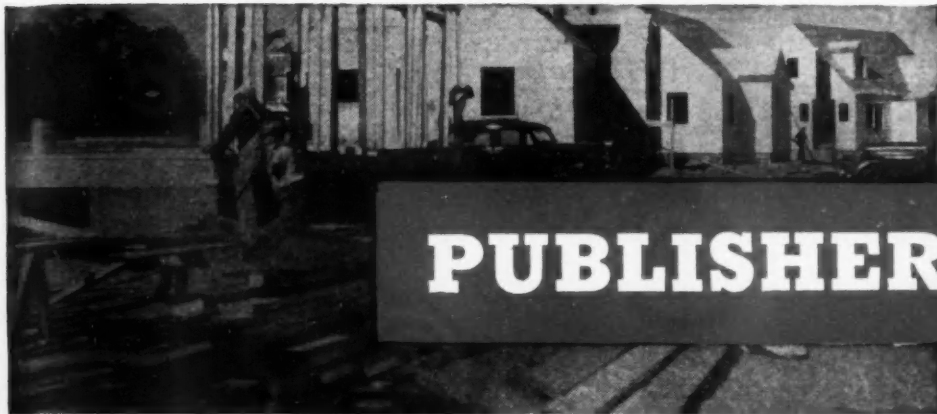
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PUBLISHER'S PAGE

Military force in domestic affairs

REASONS were given on this page in May why our foreign policies present less important issues to the American people than our domestic policies. The seizure late in April of Montgomery Ward & Company's property in Chicago *by the army* has emphasized this.

Except to carry on war, the government has no constitutional authority to use any power in time of war that it cannot use in time of peace. The issue in the Ward case is whether the government acted legally. If it can act illegally in time of war, it can act illegally in time of peace. If in the Ward case it exercised power illegally, and public sentiment and Congress do not sternly condemn its action, it can be expected to continue acting similarly during and after the war.

The government ordered striking employees of the Ward company to return to work and ordered the company to "continue" a contract with a labor union that had expired about five months before. The company refused on the grounds, first, that the union no longer represented a majority of its employees; second, that the contract had expired and contained provisions for the check-off and union maintenance which the company would not renew; and, third, that the company was not subject to orders of the War Labor Board because, although a very large retail store, it was not engaged in war work as defined by statute any more than any small retail store. Thereupon, the government had the army seize the property and evict the company's officers. Later on the same day the government asked the federal court for an injunction to prevent the company's officers from interfering with government operation.

The government's action in appealing to the court *after* instead of *before* it seized the property, and then returning

the property to its owners and withdrawing its case from the court as soon as an election had shown the union did represent a majority of the employees, prevented the court from deciding either before or after the seizure whether it was legal. The government thus plainly confessed that its seizure of the property by military force was an illegal exercise of dictatorial power.

In other countries, especially Italy and Germany, the middle class encouraged such illegal exercises of power for its own supposed advantage. It thus helped to establish dictatorships in the hope and belief that they would curb and control socialists, communists and labor unions. But once in power, the dictators used their secret police and armies to control middle class and workers alike; and all the people lost their freedom. In this country government is using its power, as in the Ward case, for the supposed advantage of labor unions, and is being encouraged by labor unions to do so. But if such illegal use of power is allowed to continue, members of unions will soon find that any government that will illegally dictate to employers will also illegally dictate to employees.

There can not long be in any country freedom for some and not for others. There can be only freedom for all or tyranny for all. And there can be freedom for all only if government, whether in war or peace, is strictly limited to the exercise of its legal powers. The danger of dictatorship in any country is greatest when it has a large army. Because this nation now has a huge army, it should regard with special concern every use, however small, of military force in its domestic affairs.

Samuel O. Drun,

**WHY LOOK HERE
FOR THE POST-WAR BATHROOM**



when *experience* tells you so much

When shirt sleeves are rolled up and the "some-day-soon" homes actually get down to the blueprint stage, they're sure to reflect the teachings of past experience. Bathrooms especially will combine eye-pleasing design with the serviceability and long life that time has proved are worthy of your reputation—and the homeowner's investment.

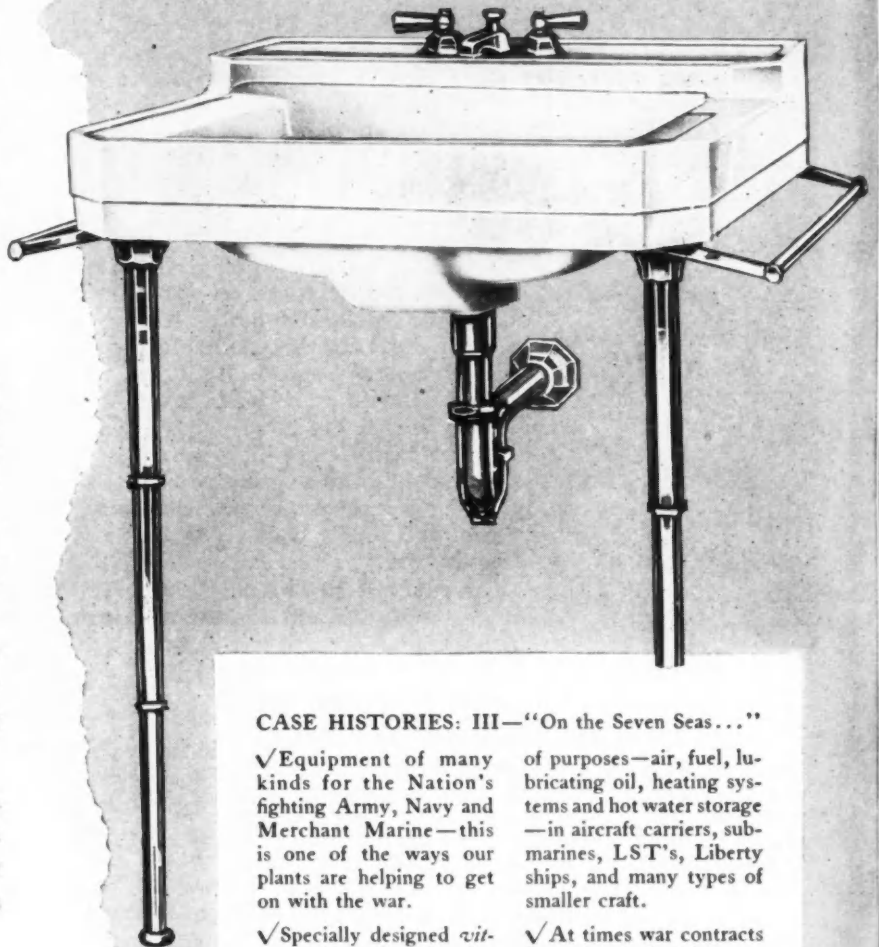
The famous Winston Lavatory shows why on both counts there has long been a preference for Case plumbing fixtures. Here is the *permanent* cleanliness and beauty of *twice-fired* vitreous china, the utility of an integral shelf, extra large basin, anti-splash rim and concealed front overflow. Fittings and accessories—styled to "fit" equally well in the mansion or the cottage—complete a fixture that denotes quality in every detail.

Case experience, revealed in so popular a lavatory as the Winston, is a mighty sound starting point for the post-war bathrooms of your clients and customers.

W. A. Case & Son Mfg. Co.
Buffalo 3, N. Y. Founded 1853.

Case

LIFETIME PLUMBING FIXTURES



CASE HISTORIES: III—"On the Seven Seas..."

✓Equipment of many kinds for the Nation's fighting Army, Navy and Merchant Marine—this is one of the ways our plants are helping to get on with the war.

✓Specially designed *vitreous china* plumbing fixtures for combat vessels building on the Great Lakes and on the Pacific Coast. Steel engine housings for the Army's fleet. Steel portholes for cargo vessels. Thousands of *welded* tanks for a variety

of purposes—air, fuel, lubricating oil, heating systems and hot water storage—in aircraft carriers, submarines, LST's, Liberty ships, and many types of smaller craft.

✓At times war contracts have absorbed a high percentage of our production, with resulting delays in the flow of products for civilian use. We cannot promise any improvement in "civilian" production until after the successful invasion in the West.



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War Bonds

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GENE

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 have an even better appreciation
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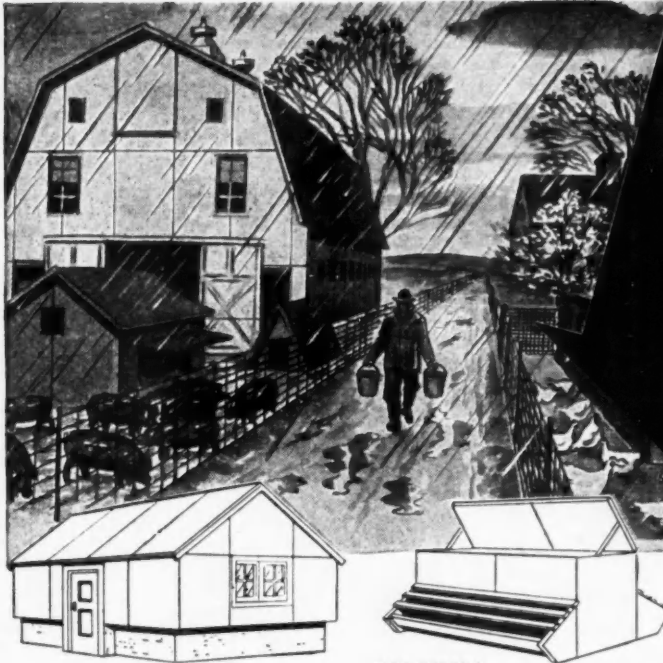
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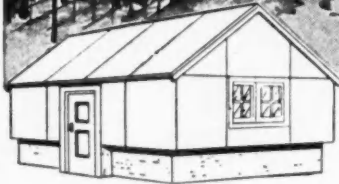
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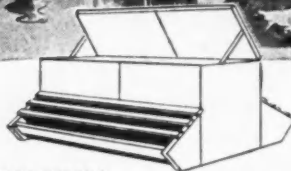


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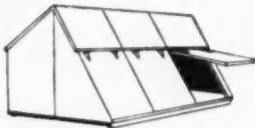
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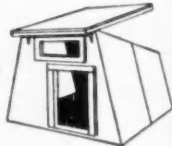
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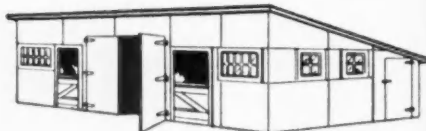
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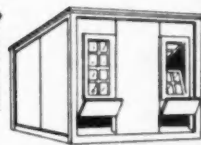
INDIVIDUAL PIG HOUSE



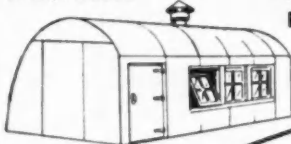
SHEEP SHED



UTILITY HOUSE



POULTRY HOUSE



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... the Ideal Material for Repair, Maintenance, and New Construction

Protecting farm production by keeping structures in sound, weather-tight condition, is good from every angle—good for the farmer, for the nation's war effort, and for your business.

You can do this important job best by recommending CAREY "COVERALL" BOARD for all farm-building repairs and new construction.

Prefabricated of rock-like asbestos cement, "COVERALL" BOARD is weather-proof and wear-proof, impervious to moisture, rust, rats, vermin and termites . . . and positively cannot burn. Smooth and attractive in appearance, and requires no painting for its protection — an added economy. Easy to work with and apply. No cracking or crumbling, no warping or shrinking. Available in convenient sizes.

You can sell or use CAREY "COVERALL" BOARD with assurance of lasting customer satisfaction. For further details, write Dept. 10.

THE PHILIP CAREY MFG. COMPANY

Dependable Products Since 1873

LOCKLAND, CINCINNATI 15, OHIO

In Canada: The Philip Carey Co., Ltd. Office and Factory: Lennoxville, P. Q.

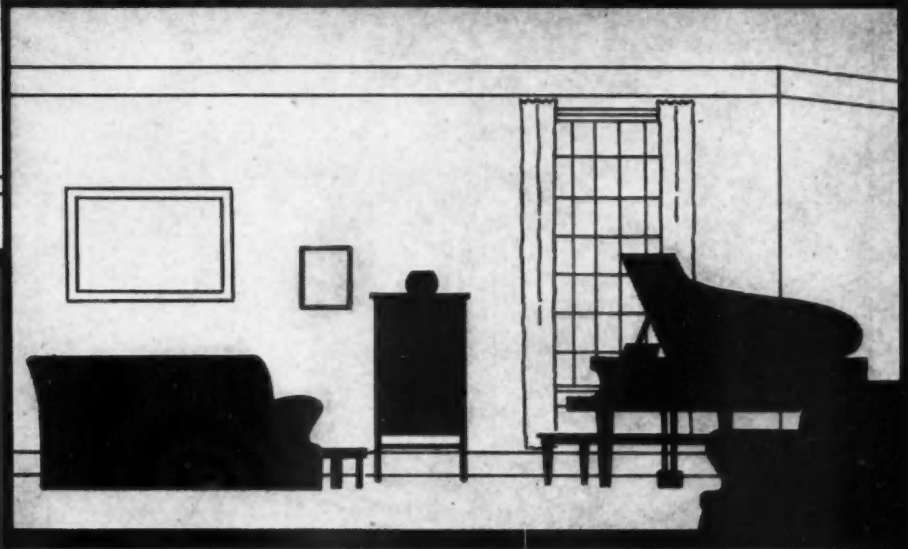
- for
- HOG HOUSES
 - POULTRY HOUSES
 - BROODER HOUSES
 - GRANARIES
 - SILOS
 - BARNs
 - MILK HOUSES
 - FEED BINS
 - STORAGE SHEDS
 - BASEMENT WALLS
 - MACHINE SHEDS
 - STORE ROOMS
 - TOOL SHEDS
 - HOME REPAIRS
 - PARTITIONS
 - CEILINGs
 - GARAGE LININGS
 - SHELVING
 - HEAT BARRIERS
 - CLOSETS, ETC.

*Easy to Work!
Nail it! Saw it! Cannot Burn!*





WITHOUT MODUFLOW. Alternate periods of heat and no heat, causing drafts and air stratification. Result: Cold floors, overheating and underheating.



WITH MODUFLOW. Constant supply of heat, modulated to exact degree necessary to offset heat loss. . . . Results: True comfort.



MODUFLOW CONTROL

DELIVERS MODULATED HEAT . . . CONSTANTLY

THE MINNEAPOLIS-HONEYWELL MODUFLOW CONTROL SYSTEM is the logical step in the evolution of home heating systems.

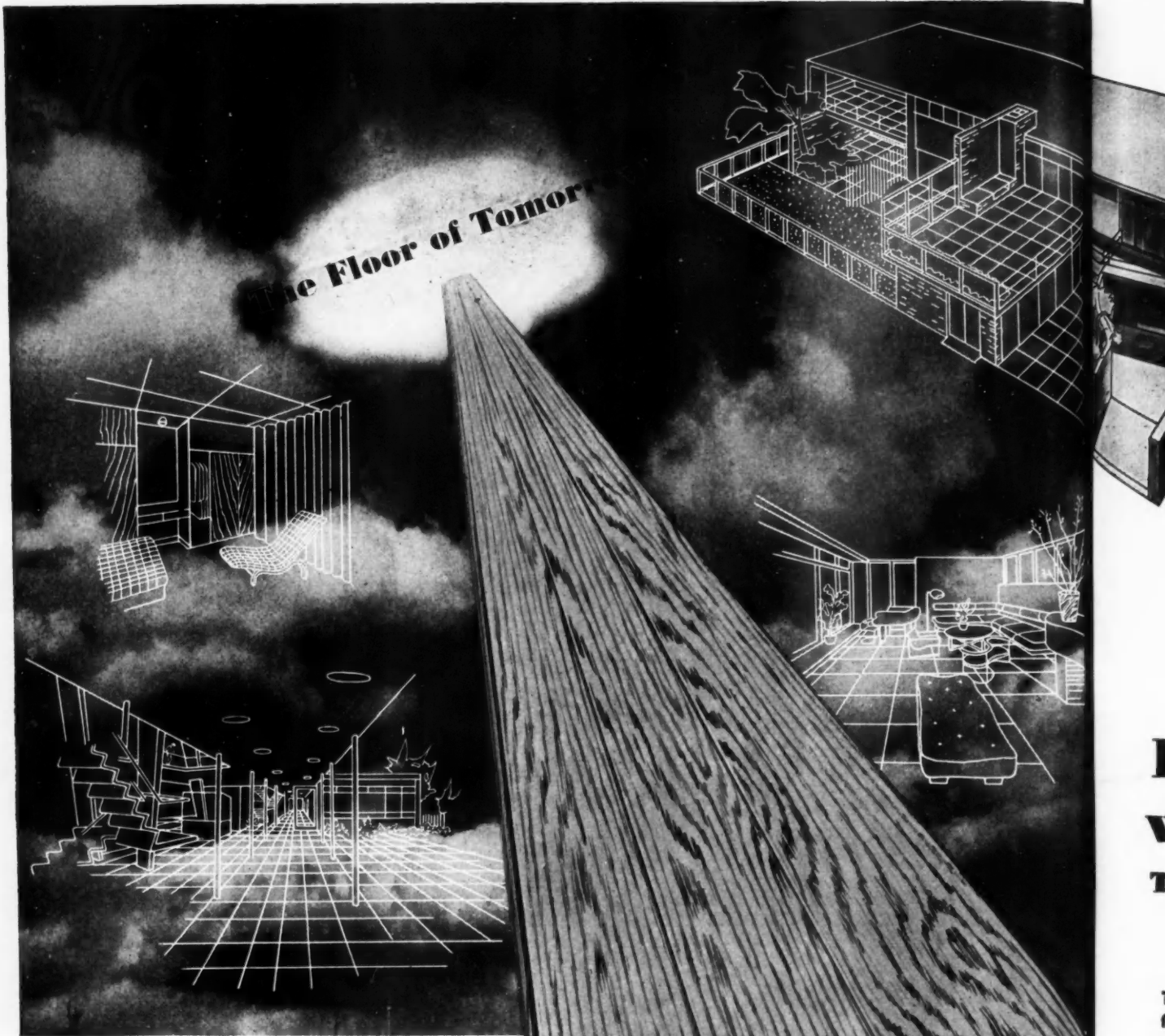
Instead of alternate periods of heat and no heat, due to intermittent heating and causing drafts and air stratification, which results in cold floors, the Moduflow System of control delivers a constant supply of heat, modulated to the exact degree necessary to offset loss of heat from the home. Moduflow accomplishes this by automatically adding heat from the furnace or boiler with return air or water to exactly the temperature required, and continuously

circulating this mixture through the heating system. In the case of steam heat, only enough steam to satisfy the heating requirements is circulated.

The Moduflow System of control will be available after the war for any automatic heating plant . . . You will find Moduflow a powerful sales tool — one that will definitely place your homes in that "out of the ordinary" classification . . . Write for full information to Minneapolis-Honeywell Regulator Company, 2842 Fourth Avenue South, Minneapolis 8, Minnesota . . . Branches and distributing offices in 49 principal cities.

MODUFLOW

MINNEAPOLIS
Honeywell
CONTROL SYSTEMS

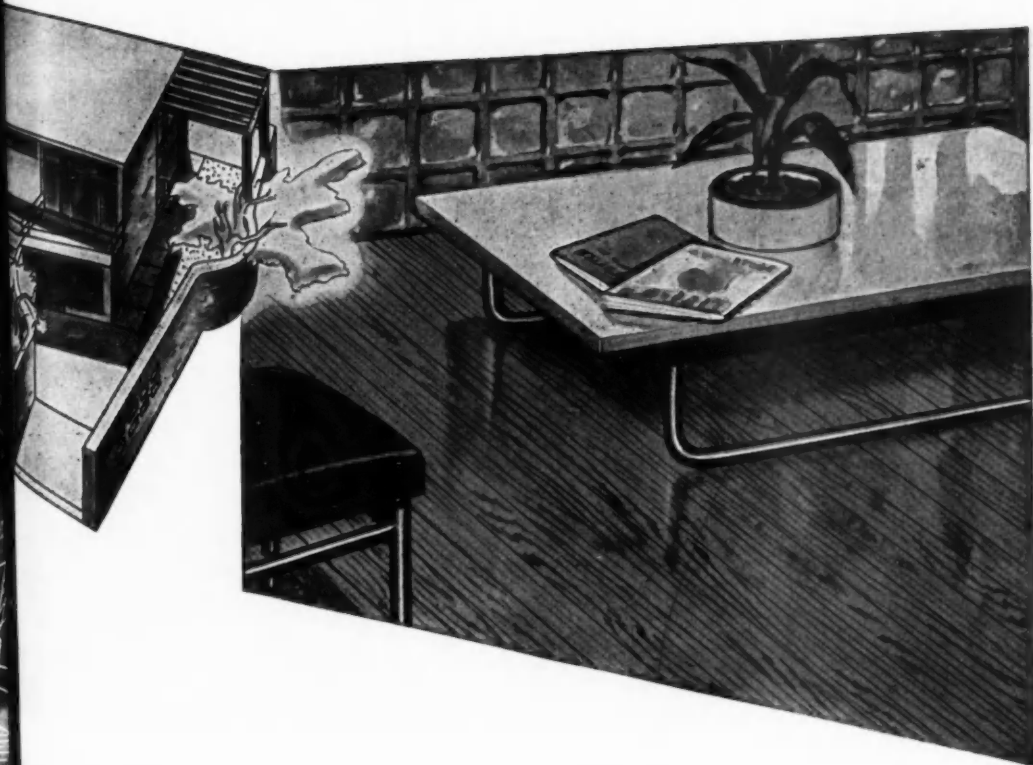


TUF-LUSTRE FLOOR FINISH FOR REFINISHING OLD FLOORS

The same handsome, damage-resistant finish used on Bruce Streamline Flooring will soon be available for the refinishing of old wood floors. With the new Tuf-Lustre Seal, Wax and Cleaner, home owners will be able to give old faded floors all the advantages of Tuf-Lustre beauty, durability and ease of maintenance at a lower cost than by any other method. Watch for an announcement on the availability of the New Tuf-Lustre Floor Finish line.



AMERICA'S MOST BEAUTIFUL FLOORS



Bruce Streamline Floors with the New Tuf-Lustre Finish

The Deep-Seal Floor Finish that Will Not Scratch-Chip-Peel!

WHAT IS THE NEW TUF-LUSTRE FINISH?

Tuf-Lustre is the new deep-seal floor finish that brings out the full beauty of the wood by developing its natural grain and figure. Penetration, the secret of Tuf-Lustre, seals the pores of the wood against dust and dirt and produces a long-lasting, lustrous finish that will not scratch, chip or peel.



**THE SCRATCH TEST
PROVES TUF-LUSTRE
FLOOR FINISH SUPERIOR!**

Half of this panel is surface finished the ordinary way and the other half Tuf-Lustre deep-seal finished. A coin scraped across both finishes will chip and mar the surface finish but leave the Tuf-Lustre finish unharmed.

Even in a world at war, the minds of men have been at work creating better things for better living for the homes you will build at war's end.

And in the front ranks of these improved building materials will be floors of greater beauty—greater durability—and greater ease of maintenance. This we know, for such a floor is a Bruce Streamline Floor with the New Tuf-Lustre Finish.

Best of all, when home builders demand Bruce Streamline Floors for their post-war homes you can give them what they want, for this "miracle" floor is no idle dream that needs time for development and proof . . . it will be available the moment building restrictions are lifted.

The millions of feet now in use *prove* that owners prefer its natural wood beauty, its handsome Tuf-Lustre finish, its ease of cleaning. You too will prefer it because of the time and labor it saves. An ordinary house job can be completed 3 to 5 days earlier because Streamline comes to the job completely finished . . . install it, and it's ready for use—a better floor with a better finish at a cost lower than an ordinary hardwood floor that must be finished after it is laid.

Get the facts now and be prepared to give your clients the floor of tomorrow for their home of tomorrow.

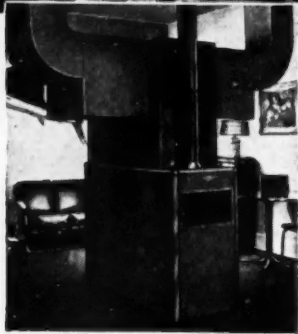
E. L. BRUCE CO., Memphis 1, Tenn.

THE WORLD'S LARGEST MAKER OF HARDWOOD FLOORS



Each room in our home has been transformed into a haven of delightful comfort. Windows are ever-closed, shutting out all outside jangling noises --- and my wife assures me the drapes and furniture will last much longer.

ing appetites have been



Another reason why

Servel's New *All-Year* Gas Air Conditioner

is the next essential for the home of tomorrow

Year-round comfort indoors—no matter what the weather outside—is naturally the most important blessing bestowed by Servel's New *All-Year* Gas Air Conditioner. But there are additional reasons why users call it "The next essential for the home of tomorrow."

Besides supplying cooled, dehumidified air in summer, and warmed, moistened air in winter, the Servel *All-Year* Gas Air Conditioner makes homes quieter, healthier, cleaner. The "ever-closed windows" afford extra privacy, reduce danger from damage due to sudden summer storms. The removal of pollen particles, as well as dust, from the filtered air supplied by this system, affords

welcome new relief for asthma and hay fever sufferers.

So you can be sure your clients will want Servel's New *All-Year* Gas Air Conditioner in their post-war homes—and places of business, too. And you'll be able to give it to them. For it's been tested, proved, and acclaimed in more than 300 test installations all over the country. Mass production will begin just as soon as material and capacity are released from war work.

Write today for complete information on Servel's New *All-Year* Gas Air Conditioner, "The next essential for the home of tomorrow." Address Servel, Inc., Evansville 20, Indiana.

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

SERVEL  **Inc.**

America's Leading Makers of Modern Gas Appliances

PLUS-ABILITY

GIVES WEATHERWOOD

**AN EXTRA VALUE
That Makes Weatherwood
Insulation Mean More!**



Extra value . . . that is the demand today—and Weatherwood* answers with "Plus-abilities" in products which create many possibilities—all combined in one material to meet the challenge of a building industry that expects more than ever before—and gets it in *Weatherwood*.

Here is insulation *and more*—more for your money . . . beauty . . . fuel savings . . . comfort . . . decoration . . . sound absorption . . . and many more services combined in one material. That's why Weatherwood Products—all things considered—are just about the most economical form of insulation to be had.

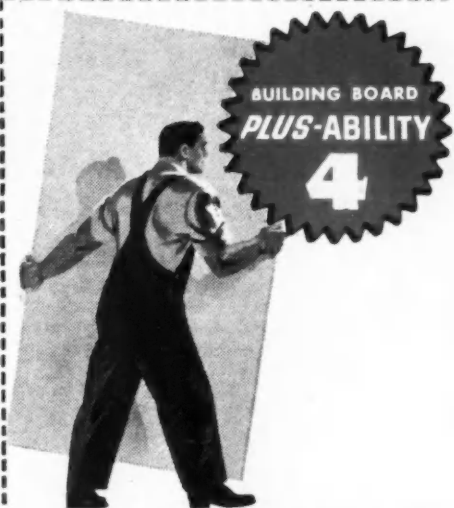
*Trademark Reg. U. S. Pat. Off.



+ Today's Economy Way—Here's where Weatherwood Sheathing "Plus-ability" comes into play with its 3-way service: 1—Insulates; 2—Sheathes; 3—Braces.



+ Plastered Walls Can Do More for You — Weatherwood furnishes a sturdy plaster base, keeps down wind leakage, heat leakage and sound transmission.



+ "Plus-ability" Steps In . . . with Weatherwood Building Board—goes on fast—covers a lot of area—provides attractive surface. Combines insulation with saving time and money.



UNITED STATES GYPSUM

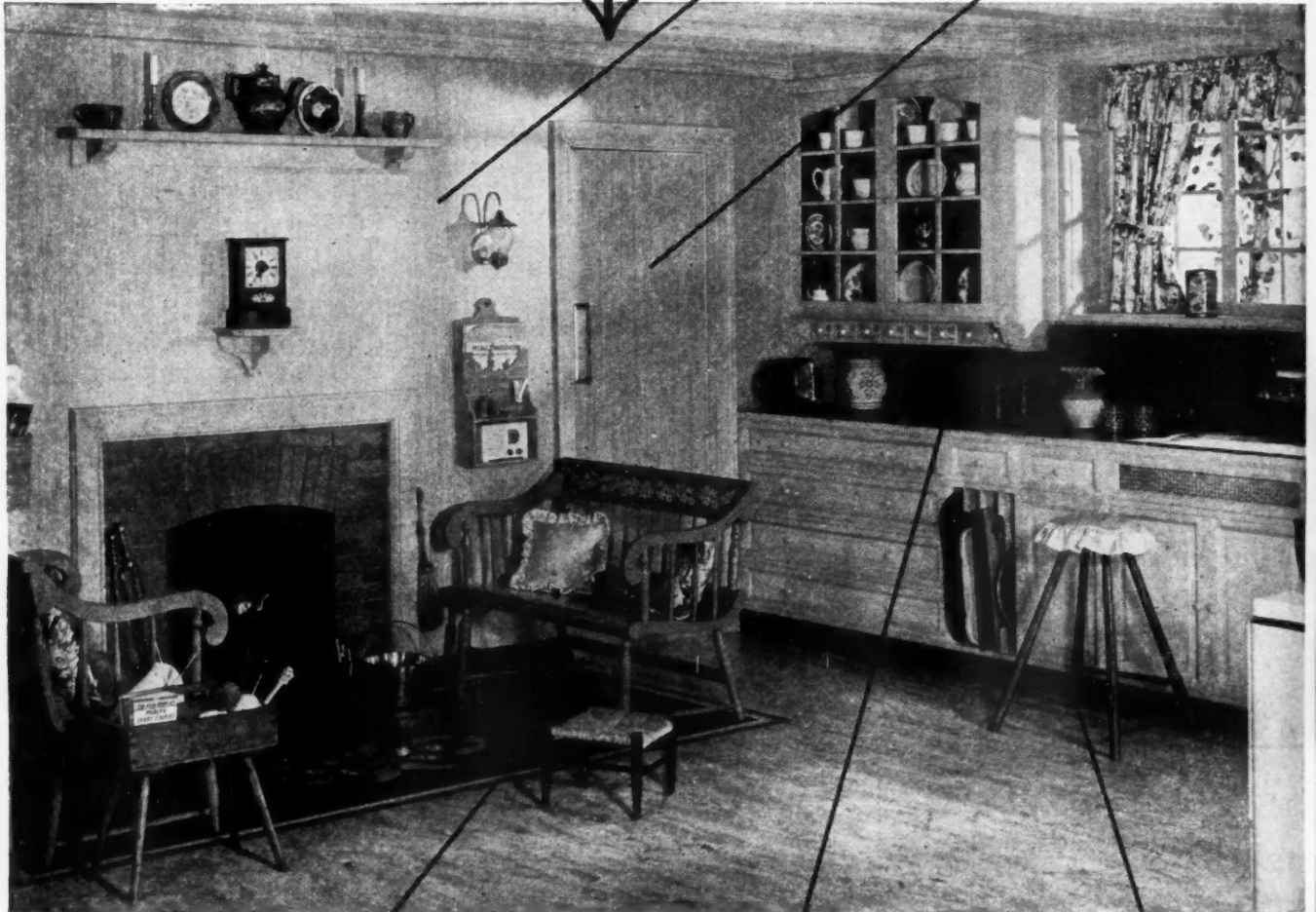
Manufacturers of Building and Industrial Products Since 1901

GYPSUM • LIME • STEEL • INSULATION • ROOFING • PAINT

Rooms like this turn prospects into owners

Beautifully blended colors of Nairn Wall Linoleum provide a permanent finish lasting as long as the house itself.

Doors and door mouldings of matching or contrasting Nairn Wall Linoleum reflect the modern trend and are so easy to keep clean.



Resilient, quiet Nairn inlaid floors are satin-smooth, requiring minimum of care. May be personalized with contrasting color strips, borders and insets to suit every taste.

Homemakers demand these quiet, resilient countertops and splash backs provided by Nairn Linoleum . . . colorful and stain resistant too.

Recessed base of Nairn Linoleum in harmonizing shade adds attractiveness as well as serviceability. Base may be coved, if desired.

Make your postwar houses sell on sight by including the many "wanted" features of Nairn floors and walls. Installed by expert craftsmen the country over, they speed the construction and permit immediate occupancy upon completion. And remember, when installed in accordance with our specifications, Nairn floors and walls are fully guaranteed.



Kearny plant recently awarded renewal star for Army-Navy "E" for continued fine record in the production of war equipment. Dig deep... buy WAR STAMPS and BONDS regularly.

CONGOLEUM-NAIRN INC.

MAKERS OF GOLD SEAL CONGOLEUM AND NAIRN INLAID LINOLEUM
KEARNY, N. J.

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Fenestra
the right window
for EVERY room
in the house

For example: TYPE 2313-K OVER THE KITCHEN SINK

Women will want their postwar kitchens cheerful and sunny—with larger glass areas made possible by the narrower, neat frames and muntins of steel windows; better ventilation—with windows that deflect passing breezes into the room; easy opening—of windows that always open with a finger's touch because they don't warp or bind.

These and many other Fenestra advantages, some of which are shown at the right, are good reasons why Fenestra Windows can be powerful sales builders in your postwar homes.

For over the kitchen sink, we recom-

mend Fenestra Type 2313-K. It fits neatly into this space with normal 6'8" header height. Fenestra's postwar line has been designed so you can provide a right window for every room in the house.

This postwar line will be simplified, making steel windows easier to use and easier to get. Write us for full information on postwar types and sizes. Fenestra Windows are not being made right now, for we are busy on war work. But we believe you'll find this information helpful in planning your postwar houses.

DETROIT STEEL PRODUCTS COMPANY
Now Chiefly Engaged in War Goods Manufacture
Dept. AB-6 • 2260 East Grand Blvd. • Detroit 11, Mich.
Pacific Coast Plant, Oakland, California

SATISFY CUSTOMERS WITH THESE FENESTRA ADVANTAGES



EASY OPENING—NEVER WARP OR BIND



MORE DAYLIGHT—LARGER GLASS AREAS



BETTER VENTILATION—CATCH THE BREEZES



SAFE WASHING—FROM THE INSIDE



SCREENED IN A JIFFY—SAFELY



LOWER COST STORM SASH

Fenestra SUGGESTS



START POSTWAR HOUSE PLANS NOW

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

NATIONALLY ADVERTISED! Full page advertisements, in color, feature Weldwood Plywood in Better Homes and Gardens, American Home, House Beautiful.



Beautiful!

15,206 inquiries in one month from the first advertisement!

If you've had any doubt as to whether your customers want plywood-paneled walls—dispel it now.

They do!

Over 15,000 persons have asked for information *the first month* Weldwood Plywood Paneling was advertised!

And that advertisement was only a starter!

Available for your post-war use at little more over-all cost than plastering, walls of Weldwood Plywood Paneling will bring sales-stimulating beauty to homes in every price range.

In genuine walnut, mahogany, Weldtex, knotty pine, oak, gum and other fine hardwoods, these gorgeously grained 4' x 8' x 1/4" panels, (factory-finished if you like) are eminently prac-

tical. They're crack-proof and guaranteed for the life of the building.

Weldwood Plywood Panels provide all the advantages of dri-wall construction.

No intricate installation; they go right on furring strips attached to studding...

No "plaster damp" to cause cracks and warping...

No 3 to 6 weeks' delay while moisture dries from walls...

No waste of materials.

And for those walls and ceilings that are to be covered with paper or paint, sturdy, inexpensive Weldwood Utility Panels with their extra-heavy gum faces will provide an ideal under-surface.

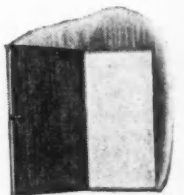
Forever smooth, they do not develop raised grain-lines to show through wall

paper or paint. A quarter-inch in thickness, they will be available in convenient 6' x 4', 7' x 4' and 8' x 4' size panels. (Grain runs short way.)

Write for complete information on Weldwood Plywood and Weldwood Products today.

The Mengel Grid Core Flush Door

... light, strong, beautiful and free from troublesome warping and cracking!



Plastics and Wood Welded for Good

Waterproof Weldwood, so marked, is bonded with phenol formaldehyde synthetic resin. Other types of water-resistant Weldwood are manufactured with extended urea resins and other approved bonding agents. Back of these Weldwood Products are unmatched facilities and experience in Plywood production and fabrication. Available also are the services of qualified engineers, chemists and wood technologists.

WELDWOOD Plywood

Weldwood Plywood and Plywood Products are manufactured and marketed by

THE MENGEL COMPANY, Louisville, Ky. . . . UNITED STATES PLYWOOD CORPORATION, New York, N. Y. Distributing Units in Boston, Brooklyn, Chicago, Cincinnati, Cleveland, Detroit, High Point, Los Angeles, Louisville, Newark, New York, Oakland, Philadelphia, Rochester, San Francisco, Seattle...Send inquiries to nearest point.

This est o fighti it . . . It cut is the Fiber greas This s on the need Avail for \$28 busine now's

DeWAL 4803 Fo Please s Name Address City

Here's the New **DE WALT** PORTABLE BUILDERS' SAW

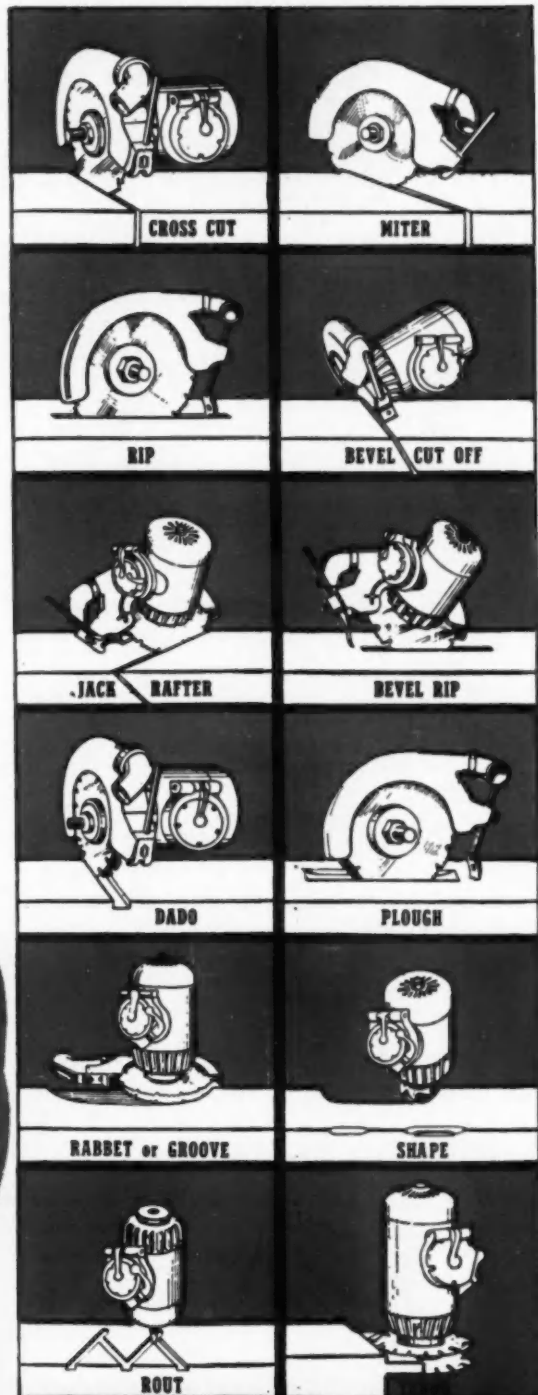
to pre-cut houses...on the job!

This portable DeWalt has already proved itself under the toughest operating conditions . . . cutting all kinds of lumber . . . on fighting fronts all over the world. You've never seen a saw like it . . . it's perfect for builders . . . war-time or peace-time.

It cuts fast, accurately and safely. One of its many new features is the DeWalt-built direct drive motor that's wound with Formex Fiberglas insulation (at no extra cost to you) and furnished with grease sealed for life ball bearings that require no lubrication.

This saw has the full cutting capacity you need to pre-cut houses on the job. It also has the flexibility to cut out the mill work you need without mill costs. It's a complete shop in itself.

Available in three sizes . . . 1 1/2 HP only \$248; 2 HP for \$280; 3 HP for \$285 f.o.b. factory. If you are planning to stay in the building business and want to capitalize on the post-war building market, now's the time to "cut out" the coupon and get the facts.

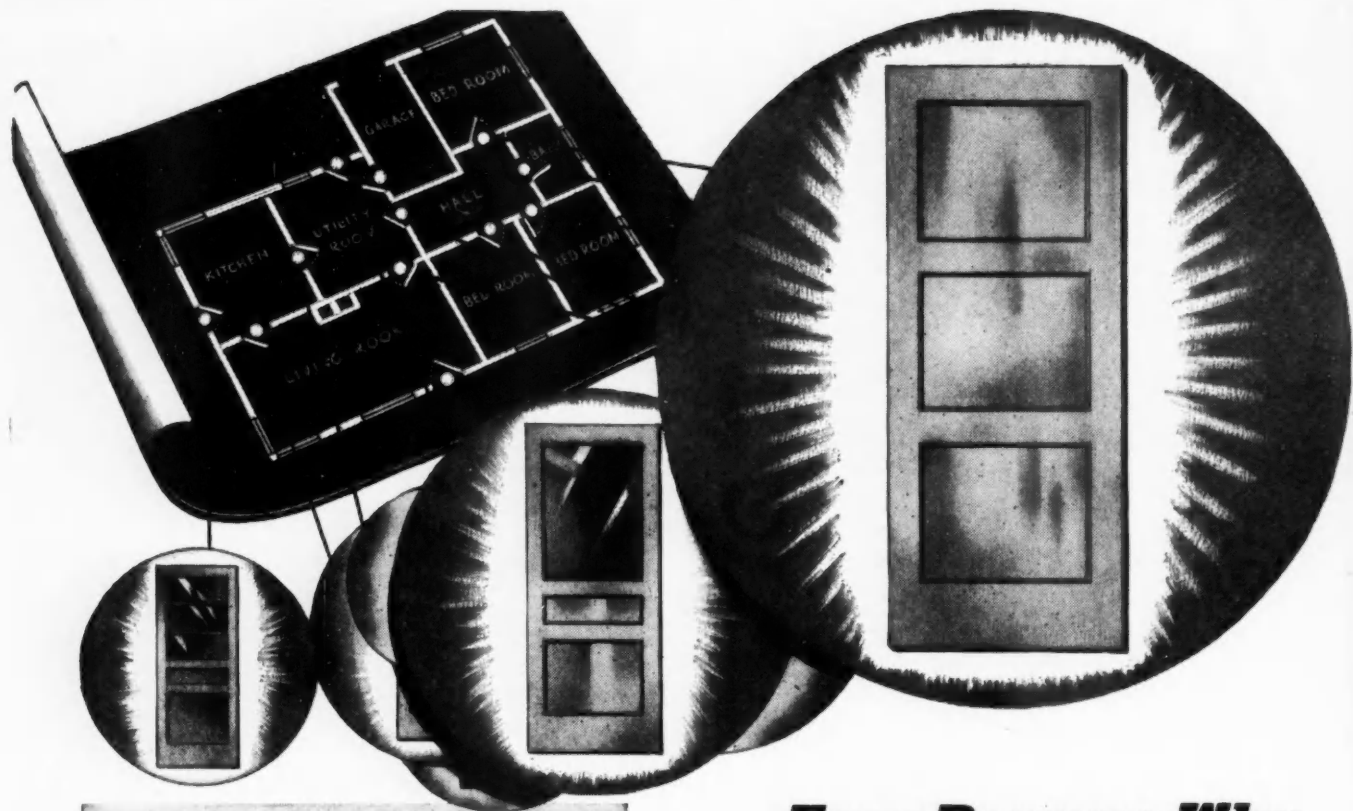


DeWALT PRODUCTS CORPORATION
4803 Fountain Avenue, Lancaster, Penna.

Please send me Portable Builder's Saw Folder, Pre-Cutting Manual for Contractors.

Name _____
Address _____
City _____ State _____

DE WALT
*Makes Every Cut Possible
With a Circular Saw*



FACTRI-FIT

A NEW LINE OF DOUGLAS FIR INTERIOR DOORS OFFERING THESE ADVANTAGES:

- 1—Every door is grade-marked—easy to order, specify and supply. Ends all guess-work and confusion.
- 2—FACTRI-FIT doors are pre-fit, trimmed ready to hang. Slow, laborious trimming and fitting are eliminated.
- 3—FACTRI-FIT doors are scuff-stripped too, for protection in handling and shipping. Added assurance that every door will reach the job **READY TO HANG.**

FACTRI-FIT doors may be ordered completely machined at the mill—gained and mortised or bored by high speed precision tools. Savings on the job more than offset the slight added cost of FACTRI-FIT features.



*Now available only for war needs and other essential building.

FIR DOOR INSTITUTE
Tacoma Building
Tacoma 2, Washington

FIR DOOR INSTITUTE
Tacoma 2, Washington

Four Reasons Why New, Improved DOUGLAS FIR DOORS*

will help you increase your profitable building jobs.

- 1 Douglas Fir interior doors are now offered in a new FACTRI-FIT line (in addition to the regular line). FACTRI-FIT doors are pre-fit at the mill—trimmed, ready to hang. With a FACTRI-FIT door, there's no planning, sawing or trimming necessary on the job.
- 2 Douglas Fir interior doors are featured in modern 3-panel layouts—basic designs adaptable to every style of home and all types of building.
- 3 Even when you order FACTRI-FIT doors completely machined at the mill the cost is surprisingly low. The savings you'll make in time and labor will more than offset the slight extra charge made for FACTRI-FIT features.
- 4 Manufactured of structurally strong Douglas fir—the naturally DURABLE wood—these doors assure long-time service and complete owner satisfaction.

Learn more about these all-purpose doors. Write for catalog showing the complete series of Douglas Fir interior doors, TRU-FIT entrance doors, and new speciality items.

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There's Nothing Finer than

SKILSAW!

IT WAS FIRST IN 1923



Photograph of the first SKILSAW...the ORIGINAL portable electric saw.

AND IT'S THE BEST IN 1944!



More SKILSAWS are in use today than the total of all other makes of portable electric saws!

● It's no wonder that SKILSAW is the most popular saw among contractors everywhere. SKILSAW is better built, more efficient, more dependable. Every SKILSAW made is the product of constant effort to improve everything that goes into it—materials, craftsmanship and design.

Ever since 1923, SKILSAW has helped contractors do a better job of building. Before the War, SKILSAW speeded the construction of thousands of homes, industrial plants and factories. Since Pearl Harbor, SKILSAW has helped build vital war plants, barracks, air-dromes, war housing projects, even faster.

SKILSAW is the most valuable time-saving and labor-saving tool you can have! It makes every cut in con-

struction quicker . . . makes every worker count for more! Ask your distributor to demonstrate SKILSAW today!

★ ★ ★

Look to SKILSAW for continued leadership! When private building returns . . . new, lighter weight and more efficient SKILSAWS will be ready to speed up all of your sawing . . . to make more profit for you on every construction job.



SKILSAW, INC.

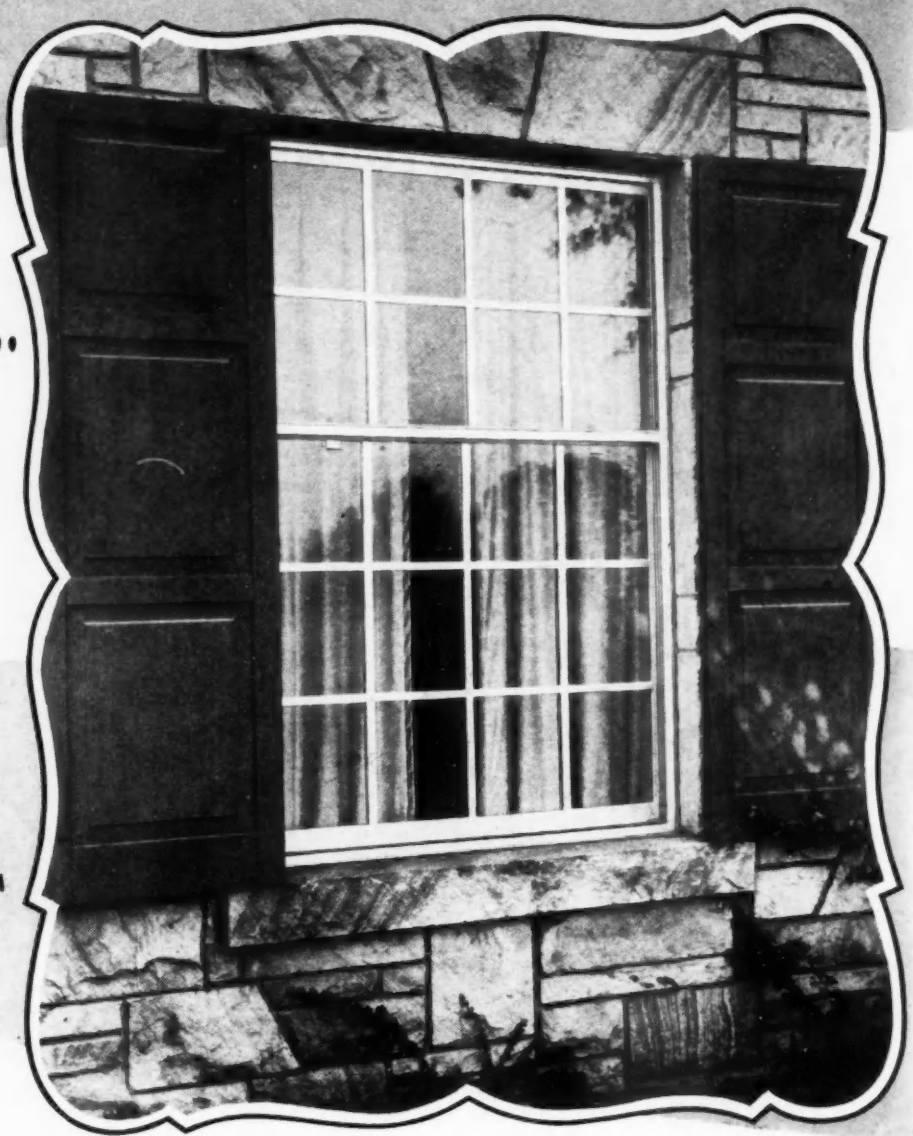
5033 Elston Ave., Chicago 30, Ill.

Sales and Service Branches in All Principal Cities



Windows...
*that simplify
 extraordinary
 construction*

**ADLAKE ALUMINUM
 WINDOW WITH STORM
 SASH IN PLACE**



It is one thing to accomplish the extraordinary at extraordinary cost. It is something entirely different to achieve it *without* extraordinary construction cost.

Therein is the *big advantage* offered you by ADLAKE Non-ferrous Windows. They simplify construction. They permit the achievement of outstanding beauty with *simplified* construction.



THE ADAMS & WESTLAKE COMPANY

ESTABLISHED IN 1857

ELKHART, INDIANA

NEW YORK · CHICAGO

MANUFACTURERS OF ADLAKE NON-FERROUS METAL WINDOWS

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BRIEFLY TOLD:

marine in the South Pacific writes—"I like your factory Home. Tell D. Allen Wright I want him to plan a home for me after the war with Timken heating equipment."

★

Garden club cast a vote thanks for Cameron Clark's timely suggestion of a Garden-Hobby Room featured in the March TSA in Life magazine.

★

More than 49,000 people wrote in for the TSA free booklet containing a description of the Suburban Home. Requests are still coming in for data on this home which was featured in TSA's last fall's advertising.

★

Inclusive evidence that Timken advertising is being read and acted upon favorably.

★

Present plans, now under steam at the factory, call for an even more complete line and greater flexibility of equipment in the postwar era than ever before in TSA history. Look for a wide range of sizes and types of heating equipment for every heat-need in the home field. Plans will include many sizes of heating equipment for new small homes.

★

Plant reports continue to come in to the factory complimenting us on the outstanding economy of Timken units under fuel rationing. This data will be carefully compiled for use when peacetime manufacturing is resumed.

★

Write for a free copy of our new Recreation-Room booklet. Contains designs by outstanding architects which shows how postwar homes will be heated with Timken equipment.



Whether it be the competition at a Dog Show or in the field of business, class will always tell.

In the oil heat industry, year after year, Timken Silent Automatic has been the outstanding franchise.

Because Timken has led in product performance, user satisfaction, volume of profitable sales, dealer profits, advertising and sales promotion, sales and service training and financial stability, the Timken franchise has meant more to dealers than any other franchise in the industry.

Many dealers today are at the crossroads of their business careers. They can continue with a line which does not possess the qualifications to be a leader; or, they can turn to Timken and be in a position to lead in their communities as Timken Silent Automatic leads nationally.

Right now is the time to lay your foundation for future success. We're making plans now for the busy postwar years. Write in and see how our plans will benefit you. There is no obligation.

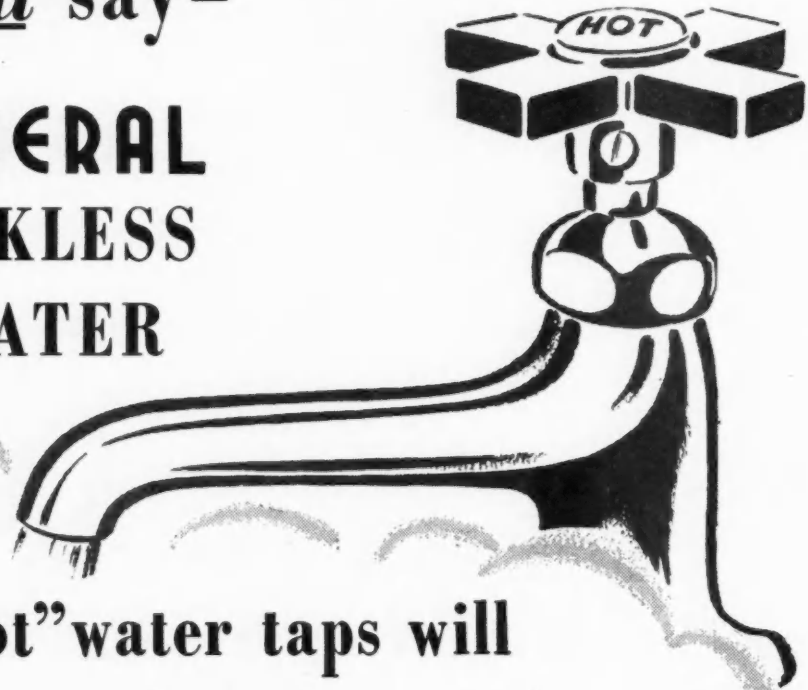
TIMKEN *Silent Automatic*

Quality Home Appliances — for Comfort, Convenience and Economy

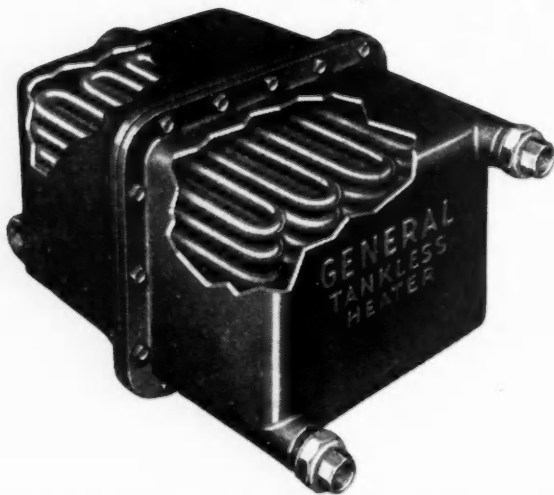
Division of THE TIMKEN-DETROIT AXLE COMPANY, Detroit 32, Michigan



When you say—
**GENERAL
 TANKLESS
 HEATER**



...“Hot” water taps will
 mean what they say!



(UNTIL VICTORY — a major part of our production is precision war work ... torpedo and bomb parts, fuse setters, special Navy water heaters.)

Constant hot water from morning tub to evening “dishes” ... sparkling clear, sediment-free water from seamless copper tubing ... that’s what you can offer your clients when you specify — or recommend — the new *GENERAL* Tankless Heater!

Compact, self-contained *GENERAL* Tankless Heaters hook up directly with any type of automatically fired boiler. They cost less to install and take less space than storage tank systems ... yet supply 3½ to 35 gallons of piping hot water every minute!

Plan your “homes of tomorrow” to provide “unlimited” hot water the modern, money-saving way ... with *GENERAL* Tankless Heaters. Write for complete Catalog 15. General Fittings Company, Department F, 123 Georgia Avenue, Providence 5, Rhode Island.

GENERAL

TANKLESS WATER HEATERS

- Also Tank-Type Water Heaters • Thermostatic Mixing Valves
- Water-hammer Silencers • Coil-heated Tanks
- Live-Steam Heaters • Pipe Unions

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Where was Mary when the lights went out?

THIS month we bring you another touching episode in the history of the Bjones family—who built a dream home, only to have it turn into a nightmare.

Upstairs, Mr. Bjones is entertaining (?) his boss—trying to make light conversation in a house as dark and dismal as Schickelgruber's future.

And where is Mary Bjones? Alas, she's down in the cellar fussing and fumbling with fuses—wondering why life is just one darn fuse after another!

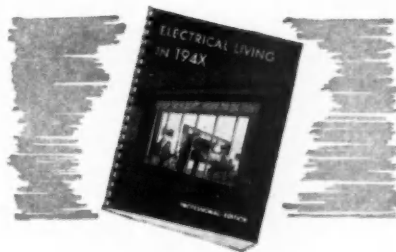
There are three reasons for the trials and tribulations of Mr. and Mrs. B . . .

First—their home was *inadequately wired* to carry the electrical loads imposed by modern lighting and electrical appliances.

Second—their home was not equipped with *modern circuit protection*—they could not restore electric service, at the flip of a switch, after the trouble was corrected.

Third—their home did not have modern circuit protection—*conveniently located*—they had to go to the "hard to get to" protective device in the cellar.

We have prepared a new book—"Electrical Living in 194X"—that will help you explain the urgent need for better wiring and modern protection to present and future home owners.



"Electrical Living in 194X" tells all about increased electrical loads in future homes—modern circuit protection—lighting and lighting controls—entrance equipment and distribution panels.

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

BETTER HOMES DEPARTMENT Six Point Advisory Service

. . . offers free technical advice on the selection, application, and arrangement of fixed electrical equipment in 194X homes—dimensions and clearances, for proper installation and easy access for servicing—placing of lighting outlets and controls—location and size of wiring, water supply, and drainage lines.

Send your electrical problems to the Westinghouse Better Homes Department. Our housing specialists will give you authoritative information, promptly.

Westinghouse

Plants in 25 Cities Offices Everywhere

WESTINGHOUSE PRESENTS John Charles Thomas, Sunday, 2:30 p.m., E.W.T., NBC. "Top of the Evening", Monday, Wednesday, Friday, 10:15 p.m., E.W.T., Blue Network



FARMERS IN THIS COUNTY ARE PLENTY SMART - THERE'S ANOTHER CERTAIN-TEED ROOF!

COUNTRY GENTLEMAN

(Continued from Page 34)
 before. This has a practical significance right now: it simply means that it is the smart thing to let the new pullets stay on range as long as good weather permits.

In other words, take your time about housing your pullets - that is, if they are in early as in previous years. If it is not possible to give the new layers access to a green range, see to it that some form of greens is provided for them. If grass silage is available, feed it at the rate of 3 to 5 pounds per 100 birds per day. Legume or mixed hay may be fed up to 10 per cent as leaves will result in savings in feed. This is the important thing right now and for the months to come.

RALSTON K. HANNAH

MORE GRAIN AND MORE PULLETS.
 The average Southern farm flock of hens, now receiving about 25 pounds of grain a bird, needs to receive more grain and needs more good pullets and fowls.

These facts were revealed in a three-year study by D. F. King, Alabama Polytechnic Institute, of 70 typical flocks in Lee County, Alabama. The hens were getting only 11 pounds of grain a year laid 80 eggs a year, an increase of 68 eggs from 26. King also found that half of the flocks should be pullets. The pullets made up of 50 per cent of the flock did each hen in flocks of 200 or more, an average of almost 100 eggs a year laid in the September period when egg prices are high.

Are There "Gr...

they get two-way protection!

means added protection against spontaneous combustion! Yet Certain-teed shingles are not expensive... and they are made by a special process... they are saturated with weather-resistant asphalt... coated with mineral granules... important that spruce up even an old building!

HANDBOOK FOR FARMERS

CERTAIN-

"Say! THIS Ad Is on the Beam!"

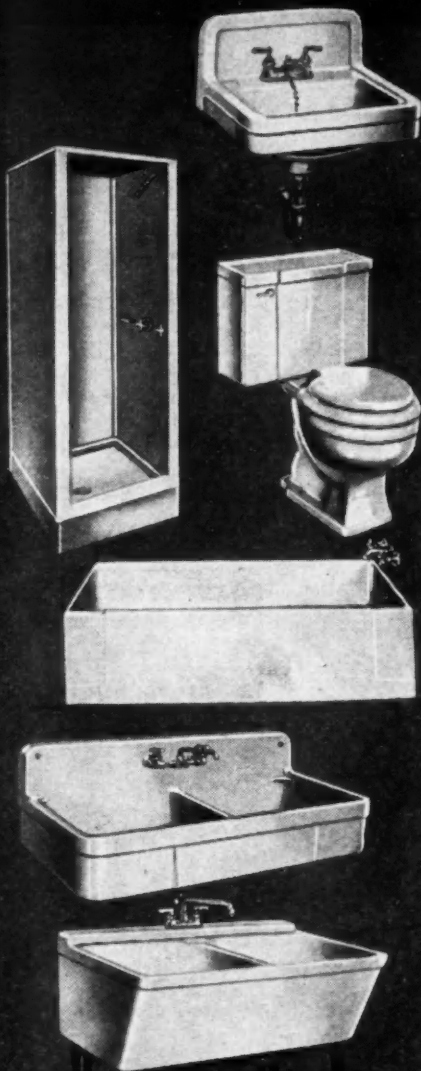
... "With farmers making more money than ever before, and catching up on repairs they've needed for years, this ad makes sense! The farm market is our best bet and this ad sure does sell 'em on re-roofing with Certain-teed now!"

CERTAIN-TEED BUILDING PRODUCTS

120 S. LaSalle Street, Chicago 3, Ill.

C
NATION.

plumbing for today... plumbing for tomorrow



The fixtures shown here are available for today's construction needs

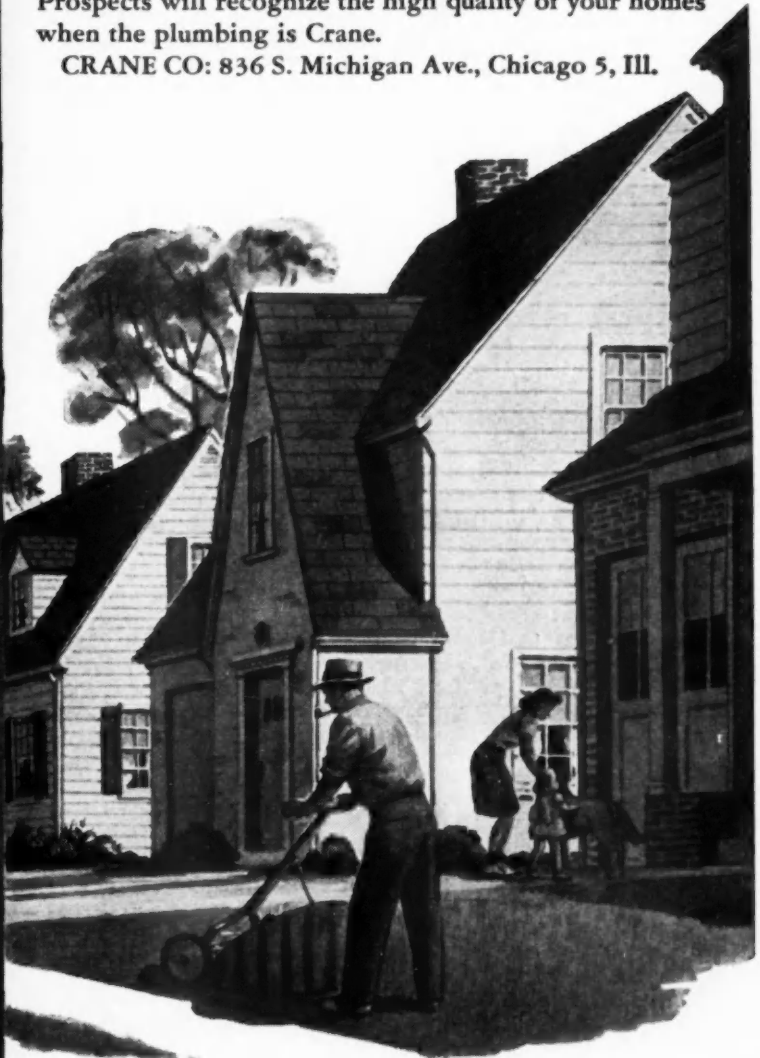
For the homes you are building today, Crane has developed a line of high quality fixtures made largely of non-critical materials. It includes bathtubs, sinks, water closets, lavatories and laundry trays.

For homes you are planning for tomorrow, the Crane postwar line will include new plumbing fixtures designed to suit the taste of tomorrow's home owners. Already these fixtures are past the planning stage and will be in production as soon as war conditions permit their manufacture.

Right now, through colorful national advertising, Crane is helping stimulate a desire for postwar homes. Your customers are being urged to start their planning today for their future home. An attractive portfolio filled with suggestions for bathrooms and kitchens is being sent to thousands of these home owners of tomorrow.

Be sure to include modern Crane plumbing fixtures in the bathrooms and kitchens of the homes you are planning. Prospects will recognize the high quality of your homes when the plumbing is Crane.

CRANE CO: 836 S. Michigan Ave., Chicago 5, Ill.



CRANE

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

CRANE CO., GENERAL OFFICES:
836 S. MICHIGAN AVE., CHICAGO 5

VALVES • FITTINGS • PIPE
PLUMBING • HEATING • PUMPS

News, Views
and Comments

On and Off the Record

by **STRUCTOR**

DEMOUNTABLES — Behind the Washington scene considerable jockeying is going on as to who will control the disposition of tens of thousands of demountable houses built during the war. The Federal Public Housing Agency would like to control them. Private building interests would prefer to see the Army, or almost any other agency, have them. If dumped on the market these houses could be very disrupting. Many feel it would be better to ship them abroad for temporary use by war refugees and the homeless who are returning to bombed-out communities.

Trailers also present a problem. Tens of thousands of these are now owned by Uncle Sam. They would make good tourist centers, but trailer manufacturers would hate to see their postwar market flooded in this fashion.

U. S. STEEL INTO PREFABS—

Purchase of stock of the Gunnison Prefab Housing Corp. by U. S. Steel is big news, and has resulted in a renewed outburst of speculation on postwar prefabrication. Gunnison's entire system was built around the use of *plywood*, which makes the picture all the more confusing. Foster Gunnison has been a colorful figure from the early prefab days, with numerous ups and downs, many false starts, and it must be admitted, a sound layer of real achievement. What will happen with U. S. Steel in the prefabrication picture, time alone will tell.

HOUSERS—Public housers from all over the country gathered in Chicago last month for a three-day session of the National Association of Housing Officials. The size of the convention and the extensiveness of the program indicate a well-organized set up. I was impressed by one item on the program entitled, "Committee Meeting on Retirement Plans for Local Authority Employee." Indicates long-range planning all right!

Another intriguing item on the housers' program on May 3 was the following: "4 P.M.: Off-the-record session for commissioners and executive directors of local housing authorities, with John B. Blandford,

Jr., Administrator NHA." Why all the hush-hush?

BUILDERS PREPARED—I made a whirlwind tour of San Antonio's war and pre-war homes recently with Ralph L. Eiser, local FHA underwriter, as guide. Local builders and the FHA have done a fine job. Before the war an extremely attractive type of modern Colonial with a southwestern flavor was developing. I think this style will go far after the war.

As we passed many attractive future home sites I learned that San Antonio builders have already had their subdivisions laid out and approved by FHA. These builders are also employing good architects to prepare fully detailed and complete plans for their postwar houses.

Thus when the green light is given they will be ready to start—and there is a big market for medium-priced, well-designed, well-equipped houses in San Antonio as elsewhere.

TOO MANY SMALL HOMES—In Dallas, FHA men and local builders feel that there is being built up an oversupply of cheap, small homes. Not an oversupply under present conditions, but a possible oversupply in postwar. At least they feel that there will not be a big market for similar small, low-cost homes, nor will there be a need. The thousands of Title VI war homes have taken care of this market for a long time to come. They say the low-cost market is "saturated."

On the other hand, everyone in Dallas agrees that there is a tremendous need and there will be a tremendous demand for houses in the middle-price bracket—that is, \$5,000 to \$10,000. It is in this price range that Dallas builders see a great postwar expansion.

LIKE SMALL TOWN—A recent survey among war workers who moved to small towns from big cities shows that 23 per cent like the small towns so well they plan to stay there. As reasons they listed that they were: "Tired of spending all our earnings on city rent," "Cities too crowded," "Children get a better break in the small town," "Too much rush and bustle in the city," "Cheaper living in the small town."

It makes you wonder what the

future of our big city is. Hardly anyone except the Presidents of the Chambers of Commerce will admit anything good about big city living. Every indication is that the mass of the public want to get out into the suburbs or further out into the small towns or rural areas. That is where the bulk of the individual home building will be done.

As for the rotten cores of the cities, eventually the nation will have to face the problem of whether it will spend huge sums of money to rebuild them—which would be a very expensive operation and of doubtful value—or whether it will tear them down and turn them into parks. Then if any subsidies are needed, provide the subsidies in a way that will enable people who live in those areas to own a home of their own in the country.

MEXICO'S BLACK MARKET—

The story is told around Mexico that one of the sources of American building materials and equipment down there is the minor Mexican government official. It seems that it is possible for Mexican government departments to get priorities to enable them to secure materials for certain projects. However, once the materials have been delivered, it is possible for the Mexicans to cancel the project. The materials are supposed to be returned, but somehow they aren't, and the result is that a large number of pesos change hands and the materials find their way into private structures—usually at very fancy prices.

SOFT WOOD MADE HARD—

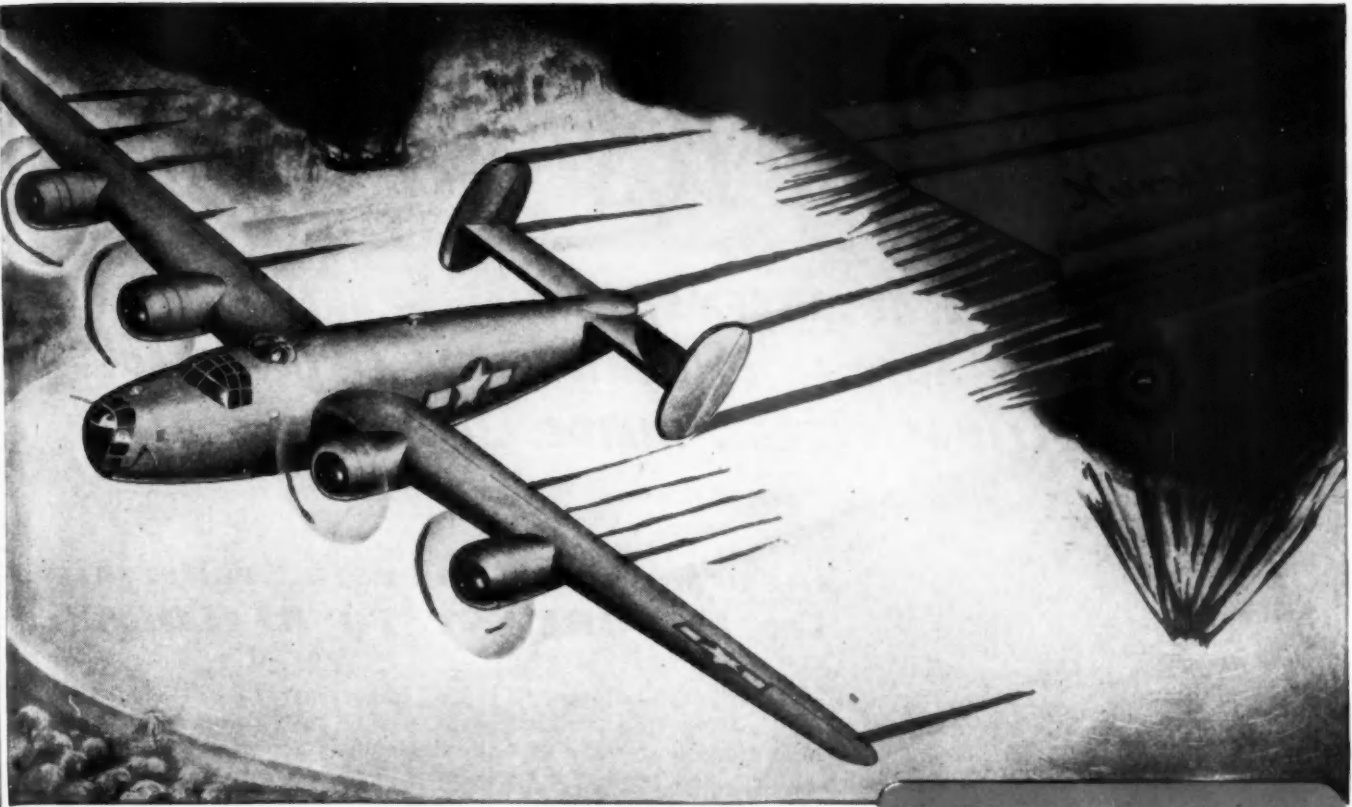
One of the latest developments in wood treatment is a du Pont discovery which makes soft wood hard, and does many startling things to it. Methylolurea mixed with dyes is forced by pressure into the wood. A product like pine takes on the hue of cherry; other woods become extremely hard. Swelling, sticking and warping is eliminated. It should have a big future in the building field.

FHA HOME COST—FHA statisticians have analyzed some 700,000 pre-war Title II FHA mortgage loans to show some striking figures on the incomes of these home buyers.

Income of 65 per cent of the purchasers averaged under \$2500; 30 per cent were below \$2,000, and about 10 per cent, or 70,000 purchasers, had an income of less than \$1500.

Thus the fact is established that FHA was doing a job for the lower income worker. More than half of the 700,000 homes were valued at less than \$5,000.

Land cost averaged 10 per cent of the total property value. The average gross monthly payments, including amortization, interest, taxes and insurance, were about \$33 a month.



There goes your *NuMetal* weatherstrip!

BERLIN bombed! Tokio raided! When you read headlines like these, remember this. The NUMETAL Weatherstrip you haven't had is flying high these days! It's flying wherever our boys fly, because the men and machines who once made America's finest weatherstrip are making vital parts for Uncle Sam's planes.

But the War won't last forever. Some day, the Japs and Nazis will get enough, and when that day comes, the Macklanburg-Duncan Co. will again lead the way in bringing you new and better products.

In the meantime, we are doing our best to serve you as well as Uncle Sam. We are manufacturing the limited number of items allowed under present conditions. We're dividing them as fairly as possible among our dealers. But more important still, we're planning for the postwar days ahead. And you *hardware* and *lumber dealers* are an important part of those plans. You stick with us . . . and we'll stick with you!

These items still available . . .



Nu-CALK
CALKING & GLAZING
COMPOUND—will not
dry out, run, crack,
harden or pull away.

Nu-Glaze
GLAZING COMPOUND

Does not dry out, crack
or peel. Not oily. Clean
to handle. Applied like
putty—but not putty.

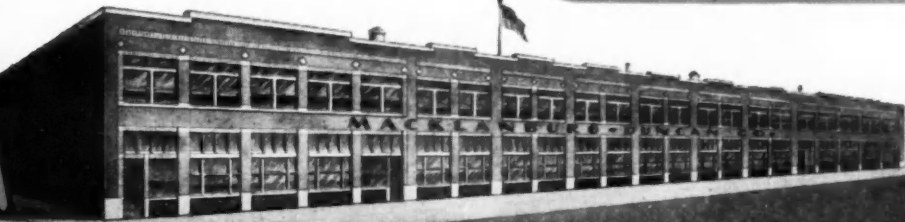


**VICTORY WOOD & FELT
WEATHERSTRIP**

An efficient, easy-to-install weatherstrip.
Made of high grade felt and wood.

MADUCO PLASTICS

Maduco Plastic Molding and Trim won
the National Plastic Award for 1941.



MACKLANBURG-DUNCAN CO.

Manufacturers of NUMETAL WEATHERSTRIP • NU-CALK CALKING COMPOUND • NU-ART MOLDINGS AND EDGING
NU-GLAZE GLAZING COMPOUND • NU-WAY WEATHERSTRIP • NU-ART LETTERS AND NUMBERS

OKLAHOMA CITY 1, OKLAHOMA

How Coleman Is Making It Easier To Build More Salable Post-War Homes

**THESE COLEMAN ADVANCEMENTS GIVE PRACTICAL HELP!
— IN PROVIDING AUTOMATIC HEAT, MORE LIVING-SPACE —
"HOUSE-SELLING" EXTRAS, INSIDE LIMITED BUDGETS**



These Points Of Coleman Leadership Are IMPORTANT TO BUILDERS:

In 1941, Coleman led in sales of major warm-air home heating units. This leadership came from leadership in design and performance. Coleman's greater public acceptance will help sell Coleman Heat-Equipped homes. But more important, Coleman models will help you build homes with the "extras" people are going to demand.

For instance, the improved Coleman Floor Furnace, and the new compact central-plant designs, require no basement. If you design a basement as part of the house, it can be extra (and highly salable!) living space. Or, you can divert the money for excavation to "more upstairs."

Most important: These Coleman heat plants will be fully automatic, to meet the demands of an estimated 80% new-home prospects. Yet, with their low price and low fuel cost, homes in the low-price field can afford this luxury.

Learn how Coleman can help you in planning and selling in the post-war market! Write for your copy of Coleman's booklet, now going out to thousands of your prospective customers: "The Inside Story of Tomorrow's Home Heating." Address Coleman Lamp & Stove Co., 2nd St. & St. Francis Ave., Wichita 1, Kansas.



COLEMAN FLOOR FURNACES. Sunk in the floor itself! Needs no basement. Improved principle for even heating; better warm-air circulation; warm floors. A practical, low-cost way to "area" heating; oil and gas models.



ADVANCED COMPACT CENTRAL PLANT. Occupies small space, yet delivers extremely large heat output. Gravity or blower types, oil and gas models. Goes anywhere in basement or on first floor.



THE "HOT" NAME IN HOME HEATING



THE COLEMAN LAMP AND STOVE COMPANY • WICHITA 1 • CHICAGO 11 • PHILADELPHIA 8 • LOS ANGELES 54

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WOOD...STUCCO...BRICK...
 whatever the outer surface, Tomorrow's
 Homes should be built with the Approved
 Insulite Wall of Protection

AS LONG as this country retains its freedom, there will be many types of homes. Some prefer wood. Others insist upon stucco. Still others may want field stone.

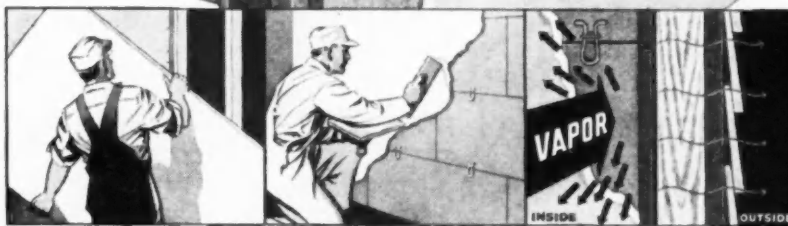
In the homes you build tomorrow—no matter the style, or the exterior finish—modern standards of heat control and of air-conditioning will place new demands upon walls.

Walls must provide effective insulation. They must also be constructed so as to reduce moisture condensation within the walls to a minimum. You agree to that, of course.

How to do it? By always specifying the Approved Insulite Wall of Protection. This wall provides:

Double Insulation . . . Superior Bracing Strength . . . Protection against moisture condensation within walls.

The drawings to the right explain why. Also consult Sweet's Architectural File, Section 10, or write today for technical information on the subject.



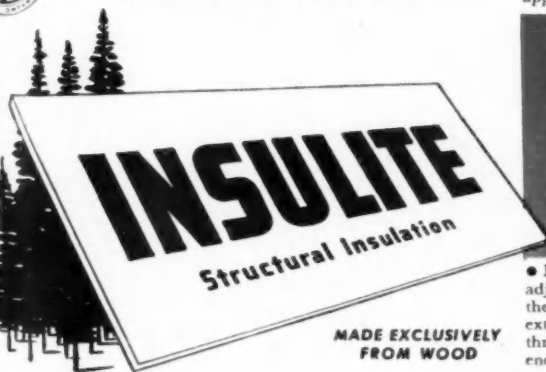
● On outer-walls, Insulite Bildrite Sheathing. The large boards provide a wind-proofed, weather-tight wall. Bildrite Sheathing has a bracing strength four times that of wood sheathing, horizontally applied.

● On inner-walls Insulite Sealed Lok-Joint Lath, furnishes a second wall of insulation. The patented "Lok-Joint" provides a strong, rigid plastering surface, prevents joints from opening under trowel pressure.

● How moisture condensation is effectively minimized in the Approved Insulite Wall of Protection. Sealed Lok-Joint Lath with asphalt barrier against the studs effectively retards vapor travel. Bildrite Sheathing, being permeable to vapor, permits what little vapor escapes to pass naturally towards the outside.



INSULITE
 [Division of Minnesota and Ontario Paper Company]
 MINNEAPOLIS 2, MINNESOTA



MADE EXCLUSIVELY FROM WOOD



● Nail top parts of the bracket securely to two adjoining studs. Place a 1" x 6" board under the lower extension of the bracket, the board to extend across at least two studs and to be nailed through the Bildrite to the studs. Nail lower end of the bracket to the 1" x 6".

● Do not wet lath before applying plaster. Use quick setting gypsum plaster, especially for first coat (two to three hours time to set). Three coat plastering, (scratch, brown and finish coats) is recommended for best results. Avoid over sanding or use of weak plaster.

Here's One
Builder's Supply Line
the War Hasn't Cut!



...Your use of Asbestos Sidings helps provide a critical war material!

Asbestos fibres are mined in a variety of lengths. Long fibre is critically needed for vital war products. But many tons of short fibre must be mined to obtain one ton of long.

Since asbestos sidings and shingles are the chief outlets for short fibres, the more of them that are used, the more war-essential long fibres can be mined.

Thus your sales and use of asbestos sidings benefits 2 very important partners!

YOU!

And UNCLE SAM!

YOU can put to work for your profit all the well-known advantages of asbestos fibre and Portland cement... which combine to make Flintkote sidings fireproof, rotproof, weatherproof, termite-proof... and ageproof besides!

And with Flintkote's wide variety of styles and finishes to choose from you can have wide freedom of design to remedy any "ailing house."

Besides, when you encourage the use of asbestos sidings for essential maintenance and repair, you contribute substantially to the war effort!

That's why WPB has given the green light to asbestos siding sales.

And for top-quality in these profit-packed building products, figure on Flintkote!

THE FLINTKOTE COMPANY

30 Rockefeller Plaza, New York 20, N. Y.

Atlanta - Boston - Chicago Heights - Detroit - East Rutherford - Los Angeles - New Orleans - West

Figure on FLINTKOTE for 'Forty-Four!



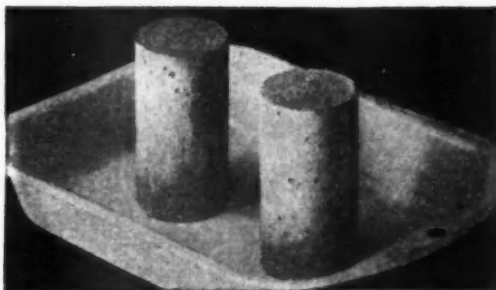
BRIXMENT Mortar

is More Durable

● 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.



These two photographs show a cylinder of Brixment mortar (left) and a cylinder 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, 1/4" of water was put into the tray and the cylinders were alternately frozen and thawed 15 times. Note that the Brixment mortar remains intact, whereas the other mortar has crumbled badly.

LOUISVILLE CEMENT COMPANY, Incorporated
 General Offices: Louisville 2, Kentucky
 Cement Manufacturers Since 1830

"A

FOR LITTLE MISS

Glamour Girl

OF TOMORROW...

Bath-time in postwar tomorrow will find a new flair in beauty...new smartness...in the styling of Chrome Bathroom Accessories by Gerity!

Gerity thinking right now is blueprinting Accessory designs for towel bars, soap dishes, tumbler holders, cabinets and similar items...to harmonize with tomorrow's decoration themes and colors...tomorrow's building trends...tomorrow's way of living...

Gerity Engineering will back this styling with *lifetime durability*...a mirror-finish Chrome that won't crack, peel, check, break off or tarnish! Start *right* in postwar Accessories for Bathrooms and Kitchens—get Gerity Chrome!

Gerity-Adrian Mfg. Corporation, Adrian, Michigan.

TOMORROW'S DREAM HOME WILL HAVE GERITY CHROME

Gerity
CHROME BATHROOM ACCESSORIES

"A MODERN SINK? I'd love one!"



✓ Keeping a mess kit clean in the steaming jungles is a good trick if you can do it. Of course, there's always grass . . . and you *may* have water . . . but a lot more is needed to remove the grease and get the "gadgets" really clean.

Many a Yank in the South Pacific has thought more than once of "that sink back home." And of American Bathtubs and other modern plumbing conveniences, found all too rarely in other parts of the world.

This awakened interest in modern plumbing will be reflected in millions of Postwar Homes. Bathrooms and kitchens will get more attention than ever; will be more carefully planned and even better equipped.

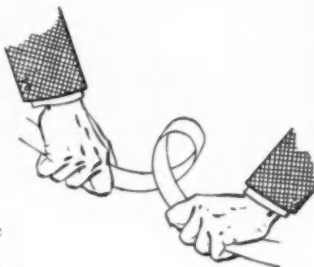
Porcelain-enamel-on-steel Plumbing Ware is a "natural" for the Postwar Market. Its handsome styling and lasting beauty will appeal strongly to buyers, as will its highly impact-resistant finish, so easy to keep clean. Its great strength with comparative lightness in weight will be another big selling feature, especially in prefabricated bathroom and kitchen units.

Today, the makers of this better plumbing equipment are engaged 100% in war production. When peace comes, however . . .

Look for important changes in the plumbing business . . . based on PORCELAIN FORMED METALWARE

TODAY'S *Porcelain Enamel*

Thinner coats and better bonding qualities make today's porcelain enamels more durable than ever. Without losing any of their beauty or wearing properties, they're now tougher . . . more resilient . . . more shockproof and impact resisting.



Tomorrow, as in the past, the finest porcelain - enamel - on - steel will be made with Ferro Frit, Clay and Colors . . . and in Ferro-built Porcelain Enameling Furnaces.

FERRO ENAMEL CORPORATION · CLEVELAND 5, OHIO

Douglas Fir Plywood Will Make Your Post-War Building Jobs Easier and More Profitable

PLAN NOW TO MAKE FULL USE OF PLYWOOD'S MANY ADVANTAGES



Many builders speed construction and cut costs by using plywood for concrete forms (assuring smooth concrete surfaces) . . . then reusing the panels for sub-flooring on the same building, or for concrete forms on other buildings.

★ Because of its many outstanding qualities, Douglas Fir Plywood today serves the war effort exclusively. When it is no longer so urgently needed it will again serve you—in countless new ways.

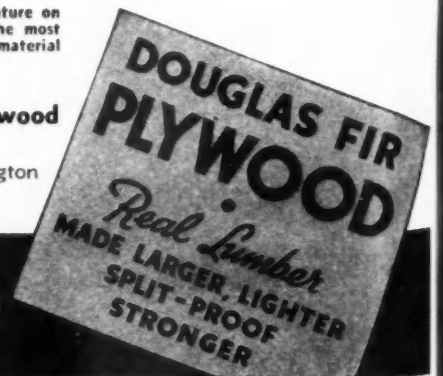
IN the coming post-war building market, build better houses faster and cut labor costs—with Douglas Fir Plywood.

There is a grade of Douglas Fir Plywood for every construction use—for concrete forms, sub-flooring, wall and roof sheathing, interior walls and ceilings, built-ins and exterior finish.

Plywood adds great rigidity to walls, provides a smooth dust-proof sub-floor, is easy to finish attractively on both interiors and exteriors.

Write for detailed literature on Douglas Fir Plywood—the most versatile construction material you can use.

Douglas Fir Plywood Association
Tacoma 2, Washington



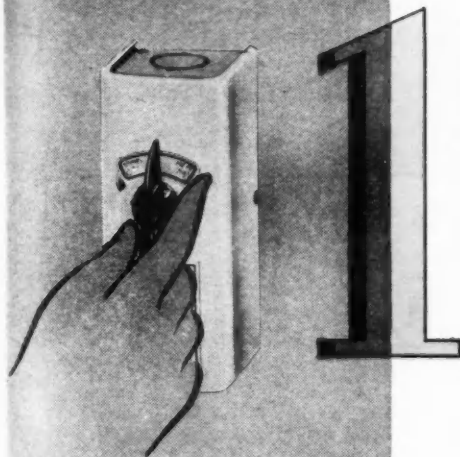
SPECIFY DOUGLAS FIR PLYWOOD BY THESE "GRADE TRADE-MARKS"

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2 Exclusive Mueller Heating Controls...



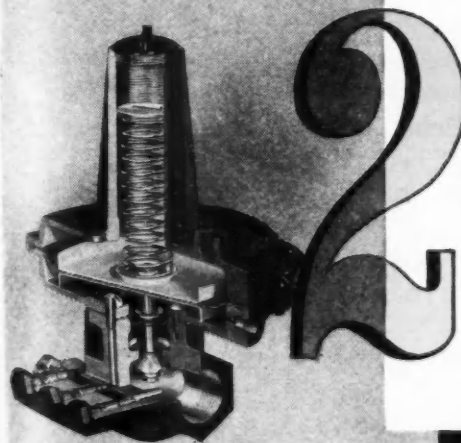
...that assure genuine **INDOOR COMFORT**
and greater heating satisfaction in your
post-war homes



1

The Mueller Season-stat—this exclusive control keeps any Mueller automatic heating plant in step with the weather.

The Season-stat shuts off the gas valve or oil burner, or operates the damper motor on a coal-fired unit, in accordance with the plenum temperature which is determined by the setting of the pointer on the Season-stat. The attractive instrument may be located on the wall of any first-floor room. Thus, long periods of air circulation are attained under any outdoor temperature conditions. In mild weather, air is delivered at a relatively low temperature with the *continuous movement* essential to comfort and health.



2

The Mueller Levelizer — an exclusive Mueller gas-heating control—regulates the gas flame up-and-down instead of on-and-off. The Levelizer automatically provides continuous heat in varying quantities, as needed. Thus the operation of the heating plant matches the weather.

Include Mueller heating equipment in your post-war plans. Write for bulletins on these and other features of the complete, nationally-known, nationally-advertised Mueller line. *L. J. Mueller Furnace Company, 2016 W. Oklahoma Avenue, Milwaukee 7, Wisconsin.*

B-17

MUELLER *Climatrol*

HEATING AND WINTER AIR CONDITIONING

No Need for "Out-of-Focus" Sound...



WITH SABINITE "M"

Similar to movies that get "out of focus"—sound gets "out of control" and becomes blurred by bouncing back and forth from walls and ceilings that do not absorb it. That's what we mean by out-of-focus sound.

There's no "rhyme or reason" for poor sound reception these days in theaters and auditoriums—no room for nerve-shattering noise in modern restaurants, offices and schools—all this became obsolete from the moment when Sabinite* "M" was first introduced.



ACOUSTICAL
PLASTER
FINISH

For Sabinite "M" is *more* than a plaster finish—it is an *acoustical* plaster finish that absorbs a high percentage of sound—it is light-reflecting—available in prepared colors or decorated to suit.

Being a plaster finish, Sabinite "M" becomes a part of the original plan—blends with the design and decoration—needs no special construction—may be applied by any good plaster craftsman. This is "Today's Quiet Way"—with Sabinite "M".

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

TODAY'S "QUIET" WAY

One material that decorates, protects against fire and quiets sound in one operation—Sabinite "M".



UNITED STATES GYPSUM
300 W. ADAMS ST., CHICAGO, ILL.

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

FIREPROOF GYPSUM

The World's most widely used Mineral for making Fireproof Wall and Ceiling Materials.

ELJER PLUMBING FIXTURES

... specially designed models for use in prisons

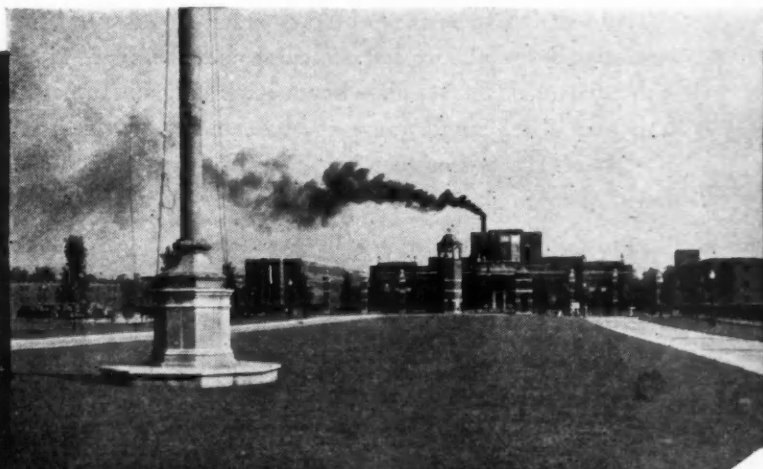
Plumbing installations in modern prisons call for many special fixtures. The designer or builder who goes after such work will find that a complete line of prison fixtures can be furnished by Eljer. We mention this as but one more example of Eljer's broad experience in

designing and building fixtures for all types of installations.

Write for our catalog and our free booklet on residential bathrooms, entitled, "Women Tell Us...". Also see our 8-page catalog in Sweet's.

ELJER CO., FORD CITY, PA.

Since 1907, manufacturers of fine plumbing fixtures



U. S. Penitentiary, Terre Haute, Indiana



Federal Correctional Institution, Ashland, Ky.



Both institutions are equipped with Eljer plumbing fixtures.



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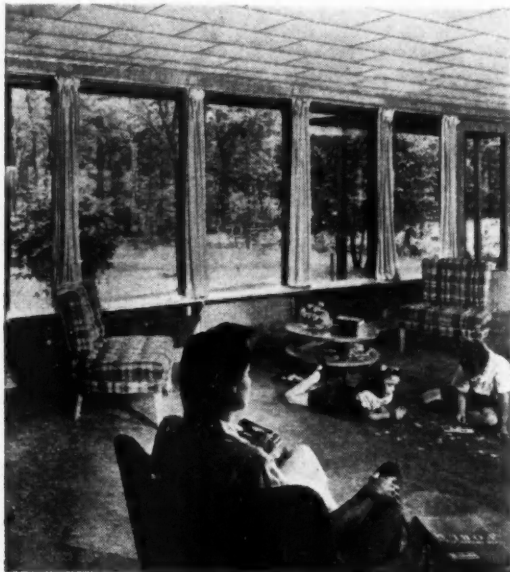
TILE

HERE IT IS!

THE NEW GLASS UNIT FOR WINDOW INSULATION

Thermopane

with the **BONDERMETIC SEAL**

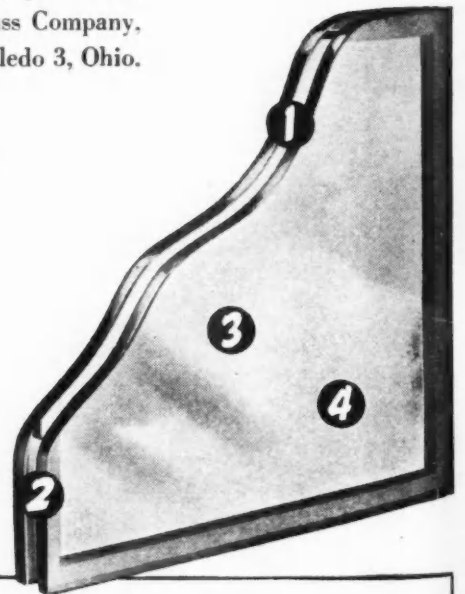


THERMOPANE is a revolutionary new and patented windowpane with permanent, built-in insulation. It is a factory-built transparent glass insulating unit for homes and other buildings . . . a development of Libbey-Owens-Ford Research that will accelerate the incorporation of larger windows and Daylight Engineering in the homes of tomorrow.

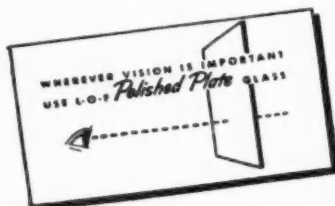
THERMOPANE is made of two panes of glass, separated by an insulating layer of air, and sealed around the edges at the factory with a patented metal-to-glass bond. It's installed in a modified single sash just like a single pane of glass, but it provides double-glass insulation. The homeowner has no extra glass to put up and take down, no extra glass to keep clean. The age-old cold weather problem of larger windows is now eliminated. For a descriptive booklet, just write to Libbey-Owens-Ford Glass Company, 1264 Nicholas Building, Toledo 3, Ohio.

4 IMPORTANT FEATURES OF THERMOPANE

- ① **INSULATING AIR SPACE.** The air inside the Thermopane units is scientifically cleaned, dried and hermetically sealed. This layer of air gives Thermopane its high insulating efficiency.
- ② **BONDERMETIC SEAL.** This metal-to-glass seal permanently bonds two panes of glass into a single unit. Strong and weather-proof, it seals the insulating air space from dirt and moisture.
- ③ **NO FOGGING UP.** Because of the patented *Bondermetic Seal*, and the insulation afforded by the sealed-in air, frosting up and condensation are eliminated on the two inner surfaces.
- ④ **ONLY TWO SURFACES TO CLEAN.** The inner glass surfaces are specially cleaned at the factory . . . always stay clean.



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LIBBEY · OWENS · FORD
a Great Name in **GLASS**

All The More

A well-proven increase in comfortable living conditions are pre-ferred.

Expressing windows livability.

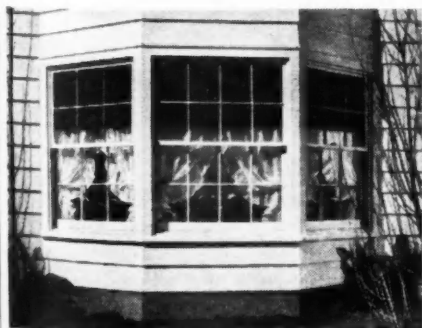


All Over the Country They're Planning to Use MORE WINDOWS ... By Curtis

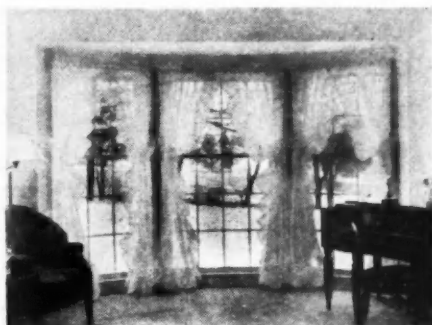
FROM coast to coast, architects and builders have recognized the trend toward *more windows* in post-war homes. To meet that trend, they are including Curtis Silentite "Insulated" Windows in the plans they are making for the dwellings of tomorrow.

It's easy to see why! Silentite Windows are backed by a three-quarter century of research and experience. They go further than any type of window, we believe, in meeting modern needs for beauty—weather-tightness—easy operation and fuel economy. They are economical to install—making it possible for you to specify more windows in the house and yet keep costs moderate. Silentite Windows will be available in a complete line—for every type of home.

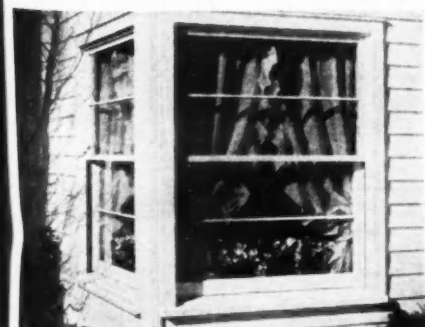
Here are some Curtis suggestions for your post-war planning.



A well-proportioned bay will add space and increase charm in any home. Made of durable Ponderosa Pine, Silentite window units are pre-fit for easy, economical installation.



Large size windows are becoming more popular. And when they go to the floor, as here, the effect is very beautiful. These are stock size Silentite units, insulated to save fuel.



Expressing the modern trend, Silentite corner windows will help to add distinction and livability. Several sash styles available.



Tomorrow's kitchens can have plenty of light, air and cheer. Silentite casements—wood, of course—have proved their superiority.

Curtis Introduced—

...the first successful window improvement in nearly 300 years with the Silentite line. Today, Curtis research is constantly directed toward developing still greater window improvements. That is why it is worth your while to keep in touch with Curtis on windows and stock architectural woodwork.



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Dept. AB-6S Curtis Building
Clinton, Iowa

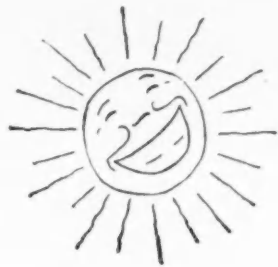
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**TO PLAN MORE
WINDOWS FOR
THEIR "DREAM HOMES"**

WATCH WOODWORK!

HOME builders of tomorrow want more windows . . . to bring light and cheer into homes . . . to increase the apparent size of small rooms . . . to add beauty and interest to both interiors and exteriors.

And because those windows must be weathertight — made especially to conserve heat and to keep out chilly drafts — wood is an ideal material. Stock windows of durable, toxic-treated Ponderosa Pine will more than ever be in demand. For such windows are pre-fit and pre-assembled...easy to install...economical to maintain...adaptable to all

types of design. Today, as we approach peace, Ponderosa Pine continues the research which has made wood so outstanding a building material in the past. For a practical view of the postwar building future, *watch woodwork!*

* * *

FREE—THIS GUIDE TO POSTWAR PLANNING

Containing scores of suggestions and ideas of windows, doors, frames and woodwork, this booklet, "The New Open House," is a helpful postwar planning guide. Mail the coupon for your copy — it is yours without cost or obligation.



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Chicago 2, Illinois

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

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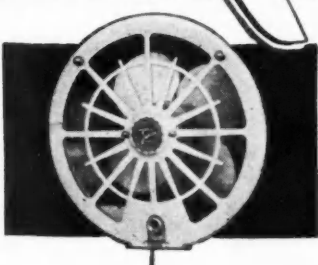
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KITCHEN VENTILATOR FANS

Prospective home owners are particularly impressed when they see that Emerson-Electric Kitchen Ventilators are "part of the plan".

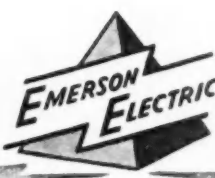
HOME buyers and home builders will welcome the hot-weather relief and comfortable living you include in your plans when you specify Emerson-Electric Home Cooler Fans.

Installed in attics, and turned on after sundown, these quiet, powerful fans provide a constant circulating flow of air. They rapidly vent overheated air trapped in attics and living quarters, while they draw cool refreshing air into the house through open doors and windows. . . . Designed to fit any type of modern home; built to give years of service.



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HOME COOLER FANS KITCHEN VENTILATORS



They make bombers Fighting Mad

Bombers are pretty peaceful articles resting on the ground. But up in the air they're different birds. There's fire in their eyes.

What happens between the minute a bomber rolls out of a hangar and the time it takes to the air? Brother, you should see!

The busiest group of men you'll ever know start working on their pet. They gas her up. They stow the bombs. They check everything on the plane. And off to the side you'll see (and hear) the purr of the ground crew's faithful "putt-putt."

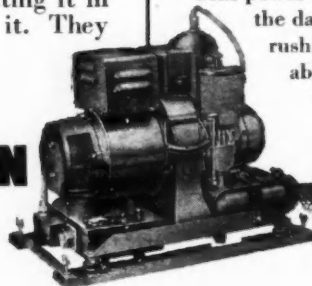
It's a Homelite Portable gasoline-engine-driven Generator . . . small, compact and *busy* . . . working for all it's worth, furnishing power for charging the plane's batteries and testing its electrical equipment . . . helping the boys in the ground crew to get the plane fighting mad.

It's not an easy life sparring with a bomber . . . getting it in fighting condition. But Homelites are able to take it. They do the job.



HOMELITE CORPORATION

PORT CHESTER, NEW YORK



They Improve Dispositions

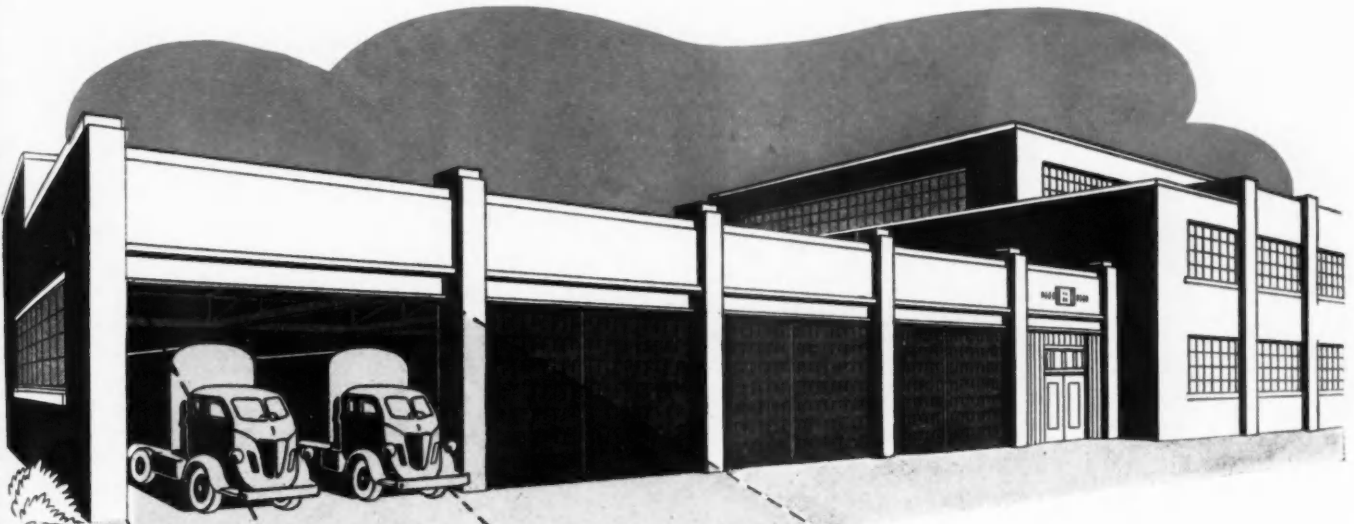
On the home front, Homelite gasoline-engine-driven generators are a blessing to busy construction men. Speeding up work with power for electric tools . . . stretching the day with night time lighting . . . rushing to emergencies with portable power . . . these Homelite units are always on the go.

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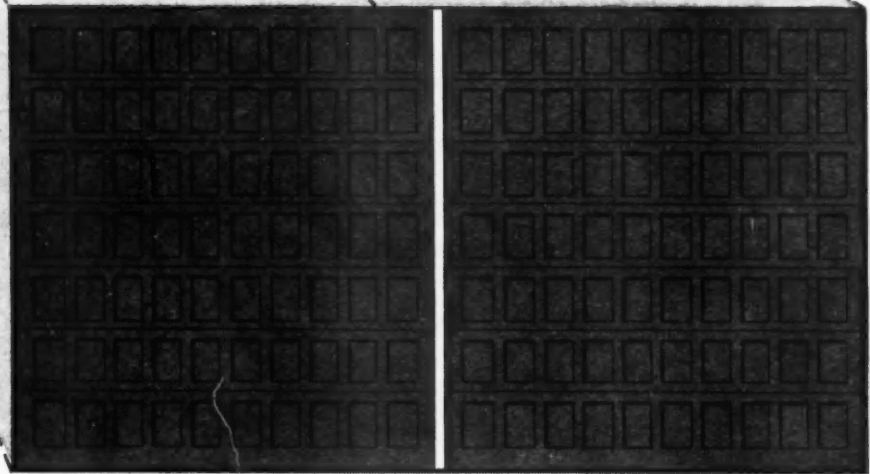
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HERE'S OUR SLANT

Standard Crawford high-clearance Industrial Doors for enclosed loading dock application. Available with glazed or solid panels. Removable mullions. Simplification of mechanical equipment involves few moving parts. Sturdy, good looking, easy to install, easy to operate, dependable.



on the all-weather protected loading dock problem

● Purely practical considerations must guide the selection of industrial doors. That's why, first of all, these Crawford Doors for loading dock enclosure were built to stand frequent and hard duty usage. That's also why they were engineered to operate easily, quickly and dependably and to exclude weather.

When these matters affecting use and economy were settled to our satisfaction we turned our attention to refined appearance in keeping with modern trends in industrial architecture. We believe you will agree on this as basically sound practice. It is on such a basis that we solicit the opportunity to talk with you about your industrial door needs. Standard or special, one door or a battery of them—Crawford will give you sound counsel. Naturally—there's no obligation.

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

Crawford

**UPWARD - ACTING
DOORS**

Residential Garage Doors
Commercial & Industrial Doors
Hand or Power Operated Doors
* Crawford Doors *



Chemicals and Glues . . . two postwar certainties for

**EXTRA VALUE
EASIER SALES
PLUS PROFIT**

Few are the things in the postwar building field that can be predicted with absolute certainty. But among these few will be the wider demand for chemically protected lumber and for greater use of plywood and other glued lumber products.

Customers of tomorrow—trained to expect more from such war-born developments as termite-proofing of army and navy buildings and the sensational new military uses of plywood—will *expect* similar chemical-and-glue advancements in their new homes, farm buildings, and other structures built of lumber.

Monsanto Chemical Company and I. F. Laucks, Inc., have done

their *own* postwar planning so that you may be in a better position to do *yours*. Formerly two separate organizations, Monsanto, a major producer of chemicals and plastics, and Laucks, "America's Glue Headquarters," both are now united.

This means a breadth of experience and of research and production facilities in chemicals-and-glues previously unapproached in the forest-products industry. And that in turn means you can count on being kept fully apace with the great developments expected by the public in chemically treated lumber and in new uses of plywood and other glue-construction applications.

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WHEELER OSGOOD

Tru-sized **DOORS**

COME TO YOU

Completely Manufactured

No Sawing No Planing No Fitting

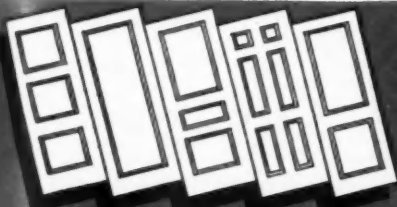
You SAVE

55 MINUTES ON EACH INSTALLATION

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**Every TRU-SIZED DOOR is
Made to Exact Book Opening**

Tru-sized, America's Modern Doors, are designed to help carpenters and builders do a better job. Tru-sized to exact book opening, they fit perfectly any jamb that is plumb and square. The saving of 55 minutes on every door installed is the average timing clocked by skilled workmen. A Tru-sized Door, fully machined for locks and hinges, can be installed in 20 minutes.



**MAIL
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TODAY!**

Wheeler Osgood Sales Corp. Dept. 7
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Please send me free literature and detailed guide sheet for ordering Tru-Sized Doors.

Name _____

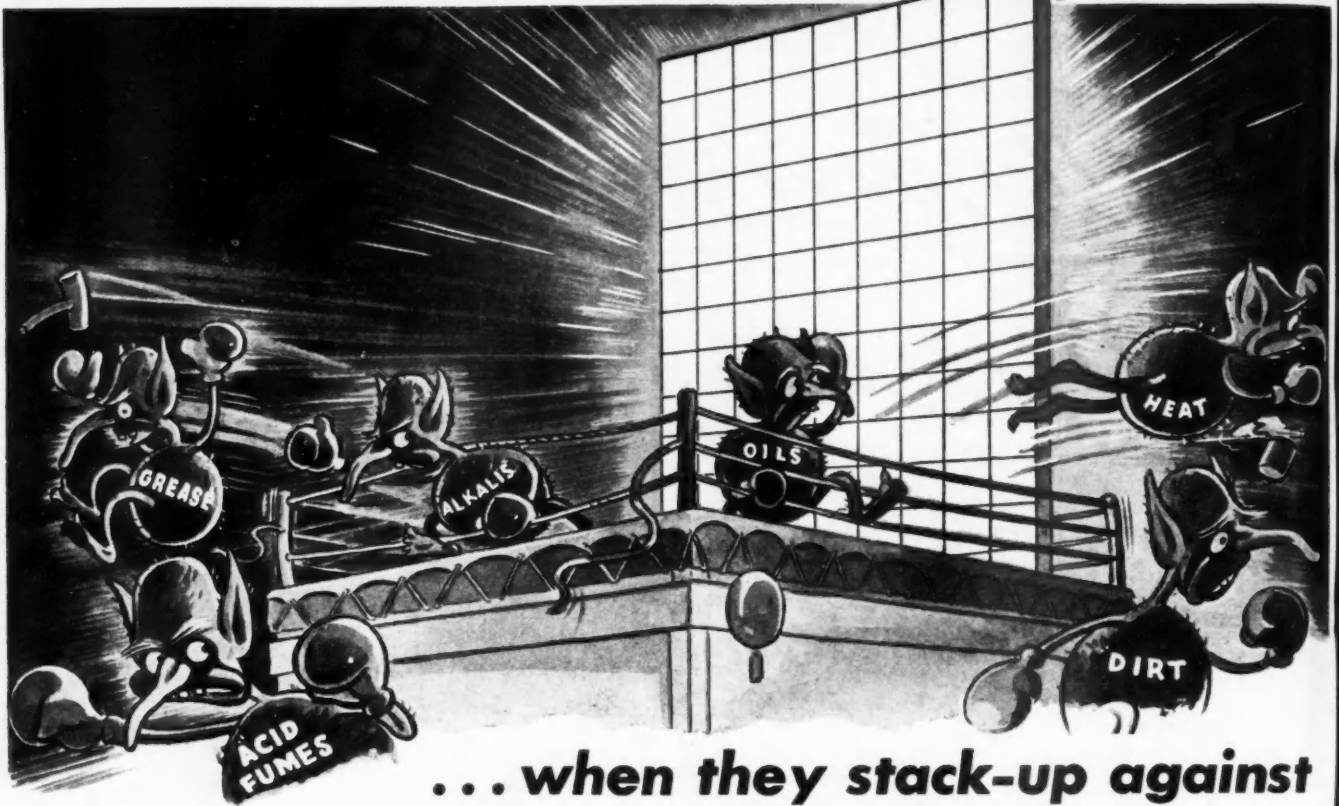
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BE WISE—USE TRU-SIZED AMERICA'S MODERN DOOR

BLURMITES*... Licked Before They Start...



... when they stack-up against
MARLITE!

**MARLITE IS IMMEDIATELY AVAILABLE
ON SUITABLE PRIORITIES!**

Send all orders and let us see if we can help! Marsh Wall's procurement staff is ready at all times to help with your priority order problems.



HIGH-PRIORITY business includes war plants, war housing and hospitals. A "natural" for hospital installations . . . from operating rooms to diet kitchens . . . Marlite is normally available in plain-colors, tile-patterns, horizontal-line, genuine wood-veneers and marble-patterns. Marlite's versatility and dependability in today's widespread hospital work are graphically illustrated in a new full-color folder. Send for your free copy and see how you can help with this important priority business. Write today for the Marlite Hospital Folder!

Blurmites will always be with us. **BUT** when plastic-finished Marlite wall paneling is installed, their destructive action is no longer to be feared. Marlite's *pioneer high-heat-bake finish* takes care of that in short order, for this exclusive finish *seals the surface* against the penetrating effects of dirt and moisture—against Blurmites!

REPUTATION-MAKER FOR BUILDERS

Marlite's charming and distinctive surface wins *immediate customer approval*. It's easy-to-clean—retains original beauty for years and never needs repainting or refinishing. Quickly and easily installed for new construction or modernization, Marlite also is moderate in cost!

Keep your customers satisfied . . . build an unchallenged reputation . . . enjoy top-notch business and the resulting profits . . . by installing plastic-finished Marlite walls. Large, wall-size panels are ideal for all types of rooms in all types of structures. Send for samples and complete information . . . and remember, Marsh Engineers are ready now to help you with plans and specifications.

* Blurmites—destructive agents, harmful to the finish of many wall, ceiling, and counter surfaces.



Marlite

REG. U. S. PAT. OFF.

MARSH WALL PRODUCTS, Inc.
63 MAIN ST., DOVER, OHIO

PLASTIC-FINISHED WALL PANELS • FOR CREATING BEAUTIFUL INTERIORS

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OWNERS ARE DELIGHTED WITH THE UNIFORM TEMPERATURE AND FUEL ECONOMY OF FORCED HOT WATER HEAT

No matter how well you build a house, *it is no better than its heating system!* Give your customers the kind they'll always thank you for . . . give them heat which is controlled *automatically*—not by opening and closing windows. Give them a B & G Triple Duty System!

This system of *forced hot water heat* meets every requirement of the ideal heating system. It does not overheat the house when the weather is mild. It does not fail when the temperature skids to zero.

Heat delivery by means of water under mechanical circulation can be modulated so gradually and smoothly that every slight variation in outdoor temperature is met by a corresponding change in the heat supply. Therefore, *overheating*, the most common cause of both discomfort and fuel waste, is eliminated.

For a sales feature with real punch, give your homes the luxurious winter comfort of B & G Triple Duty Heating.

YEAR 'ROUND HOT WATER FOR KITCHEN, LAUNDRY AND BATH

The owner has at his command a virtually inexhaustible supply of domestic hot water—*both winter and summer!* It is furnished at amazingly low cost by the B & G Water Heater, an integral part of the system. A great convenience and a great money saver!



This is the simple, dependable equipment of the B & G Triple Duty System. Send for booklet, "Conditioned, Sun-like Warmth," for complete information.

B & G

TRIPLE DUTY SYSTEM

BELL & GOSSETT COMPANY
MORTON GROVE, ILLINOIS

Washington News Summary

FHA's Tenth Birthday Spotlights Teamwork Between Government & Private Enterprise.

Ten years of successful operation sets a pattern for postwar workability.

WITH the Federal Housing Administration's tenth anniversary due on June 27, FHA Commissioner Abner H. Ferguson reversed the usual procedure for birthday celebrations by offering congratulations to private lenders, builders, materials dealers and manufacturers, realtors and other groups on the large part they have played in the substantial accomplishments recorded under the FHA program during the past ten years.

FHA's program "to improve housing standards and conditions and provide a system of Mutual Mortgage Insurance," under which over \$7.5 billions of private funds have been spent to provide better housing for nearly 6 million families, was from the first a co-operative undertaking, calling for the highest degree of support from the building industry and lenders alike, Mr. Ferguson declared.

"Each of these groups," he added, "has a right to congratulations on a job well done—a job which has seen millions of Americans better housed and a full measure of stability and prosperity returned to the building and mortgage lending fields."

Mr. Ferguson recalled the chaotic conditions which existed in residential construction in 1934 when FHA was created by Congress. New home construction was at a standstill, the mortgage lending field was in such panic that financial institutions were reluctant to risk their funds in home loans, and home buyers were discouraged by the antiquated and high-cost of first, second and third mortgage loans then in vogue.

"By encouraging a reduction in mortgage interest rates and by popularizing the long-term amortized mortgage, FHA restored popular confidence in home ownership and placed the benefits of home ownership within the financial

means of a constantly broadening proportion of the population," Mr. Ferguson said.

"This upsurge in home buying meant new and bigger markets for material manufacturers and dealers, profitable and safe outlets for the funds of financial institutions, increased employment for building-trades workers and, of course, more and better homes for Americans.

"From June 1934 through June 1944, approximately 4,500,000 property owners have been enabled to improve their home, farm and business properties through loans amounting to more than \$1,700,000,000. In that same period of time over 1,400,000 families have been enabled to buy, build or refinance their own homes, or to rent better quarters through loans exceeding \$6,000,000,000."

In its July issue *American Builder* will feature a full review of FHA's accomplishments up to date, and show how it can render an even greater service to home building in the postwar future.

Blandford reports—A total of 27,822 housing accommodations for war workers were completed in March, bringing the total completions during the first three months of this year to 94,037, John B. Blandford, Jr., Administrator of the National Housing Agency, reports.

The March completions included 23,959 new units, of which 12,378 were built under public financing and 11,581 by private builders. Completions under the conversion program totaled 3,863 units, of which 2,948 units were publicly financed under Government lease and 915 were privately financed. Almost all publicly-financed housing now being built is of temporary construction, whereas the privately-financed units are of permanent type and will continue in use after the war.

Whitlock warns—"Unless plans are completed and approved by the time civilian construction is resumed, there is every reason to believe that community development in the future, as in the past, will proceed on a haphazard basis—permit blighted areas to continue in

existence for another generation or longer," Douglas Whitlock, President of The Producers' Council, says in urging local officials to busy themselves now on postwar planning.

Homes for China—12 million new homes will be needed to shelter 84 million displaced war refugees in China, the Chinese government estimates. Chinese-American Council says this will call for 170,846 tons of nails, hardware, small carpenter tools and cement manufacturing equipment. Will erect simple shelters 16 by 13 feet, 12 feet high of wood framework with walls and roofs of Chinese materials and floors of concrete.

Hotel rehabilitation—Those who buy hotels, apartment houses or office buildings released by the army or navy may now secure allocation of materials for their rehabilitation, WPB announces. For details and new forms, communicate with Office of Civilian Requirements of WPB.

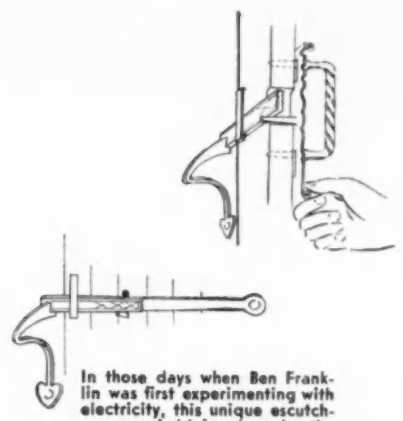
More electrical conductor—To reduce the use of numerous small transformers WPB has changed the Housing Utility Standards to permit small additional quantities of electrical conductor for extending electric lines for war housing projects. See local FHA office.

Mortgage loans booming—Despite restrictions on new construction, an upward trend in non-farm residential financing continues apace, Federal Home Loan Administration points out. First quarter of '44 totals \$980 millions, a rise of 37 per cent over same period in '43.

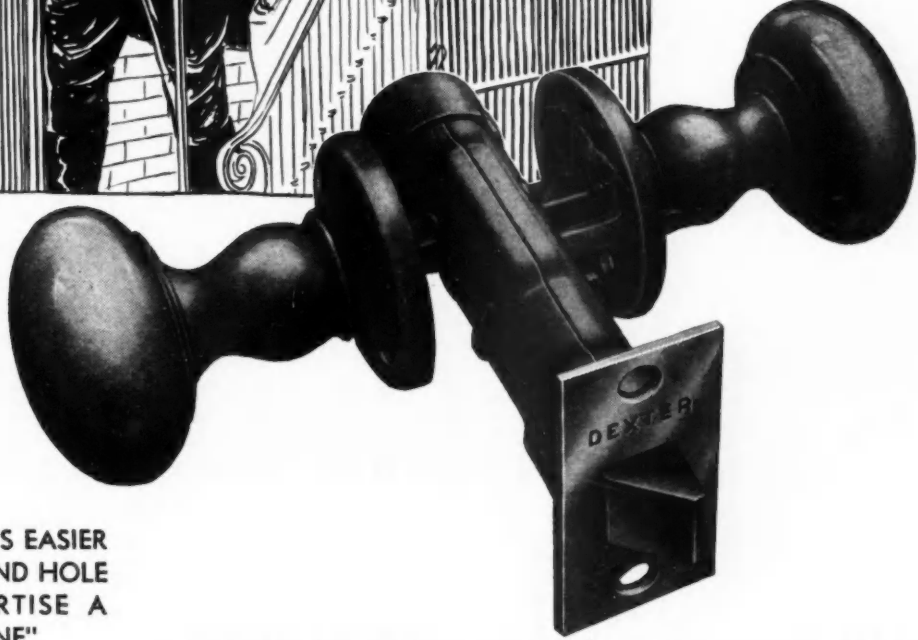
NAHB Meeting—An important war and postwar home-building program was advanced at recent meeting of the National Association of Home Builders in Washington. See feature story in this issue of *American Builder*.

Helps lumber—WPB says the cutback in construction for 1944 will likely exceed its estimate of last fall, that this will materially help conserve scarce lumber.

Contractors indicted—Department of Justice has secured indictments against the contractors of Winfield Housing Project near Linden, N. J. They are charged with filing false claims for reimbursement with the Federal Works Administration on this public housing project.



In those days when Ben Franklin was first experimenting with electricity, this unique escutcheon was held in place by the door handle; slots permitted it to be raised or lowered. The bar, on the back of the door, rested on a prong projecting from the escutcheon through a hole in the door. When the escutcheon was raised the latch bar was released from the keeper.



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

1944 War Housing Calls For DEXTER-TUBULARS



DEXTER TUBULAR LOCKS and LATCHES

The spirit of *Independence*, that characterized our country from its earliest days, is found in American ingenuity to continually devise new and better ways of doing and making things. The origination of Tubular Locks and Latches, some twenty years ago by Dexter, was a big step forward in Builders' Hardware. Its many advantages, the simplicity and speed of its installation have gained increasing popularity for Tubulars. Dexter Tubulars are backed with a written Lifetime Warranty.

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

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

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Reliability

STARTS, *with . . .*



Bradley
OAK FLOORING

RELIABILITY . . . hidden ingredient which makes Bradley Oak Flooring a better product.

Where does it first enter? Not with the flooring factory or sawmill. Farther back than the forest. It begins with the standards which the Bradley Lumber Company set for itself at the time of its inception . . . standards that have guided all activities since.

Thus each step . . . in forest operations, sawmill, dry kilns, flooring factory, even loading into cars that take it to many and

far-flung destinations . . . is taken with the prime intent of building reliability into Bradley Oak Flooring.

What of the War? It has deflected, of course, the flow of Bradley Oak Flooring from normal channels of distribution and use, but not one iota has it deflected Bradley from its basic policy of reliability. With the lifting of wartime restrictions Bradley Oak Flooring will again be available . . . again a better product.

BRADLEY LUMBER COMPANY *of Arkansas*
WARREN, ARKANSAS

AMERICAN BUILDER Editorial

Mexico's building boom

MEXICO'S builders are not having to wait until after the war for a building boom; they are enjoying one of monumental proportions *right now*. Thousands of palatial homes, monumental public buildings, deluxe apartments, theatres and business buildings are being constructed *right now*, regardless of the war. One can hardly walk a block in Mexico City without encountering the familiar sights and sounds of construction activity.

So great is the boom that building costs have spurted 100 per cent in the past year. Yet this has only served to spur others ahead in what looks like a mad rush to get money into land and buildings as a hedge against inflation.

American money and materials

In addition to a building boom, Mexico is having inflation of serious proportions. Living costs have skyrocketed. Those in this country who have grouched about OPA ceiling prices, rent control and other attempts to keep prices down ought to spend some time in a country like Mexico where the SKY is the limit.

To make the spectacle of Mexico's boom particularly enjoyable to idle U.S. builders, it can further be related that it is financed to a considerable degree by U.S. money, and large quantities of U.S. materials are being used. A busy black market exists in U.S. materials and equipment at fantastic prices. While the Mexicans make a large part of their own building products, the better quality U.S. bathtubs, fixtures, and specialty equipment are much in demand, and are being sold at high prices.

A priority system has been set up by U.S. officials to attempt to govern the flow of materials into Mexico, but apparently once they get into the country, control of them is lost.

All is not a bed of roses for the Mexican builder. He not only pays a high price for scarce materials, but has to hand out pesos right and left to make sure they are delivered. He has to obtain numerous licenses and permits, and suffers "inspections" all through the job—all of which take many more pesos in what we very harshly call "bribes" in this country, but which have a much more tolerant title south of the border.

Very little lumber is used in Mexican building, and what lumber is available is very high priced. A Mexican lumber yard is divided up into small

rooms, with boards stored neatly on end, each room tightly padlocked to protect its contents.

Cement and bricks are the principal materials of construction, and Mexican workmen are very skillful in their use. Although wages have gone up, the pay for an eight hour day for a laborer is three to six pesos (60c to \$1.20) and for a skilled mason is five to ten pesos (\$1 to \$2).

To visit a Mexican subdivision (Colonia) on a Sunday afternoon is to be reminded of 1929 days in the United States. Colorful flags fly along the streets and elaborate signs and entrance decorations invite the visiting crowds to invest their money in land and homes. Most of the building is in the higher priced homes; this is definitely not a poor man's building boom in Mexico. Land is sold in meters, the average subdivision lot being about 8 x 20 meters.

There is apparently no effort made to determine whether any building is necessary to the war effort. One of the largest skyscrapers, using huge quantities of steel, is the National Lottery Building. Many of the homes are palatial in size and appointment.

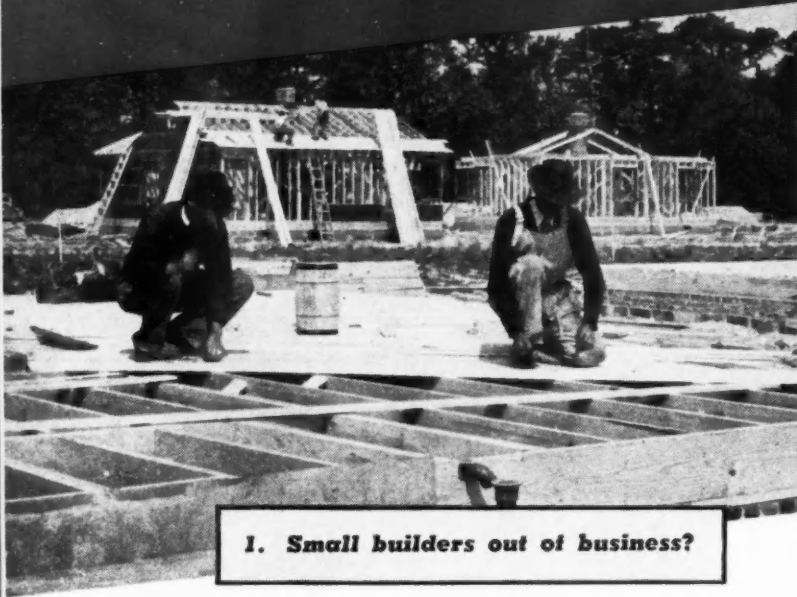
House has eight baths

Theatres, public buildings and other nonessential structures are numerous. One house visited near Mexico City by *American Builder's* editor as it neared completion in April contained eight bathrooms, each equipped with the finest U.S. plumbing fixtures. Incidentally, this house was built by a U.S. citizen.

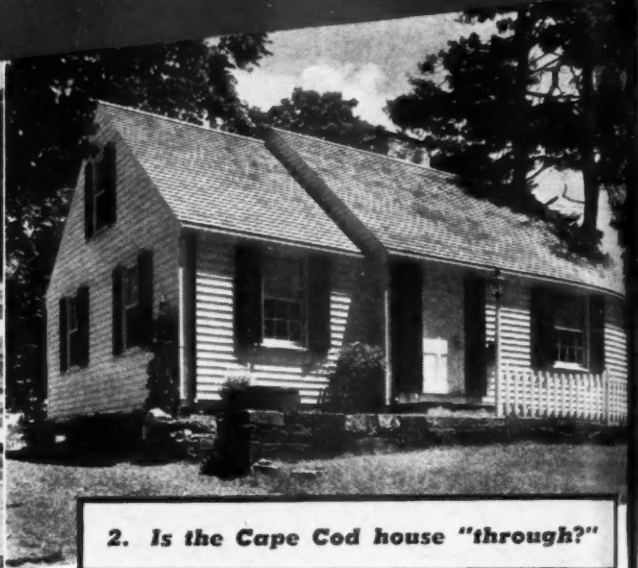
No one in Mexico seems to question the propriety of this building boom in wartime. Perhaps we should not. The United States has received benefits in the way of war materials and protection of its southern borders that are worth a great deal to her. If Mexico, as a result of war conditions, war orders or war loans, is able to enjoy a boom, that may be strictly her own business.

But on one point there will be no difference of opinion among American builders. That is, no more scarce U.S. materials and equipment should be allowed to cross the border. If Mexico has so much steel, copper, plumbing and other materials that she can build lottery buildings, theatres and palatial homes in such volume, then she has enough to get along without such products from the United States, where they are vitally needed for homes and essential uses.

What's Ahead for Builders ???



1. Small builders out of business?



2. Is the Cape Cod house "through?"

Answers to your current questions on postwar building

IN a world whirling with new ideas the building business will certainly not stand still.

The war is blasting many established customs. For building men, many of whom are now out of active business, it is a time to develop, plan and prepare for the future.

Many conflicting, irresponsible, and often irrational things are being said about the future of the building industry and of builders. The following comments on some of the current questions is intended to help men of the industry make their own decisions.

1. Will small builders be put out of business?

This question is raised by the fact that so much publicity has been given to big wartime operations, to mass production, and to prefabrication.

War housing has been done by a comparatively small group of large operators; it is frequently stated that in the postwar period the large builder will be so well financed, operate with such efficiency, and have such a smart selling organization, that he will put the small builder out of business.

The answer to this is that conditions will vary in every community. The smaller builder has a smaller overhead. A large per cent of the postwar homes built will be on scattered lots on property already owned. The big operator cannot function efficiently on scattered lots.

Furthermore, the trend towards more building on the outskirts of towns and in rural areas works to the advantage of the small builder rather than the large operator.

Still another factor to be considered is the return of hundreds of thousands of men from the Seabees, the Army construction division, and other branches of the service who have received some construction training

and who will want to get into the building business. These men will start out as small builders.

2. Will all postwar homes be "low cost"?

In a great many of the war centers thousands of low cost FHA Title VI houses have been built. In such areas it is entirely possible that the low cost home market will be "saturated" by the time the war ends.

A strong public reaction has already set in against the flimsy, box-like, cheap-looking and extremely small war houses that have been built in many areas.

My belief is that at least in the early postwar stages, houses in the middle-priced bracket will make up the greatest volume of business.

3. What about building costs?

No doubt ceilings on many building materials will remain for some time after the war. But even so, building costs—particularly labor costs—will be considerably higher than they were in pre-war days. Real estate prices have advanced, and the net result is that the extremely low prices talked about in newspaper stories and advertisements seem very unlikely.

As building volume gets under way, however, new materials, improved methods, and keen competition may force the overall price of the complete house down to levels comparable with or somewhat lower than pre-war.

4. What does the public expect?

The public is being grossly misled to expect a host of items of equipment and expensive materials in postwar homes *without paying for them*. Unless something is done to counteract the flow of fantastic predictions now appearing in the general press, they will undoubtedly be disappointed. For there is nothing in sight to indicate that air conditioning, elaborate modern kitchens, extensive

(Continued to page 126)

By Joseph B. Mason, Editor



3. Is mass production the answer?



4. What about prefabrication?

"Greatest development in building history"

By Joseph H. Schulte

Director, Fritz B. Burns Research Division



THERE are enough definite improvements in sight to require altogether different layouts and details as compared to war and pre-war plans. Our war and pre-war houses were and are, we believe, constructed for different eras, and we do not wish to confuse them with the new developments in layout, design, materials and equipment that will be greatly improved in the postwar era.

The interpretation of public reaction to the improvements of the home-building industry is the primary purpose of the Fritz B. Burns Research Division.

The postwar house is not going to be an extreme or a fantastic house of revolutionary design. In appearance it will not differ very much from the attractive architectural lines to which we have been accustomed. However, in the low-price field it will be a bigger house, while in the higher-price brackets it will be of reduced size. The ability of architects, especially in the smaller homes, will be evident in its planning to a far greater extent.

Homes will be better designed, have larger closets, more window area, engineered lighting, and will include modern streamlined kitchens and bathrooms. The kitchen and bathrooms will be the only rooms of the postwar house that will be radically changed. Extra attention will be paid to features that lead to more comfortable, as well as better living. These will include:

1. Climatized interiors, realized by new and efficient air conditioning units. These units will maintain proper air temperature, correct humidity, and ideal air pressure control for the greater comfort of the home owner. Interior temperatures will be kept even by the use of the "Modu-flow" principle of heated and cooled air control. To prevent the waste of energy the same principle will be utilized to create different temperature zones in separate parts of the house, using, however, only one heating unit.

2. Healthy, clean and wholesome atmosphere will be maintained by the removal of all dust, germs and foreign matter by such units as the "Precipitron," which removes over 98 per cent of the impurities from the air by elec-

tronics. Homes will require little dusting. Materials, fabrics and furniture will depreciate more slowly and the health of the community will be maintained.

3. Light metals, plastics and plywoods will play a certain part. These newly developed materials will not dominate construction but will be utilized where their quality and characteristics do the job better or at less cost than other materials. Light metals can be used for wall panels, furniture, shingles, door and window sash. Plastics may be used for all accessories, pipes, tubing, fittings, screens which are not affected by salt atmosphere, moldings, seat covers, upholstery and draperies. Laminated plywoods may be used for non-bearing walls, ceiling panels, built-ins, fabricated sections and closet and wardrobe units.

4. Homes will be better designed, especially the smaller homes. Lines will be simple, decoration conservative, and charm will continue to be a traditional part of American architecture. Climate will dictate to a great extent style and architecture, and the one-story house will continue to grow in popularity. Rooms in which most of the living is done will get special attention for their layout.

5. The window area of the home will be increased, and engineered lighting will play a very important part. Larger windows, with attention being paid to the directional source of light, the adequate amount and quality of light, will add to the future well-being of the eyes of the nation.

We can then conclude that the postwar house will be a better house, that its development will be greater than at any other time in building history, and that emphasis on research will result in more attention being paid to quality of materials and equipment. But you will be able to recognize it for its greater charm, its architectural design, and its increased convenience and comfort.

By and large, familiar materials will remain favorites but they will be improved. Many newcomers will find their place, but only after their qualities have been proven. Our future living will not be classed as fantastic, but it will be definitely better, more pleasant and more satisfying.



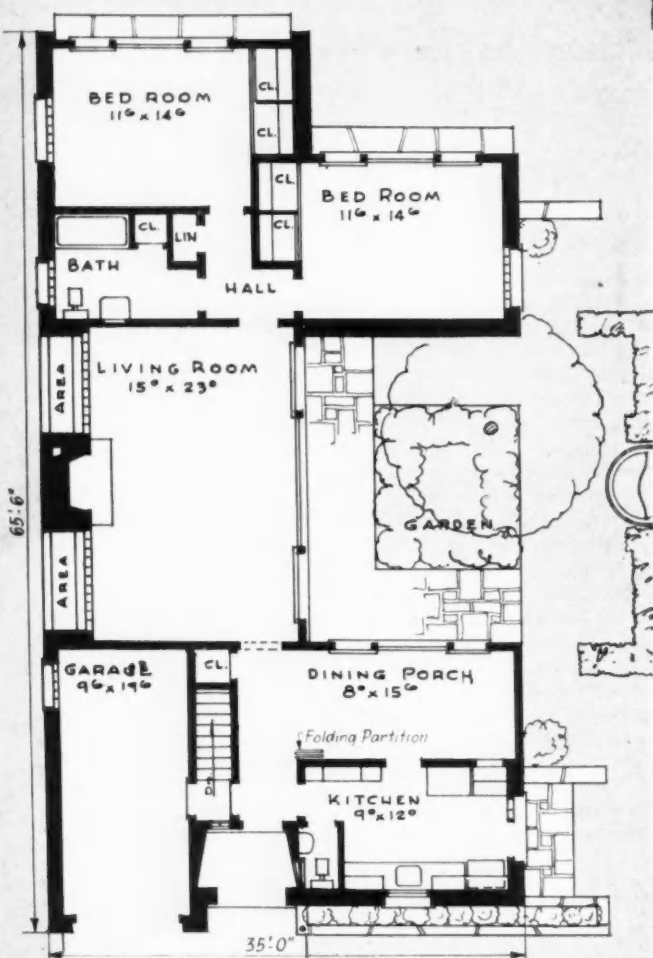
5-Room Sensible Modern Design

AS NUMBER 6 in this Blueprint Series, Architects Henry Otis Chapman and Randolph Evans have done a splendid job of adequately planning a popular, small postwar home. As shown here, it is suitable for use either on a fairly narrow city lot or on a country site, in the latter case the plan being turned sideways.

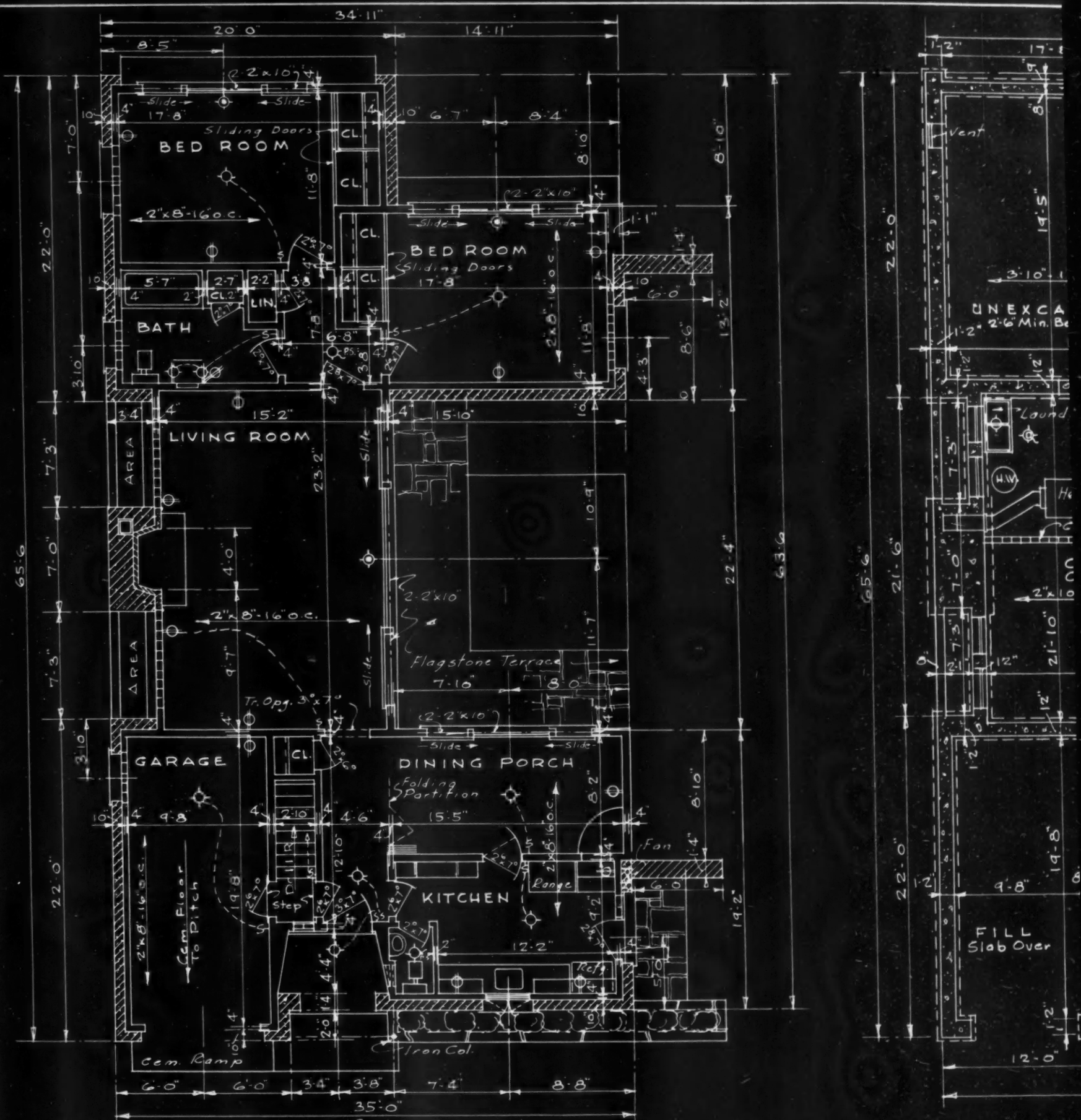
Exterior is as modern as tomorrow, but sensibly so—no freak architecture, just straightforward styling. The functional plan has many innovations. One of these is the extensive use of glass block along the side elevations for privacy. When built on a narrow lot the living room and dining porch overlook a gardened terrace enclosed by a hedge as on the plan at left. Principle outlook for the bedrooms is to the rear, with sliding glazed doors flanking a fixed picture window; this same clever device is used in the dining porch and living room.

Other features of this excellent design include lavatory handy to the front part of the house, sheltered entrance, built-in garage, seven closets, compact and efficient kitchen, well-lighted basement with utilities to one side of partition. Careful study will reveal many more plus values in this design with a future.

No. 6 of Blueprint Series—American Builder blueprints are presented each month as an educational feature to promote and stimulate sound postwar planning. Previously covered subjects include a rambling Colonial—private garage with architectural charm—postwar home for suburbs—a 6-house postwar community—country club cabins.



This home is carefully planned for privacy on a city or country site

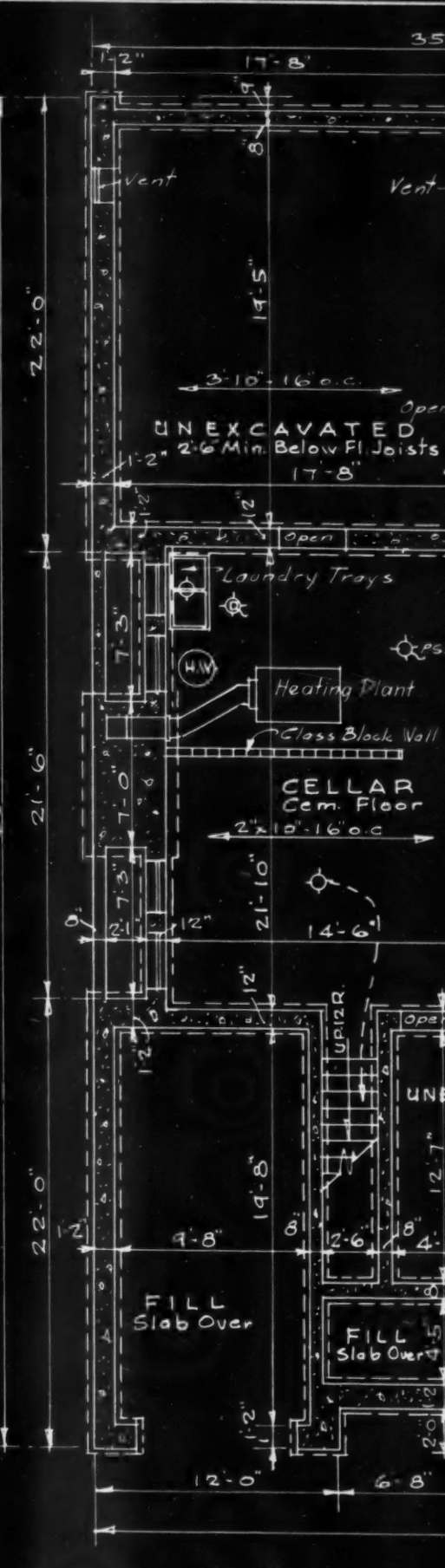


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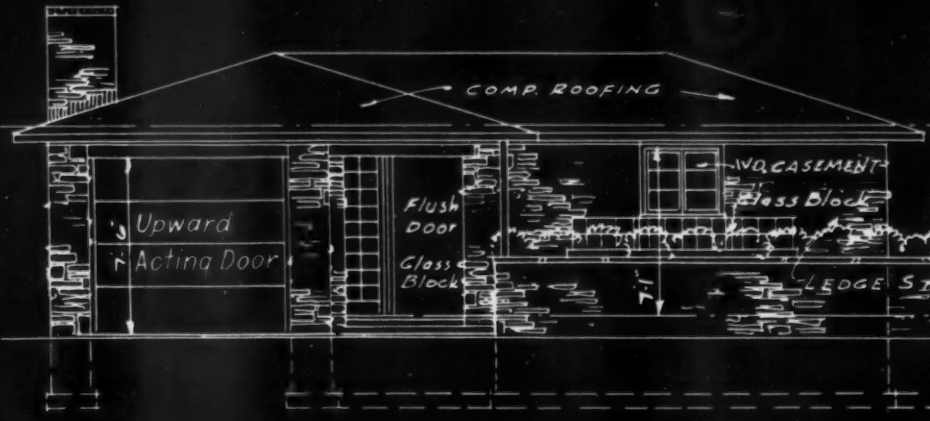
AN

CELLAR PLAN
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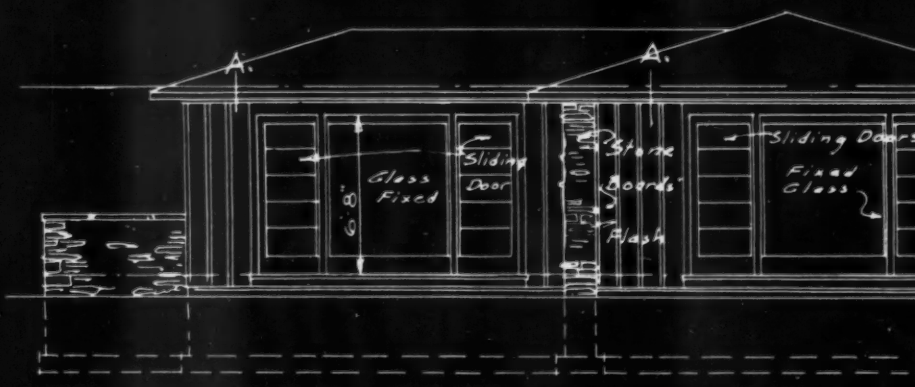


PLAN
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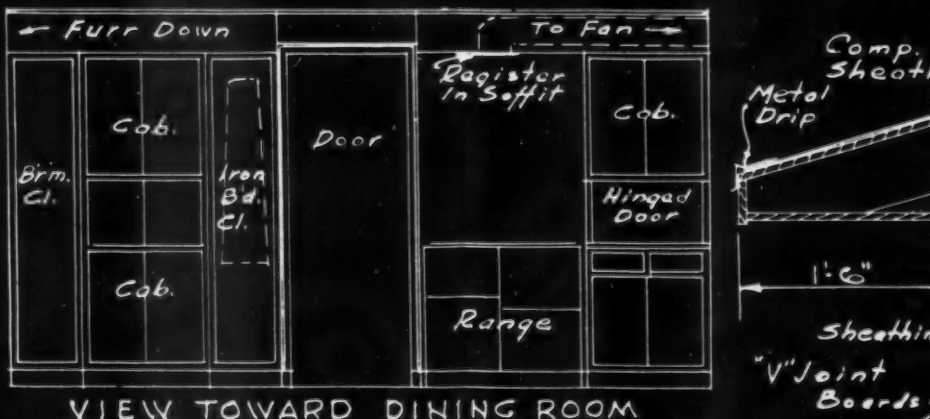
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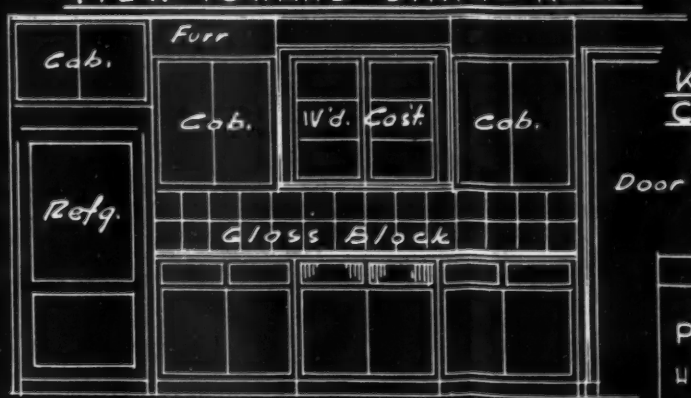
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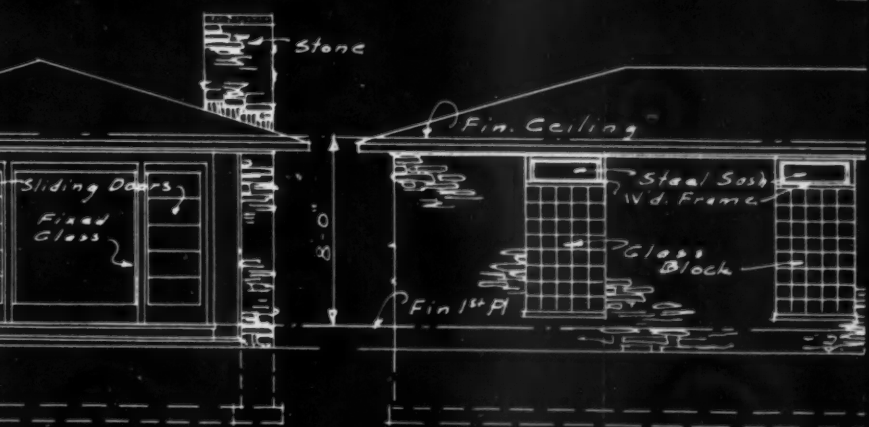
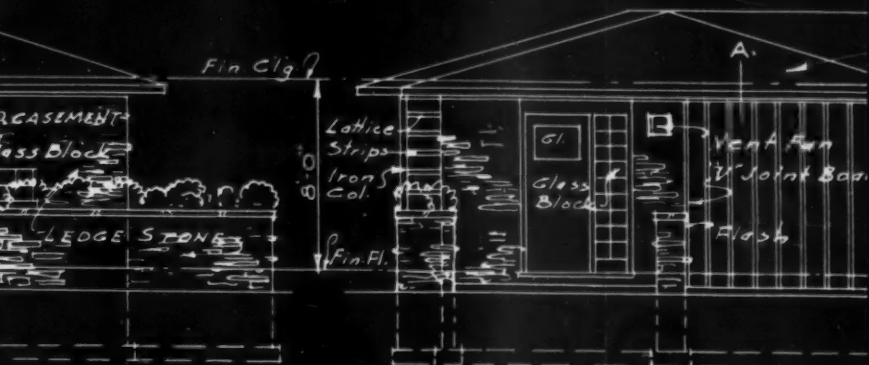
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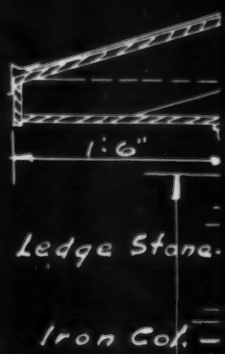
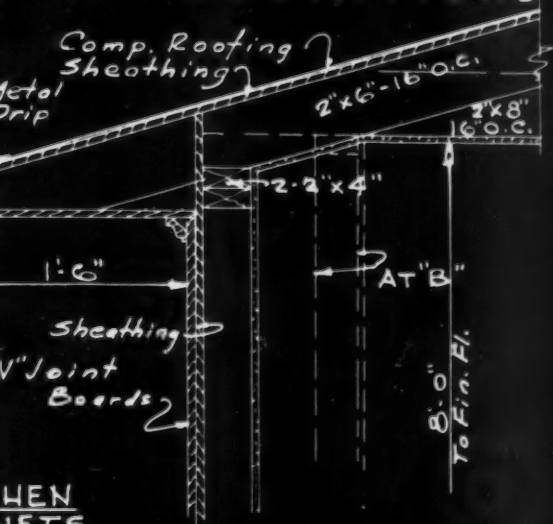
V I E W T O W A R D F R O N T

KITCHEN CABINETS
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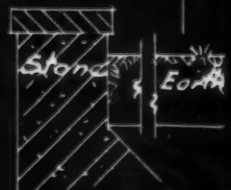
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HENRY OTIS CHAMBERLAIN
ARCHITECTS
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ELEVATIONS Scale - 1/8" = 1'-0"

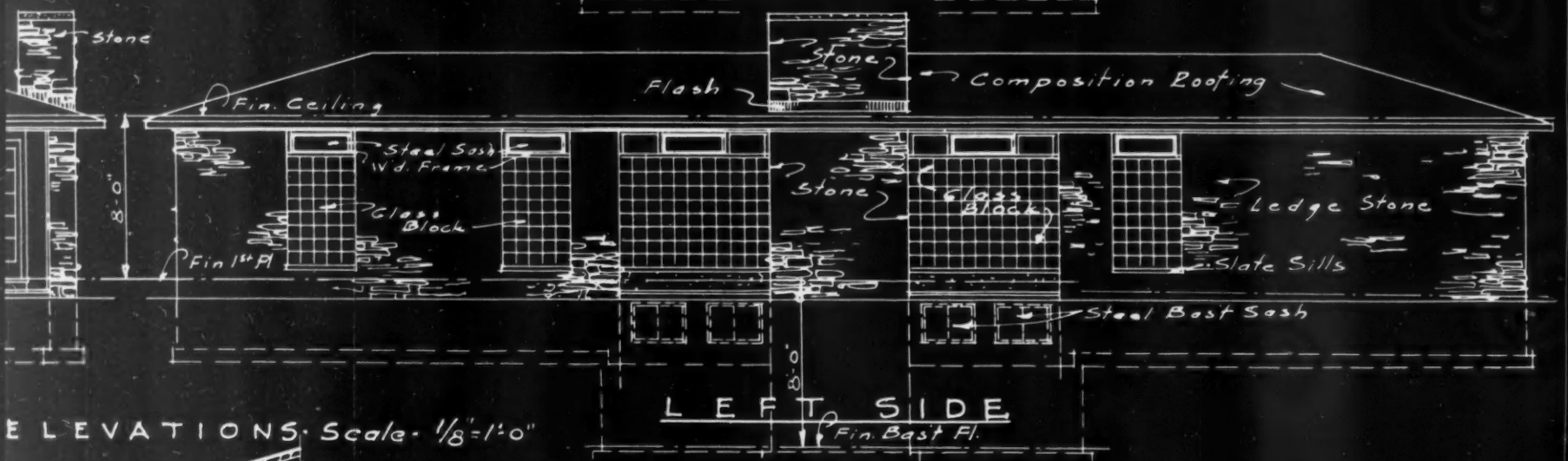
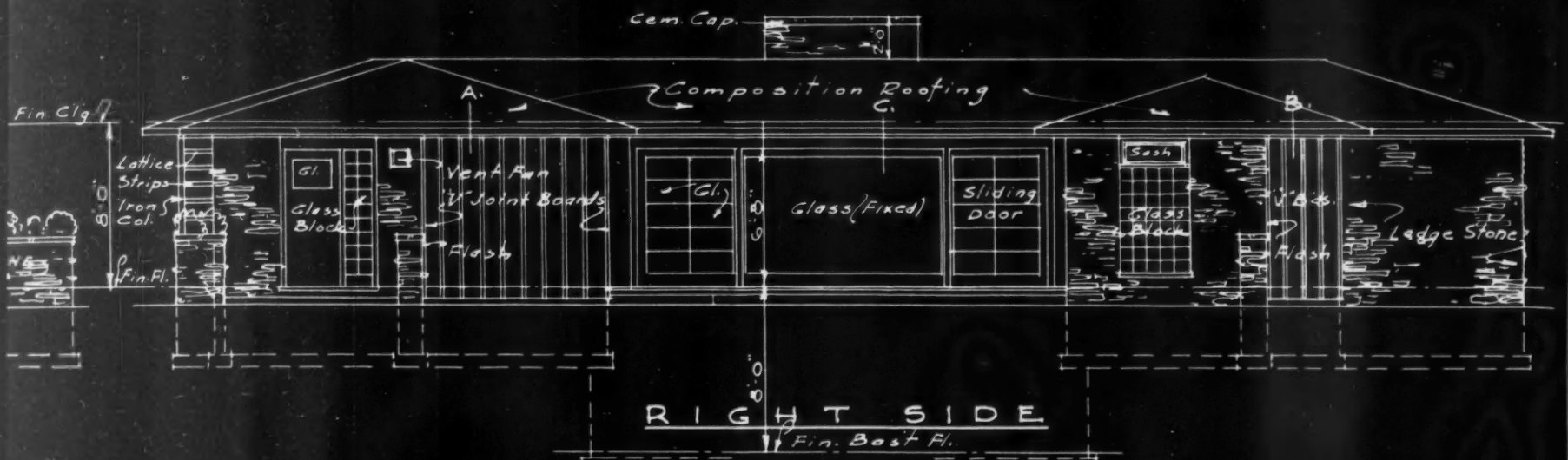


DETAIL AT "A"
Scale - 3/4" = 1'-0"

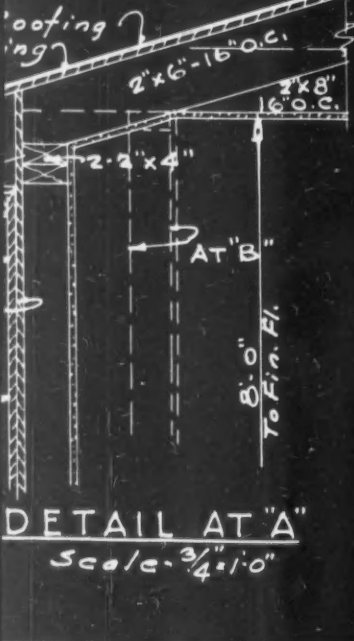


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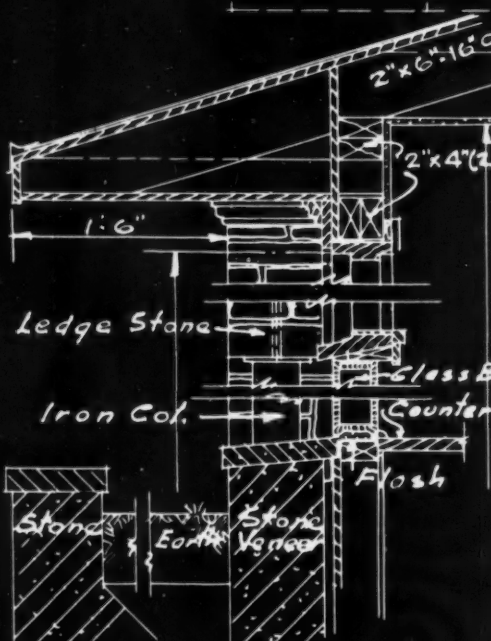
DETAIL
 KITCHEN
 WINDOW
 Scale 3/4"



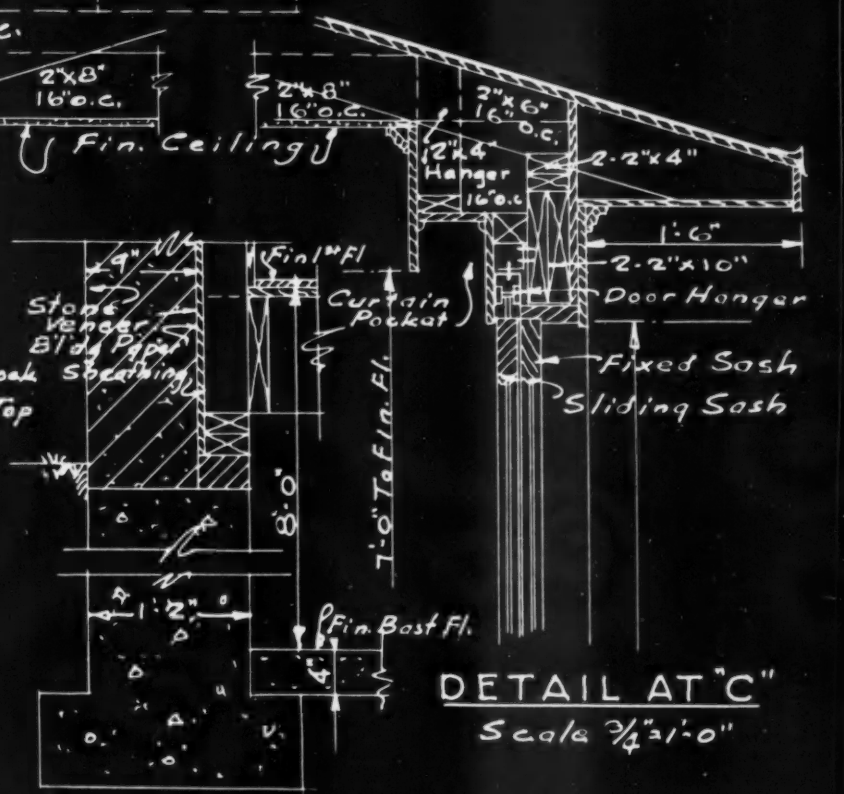
ELEVATIONS Scale $1/8" = 1'-0"$



DETAIL AT "A"
Scale $3/4" = 1'-0"$



DETAIL AT KITCHEN WINDOW
Scale $3/4" = 1'-0"$



WALL SECTION - Scale $3/4" = 1'-0"$

N No. AB-6
AN BUILDER
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MODERNIZED CONVENTIONAL—Yes, it's a new name to fit a new style of house architecture. Builder Johnson has checked it with prospects for postwar homes. He reports almost unanimous approval.



JOHN N. HIGHLAND, Architect

On His Mark—All Set **READY TO GO!**

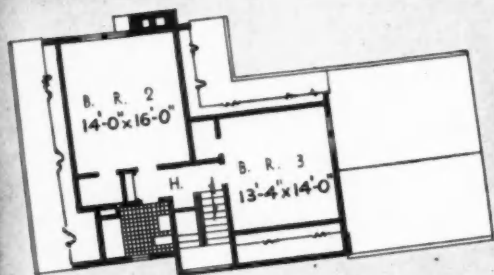
Here's news you're waiting for. Shows the style and plan of home progressive builder Walter S. Johnson will present to postwar Niagara Falls. Land planning of purchased property under way—house designs approved—working drawings ordered. Can spring into action on the starting gun.

By John E. McNamara

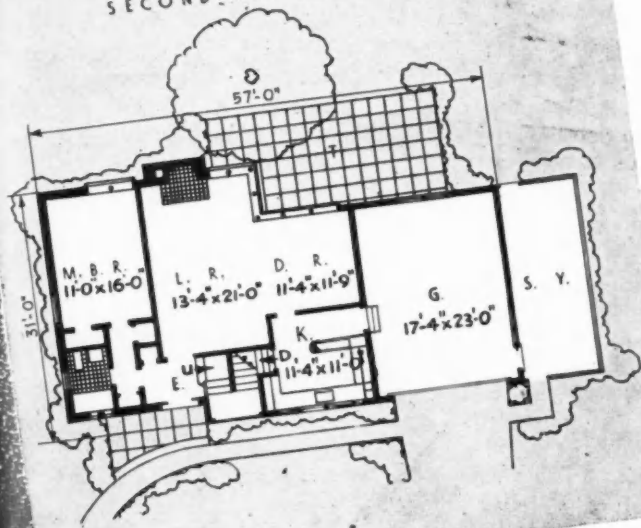
Associate Editor

DOES any builder expect prospects for homes postwar to lie in wait for him—a club in one hand, the cash in the other—and bludgeon him into selling his houses?

If such builders exist, and we doubt there are many, Walter S. Johnson of Niagara Falls is not one of them. Johnson sees the postwar prospect as a wary, cagey, expecting and demanding buyer—searching for he knows not what, but nevertheless a something in the form of a house that will fit his nebulous conception of such phrases as—*marvel of modern streamlining, miracle of scientific research, warmed without a heating plant, cleaned without work.*



SECOND FLOOR



THE LUXURY of space shown points up AMERICAN BUILDER predictions of greater livability in postwar homes. Notice how large the bedrooms and closets are. Housewife can step from car into kitchen and find service bar ready to receive her bags of groceries. The kitchen is visualized and detailed in illustrations on next pages.

Yes, some even expect to see a house that can glibly abandon its foundations and wheel along on a family fishing trip. Has ever a prospect for anything been given such a *build-up* as the prospect for the postwar house?

It is to be hoped that most Americans have too much horsensense to expect the impossible. Yet it is obvious that people's expectations have been *built up* to expect far more than it will be possible to deliver by any stretch of the most rubber-bandish imagination.

Being a practical man, however, Johnson refused to pooh-pooh away the problem presented by this over *built-up* prospect. He chose rather to accept it as a real challenge to him as a builder, a challenge to deliver—no, not a miracle home—but a better home postwar than he had ever built before.

He set about this task by making a list of all the latest improvements in proved and practical materials and equipment likely to be available right after victory.

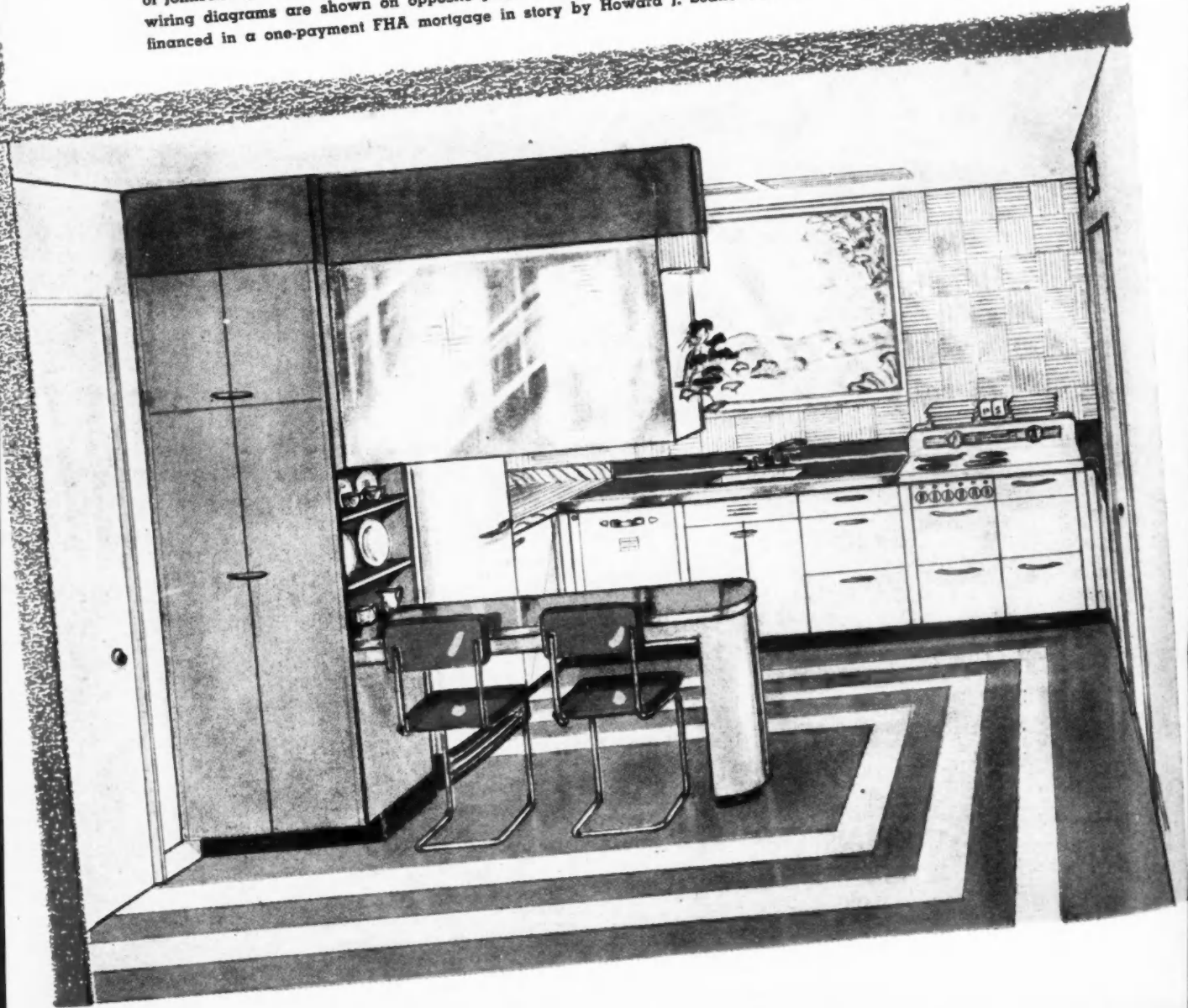
Next he listed the services he wanted his postwar homes to render. They follow: Let in a *flood of sunlight* through *larger glass areas*. Keep the *winter heat in* and the *summer heat out* with complete and vapor-

Legal obstacles have been cleared away to finance kitchen equipment in single mortgage. The FHA accepts.

ALL THE EQUIPMENT shown in the beautiful, new and modern kitchen of Johnson's postwar plan can now be included in the one mortgage on the house.

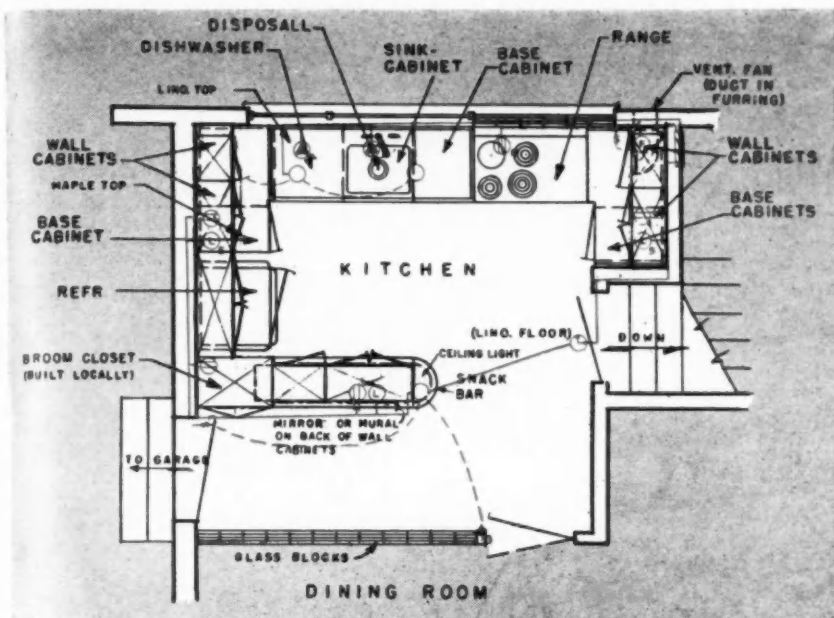
STATE LAWS ON CHATEL have now been changed in forty-two states to permit the equipment to be financed in the same amortized mortgage covering the house, provided owner and mortgagee mutually agree. Check with your local FHA office for the latest rulings affecting your territory.

A PHOTOGRAPH—not by a camera lens but by the eye of an artist—looking into the proposed kitchen of Johnson's postwar home. A mirror fronts the cabinets reaching over the snack bar. Equipment and wiring diagrams are shown on opposite page. Read how this completely equipped kitchen can be financed in a one-payment FHA mortgage in story by Howard J. Scaife which starts on the next page.



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THE OVERLAID lines in red illustrate the wiring required to accommodate the equipment shown. The kitchen plan was made for builder Walter S. Johnson by the Hotpoint Kitchen Planning Division.

LEGEND
(ASA STANDARD Z 32.9 -1943)

- ⊖ ELECTRIC RANGE CONNECTION
- ⊖_D DISHWASHER CONNECTION
- ⊖_D DISPOSALL CONNECTION
- ⊖₁ CONVENIENCE OUTLET &
- ⊖_L LIGHT & SWITCH CONNECTION
- CEILING LIGHT CONNECTION
- ⊖_C KITCHEN CLOCK
- ⊖_F ELECTRIC FAN CONNECTION
- ⊖ CONVENIENCE OUTLET

IDENTIFIES the wiring scheme by symbols which show the circuits which serve each of the several pieces of equipment. All this equipment can be included in the one payment mortgage for approximately \$5.72 additional per month. See the details in the story starting below.

sealed insulation. Provide greater year-round comfort with adequate air-conditioning and air purification. Build a full extra bathroom in place of the downstairs lavatory. Give the luxury of space by adding to the over-all size of the house—closets in which a man can turn around—a roomier, heated vestibule. Through the judicious use of mirrors add the illusion of even more space.

Build a kitchen with "Silent Serv-

ants" to give a housewife time to enjoy the playfulness of her children—the vitality at days-end to greet her husband like the spirited young sweetheart he married, not a drudgery-aged wife.

He then turned these lists over to his architect, John M. Highland, to incorporate them into plans for his postwar homes. He wanted, he said, something new in exterior design, something with a feeling of freshness

about it, but not even approaching the extreme modern.

"Modernized conventional, that's it," he said. "Keep the general lines the public eye is accustomed to see, but put a smart new dress on it."

In these pages *American Builder* presents for the first time one example of Johnson's answer to that challenge—to build a better home postwar than he had ever built before.



HOWARD J. SCAIFE

FULLY EQUIPPED HOMES MADE FEASIBLE for Postwar!

FHA acceptance and advanced merchandising clear the way for homes with complete kitchens, says Howard J. Scaife, Manager of Kitchen Sales for Edison General Electric Appliance Company.

"ALMOST everyone seems to be taking it for granted that there is just automatically a vast market for new homes. Only of late a few of the more cautious thinkers are warning us that this market cannot be expected to spring into

full bloom as soon as building restrictions are lifted," said Howard J. Scaife, manager of Kitchen Sales for Edison General Electric Appliance Company, manufacturers of Hotpoint products, in pointing out what his company is doing to

meet some of the conditions it expects to find in the postwar period.

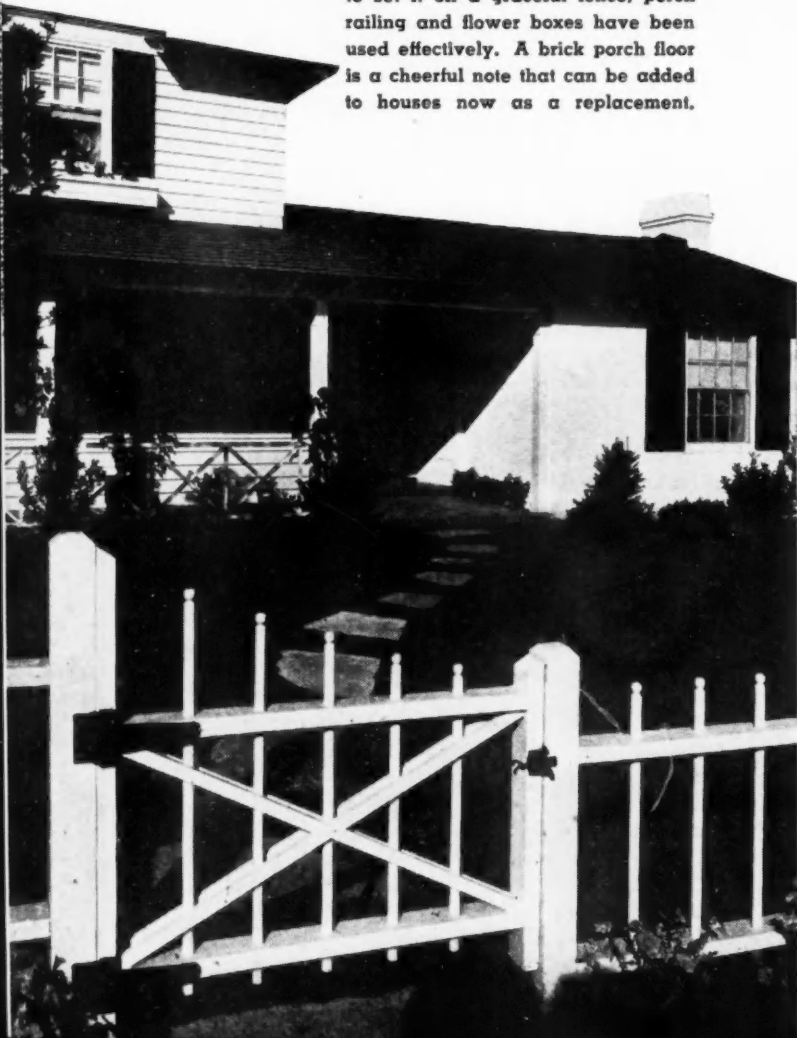
"The people who will possess over a \$100 billion in savings at war's end are not necessarily going to rush into the market to

(Continued to page 104)

Outdoor Ideas for Fix-ups Now, Homes Tomorrow

AGAIN THIS YEAR home owners are looking for ways to make their properties more livable, more valuable. Sometimes it's merely a question of maintenance, in other cases, one of adding small extra features. Pictured on these pages are a number of carefully selected details for such work; they will also add ideas to your future homes file. Those garden features that are largely done with masonry can go ahead now and some of the others require very little lumber. For instance, the graceful railing on the porch below takes only a small amount of 2-inch material; brick floor and nicely detailed spindle fence harmonize. Look these over for salable fix-ups.

SEEN below is an interesting entrance to a southern California home; to set it off a graceful fence; porch railing and flower boxes have been used effectively. A brick porch floor is a cheerful note that can be added to houses now as a replacement.

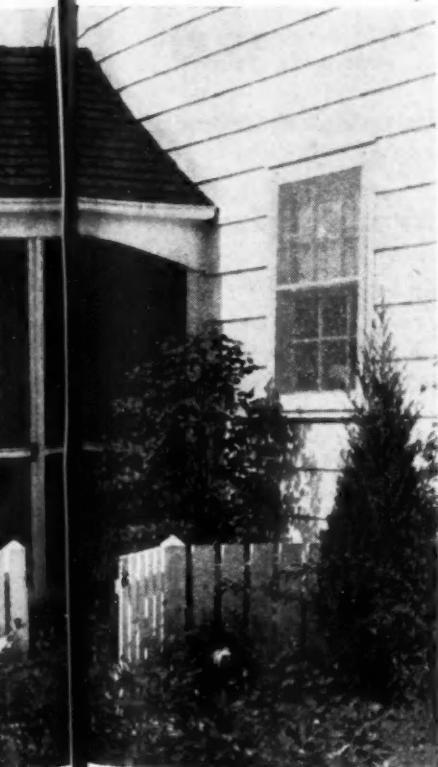
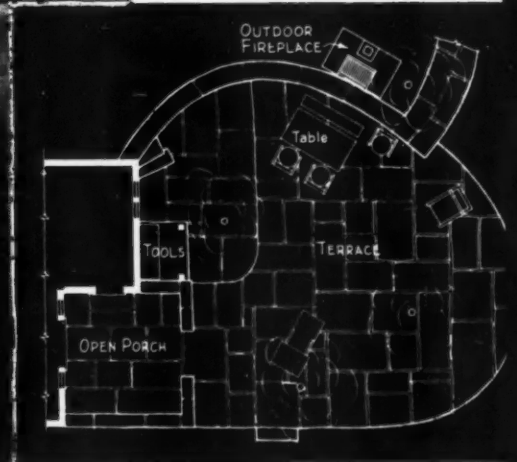


SCREENING IN an open breezeway gives outdoor living;

post lamp a

More Summer Enjoyment for Sale

WHAT home owner wouldn't like to add an outdoor living spot like the one at the left? Plan below identifies fireplace, protected work table, dining area; materials used are available but cost complete would probably exceed limit if all done at once.



Post lamp and low fence trim it up.



FLAGSTONE step, combination settee and rose arbor dress up the entrance of a plain cottage.

Convention and Home Show Set by Builders

NAHB heads meet in Washington, discuss war and postwar trends. Set January 1, 1945, for big home show meeting in Chicago.

A FURTHER indication of the strength and growth of the National Association of Home Builders of the U. S. was given in Washington last month by the announcement of definite plans for a national convention and home show to be held in Chicago, January 15 to 18, 1945, at the Sherman Hotel.

The announcement was made as the culminating feature of a four-day conference of officers, directors and members of the Emergency Committee of the association. More than one hundred builders from all parts of the United States attended.

Arrangements for the big builders' convention and home show are to go ahead on the assumption that war conditions in January, 1945, will permit such a gathering. The building exhibit will be staged by the Metropolitan Chicago Home Builders Association, with dynamic

George F. Nixon serving as chairman of the Convention and Exhibit Committee.

Nixon expressed the opinion that the time has come for private builders "to begin planning for the 5,000,000 persons who will be wanting new homes." He said such an exhibit would "dispel confusion about the postwar home."

Officials Attend Meeting

"The exhibit will answer the question as to what kind of home will be built first and when," he said. "The exhibit planned for our Chicago exposition will sift the practical from the dream, and show *what we can really expect* in this, the second largest industry in the United States."

The NAHB Washington Conference was attended by an impressive number of important government



officials. These included John B. Blandford, National Housing Administrator; Philip M. Klutznick, Federal Public Housing Commissioner; Abner H. Ferguson, Commissioner of FHA, and Earle S. Draper, Deputy Commissioner. Also on hand were representatives of WPB and government department having to do with the supply and control of building materials.

The conference was highlighted by an impressive banquet at the

American Builder to Publish Home Show and Convention Issue

The January, 1945, issue of American Builder will be a special Home Show and Convention number.

In addition to containing a preview and advance program of the National Association of Home Builders' convention in Chicago, this issue will present editorially views and opinions of the men of the building industry on postwar home planning, design, and construction progress.

War conditions permitting, this special Home Show and Convention issue will reach the men of the building industry just prior to the time of the NAHB meeting.

As George F. Nixon has put it, "The time has come when private home builders throughout the U. S. can begin planning for 5,000,000 persons who will be wanting new homes.

"Builders feel that something is needed to clarify, crystallize, and coordinate the hundreds of allegations, statements, predictions and opinions concerning the postwar American home.

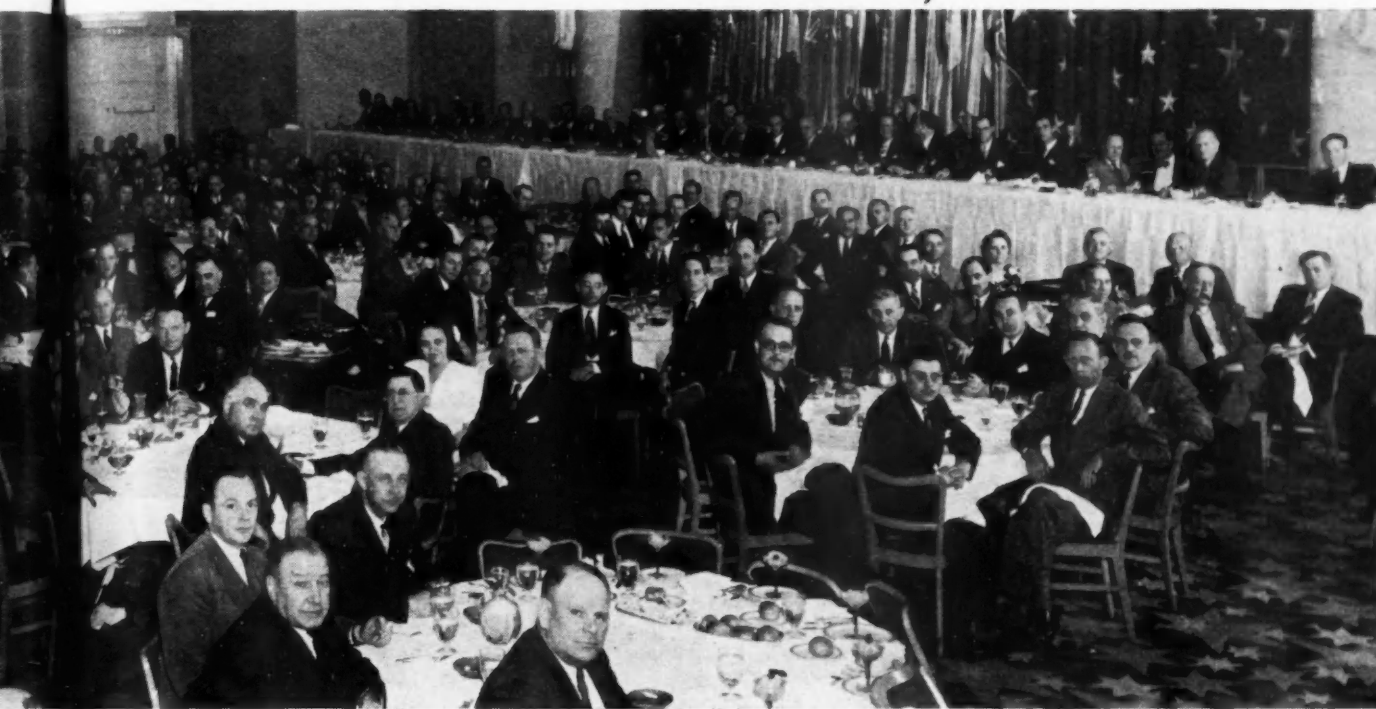
"There has been more progress in the past seven years in the home building business than in the previous fifty years."

35 CON

Statler people invited congressmen to meet with them in the Statler Hotel, Washington, D. C., on January 15, 1945. The meeting was held in the Statler Hotel, Washington, D. C., on January 15, 1945. The meeting was held in the Statler Hotel, Washington, D. C., on January 15, 1945. The meeting was held in the Statler Hotel, Washington, D. C., on January 15, 1945.

A large number of people spent the day in the Statler Hotel, Washington, D. C., on January 15, 1945. The meeting was held in the Statler Hotel, Washington, D. C., on January 15, 1945. The meeting was held in the Statler Hotel, Washington, D. C., on January 15, 1945.

W.A. to be a surprise of these California. Some of the California units, n



35 CONGRESSMEN were included among guests at banquet held during National Association of Home Builders meeting in Washington.

Statler Hotel for more than 300 people. Included among the guests invited by the builders were some 35 congressmen. Speakers at this banquet were Robert P. Gerholz, President of NAHB; Frederick C. Smith, Member of Congress from Ohio, and F. E. Hebert, Member of Congress from Louisiana.

The conference was a well-organized affair with numerous committees making reports on subjects concerning present and future operations of home builders. Among the important committees reporting were FHA Legislations, Morris Macht, Chairman; Congressional Committee, J. Wesley Buchanan, Chairman; and Committees on Taxation, Land Planning, and Finance.

A large part of each morning was spent by the builders in calling on important key congressmen concerned with legislation of interest to the residential building industry.

Because of the extent and complicated nature of the discussions concerning a wide range of problems confronting residential builders, it is impossible to report every session. Following, however, is a brief resume of the discussions of selected important subjects:

WAR HOUSING—20,000 units to be programmed for private enterprise April to November. Most of these are in the southern part of California and in parts of Texas. Some 14,000 stopgap units—portables or trailers—will be built in California. "We have some 200,000 units, mostly private, to complete,"

NHA Administrator Blandford said.

PUBLIC HOUSING—Blandford told the builders that it is the policy of FPHA to close up public war housing when private projects cannot be rented in the same area.

LUMBER—Outlook continues bad. Builders were urged to develop every possible substitute as well as every possible lumber saving device and method.

RANGES AND PLUMBING—Adequate supply expected for programmed housing. Same is true of furnaces and electric water heaters.

REFRIGERATORS—Situation worse and will continue bad. Expect these to be last of equipment to become available.

TITLE VI—Congress is to be asked for additional \$200,000,000 to complete balance of Title VI private war housing program.

Considerable discussion of some form of postwar FHA legislation to replace or continue parts of present Title VI took place. Opinions seemed to point towards provision of a new FHA title directed toward low cost private home building with a special insurance fund and special long term mortgages to permit private builders to service the low cost housing field, both for sale and rental.

CHANGE FHA NAME—Builders favored a change of name for FHA so that it would not be confused with public housing.

H1, H2, H3—The housing program immediately ahead was de-



GEORGE F. NIXON, prominent Chicago builder who heads Convention and Exhibit Committee of Metropolitan Chicago Home Builders Association. Home show will be held in exhibit hall of Sherman Hotel, Chicago, January 15 to 18.

scribed by Blandford, Klutznick and others in terms of H1, H2 and H3. H1 is used to designate the balance of war housing for in-migrant workers. H2 is described as "an interim program within the framework of existing conditions under L-41." H2 housing would be calculated "to relieve community hardships due to housing congestion." As soon as materials are available and war conditions permit the H2 program will begin to function. *It will not be restricted to war communities or to war workers.*

(Continued to page 122)

Detroit Builder Produces Basementless Duplexes

J. Leonard Rush, Architect of Detroit, and Harvard Building Company do an outstanding job



ONE-STORY, no basement duplexes in northern climates are unusual in the general run of housing. Mr. Bert Smokler, president of the Harvard Building Company, conceived and planned this development at the start of the war. It met all WPB rulings for war housing, and is near the minimum of compactness for approved living units.

The first units were ready for occupancy 71 days after the first trench was dug. All units are occupied by either renters or owners and they

seem satisfied with them. Built on a series of cul-de-sac roads, the homes are free of all through-traffic with its noise and hazards for small children.

The floor plan layout is simple and straightforward, yet it provides ample space for comfortable living in a one-bedroom home. The eating space in the kitchen is a pleasant spot because of the large window set in a slight bay. The central hall connects with all the rooms excepting the utility room which opens off a sort of back hallway, although it is, really, part of

the kitchen area of the house.

The centrally located chimney serves both houses, the utility rooms being arranged so that the warm air furnaces have short smoke pipes. The space devoted to a coal bin could be made part of a larger utility room if oil or gas were used for fuel. In this case, there would be ample room for laundry equipment and closet spaces.

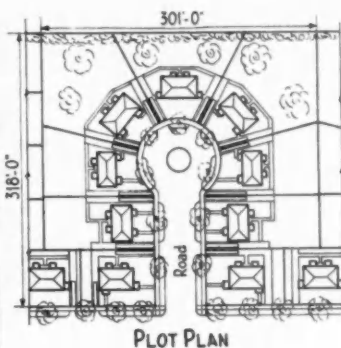
The houses are equipped with both refrigerators and stoves, and the cost of house and lot, including profit, was \$4,541, taking a mortgage of \$3,950.

Michigan Builders Display

Muskegon Builders Prefer Single-Family Dwellings

The Andrews-Achterhoff Agency of Muskegon and Walters and Brecher of New York use an excellent plan





THE cul-de-sac plot plan and the floor plan at the left show what excellent planning was done for the group of houses as shown in the photo above. The site is near a war plant west of Detroit and close to a large public park and playground. The floor plan is said to be the most compact living unit approved for war housing, yet occupants are well pleased with them. The cost per unit was \$4,500 and the mortgage was placed for \$3,950. Rent is set at \$42. Some occupants are buying their homes and all units in the development are occupied.

Versatility in War Housing

ROOSEVELT PARK in Muskegon is a flat, sandy area particularly suitable for one-story houses with full basements. Excavations are made by power equipment and, after the cement block foundation walls are laid and waterproofed, the sites are filled and graded. Of course, like most all privately promoted war housing, some difficulties were encountered. For instance, the lack of bath tubs for the 120-odd houses made the builders put shower stalls in the bathrooms for temporary use, and this meant moving the win-

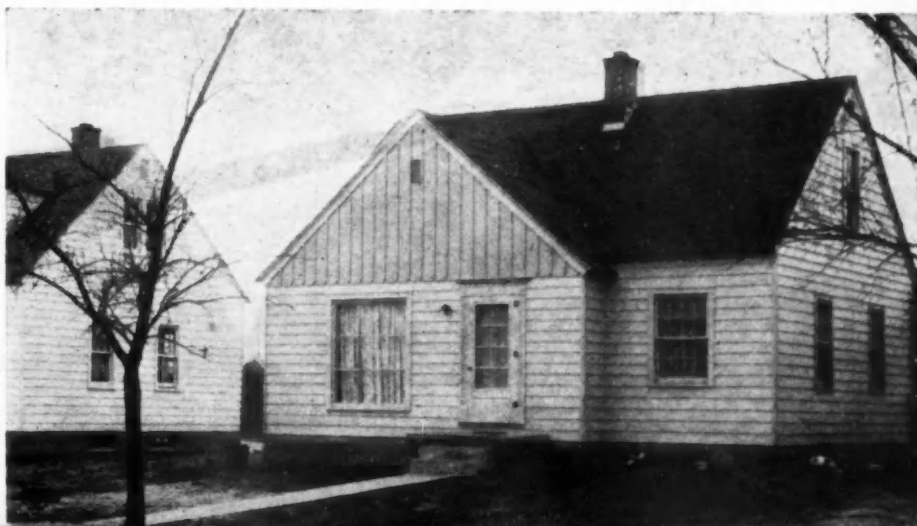
dow to one side to make suitable wall space for the shower.

The building area did not have water or sewer service, but application to WPB produced authority to extend city mains for water. FHA approved an adequate septic tank sewage system for the houses. In the sandy soil of that part of Muskegon, such a system is safe, at least until the city sewer system is extended.

A study of the floor plans at the bottom of the pages will explain the ready acceptance of the houses by the public. WPB gave the builders

authority to sell one-third of the houses at \$6,000 plus slight additional costs, which amounted to around \$150.

The rental charge is \$50 plus \$3 for service charges. The loan commitments were for \$5400, and the down payment on those sold was \$750, with monthly payments of \$37.85. Of this amount, \$30.02 is principal and interest, \$4 is estimated tax reserve monthly, \$1.65 goes for hazard insurance escrow, and \$2.18 for FHA insurance. Ample manufacturing plants border the area.



"I'm Ready Now for a Fighting Front Job", Says Bruno, the Builder

A typical American Builder, one of a fighting-building family, awaits his turn for active service; having done his best on war housing, he looks forward to the day that will start the postwar home building battle.

By Robert E. Sangster

Managing Editor

STANDING at entrance of one of his houses, Bruno Koeneman points out other units to FHA Director R. E. Terhune (So. Illinois).



YES, it's been tough going on some of these Title VI Projects but the rest of my family has had a tough fight too" agreed Bruno Koeneman, 35-year-old head of a family building business. "You see I'm the last of five builder-sons to leave off building for fighting. That'll mean 'E.J.,' my father, will have to hold things together till we finish this bigger job."

Bet your bottom dollar on one thing—the "Fighting Koenemans" will be back getting their share of postwar jobs and delivering the finest homes their community has ever seen using the heart-breaking experience learned on war housing.

And these lessons as told to your reporter make up this story of just how a remarkable job of individual Title VI rental houses was completed this spring, 100 per cent occupied and then overnight turned back to the

builder 100 PER CENT VACANT. But here's the tale from the beginning to a happy ending.

I went to Chester, Ill. with R. E. (Bob) Terhune, FHA Director of Southern Illinois, to see this Title VI project which is a favorite of his. My first impression of the builder, friendly Bruno Koeneman, was one of sincerity and determination. His jobs would naturally be well built, efficiently handled. The 20-house project that we drove to for inspection appeared to be all of that on first appraisal and had the added advantage of a picturesque site—high rolling ground overlooking a wide stretch of the Mississippi. "That you see way off there probably isn't Texas, but it must be close to it" is the way the distant view to the south is pointed out.

After agreeing that the site was one of the best, I turned to the houses and the builder for the answer as to

how this job was salvaged from threatened disaster. As pictured on these pages the units are substantial, attractive, well placed on 60 to 80-foot lots which had been redivided from former 50's. One surprising feature was all masonry construction in a section that is traditionally lumber-minded.

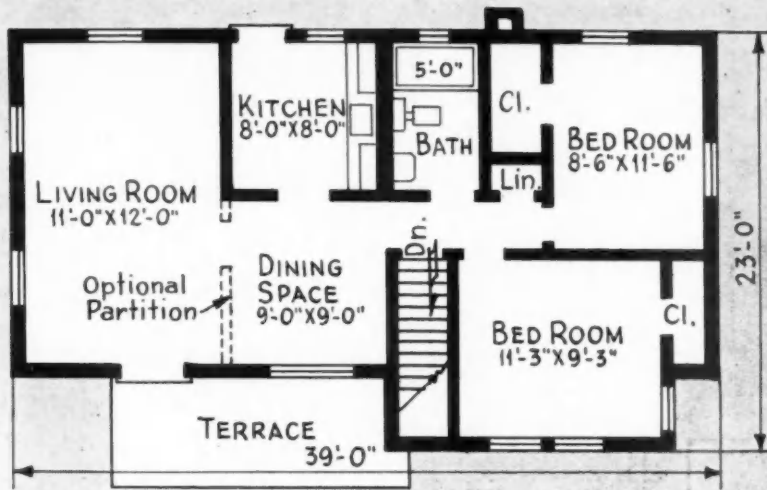
"What did the change over from frame mean to you down here?" I asked. "Well that was one of the breaks that pushed us pretty hard. You see we normally run 90 per cent of our trades, all except plumbing and heating. Most of our crews went to war and masonry had been limited to basements and chimneys anyway. When we had to go to brick and tile to meet WPB it meant bringing in mason crews at top scale.

"But we made the grade without cutting corners," added Bruno proudly. And indeed they had; in spite of

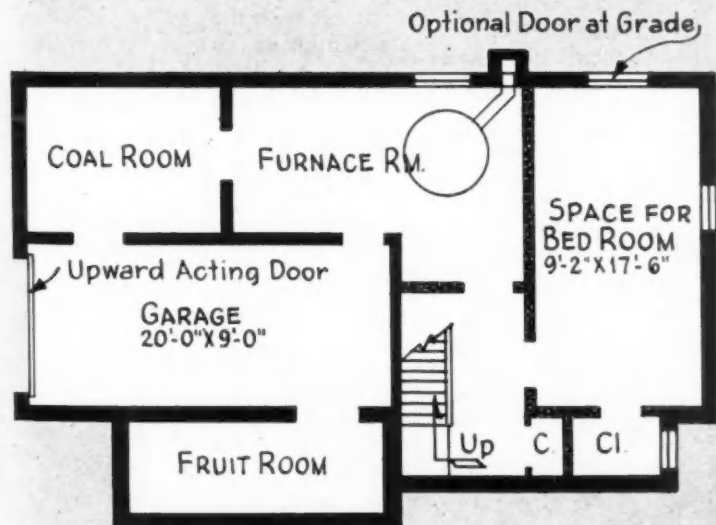
STREET VIEW of Builder Koeneman's Title VI 20-house project at Chester, Ill. Note wide lots, exterior variations of plan.



THE rear of these sites falls off to the Mississippi, one of the most picturesque spots imaginable. Garage is built into basement as on plan shown below.



FIRST FLOOR PLAN



SECOND FLOOR PLAN

upped labor rates in these downstate towns and rural areas that have pushed costs to the ceiling, these little houses have been packed with extra values.

The next question was naturally, "What did you do on this job that you hadn't done before?"

"Well there've been a number of things we've learned are important that never seemed to be pressing before," was the thoughtful answer. "For one, careful planning. Down here in normal times we only had an architect available for some of the bigger jobs. The planning department of FHA was a big help on these in working out plumbing economies, for instance. After the war we'd like to add an architect to one of our companies—the Koeman Construction Co. which is the building unit, or Koeman agency which handles the sales financing and subdividing.

(Continued to next page)

THE PLAN—Here is the arrangement that meant plus values in these Title VI units. 800 square feet of floor area, well laid out basement solid masonry construction, big lots, attractive exteriors made these units readily salable when war tenants moved out and Builder Koeman found them all on his hands over night, as told in story.

"Then there's better teamwork on the job. Now our men know how to follow along with less lost time from start to finish. Part of this better organization came through precutting. Not a fancy set-up. We just set up a bench over there," and Bruno pointed to a central spot handy to the group, "laid out joists, rafters, and other pieces and cut all we needed

from these with a Skilsaw. Simple, but a standard plan made it possible to cut out waste material and knock off hours of time.

"We've worked out a satisfactory construction on these houses with face brick, 4" tile backup, furred and plastered on Rocklath. With good insulation over the ceilings these houses are very easy to heat and are always comfortable. We'll add masonry crews after the war."

As we approached one of the houses, then occupied, he added thoughtfully, "Working with rentals you get a better idea of what people want in a small house. For instance after we started these we added a fruit cellar under those porch slabs. Didn't cost much—little more excavating and a little concrete but people like them."

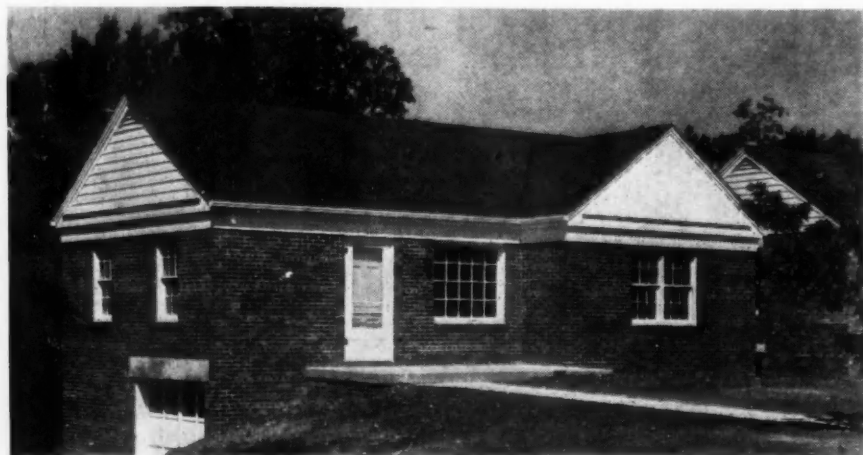
So we went inside and were shown around by a proud young housewife.

The arrangement is very livable and spacious appearing throughout as compared to some of the dog houses I've seen passed off as war housing.

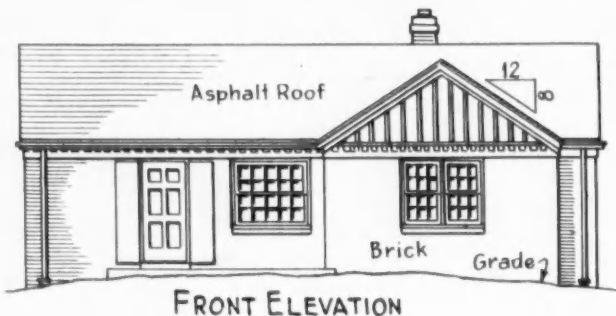
As we were coming out Builder Koенeman remarked, "The young couple that just bought that place are pretty happy about it." Bought, I wondered. "You see three weeks ago I'd just finished and rented the last of these. Then the Army closed Chester Field which was the reason these houses were built—for field personnel. Overnight every one of the tenants moved out and next day I had the whole twenty on my hands." "Wow! what a break," I exclaimed, "but what about these people in them now?"

"The ten now reoccupied are either sold or under lease option to people from town and at the rate they're going I don't expect to have any trouble with the rest" said Bruno with a twinkle in his eye. "When this happened I called Mr. Terhune in FHA office at Springfield and between us got an immediate release from WPB

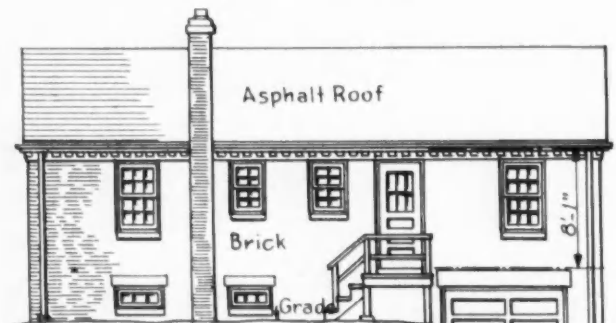
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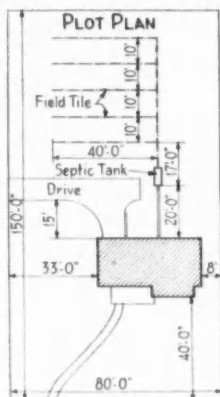
A VARIATION of exterior used on Koенeman's Chester, III. project. Close co-operation with regional FHA Office Architectural Dept. was credited for excellent values delivered.



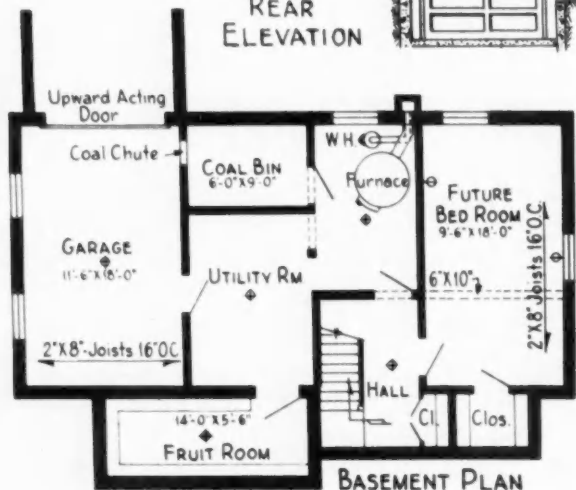
FRONT ELEVATION



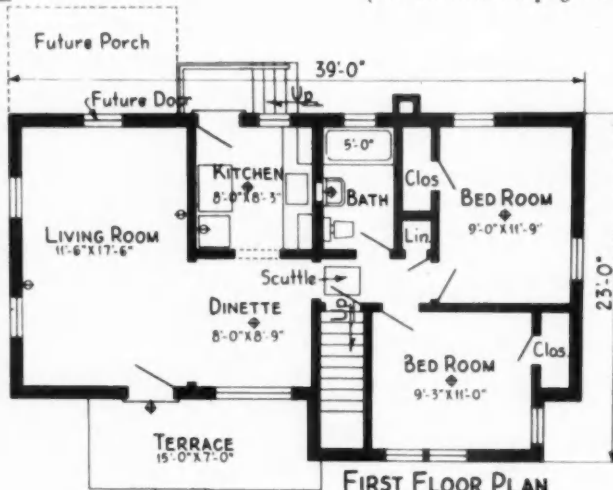
REAR ELEVATION



FOR SITES with less drop-off, this plan is used with garage entrance from rear; allows for future porch off rear of the living room.



BASEMENT PLAN



FIRST FLOOR PLAN

War-Construction Shows How to Cut Costs

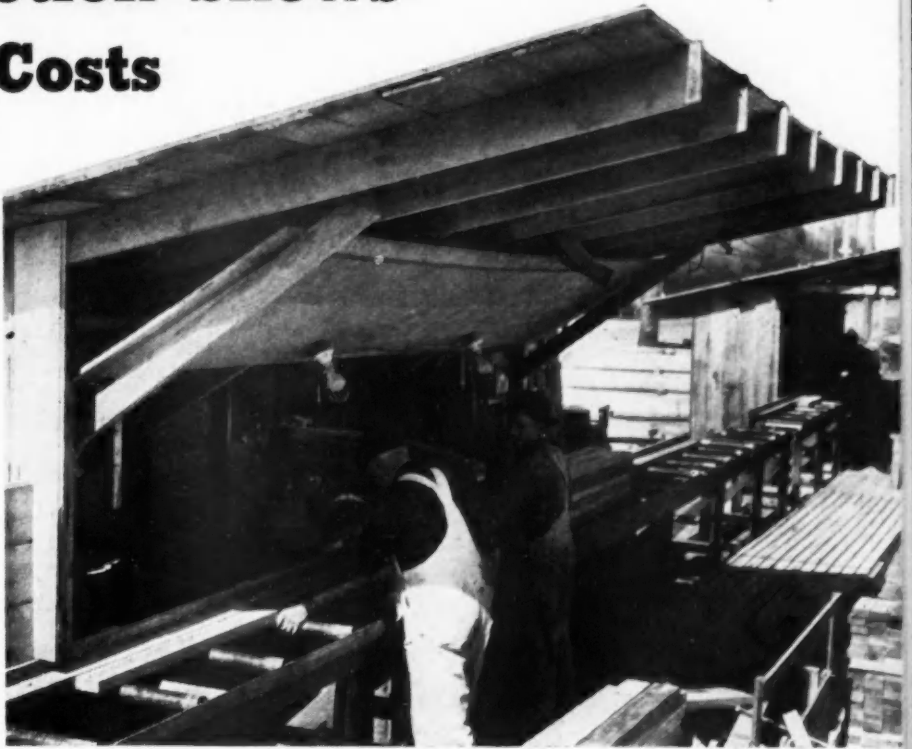
Pre-Cutting and Fitting in Power Shops at the job site, as developed in Alaskan operations, found equally good for civilian home building in Western Washington —PART I.

THE HARD LESSONS taught by war construction will certainly alter, and perhaps improve, many of the customary practices of peacetime building, even of small homes. The drive for speed and for getting the job done regardless of obstacles that has dominated war plant construction and war housing will probably be duplicated in postwar home building by a similar drive for lowered costs, less waste and more efficiency in production.

Some of the big construction organizations are already turning to the small home field and are demonstrating what can be accomplished when building is done in large units under unified management and with plenty of power tools and equipment. Costs are being cut and, in some instances, quality of workmanship improved.

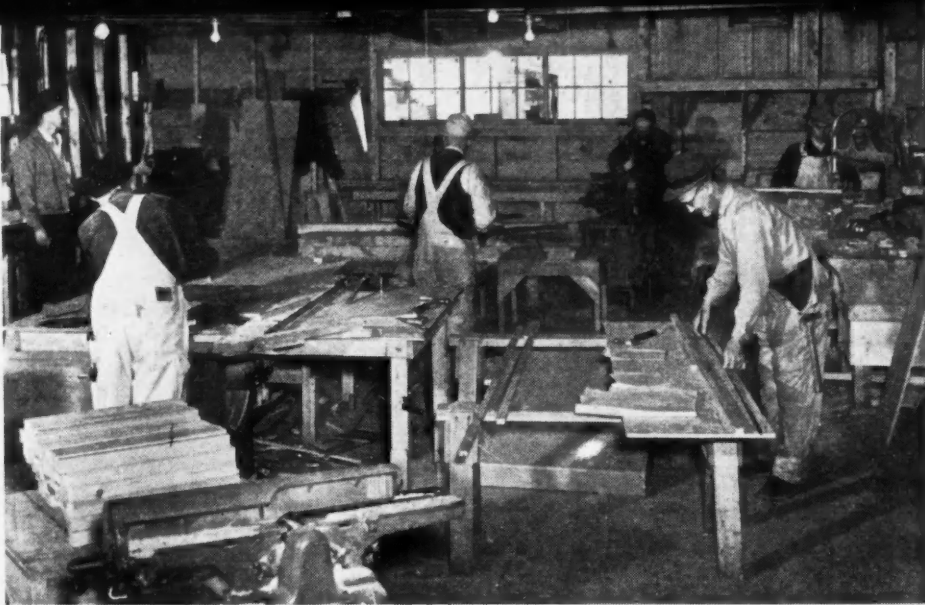
A notable example is the 415-home project, known as Northwest Homes, now being developed in the Lake Burien section south of Seattle by the Puget Sound Bridge & Dredging Co., an organization long identified with major waterfront improvements, ship building, and heavy construction in the Pacific Northwest. This is the first home building work—except for its Alaska war housing experience—that this company has undertaken. And the fact that it has gone into this sizeable development of homes as a long-term owner, offering them for rent, indicates confidence in the values they are building into these properties.

One of the things that the Puget Sound Bridge & Dredging Company men have learned up in Alaska, building houses for the Navy, is that it helps results to do a lot of the work inside, out of the storm and under cover. They had the contract for 76

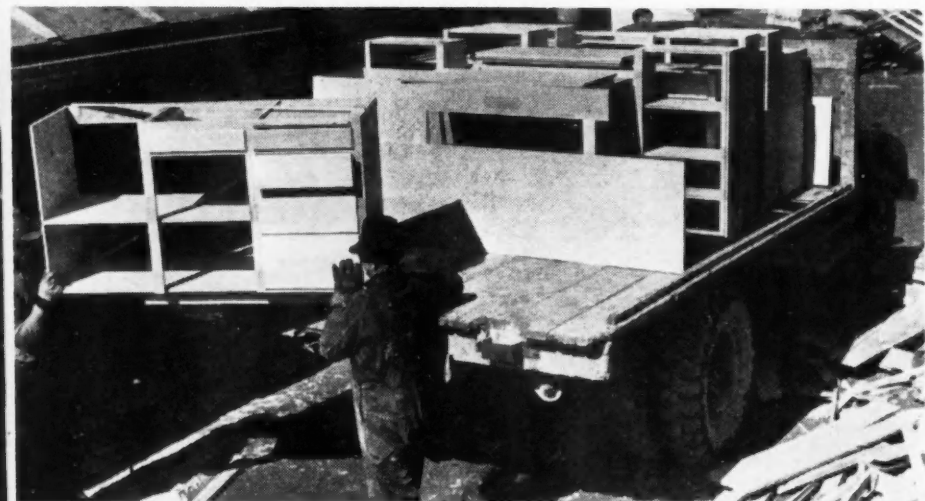


ABOVE: Double set-up of saws and roller bench handles angle cutting at both rafter ends without reversing on Puget Sound Bridge & Dredging housing job. **RIGHT,** handy lumber buggy (made from an old concreting cart) transfers finished work to stock piles. **BELOW,** stock piles of cut-to-fit rafters, each unit one complete roof, ready to be trucked as needed.





KITCHEN CABINETS, porch brackets and other special millwork are turned out in this temporary power-shop building (above) at the job site. Color priming of vent panels (left) is done under cover in a dry, heated warehouse shed, 24 by 100 feet, where the Curtis Silentite window frames and sash and the Wheeler-Osgood Tru-Sized doors are stored.



houses at Dutch Harbor and found that the best way to win out against the weather up there was to do as much as possible of the cutting and fitting for those houses inside the snug work-shops which they set up right at the building site.

Careful scheduling and planning and the use of power tools in these shops held their costs in line and permitted them to forge ahead with the job in spite of rough weather.

Also, another housing contract at Kodiak was undertaken; this one using prefabricated wall sections; but that method proved more expensive and not so practical for that region of high winds. So, the company's present home development rests on this war housing experience plus its heavy engineering and contracting background dating back to 1885.

Early last summer the Puget Sound organization acquired two extensive tracts of raw land four to five miles south of Seattle's industrial section. Topography was high and gently rolling; soil a rich loam, well drained; forest growth dense but small. A development plan of wide, slightly curving streets, with home sites averaging 50 feet in width, was laid out by Robert L. Durham, architect, who also prepared eight basic floor plan designs for 2-bedroom and 3-bedroom homes, each basic design having five different elevations. This gave a total of 40 distinct designs, and by reversing the floor plan double that number. Total number of houses to be built on the two tracts is 415.

Work began immediately leveling and grading the land with powerful bulldozer and wheel scraper equipment; the streets were put through; city water and electricity brought in; concrete sidewalks laid and curbs put

LEFT: Cabinets for three houses are being loaded on truck, one of three flat-bed trucks kept busy moving pre-cut and semi-finished materials from the shop and storage area to these Seattle houses under construction.



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in, to be followed by asphalt paving. All of this work was done by the Puget Sound Bridge & Dredging Co. with its own force and equipment.

With the start of the actual house building operations the important power shop buildings and warehouse sheds were put up, located near the entrance to the tract on a main traveled road and adjacent to the field office. Under the efficiency building system to be followed every cutting operation was to be done by power in these shops and warehouses, the pre-cut and fitted pieces then to be labeled and piled in stock and transported to each house by truck as needed.

Several of these shops are here illustrated. The rafter cutting shop is semi-open air; it has two DeWalt saws and a long roller conveyer bench so that both rafter ends can be sawed with angle cuts without reversing rafter or changing the setting of the saw. An accurate cutting list and set of patterns control the operator and his assistants. There are 38 different types of roofs in use, each calling for a slightly different assortment of roof members. Fifty complete roof frames are carried in stock alongside the framing shop, and the stock piles are plainly marked with house design number. Everything needed to erect a roof is there to be picked up as needed and trucked to its house.

Wall studs come from the saw mill cut to a standard exact length of 7' 2 5/8" (at a cost of \$1.00 per thousand extra).

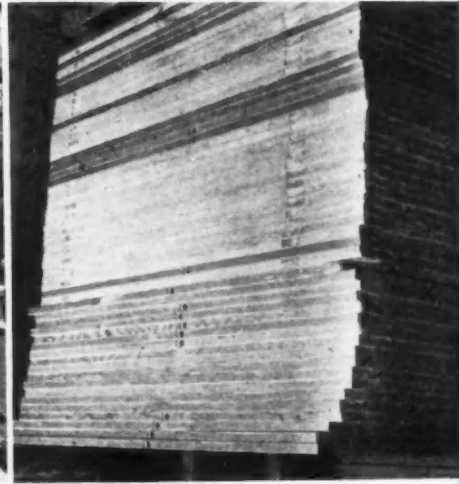
Rough window bucks are made up in the eleven different types and sizes called for in these house designs, and are piled in the stock yard ready to be picked up and trucked out.

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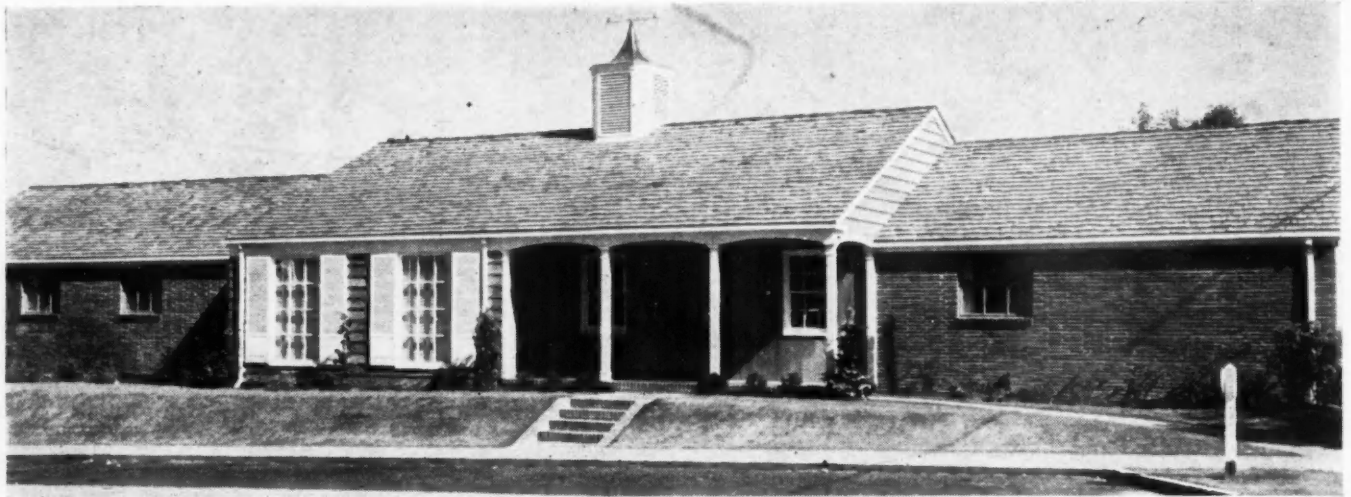
RIGHT, supply of built-up stair stringers which are "just as strong and cost half." Tru-Sized doors, factory fitted and bored, ready to hang. BELOW is shown panoramic view of part of Northwest Homes development. All photos by "American Builder."



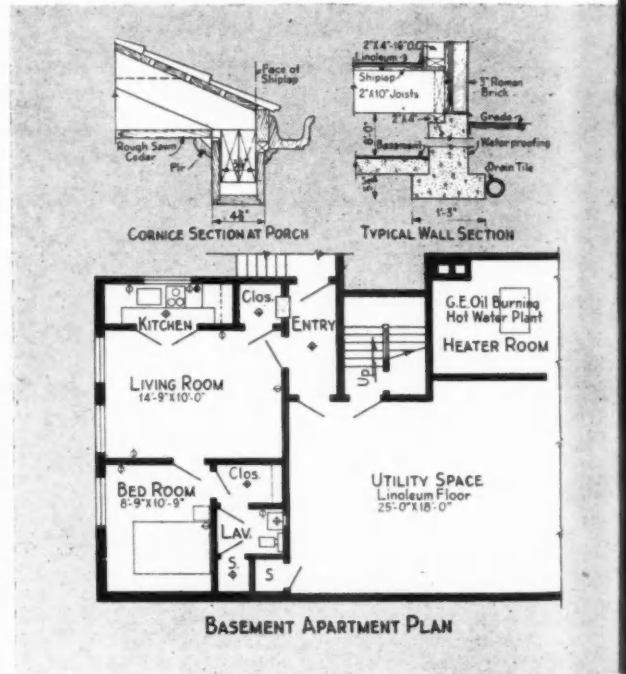
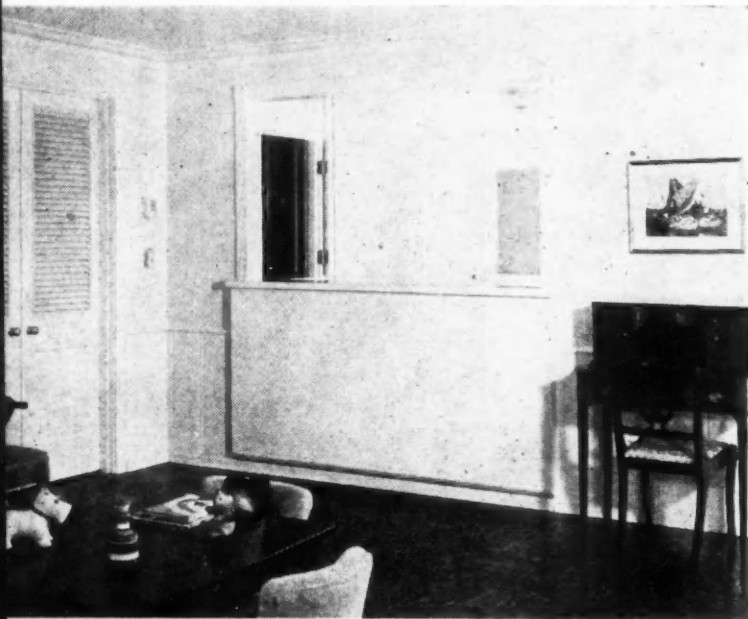
PIPE AND PLUMBING SHOP, with power cutting and threading machine, cuts costs. Each wired bundle on rack (above) contains everything needed for complete water piping for one house. Sanitary piping loops and other pipe assemblies also are made ready in this shop. Window frames are stacked ready for delivery.



Many Communities Want Doctor's Clinic



MUCH of the effectiveness of this professional building is due to the skillful detailing of the entrance. Below and on opposite page are floor plans of the Nelson Clinic; Ralf E. Decker, architect; Andrew A. Nelson, builder. At left, below, general reception Room, size 17 by 21 feet; the control desk was specially designed; sliding panels of plate glass separate the receptionist's office from the waiting room. Also below, is one of the two consultation offices.



IT IS very probable that in our postwar America a good many doctors will be adopting the clinic type of office, since it conserves the doctor's time, permitting him to serve more patients more efficiently. The trend in some cities is already definitely that way; and, as between a location at the city-center or out where a drive-in site can be had, many seem to prefer the latter.

These private clinic buildings can be large or small, depending on the number of physicians and the type of practice; but, in general, they follow the plan of providing each doctor with a number of small examination rooms in addition to his larger office or consultation room, so that a number

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Like This

Designed to harmonize with a Seattle home neighborhood, successful Nelson Clinic of drive-in type sets a pattern for postwar construction; ideal facilities for two or more associated physicians



Photos by Hugo Osterman



FIRST FLOOR PLAN

of patients can be taken care of at one time, with a nurse or assistant attending to the "preliminaries." The head physician then moves along from patient to patient, as in a hospital, and his time is greatly conserved. Provided also are a general reception room, operating room, special treatment rooms, x-ray, technician's laboratory, etc.

Designed and built in 1941, just before the war restrictions on building were imposed, the medical offices of Dr. Reuben E. Nelson and his brother, Dr. Philip S. Nelson, on East 63rd Street near Roosevelt Way, Seattle, exemplify this system. Located in a residential neighborhood, the building is very much of the homey type. It is pleasant and inviting, and thoroughly accessible both to the drive-in automobile and the "baby carriage trade."

Careful detailing and good construction have combined to give this structure an atmosphere of professional competency.

The photos and drawings on these pages, merit careful study. The building, of colonial design, occupies a corner site with a frontage of 127 feet and a depth of 70 feet. The street curb in front is recessed back to the sidewalk to permit right-angle parking of a dozen cars. Construction is a combination of brick veneer (narrow roman brick) for the two wings and 10-inch cedar siding for the central section. Roof is of 25-inch cedar shakes. The lantern was adapted by Architect Decker for the crowning feature of the building after having tried and rejected

(Continued to page 124)



CASHING IN ON THE FARM BOOM IS GOOD GOING FOR BUILDERS

Homes, barns and sheds are in dire need of repairs. Both money and materials are available.

DON'T ever let anybody tell you that it is a waste of time to go out into the country for good business in the building line. There's enough building needed now and for the next ten years to amount up to an average of a billion dollars every year. Just read some of these figures taken from a collection of Government and private agricultural engineers' surveys for definite proof.

Farm construction and maintenance in 1919 was 940 million dollars. In 1932 it was 140 million, and depreciation was figured at 405 million. In 1939, 34 per cent of all farm structures needed major repairs, and half

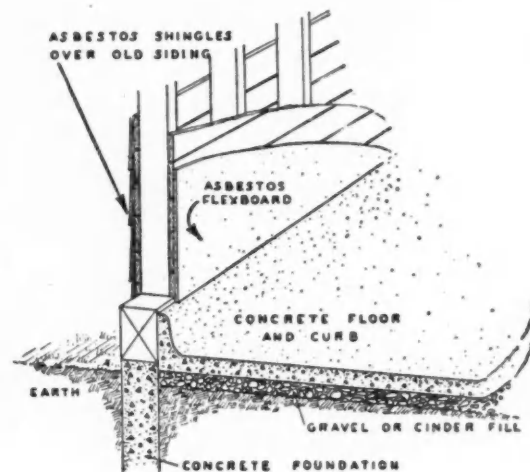
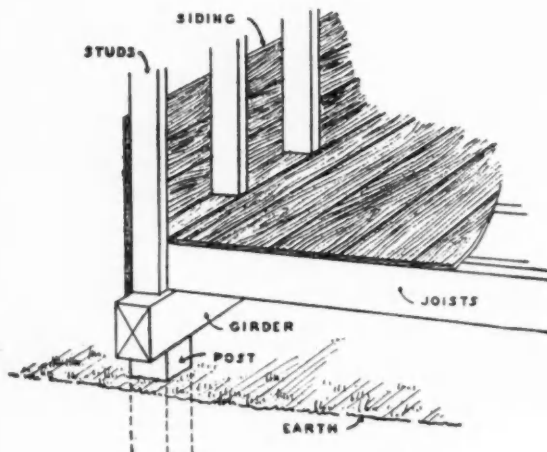
of the farm homes were over 25 years old. Annual fire losses were 90 million dollars, and other losses added another 10 million dollars. And as far back as 1934 a Government housing survey showed a need for 700,000 farm dwellings.

The farm plant entered the war in a state of deterioration that has steadily grown worse. As the farmers' incomes grew bigger with the war, they had the money and desire to fix up their buildings and build new ones, but there was difficulty in getting materials, and help was scarce. But now the need for farm production to not only win the war but to help keep it won

is so important that materials are being made available and loans are easily obtainable.

The farm field is ripe for the builder, and the farmer is waiting for his help. These facts are brought out in many ways, one of which is by public-opinion surveys in which the farmers say that 32 per cent of them are going to build new or repair old structures.

All interests in the rural field are constantly telling the farmer that he should improve his establishment for one reason or another. The farm press, American Society of Agricultural Engineers, Land-grant college



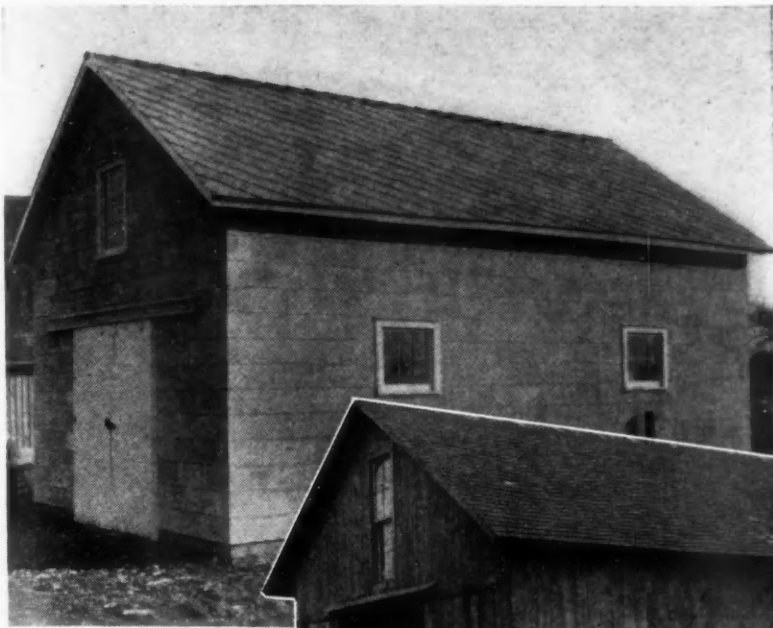
BEFORE and after drawings at the left show how an old wood floor building can be given a foundation of concrete and a rat-proof floor and walls, using asbestos siding and boards on the latter. The girders are jacked up and blocked. All rotted wood is removed before making repairs.

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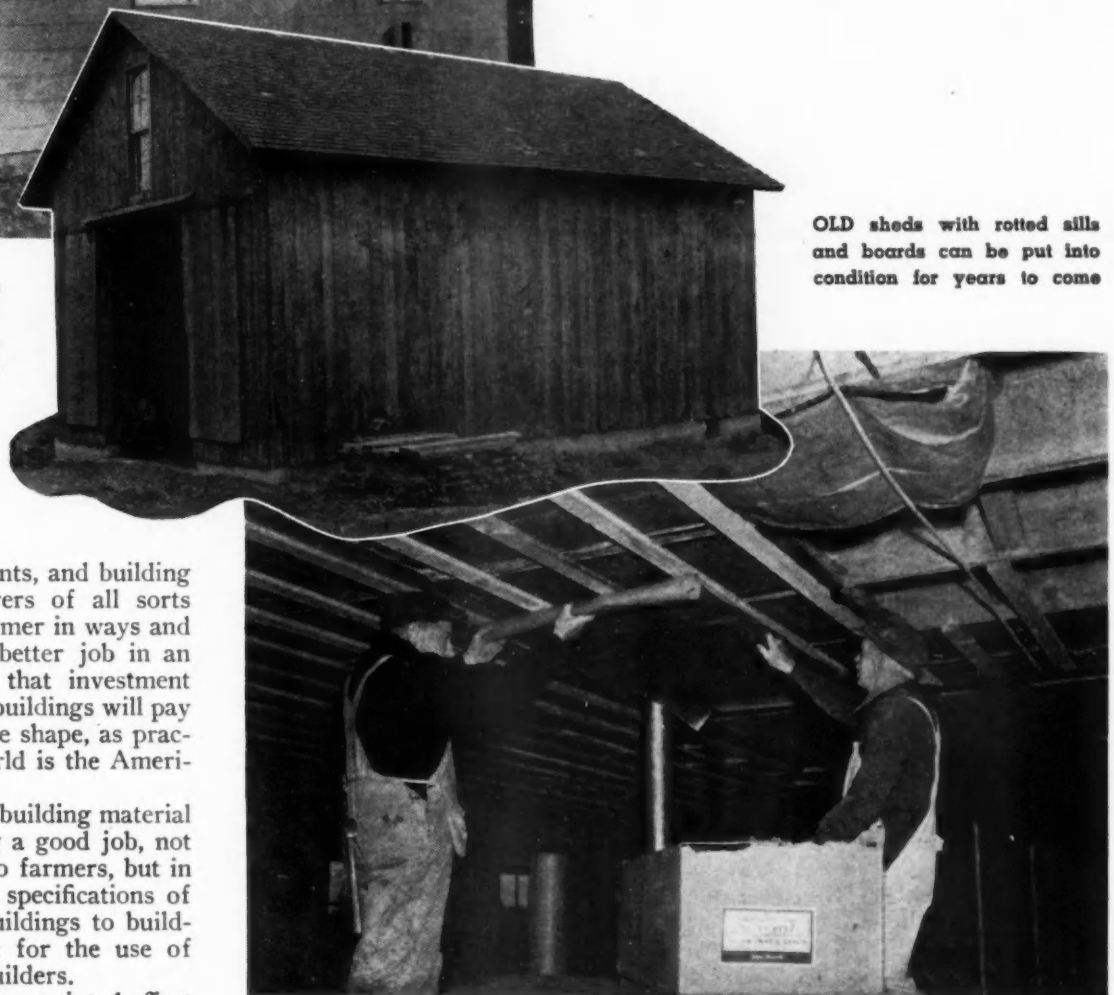
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REHABILITATED sheds like the one shown above are profitable jobs for both builders and farmers

New buildings, new additions, remodeling and repairing are all part of the paying farm market.

OLD sheds with rotted sills and boards can be put into condition for years to come



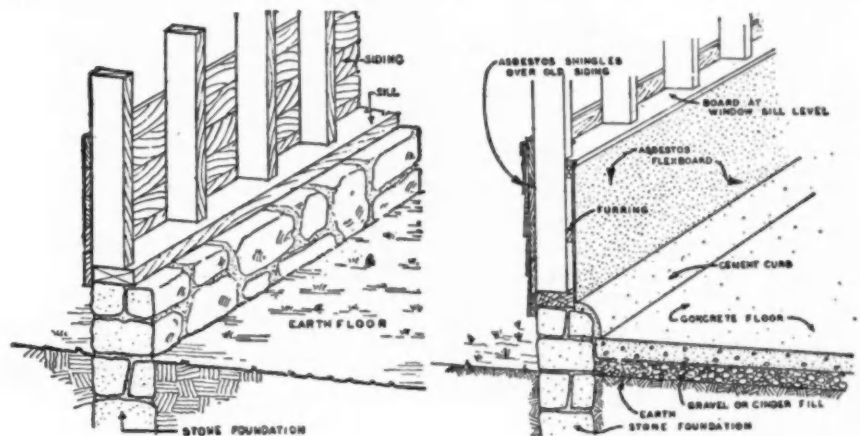
CEILINGs of cow barns are insulated, vaporproofed and fireproofed for better results.

experts, County Agents, and building material manufacturers of all sorts are educating the farmer in ways and means for doing a better job in an easier fashion, and that investment in better homes and buildings will pay for itself in very nice shape, as practically the whole world is the American farmer's market.

Especially are the building material manufacturers doing a good job, not only in advertising to farmers, but in supplying plans and specifications of all types of farm buildings to building material dealers for the use of both farmers and builders.

There also has been a pointed effort on the part of manufacturers to produce and explain the uses of different kinds of building materials that do not call for priority ratings. And, too, the farmer's ability to secure enough materials that do call for ratings to build or repair his buildings is far better than his city brother who goes away from home to make a living.

MANY old barns with earth floors and sills resting on stones, similar to the sketch at the right, are well worth putting back into shape despite the rotted condition of their underpinning because the upper framing is usually in good shape. The method shown in the farther sketch is a practical way to install solid, rodent-proof floor and walls.





THIS is the beginning of a conversion job making a practical and pleasant living room out of an old, out-dated porch.

Jobs and Profits in Repairs & Conversions

The Remodeling and Conversion of Homes Is Fast Becoming a "No Limit" Game. Figures Regarding This Activity Run Into Billions



NOT only the need for but the actual doing of remodeling and conversion jobs is growing by leaps and bounds. There is a sound reason for this because of the growing necessity to keep both home and small business properties in good economic condition.

New postwar building will surely come along in an increasing volume once materials are released for this purpose. Owners of properties are anticipating the competition that this new construction will create, and are now making repairs and conversions so as to be in as sound a position as possible when new building does become a reality.

Houses that now are just home properties will, if converted into income properties, be in much better shape to be sure of paying off the balance of the mortgage, or to be a more attractive proposition on

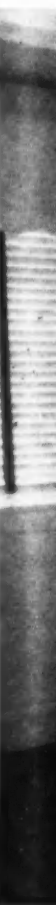
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the real estate market for re-sale. Builders and mortgage lending agencies use these facts to influence home owners in the acceptance of having jobs done on their properties while it can be done now with FHA insured loans, and while building materials are available for the purpose of creating added quarters for war workers and their families in areas where new war housing doesn't supply the need.

While new building construction is important, there never has been a real replacement market for houses. When considering the population growth of the last two decades, it is found that with a net increase of 10 million non-farm households, there were 10 million new dwelling units built. From 1940 to date, the picture changed. The conversion of existing houses is now necessary to take care of the increase in the number of families, and this continues more and more so as new construction lags.

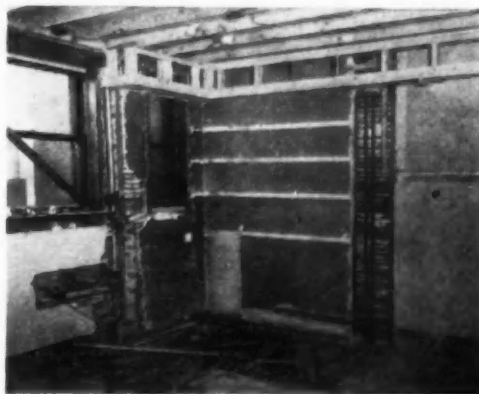
The before and after pictures of conversion of an old porch area into part of a living unit in an old house is a good example of the possibilities along this line. The brick wall was furred and knotty pine siding applied. The archway was framed and lined with mirror glass, and glass shelves added to create a distinctive decorative note.

Most every conversion job calls for a bit of ingenuity in planning the alterations, as seldom is one job quite like the last one. An example is the kitchen bar shown in the photo below. It makes possible the inclusion of four cupboards and drawers and counter top needed for the size of the kitchen.



PORTABLE power tools used on remodeling and conversion jobs do much to keep the cost of labor at a minimum. Here is a saw ripping an 18-foot board in 1-20th the time it would have taken by hand sawing.

CONVERSION jobs often call for considerable tearing out and rearrangement of existing conditions, but much old material is reused.

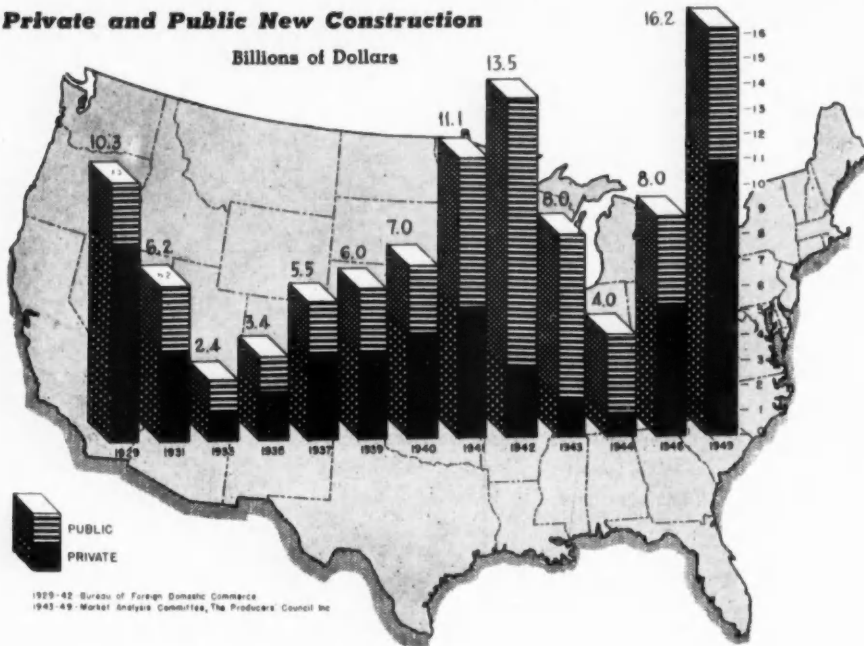


BELOW is a modern kitchen and dining alcove built in a conversion job that paid good profit for the builder.



How Big Will the Postwar Market Be?

Private and Public New Construction



"Foresee Average Postwar Year 55 Per Cent Ahead of 1929, Best Pre-war Year"—Market Analysis Committee of the Producers' Council.

Market Analysis Committee's estimate of \$6.4 billion of private residential building as an average for the five years, 1947-51, would provide 972,000 dwelling units per year.

There is also a great volume of deferred maintenance, repair and modernization. In addition, community facility construction (commercial, religious, recreational and other types of building) has been subnormal during the past decade. Demand for industrial construction will also be large as a result of new product development, plant decentralization and the expansion necessary for high levels of postwar production.

It is more than likely that postwar construction will provide markets for building products aggregating in value at least five per cent of the gross national output. This means that, if building product manufacturers appraise postwar market potentials with foresight and clear thinking, there may be during 1947-51 a market for building materials and equipment averaging almost \$10 billion, 30 per cent greater than it has ever been.

IN 1943 about half of the families had incomes of over \$2500, while during 1935-39 less than 15 per cent of the families were in the same income group, according to The Producers' Council. War restrictions have prevented the normal flow of this increased income and have deferred the expansion of construction markets.

A great portion of the increase in national income continues to accumulate. Savings by individuals and unincorporated enterprises, according to the Department of Commerce, will increase during 1944 to a total for six years up to \$125.7 billion. At least \$100 billion of this can be expected to be in more or less liquid form. But, unless civilian pro-

duction is quickly resumed, and geared for high levels, accumulated savings may be dissipated during a period of protracted uncertainty and unemployment.

Postwar construction demand is rooted in the nation's need for new facilities and for the proper maintenance and care of existing properties.

No need is greater than that for new residential units. To provide for only the need created by new family formation and the deficiency of housing during the depression and war years, it has been estimated that there will be a basic postwar requirement for about 600,000 new non-farm dwelling units a year. The

VOLUME OF CONSTRUCTION ACTIVITY IN THE UNITED STATES' 1928-1949 (Millions of Dollars)

Type of Construction	1949*	1948*	1944 ¹	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928	
			Armistice Before July 1st	No Armistice																
New Private Construction	10,978	5,290	1,580	985	1,593	2,877	5,261	4,232	3,530	3,162	3,507	2,730	1,908	1,479	1,200	1,729	3,648	5,430	7,926	8,063
Residential	6,383	2,100	625	400	792	1,460	2,881	2,359	2,046	1,767	1,655	1,368	913	591	413	638	1,460	1,790	3,562	3,961
Industrial	845	590	150	50	126	315	678	423	227	183	493	279	157	175	185	77	195	487	802	717
Community Facilities	1,865	1,100	130	60	65	212	628	559	505	500	529	419	300	266	232	467	901	1,401	1,699	1,900
Farm	585	500	185	145	125	195	300	246	226	220	210	200	200	140	125	85	145	240	300	285
Public Utility	1,300	1,000	470	340	485	695	774	645	526	492	620	464	338	307	245	462	947	1,512	1,563	1,330
New Public Construction	5,260	3,500	3,065	3,030	6,425	10,672	5,884	2,754	2,515	2,086	2,038	2,174	1,449	1,486	1,216	1,794	2,577	2,777	2,411	2,463
Residential	140	290	415	460	800	600	479	205	76	35	93	61	9	1						
Industrial	20	115	690	720	2,150	3,585	1,400	144	14	14	4	3	4	9	(*)	(*)	(*)	(*)	(*)	(*)
Military and Naval	280	435	1,170	1,305	2,860	5,206	2,059	510	119	62	37	29	37	47	36	34	40	29	19	15
Highways	2,030	1,860	530	385	400	667	1,013	945	884	837	850	876	622	821	675	916	1,323	1,481	1,248	1,270
All Other Public	2,790	800	200	160	215	614	933	950	1,422	1,138	1,054	1,205	777	608	505	844	1,214	1,267	1,144	1,177
Total New Construction	16,238	8,790	4,665	4,025	8,018	13,549	11,145	6,986	6,045	5,248	5,545	4,904	3,357	2,965	2,416	3,523	6,225	8,207	10,337	10,565
Maintenance and Repair	5,400	3,900	3,000	3,000	3,600	3,456	3,421	3,123	2,982	2,805	2,866	2,687	2,288	2,028	1,773	1,967	2,584	3,301	3,562	3,444
TOTAL CONSTRUCTION	21,638	12,690	7,665	7,025	11,618	17,005	14,566	10,109	9,027	8,053	8,411	7,591	5,645	4,993	4,189	5,490	8,809	11,508	13,899	13,999

*Annual Volume 1943-1949 estimated by the Market Analysis Committee of The Producers' Council, Inc. Data prior to 1943 are published figures of the Bureau of Foreign and Domestic Commerce, excluding Work Relief Construction which amounted to \$6960 million from 1933 through 1942.

*1949 is the average, or middle year, of the period 1947-51 during which time it was assumed that construction costs would average 30% higher than the level obtained in 1940.

*1946 is not the exact year. This represents the construction volume of the first twelve months after cessation of hostilities on the assumption that final armistice occurs prior to mid 1945 without chaotic price inflation. Further, the estimate is predicated on resumption of building product manufacture and civilian construction before the final armistice. It is also assumed that a substantial number of private and public construction projects will have been planned in advance of the final armistice.

*The estimate on the basis of an armistice with Germany before July 1st, 1944, has been made solely to indicate the probable immediate effects on construction if such an armistice occurred and War with Japan continued.

(*)Public Industrial Building not segregable from private construction prior to 1934.

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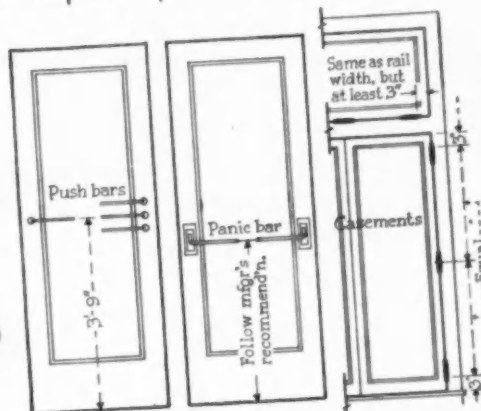
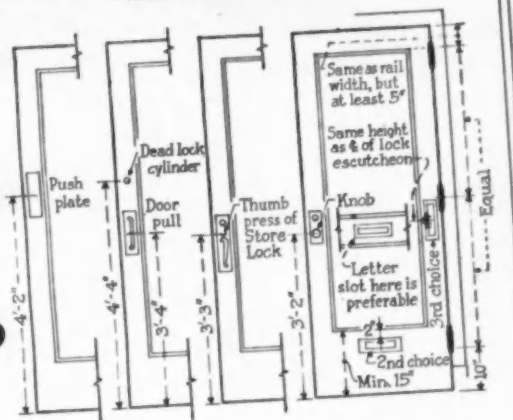
HANDY NOTEBOOK WORK SHEETS

American Builder JOB HELPS Prepared by Don Graf

Builders' short cuts, time savers and how-to-do-it ideas shown in convenient 3x5 notebook size for use in office or on the job. A continuing editorial feature appearing monthly. Sheets or notebooks are not for sale or available from any other source than the editorial pages of American Builder.

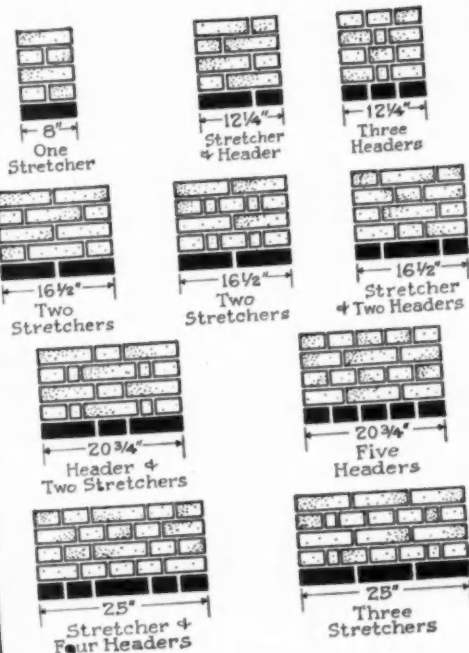
HOW TO LOCATE HARDWARE

AMERICAN BUILDER FOR JUNE 1944



HOW TO LAY UP BRICK PIERS

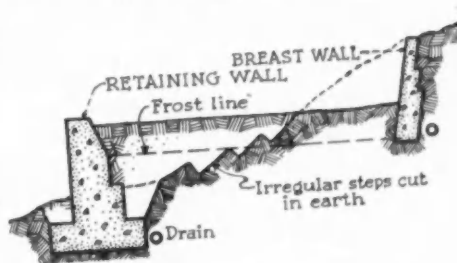
AMERICAN BUILDER FOR JUNE 1944



One-half inch vertical joints have been used as the basis for the dimensions shown above. By varying these joints from 1/4" to 1" a considerable latitude in widths may be obtained so that piers will fit properly between windows and doors without too much cutting of brick.

HOW TO BUILD TERRACES ON SLOPES

AMERICAN BUILDER FOR JUNE 1944



BREAST WALLS—These are erected only to prevent weathering or disruption of earth which is in its **UNDISTURBED** natural position, and which is sufficiently cohesive and stable to support itself unless disturbed. Breast walls cannot be used to retain earth whose angle is greater than about 30°. The greatest angle for plastic clay is 25°. The strength of a breast wall must be increased when the strata to be supported slope down toward the wall.

RETAINING WALLS—These are of sufficiently heavy mass to prevent overturning due to the pressure of material behind. The back of the wall should be sloped from the frost line to its top surface, as shown. This slope should be troweled smooth to lessen the hold of the frozen earth and prevent displacement. If the original ground is made stepped and the new earth well rammed in layers, the pressure will be less toward where the earth is placed in layers sloping toward the wall.

WATERPROOFING—The life of the concrete will be lengthened if a standard waterproofing is applied. If finished masonry parapets occur on the top of retaining walls, a damproof course should be laid under them.



Now Is the Time To Put American Homes In 1st Class Shape

Non-priority materials and a certain amount of others are available for use

Readers are invited to submit how-to-do-it items for this department. \$3.00 will be paid for each item when published. Include sketch or photo.

How to Prepare an Old Surface for Re-Siding

OLD MAN WEATHER, plus neglect on the parts of home owners, have created a tremendous market for re-siding and re-roofing. Various types of shingles and siding materials are available without priority. In fact, the powers-that-be in Government circles are emphasizing their desires for rehabilitation of existing buildings in an effort to keep families healthfully housed pending the final relaxation of restrictions on new private building operations.

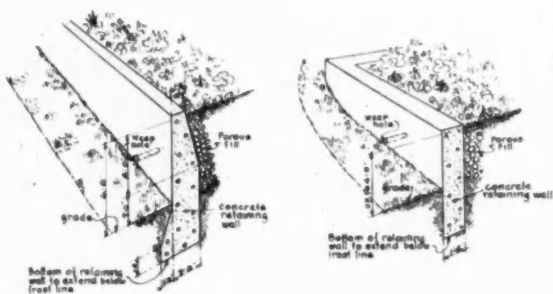
Old surfaces, whether roof or walls, have vulnerable spots that need attention before any new surfacing materials are applied. On the roof, for instance, the ridge, eaves, valleys, gutters and flashings at chimneys, dormers and vent pipes are dangerous spots which need careful inspection and repair, or at least made water-tight with roof cement before re-roofing. Flashings at window and door frames can well take a treatment of cement or calking compound before sidings are applied.

All loose roofing and siding must be nailed down tight and the surface made as smooth as possible. On side walls, a layer of gypsum board or a similar board for the purpose is good practice. Bevel wood strips can be used to smooth the projections of butts of old shingles or siding. The exterior layer of surfacing material plus the re-siding of asphalt or asbestos-cement shingles adds a real degree of insulation to the house. This feature, plus calking and double windows in winter, make such jobs attractive propositions to home owners, and good business for you.



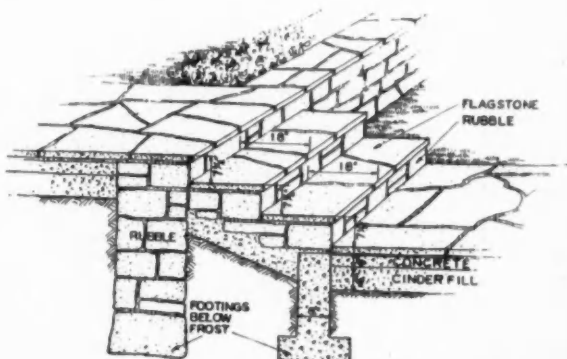
How to Build Retaining Walls

THE action of winter freezing and melting often has a bad effect on retaining walls that were improperly designed when built. Here are two satisfactory types for various heights that will withstand extremes of weather. The depth of the wall, its thickness and height dimensions, the weep holes and kind of fill are important. The bottoms of the walls must go below the frost line for safety.

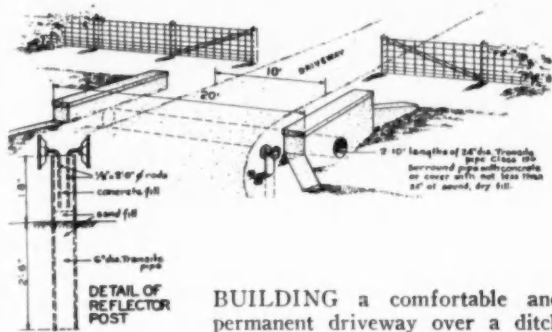


How to Lay Flagstone Walk and Steps

PERMANENT construction of flagstone walks and steps depends upon proper footings, foundations and fills. To do a good job of repairing such work, it is best to get down under the surface and supply footings or proper fill before re-laying the flagstones themselves, as shown in drawing.



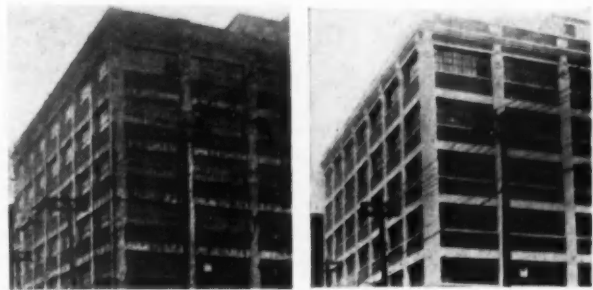
How to Make a Driveway Entrance



BUILDING a comfortable and permanent driveway over a ditch or gutter is not hard to do if you follow the dimensions and method shown in the accompanying sketch. Foundations for the poured concrete walls must go below frost line. Two 10-foot lengths of Transite pipe, class 150, are surrounded with concrete or covered with not less than 24 inches of sound dry fill. The reflector post is a 6-inch Transite pipe partly filled with sand and then with concrete poured around the 1/2-inch, 2-foot rods that hold the reflectors.

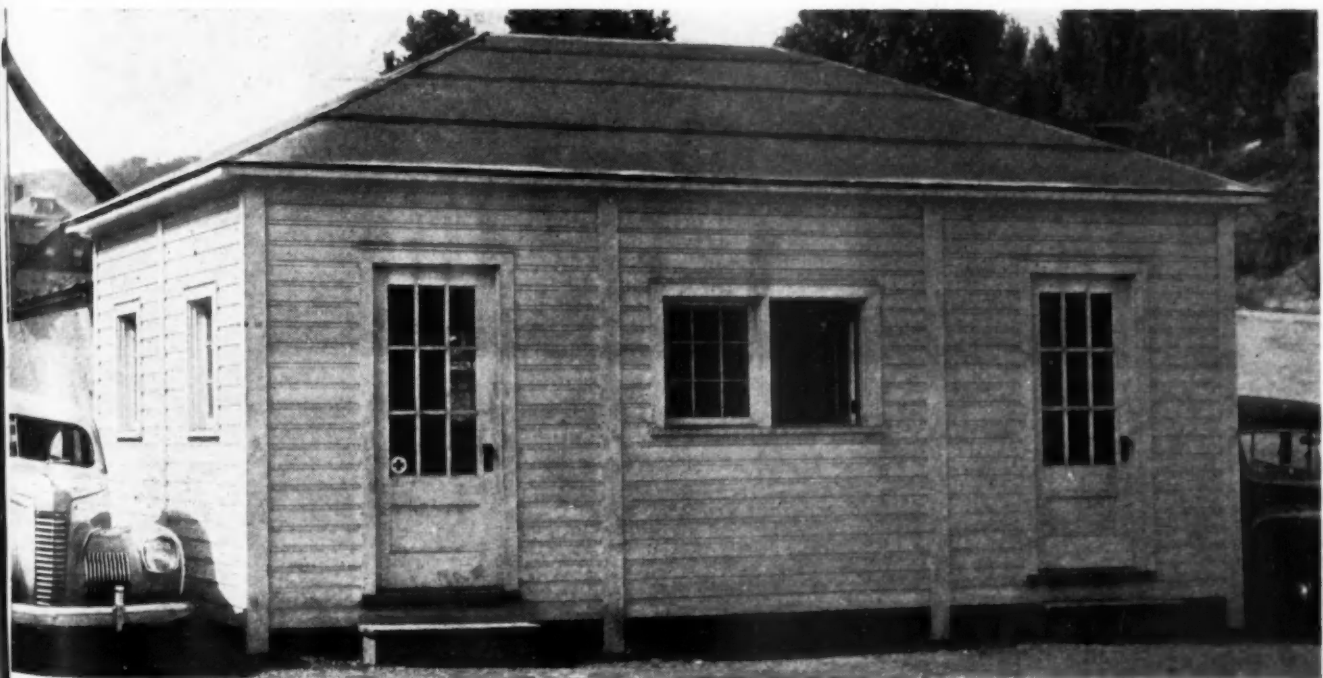
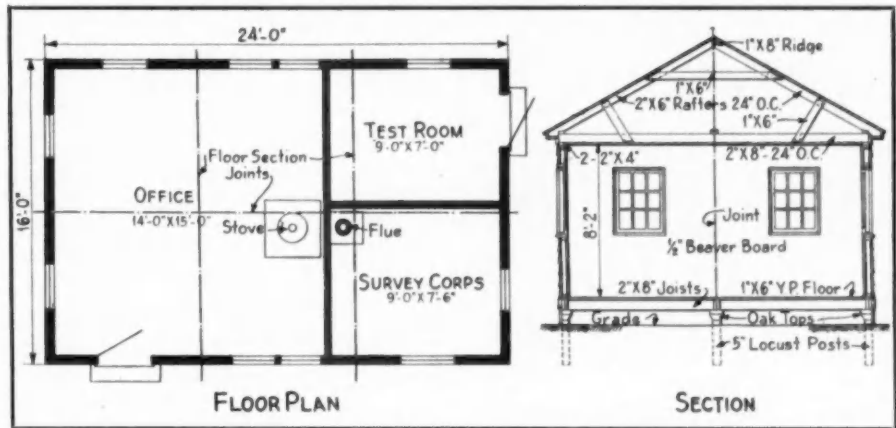
How to Renew Masonry Walls

OBSOLESCENCE is taking a dreadful toll of many buildings these last few years. Masonry walls, as shown in the pictures below, can be surfaced with Waterfoil to greatly lengthen their life. The material, applied with a stiff brush, reacts chemically with the lime hydrate of the masonry to form a fine, hard heavy coating which literally "welds" itself to the structure. Pictures through courtesy of A. C. Horn Co., Long Island City, makers of Waterfoil.



How to build a demountable building of many uses

MANY practical uses can be made of a demountable building, both on a building job or for farm storage. Built in 8-foot sections that are bolted together with unskilled labor, this type of building can be of different overall sizes. It is readily transported by truck. Windows and doors are demountable and the roof and floors are built in sections. Locations and sizes of doors and windows can vary to suit any purpose to which the building may be put. Building was designed by Allegheny County, Pa. Department of Works for use as a field office.



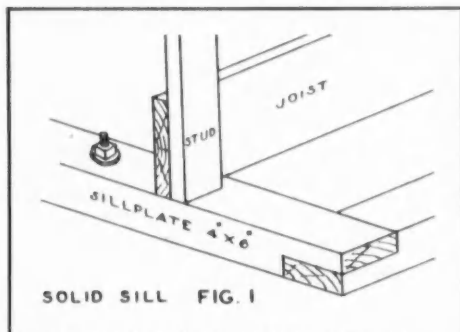
How to Frame and Install Sills

REPAIR, remodeling and new construction all call for fundamental knowledge of sound framing. The New York State Educational Dept., Albany, N. Y., supplied these sill details, prepared by Leo P. McDonnell.

THE important factors to be considered in the design of sills are (1) that a solid and rigid sill plate be provided for the support of the joists and side walls, (2) that the sill be so constructed that it provides a means of tying the framework and masonry wall together with an immovable airtight joint, and (3) that the type of sill construction be similar to that of the girder so that the shrinkage at these bearing points will be equal.

Figure 1 shows a typical solid sill. The sill plate upon which the joists and side wall studs rest is a solid member bolted to the masonry. The joint at the corner is half-lapped together.

This type of sill was used in the early type of balloon frame construction and has been since modified because of the open spaces it left between the ends of the joists at the sill. This allowed air from the basement to circulate between the side wall studs and the second floor joists, causing a fire hazard and a heating difficulty in the finished house.

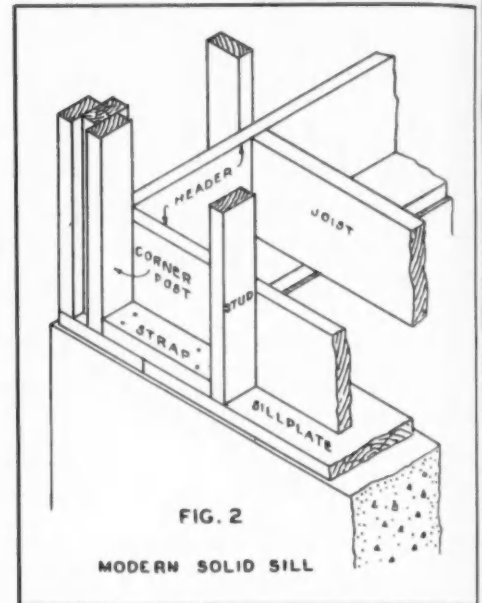


SOLID sills are bolted to the masonry, and the sill plate ends are half-lapped.

The more modern type of solid sill (Fig. 2), which may be used in the modern braced or in the balloon type of frame, is built up of modern sized lumber and has the advantages of the early type of solid sill. The sill plate should be so constructed that it will form a straight and true surface on which the joists and side wall studs may rest. The corner joints should be lapped, or strapped if butted together. The side wall studs rest directly on the sill plate, thus reducing the bearing members of horizontal grain to a minimum.

The header at the end of the joists prevents drafts between the studs and joists. It also provides solid sill construction and a firm base upon which to nail the subfloor. This header may be cut in between the joists or may be spiked to the ends. The method used would depend on the width of the sill plate. The joists should have a bearing seat on the sill plate of at least 4 in. Thus, if the header is spiked against the ends of the joists as shown in Fig. 2, the sill plate would necessarily be 2 in. x 10 in.

THIS sill is more modern and can be used in both balloon and braced types of framing.



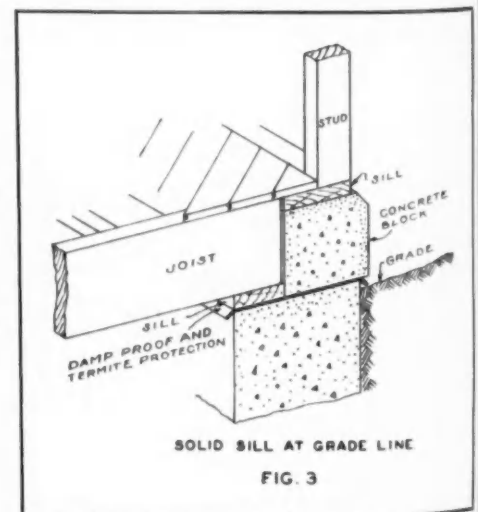
If blocks are cut in between the joists, the sill could be 2 in. x 8 in.

The type of solid sill shown in Fig. 3 may be used where the outside grade line is nearly as high as the inside floor line. This type of sill is generally associated with the balloon and modern braced frame. In this type of foundation, where the sill is within one foot of the ground, there should be some means of damp-proofing in the masonry walls.

Figure 4 shows the box or T type of sill construction generally used in the platform type of frame. This type provides the advantages of the single sill, namely the fire stop and the solid bearing upon which to nail the subfloor. The disadvantage is that the side wall studs rest on horizontal grain of considerable thickness. This thickness is equal to that of the shoe, subfloor, joist and sill. Notice that the subfloor runs to the outside header of the sill and must be laid before the side wall partition is raised.

This type of sill as well as those in Figs. 1, 2 and 3, presents another disadvantage. There is no other means

WHERE the outside grade line is nearly as high as the inside floor line, this type of sill is often used.



of tying the sill plate to the joists other than toenailing.

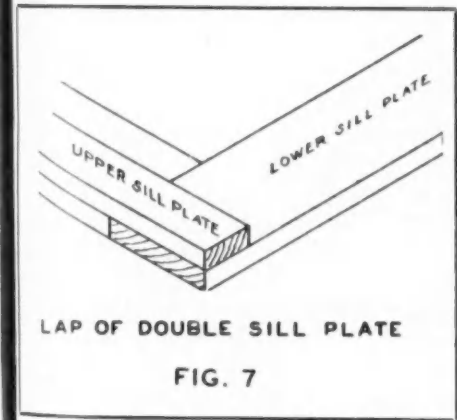
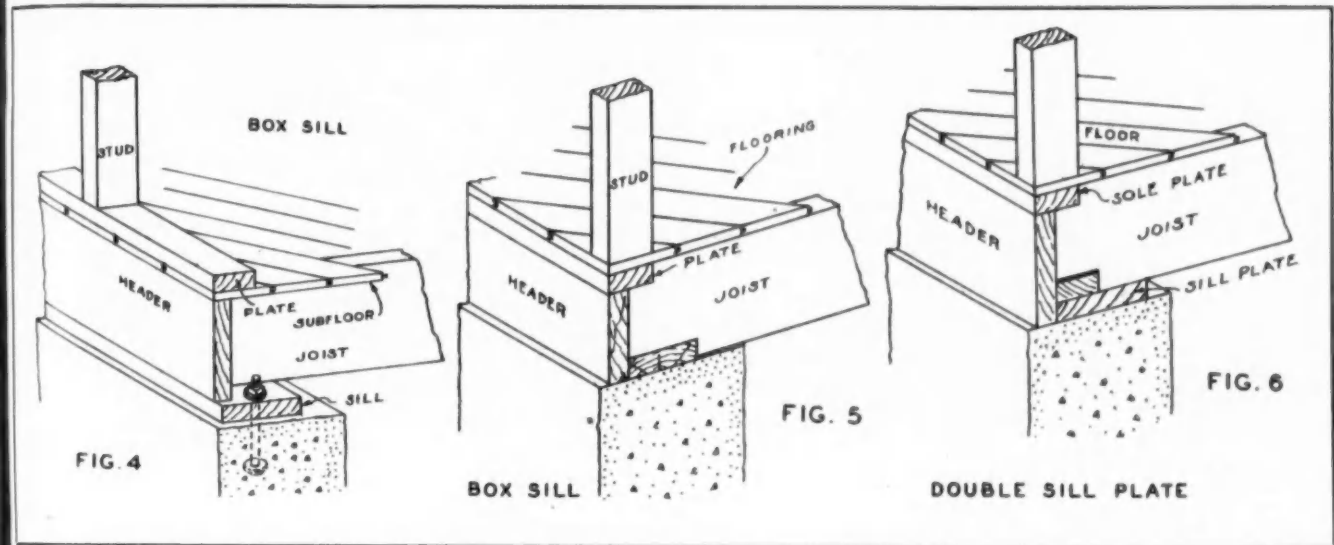
Figure 5 shows another type of box sill with a sill plate of the single type. The header rests directly on the masonry, thus affording good nailing into the edge of the sill plate. The plate upon which the side wall studs rest is let into the top of the joists, thereby providing a good nailing surface for tying the header and joist together.

This type of sill illustrates the practice of notching the bottom of the joists where they rest on the sill plate, thereby reducing the strength of the joist at this point. This is sometimes avoided by inserting a double sill plate as shown in Fig. 6. This provides for full width bearing of the joist on the sill. It also makes it possible to nail

the header solidly to the double sill plate and permits the anchoring of a double sill plate to the masonry instead of the weaker method of anchoring only a single sill plate.

The double sill plate may also be straightened more easily than a single plate and provides for the lapping of one plate over the other at the corners of the building as shown in Fig. 7.

There has been much discussion among carpenters, builders and architects as to the design of sills. The carpenter has often preferred the type of sill that could be built most easily and still present a good job. The builder was sometimes forced by competition to use that type of construction which required the least amount of labor



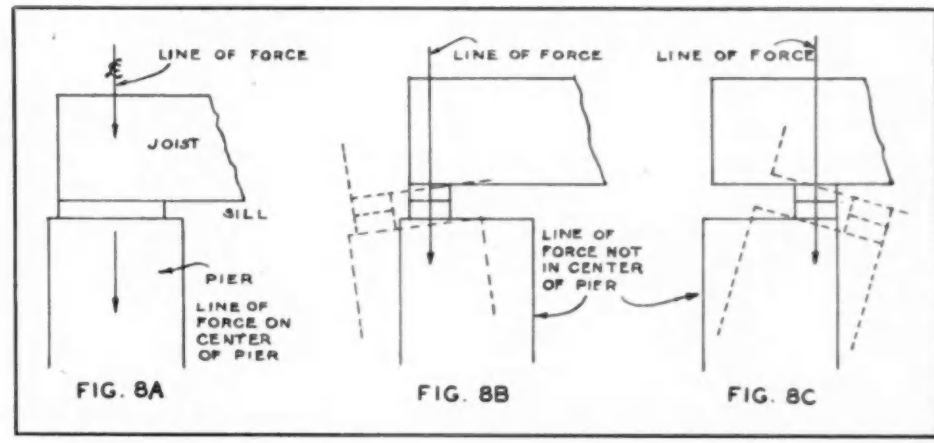
DOUBLE sill plates can be straightened easily, and the lapping of one sill plate over another adds strength.

and materials. The architect looked at the problem from an engineering point of view. However, the principles mentioned on these pages should be the important factors in the selection of the type of sill to be used. The particular one used should contain horizontal bearing members of the same total thickness as those at the other end of the joists.

Figure 8A shows a section of a floor platform and sill placed on a pier. The load placed on the pier by the joist and sill is concentrated and the line of force should come as near to the center of the pier as possible to avoid tipping the pier as shown in Figs. 8B and 8C.

In general, the sill plate is the bearing member placed directly on the masonry wall. The accuracy with which this member is framed is of great importance to the successful framing of the entire building.

THE three drawings at the right show a section of a floor platform and sill resting on a pier. The load on the pier is concentrated through the joist and sill, and the line of force is approximately in the center of the sill plate. Both figures, 8B and 8C, show wrong kind of framing.



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Building News Review

By Frank W. Cortright

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



Blandford clarifies NHA plans—

Addressing the Home Builders Association of Philadelphia at their annual banquet, Administrator Blandford stressed the importance of an organized industry and expressed doubt that private enterprise can house the lowest income group without subsidy. We quote directly from his speech:

"Broad responsibility and equally broad opportunities rest with the private building industry of this country. With the benefit of its wartime experience, it stands on the threshold of a large potential new market. This, in short, is the mass housing market of America—composed of millions of families who will want good housing after the war, who do not have it now and who will be able to pay an economic price for an efficiently produced product. If the industry can develop this market—and I'm sure it can—it will be rewarded by a vastly greater volume of profitable production than it has ever enjoyed in the past. But it will not be an easy task and the responsibility for achieving it will rest with industry itself, even though communities and the Federal Government do everything within their power to help."

Industry can meet challenge—

"Housing has become more conscious of itself as an industry as a result of its war housing experience. One important result has been the development of the National Association of Home Builders as the representative organization of private builders throughout the country. You now have an organization which can speak for the interests of the industry as a whole. Of course, your new and larger stature carries with it large expectations and large responsibilities for careful, factual investigation, for objective analysis of developments vital to the progress of the industry, and for constructive proposals in the interests of the home owner and the home renter."

No federal programming—"The primary responsibility," Blandford continues, "for peacetime housing rests with the communities in which the housing will be built, with the citizens who will live in it, with the builders and institutions who will develop and finance it, and with the workers who will build it. We do not believe that the Federal Government should directly program or build housing in peacetime. But we also believe that this community responsibility carries with it the obligation to

plan for meeting local housing needs much more effectively and completely than in the past: to determine how much housing is needed and where, what kind, and how in general it can be built and financed."

Should aid private enterprise—

"The Government should extend every necessary assistance and stimulus to this community housing progress. It should assemble the national information and conduct the national research to keep communities and the industry abreast of the best developments in housing technique, planning and financing. It should stimulate maximum performance by private enterprise through such tested national aids as FHA mortgage insurance and the Federal Home Loan Bank system, and whatever new methods of indirect assistance may prove desirable. Perhaps it should establish machinery for federal financial aid to communities to break the bottleneck of high land costs in urban redevelopment."

Subsidy necessary at bottom—

Mr. Blandford has repeatedly said that there will be no competition by government in the housing field. He indicates that he believes private enterprise cannot meet the lowest income rental housing need. His exact phrasing is as follows:

"I hope the building industry will not miss this opportunity or fumble this ball because it has been distracted by straining to occupy the bottom segment of the housing market. Clear, sober thinking should identify this area as one which clearly calls for subsidy. No transient, fancy formula can confuse this fact. This segment is fundamentally a rental area involving complicated and vexatious operating problems—and it is an area where governmental assistance in the form of a subsidy inevitably carries with it governmental regulation, be it local or federal or both."

Title VI to continue—The conclusion has finally been reached by NHA and FHA officials that the continuation of the Title VI program is advisable. It is now believed that the outlook for building materials will not improve sufficiently within the next six months or so to permit regular building to be revived even in a limited way. Also, it is felt that there is still a need for war housing in some places that private builders can meet.

How much more Title VI?—The

exact amount of new insurance authority that will be requested has not been determined as yet, but the figure of from \$200 to \$250 million has been prominently mentioned. Since new programming is necessary, it is understood that a sufficient increase will be requested to last through the remainder of the present calendar year.

Low interest rates—Recently William A. Clarke, President of the W. A. Clarke Mortgage Company of Philadelphia, pointed out that life insurance companies' investment in mortgages at the end of 1943 was at the lowest point in 25 years, less than \$6 billion, or 17.2% of their admitted assets, as contrasted with 41.0% in 1925. Mr. Clark also noted the increase in holdings of low-interest Government obligations from 5.9% in 1925 to 33.4%, or about \$11½ billion last year. Faced with this condition, he warned of the trend of life insurance companies to enter the building business to restore their earnings to a satisfactory level. He indicated that 4% interest on mortgage loans is about the minimum rate at which life insurance companies, mutual savings banks, and savings and loan associations investment in mortgages could be counted on to produce a satisfactory yield.

Central purchasing discontinued

—Since early in 1942, FPMA has engaged in the mass purchasing of such items of household equipment as kitchen ranges, ice boxes, space heaters, water heaters and plumbing equipment. The apparent reason for now terminating the program is that the supply situation has improved to such an extent that contractors can obtain the material on the open market. However, FPMA is supposed to have a large enough stockpile to last for three or four months and is on the last lap of its course. FPMA, through mass purchasing, has bought \$80 million worth of equipment, largely Victory models.

Builders and bankers on low cost housing

—Chairman Morris Macht of NAHB's FHA Legislation Committee and Chairman George Underwood of Mortgage Bankers Association's Committee each brought eight men to Philadelphia last month for an all-day conference. Although a number of subjects were covered, the need for long-term, lower cost loans for minimum housing dominated the discussion. Private builders and bankers are faced with a choice. They must either set up financing procedures, probably FHA insured, or the Federal Public Housing Authority will undertake to do the low-cost housing job in this country. In the final analysis, of course, Congress will make the decision. Expansion of socialized housing in this country is not possible without heavy appropriations from the State and Federal treasuries.

Security deposit in new OPA bill—

Concluding a study of price control extending over the last year, the Smith

(Continued to page 100)

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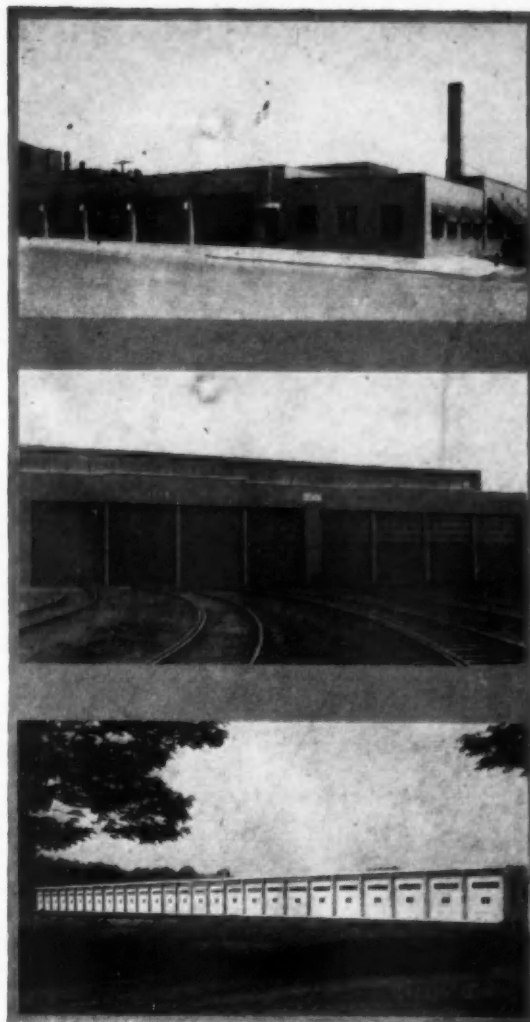
Quick Delivery of

Ro-Way

OVERHEAD TYPE DOORS

for any Job entitled to a High Priority Rating under the M. R. O. Plan of providing Maintenance Repairs & Operating Supplies

—and GOOD Delivery on all other Commercial and Industrial Jobs.



COMMERCIAL BUILDINGS

Ro-Way Doors are available for freight terminals, warehouses, public garages—in fact, for all types of commercial buildings.

INDUSTRIAL BUILDINGS

Ro-Way Doors can be made for railroad shops, munition factories and for all other types of industrial plants.

GOVERNMENT BUILDINGS

Ro-Way Doors are serving America in armories, ordnance plants, supply depots, cantonment camps and in hundreds of other Government structures.

Write for complete new Catalog of Ro-Way Overhead Type Doors. See our Catalog in Sweet's.

ROWE MANUFACTURING CO. 777 HOLTON STREET GALESBURG, ILL., U.S.A.

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

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in Lumber

produces better, lower cost farm buildings

FARMERS are thinking about farm buildings and equipment in new terms. They are regarding them, not as fixed and static structures, but as dynamic working tools. They know that efficient buildings, correctly designed and soundly constructed reduce animal mortality, protect health, save labor hours and steps in care and management, save feed and increase production.

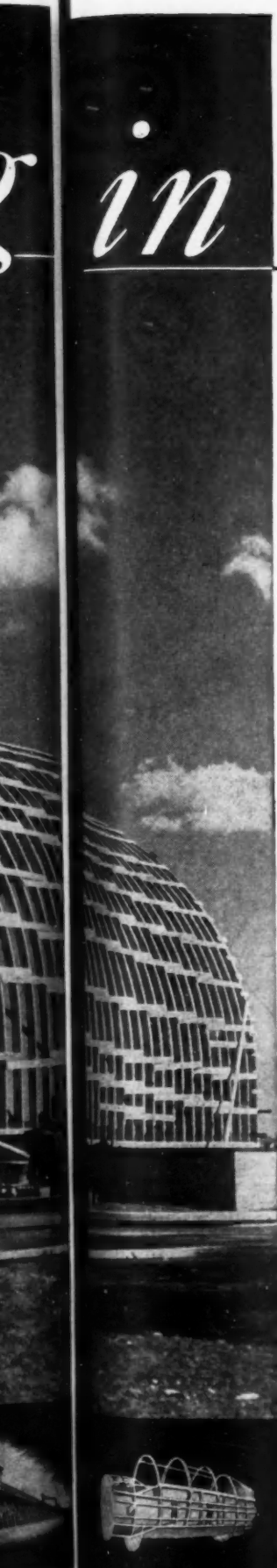
Engineering in lumber has made impressive contributions to farm building progress. It has developed glued laminated wood arch rafters which are being increasingly used in the construction of nearly every type of farm building. In large dairy barns these arch rafters provide generous hay storage free from objectionable bracing, while in smaller structures they give ample head room and wide post-free interiors.

These laminated wood rafters are continuous framing members running from foundation to roof-ridge, thus eliminating the joint of sidewall to roof. Anchored at the sill with strong angle irons and joined at the ridge with metal plates and bolts, they make a more rigid, durable, wind-resistant structure. They save time in erection.

Engineering in lumber concerns itself with the development of wood as a building material and improvement in the design of farm buildings. It is working for you and your customers. And as soon as farmers can build again, improved 4-Square lumber and other timber products, together with the engineered designs of the 4-Square Farm Building Service will enable you to deliver better and more economical farm structures.

WEYERHAEUSER SALES COMPANY

FIRST NATIONAL BANK BUILDING • SAINT PAUL, MINNESOTA



4-SQUARE LUMBER

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

Learn something about your War Bonds from this fellow!



THE BEST THING a bulldog does is **HANG ON!** Once he gets hold of something, it's mighty hard to make him let go!

And that's the lesson about War Bonds you can learn from him. Once you get hold of a War Bond, **HANG ON TO IT** for the full ten years of its life.

There are at least two very good reasons why you should do this. One is a patriotic reason . . . the other a personal reason.

You buy War Bonds because you know Uncle Sam needs money to fight this war. And you want to put some of your money into the fight. But . . . if you don't hang on to those War Bonds, your money isn't going to *stay* in the battle.

Another reason you buy War Bonds is because

you want to set aside some money for your family's future and yours. No one knows just what's going to happen after the War. But the man with a fistful of War Bonds *knows* he'll have a roof over his head and 3 squares a day no matter *what* happens!

War Bonds pay you back \$4 for every \$3 in 10 years. But, if you don't hang on to your Bonds for the full ten years, you don't get the full face value, and . . . you won't have that money coming in later on when you may need it a lot worse than you need it today.

So buy War Bonds . . . more and more War Bonds. And then *keep* them. You will find that War Bonds are very good things to have . . . and to hold!

WAR BONDS to Have and to Hold

The Treasury Department acknowledges with appreciation the publication of this message by

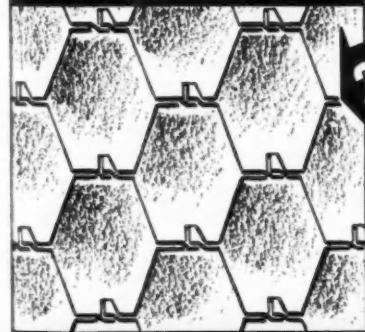
AMERICAN BUILDER AND BUILDING AGE



1
A twist of the hatchet lifts one side of the slot cut in the lower course.



2
Insert locking slot of tab being laid with slot raised with the hatchet.



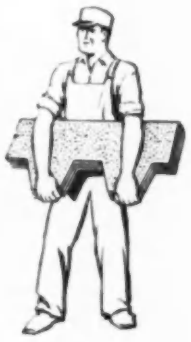
3
The finished roof is securely anchored and proof against wind damage.

THE Ford Cyclone Safety Shingle is a product backed by eighty years of experience in making roofing. It has successfully stood the test of years of use in localities where unusually high winds are encountered. Cases are on record where entire roof decks have actually been blown off without disturbing the shingles.

The interlocking feature of this shingle gives highest possible protection against wind damage. Each shingle is anchored to the roof structure so that high winds cannot blow snow and rain underneath.

The attractive appearance of the regular hexagon shingle plus the safety feature of a locked-on secure roof is found only in the Ford Cyclone Shingle.

Ford Cyclone Safety Shingles are distinctive for their beauty, durability and speed of application on either new or old roofs.



FORD ROOFING
PRODUCTS COMPANY

Established 1865

Chicago 2, Ill. • York, Pa. • Vandalia, Ill.

Out of a Volcano



(ADVERTISEMENT)

...came this Revolutionary Improvement in Home Comfort!

How a Typical American Industry, Founded on the Principle of Providing Better Living, Grew in 12 Short Years to Such Importance that it Became an Essential Priority Industry During Wartime—Conserving Precious Fuel—Protecting the Health of Millions.

By the **JOHNS-MANVILLE** **ROVING REPORTER**

SURPRISING as it seems, man's dwelling remained substantially the same for centuries—primarily, a shelter from wind and rain. And even "modern houses"—those built as recently as the nineteen-twenties—were far from modern in the matter of comfort. They leaked heat like a sieve—rooms were often unbearably hot in summer—hard to heat in winter.

Then, by observing the phenomenon of a volcano where mineral fibers were produced by the action of nature, human ingenuity brought about a revolutionary improvement in home comfort. It gave birth to an entirely new industry. And, of all the industries I know, this is the best example of new wealth and new jobs being created by employing scientific research and developing the proper merchandising and advertising principles.

The Story of Rock Wool

It was about 1927 when Johns-Manville began the commercial development of rock wool home

insulation. In the laboratory, tests proved it to be an extremely efficient insulating material. Four inches of it is equivalent in insulating value to a stone wall eleven feet thick. In addition rock wool was found to possess other desirable properties—it won't rot or decay—will not attract vermin and it is fireproof.

But in those days the general public did not even know that there was a need for insulation in their homes. Here, indeed, was a virgin field in which to build a new American industry. A challenge to creative minds to embark on an uncharted sea of manufacturing, marketing and merchandising.

First, engineers had to build a machine to manufacture the finished product. Two forms were developed—the nodulated material which could be blown through a hose into the walls and ceilings of existing homes, and the rock wool Batt for new homes during construction and accessible attic spaces of old homes. The original rock wool Batt was produced by Johns-Manville in 1929.

These, then, were the products handed by Research to the Johns-Manville sales organization. But there was no demand. No market. No precedent for distributing or selling any such products to the public. It was a completely untried, untested problem in merchandising.

A New Industry is Born!

The story of what followed is familiar to most building-material dealers. Many will remember the early rock wool Batts. In succeeding years, constant improvements were made. The cost was steadily reduced, thereby creating an ever-increasing market.

Beginning in 1929, Johns-Manville advertising edu-

cated the public to the need for insulation, explained its benefits, created the consumer demand for this new, unknown product.

When war was declared in 1941, the rock wool home insulation industry was only 12 years old. Yet it had grown to such great importance in this brief time that it was highly essential to our war program—so important that even the government itself urged people to insulate their homes and promoted its use through an enormous educational program.

J-M Rock Wool —and the Future!

This, then, is the story of that magic mineral that came out of a volcano. A classic example of a new industry, new jobs created by private enterprise and scientific merchandising.

Today, nobody would think of building a new home without insulating it. Today any home—large or small—can

afford this quality insulation that assures a warmer house in winter, a cooler house in summer—plus fuel savings up to 30%.

Close to a million homeowners throughout the country now enjoy the year-round comfort of Johns-Manville Rock Wool Home Insulation. An army of satisfied customers. An invaluable reservoir of good will for the dealer who handles Johns-Manville Rock Wool and the builder who installs it in the years to come.

I believe all dealers and builders will agree that home insulation has been one of the major contributions to the building industry in recent years. When peace comes and America embarks on its greatest building program, J-M Rock Wool Batts will provide a new standard of comfort and economy for countless new homeowners.

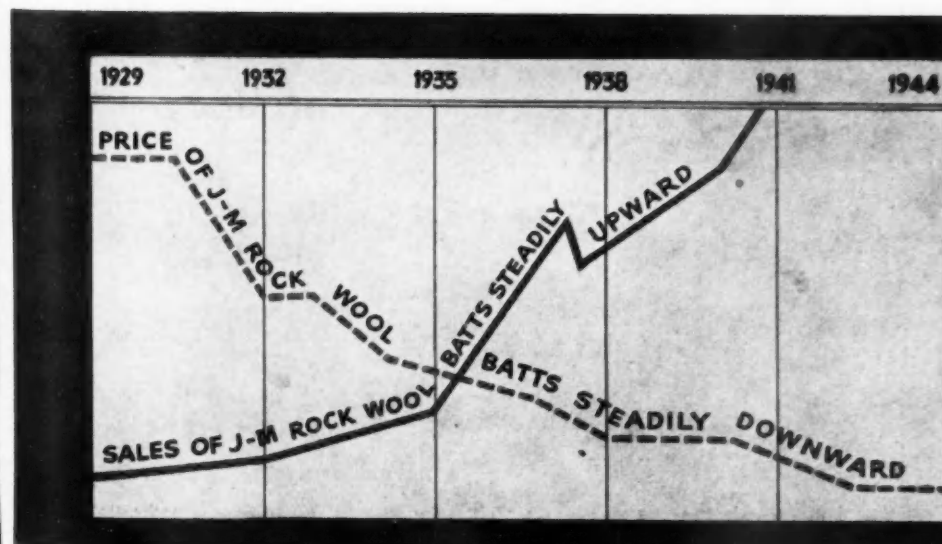


Chart shows how price of J-M Rock Wool Batts has decreased since their introduction in 1929. Reduction in price has brought about a continuous increase in sales volume for the J-M dealer.

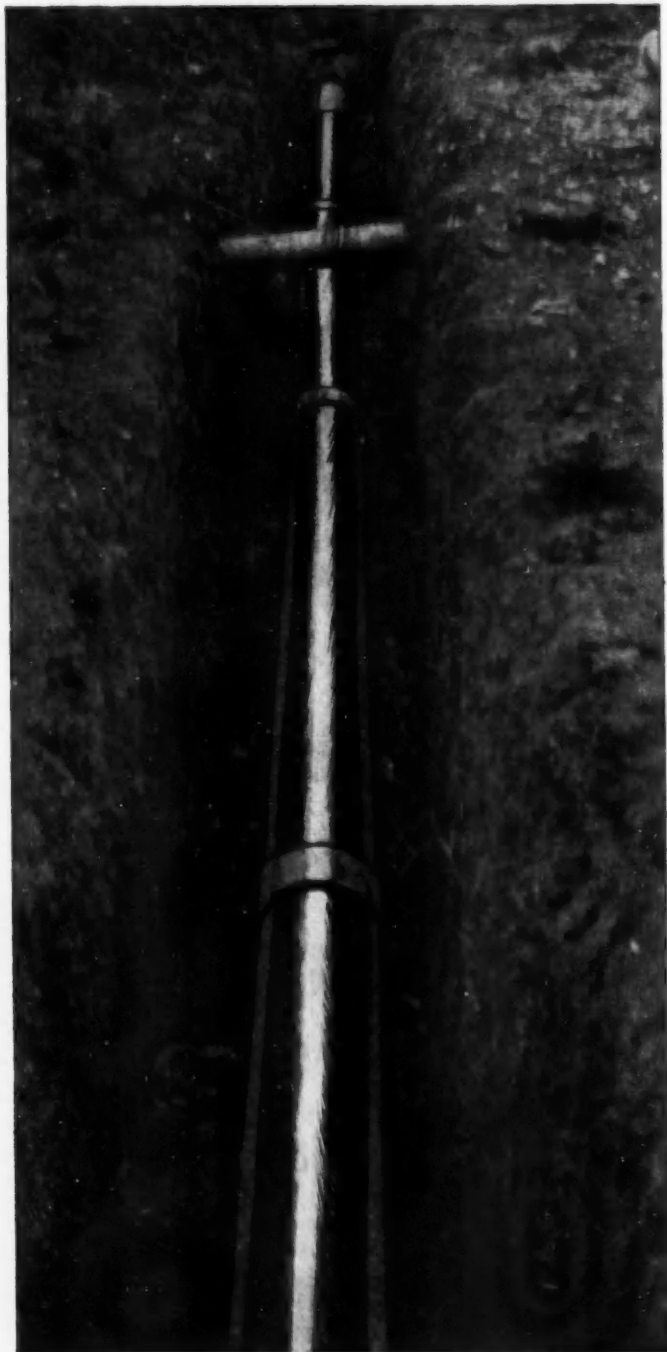
There's a market for miles of this pipe

NOW!

Your market for Orangeburg Pipe is anywhere in your territory where there's a need for connections from House-to-Sewer or Septic Tank, Downspouts, Storm Drains, and Irrigation. And existing right now, too, is a real opportunity to make plenty of profits out of Orangeburg Perforated Pipe for Septic Tank Filter Beds, Farm and Muckland Drainage, and Foundation Footing Drains.

The building boom of the postwar future will of course greatly increase your market for Orangeburg Fibre Pipe for non-pressure uses. But even today many of your customers badly need this vital aid to better drainage—and their need is your opportunity to offset dwindling profits, due to low inventories, lumber shortages and other causes, with the good profits from Orangeburg sales.

So take full advantage of a pipe dream come true. Stock Orangeburg Pipe now—and get your share of this profitable pipe business.



Only Orangeburg Pipe Gives All These Advantages!

PERMANENT — Does not chip, break, or crack easily. Non-corrodible. Does not crack under sudden temperature changes — freezing and thawing.

RESISTS ROOT GROWTH — Tight joints prevent root entry and the coal tar pitch with which Orangeburg Pipe is impregnated makes it further resistant to roots.

NO INFILTRATION — Permanently tight joints prevent ground water infiltration. There are no leaks with Orangeburg Pipe.

LONG LENGTHS — Orangeburg comes in long lengths. Fewer lengths of pipe needed. Fewer joints to make. Fewer pieces to handle. Can be sawed to any length. Greater flow capacity. Less friction loss.

LIGHT IN WEIGHT — Easy to handle. Easy to lay. Saves time and labor. Easy to truck, too. In 4" size, 1000 ft. weigh only 2700 lbs.

BIG CONSUMER DEMAND — Orangeburg is nationally advertised in leading home and farm magazines.

PROMPT DELIVERY — Made of non-critical materials, Orangeburg Pipe is available for prompt delivery now.

MAIL COUPON TODAY FOR COMPLETE INFORMATION

THE FIBRE CONDUIT CO. (A.B.A. 6-44)
Orangeburg, N. Y.

Please send complete information about Orangeburg Fibre Pipe.

Name

Address

City

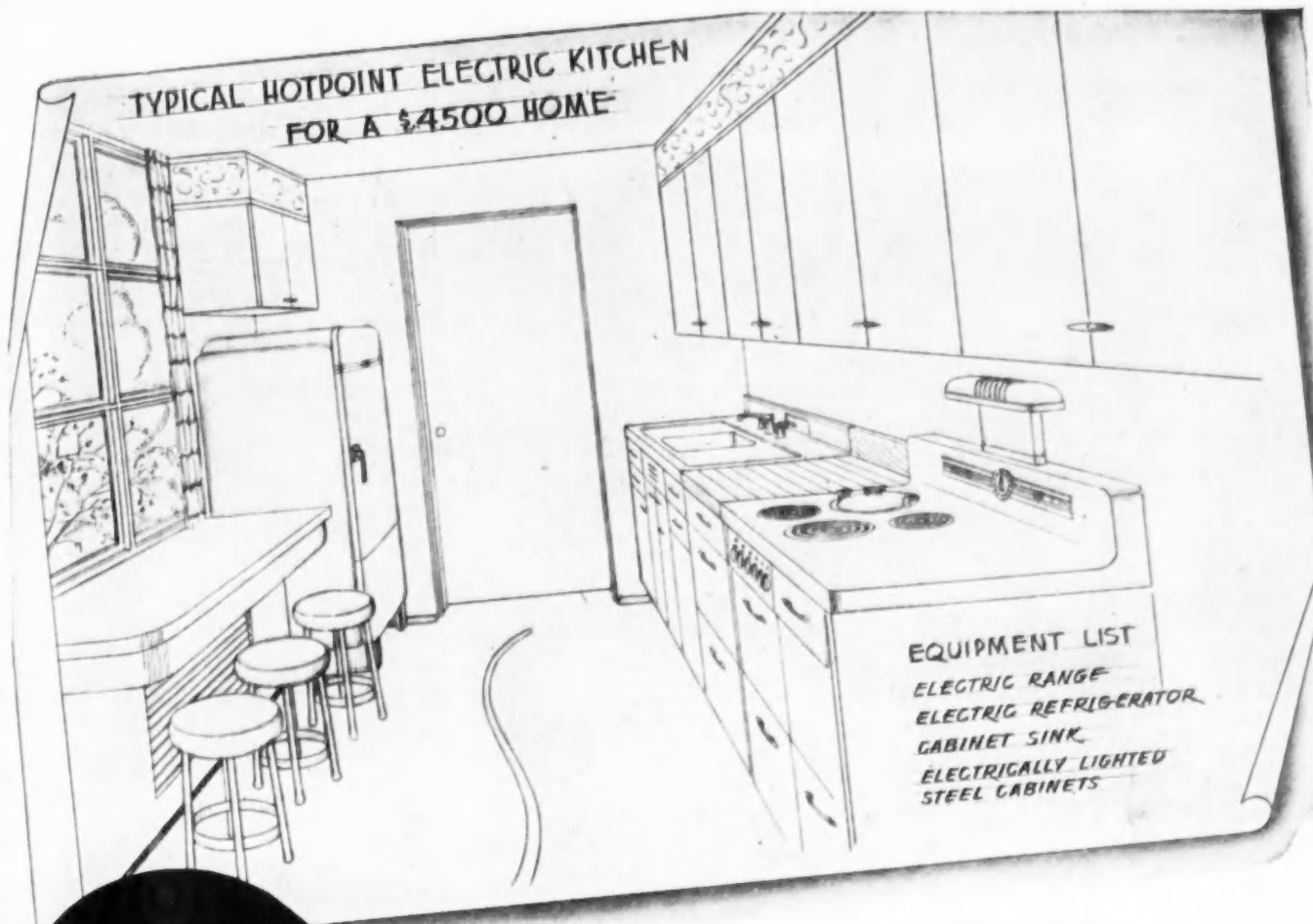
MAIL
COUPON
TODAY



ORANGEBURG FIBRE PIPE

ORANGEBURG

WITH 30 YEARS EXPERIENCE IN THE MANUFACTURE OF NON-METALLIC CONDUIT AND PIPE, SERVES THE POWER AND LIGHT, TELEPHONE, GENERAL CONSTRUCTION, CHEMICAL, PETROLEUM, PLUMBING AND BUILDING SUPPLY FIELDS WITH ELECTRICAL FIBRE CONDUIT . . . ELECTRICAL UNDERFLOOR DUCT SYSTEMS . . . AND FIBRE PIPE FOR NON-PRESSURE USES.



77%

of New Homes will be in price range for ELECTRIC KITCHENS

"More than seven out of ten postwar homes will cost \$3,000 or over." That is the prediction of the United States Chamber of Commerce.

Buyers of those homes will be able to afford Hotpoint Electric Kitchens. And results from Hotpoint's advertising during the past two years show that they want them.

NEW POSTWAR HOMES, to be truly modern, must have new kitchen equipment. Appliances in the average kitchen today—like the average automobile—are well beyond the replacement age.

Postwar home buyers don't want the old-style stripped kitchen, but one that is "planned"—complete with all equipment new and modern. To American

women today, "a home is only as modern as its kitchen."

Take advantage of this trend. Homes with Hotpoint Electric Kitchens are complete homes... they create satisfied clients... they move faster, because they are truly modern. And financing costs for speculative building are reduced by faster turn-over.

Hotpoint offers you two advantages.

First, modern, finest quality electric kitchen equipment. Second, "Hotpoint Kitchen Planning Service," by an expert staff of kitchen designers—especially for builders and architects. Write for details today.

Edison General Electric Appliance Co., Inc., 5641 West Taylor Street, Chicago 44, Illinois.

In most states, all Hotpoint Kitchen equipment can be included in F. H. A. loan.



ELECTRIC Hotpoint KITCHENS

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



Short-cut To a Well-done **INSULATING JOB**

A Stanley Electric Drill equipped with a hole saw makes short, neat work of cutting into building walls for blowing in pellet-type insulation. The cut-out disc, along with the siding, can be quickly replaced after the insulation is done — and you have a good job and a pleased house-owner as a future reference. The Stanley Electric Drill illustrated is compact, powerful — ½" capacity. Stanley High Speed Steel Hole Saws are made in diameters up to 3½ inches. Send for Stanley Electric Tool Catalog No. 67 showing complete line. Electric Tool Division, The Stanley Works, New Britain, Connecticut.



STANLEY

DRILLS • SAWS • HAMMERS • GRINDERS • DISC SANDERS

CORTRIGHT—

(Continued from page 90)

Committee of the House has simultaneously filed its report (No. 1356) and introduced a Bill (H.R. 4647). Administration forces, however, have been marshalled flatly to oppose this and any correction of existing defects. OPA assumes the position that the amendments designed to alleviate harsh and unjust provisions, and more clearly define the powers granted by the act, would "scuttle the hold-the-line program" and lead to inflation!

Lumber Outlook darkens—Despite the lumber interests' bitter and vociferous denunciation of it as "a classic example of bureaucratic fumbling" WPB this week further clamped down with its new control order, L-335. Although the order exempts construction authorized under L-41, it pointedly tells the story of acute scarcity. Stocks at sawmills and concentration yards have touched an all-time low, slightly more than 4½ million board feet as compared with 6½ million a year ago, and more than 10 million in 1941. With declining production being accelerated by the manpower shortage, and steadily mounting demands for war uses, WPB says it has no alternative. Estimated requirements for boxing, crating, and dunnage alone will absorb more than 60 percent of this year's production. Off-short military requirement will increase with military successes and are, therefore, indeterminate but huge. In spite of all this, the quantity of lumber required for war housing is of such small proportions, and the housing is so vitally essential to war production, it is inconceivable that WPB will fail to grant the necessary priority rating.

NHA survey on Postwar housing

—In the main, the object of the study, nearing completion, is to determine the need rather than to appraise the market from the standpoint of cash or financing resources in the possession of potential purchasers. To obtain an appraisal of the need, the 1940 census returns have been re-examined and population shifts as revealed by rationing records analyzed. Such factors as the requirements of returning service men and the number of new families expected to be formed in the postwar period have been considered. An estimate is made of the backlog of demand for new homes caused by war restrictions on building and the number of families that have had to double up.

Any attempt to control residential construction in the immediate postwar period, except that necessitated by unforeseeable postwar conditions, is not expected. Experience gained in programming war housing has conclusively proved that artificial controls are unreal and introduce insurmountable problems. Instead, Administrator Blandford is expected to guide his staff in extending every necessary assistance and stimulus to communities in meeting their housing needs.

(Continued to page 102)

PENNY WISE-
Yes.

MUELLER BRASS CO.—PORT HURON MICH

BUT *Not* PIPE FOOLISH

● It is sound business to watch the little costs in building . . . those little costs that collectively mount to larger totals, but . . . saving a few cents or dollars on the initial costs of **vitaly important** items, such as the piping system, at the expense of enduring quality, is false economy . . . The pipes which supply hot or cold water to kitchen, laundry and bathroom fixtures, are the **ARTERIES OF THE HOUSE** and are one of the most important items in it.

A **STREAMLINE** copper piping system cannot rust or leak if properly installed. It is a trouble-free system that will always provide efficient service without costly and annoying interruptions or replacements. There are many other advantages too. It can be installed in less space. There is less heat loss through radiation than with ferrous piping. Hot water reaches the faucets quicker and with less drop in temperature. Its first cost is its only cost. It will give perfect service as long as the building stands.

Property can have a quicker turn-over when it is pointed out to the prospective buyer that its piping is everlasting copper. For the very few dollars it may cost over rustable piping, it will repay you in better prices, quicker sales and lasting satisfaction to the buyer, which enhances your prestige as a reliable builder. Plan to make a leader of **STREAMLINE** copper pipe and fittings for the arteries of your post-war houses.

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

—MUELLER BRASS CO.—PORT HURON MICH—STREAMLINE—HARD—GOVT—TYPE M—



The Doctors Hospital

Selects **NEW LONDONER** HOLLOW-CORE
FLUSH DOORS
PAT. NO. 2,172,227

It isn't by chance that New Londoner Hollow-Core Flush Doors are used in the construction of so many of America's fine buildings. It's by choice. Through many years of faithful service, these famous doors have won the acceptance of those best qualified to pass judgment on high quality. And this is equally true in the home building field. Architects, builders and contractors in ever increasing numbers are recommending New Londoner Hollow-Core Flush Doors.

Doctors Hospital
Seattle, Wash.
George Wellington
Stoddard & Associates
Architects
Sound
Construction
Co.
General Contractors

A PLYNEERED PRODUCT

AMERICAN PLYWOOD
Corporation
NEW LONDON, WISCONSIN

(Continued from page 100)

Courts against OPA in deposit cases—For the second time a United States District Court has held that OPA has no authority to interfere with the practice of security deposits on rental war housing. In Connecticut, United States District Judge J. Joseph Smith (Civil Action No. 1041) also rendered judgment for the defendant. In this case the Sylbern Homes of Connecticut, Inc. "required its tenants of war housing to pay an additional amount equalling from two to three months' rent, either in a lump sum prior to occupancy, or in monthly payments until the agreed upon sum was in the possession of the defendant as loss either through damage to the premises by the tenant or through other violation by the tenant of the terms of the lease."

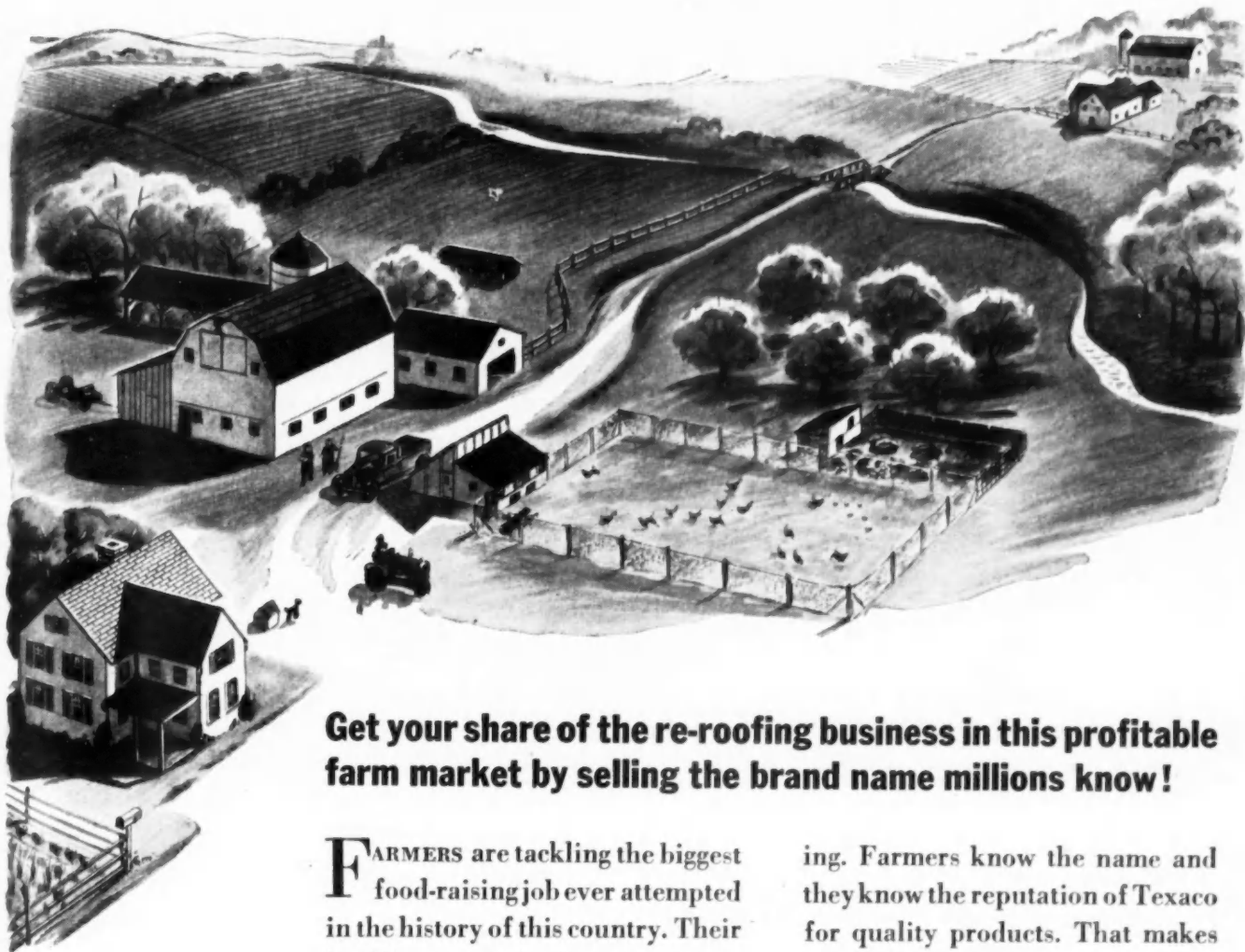
Decisions should discourage OPA from further attacking builders on the security deposit issue. The fact that two Federal judges have held that security deposits, under proper conditions, are necessary for the most efficient use of the housing and the protection of the property, should fully support our plea for relief by the Congress.

Plea for increased ceilings—While in the process of extending the Title VI program, NAHB is urging that serious consideration should be given to increasing the ceilings. A short amendment raising the maximum mortgage loan above the present amount of \$5,400 would do the trick. The present philosophy is to gear the H-2 program to a maximum house cost of \$6,000. This is unrealistically low in view of already high and steadily mounting building costs brought about by the necessity of using substitutes for certain items, as well as by the increasing cost of labor, lumber and other basic products. There are plenty of cases where war housing construction in high cost areas has proved to be an economic impossibility under present conditions. We suggest an upward adjustment of the limit so as to permit housing up to \$8,000 and a \$60 a month shelter rent maximum.

Help on lumber?—Some slight relief in lumber may be obtained by importations from Russia. It is still rather vague but we understand that there has been a movement of Russian lumber of the softwood type in a kind of reverse lend-lease. Our ships have plenty of return cargo space to bring this lumber back to ease up military demands for boxing and crating.

A confusing picture exists concerning the war housing needs at the present stage of the program. In many cities where the bulk of the need has been met, it is being found that there is a deficit in such categories as housing for Negroes and larger units of the two and three bedroom types. To find the answer to these questions will take the accumulated experiences of the NHA and the private building industry.

Sell the brand name millions know!



Get your share of the re-roofing business in this profitable farm market by selling the brand name millions know!

FARMERS are tackling the biggest food-raising job ever attempted in the history of this country. Their buildings must be kept in sound, weather-tight condition—to protect valuable crops, stock and farm equipment.

That of course means *roofs* particularly . . . which in turn means *re-roofing*. There's your market, and it's a big one!

Get your share of it by offering Texaco Asphalt Shingles and Roof-

ing. Farmers know the name and they know the reputation of Texaco for quality products. That makes your selling job easier.

★ ★ ★

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



TEXACO



SHINGLES and ROOFING

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Fully Equipped Homes—

(Continued from page 65)

buy new homes. They are too likely to be the type of prospects described by builder Walter S. Johnson in the accompanying article. They have been given a *build-up* to expect the impossible. When they come down to earth, they will expect the postwar home at least to outstrip the home of yesteryear in design and completeness of equipment and fittings.

"Progressive home builders, as typified by Johnson and his advanced thinking, are coming more and more to realize that the public

will accept no less than the *completely equipped home*. This means a home with a fully equipped kitchen even in the lowest price bracket.

"Of course the word *complete* will necessarily have to represent a different list of equipment in homes in different price brackets. Range, refrigerator, cabinet sink and three steel cabinets constitute the minimum of kitchen equipment which the public will expect in the \$3,000 home. From this minimum the amount will grow to include the electric dish washing machine, the garbage disposall, more cabinets and electric hot water heaters.

"If the prediction of a million

homes a year is to be realized, the way must be cleared now, before the war ends, to implement the building industry to erect and sell the completely equipped home. For we can now see that the *attainment of this goal is teamed up inseparably with the packaged merchandising principle—a completely equipped kitchen as an integral part of every home, financed in a one-payment mortgage.*

"Two obstacles have previously prevented the home builder from offering the completely equipped home. (1) It was impossible to include removable equipment in the one-payment mortgage. (2) The builder purchased and installed appliances on which he had little or no opportunity to profit.

"The first obstacle has been largely overcome. New legislation has been enacted in most states to permit part or all of the equipment to be included in an FHA mortgage.

"The second obstacle is now overcome by the merchandising program of this company.

"To accomplish this objective we have added a new link to the chain of normal equipment distribution. From now on the volume builder of homes will enjoy a profit opportunity as an outlet for equipment when installed and sold as part of a new home. This will enable him to offer his prospect the completely equipped home in a one-payment mortgage.

"Executives of this company believe that this step will greatly enhance the salability of its complete line of equipment in the vast replacement market in old homes, that their dealer organization will enjoy a harvest in this market by virtue of this step. Here's why:

"The fully equipped kitchen in new homes will be the center of attention. The owners of these homes will proudly demonstrate their new kitchens to their friends and instill in them the urge to add equipment of like quality in their own homes.

"What better advertising could our regular appliance dealers enjoy than the presence of this equipment in the new postwar homes in which there is so much pent-up curiosity?

"What better endorsement could a dealer flash on an indecisive prospect for new equipment than a list of owners who bought such equipment when they purchased their new homes?

"Hotpoint's regular distribution channels will remain unchanged.

"Here's an example, based on pre-war prices, of how this system will work: For purposes of this illustration, let us take a house that would, with the old-style stripped kitchen,

(Continued to page 106)



Weather-Wise Builders

Use TRU-BILT EXTERIOR PLYWOOD



In manufacturing TRU-BILT, West Coast Plywood Co. has taken far-reaching steps to protect the builder against the danger of having his workmanship ruined by weather conditions beyond his control. To reduce shrinkage, warping and checking to a minimum.

1 TRU-BILT is made for exterior use—to withstand dampness and changing humidity.

2 The TRU-BILT process controls moisture content—assures uniform resistance to weather conditions.

3 We use pure phenolic resin glue and a superior hot press manufacturing method.

For maximum weather resistance, use . . .

TRU-BILT

WEST COAST PLYWOOD CO.

ABERDEEN, WASHINGTON

Manufacturers of

HOT PRESSED—DOUGLAS FIR PLYWOOD



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



**A Temlok Idea
that wins
friends!**

CHANCES ARE that most of the Sunday Schools—as well as kindergartens and other civic institutions—in your city want to do over their rooms, yet are putting it off because they think it will be difficult and expensive. Here's an opportunity for you to do them a favor, and one for yourself, as well. For Temlok jobs are profitable, and can be handled easily and quickly with the labor you have available.

Think of the parents and adult students who'll take pride in the finished work. Think of the word-of-mouth selling they'll do for you, the potential business their homes and businesses represent. Why not make a special drive for Temlok De Luxe jobs of this kind? You'll probably be surprised to discover how many there are.

Just like other buildings, schools of all kinds need remodeling now and then. For the nice-looking walls and ceilings they want, plus insulation to make heat control easy, and high light reflection without glare, use Armstrong's Temlok De Luxe. You also have a choice of many attractive designs you can work out with the panel, plank, and board forms of this popular material. Be sure you have the facts, samples, literature. Armstrong Cork Company, Building Materials Division, 1606 Ross Street, Lancaster, Pennsylvania.

ARMSTRONG'S TEMLOK INSULATION

SHEATHING • LATH • BOARD  DE LUXE INTERIOR FINISH

(Continued from page 104)

sell for \$7200. It is supposed that the mortgage is to be amortized over twenty years. To this we now add \$800 to cover the extra cost incurred, at retail selling price, to add the new and modern cabinet sink, range, refrigerator, dishwasher and garbage disposal. An additional down payment of about \$100 will be required.

"The monthly payment without this additional equipment would have been \$56.91 including interest at 4½ per cent, FHA and fire insurance and taxes. With the extra equipment, the monthly payment

would become \$62.63, or \$5.72 more per month to purchase the completely equipped home.

"This fits ideally into FHA's personal credit requirements. FHA knows how much strain can be put on a man's budget when it approves the purchaser. It has no control over his purchases after he is approved. Often he goes into the market and buys this same new equipment. On the most favorable credit terms, he would pay a finance charge of \$120.10, and he would have an additional monthly payment of \$30.67 for a period of thirty

months. Add this to his monthly payment on the house and you get \$87.58 compared to \$62.63. In many cases the latter figure would be the maximum for which FHA would approve him, the maximum he should spend without defaulting.

"The argument will be raised that people who already own some items of this equipment will object to the plan. The answer is obvious, as pointed out by several builders. New equipment has been impossible to buy during the war and women will want, if not actually have to have, the new and modern. To American women today, a home is only as modern as its kitchen.

"Builders will take advantage of this trend. Homes with fully equipped kitchens are *complete* homes—they create satisfied buyers—they move faster, because they are truly modern," Scaife concluded.

* * *

"I'm Ready Now—" Says Bruno

(Continued from page 74)

"to sell to the public. Folks had been admiring the spot here and some had visited out here. So by giving them a chance quick without letting them stand empty we got our first buyers asking for certain favorite houses."

Well, that's the story. And it looks like that's going to be the story over and over again in other spots where the war will be pulling up stakes one of these days. You won't need labels to tell which were the properly programmed projects, which were built for keeps. There may be ghost towns and houses but they won't be tagged Bruno Koeneman or with names of builders like him.

And looking forward to the post-war era Koeneman hopes to get back to his usual run of construction, plus some of the things he has already planned. Before the war he operated in the Illinois towns of Chester, Carbondale, Steepleville and Marion. Besides 20 to 40 houses a year he has built such structures as a theatre, printing shop, schools, a city hall, commercial buildings, repairs, etc., in other words about any job that can come up in a small city.

In the home field he expects to go ahead on the Koeneman subdivision at Carbondale with \$4,000 to \$10,000 houses; in Marion there is a pre-war project to be filled out with \$6,000 to \$15,000 units. On these jobs, mortgages will be FHA insured, if available, because Bruno believes FHA is a postwar "must." He says:

"In small cities and semi-rural areas FHA sets necessary standards of plans and specs for uniform good construction where codes do not cover. This is an assurance of continued high-grade home ownership outside of the larger cities."



POST-WAR PLANNERS Want Pleasing Exteriors

FOR GENERATIONS Red Cedar Shingles have contributed to good "homey" American building and they will continue to do so in the post-war period.

Coupled with carefree service, long life and negligible upkeep, Red Cedar Shingles provide the builder with a roof that *stands up* and when double-coursed on side walls, a substantial exterior both versatile and attractive.

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

**RED CEDAR
SHINGLE BUREAU**
White Building, Seattle 1, Wash.
Canadian Office, Vancouver, B. C.



Red Cedar
SHINGLES

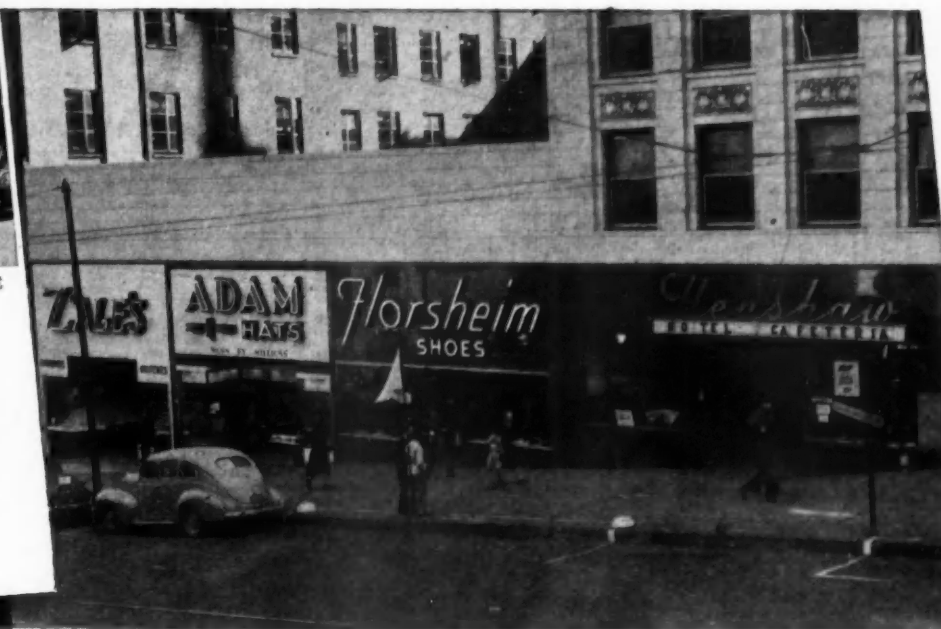
Get ready for store remodeling work!

Line up store jobs NOW . . . so you'll
be set for fast action when building
restrictions are lifted



BEFORE

THIS PROPERTY in Omaha, Neb., is a good example of how Pittsburgh Glass can mean better-looking stores and better business for merchants . . . and profitable modernizing jobs for you. Architect: Ed. Sessinghaus. Contractor: E. E. Gilmore Company.



AFTER

CONTRACTS today mean quick profits tomorrow. Talk to the store-remodeling prospects in your territory. Get them committed. And the minute building bans go off, you're ready to go to work!

Right now, as you read this, we're helping to prepare the way for you. We're running powerful advertising in more than twenty of the most important retail fields. We're urging

your prospects to get store modernization plans approved *now* . . . for better looking store interiors and store fronts.

We're telling them that the quicker they make their plans, the quicker they'll get the work done when the use of Pittsburgh Glass and Store Front Metal in store construction returns to normal.

Start covering your territory to-

day . . . and line up store remodeling jobs. And whenever you build, remember that Pittsburgh Glass Products are known and preferred by your prospective clients, due to many years of consistent advertising.

Meanwhile, send the coupon for our free books of facts, figures and photographs about many actual stores remodeled with Pittsburgh Glass.

"PITTSBURGH" stands for Quality Glass and Paint

PITTSBURGH GLASS

for Store Fronts and Interiors

PITTSBURGH PLATE GLASS COMPANY

Pittsburgh Plate Glass Company
2179-4 Grant Building, Pittsburgh 19, Pa.
Please send me, without obligation, your illustrated booklets on store modernization.

Name.....

Address.....

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

FIGURING WITH AN ARCHITECT

on Post-War House Plans?

send us his name...we'll mail you both—



NOTHING LIKE IT!

MESKER BROTHERS ★ Department A
 430 S. 7th Street ★ St. Louis 2, Mo.

Gentlemen: Without obligation, please send the following architect and me a copy of the new Mesker Brothers 1944 Book of Residential Windows:

Architect's Name _____
 His Address _____ (Give street address or P. O. Box No.)
 City _____ State _____
 My Name _____
 My Address _____ (Give street address or P. O. Box No.)
 City _____ State _____

AB-44

Catalogs and How-to-do-it Information

30—"AN OUNCE OF PREVENTION . . ."—Reclaiming semi-delinquated home properties will not only be a large percentage of the construction activity for the decade to come, but it will bring the builder into contact with rotted and termite-infested structural members that definitely indicate replacement with protected material. To this end, the Abesto Manufacturing Company has published a folder which gives a clear explanation of the causes and remedies of such failures. It is good information to have for new construction as well as rebuilding jobs.

31 A. B. C.—POSTWAR HOME AND POSTWAR HEATING—The *ultimate* in residential heating and air conditioning depends upon controls. In other words, a blast of cold or a blast of heat may be welcomed as such, but the acme of postwar satisfaction of inside weather-making lies in individual control. Minneapolis-Honeywell are offering three outstanding booklets, two on the postwar home and postwar home heating (A and B), and one on personalized heating control of postwar apartment buildings (C). Such modern developments are definitely important items with which to be thoroughly acquainted, and here's your chance.

32—HERE ARE CHALLENGING IDEAS FOR DEALERS AND BUILDERS—in a new, 1944 24-page booklet telling how to make money in the lumber and building business with De Walt custom-cut methods using De Walt power equipment. Just a few of the practical subjects include reworking the lumber you can get to sizes you can sell, establishing contractor and builder trade by offering cost-cutting services, and how to make more money by improved yard methods. All-in-all, this booklet, colorful and full of photos, contains many helpful ideas for you and your associates.

33—MOST USEFUL CALCULATOR AND HANDBOOK IN YEARS—comes to our attention. They put all kinds of home heating, water heating and required radiation information on the tip of your tongue by the mere flip of a page in the handbook or the turn of a wheel on the lightning calculator. Both of these handy items—which will fit into your pocket—are offered by L. O. Koven and Bro., Jersey City, makers of Koven Quality Products since 1881.

34—"SAVES MAN-HOURS AND MAN-POWER"—is part of the title of a new, 1944 spring booklet put out by the Kimberly-Clark Corp., manufacturers of Kimsul Insulation. This 24-page publication is full of actual installation photos, drawings descriptive of various types of uses, and specifications and information regarding both insulation and acoustics not only for normal construction but for pre-fabrication methods as well.

35—SUGGESTIONS IN ARCHITECTURAL CONCRETE—will occur to you from the illustrations and text contained in a late publication by the Portland Cement Association. Whether a house or a public school is occupying your mind, you will get real data and interesting reading from this 36-page booklet.

36—BENNETT FIREPLACES AND SUPPLIES—will be available after the war, and the company has put out a catalog of where it left off supplying its wares before the war. It would be well to go through this catalog to be sure you are up to date on fireplace equipment and all the different sizes available. Bennett Fireplace Company, Norwich, New York.

(Continued to page 110)

Typical of the beauty and convenience which home owners can look forward to is the Kohler Camberley enameled cast-iron sink shown. It has an 8-inch-deep basin, two large drain-boards, a 3-inch-wide ledge, mixing faucet with swing spout, rinsing spray and Duostrainer.



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You'll cook up BIG SURPRISES

IN THE KITCHEN OF TOMORROW

DESIGNING a home from the outside in—fitting a floor plan to a given exterior—is a thing of the past. Builders, realtors and others who are keeping their fingers on the post-war living requirements of America are convinced that design changes are going to begin *inside*.

Determining factor in all home design will be more living space. This, coupled with higher efficiency and increased comfort, will result in many changes in interior arrangements.

Kitchens, for example, will almost without exception include eating space. A definite trend is indicated for more comfortable working conditions, rather than

mere elimination of steps. Cabinets will be plentiful and arranged to avoid crowding. A planning desk will probably become an integral part of every kitchen. The acid-resisting enameled sink of durable cast iron will undoubtedly continue to be the overwhelming favorite it has always been.

From the builder's angle, salability will be of prime importance. The use of known-brand products of undisputed quality is one of the best forms of "sales insurance." Kohler, anticipating this need, will be in a position to supply the most up-to-date kitchen and bathroom fixtures and fittings. . . . Kohler Co., Kohler, Wisconsin.

★ BUY UNITED STATES WAR BONDS ★

K O H L E R O F K O H L E R

PLUMBING FIXTURES AND FITTINGS • HEATING EQUIPMENT • ELECTRIC PLANTS

MUD is selling post-war bathrooms by the million



Trucks and jeeps of the 5th Army toil through deep mud in Italy

To the boys who are battling General Mud in Italy and in Pacific jungles, a real bathtub is one of their dreams of home. When they get back they will join many other Americans who are planning to remodel their homes or build new ones. Millions of new bathtubs, lavatories and sinks will be needed.

Then you can offer smart modern bathrooms, with Formed Iron Plumbing Ware finished in beautiful porcelain enamel. This durable finish is glossy-smooth, easy to clean and keep clean. It resists staining and will be available in colors as well as the ever-popular white.

Formed Iron Fixtures combine great strength with light weight. They are cheaper to haul and easier to install. And you can assure your customers lasting satisfaction when you put in fixtures that are porcelain on ARMCO Enameling Iron—the original enameling iron and the most widely used base metal for this exacting purpose. The American Rolling Mill Company, 1271 Curtis Street, Middletown, Ohio.

FOR EXPORT: THE ARMCO INTERNATIONAL CORPORATION

HELP FINISH THE FIGHT—
WITH WAR BONDS



(Continued from page 108)

37—WATCH YOUR TRUCK TIRES—is the theme of a booklet recently put out by the B. F. Goodrich Company. Photographic illustrations are used to tell the reader what will happen to a tire that is not properly taken care of, and remedies and preventive actions are thoroughly explained.

38—ALUMINUM IMAGINEERING NOTEBOOK—is the title of a new booklet by the Aluminum Company of America. It "imagines" the reader into post-war items made of aluminum, from cross-country busses to windows and other items for home builders. Most illuminating and interesting book.

39—WHICH WAY, SMALL BUSINESS?—Everyone wonders, even as you and I, what is in store for small business. The U. S. Chamber of Commerce has published a very interesting small booklet of 36 pages prepared by Emerson P. Schmidt, Economist. Be sure to put the number of this booklet on the Service Coupon when you send it to Chicago. The wide-spread interest in small business is clearly brought out when one realizes that over 400 bills were introduced in Congress between 1933 and 1944 to help small business.

40—FLUORESCENT LIGHT WATCH-DOGS by G. E.—The final answer to successful fluorescent lighting is in the proper use of accessories. The manufacturer, the lighting engineer, the maintenance engineer, and the users of fluorescent lighting will be interested in the new catalog by General Electric Co., on the importance of fluorescent starters which, as they say, will "start 'em hot and stop 'em cold." Details of operation and mounting directions are given in this free, 18-page catalog.

41—REAL GUIDE TO MODERN HOME CONVENIENCES—is an accurate description of the 44-page book, "Donley Devices" published by the Donley Brothers Co., Cleveland. Take their 20-gauge steel attic ventilators, for instance. They are low in cost, save time in installation, and are available in rectangular, half-round and quarter-round shapes and in a wide selection of dimensions. Installation directions are graphically explained.

42—CERAMIC TILES ALWAYS SATISFY—No matter how modest or grand the houses may be that you will erect for your particular market, there will always be a place in them for tile. Both bath room and kitchen, at least, offer suitable locations for this impervious material that is as old as the Pharaohs and as modern as your first postwar house. The Tile Association has a colorful booklet available which is full of practical information.

43—OVER-ALL INTERIOR WALL PAINTING WITH "SPEED-TONE"—is the subject of a leaflet which gives all the information needed to do a good over-all job of decorating. This new oil paint material seals, primes, and finishes in one coat. It can be used over wallpaper, brick and cement or plaster. The 20th Century Paint and Varnish Co., Brooklyn, publishes the leaflet along with color cards of flat finishes that are washable and which dry in one hour.

SERVICE COUPON—CLIP and MAIL to CHICAGO

Readers Service Department,
American Builder,
105 W. Adams St., Chicago 3, Ill.

(June, 1944)

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.

Build CONCRETE Improvements Now!

Help save feed and labor



A sanitary concrete floor and new concrete masonry walls converted this old farm structure into a modern dairy barn. New concrete milk house (at left) was built at the same time.

Concrete Men! You can help farmers save labor and increase war food production with concrete improvements. The materials required are not critical and are easily available.

The old dairy barn, illustrated above, is an example of the effectiveness of concrete repairs. This structure was restored with concrete for many more years of usefulness.

Timely concrete replacements can add to the life and utility of thousands of other farm buildings.

Phone your farmer friends. Call on them personally—write them letters. Suggest concrete improvements which will save feed and labor. Advertise your services to farmers in local newspapers. Ask us for advertising suggestions for use with farmers. Send for your copy of *"Restoring Old Farm Buildings With Concrete."* Free in U.S. and Canada.

PORTLAND CEMENT ASSOCIATION
Dept. 6-3, 33 W. Grand Ave., Chicago 10, Illinois

A national organization to improve and extend the uses of concrete . . . through scientific research and engineering field work

BUY MORE WAR BONDS

HOPE'S WINDOWS

1818 *The Name Guarantees* 1944



Residence at St. Petersburg, Fla., Wm. B. Harvard, Arch't

The trend toward steel windows for modest homes, interrupted by the war, will be accelerated with the return of peace. New developments by HOPE'S Windows will play an important part, offering versatility of layout, durable quality of construction, more convenience in service to the trade with price and distribution policies that will assure the widest markets.

In the meantime, until present stocks are exhausted, the HOPE'S Steel Windows remaining in our warehouse are available for immediate delivery without priority certificate.

HOPE'S WINDOWS, Inc.

Jamestown, N. Y.

BACK THE ATTACK . . . BUY WAR BONDS



Yes, the Allied Nations are on the offensive now. But Mons and Ypres and Belleau Wood were no picnics in the other war. And the same battle-grounds may be as bitterly contested again.

Today, overconfidence is our worst enemy—a letting up in the war effort our greatest danger. No one is more anxious than we are to welcome a post-war world. But premature celebrating is the surest way to prolong the fight.

When the war is over, The F. H. Lawson Company will be back with you. And new designs, new materials, plus the traditional Lawson quality will make our postwar products well worth waiting for.

But a lot of water may go under the pontoon bridges before another Armistice is signed. And until that memorable occasion, let's remember the war is still on.



**THE F. H. LAWSON
COMPANY**

Cincinnati 4, Ohio

Hear How Quickly Manufacturers Can Convert to Production of Materials for Peacetime Building.

SUFFICIENT supplies of most building materials and equipment will become available to permit large-scale resumption of residential and other civilian construction within three months after the end of the war with Germany, Russell G. Creviston, General Postwar Chairman of The Producers' Council, stated at a meeting in Chicago recently of the Board of Directors.

"With the exception of plumbing, heating, and electrical equipment, most companies report that they will be producing large quantities of products for civilian building three months after reconversion begins.

Survey Shows What's Being Made Now

"A recent survey of the current production of building product manufacturers in The Council indicates that only 15 per cent have discontinued their normal lines entirely, in favor of war goods. Over 26 per cent have continued to make pre-war products exclusively in order to meet the demands of the war construction program and of essential maintenance, and 85 per cent of the manufacturers have continued production of pre-war lines along with other products being made exclusively for war use.

"Thus, while 75 per cent of all building product manufacturers are engaged in the production of distinctly new products needed in the war, all but 15 per cent also have continued to turn out the same products that will be required in the civilian construction program as soon as restrictions are removed."



BOARD OF DIRECTORS of Producers' Council, meeting in Chicago last month, heard results of survey on manufacturers' conversion to peacetime production of building materials and equipment by Russell G. Creviston, Postwar Chairman.

Creviston stated that complete information is not yet available with respect to the number and nature of new building products to be available for early postwar use. "Many manufacturers have indicated that their distinctly new postwar products will not be generally available until quite some time after the end of the war," he said, "owing to the fact that there has not been sufficient time to perfect and test many of the new developments, and because considerable time will be needed to tool up for the new lines.

"Throughout the industry, the intention is to produce thoroughly reliable and tested products as quickly as possible and in the largest possible quantities, so as to permit an early resumption of postwar construction. However, some decidedly new lines, developed and tested during the war construction program, will be ready for the market as soon as restrictions are lifted. In addition, there will be many other building products offered for early use that represent distinct improvements on pre-war models," Creviston concluded.



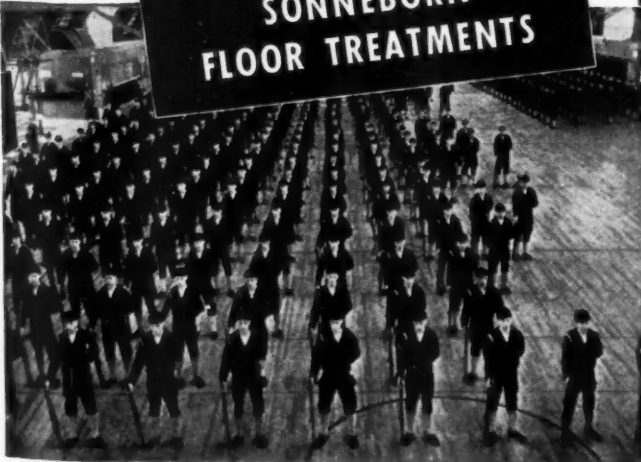
WHEN YOU HAVE TO BE SURE OF RESULTS

You must use methods and materials you can trust. No matter what your floor problem . . . preservation and finish—hardening and dustproofing—patching and resurfacing—cleaning, waxing and maintenance . . . there is a SONNEBORN product that will give you certainty of results. And there is a SONNEBORN trained field man available to help you. What is *your* problem? Write Dept. A-14.

BUILDING PRODUCTS DIVISION
L. SONNEBORN SONS, Inc.
88 LEXINGTON AVENUE, NEW YORK 16, N. Y.

for SURE results in solving your floor problems count on
SONNEBORN FLOOR TREATMENTS

Official U.S. Navy Photo



At Sampson, N. Y., Naval Training Station, wood floors of Drill Halls are treated with LIGNOPHOL, the one-application penetrating wood finish—a SONNEBORN floor treatment. Shreve, Lamb & Harmon, Architects-Engineers. John A. Johnson Contracting Corp., Contractors.



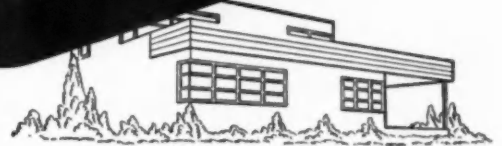
50 YEARS OF SERVICE

1894



1944

TO THE BUILDING INDUSTRY



AND-IN TUNE WITH

TOMORROW!

Experience gained in peacetime and war production activities assure high standards of quality in NRC modern design heating equipment . . . for your current and post-war construction.

The NATIONAL RADIATOR Co.

226-O Central Avenue • Johnstown, Pa.

Better Product Features
for Better Heating

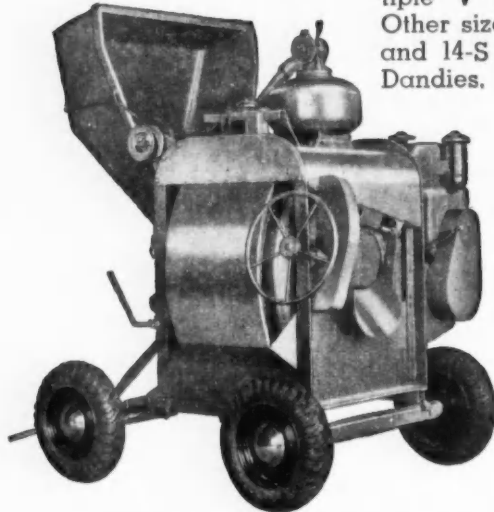


Commercial and Residential
Heating Equipment

For "Outstanding Production Achievement"

KWIK-MIX MIXERS

Kwik-Mix convertible 10-S Dandie . . . side or end discharge . . . change can be made in the field to suit pouring conditions. Special features are: easily accessible drum drive shaft . . . flow-line discharge chute . . . simplified skip-flow shaker . . . enclosed reduction gear assembly in oil . . . multiple "V" belt drive. Other sizes are 7-S and 14-S Kwik-Mix Dandies.



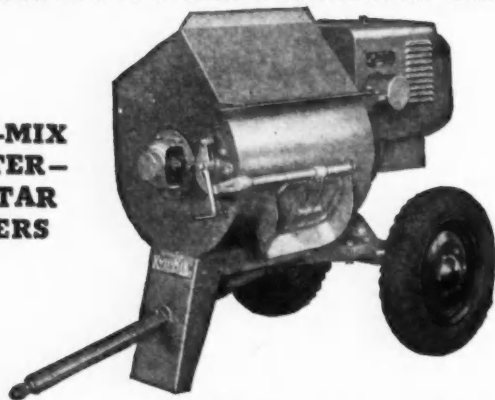
KWIK-MIX 10-S DANDIE



Kwik-Mix 3 1/2-S Concrete Mixers . . . side or end discharge . . . tilting or non-tilting . . . anti-friction bearings . . . spring mounting . . . high speed trailing . . . welded construction.

KWIK-MIX 3 1/2-S END DISCHARGE TILTER

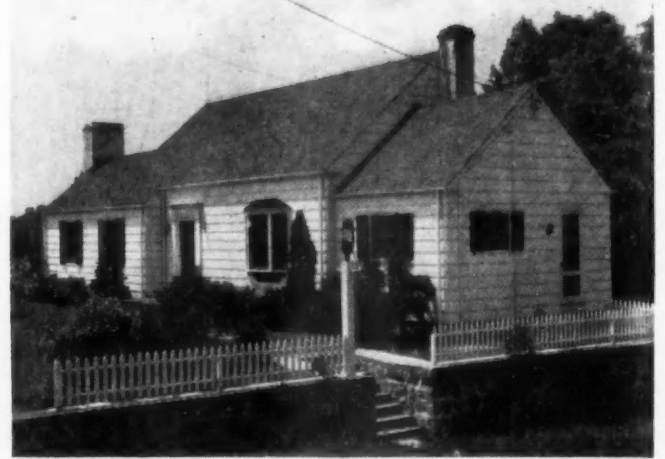
KWIK-MIX PLASTER-MORTAR MIXERS



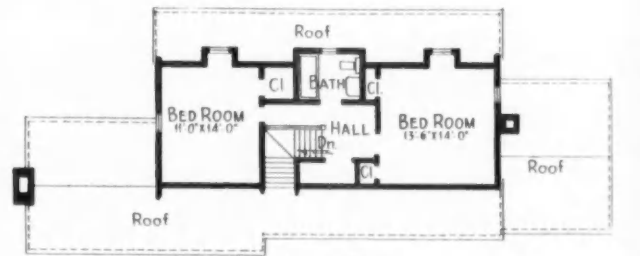
Kwik-Mix Non-Tilting 6-P Plaster or Mortar Mixer . . . fast discharge, 7 seconds . . . light weight, only 850 pounds . . . air cooled engine . . . V-belt and worm drive . . . low shoveling height. Also 4 wheel 10-P tilting model.

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

Front Cover Home, Well Worth Its Cost In Bonds



BUILDER Ed. Wallace, who is responsible for the house on the cover, achieved an unusually attractive small dwelling which, in reality, when you study the plans below, is not a small house at all. Taking advantage of the typography of the site, he was able to create an efficient basement including a double garage. With two bedrooms and bath room down stairs, the upper floor could be left unfinished if a buyer wanted to defer the cost for a few years.



SECOND FLOOR PLAN



FIRST FLOOR PLAN



BASEMENT PLAN

**SIX STEPS OF PROTECTION
IN THE PUBLIC INTEREST**

... (1st of a Series)

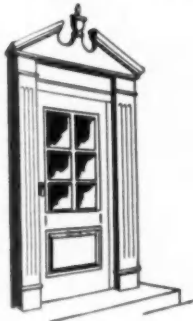


.....“Don't expect me
till late, dear—
I think we've found it!”

For years, laboratory lights had burned late while research chemists toiled and delved. And then—on a cold, blustery night in 1937—the great moment arrived. At last, a method had been found for measuring the efficiency of toxic preservatives for wood . . . a method that was to permit the establishment of definite minimum standards for treating woodwork such as windows, screens, doors and frames.

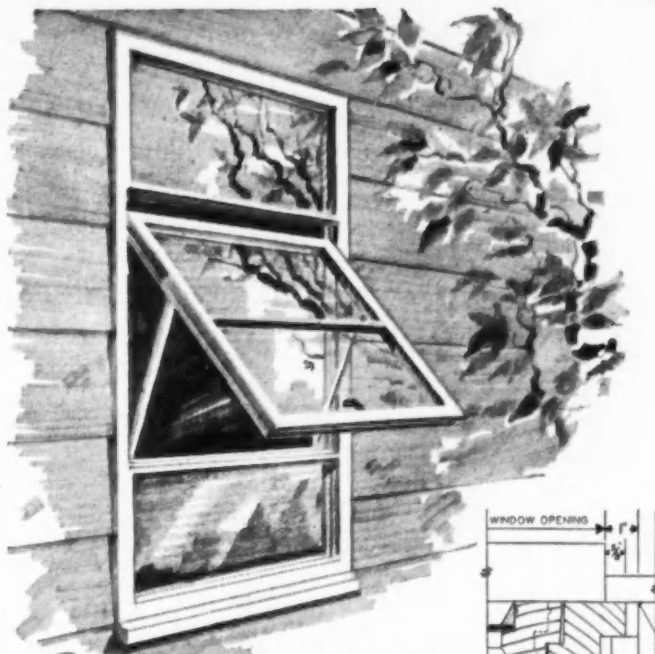
Protection in the public interest—protection of architect, builder and homeowner alike—is the purpose of the toxic minimum standards devised by NDMA. Administered by responsible authorities, these standards serve to enhance and improve the lasting quality of wood . . . add an extra measure of endurance to wood's unequalled beauty, workability, utility and economy.

The NDMA Seal of Approval—available by license to all manufacturers and distributors who conform to the toxic preservative standards of the NDMA—represents these six steps of protection:

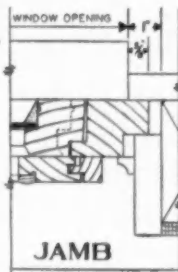


1. An efficient test for measuring effectiveness of toxic preservatives
2. Minimum standards governing the toxic preservative treating of woodwork products
3. A seal identifying products treated in conformity with NDMA Toxic Preservative Standards
4. Mill inspection of treating equipment and practices
5. Laboratory check-tests of preservative solutions
6. Educational effort in the public interest

NATIONAL DOOR MANUFACTURERS' ASSOCIATION
McCORMICK BUILDING • CHICAGO, ILLINOIS



PELLA "AWNING" TYPE—designed for practical and simple wall installation, forming its own window frame . . . interior trim not needed, thus—saving many dollars.



LOW COST

Pella

"AWNING" WINDOWS

**For Standard 2 x 4 Frame
... Thin Wall ... Masonry Construction**

Made by Makers of Famous Pella Casement Windows

**No FRAMES
SASH WEIGHTS
BALANCES**

White Pine Sash ... Toxic Treated

These extremely ingenious windows set right in the studding! They do not require any frames, sash weights or balances. Units come completely

assembled so no fitting is necessary on the job. . . . Flush type lock handle is an exclusive feature. Units can be glazed with standard size lights. . . . Available with screen and storm sash—inside screen and storm sash are interchangeable; top hinged or channel guided. Pella "Awning" Windows comply with Federal Housing Authority Specifications. . . . WRITE FOR FREE DETAILS! Mail a post card TODAY! Ask for your FREE set of full-size details on Pella "Awning" Windows. Address Dept. 364.

**Ideal AND EASY TO ADAPT FOR
SPECIAL JOBS LIKE THESE**

Patent No. 135609



MULTIPLE UNITS of Pella "AWNING" WINDOWS made to your specifications are available when quantities warrant. Wide range of combinations possible. For schools, office buildings, etc. upper sash can be made to ventilate.

"4-CYLINDER" HOUSE designed by Arthur T. Brown, A. I. A. of Tucson, Ariz. incorporates Pella "AWNING" WINDOWS. Pella's broad, horizontal lines give house the appearance of greater size.

ROLSCREEN COMPANY, PELLA, IOWA

Pella RolSCREENS • Pella Venetian Blinds • Pella Casements



No laboratory ever exposed wood to more severe test conditions

BANANA ripening rooms are held at temperatures between 56° and 70° F. Humidities are about 95%. Ideal conditions for rapid growth of wood-destroying fungi, but Wolmanized Lumber* is no ordinary wood. It stands up here.

VACUUM PRESSURE impregnation with Wolman Salts* preservative accounts for this unusual ability. Ordinary wood is thus made highly resistant to decay and termite attack—a fact proved by many similar installations of Wolmanized Lumber, in service for many years, in banana ripening rooms.

THIS WOOD ADDS its insulating value to that of the cork-lined walls, while serving primarily as a strong framework for the structures. Wolmanized Lumber is clean, odorless and paintable. Its use introduces no unusual problems; it is light in weight, easy to handle and erect.

SERVICE RECORDS on many other types of installations, covering millions of feet of Wolmanized Lumber, provide equal evidence of its lasting ability. Plan on profiting by the use of this long-lived wood by specifying it for your postwar construction. American Lumber & Treating Company, 1645 McCormick Bldg., Chicago 4, Ill.

*Registered Trade Marks

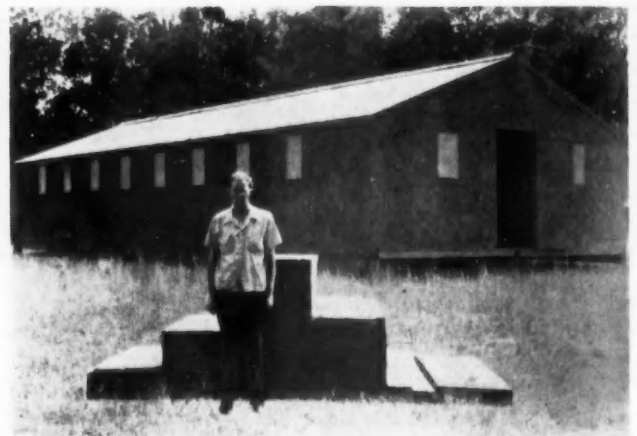
WOOD THAT'S *Alloyed* FOR SAFETY AND ENDURANCE

AMERICAN LUMBER & TREATING COMPANY

Plywood, Plastic and Metal Show New Building Technique

A REVOLUTIONARY new technique for postwar construction utilizing factory-fabricated, plywood-plastic, metal panels which retain the outstanding properties of each material was recently announced by the United States Plywood Corporation. Potentially useful to a wide variety of applications, the principal prospect for the technique and the product appears to be prefabricated houses and other prefabricated structures, according to the sponsors. For houses, garages, farm buildings and warehouses, application of the new technique presages "a house built without any solid wood studs, joists or rafters," it is claimed.

The material combining plywood, plastic (used as the adhesive) and light metal of paper thickness is known as "Armoply." The material can be factory-fabricated in sizes required and advantageously shipped to the assembly point because when the units are flat they occupy little space and because of the relatively light weight of the material used. U. S. Plywood experts explain that, the wood being used in compression and the metal in tension, the materials are thus employed to their best advantage. The flanges of the metal-bonded plywood panels take the place of studs, rafters or joists. The metal face is exposed to the weather on walls and roof.

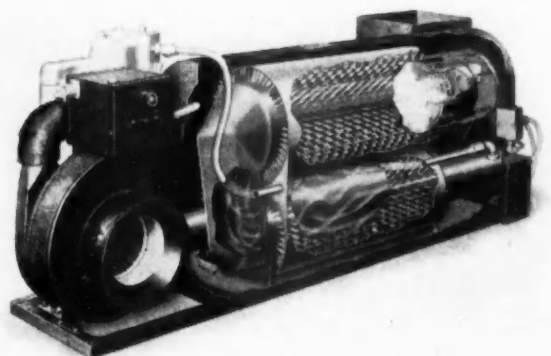


NEW building technique and plywood product used on this job.

Aircraft Heating Unit Adaptable for House Heating

COLD, the bitter enemy of bomber crews, has had its bite removed by a new aircraft heater of the combustion type, burning gasoline from the plane's tanks. It was developed by the Heating Division, Anchor Post Fence Company, Baltimore, Md. Now in use on Navy patrol bombers, as well as the giant Mars, it combines the multiple functions

(Continued to page 118)



THE cutaway view of the aircraft heater shows the travel of hot gases from the burner at the upper right through a primary exchanger and downward to a secondary exchanger.

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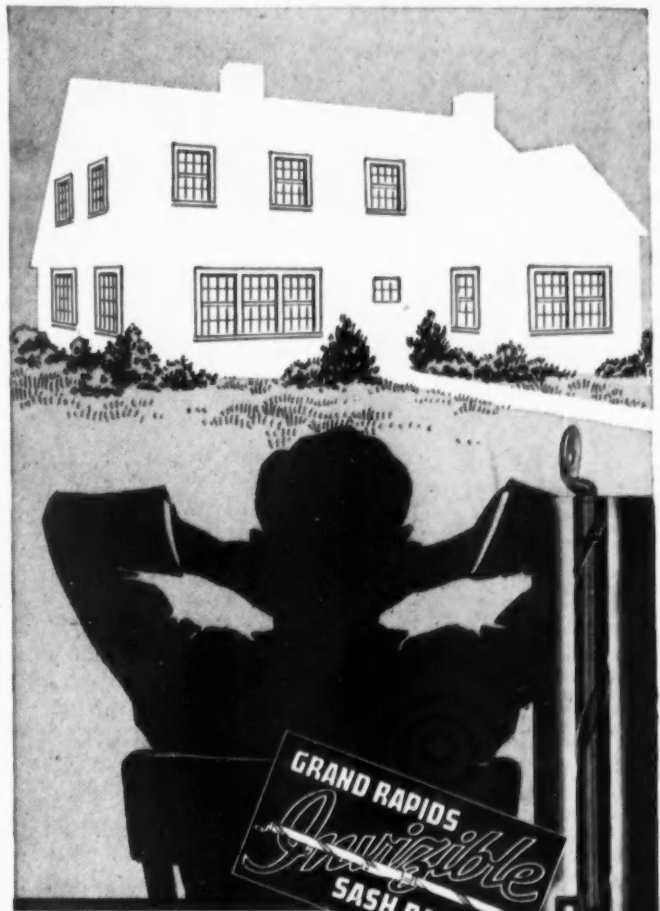
**PROTECTS WALLS FROM THE
"DESTRUCTANT DRAGON"**

In days of old the knight in shining armor rode forth to slay the dragons of that day, to protect his lady fair;— Today's dragons are just as real to the fair ladies who make our homes.

TIM TYLAC covers walls with a suit of shining armor—in vain the "DESTRUCTANT DRAGON" breathes heat and acrid fumes against its lustrous surface . . . in vain his lashing tail tries to crack and chip, to mar its enduring beauty . . . his slimy claws avail him naught.

Home owners will demand the economical, permanent beauty of TYLAC for post-war construction and remodeling. Jobbers, Dealers and Builders, plan now your future with TYLAC—More Sales—More Profit—More Satisfaction.

TYLAC COMPANY
MONTICELLO, ILLINOIS
MANUFACTURERS OF ENDURING-MODERN WALL COVERING



**Window
Planning
Begins Now!**

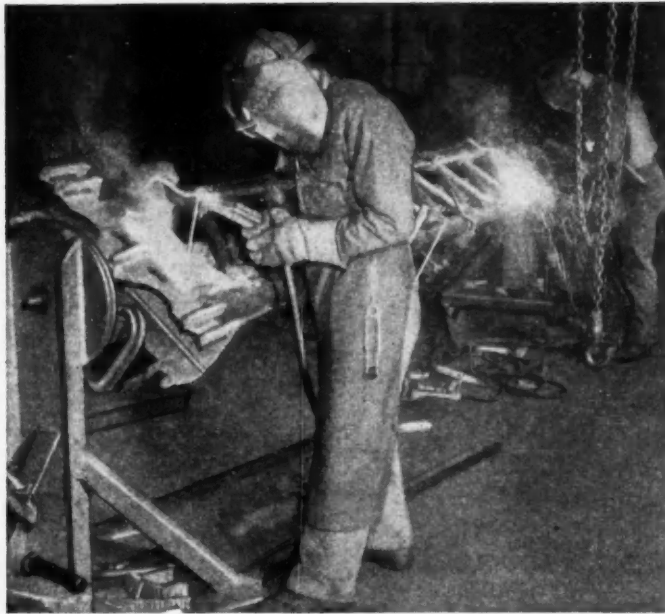
The end of the war cannot be foreseen, nor can one foretell the great political problems of its aftermath. But one thing is certain: American manufacturing ingenuity will be taxed to supply the pent up demand for merchandise by the American public.

So, planning begins now! Time, an ever important factor in the consideration of profits, will be doubly valuable in a hectic post-war reconstruction era. That is why, in window planning, the Grand Rapids Invincible Sash Balance must be given prime consideration. Simplicity, rapidity and ease of construction—smooth, dependable performance, and other equally commendable features—puts the Grand Rapids Invincible out in front in any planning of window assemblies.

Note: Sash pulleys will be available as soon as materials are released.

At present governed by government priorities. Send for catalog for information and delivery details.

GRAND RAPIDS HARDWARE COMPANY
GRAND RAPIDS • MICHIGAN

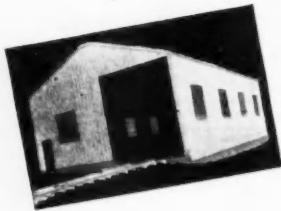


Position Welding On Part of Trestle For Army's Ponton Bridges.

POSTWAR BENEFITS FROM WAR-PRODUCTION EXPERIENCE

With every energy directed toward ever-increasing production of invasion docks, trestles and bridges and the famed LST ships, International Steel Company engineers and shopmen are learning new welding techniques, are acquiring experience in high speed, low cost production and are developing prefabrication methods that will be of tremendous value to International customers when peace comes.

The structural steel, bridges, steel trusses, packaged windows, joists and the host of other International Steel products that you will want then will be better and lower-priced and will come to you in less time because of the knowledge and experience we are gaining now.



"PACKAGED" BUILDINGS IN TEST STAGES

Low Cost—
Quick field assembly with unskilled labor—
Simple expansion, alteration or removal with 100% salvage of parts.

These are just a few of the advantages of the new prefabricated steel buildings for industrial and commercial use which International engineers have developed. Sizes range from 6' x 6' x 8' to largest manufacturing plants.

A request on your letterhead will bring you full information about these new buildings and other postwar improvements in International building products. Perhaps we have the answer to some of your postwar problems.

International

★ STRUCTURAL STEEL
 ★ STEEL BUILDINGS
 ★ STEEL TRUSSES
 ★ BUILDING PRODUCTS

STEEL CO.

1701 EDGAR STREET
 Evansville 7, Indiana

(Continued from page 116)

of cabin heating in flight and not in flight, with the transfer from one phase to the other automatically controlled. The heater uses about the same amount of electricity as the average reading lamp, and it has an hourly output of 90,000 BTU, which is enough for a 5 or 6 room house. According to the manufacturer, the combustion principle involved has excellent possibilities in postwar domestic heating as well as automotive and space heating.

* * *

Delinquency Down for a Count of Ten at Port Washington, L.I.

T EEN-AGE boys and girls of Port Washington, L. I., have found their own answer to the problem of juvenile delinquency.

Sponsored by the Port Washington War Council, they are getting some practical training in home craftsmanship while building a youth activities center for their own use.

At the same time they beautified a run-down Main Street eye-sore. Painting, plastering and furnishing are all being done by the eventual users.

Why not find an eye-sore building in your town—they're all over, you know—and organize a group of youngsters to duplicate what the boys and girls of Port Washington have done?



ABOVE: The crew of workers poses on the porch of the old house they repaired and redecorated as their activities center to keep them off the streets.



RIGHT: Doing carpentry in one of the rooms are, left to right Jerry Moore, John Bentz and Charles Hoins. Notice the old fashioned wood lath to be replastered.

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ROOM TO GROW

With an eye to future supply, selective logging is practiced in the Western Pine region by removing only part of the forest - the trees that should be harvested now and converted into lumber. Opening an area in this way allows more sunlight and food in the soil to reach the "leave" trees or residual stand. It increases the rate of growth of trees left for the next crop. It is good forest management.

Under a long-range cutting program, lumber companies perpetuate their forests and provide a continuing supply of Western Pines* far in the future as in the past.

WESTERN PINE ASSOCIATION

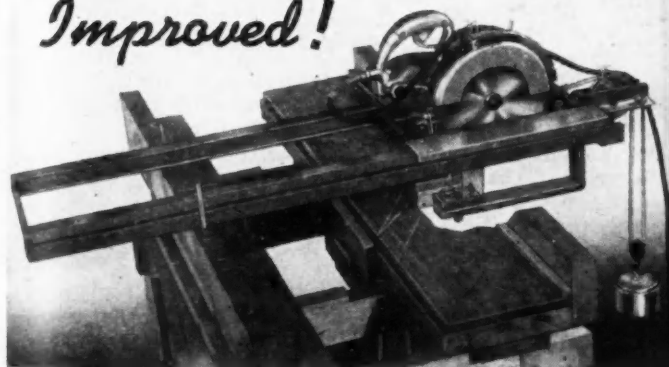
YEON BUILDING, PORTLAND 4, OREGON



*THESE ARE THE WESTERN PINES - IDAHO WHITE PINE • PONDEROSA PINE • SUGAR PINE

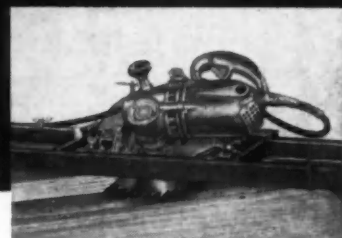


Improved!



Fred W. Wappat PORTABLE RADIAL GUIDE SIMPLIFIES PRODUCTION CUTTING!

You make ALL Jack-rafter Cuts . . . Without Laying Them Out . . . Using This Handy, Low-cost Unit



Making jack-rafter cut

Now you can have radial saw production and accuracy *plus* the usefulness of an electric handsaw—all in one! You simply use the improved Wappat Portable Radial Guide, any Fred W. Wappat Saw and a table made of stock lumber that any carpenter can knock together from our drawing.

Guide and saw lock accurately for square or angular cuts—work is laid out for you automatically. Any Fred W. Wappat Saw can be clamped in the carriage or removed in a few seconds . . . that's how quickly you can change from multiple-cut radial saw operations to electric handsaw work. Saw can also be inverted in table for production ripping. The new all-welded construction of the Guide eliminates excess weight.* The carriage now moves on sealed ball bearings—no lubrication necessary—and is correctly counter-balanced to give a steady, even stroke in either direction.

The Wappat Portable Radial Guide is designed to cut your production costs . . . and built to give you years of service. Write today for full information.

Fred W. Wappat Portable Radial Guide . . . \$70.00

Model A-9" Saw, 3-7/16" Cutting Capacity - \$125.00

Model A-8" Saw, 2-5/8" Cutting Capacity - \$105.00

Accessories and Parts for Alta and Wappat Tools

*Wt. of Guide—55 Lb.
Wt. of Table—47 Lb.

Compactness an important feature. Entire Unit fits in a space no larger than the back seat of a car.



Inverted Saw does production ripping

Fred W. Wappat PORTABLE ELECTRIC TOOLS

135 VALLEY ST. MAYVILLE N. Y.

BLUEPRINTS FOR YOUR HOUSE of TOMORROW



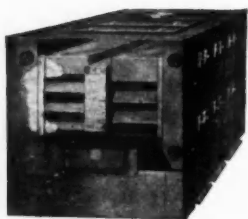
YOU MAY BUY A READymade HOME!

The idea of pre-fabrication is gaining momentum among leading architects and builders...

BUT -
Your Heating Plant will be KOVEN WATERFILM

In the future as in the past, the KOVEN WATERFILM boiler will offer perfect assurance of heating comfort. The fastest steaming boiler on the market, as well as one of the most attractive and modern in design, KOVEN WATERFILM incorporates the newest scientific improvements. Its patented construction provides these important advantages... quick heat throughout the house, sustained, even room temperatures, a plentiful supply of domestic hot water, and real economy of operation.

For industrial installations, the Waterfilm sectional series (pictured) is ideal — it can be taken through a two-foot door, eliminating costly rigging and alterations.



SECTIONAL SERIES for war plant or apartment house use.

WATERFILM BOILERS, Inc.

154 OGDEN AVENUE

JERSEY CITY, N. J.

PLANTS: JERSEY CITY, N. J. • DOVER, N. J.

Real Estate Survey Shows Serious Wartime Property Depreciation

THE heavy wartime drain on building materials and labor is causing serious property depreciation in a great many sections of the country, according to the 42nd semi-annual real estate market survey released today by the National Association of Real Estate Boards.

Covering 376 representative cities, the survey disclosed that maintenance and repair handicaps are resulting in a seriously rapid deterioration of structures in 33 per cent of the cities. Structural soundness of buildings was affected somewhat in 65 per cent of the cities and in 4 per cent structural deterioration had become a serious problem.

This is the 21st year it has been made and it represents the opinion supplied by local real estate boards.

Another drawback to property owners noted in the survey was that rental rates have not kept pace with upkeep and repair costs. It was found that rent levels fixed by OPA in 60 per cent of the cities do not provide for reasonable repairs. The same situation prevails in 71 per cent of the maximum rent areas and 72 per cent of the industrial areas.

A study of postwar community planning disclosed that two-thirds of the cities had formed planning committees and that 70 per cent of the strategic industrial centers had begun to plan for peacetime readjustments.

The larger cities are leading in this movement. Of those over 200,000 population, 92 per cent have reconversion plans, while 48 per cent under 25,000 population have started such work.

Some community effort to prepare for reconversion to a peacetime economy is reported under way in 50 per cent of the New England cities, 58 per cent of the Middle Atlantic cities, 68 per cent of the Southeast cities, 73 per cent of the Great Lakes cities, 55 per cent of North Central cities, 70 per cent of South Central cities, 64 per cent of Northwestern cities, and 74 per cent of the Southwest cities.

Getting Ready for Postwar

Most promising postwar preparation is that being made by individual industries. The survey finds that in 77 per cent of reporting communities, industries are investigating a switch-over to some form of peacetime production other than their pre-war production.

It appears that cities will have very diverse situations as to the amount of factory space that must be changed from government to private use. In the present survey 84 per cent of the cities said not more than 10 per cent of their used industrial space was Federally owned, and 47 per cent said the government had none whatever. But it is estimated that the government owns three-quarters or more of all factory space in five per cent of the cities.

War has hastened the trend to streamlined one-story factory buildings. In one city out of every three, one-half or more of the present factory space is of the one-story type. But in almost another third only a very small amount of the space (less than 10%) is of the one-story type.

Some of the unusual sidelights of the wartime realty field follow:

1. Residential rents are not sufficient to justify investment in rental housing at present construction cost in 77 per cent of the cities. In maximum rent areas, rates are insufficient to justify rental housing investment in 82 per cent of the cities.

2. To avoid OPA's restrictions on residential sales, there has been a withdrawal of properties from the rental market in 31 per cent of the cities.

3. OPA rent levels are considered to be too low for fairness in 81 per cent of the cities. (1 per cent of the cities reported them *too high*.) Eighteen per cent feel that while variations are too great between individual properties, the general intention as to rent level is fair.

(Continued to page 122)

Moncor SURFACE WIRING DEVICES

CAN BE USED WITH BRAIDX,
BX OR CLEAT WIRING

For Quick New Wiring

OR WIRING EXTENSIONS

THESE sturdy, good looking Textolite devices are ideal for use with cables hidden or exposed in farm buildings, cottages, garages, warehouses, industrial buildings, military buildings, etc. Knockouts in ends, sides and backs enable them to be end connected, side connected (cleat wiring) or back connected for concealed wiring. Your customers will like them.

For further information, see the nearest G-E Merchandise Distributor or mail the coupon.

Approved by the Underwriters'



General Electric Company
Section D644-86
Appliance and Merchandise Dept.
Bridgeport, Connecticut

Sirs: Please send me information on
Moncor Surface Wiring Devices.

Name.....

Address.....

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

Hear the General Electric radio programs: "The G-E All Girl Orchestra" Sunday 10 P.M. EWT, NBC. "The World Today" news every weekday 6:45 P.M. EWT, CBS.

BUY WAR BONDS

GENERAL ELECTRIC

Qualitybilt WOODWORK

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



DESIGN FL2429



DESIGN FL3039

BATHROOM CABINET

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

CORNER CHINA CASES

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



"UNI-ROL" GARAGE DOOR

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

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

FARLEY & LOETSCHER MFG. COMPANY

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

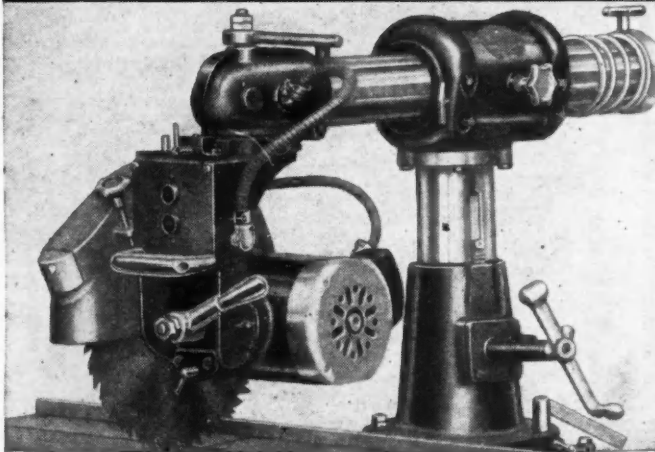
Structural, Reinforcing or other Blding Steel Shipped from Stock

Write for Stock List—
your guide to over 10,000
different kinds, shapes
and sizes of steel for quick
shipment from ten plants.

Joseph T. Ryerson & Son, Inc. Plants at Chicago, Milwaukee, St. Louis,
Cincinnati, Detroit, Cleveland, Buffalo, Boston, Philadelphia, Jersey City.

RYERSON

The COMET Senior



LOOK TO THE FUTURE count on Comets

A war is still to be won. But builders everywhere visualize the vast construction ahead. That, too, will be a tremendous job. . . Then, as now, count on Comets. Write for free literature.

CONSOLIDATED MACHINERY & SUPPLY CO., LTD.
2029-33 Santa Fe Avenue, Los Angeles 21, California

COMETS cut quicker

(Continued from page 120)

4. The building of war plants has materially shifted the industrial area of some of our cities, but the movement is not as great as was expected. Only 10 per cent of the war industrial cities, or nine per cent of all cities have experienced such a shift.

5. Wartime immigration to industrial centers, representing the greatest population movement in the history of the country, is expected to have a definite effect on the population pattern. A large proportion of the newcomers are expected to become permanent residents in 48 per cent of the cities. But 52 per cent of the centers expect only a small portion of the new population to remain.

6. On the problem of the disposition of Federal war property, 25 per cent of the real estate boards in war areas have special committees co-operating with industrial, business and civic interests, in making local economy fit into the national disposal pattern.

7. Regional industrial reports from members of the Society of Industrial Realtors show that switch-over plans are being considered by 90 per cent of the Southwest factories, 80 per cent of the Northwest factories, and 81 per cent of the New England industries.

* * *

Builders' Convention—

(Continued from page 69)

The H3 program was described as intended to correct cases of individual hardship—health, welfare, family conditions, or to replace or reconstruct houses lost by fire, tornado, floods, etc.

POSTWAR CONTROL—Strong opposition to any extension of controls on home building and materials beyond the shortest necessary time after the war was expressed. Abner Ferguson, however, told the builders that he did not see how it would be possible to avoid "some control of prices until supply and demand are more closely in balance."

Meetings throughout the session were presided over by Robert P. Gerholz, President of NAHB, Joseph E. Merrion, of Chicago, Chairman of the Home Builders Emergency Committee and by Chairmen of the various subcommittees. Arrangements for the conference were ably handled as usual by the Executive Vice President of NAHB, Frank W. Cortright.

* * *

War Construction—

(Continued from page 77)

A power cabinet shop is well equipped for production of kitchen cabinets of Douglas fir plywood. These are of modern attractive design, popular with the housewives, and of excellent construction. They are trucked directly to the finished houses as needed. Porch brackets, vent panels and any special millwork needed is turned out promptly in shop.

Doors are ordered from the factory fitted to exact size and accurately machined for locks and hinges. Window frames of an improved type come knocked-down in bundles and are set up in the millwork shed under favorable working conditions for quality and speed. Two men can thus assemble 120 windows per day.

All siding, outside trim, frames, sash, outside doors and porch material are painted one coat before going out to the job. This work is done inside, under cover.

(Part II of this report, covering the cost-saving methods of house erecting by the Puget Sound Bridge & Dredging Co., will appear in an early issue.)

* * *

Doctor's Clinic—

(Continued from page 79)

two arrangements of ornamental chimney as being too "domestic."

The entrance for patients is to the left from the central porch. From the large reception room halls run back to each wing with the consultation rooms and examination rooms on each side. Surgery, x-ray department, laboratory and recovery rooms are at the rear. Basement is excavated under the left half only, and there, a 3-room apartment is located,

(Continued to page 124)



B & T Metal Trims
 Trademarked
CHROMEEDGE

Trade Mark Reg. U. S. Pat. Off.

**Covering the building field
 in decorative trim needs**

For every type of building—wherever modern floor and wall coverings are used—there is a wide selection of extruded and rolled B & T Metal Trims, trademarked Chromedge. And when B & T facilities are no longer required for war needs, they will be ready again to cover the building field, with further improvements!

The B & T Metals Company
 Columbus 16, Ohio

TRAIL-SMITH

**7-S or
 10-S**

- Spring-mounted axle — Roller bearing auto type wheels — Oversize low pressure pneumatic tires — Automatic skip vibrator — Enclosed gear reduction — Multiple V-belt drive — Vertical siphon-type tank.

Get Yours — TODAY!

7-S TRAIL-SMITH (1 bag size) can be shipped today, without priority. Equipped with steel wheels, or automobile wheels for pneumatic tires. 10-S also available but requires government release. Write for literature.

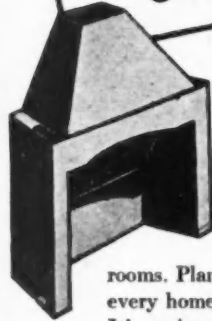
THE T. L. SMITH CO., 2849 N. 32nd St., Milwaukee 10, Wis.
 Streamlined, Dependable TRAIL-SMITH Mixers
STILL LEADING THE PARADE



MIXER MANUFACTURERS FOR MORE THAN 40 YEARS

PROVED by Wartime Experience

The **HEATILATOR**
 is Today's
Outstanding Fireplace

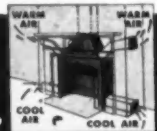


Nearly every prospective home builder wants a Heatilator Fireplace. That's because the wartime experience of Heatilator owners has proved the value of circulated fireplace heat. All over America, Heatilator Fireplaces have helped to stretch rationed fuels, and have kept homes comfortable by circulating heat to all parts of the room, and to adjoining rooms. Plan now to build this outstanding fireplace in every home. It eliminates the usual causes of smoking. It's easier to build.

HEATILATOR, INC.

814 E. Brighton Ave., Syracuse 5, N. Y.

HEATILATOR
 Fireplace



Here's a "Best-Seller" to Post-War Builders

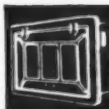
Home-Owners Will Demand This **Majestic FUELLESS INCINERATOR**

The growing demand for a quick, easy, low-cost way to dispose of garbage indicates a lively post-war market for the efficient Majestic No. 30 Fuelless Incinerator. This compact, attractive, economical unit destroys wet or dry garbage and waste quickly and sanitarly without the use of a separate fuel. It attaches to any 8" flue—doesn't interfere with heating plant operation—lets no odors escape into the basement or utility room. Here's a proved source of profits you'll want to include in your post-war preparations. Write for full details on the Majestic No. 30 Fuelless Incinerator today.

The Majestic Co.
 921 Erie St.,
 Huntington, Ind.



Majestic
 Building Necessities



(Continued from page 122)

No danger of Shock with Type AC **FA SERVICE EQUIPMENT**

Safety and modern protection are built into each Load Center, Service Equipment and Panel-board. All current carrying parts are covered. Needless circuit interruptions are prevented when momentary, harmless overloads occur—but the circuit breakers "trip" on short circuit or harmful overload. Requiring no fuses, the circuit breakers are operated manually, like an ordinary tumbler switch. Simply return the handle to the "on" position after the cause of the short circuit has been removed.

Capacities: 15, 20, 25, 35 and 50 amperes, for 120 volt AC service . . . Fully approved by Underwriters' Laboratories, Inc.

Write for
Bulletins 63 and 67

describing and illustrating the FA line—including wiring diagrams and suggested specifications . . . Frank Adam Electric Company, Box 357, St. Louis (3), Mo.



Frank Adam
ELECTRIC COMPANY
ST. LOUIS

OVER-THE-TOP² DOOR EQUIPMENT

✓ PROFITABLE
✓ PRE-FABRICATED
✓ PREFERRED *

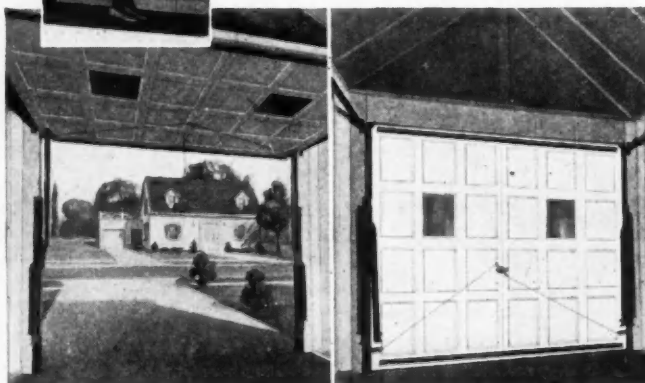


Whether home construction in the future follows a trend toward pre-fabrication or not, Frantz Door Units will be the perfect "package" for post war garages. Pre-fitted doors, made in 3 sizes, will come complete with genuine "Over-the-Top" Equipment, ready for quick installation . . .

- No. 10 For Openings 8' x 7'
- No. 7 For Openings 8' x 6' 6"
- No. 21 For Openings 16' x 7'

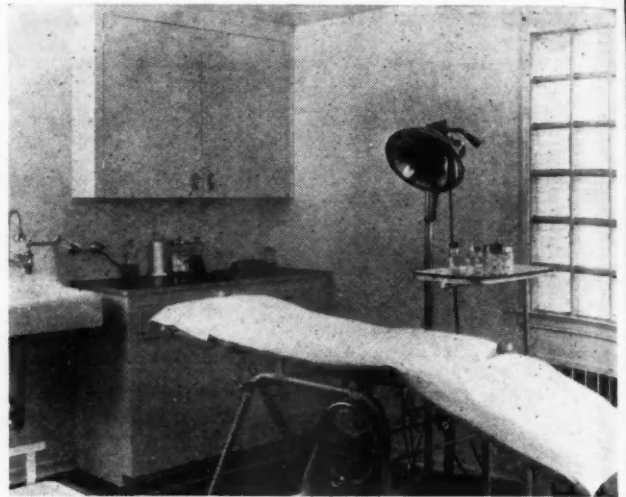
Right now our plant is almost wholly engaged in the production of items for the Army and Navy, but we can supply "Over-the-Top" Hardware for commercial installation. Write for information.

* "Over-the-top" Door Equipment is preferred because it's so simple: easy to erect; easy to operate. You can install 'em and forget 'em.



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OPERATING ROOM for minor surgery in Seattle Doctors' Clinic

along with the heating plant, an oil-burning, hot-water system with concealed fin-type radiators.

A human-interest touch on this doctor's clinic, as a building project, was the fact that the builder, Andrew A. Nelson, a pioneer building contractor of the northwest, is the father of the Doctors Nelson, and that it was built in his 75th year.

* * *

LETTERS—

(Continued from page 7)

going to be a lot of men requiring hospitalization over a period of years, and good hospitals in communities over the country will be of great service to these men as well as the regular run of citizen.

What is required is a plan of a hospital comparable to the size mentioned above, with the heating plant and laundry attached; no basement, ground floor just below the grade line, and two floors above. If you had a facsimile of a plan close to this it could be added to or deducted from to suit. At the present time the committee here has nothing to guide them in making up a plan.—C. H. McLARTY, Kindersley, Saskatchewan, Canada.

Report from Miami

To the Editor: I suppose you have been looking for a letter from me during my stay in Florida. I must apologize, but there is practically no building at all in progress in Florida. Miami is very short of housing, apartments and also commercial buildings. Property is selling at what seemed to us to be very high prices. The most recent buildings built in Miami are of very fine quality. They are mostly of masonry construction; almost no frame building.

I think there will be real business for the Miami construction industry as soon as they are permitted to start building. One piece of property changed hands recently in the following manner: A Miami Beach produce dealer paid \$1600 per front foot for a 99 year lease on a corner lot on Lincoln Road. He intends to remove present structure on lot and build a 12-story building. The ground floor all stores, second has been leased to a bank which will have elevators and escalators to take care of the people, and the other floors above for offices. The paper stated that the entire building has been leased and construction will start as soon as restrictions are lifted.

On our trip up we saw a few houses under construction in the small villages and on farms, but nothing at all in any of the cities we came through. All the lumber yards we noticed seemed to be practically bare. There does not seem to be very much lumber any place along the Eastern seaboard.—WALTER S. JOHNSON, President, Walter S. Johnson Bldg. Co., Inc., Niagara Falls, N.Y.



New Materials Won't
STYMIE YOU
WHEN YOU HAVE THIS

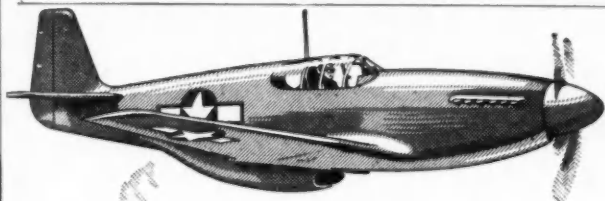


WALKER-TURNER Radial Saw

New materials—now and in the post-war period—bring new problems of cutting, shaping and working. That's why it's important to have versatile Walker-Turner Radial Saws in your shop. These machines crosscut, rip, dado, shape, route, tenon and miter—on wood, metals, plastics and ceramics—much faster, much more accurately, much more economically than hand labor.

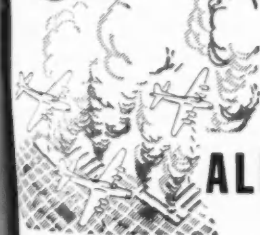
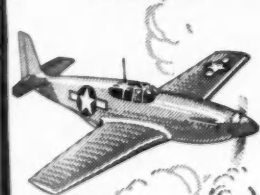
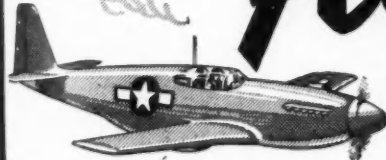
The Walker-Turner Radial Saw rips 38" wide; travels 21½" on a sliding ram to make deep cuts with proportionately smaller blades (a 12" blade cuts 4¾" deep). "Slab cutting" method, patented geared motor, effect substantial savings in wheel and blade use. Write for literature. Walker-Turner Co., inc., Plainfield, N. J.

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Now and Always

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Tools featured above are the MALL 1½ H.P. Gasoline Powered Concrete Vibrator—also available in 3 H.P. with round base or wheelbarrow mounting—as well as 1½ H.P. Universal Electric and 7500 r.p.m. Pneumatic models; Gasoline Engine Chain Saw which can be furnished in 24", 36" and 48" sizes—also pneumatic models, and MALL Electric Circular Saw, 2 models, 8" blade and 2½" cutting capacity, and 12" blade with 4½" capacity.



MALL TOOL COMPANY
7737 South Chicago Ave., Chicago 19, Ill.

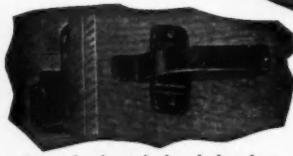
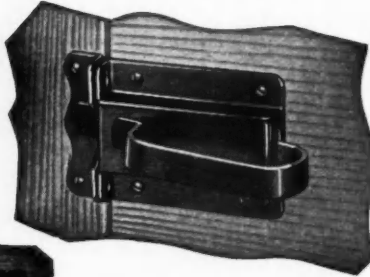
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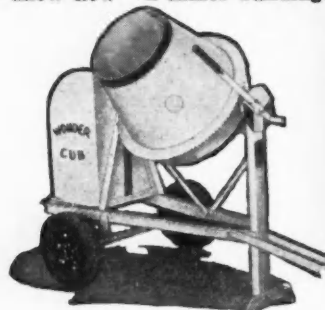
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Get **FREE** Wonder Small Mixer Catalog.

CONSTRUCTION MACHINERY CO. WATERLOO IOWA

What's Ahead—

(Continued from page 56)

electrical equipment and controls, extra bathrooms and better products and equipment can be added to postwar homes without increasing the cost.

5. Is the Cape Cod home through?

Definitely no. A slow revolution in home design is taking place, but in most parts of the country, and for the bulk of the building volume, traditional architecture with some small simplifications and improvements in design will prevail.

6. Can mass building solve all problems?

Henry Kaiser to the contrary, mass building cannot possibly be the answer to a big portion of the postwar building problems.

There will be, of course, some large, well planned communities on the outskirts of some of the larger cities. There will also be an attempt to rebuild blighted areas in the center of the big cities, either through public housing or through private redevelopment corporations.

But the great bulk of residential building as commonly understood, will be done on the outskirts of cities and towns, and will spread out further and further into the adjacent rural areas. In such areas building tends to be broken up into smaller units; it is far simpler to assemble a small parcel of land for a dozen houses or 25 or 50 than for a huge thousand-home project.

Also the psychology of mass production of many houses at a time, as has been done during the war, does not apply to peacetime. When homes have to be sold as they are built, mass production tends toward more individualized treatment.

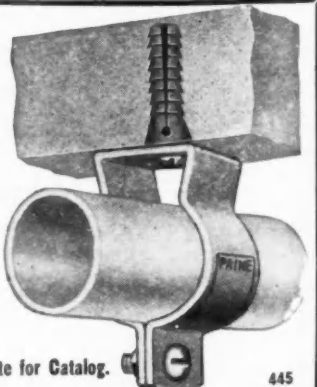
7. What about prefabrication?

To the extent that prefabrication methods can be made available in thousands of communities to the many more thousands of building men who operate in those communities, it will make progress.

Many large corporations intend to invest capital in the building industry. At this time it appears that their efforts will be centered around developing prefabricated parts or improved equipment or new materials that can gradually be applied to traditional construction. Thus postwar builders will be flooded with a host of new and improved items of equipment, materials and home parts that will bring about extensive changes in home construction as they have known it.

Thus the ultra conservative or reactionary builder, large or small, who refuses to study new materials and construction methods and apply them as rapidly as possible, consistent with sound progress, will fall by the wayside. There is no room for complacency about postwar changes. Although I do not agree with those who predict revolutionary, radical, and fantastically sudden changes in houses or building methods, I do believe that all established methods are under fire and will have to prove themselves to maintain their position. The industry has a period of experiment, evolution, and development ahead of it such as has never been experienced before. And this situation is full of opportunity for those who have the imagination, the brains, and the ability to capitalize on it.

PAINÉ CONDUIT CLAMP



All clamps are rust resistant. Furnished with correct size stove bolt and nut in each clamp to save time counting bolts and nuts for each clamp when purchasing and to reduce installation time. Manufactured in rigid and thin wall sizes.

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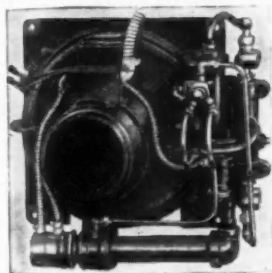
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in handy reach. A sure answer to the need for more closet space.

2 Ball bearing glides for sliding glass and wood wardrobe and cabinet doors.

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4 Space-saving adjustable metal shelf supports for quick, easy 1/2" adjustment to any level. For library, storage cabinets, closets.

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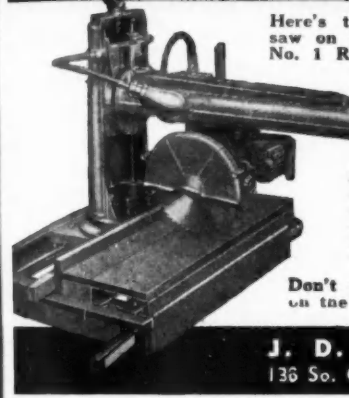


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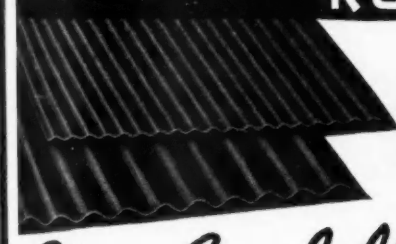
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WRITE FOR DETAILS ON KINNEAR STEEL ROLLING DOORS with the KINNEAR-ORIGINATED INTERLOCKING-SLAT CONSTRUCTION.

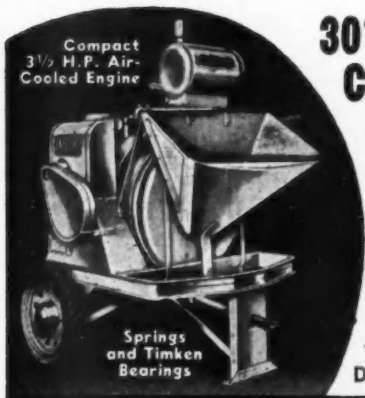


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To reduce this heat loss and passage of moisture vapor, a hinged trap door made of Nu-Wood Sheathing is suggested for over the top of the stair opening, as shown in the cut section drawing. Though the door may be made in one piece, two sections will be easier to open and close.

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DESIGNED FOR PRESENT AND POST-WAR NEEDS!

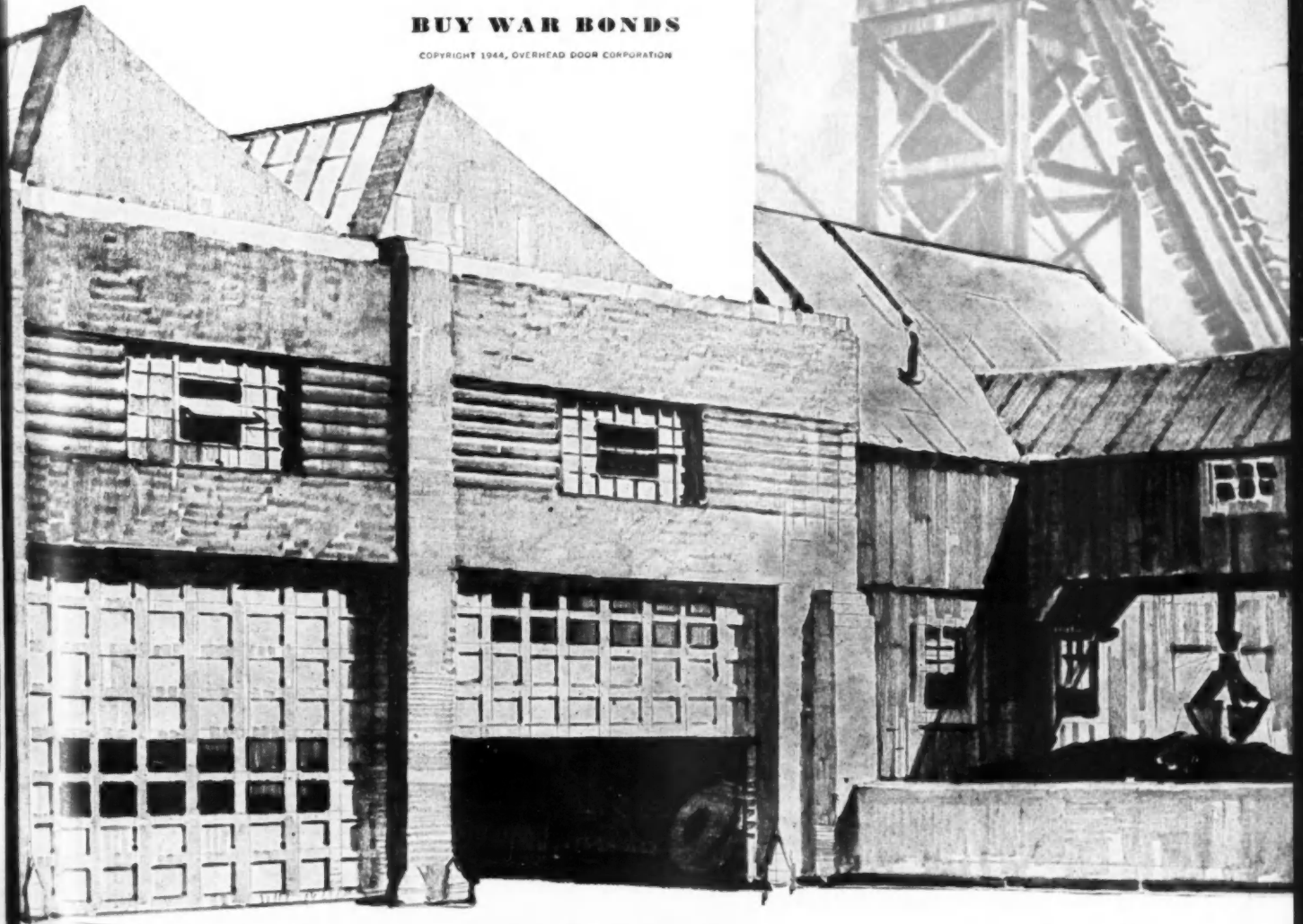
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