

# How You Can Help Relieve the Housing Shortage in Your Community <u>Now!</u>



Attractive, permanent CEMESTO HOUSES at St. Louis, Missouri, speedily erected by Joseph Leopold, Clayton, Missouri, Contractor.

## Contractors in Every Section of the Country Are Building These Precision-Engineered CEMESTO HOUSES

• Here is a sound, practical, *proven* plan which will enable you to help relieve the housing shortage in your community.

• With Cemesto exterior walls and interior partitions supplied by Celotex and precision-cut structural framing, door and window units and all millwork, including shelving, cabinets and trim, shipped from approved millwork companies, you can quickly complete projects of ten or more comfortable, modern, low-cost permanent homes.



• If you are waiting for an opportunity to go into action on low-cost housing, this is it. We can furnish you with complete plans, specifications and construction directions. *Mail coupon below for detailed information*!

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SOLAR WINDOWS FULLS VENTILATION

# a practical answer to a popular trend

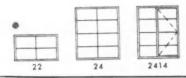
In satisfying the home buyer's hunger for more sunshine, don't overlook his need for *ample fresh air* in the room.

And be sure to give him solar windows that afford him *economies* in screens, storm sash, curtains, shades, Venetian blinds, awnings.

In the above illustration, note that this window wall is made by combining economical, standardized, Fenestra Steel Casements to form a large window reaching from wall to wall and from floor to ceiling. Observe that some of the units are ventilated, while some are fixed. Each is of a relatively small size, for economical screens, storm sash, shades, etc. . . . The Fenestra Solar Window is one of the most practical—and economical —types ever developed.

Whether combined into big solar windows, or used singly in various rooms, the popularity of Fenestra Steel Casements with homeowners comes from superior appearance and utility. Their slender, graceful lines beautify the outside as well as the inside. They provide more daylight and better ventilation. They always open easily, at a finger's touch—they can't warp, swell or stick, because they're steel. Tight-fitted at the factory, they stay weather-tight on the job. Cleaning of most types, on the outside, is safely done from the inside. Screens that last a lifetime are safely attached on the inside—no marking or numbering required.

For full information about these modern, up-to-date windows, write to Detroit Steel Products Company, Department AB-12, 2260 East Grand Boulevard, Detroit 11, Michigan.



FENESTRA STANDARD TYPES illustrated above



• SIMPLICITY—With versatile Stran-Steel, only a few basic types of framing members are required. Assembly on the site is fast and easy, because all materials are pre-cut to precision lengths. Erection tools are simple, too; ordinary carpenter's equipment does the job.

• EFFICIENCY—Stran-Steel framing can be assembled quickly with sheet metal screws or by welding. Collateral materials are nailed securely to the frame itself by means of the nailing groove, a patented feature of all Stran-Steel joists and studs. Architects have full latitude in working out widely varied exteriors in brick, lumber, stone and other materials.

• ECONOMY-In apartments, terraces and other multiple housing projects where framing members are duplicated frequently, Stran-Steel usually costs no more than other framing materials. In single homes, stores or other individual light-load buildings, the initial cost of Stran-Steel may be slightly higher, but the extra investment is repaid many times over in low upkeep and longer building life. For details, see Sweet's File, Architectural, Sweet's File for Builders, or the January issue of Building Supply News.

GREAT LAKES STEEL CORPORATION Stran-Steel Division • Penobscot Building • Detroit 26, Mich. UNIT OF NATIONAL STEEL CORPORATION



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## STEEL FRAMING IS SIMPLIFIED, EFFICIENT AND ECONOMICAL

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> The New Non-metallic Sheathed Cable for Residential and Farm Wiring.

> > Tough. Moisture resistant. Smooth, hard finish. Those words accurately describe three important features of PVX nonmetallic cable that mean a lot to users.

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Take toughness. From the mechanically and dielectrically strong thermoplastic insulation of the Type T conductors right through every component part - improved crushed-paper armor, waterproof jute fillers, over-all braid -PVX cable is constructed to give long, efficient service without pampering or special care. Treat it rough if you have to. PVX can take it.

And moisture resistance. This means more than a mere protective surface

covering. True, the over-all braid resists moisture, but so do the jute fillers, the paper armor, and the thermoplastic insulation. Think what this means in installations where humidity is high. And don't forget that PVX is flame resistant and will not support combustion.

Moisture Resistant

Not to mention the finish. A smooth, hard finish provides a double-barreled advantage in PVX. On the thermoplastic insulation it means that no protecting braid is required, thus extra weight is eliminated. On the over-all braid it means that there is no marking or tacking to soil hands and walls and hamper installation.

W hat else? Just a few things like easy stripping, small over-all diameter, light weight, and Underwriters' Laboratories' approval for 60 C operation. They are important features, too.

If you would like to know more about this versatile cable, why not ask your G-E Merchandise Distributor, or write to Section W18-1280, Appliance and Merchandise Department, General Electric Company, Bridgeport 2, Conn.

### CABLE DIMENSIONS No. 14/2 PVX Non-metallic Sheathed cable

Type T Conductor - 0.131 inches **Over-all Dimensions** -0.34 x 0.46 inches Weight per M Feet - 77 pounds

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FROM STUDDING

ALL IN A DAY'S WORK WITH

## UPSON PANELS

FROM BARE STUDS to finished walls and ceilings in a day or two? Yes! And Upson Panels make it possible !!

Following simple Upson directions, any carpenter can quickly create beautiful walls and ceilings that remain CRACKPROOF forever.

Upson Panels are unique among wall coverings. They offer characterful beauty, efficient insulation, and give added dollar value to the home. And Upson engineers have carefully prepared simple directions that make application easy and quick-without undue fuss or muss.

So when you can again use this ideal material for modern dry wall construction, make sure you are taking full advantage of Upson CRACKPROOF Panels. For re-covering cracked plaster walls and ceilings, there is nothing better on the market than Upson Quality Panels. Impartial surveys show that two out of three homes have cracked plaster in one or more rooms-a tremendous market.

The time is coming when Upson Panels will again be in full supply. Like most other good products, Upson Panels are still scarce. The outstanding products in nearly every industry are presently in excess demand!

#### UPSON PANEL APPLICATION IS AS SIMPLE AS



**B** Ceiling panels go up quickly. Held in place by a T-brace, the panels are se-curely clinched by the fasteners by means of block and hammer. A permanent, CRACKPROOF ceiling!



A Upson floating fasteners, applied direct to studs or furring on 16" centers, anchor the panels securely from the back. No ugly nail holes to countersink or fill.



C Walls, too, are easily and quickly applied. Standard fourfoot widths for artistic paneling --or fullwall panels, when available, to cover the entire wall of an average room. Upson Panels take paint smoothly and easily.



THE UPSON COMPANY, LOCKPORT, N.Y. Upson Products are Easily Identified by the Famous Blue-Center

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**BUILDING AGE** 

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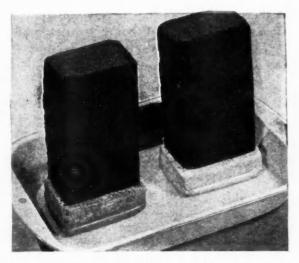
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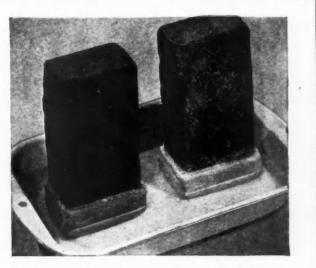
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er 1946 American Builder, December 1946.

# BRIXMENT MORTAR Helps Prevent Efflorescence



To test two mortars for resistance to efflorescence, "cap" two brick heavily with the mortars—let harden, and



keep both brick for a few weeks in a shallow pan of water, as shown. Try this with Brixment mortar!

## HERE'S WHAT <u>CAUSES</u> EFFLORESCENCE-AND WHY BRIXMENT MORTAR HELPS CONTROL IT

Efflorescence is an outcropping of minute white crystals on brickwork. When these crystals occur on colored mortar joints, the condition is sometimes mistaken for *fading*.

Efflorescence is caused by the presence of soluble salts in masonry materials. When reached by water, these salts dissolve, and are drawn by evaporation to the surface of the wall. Brixment itself does not cause efflorescence because it is practically free from soluble salts. Even when such salts are present in the sand or brick, the waterproofing in Brixment usually prevents them from coming to the surface.

Bricklayers who have used Brixment mortar for years say they have far less efflorescence with Brixment than with any other mortar.

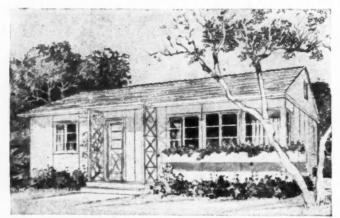
## LOUISVILLE CEMENT CO., Incorporated, LOUISVILLE 2, KENTUCKY

**CEMENT MANUFACTURERS SINCE 1830** 

# BUILDERS NEEDED To Assemble These Quality VETERANS' HOMES

Right now you can get these complete HomeOla manufactured houses, ready for quick assembly anywhere. Requiring less than 300 man-hours for erection, you can get your money out quickly.

FHA has accepted HomeOla construction in all 48



**Complete** parts for Model 21 "Uni-level" HomeOla cost the builder approximately \$1300 delivered at the building site.



**Complete** parts for Model 11 Home-Ola cost the builder approximately \$3500 delivered at the building site. After erection-with basementthis house has been appraised fre-quently in the range of \$6000.

states . . . the Veterans' Administration is approving loans . . . and through building and loan associations standard mortgages are frequently available.

Complete Units !

Delivery Anywhere!

The first RFC guaranteed market contract was issued on these two houses which have already proved their value to owners and national authorities in 23 states.

You can keep your men busy . . . keep your money working . . . keep veterans from over extending their credit with houses they cannot afford.

Both models come fully equipped including: forced draft furnace, automatic water heater, complete plumbing [assembly and all plumbing fixtures; all electrical fixtures, outlets, wiring and distribution-box; Kimsul insulation; all finish hardware. Construction is stressedskin plywood panels, modular design, supported by structural steel beams. Basement is optional.

**MODEL 21 Delivery of this new All-On-One-Floor** Model began in November. Floor plan is 32 x 24 feet, with two bedrooms and large living room. Kitchen, dining room, living room and utility room can be arranged in a variety of ways without additional parts. Exterior panels may be arranged to place windows and doors to suit owner's preference. MODEL 11 This story-and-a-half model is now being lived in from coast to coast. Floor plan is 24 x 20 feet, with two bedrooms upstairs. Living room is 20 x 12 feet with five big windows for placement to suit owner. This model has 760 cu. ft. of storage and closet space. Ample breakfast nook adjoins kitchen, and bathroom is conveniently located on the ground floor.

We will furnish complete erection manuals, estimating forms and every practical aid to the builder. Facsimile documents covering appraisals and financing are available from many parts of the country. Magazine and newspaper stories have prepared veterans to accept HomeOla houses. The houses are ready-The market is ready-Investigate today. Shipments must be scheduled on a "first come, first served" basis.

TRADE MARK BEG. U. S. PAT. OFF



Wire, phone or write to the manufacturer if your local lumber dealer does not yet have the HomeOla franchise.

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## **PUBLISHER'S PAGE**

## What Will Follow the Election?

A MERICAN BUILDER was one of the first publications of any kind to begin opposing the principal policies of the New Deal. We have opposed them ever since upon the grounds that they have tended to prevent prosperity, to destroy individual freedom and private enterprise, and to establish national socialism. Consequently, we are gratified by the results of the recent election.

But American Builder is a business, not a partisan, paper. It is concerned with policies, not with politics. Therefore, it emphasizes that the election has not solved the nation's economic problems, but merely transferred the responsibility for solving them. The labor union monopolies still exist. Will a Republican Congress have courage to repeal the legislation that has created them? Government expenditures are still enormous and taxes correspondingly high. Will a Republican Congress have courage to reduce these expenditures and abolish all subsidies, reduce taxes and balance the government budget? Virtually all controls of wages and prices have been abandoned. But control of rents and projects for government housing remain. Will the Republicans abandon them, and give private enterprise opportunity to house America? Will business men abuse their recovered freedom, or use it to restore the real competitive private enterprise, which is essential to reversing permanently the trend toward national socialism?

Let us not kid ourselves about what has occurred. Private enterprise has not won a campaign. After losing one battle after another for fifteen years, it has won a battle. The campaign for saving it can be won only by private enterprise serving the public better than ever in future and meeting with organized re-

sistance the *organized* efforts that will be made to destroy it.

The ultimate outcome will not be determined by declarations of general principles, but by specific policies. Everybody but a handful of avowed socialists and communists professes to favor "free private enterprise." But every economically unsound policy of government, labor unions or business tends to undermine private enterprise. It is endangered most by depressions and unemployment. The depression in 1921-1922 occurred and the depression in 1930-1940 began while the Republican party was in power and most business was free. What caused these depressions? Great increases of commodity prices after World War I were followed by a drop of almost 50 per cent in prices between the middle of 1920 and the middle of 1921. The depression of 1930-1940 was started by numerous mistakes of government and business men, resulting in a terrific boom and bust in the stock market.

We are in about the same stage now in a post-war period as we were early in 1920. Those who favored continuance of controls contended that without them we would repeat the "boom and bust" of 1920-1922. Perhaps we shall. But wise business men will not seek immediate big profits by unnecessarily boosting prices. They will offer organized opposition to all government policies tending to socialize the economy. At the same time in the management of their own businesses they will follow pricing policies intended to secure reasonable profits over a long period of years from a large volume of business.

serving the public better than ever in Same O. Dum,

MORE AND MORE AMERICAN-Standard HEATING AND PLUMBING PRODUCTS FOR YOU IN 1947:

★ Things are rolling at American-Standard plants. Production is steadily increasing. New facilities are being added. So that next year, you can expect more and more American-Standard Heating Equipment and Plumbing Fixtures to be available for you. We suggest you contact your Heating & Plumbing Contractor for complete details. Purchases for modernization can be made on a convenient Time Payment Plan. American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pennsylvania.



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Adjustable to variations in sizes of door.

Cuts installation time from  $1-11/_2$  hours to 8-10 minutesl

★ No nailing! Only three precision milled pieces to handle on the job!

"Shock - Absorber" Springs assure accurate fit for life of building! -14

## IT'S THE NEW WHEELER OSGOOD DOOR JAMB

THE MOST ADVANCED IDEA IN DOOR JAMB HISTORY The amazing new Tru-Sized Door Jamb (Pat. applied for) is your door The amazing new Tru-Sized Door Jamb (*Pat. applied for*) is your door-way to great savings in time, work and money! . . . There's no planing, no squaring—the tedious, time-consuming work of making addos, placing and fitting blocks, squaring and plumbing with wedges, gaining for hinges, and cutting and installing stops is either eliminated or done at the factory! . . . You quickly and easily adjust door clear-ance with a screwdriver, and the "Shock-Absorber" Springs assure per-manent accuracy of fit.

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Look into the advantages of the new Tru-Sized Jamb TODAY!



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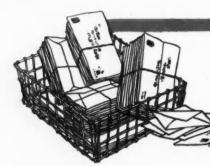
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**Jamb** like

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## **Our Readers Say:**

#### **Stevens to Stevens**

To the Editor: It offers me pleasure to write you this personal letter and praise highly the most timely and interesting article "Keep Posted—Avoid Legal Entanglements" by Robley D. Stevens, appearing in the August issue of American Builder.

I have examined the contents and truly believe that such information can prove extremely helpful to your readers and may even help save them costly violations.

You have rendered a fine public service to the industry in releasing this article and it is a credit to your organization and Mr. Stevens, the author.

In the light of this fact, may I recommend that your office consider awarding the author some kind of a medal, certificate or plaque for his outstanding contribution to the building construction industry as being the most timely and informative story which affects the general welfare of the industry?—W. G. STEVENS, Jr., Philadelphia, Pa.

#### Chicago scene

To the Editor: Building permits for small homes in Chicago during the month of September totaled 135; apartment units 38. Total for shelter-seeking veterans, 173. Our normal need is 2,000 per month. We had a backlog of 60,000 last Jan. 1. Our backlog next January will be slightly better than 80,000.

"What-a-man Wyatt," our publicity loving building expediter, last January promised Chicago 40,000 units per year for the next two years. Last year total units constructed in Chicago amounted to 5,100. This year with the war over, total units completed will be approximately 3,300. This figure is slightly less than 9 per cent of the optimistic 40,000 units promised last January by the correspondence school bricklayer from Louisville.

The reason for the disgraceful and discouraging small number of units in this city in September is that our building expediter and our local CPA office have put on the most magnificent demonstration of glamorized stupidity in the history of the world. Our local CPA office has issued permits for garages, super-stores, factories, industrial work, etc., with the same ease and in the same quantity that passes are issued for a race track.

All materials and all mechanics are being utilized on industrial work. Ninety-seven per cent of all materials used in industrial work can be used in the construction of small apartments.

The double time on Saturday and Sunday that industrial builders use as a lure to grab building mechanics is something that the builder of small apartments and small homes cannot afford to pay.

If industrial building were not permitted to run wild as it is under the leadership of our local CPA office, mechanics and materials would be available for the construction of housing units. Prices would be down to a point where the builder could see a profit. In place of 173 units for September, Chicago would have had close to 4,000 for the month. The way to purify the contaminating waters surrounding building is the same today as it was last January. Congress had the solution. It's up to them to act. Irrespective of what representatives of organized labor may say to the contrary, there are in this nation today only sufficient men and sufficient materials to take care of 25 per cent of construction requests.

Permitting all forms of construction to proceed at the same time, such as our government is doing at the present time, creates open bidding for men and materials and results in high inflationary costs to all.

Congress should make the decision. If they decide that industrial work, commercial work, factory work, tavern alterations, garages, race track remodeling, bowling alleys. automobile agencies, super markets, office buildings, railroad depots, airports, churches, schools, etc., are more important to the economic welfare of this nation, then let us shut down immediately for a period of three years the construction of all small apartments and homes, and let those war-fat tycoons slug each other into submission through their open bidding for men and materials.

On the other hand, if Congress decides that the construction of small apartments and homes is more important to the economic welfare of this nation, then let's shut down immediately all industrial work, commercial work, alterations, additions, repairs, etc., to the extent that they could not even replace a broken window in one of their projects unless they elected to fill the hole with cardboard or newspapers.

If the upward flight of construction cost is permitted to travel unchecked for 90 days more, it is quite possible that all building may fall of its own weight, dragging down with it dozens of sister industries, and may mangle our national economy to a point where it will take years to recover.—JOHN J. MAN-GAN, Chicago, III.

#### **California** blues

To the Editor: I always look forward to what Mr. Dunn has to say about the OPA and all of these other A's. I resigned working as a carpenter to again enter contracting and to specialize in homes for veterans. I have tried to get priorities for two jobs and as recently as two days ago I finally got one priority through. I showed a selling price of \$10,000 for the property which was about \$1,000 too low on the present market.

This priority was marked down to \$7,800 for price of lot and buildings. was going to build the house for \$2 .500. It is a one-story residence, three bedrooms, single garage with a porch or breezeway between. The lot price is \$850. This leaves only \$6,950 for the buildings. I made a visit to the appraiser and he agreed with me that \$7,500 was very reasonable. I called on a real estate man who guessed the price at \$10,000 for cost of buildings alone. I showed the plans to a home builder whom I had built some for, who said he wouldn't build it for less than \$8,500. So I called at the lumber yard where l do business and asked them if they would make me a guaranteed price on materials. I got a negative reply. So I sat down and wrote a letter to the FHA telling them that \$7,500 is the price if I am to do the work. Now just what kind of a government is this? If one were in Germany or Japan before they were defeated do you suppose any businessman, or I will say mechanic, would have to get permission to work at his trade? There are others here who are hot around the collar. One home builder here was going to build 100 homes. He only built two of the hundred. Why? The answer is very plain. Too much government red tape. So goes the housing for veterans in Visalia .-- C. K. CAR-VER, Visalia, Calif.

#### **From Purdue**

To the Editor: The October issue of American Builder is one of the finest issues of any building publication put out for some time; at least that is my personal opinion.

I am particularly interested in knowing what organization developed the material on "Land Use" appearing on pages 92 and 93. I note that credit for the article is given to the Chicago Plan Commission but, at the same time, there must be someone who actually did the "spade work" in making such a study.-CARL L. BOESTER, Purdue Research Foundation, Lafayette, Ind. 1946.

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American Builder, December 1946.

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JOISTS

Get this new Truscon "Clerespan" Joist catalog on your boards immediately...it is filled with the newest and most scientific data on the use and specification of this highly practical construction unit.

INFORMATION YOU

SHOULD HAVE

There are 20 pages of common-sense information on modern design with the help of Truscon "Clerespan" Joists . . . 20 pages of diagrams, typical construction photos, load tables, specifications, and other valuable data that will help in designing your jobs.

Truscon "Clerespan" Joists permit building floor areas with clear spans up to 64 feet. They can be used both for floor and roof construction, where they will meet the requirements for many types of buildings.

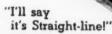
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Write for the new free Truscon "Clerespan" catalog today.

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## **PRE-FINISHED (STRAIGHT-LINE) FLOORING**



... which has supplied its enthusiastic owner with beautiful, superior hardwood floors at a substantial savings in cost.

Bradley's factory finishing by assembly line methods meets the demand for a floor that's better in every way than any offered in the pre-war period. Reason . . . workmanship that is an amazing improvement over hand finishing on the job, plus basic refinements in manufacture.

> The time when we can book orders is still in the future, but we'll be glad to send descriptive literature and specifications now.

## CARDINAL POINTS OF SUPERIORITY

1 Straight-line ripping.

2 Machine sanding-steel weel pelishing.

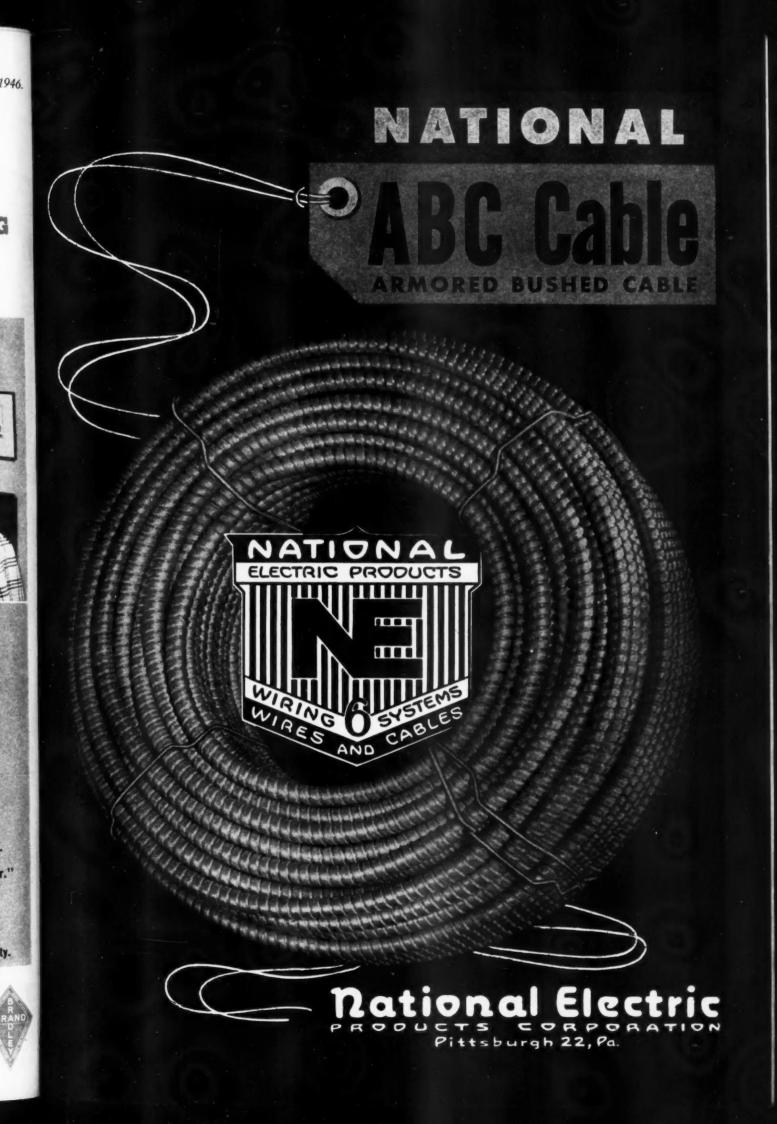
3 No raised grain.

4 Best quality filler, rabbed in.

- 5 Deep penetrating finish seals wood pores.
- 6 Finish dries evenly in "controlled weather."
- 7 Final polishing by high-speed brushes.
- 8 Heavy-bodied wax, machine buffed.
- 9 Uniform color; rich, lustrous, lasting beauty.

#### PRODUCED IN OAK-BEECH-PECAN

WARREN, ARKANSAS



# How to give a **Bigger Bonus**

18

## ...without budging your budget a bit !

**S** UPPOSE Bill S., one of your employees, is due for a \$75 bonus this year. If you give the bonus in U. S. Savings Bonds, Bill will receive-not \$75, nor a \$75 Bond-but a \$100 Bond.

Yes, the bonus in Bonds looks like a lot more-and it is more. (Every \$3 put into U. S. Savings Bonds pay \$4 at maturity.) With the same size appropriation, you're actually giving a bigger bonus.

Consider, too, that Savings Bonds mean individual security for each Bond-holder-and collective security for all of us, because they help to control inflationary tendencies. You can easily see that you're doing yourself, your employees, and your country a favor by deciding to ...

#### Give the BONUS in BONDS

... and keep up your Payroll Savings Plan! IMPORTANT: If you have not already received your copy of "How You Can Help Give Free Enterprise a Boost," write on your letterhead to: Room 750, Washington Building, U. S. Savings Bonds Division, Washington 25, D. C. Limited supply. Please write today.

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

## American Builder and Building Age

This is an official U.S. Treasury advertisement prepared under the auspices of the Treasury Department and The Advertising Council.

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Plan! d your

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Time is too precious to use anything but a SKILSAW on every cut on every construction job. Ask your distributor today about a demonstration.

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KILTOOLS

SKILSAW, INC. 5033 Elsten Ave., Chicage 30, III. Factory Branches in Principal Cities NS



## **Outside Walls**

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ALC: NO

Insulates as you build

Insulite sheathing builds a strong, weathertight, windproofed wall . . . a wall with effective insulation.



## Inside Walls

Insulite Sealed Lok-Joint Lath provides a strong, rigid plastering surface . . . plus a second wall of insulation.

Refer to Sweet's File... Architectural Section 10 a/9.



\*As Determined by Leading Testing Authorities

INSULITE • Minneapolis 2, Minnesota

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946.

Mammoth extrusion presses like the one illustrated above are putting on a gigantic "squeeze play" for your profit. Yes, in aluminum manufacturing plants all over America, component parts of Premier Aluminum Sash are being produced in ever-increasing numbers!

This means larger shipments to us-faster production by us-more complete stocks for you . . .

We are shipping thousands of Premier Aluminum Sash and Frames every week. Ask your jobber today about Premier Aluminum Windows . . .

Be sure that you have complete stocks on hand for the 1947 building season which starts soon. Insure larger sales and greater profits for your business with Premier-America's finest metal hung windows.

- · Easy to Install
- · Easy to Service
- · No Putty
- · No Leakage, Sash Glazed
- with Everseal
- · Weatherprocf
- · Built-in Stainless Steel Weatherstripping
- · Positive Lock
- · Spring Sash Balances
- · Rustproof
- Double Strength Glass

Contact your supplier for complete informa-tion or write PREMIER METAL PRODUCTS CORP. for descriptive literature, sizes, detail drawings, etc.



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## NATIONAL MAGAZINE SURVEYS PROVE WOMEN WANT

WOMAN'S HOME COMPANION survey shows that more women plan to buy an Electric Range than any other type!

McCALL'S MAGAZINE readers made the Electric Range their 2-to-1 "must have" choice in a recent contest.

SUCCESSFUL FARMING survey shows that nearly twice as many REA customers intended to soon buy an Electric Range as then had one.

HOUSEHOLD MAGAZINE survey indicates that 3 times as many women want Electric Ranges as "now have" them.

**COUNTRY GENTLEMAN** survey shows that among the upper two-thirds of white farmers, the Electric Range is the 2-to-1 choice!

Magazines can't guess about the preferences of their readers. They've got to KNOW—and they find out by making surveys.

These magazines found both on the farm and in the city an overwhelming preference for ELECTRIC RANGES. The convenience, cleanliness, dependability and economy of electric cooking are getting across to women everywhere.

Your houses can take advantage of this trend at little cost. Just build in the wiring for Electric Ranges. It's one of the most sales-worthy features you can install!

Electric Range Section NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION 155 E. 44th Street, New York 17, N. Y.

A-B STOVES • ADMIRAL • CROSLEY • ELECTROMASTER • ESTATE HEATROLA • FRIGIDAIRE • GENERAL ELECTRIC • GIBSON HOTPOINT • KELVINATOR • LEDO • MONARCH • NORGE • QUALITY • UNIVERSAL • WESTINGHOUSE

TO KEEP THEM MODERN A SYMBOL OF THE MODERN POST-WAR HOME FOR ELECTRIC RANGES

6.



**IN THE RECORD**—Hard on the heels of the exposé of the NHA made by Senators Wherry and Ferguson, as recorded in the Congressional Record of July 27, comes another exposé by Senator Brewster. A hitherto secret senate war investigating report denounced NHA for inefficiency and waste of public money in handling its postwar housing program.

**BUNGLED WAR HOUSING**—Brewster said that the report traces present housing shortages back to bungled war housing, and that they result from inaccurate NHA estimates.

**MORE STATISTICS**—Looks as if NHA got so much in the habit of cooking up fictitious statistics with which to impress Congressional committees when the agency was pressing for more control that they forgot how to be honest with themselves.

**ALL IS CLEAR NOW**—Nobody in the building industry could understand why NHA needed so many thousands of employees during and after the war. Now it is understandable. Those who were not engaged in cooking up fake statistics were probably engaged in trying to suppress facts and hide mistakes.

**ROCKY MOUNT**—It is a little town in North Carolina. It set up its own housing committee, turned thumbs down on a trailer camp suggestion, and ruled out temporary housing. Building is a local problem, and Rocky Mount proved it. In less than six months, 577 people looking for housing were reduced to 18.

**MR. BEACH**—Probably few people outside of Rocky Mount ever heard of Mr. Beach, but he is the Rocky Mount Housing Expediter. He is also, on his record, a man from whom Mr. Wyatt could learn much.

**THEY HAVEN'T QUIT**—Now NHA is getting personal in its thirst for more power. Latest proposal is to require "that a builder have a construction authorization from a federal agency before he could obtain a building permit from his local officials." Not-satisfied with being a party to creating black markets in materials they now seek to set up building construction bootleggers all over the land.

**MORE POLICE**—Putting that kind of a deal over would further entrench the power-hungry NHA bureaucrats, and give them a good argument for hiring a few thousand agency policemen. Late lamented OPA spies are available in droves, too. There could be a connection.

**JACK BLANDFORD**—He was a lot smarter than most people gave him credit for. His resignation and subsequent hibernation to China was expertly timed. He doesn't have to answer for suppressed statistics, justify bungled war housing programs, in both of which he had a part. Best of all he was smart enough not to let himself get impressed into service as a Housing Expediter. \*

**BENNY AND ALLEN**—If these two well known radio comedians are as good at solving housing problems as Porter and Wyatt are as radio comedians, a switch might well be made. Porter and Wyatt were not even trying to be funny over ABC on Oct. 12, but they were. Controls, controls and more controls is what they want.

**HOUSING STATISTICS**—Builders in the Chicago area, according to Chi. Met. Home Builders, started 13,086 units in the first eight months of 1946. Completed, 1917, and delayed, 11,169. Per cent completions, 14. You can get the same kind of factual data any place in the country. Completion percentages run from 9 to 15. NHA guesses or faked figures are far more optimistic.

**PLUMBING WARE**—One manufacturer reports production in first six months of 1946 up 114 per cent above same period in 1941, and expects to jump it another 50 per cent. He neither asked nor received subsidies, nor market guarantees.

**EARLY PRICE PEAK**—Dodge Corporation reports that majority of 72 non-government economists expect price peak soon, and then recession. Most expect it before end of 1947. That checks *American Builder* estimates, and if housing controls are removed early next year, points to heavy activity in home building for last six months of 1947.

NEMA survey discloses huge pent-up demand There's no let-up in the desire for Electric Water Heaters. Sales almost tripled in the 6 pre-war years—and a survey made by NEMA in 1944 disclosed three times as many women

The trend on

wanting Electric Water Heaters as now have them, because:

SAFE—Flameless, fumeless. CLEAN—Smokeless, sootless. ADAPTABLE—Permit short bol water lines—Require no flue or vent-

TROUBLE-FREE as electric light

ECONOMICAL—The cost is low for plenty of hot water all the time.

Installing Electric Water Heaters in every house you build, means giving women what they wanth

Electric Water Heater Section NTIONAL ELECTRICAL MANUFACTURERS ASSOCIATION MIRAL \* B & F \* CLARK \* ELECTROMASTER \* FOWLER \* DIGIDAIRE \* GENERAL ELECTRIC \* MOTPOINT \* DISTAREAM \* SEIDELHUBER \* KELVINATOR \* MONARCH \* NERGE \* PEMCO \* REX \* RHEEM \* SELECTRIC \* STHWAY \* THERMO-GRAY \* THERMO-WATT \* UNIVERSAL \* WESTINGHOUSE / A HOUSE WIREd For An Electric Range Is Already Wired For an



HEATER!

WATER



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24

Homeowners want—and need—the kind of wiring that will give them the full benefits of modern electrical conveniences. No one is in a better position to show them how to obtain these benefits than you—the architects and builders of America's homes.

The promotion of adequate wiring can be one of your most powerful selling tools. It can help to show your clients the way to improved service and happier living. It's sure to help build confidence and to increase sales.

GENERAL

(46)

We have prepared a variety of useful booklets to help you sell adequate wiring to every type of owner. They explain why an adequate wiring system is necessary in modern homes—how to avoid having 3 out of 5 appliances asleep at the switch—why adequate wiring increases the investment value of homes. Ask your General Electric representative for them, or write to Section AW14-1280, Appliance and Merchandise Department, General Electric Company, Bridgeport 2, Conn

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# Meet the need for Veterans' Housing with MODULAR BRICK and TILE

Meeting the need for veterans' housing can make any builder or contractor proud.

You can meet that need more successfully—and be more proud of the housing you build—when you use modular brick and tile.

First of all—you help solve the problem of scarcity. More than enough brick and tile are being produced to meet all the requirements for veterans' housing this year.

Second. You give veterans a price advantage. Brick and tile have risen but little in cost when compared with other building materials.

Third. You build veterans quality homes. Quality brick and tile are being produced now as always.

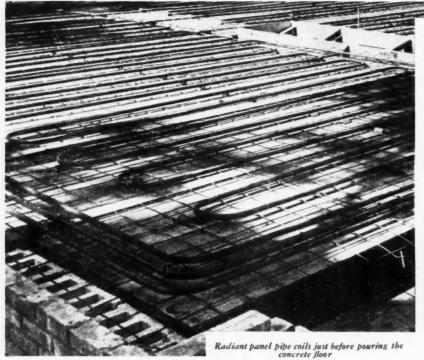
Fourth. You save time in planning, estimating and site-erection. Modular brick and tile fit perfectly between openings and join exactly with other units of coordinated dimensions such as doors and windows. You practically eliminate wasteful cutting and chipping.

In addition, you build homes of lasting beauty, with low Upkeep and maintenance charges and great fire-safety.

Write for these FREE booklets, "Brick and Tile Cavity Walls," of special value in low cost housing, and "8 Small Homes of Brick and Tile." Address Structural Clay Products Institute, Dept. AB-12, 1756 K Street, N. W., Washington 6, D. C.



Now it will be built with Modular-Designed BRICK AND TILE





An installation of radiant baseboards



Cleaner, smaller, more effective is this modern recessed radiator

at its Best

THE home equiparts of the terms of terms

Always plenty of hot water for kitchen, laundry and bath.

THE home equipped with B & G Hydro-Flo Heat is truly a haven of luxurious comfort! Whether the heat distributing units are radiators, radiant baseboards, convectors or radiant panels, this forced hot water system provides the finest in automatic, controlled heating.

B & G Hydro-Flo Heat owes its countrywide spread in popularity to its genuine merit—proved over and over again in buildings of every character! It is the system which affords the *instant*, *positive control* of heating

so essential to real comfort. It is flexible as a whip—delivering just the right amount of heat for any weather condition. No overheating in mild weather and no lack of heat when the thermometer hits bottom. At all times, indoor temperature is maintained steadily at whatever degree is preferred.

Naturally this precise measuring out of heat means utmost fuel economy—whether oil, gas or coal is burned. B & G Hydro-Flo Heat equipment can be installed on any hot water heating boiler and its extreme simplicity is a warranty of dependable operation.

#### Domestic hot water a bonus feature

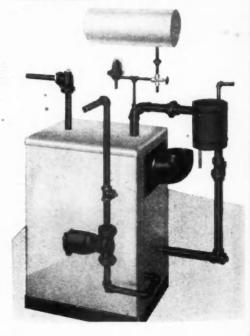
Where a B & G Hydro-Flo Heating System is installed, no separate water heater is required. The same boiler that heats the house also heats the domestic water—not only in winter but all around the calendar! What feature could have more appeal to the lady of the house than a bountiful supply of piping hot water . . . always ready for kitchen, laundry and bath . . . at every hour of the day and night.

No wonder B&G Hydro-Flo Heat is the preferred heating system!





The convector fits in unobtrusively with smart decorative schemes



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## Makes Extra-Deep Cuts FASTER!



## This Husky 9-inch "Quick Saw"\* is Powered for Heavy-Duty Sawing

There's nothing like a Black & Decker 9" Quick-Saw for ripping hours off heavy construction sawing jobs! This powerful saw cuts to a maximum depth of  $3\frac{1}{8}$ "—ten times faster than hand sawing. And it's built to take the rough spots without slowing up or overheating.

With a Quick-Saw, you can rip, crosscut, angle, groove, dado—on studs, roof trusses, rafters, joists, stair stringers, all kinds of heavy structural lumber—even save time by stacking boards for sawing. What's more, the same saw can be equipped with blades and abrasive discs for cutting compoboard, slate, tile, marble, asbestos, galvanized sheet, other thin or non-ferrous metals. Yet, with all its power and ruggedness, the Quick-Saw is perfectly balanced for easy handling.

Ask your nearby Black & Decker Distributor for full details on timesaving Quick-Saws. And write today for your free copies of our illustrated, informative "Electric Saw Handbook" and complete catalog. Address: The Black & Decker Mfg. Co., 666 Pennsylvania Ave., Towson 4, Maryland.

LEADING DISTRIBUTORS

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# control

# insect attack and rot with...

# SANTOPHEN 20

When properly formulated, Santophen 20\*—Monsanto's pentachlorophenol, technical—possesses the following qualities which give it many outstanding advantages for use as a wood preservative:

1. It is toxic to wood-rotting fungi, is toxic to termites and wood-boring insects and kills grass roots and other deleterious vegetation.

2. It is stable to light, to normal temperatures and to soil acids and alkalies.

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



 It is not appreciably soluble in water —does not leach readily.

**4.** It is a chemical compound with fixed identity—chemically reproducible year after year without variation.

5. It can be determined analytically, which makes possible accurate control of solution strength.

**6.** It can be determined analytically in wood, thus enabling the determination of its distribution in the wood.

7. It makes possible a "clean" oil treatment; treated wood can be painted and finished as desired.

8. It does not require redrying of the wood after treatment.

9. It is economical to use.

Further information will be supplied by MONSANTO CHEMICAL COMPANY, Organic Chemicals Division, 1700 South Second Street, St. Louis 4, Missouri. • ST Jamb • Ri not • will fram

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GOOD NEWS

FOR 1947!

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TEEL

WE ARE TOOLING UP TO MEET THE

MODERN

DOOR FRAMES

HOMES

EVER INCREASING DEMAND FOR.

### THESE ADVANTAGES ACCOUNT FOR THE GREAT DEMAND

STRENGTH—Welded to form a complete integral unit of [amb, head, and two sides trim; resulting in great strength.
 RIGIDITY—Being one complete integral unit, they will not warp or crack, and mitres will not open. Aetna Frames will not absorb moisture and swell, thus the size of the frame will not change.

SIZE—Designed for 1%" and 1%" standard size doors.
 PERMANENCY—Will not chip or damage, eliminating costs and inconvenience of repairs.

FINISH—Prime coated at the factory, saving one coal of paint.
 HARDWARE—Hinges are welded to frames at the fac-

• HARDWARE—Hinges are welded to frames at the factory, saving the cost of a pair of hinges and application. They are spaced to fit virtually all prefabricated doors. Bronze strike plate is furnished to fit most standardized bit key and tubular locks and latches.

• LOW COST—Cost less than wood jambs and trim installed.

Aetna Steel Door Frames, like many modern improvements in the construction field, will serve as a stimulant toward building activity. Aetna Frames are easy to erect requiring less handling at the building site, offer you mass production economy and simplify your supply problems.

SEND FOR NEW AETNA STEEL DOOR FRAME FOLDER.



AETNA STEEL PRODUCTS CORPORATION EXECUTIVE OFFICES: 61 Broadway, New York 6, N.Y. + PLANT: Pottsville, Pa.





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DEALERS HELP KEEP ATLAS MACHINERY & SUPPLY CO. O. B. AVERY COMPANY GEORGE F. BAUER & ASSOCIATES New York C. BELEFLEUR & SON, CO. Connecticut CENTRAL SUPPLY CO. Kentucky CLAPP. RILEY & HALL CO. CLARK-WILCOX COMPANY Massachusetts DALRYMPLE EQUIPMENT CO. Mississippi EAGLE SUPPLY COMPANY E. O. EARNEY California FREDONIA MACHINERY & SU Kansas A. L. GUILLE Virginia HAKE TOOL COMPANY Texas LAMONT HAND North Carolina AWKINS EQUIPMENT COMPANY LITTLEFIELD ENGINEERING Massachusetts

tle Giant

HE block-making industry today recognizes the Little Giant...pioneer in the field...as the machine that outdistances all others in speed of operation, economy and constant steady production.

W. F. LITTLETON Texas LESLIE C. MILLER Ohio MODERN MACHINERY CO., INC. Washington P. A. NEFF, MACHINERY Florida NIXON MACHINERY & SUPPLY CO. Tennessee RELIANCE EQUIPMENT COMPANY Okiahoma WASHINGTON MACHINERY & STORAGE CO. Washington WOODARD. WIGHT & CO., LTD. LOUBIAN

This recognition has been accorded--to a large degree--because Little Giants are precision tooled, and parts for replacement are always available. Dealers and distributors shown above provide the services that maintain profitable, high production for owners of Little Giants.

J. W. Appley & Son, Inc. are constantly seeking additional reputable concerns to become dealers for these fast-selling machines...and to extend replacement services to Little Giant owners everywhere.

Write or wire today for full details

You can get immediate delivery of Little Giant Block Machines



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**REGISTRATIONS SHOW IT-OPERATORS KNOW IT!** 

# **FORD TRUCKS LAST**

## <u>ONE</u> big reason— FORD ALL-WEATHER FAST WARM-UP

Ford trigger-fast engine starting often amazes firsttime owners. It's mighty satisfying, but not nearly so important as Ford *fast warm-up!* Water does not circulate through the radiator until the engine is well warmed. This speeds the heating of water, cylinder block and oil. Hot exhaust gases are used to heat the intake manifold, speeding vaporization of fuel and minimizing crankcase oil dilution. Both these features reduce wear on cylinder walls, pistons, rings, bearings and valve mechanism. Yes, winter is tough on any truck, but Ford Trucks are engineered to take it.



Ford Heavy-Duty 2-ton Cab-Over-Engine unit, 158-inch wheelbase, with dualrange rear axle, auxiliary rear springs and 12-foot Ford Platform Stake body.

31

ONLY Ford Trucks offer you ALL these long-life features: your choice of two great engines, the 100-H.P. V-8 or 90-H.P. Six— Flightlight aluminum alloy 4-ring oil-saving pistons -weatherproofed, Hi-Volt ignition—full pressure lubrication—axle shafts free of weight-load, even in light duty units—heavy channel section frames, doubled between springs in heavy duty models big brakes, with non-warping, score-resistant cast drum faces—all told, more than fifty such examples of Ford endurance-engineering.

No wonder that Ford Trucks Last Longer! No wonder that 7 out of 11 of all Ford Trucks built since 1928 are still at work! No wonder the average age of all Ford Trucks on the job is nearly 9 years! And no wonder your Ford Dealer is calling for everincreasing truck production schedules in Ford factories! See him now and get YOUR order in!





SUNSHINE FOR SALE. What a promise of enjoyable living a little sunshine gives to a room! Spread it through your houses by providing ample windows. Remember, too, that large windows "open" rooms to the outdoors — make them seem more spacious.

When you show houses to prospects there's real value in pointing to L·O·F Window Glass labels on the windows. At a glance, they can see that you have used quality glass. Libbey.Owens.Ford Glass Company. 51126 Nicholas Building, Toledo 3, Ohio.

L-O-F also makes plate glass, safety glass, *Thermopane*<sup>\*</sup> insulating glass, *Vitrolite*<sup>\*</sup> colorful glass facing, *Tuf-flex*<sup>\*</sup> tempered plate glass and other flat glasses.

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



ARCHITECT: Victor Hornbein, Denver. Photo by Andreas Feininger, New York.

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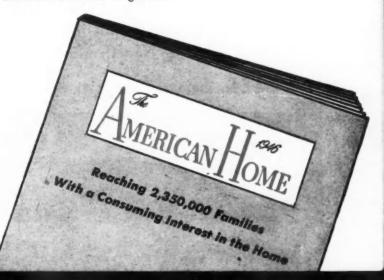
FOR



## **OU'RE GOING TO HEAR MORE ABOUT THESE BUILDING IDEAS**

American Home families are going to start a buildthe boom all of their own, as soon as materials are availthe. Many of them have already bought the real estate. Now, while they're marking time, they're planning these the homes - clipping suggestions from American Home lagazine, their text book on building.

When the time comes to build, you'll find they alk your language. They have ideas on that play-room asement — and that glass-walled sun porch. They've been beaming about these things ever since they saw them lictured in American Home Magazine. They even have beas on the type of flooring and the kind of glass to use. That's why it's good business for you to check American Home Magazine. You'll find a more ready acceptance among your clients for building materials advertised in this magazine.



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1 Size 18"x15" with 4" back
2 Eljer acid-resisting vitreous china
3 Unit fitting
4 Concealed wall hangers
5 Front overflow
6 Integral soap holder
7 Eljer styling and guality

PLATE B-4254-G

## A PRACTICAL LAVATORY WITH MANY USES

Eljer's New Lyndon lavatory combines style and practicality in a high-quality fixture for the urgent building requirements of today. It is designed to make efficient and pleasing use of limited space and is an ideal fixture for bathrooms and extra washrooms in homes of small or medium size. Schools, office buildings, factories and hotels gain important advantages in space and service costs by including the New Lyndon lavatory in their building or remodeling jobs.

SEE ELJER NATIONAL ASSOCIATION OF HOME BUILDERS EXPOSITION . CHICAGO, ILL., FEB. 23RD TO 27TH

ELJER CO. . . FACTORIES AT FORD CITY, PA. . SALEM, OHIO . LOS ANGELES, CALIF. SINCE 1904 MAKERS OF FINE PLUMBING FIXTURES

34



### Columbus Home Builders Elect Wilburn K. Kerr

At the recently held annual business meeting of the Columbus Home Builders Association, Wilburn K. Kerr was elected president of the Association for the year 1947, to succeed Walter F. Shapter.



#### WILBURN K. KERR

In addition to being an active member of the home builders group, Mr. Kerr is a realtor member of the Columbus Real Estate Board and holds the office of second vice president of that organization. He is also a member of the Board of Trustees. Mr. Kerr held the office of vice president of the National Association of Home Builders during 1943 and 1944.

Also at the annual meeting, three members—Joseph F. Schmeider, Robert B. Bleckner, and Ted W. Koons—were elected to two-year terms on the Board of Directors to fill the expired terms of Mr. Shapter, Clyde R. Montgomery, and Ralph S. Fallon. Mr. Schmeider was elected to the office of vice president and Earl F. Washburn was re-elected as secretary and treasurer of the Association.

### Chicago Builders Hear Klutznick

27TH

Philip M. Klutznick, former commissioner of the Federal Public Housing Authority, addressed the November meeting of the Chicago Metropolitan Home Builders Association on the subject of "Opportunities for the Home Builders." Mr. Klutznick, now a private home builder in Chicago, told the Chicago builders of the extensive housing program, organized and promoted by private enterprise, which he is about to launch on the south side of that city, about 30 miles from the downtown business section. When completed, a new city of some 25,000 inhabitants will have been added to the Chicago suburban area, he said.

## Long Island Home Builders Institute Proposes Workable "Vets" Housing Plan

On the ground that thousands of war veterans are not in a position to purchase a home in the \$10,000 class under the so-called Wyatt program, the Long Island Home Builders Institute, headed by Gus A. Mezger, last month made a pro-posal which its officials believe will "release many rental units for veterans' occupancy and at the same time give other potential owners the type of housing they want." Outlining the plan Mr. Mezger, and Otto J. Hartwig, executive secretary of the Institute, explained that many persons who want a house of the better type at present are "frozen" in apartments in the \$50 to \$80 price range because they are not permitted to build under restrictions of the Wyatt program.

If the regulations were modified to permit families of higher income to build higher cost houses, these families could give up their present quarters to veterans, Mr. Mezger asserted.

The "rental availability" program which they advocate calls for the allocation of 25 to 50 per cent of HH priorities in each area for the construction of residences without price ceiling limitations, for occupancy and ownership by veterans and non-veterans. This step, they point out, still would leave a considerable volume of priorities for the erection of houses specifically for ex-service men within the established ceiling price limit.

#### Veterans Assured of Housing

To make sure that housing units released by those who put up higher valued dwellings would go to veterans, the home builders suggest the following restrictions:

"No person may receive priorities and permission to build a home for his own occupancy in the higher price class just described unless he first furnishes a bona fide, firm commitment from an owner or landlord agreeing to hold for a veteran, for not less than 30 days, a rental accommodation that does not exceed \$80 a month in cost." Under this procedure for homes built without ceiling-price limitations, restrictions also would be enforced on the use of critical materials. For example, not more than 1,000 sq. ft. of hardwood flooring would be permitted in a house, and substitutes would be used for additional floor space.

Housing calling for more than one bathroom or lavatory might be limited to one complete bathroom, leaving the others to be roughed in, with lines capped, temporarily. Wire lath might be specified, thus reserving scarce Rocklath and Sheet-

rock for ceiling-price homes for veterans. To discourage speculation in land as the result of any rush to build under this plan, it is further proposed that construction of the higher price homes be limited to sites held for home building purposes prior to a specified date, possibly March 26, 1946, when the Wyatt program was launched.

The release of medium-rental housing units to veterans by families moving into homes built under the proposed program would help ease the present pressure for rental quarters under \$80 a month, Mr. Hartwig declared.

While admitting that there might be some difficulty in getting landlords to agree to hold vacated apartments for veterans, since they already have many names on their waiting list, Mr. Mezger stated his belief to be that owners of rental properties could be persuaded to cooperate. He further suggested that local veterans' committees be cloaked with the responsibility of "screening" qualified exservice men for occupancy of the released housing units.



"LARRY" G. HOLMES

#### **Holmes New NAHB Assistant**

Lawrence G. Holmes, field representative for the NAHB, has been appointed to the position of administrative assistant to Executive Vice President Frank W. Cortright. He succeeds Scott Weller, who resigned recently to join the building firm of Geo. A. Poag and Associates, Ft. Wayne, Ind.

Immediately prior to becoming connected with the National Association early this year, Mr. Holmes was business manager of the Illinois Association of Real Estate Boards and secretary of the National Council of Real Estate Taxpayers.

#### 36

## Home Builders Meet With Government Officials—Wyatt Defends His Program

During a recent eight-day conference of NAHB's national directors, held in Washington, the most heated discussions occurred during a four-hour session when Housing Expediter and National Housing Administrator Wilson W. Wyatt and nearly a score of government officials appeared before the Board of Directors of the National.

NAHB President Joseph Meyerhoff, Baltimore, presented to Mr. Wyatt some fourteen major criticisms and recommendations covering phases of the current the country was held to be a national scandal. Conventional permanent construction stands month after month while these materials are either held in warehouses by the public housing agency or used for temporary shacks and igloos in widely separated areas.

3. It was maintained that the continued export of certain building materials to foreign countries must be stopped by executive order and by the elimination of OPA bonuses and premiums for export shipment.



HOUSING Expediter Wilson Wyatt defending his program before NAHB's national directors.

problems with the NHA, the FHA, the CPA, the OPA, the WAA, the VA and the Wage Adjustment Board. He said that regulations have bred regulations to such a point that building a veterans' home is now about as complicated as the Einstein theory.

During the discussion, the following points were made:

1. Although some building materials, after many months of expediting, are in improved supply, many others are not in satisfactory production. Because of the

inent members of the Board of Directors. low, Frank W. Cortright, Joseph E. Merrion.

necessity of all items being made available, it was maintained that balanced production and full supply at lower costs could be achieved only by immediate lifting of OPA price controls on building materials. (Ed. Note-President Truman took this action last month).

2. Discrimination against veterans' permanent homes through "super-priorities" given to the Federal Public Housing Authority for temporary units should be eliminated. The stockpiling of materials by FPHA in various places throughout



4. When, as and if building materials

PRESIDENT Joseph Meyerhoff and five prom- STRATEGY MAKERS-(1. to r.) Walton Ons-

of labor can be expected only at such time as an adequate supply of both labor and materials exists.

5. A sharply critical position was maintained in the matter of "guaranteed markets" for factory-built homes. In the face of an unprecedented demand for homes, a government guarantee for any well constructed and properly priced house was held to be superfluous and improper.

6. FHA evaluation and pricing problems involved in a constantly rising market were discussed in detail. Suggestions

#### American Builder, December 1946.

were made to: (a) assist homes started before Mar. 26; (b) encourage construc. tion of three-bedroom houses; (c) encour. age the construction of a great volume of rental units at the lowest possible rent levels; and (d) provide for the veterans requiring more than a minimum house.

7. Of all questions directed to Mr. Wyatt from the floor, the hottest were demands as to why he believed the Wagner-Ellender-Taft Housing Bill had any part in meeting the veterans' emergency housing need, and why he and the NHA continue to devote so much time and effort to urging passage of that longrange, socialized housing bill. Mr. Wyatt's arguments that its "financing aids" are essential were totally unconvincing to home builders who held that most of the Title VI \$2 billion insurance authorization is still available, and that financing is the only problem with which the industry is not confronted.

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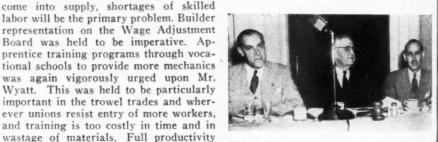
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#### **Dallas Home Builders Group Entertains National Officers**

Joseph Meyerhoff, president, and Frank . Cortright, executive vice president, of NAHB, recently spoke before a joint luncheon meeting of the Dallas Home Builders Association and the Dallas Real Estate Board at the Hotel Adolphus, Dallas, Tex.

Mr. Meyerhoff told the more than 250 home builders and realtors in attendance



NAHB officials with Dallas HBA president.

that government controls must be entirely eliminated to stimulate the production of building materials, which he termed the key to the veterans' housing problem. He also called for the defeat of the Wagner-Ellender-Taft bill when it is introduced into the 80th Congress next year.

Mr. Cortright criticized government agencies in Washington for failing to solve the housing problem. "There has been little improvement in the building



SPEAKERS' table at Dallas luncheon meeting.

situation since Wilson Wyatt became housing expediter early this year," he said

Mr. Cortright also suggested that the veterans themselves voice their protests in Washington through their own representatives in Congress.

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Southwestern Regional Conference Well Attended



#### NAHB President Meyerhoff; Ben Wileman.

Prominent builders from all sections of the Southwest gathered in Oklahoma City October 18 and 19 for the Southwestern Regional NAHB Conference. Headed by Ben C. Wileman, general chairman of the conference and first vice president of NAHB, the committees in charge arranged and carried through a well rounded and interesting program of panel discussions.



The conference was opened with a discussion titled "The Veteran's Viewpoint," presented by representatives of veterans' organizations, with a response by Joseph Meyerhoff, president of NAHB. This set the pace for the entire meeting which was built around the theme of "A Study of Veterans Housing." Other panels covered various phases of the problem.



Wm. Farrington, Houston, and R. A. Foley. V. F. Buchek, San Antonio; Frank Cortright.

Frank W. Cortright, executive vice president of NAHB, presented a report on current Washington developments at the banquet Friday evening. Saturday noon, R. A. Foley, commissioner of FHA, told the builders that with complete cooperation and teamwork all along the line, private industry can solve the current housing problems.

President Joseph Meyerhoff of NAHB concluded the conference program Saturday evening with an address.





GOVERNOR Kerr of Oklahoma, with Ben Wileman, Frank Cortright, Bill Farrington and Joseph Meyerhoff at the opening of the Greater Oklahoma City Home Show, which drew a record attendance.

### **Greater Cincinnati Builders** Hold Annual Banquet Meeting

Shown seated at the speaker's table (photo at right) during the Home Builders Association of Greater Cincinnati Annual banquet meeting are: (1. to r.) Richard M. Sandberg, executive secretary, and John B. Freiden, attorney and counsel for the Association; Walter C. Fehrman, president of the Greater Cincinnati Savings & Loan Exchange; H. H. Evers, past president, Ohio Savings & Loan League; A. L. Guckert, FHA Director; Thomas McIlvain, NAHB Nat'l Director ; Elizabeth Gordon, Editor-in-Chief, House (Continued to page 38)



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OFFICERS of Rochester Home Builders' Assodation seem satisfied with Exposition report.



ABOVE VIEW shows speakers' table at Greater Cincinnati Home Builders Banquet-Meeting.

### **Rochester Exposition Huge Success**

Over 40,000 square feet of floor space were utilized by the 85 exhibitors who displayed their building products and services to the more than 70,000 people attending the recent Rochester Better Homes Exposition, sponsored by the Rochester Home Builders' Association.

Shown (left) looking over the exposi-

tion records are: (1. to r.) M. Sanford Abbey, NAHB national director; J. Raymond Tobin, executive secretary; Joseph Bevacqua, president and national director; Joseph Entress, vice president; and Alfred Brown, treasurer, all of whom, with the exception of Mr. Abbey, are 1946 officers of the Rochester association.

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American Builder. December 1946



The election last month placed unprecedented responsibilities on us as home builders. As government moves out of the picture, the industry can and will do an increasingly satisfactory job. At the outset we must produce good homes for veterans both for sale and rental in all price classes. When the most urgent veteran need has been met we must produce good housing for all people in this country. We must demonstrate that we can exercise self-control in the public interest.

By Frank Cortright

Executive Vice-President, Na-

tional Association of Home

Builders of the United States

It now appears that present controls will be removed in steps although anything can happen in these months immediately following the elections. Presuming that restrictions will come off step by step, every segment of this vast industry must play its full part and produce to its maximum at a fair profit or wage to meet the long suppressed construction demand. Until normal competition is fully restored, both building producers and building labor will no doubt have chances for opportunistic "cashing-in" on some of this new found freedom. But the temporary advantage which might be gained by some must be sacrificed for the longer range benefit of a continuous home-buying market and employment.

Likewise, a better job must be done by manufacturers and dis-tributors of building materials, those who finance and construct housing, those who labor on and off site, and by the FHA. We must have improved construction techniques, improved financing, better land planning, better home design. We must supply all segments of the market both for sale and rental. We must meet and solve the immense problem of slum clearance. Where legislation is clearly called for, we must not only support it but shape it.

We, and not the government, shall soon be responsible for where we are going. The vote of the people demanding release from planning, regulation and governmental domination makes it mandatory for housing-by-government to be scrapped. In so doing, we must see to it that we drive with care and skill along this private enterprise highway toward the goal of free enterprise as the sole producer of good homes for all our people.

### **New Jersey Officers**



LEFT to right: M. C. Carroll, exec. sec'y, and Ralph Carletta, president, HBA of Northern New Jersey, and Henry J. Shaheen, president, and Chas. C. Deubel, Jr., exec. sec'y, New Jersey Home Builders Ass'n.

### Increase in NAHB Membership

During the past year, the NAHB has expanded its membership from 8,000 to 11,500, an increase of 3,500, according to Frank W. Cortright, executive vice president. The number of affiliated local associations has risen from 78 to 92.

#### Cincinnati Meeting-

(Continued from page 37)

Beautiful; Lockwood G. Doench, president, Home Builders Association of Greater Cincinnati; Myers Y. Cooper, former governor of Ohio, a Cincinnati builder and toastmaster for the banquet: Joseph Meyerhoff, president of NAHB: Joseph B. Haverstick, president Ohio Home Builders Association; Herbert Fast, president of the Cincinnati' Real Estate Board; E. J. McFarlan, president of the Lumber & Millwork Association, Inc., and Samson I. Crew, Chairman of the Hard Materials Division of the Lumber & Millwork Association; and Walter Schoenle, Chairman of the Hamilton County Savings & Loan League.

### New Orleans Chapter Host to FHA Commissioner Raymond Foley

The New Orleans Chapter of NAHB was recent host to Raymond M. Foley, FHA commissioner, on the occasion of his making a swing through the southern states inspecting veterans' housing. At a dinner meeting, presided over by C. Earl Colomb, N. O. Chapter president, Mr. Foley told the 500 guests, including representatives of every branch of the New Orleans building industry, that in his



ABOVE, left to right: Douglas Svendson, FHA Director for La., Mr. Foley, Mr. Colomb, New Orleans' Mayor Morrison, and N. O. Chapter Exec. V. P. "Doc" Lundquist.

opinion the cost of new homes had about reached a peak and should begin to decline after a leveling off period. Earlier in the day Mr. Foley drove the

first piling inaugurating construction at Fillmore Gardens, the largest privately financed and built veterans' housing project as yet undertaken in the New Orleans area. During this ceremony the FHA Commissioner said that he was "optimistic" about the private building industry's ability to reduce housing costs and meet the demand.

### Where Lumber Goes

A. H. M. Graves, president of the Marion County Residential Builders, Inc., Indianapolis, and Chas. E. Wagner, Burnet-Binford Lumber Company of that city, know what is happening to a lot of



the lumber supposed to be going into homes for veterans. The above photo taken by Mr. Wagner shows approximately 61/2 million feet of lumber, marked for UNRRA, awaiting shipment in Coos Bay, Ore. The marked area embraces over 4 million feet suitable for G. I. housing.

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Rated by U. S. Government tests as the best! Up to 36% better in downright insulating efficiency than 10 other brands, and substantially better than any commercial brand on the market today. And in addition, note these important advantages: — • Lightest insulation made — no structural strain. • Will not pack down always fluffy. • Mildew and moisture proof. • Odarless and vermin proof. • Harmless to skin and eyes. • Thoroughly flameproof — won't burn even under a blowtorch.

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warping, non-buckling, these crack-resistant panels should last the life of the building. More, application is fast and easy, you can decorate by any method

SHEETROCK FIREPROOF WALL & CEILING PANELS as soon as the joints are finished. Add it up. That means saved days, lowered expenses, and increased efficiency... important when millions of families desperately need housing. For large free book of complete Sheetrock data, write now to 300 West Adams Street, Chicago 6, Illinois. \*Sheetrock and Perf-A-Tape are registered trade-

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TONE 2

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From Boston to San Diego ... ... From Bismarck to Miami

**The Servel All-Year Gas Air Conditioner** is already operating successfully in hundreds of installations from coast to coast. Some have been running for more than four years. The equipment is tried, tested . . . and *approved* by users everywhere.



It's always spring indoors in this modern home at Enid, Oklahoma. Servel All-Ya Gas Air Conditioning has been providing "a new quality of living" here since 194

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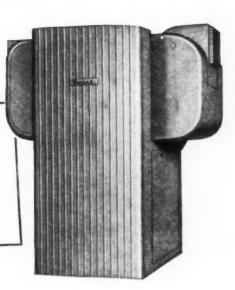
### Comfort is greater, resale price higher with Servel All-Year Gas Air Conditioning

When you specify Servel All-Year Gas Air Conditioning, you make it possible for your client to select just the climate he wishes in his home the year round. With the touch of a fingertip he can enjoy cleaned, cooled, thoroughly dehumidified air—refreshing as a mountain breeze—all through the hottest, sultriest summer weather.

And when winter comes, he can flood his home with clean, draft-free, properly humidified warmth —without leaving his living room! Winter, summer, spring or fall, a simple fingertip adjustment of the Selectrol control is all that's required to produce the desired temperature and humidity indoors.

In providing home owners with this simple, efficient, and complete control of their indoor climate, you not only give them a wonderful "new quality of living," but you increase the investment value of their homes. Leading mortgage loan officers all over the country agree that no matter what other new developments in homebuilding are perfected during the next ten or twenty years, homes equipped with the Servel unit will still be up-to-date. And consequently will command a higher resale price over a longer period of time.

For further information on the year-round comfort and investment values of the Servel All-Year Gas Air Conditioner, get in touch with your local Gas Company. Or write direct to Servel, Inc., 1612 Morton Ave., Evansville 20, Ind.





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### A house, too, can be "caught out on a limb"!

• Every architect and builder knows, of course, that you just can't beat bituminous coal for dependable, uniform, low-cost heat.

But even when a client *insists* on using some other fuel in his new home, be sure you give him the chance to change his mind sometime in the future—and turn to coal.

Otherwise, his house will be "out on a limb" when stoker developments, local coal heating services, cost differentials, or other factors convince him that he should get the benefits of coal heat.

This means: (1) provide a chimney with sufficient flue capacity to burn coal efficiently; (2) provide sufficient space adjacent to the heating unit for eventual coal storage and stoker installation.

The cost of taking such sensible precautions is negligible. And it constitutes valuable insurance of the future value of the home.

Coal supplies uniform, *steady* warmth throughout every portion of each room. For there's always a fire in the furnace—no "pop on and pop off" periods that permit accumulated heat to rise to the ceilings and leave floor areas dangerously cold. That, plus its low cost, is why more than 4 out of every 7 homes in the United States now heat with coal!



Every new home you design or build should be planned to permit the efficient burning of coal—no matter what fuel may initially be selected. In two simple ways you can free any new home to turn to coal—the most plentiful and most economical fuel of all. This means:

**1.** Provide a chimney of adequate flue capacity.

2. Provide sufficient space adjacent to the heating unit for eventual coal storage and stoker installation.



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FIR DOOR INSTITUTE The National Association of Fir Door Manufacturers Tacoma 2, Washington

### Shortage of Shop Lumber Is Critical Factor In Increasing Stock Door Production

Every fir door that can be made — with the amount of shop lumber being made available to the door factories — is being made. Production is slowly increasing but current demands for reconversion housing needs are so heavy that there are few doors for warehouse or dealer inventories, or for general building. But when present difficulties are overcome, more and more of these fine, precision-made Douglas fir doors will be available. The features outlined above — the greatest advance in stock door values in a decade — will assure you sturdy, attractive, durable doors, easier and quicker to install.

Keep in touch with your regular source of supply!

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Ceco Screens may be secured full height or half height in sliding or fixed type installations. They can be furnished to meet any job condition.

Metal Frame Screens?

Builders from all parts of the country have told us that they like to use Ceco Metal Frame Screens on the homes they build. Below are their reasons boiled down to six outstanding advantages. Here's proof why Ceco Metal Frame Screens should be used:

They help sell houses because customers like their trim appearance, and the ease with which they are put up and taken down.

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- 2 Standard types and styles for every purposefor wood or metal windows—new or replacements.
- 3 Cost no more than ordinary screens . . . factory finished . . . no on-the-job painting, trimming or fitting.
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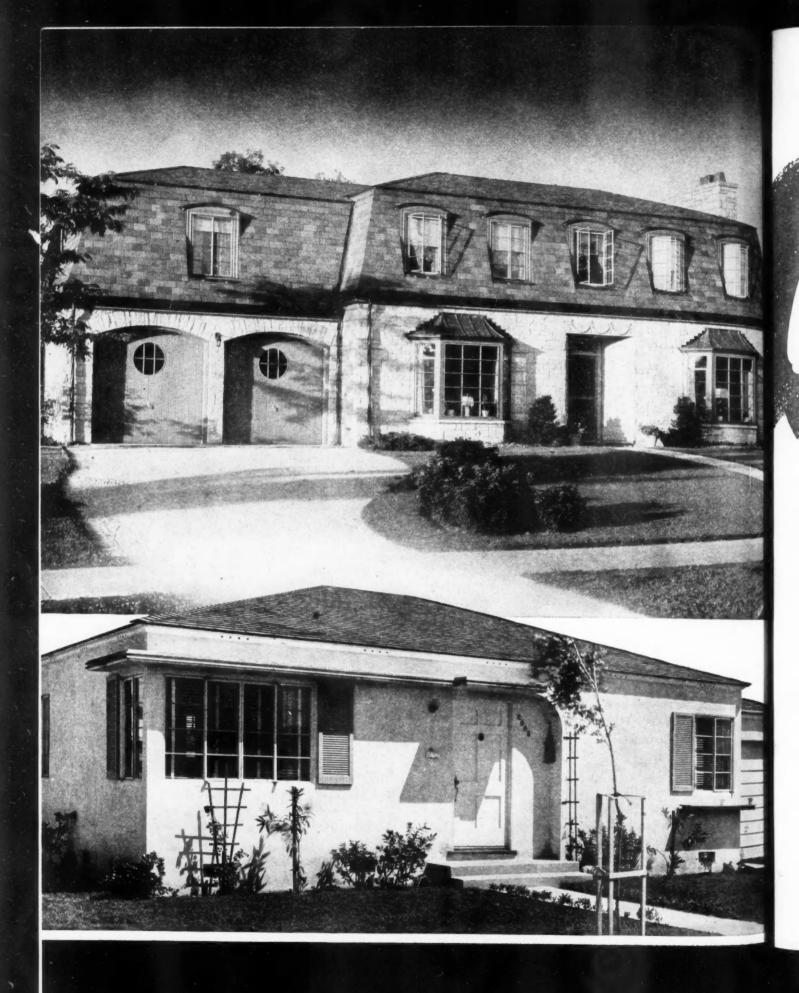
Call Ceco for the finest metal frame screens. Our engineers will be glad to assist you.

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In construction products CECO ENGINEERING makes the big difference



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Notice the ease with which metal windows can be washed from within.



# letal Windows?

All over America architects, engineers, contractors and builders are planning ahead today for the homes of tomorrow—and in the homes of tomorrow they know there must be new features to add to the beauty and the utility of those homes. One feature every home should have is steel windows because steel windows not only offer greater utility but add to the beauty and lasting good appearance of any home. So consider the advantages Ceco metal windows offer:

- Tighter weather seal-precision engineering keeps out cold, dust, rain; keeps heat in.
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- 3 Lowest initial cost installed—with metal windows the initial cost is the final cost.
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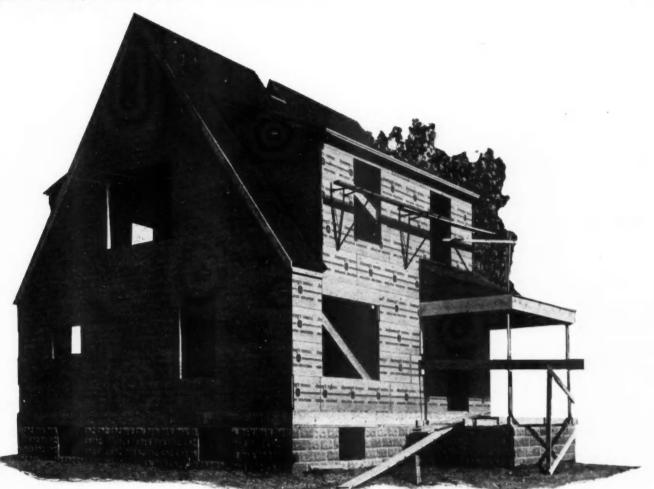
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**ONE GOOD WAY** to reduce the cost of building—and produce a better structure, too — is to use Temseal Sheathing. Temseal insulates efficiently and braces the structure strongly. And because Temseal Sheathing does a complete insulating job, it can usually be used without any other insulating materials.

Temseal is completely covered with asphalt, which provides a thorough moisture seal. In addition, its sides and long edges are sealed with heavy kraft paper. Temseal is  $2' \ge 8'$ , erected horizontally. Both long edges are shiplapped. It is lightweight and true in size, so it goes up easily and quickly on the job.

Temseal is made of sturdy wood fibers, containing within themselves millions of tiny cells and sealed air spaces which arrest the passage of heat and cold. It is highly resistant to dry rot, fungus, and vermin.

Demand for Temseal Sheathing, like that for Temlok Lath and Temlok De Luxe Interior Finish, is now greater than the supply. But new production is coming, and it will pay you to get the full story. For complete information, write to Armstrong Cork Company, Building Materials Division, 1612 Ross Street, Lancaster, Pennsylvania. Other Easy-to-Sell Armstrong Materials



Insulating Wool . . . Armstrong's flexible-type insulation, made of efficient Fiberglas\*, comes in rolls, batts, and pouring wool. It withstands rough handling unusually well and will not burn, decay, sag, or settle.



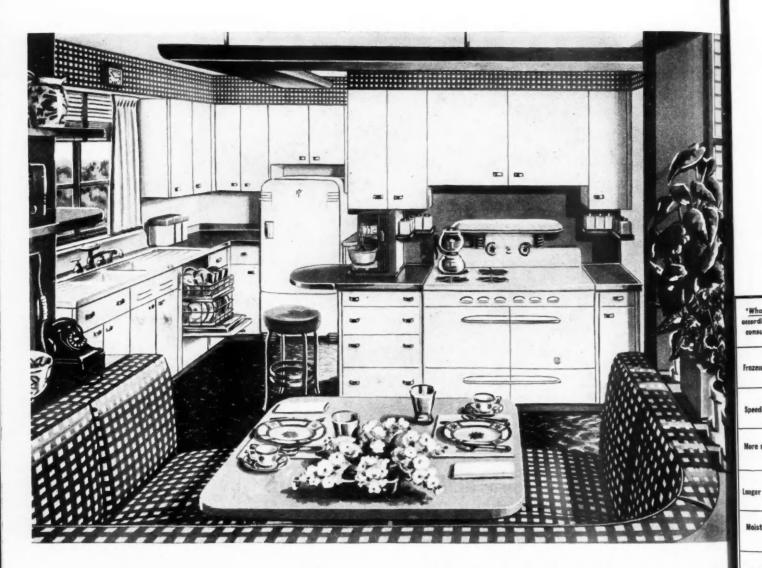
Monowall . . . Armstrong's decorative interior finish panelboard in attractive Streamline-Designs, plain colors, and Tile-Designs for kitchens, bathrooms, and all walls where easy cleaning is of greatest importance.

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The kitchen that will still be modern in 1957!

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Planned according to the latest time and motion studies ... the "New Freedom Gas Kitchen" design features an "island treatment" that is functional as well as attractive. Note how it is step-planned for an even flow of work from refrigerator to sink to range to serving area . . . how smartly it solves the problem of a convenient eating place that's not underfoot in the kitchen itself!

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the 1947 refrigerator That gives women everything they want

" <u>What</u> they want scording to recent consumer survey	How the new Gas refrigerator fills the bill
Frozen food storage	Gas refrigerator has big locker for storing up to 60 standard packages of frozen foods.
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so little to run . . . requires only the simplest connections ... is compact and smart-looking in the finest new home-and-gives longer service with greater satisfaction!

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# EASY TO MODERNIZE

# with ARCHITECTURAL METALS

Few materials lend themselves as readily to modernization plans as Architectural Metals. They offer you almost unlimited combinations of *form* and *function*. For elevator doors, entrances, stairs, railings, store fronts and many other units, they can be used to good advantage.

You can serve almost any desired purpose with ferrous and non-ferrous architectural metals in a variety of colors, qualities and strength. You can achieve both distinctive, decorative design and strong, safe construction. Under your direction, architectural metals can be used to create results that are both beautiful and practical.

You will find the manufacturers and fabricators of architectural metals anxious to help you at all times. Consult them whenever you have a problem of design or construction.

Architects interested in receiving a copy of our new Handbook on Stairs and Railings should write on their professional letterhead. For a Directory of the names and addresses of leading Fabricators, address Dept. AB-12.

ORNAMENTAL METAL MANUFACTURERS



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# How to Construct Base and Ceiling Details for plywood paneled rooms ...as explained in the Weldwood Installation Booklet

A HOST of appealing finishing touches are at your command . . . when you specify Weldwood paneled walls.

Weldwood corners, joints, panels, and other effects become attractive "points of interest." And, they do not present difficult installation problems.

Illustrated on this page are a few suggested ideas for base and ceiling designs. Just how these and other effects may be economically built . . . right on the job . . . is fully explained in the new Weldwood Plywood booklet. In addition, this booklet gives planning and construction data and shows numerous photographs of completed Weldwood interiors.

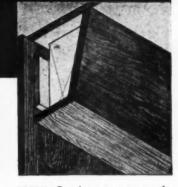
Free copy of this booklet will be mailed to you on request. Send for it today.



Weldwood Plywood and Mengel Flush Doors are products of UNITED STATES PLYWOOD CORPORATION New York 18, N. Y. Louisville, Ky.

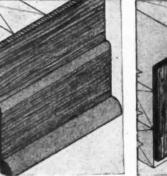
**ABOVE:** Showing attractive ceiling line finished with stock crown molding.

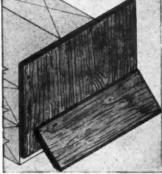
**BELOW:** Matching base using 1/4 round in conjunction with plywood strip.



ABOVE: Cornice treatment made of 1/4" matching Weldwood Plywood.

**BELOW:** Economical baseboard detail utilizing leftover trimmings from plywood wall paneling.







Waterproof Weldwood for exterior use is bonded with phenol formaldebyde synthetic resin. Other types of water-resistant Weldwood for interior applications are manufactured with extended urea resins and other approved bonding agents.

Distributing units in Baltimore, Boston, Brooklyn, Chicago, Cincinnati, Cleveland, Detroit, High Point, Los Angeles, Newark, New York, Oakland, Philadelphia, Pittsburgh, Rochester, San Francisco, Seattle. Also U. S.-Mengel Plywoods, Inc. distributing units in Atlanta, Jacksonville, Louisville, New Orleans, Houston, St. Louis. In Canada: United States Plywood of Canada. Limited, Toronto. Send inquiries to nearest point.

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When the New Weyerhaeuser 4-Square Home Building Service was announced some months ago, we said ... "This service will grow and expand. Each month a fresh, crisp, new home design will be added to the scores of modern designs to make the service a living, growing, vital force in your business. Each month a new house will be featured in national shelter magazines reaching millions of families who are planning to build."

Contractors and operative builders were advised that the service, including the wide variety of designs complete with blueprints and specifications, was ready for their use at the yards of local lumber dealers.

The six houses selected in 1946 together

with the first of the 1947 designs are shown here. Each month a new home will be added, embodying advanced developments in correct architectural design and sound engineering practice. 59

The service will continue to move forward keeping abreast of current developments in the home building field. It can be of very practical value to you now—and even more valuable later, when families will again require the maximum in home comfort, convenience, and economy.

If you have not already examined all the designs in the Weyerhaeuser 4-Square Home Building Service, it will pay you to do so. During the coming year it will also pay you to check each new house of the month as your dealer receives it.

# 4-SQUARE LUMBER AND SERVICES

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8 to 1 ....FIRST for Roofing. 39 to 1 ... FIRST for Home Insulation\_ ... FIRST for Asbestos Products. 60 to 1

People think of Johns-Manville

In tomorrow's competitive market, you'll have a powerful selling advantage in this preference for Johns-Manville Building Materials.

> \* In a scientific public opinion poll recently completed, one of the questions asked was, "In what manufacturer of asbestos products would you have the greatest confidence?" The vote was 60 to 1 in favor of Johns-Manville over any other manufacturer. The same question in regard to roofing and home insulation also produced overwhelming votes for Johns-Manville, as shown above. Complete details on request.

# Johns-Manvi

lem in your business, Johns-Manville will offer you complete merchandising plans offer you capitalize on the tremendous to help you capitalize Marville name as a value of the Johns-Manville, 22 symbol of quality. Johns-Man 16, N.Y. East 40th Street, New York 16, N.Y. Asbestos Shingles and Siding • Asphalt Shingles • Asbestos Flexboard insulating Board • Rock Wool Home Insulation • Weathertite Sheathing • Roll Roofing • Building Accessories

National survey shows\*

Vr. Builder-

When materials again become available When materials again become available when materials again become available in abundance, and you face tomorrow's keen competition, the nationally known name of tohne. Manville will prove inval-name of tohne.

keen competition, the nationally known name of Johns-Manville will prove inval-nable to you in making cake because of

uapie to you in making sales, pecausi its overwhelming public confidence. Remember that fact today as you build

name of Johns-Manville will prove inval-uable to you in making sales, because of its oversubelming public confidence

security for your business tomorrow.

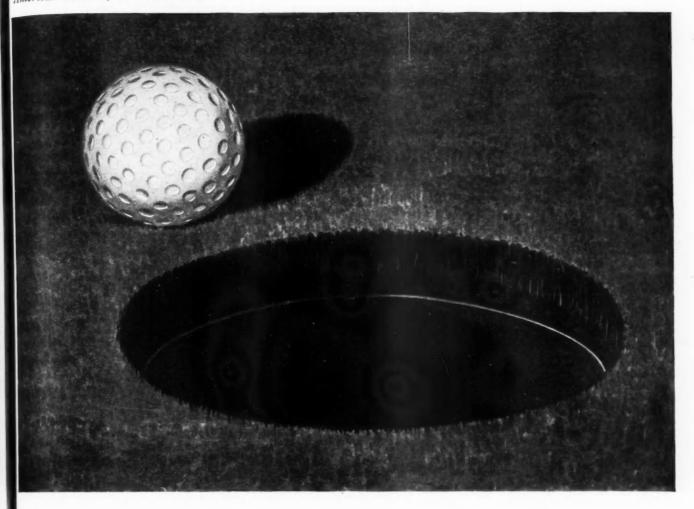
Johns-Manville intends to maintain and Johns-Manville intends to maintain and increase the acceptance for J-M products through powerful national advertising

increase the acceptance for J-M products increase the acceptance for J-M products advertising such as the J-M radio, program, "Bill such as the J-M reason, reaching up to Henry million listeners a month. When setting again becomes a proh-

when selling again becomes a prob-iem in your business, Johns-Manville will offer you complete merchandising plans

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### When a Couple of Inches Mean a Lot...

YOU need doors and plywood. Our ability to meet your needs largely hangs on a couple of inches in the width of the doors and plywood you specify.

The production of stock sizes means multiplied production more doors and plywood for more customers. On the other hand, odd-size doors and plywood mean manpower wasted - production slowed - orders unfilled.

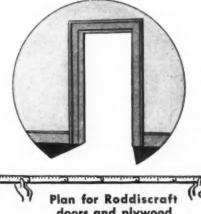
<sup>50</sup> plan for stock sizes only and we'll plan to meet your needs.

#### Roddiscraft WAREHOUSES:

CAMBRIDGE 39, MASS ..... 

LOUISVILLE 10, KENTUCKY ... 1201-5 S. 15th Street DEALERS IN ALL PRINCIPAL CITIES





doors and plywood in stock sizes -

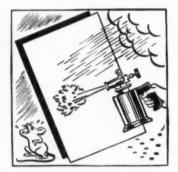
Roddiscraft warehouses, located at strategic points throughout the country, have been set up to save you time and serve you better - by making stock size doors and plywood available when and where you want them. Roddiscraft warehouse service is based on production and stocking of doors and plywood in stock sizes. Only by limiting ourselves to stock sizes can we give you the additional value of "on hand" service at convenient locations.

### What other material can match

this combination of advantages?



FAST COVERAGE --big 4' x 8' sheets go up fast, require minimum framing, save man-hours. Once up, Apac lasts a lifetime.



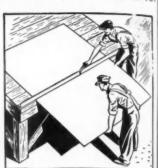


ECONOMY -low first cost, long maintenance-free life make Apac a leader in long-range economy-invaluable in building customer goodwill.

Original manufacturers of asbestos-cement roofing shingles in this country.



EASE OF APPLICATION --despite Apac's rock-like toughness, it's casy to nail in place. Or it can be drilled and fastened with screws. Pre-Drilled Apac will speed this operation ... at slight extra cost.



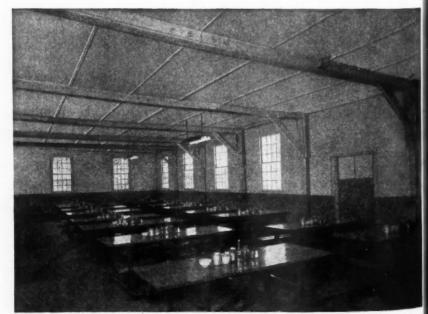
QUICKER CUTTING --to cut Apac to size, simply score with a sharp tool--as shown here---then sam off. Only complicated cuts require sawing.



### **Asbestos-cement sheets**

Builders everywhere have found Apac ideal for interior panelling walls, ceilings, partitions, bins, shaft casings—and equally good for exterior siding for many types

of structures in industry, farm and home. Get complete information from your K&M Dealer—or write us direct...we'll give your inquiries prompt attention.



Apac used as the ceiling for an industrial-type cafetera.

KEASBEY & MATTISON COMPANY · AMBLER · PENNSYLVANIA



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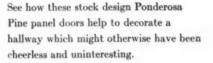
## Banish that "Dormitory" Look with Doors that Decorate!

Upper hallways and bedrooms need never have that "dormitory" look—the barracks-like plainness which so many veterans have grown to dislike—if you use doors of Ponderosa Pine!

For here are panelled doors with excellent proportions and delicate shadow lines that add a graceful note to modern living. Sturdy, dependable doors—available in many styles that are architecturally correct—at stock prices!

Windows, too, can be used freely for beauty—when you choose from among the many stock design windows which Ponderosa Pine makes available. Even the smallest home can afford these better windows—and the additional light and air which they provide.

A 32-page book, "Today's Idea House," contains dozens of photographs showing how Ponderosa Pine doors and windows can help you plan more useful, more charming homes. Mail the coupon for your copy.



The Best is Yours with...

Ponderosa Pine WOODWORK

"Today's Idea House" treats doors and windows functionally—in terms of what they can do to make living more convenient and more comfortable. Send today for this booklet—your copy is waiting.



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Ponderosa Pine Woodwork
Dept. OAB-12, 111 West Washington St.
Chicago 2, Illinois
Please send me a free copy of "Today's Idea House."
Name
Address

American Builder, December 1946

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### AMPLE FINGER ROOM Foremost in the design of all Stan-ley Latch Handles is ample finger room for easy, comfortable grip.

LATCH Unique Unque trigger latch is re-leased by a slight pressure on the plastic thumb-piece. Self-adjusting sleeve on latch "trigger" latch is remechanism adapts it automatically to doors of different thicknesses.

> HEAVY CHROMIUM FINISH All pieces are finished in bright chromium plate for added protection and lasting

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SELF ADJUSTING

# Give your custom cabinets EXTRA allure with STANLEY CABINET HARDWARE

• Rarely if ever has such careful planning gone into the design and manufacture of a new line of Cabinet Hardware. From the start Stanley was determined to achieve the peak in both beauty and down-to-earth practical utility ... a definite "plus" for dealers as well as users.

And the response to the "Stanley Girl" advertisements in such magazines as "Better Homes and Gardens" and "American Home" has proved how right these completely new designs are ... how people are interested in even little things like the type of latch on their kitchen cabinets. Stanley Cabinet Hardware has been pre-sold.

Take advantage of this ready-made market. Both the consuming public and builders have heard about this new line. Let them know you carry Stanley Cabinet Hardware by displaying it ... in your windows, on your counters.

Send for a supply of "Jewels in your Kitchen", a booklet in color showing this line . . . ideal to give your customers. The Stanley Works, New Britain, Connecticut.

IMPROVED FRICTION CATCHES

beauty.

Where a friction catch is pre-ferred, Stanley No. 33 offers an oil impregnated wood plunger which assures quiet, easy, operation and long life.

Trade Mark HARDWARE · HAND TOOLS · ELECTRIC TOOLS

1946

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### Here's part of our \$16,500,000 plan to bring you more GOLD BOND PRODUCTS

SHORTAGES! Shortages! Shortages! That annoying word was probably used more times by builders and dealers in 1946 than any other word in the English language. What is being done about it? Well, here's what National Gypsum is doing:

Almost 17 million dollars will be spent for plant expansion to increase production. The mill pictured above is National Gypsum's new plant now under construction in Baltimore. Another big plant is under way in Virginia. At 22 other Gold Bond plants, expansion programs are going ahead full speed.



The ultimate result . . . a tremendous increase in the output of Gold Bond building materials. On some products production will actually be doubled. Look for this greater production to make itself felt before the new year is many months old.

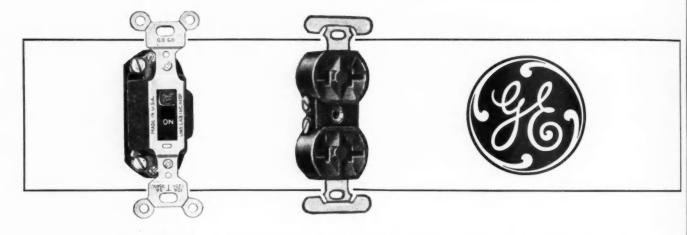
All surveys show that we are moving into the greatest building activity in the nation's history. We can't let this program bog down through lack of materials, through shortages. You can count on National Gypsum Company doing its part to take this word "shortage" right out of the dictionary.

### NATIONAL GYPSUM COMPANY · BUFFALO 2, N.Y.

Over 150 Gold Bond Products including gypsum lath, plaster, lime, wallboards, gypsum sheathing, rock wool insulation, metal lath products and partition systems, wall paint and acoustical materials.

Amer

# 3-way evidence of extra value for home buyers



### control - convenience - confidence

To most home-buyers, good electrical service is one of the most important features of a home. Frequently, this service is judged by the number, location, and quality of such visible evidence of wiring adequacy as switches and outlets.

66

There are three good ways for a builder to plan for the buyer acceptance of wiring devices that help to make sales easy.

(1) Use G-E standard switches at all



points where instant, reliable control of electric services is desired. Easy to install, T rated, and built to last, G-E switches keep householders happy with their daily efficiency.

(2) Be sure that there are ample convenience outlets for the needs of the house. G-E twin outlets are strongly made, may be side wired or top wired, and are designed for handy use in living rooms, kitchens, work centers, and bedrooms.

(3) When you show a prospective buyer the fine points of a house, point out the G-E monogram on the switches—mention the fact that the outlets and other wiring devices are made by G.E., too. He'll have confidence in that name, because he knows that it represents fine electric products. He'll have extra confidence in you, too, because he knows that you don't skimp on quality.

There is a G-E wiring device for every wiring requirement. Full information about any part of this comprehensive line is available from your G-E Merchandise Distributor, or may be obtained by writing to Section D23-1280, Appliance and Merchandise Department, General Electric Company, Bridgeport 2, Connecticut.

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These Grade Trademarks Are Your Insurance of Quality

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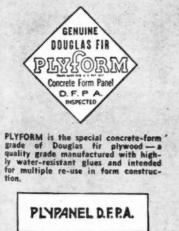
EXTERIOR-TYPE plywood is made with completely waterproof synthetic resin binder especially for permanent exposure to weather and water. It is widely used for building exteriors, for outdoor signs, for tailroad car siding, and in all phases of marine construction.



PLYSCORD is an unsanded utility panel of unusual rigidity, made to withstand the rigorous service demanded of wall and roof sheathing and ef sub-flooring.



PLYWALL is the grade of interiortype plywood made for use where only one side is exposed, as in wall paneling. It is suitable for most stained finishes, for painting or papering.



PLYPANEL is the grade of interiortype plywood made especially for high quality interior work on walls, ceilings, for booth partitions, cabinet doors and similar uses.

## Douglas Fir Plywood is Helping in the Construction of Houses for Veterans

Durable Douglas fir plywood—the engineered wood which cuts building time and costs—is now helping speed thousands of veterans' homes. A substantial portion of the industry's current production is allocated, on government order, to the Reconversion Housing Program.

Naturally, this means a tight supply situation for housing which does not come under the program, and for all other construction and industrial uses.

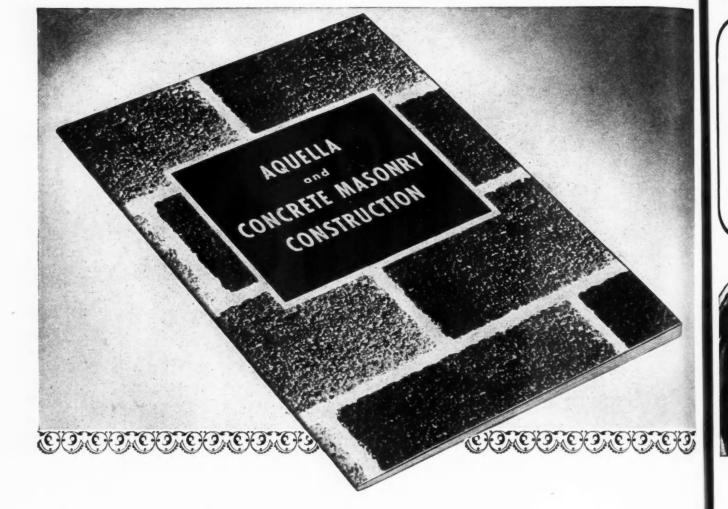
It is a fact, however, that more Douglas fir plywood is being produced today than in pre-war years. When the present overwhelming need for housing has been met, more and more of this modern "miracle wood" will become available for general use. Anticipate your needs well in advance. Keep in touch with your regular source of supply. Plywood's many advantages are worth the wait!

DOUGLAS FIR

DOUGLAS FIR PLY WOOD LARGE. LIGHT. STRONG. Real Wood PANELS

PLYWOOD ASSOCIATION Tacoma 2, Washington

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### This 16-page brochure shows how and why Aquella is used throughout the Nation to control water seepage and dampness

Name

Here is the new 16-page brochure, "Aquella and Concrete Masonry Construction", that will be welcomed by members of the construction industry. Highly informative, it brings a wealth of technical data on Aquella ... the principle on which it works to control dampness and seepage on all porous masonry surfaces-plus many interesting examples of the ways it is being used throughout the nation. For your copy, simply fill in and mail the coupon at right.

> PRIMA PRODUCTS, INC. NATIONAL DISTRIBUTORS .

New York 16, N.Y.

10 East 40th Street

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Please send my free copy of "Aquella and Concrete Masonry Construction".

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### **Give Building Back to Builders**

PHE so-called Wyatt Veterans' Emergency Housing Program never was a housing program. It has been and still is a smoke screen to hide a campaign for socialized housing legislation. Its authors believed that with an instrument purportedly aimed at producing housing for veterans, they could induce class consciousness among the veterans, then exploit them as a pressure group to aid in more quickly bringing the entire home building industry under complete and permanent government control. After the program was written, Wyatt was brought in as Housing Expediter. He was promptly victimized by fictitious NHA statistics and OPA profit control policies. He fell for the erroneous theory that veterans could be made class conscious. Whether willingly or knowingly or otherwise, he has been a party to a vigorous socialized housing campaign since the day he took office. He has devoted his energies to seeking more building control legislation where less control was desperately needed, and to using every available publicity device for preaching the false gospel of housing emergency. He has done nothing to expedite housing. The program has backfired, and the controls have failed.

President Truman, recognizing at least part of the mandate given the 80th Congress by the voters on Nov. 5, decontrolled OPA almost totally, with one result—that ceiling prices on building products have been removed. The American Builder believes and consistently has said that, freed of controls, home builders can and will meet all housing needs for all Americans, veteran and non-veteran. Removal of price controls was a necessary first step in freeing the home building industry.

It is significant, however, that at the time this is being written, (Nov. 15) no other controls on home building have been removed. Thus, the decisive battles of the home building industry for the right to do its own expediting are yet to be fought. The American Builder urges that the following actions are necessary, in the public interest:

1. End the President's wartime emergency powers, and thus restore to Congress its full right as the sole legislative branch of government.

2. Dissolve NHA, a war-born agency intended to function only for the period of the war. Its dissolution will remove government as a competitor of private builders, eliminate housing as a national political football, and stop needless present and future spending of hundreds of millions of dollars.

3. Discontinue the office of Housing Expediter. Its record of impotence is conclusive proof of its uselessness.

4. Remove price ceilings on new homes and veterans' priorities to build. This constitutes class legislation designed to appeal to low income veterans while actually forcing all veterans to purchase new homes whether they want them or not. Every new home, regardless of whom it is built for, adds to the total supply of all types of houses available to veterans and others.

5. Return FHA to a position of autonomy, relieve it of the police duties forced on it, and permit it to function solely as an insuring agency.

6. The principle of rent control is wrong. If it is necessary to continue these controls for a few months more for political reasons, lift rent ceilings on existing properties, and permit new rental housing to be built without rent ceilings. The holders of risk capital are better judges of what and when to build than a government agency.

The home building industry is aware of the danger of pricing itself out of a market, and given control of its own business will, with enlightened self interest, produce adequate housing at reasonable prices where government bureaucracy has failed.

SHOWN ABOVE are five of the ten different exteriors built around



10.000

and Sons

WILLIAM J. LEVITT Lt. (CEC) USNR

Editor's Note—The following story was written early last month, immediately following the national election, before President Truman and Hous-ing Expediter Wyatt had taken the actions which are now fa-miliar to all American Builder readers. readers.

### **Levitt and Sons Complete**

istration's attitude toward private enterprise, particularly building, and probably some modification of the ill-conceived Wyatt program, our program of 1,000 complete homes for veterans in 1946, planned late last year immediately following my discharge from the Navy, will be ac-complished. But—and mark these words well—it will be accomplished in spite of the incomprehensible Wyatt program, not because of it. Frankly, the problems we have faced in doing this job are twice those experienced when, during the eighteen months after Pearl Har-

"ALTHOUGH we can now expect housing units for war workers and decisive changes in the Admin-naval personnel in the Norfolk, Va., naval personnel in the Norfolk, Va., area.

> The speaker was William J. Levitt, again president of Levitt and Sons, prominent Manhasset, L.I., home builders and nationally known for their practical application of streamlined construction methods in producing housing, particularly war housing, on a mass-production basis. Levitts are also widely known for their pioneering of complete community developments, located contiguous to their headquarters municipality of Manhasset, in the decade before the war.

Shortly after completing the Norbor, our firm built nearly 2,500 folk projects, Bill Levitt turned the

THE TWO houses pictured below are typical of the 100 attractive small homes Bill Levitt built for veterans before the requirements of the Wyatt program forced a change.





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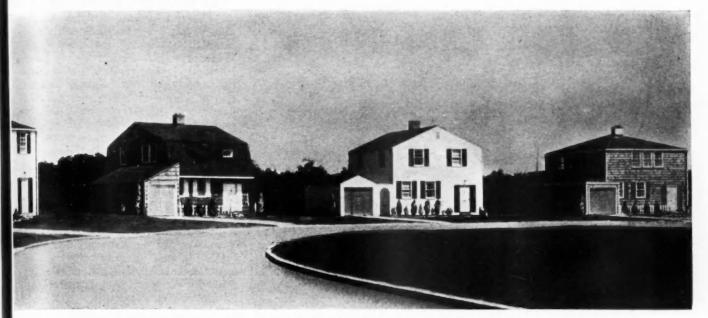
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the one basic floor plan developed by Levitt and Sons for their 900-house veterans' project located at Roslyn, Long Island.

### Veteran's Project "-in spite of Wyatt program"

operation of the business over to his father, Abraham, and brother, Alfred, and served out the remainder of the war in the Pacific theatre as an officer in the Seabees. It was during this period that he determined that the first development the organization would undertake, upon his return to civilian life, would be moderate-priced homes for veterans.

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Continuing the discussion of "wartime building" vs. "peacetime building in 1946," Bill Levitt cited example after example to prove his contention that the difficulties of operating under the wartime restrictions of L-41, and the then existing shortages of materials and labor, seemed trivial when compared with private building during this first year of peace. He declared:

"Our problems and headachesand we are no different from the thousands of other home builders in every section of the country who have tried to 'play ball' with the Administration in providing homes for veterans - unequivocally convinced me that, if the private building industry is to produce the necessary housing, complete removal of allocation and priority controls, in addition to price controls, over housing and building materials is the only answer. Further, if Mr. Wyatt and his planners are sincere in their desire to stimulate the construction of rental accommodations for veterans a completely free situation must exist.



CONSTRUCTION scene above clearly shows assembly-line technique used in framing.

BELOW: Another view of the Levitt development showing additional exterior designs.





ABOVE: The attached garage and red cedar shingles distinguish the "Type 5" house.



THE ABOVE view of the compact, efficient kitchen shows space for automatic laundry.

THE "TYPE 5A" house below has a detached garage and J-M asbestos shingle exterior.

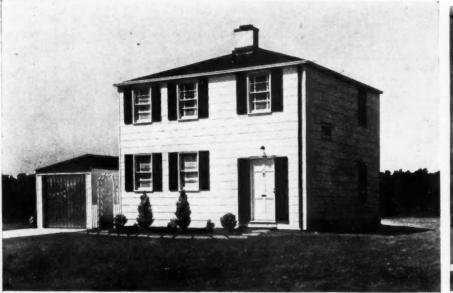
#### American Builder, December 1946.

"The unfortunate and inconceivable Wyatt program undeniably has been in a wholly irrational state. What principles could possibly have justified placing restraints on building unless they were intended to further prolong the housing shortage and keep our industry immersed in politics? If you will recall, it was one of the first industries to be picked on and now it is the last to be held under controls. It has taken a terrific licking-thanks to the government. Under the guise of a planned economy, directed by selfseeking bureaucrats, it has reached a new low. Why, even President Truman said in vetoing the first OPA bill last summer: 'Our economy, however, cannot be half stabilized. We cannot quarantine in-flation.' Yet, in spite of such utterances and the scrapping of most controls, the building industry continued to be regimented.

"Further-and this is most important - only the removal of all restrictions and controls will lower the actual cost of many materials and items of equipment and thereby reduce the cost of building homes. The wiping out of black markets and eliminating delays on the job alone will bring a substantial and immediate saving in construction costs. In the case of our veterans' homes, which we have had to price at \$10,-000, we have estimated the saving would amount to about 20 per cent. It might be more. I wonder if veterans are aware of the price they are paying for 'Wyatt's folly'?'

The original Levitt veterans' program, mapped out in the expectation of being free to build "for the market," embraced a wide variety of

BELOW: A typical bathroom in the Levitt houses. Extra lavatory is on first floor.



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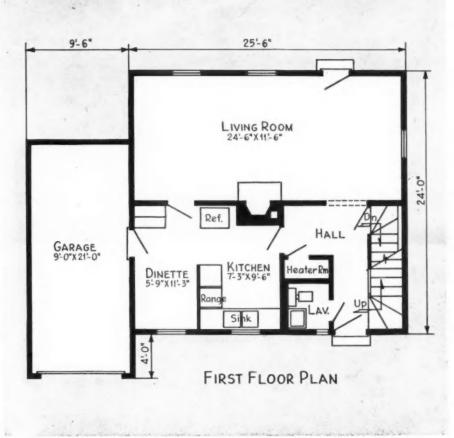
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attractively designed two- and threebedroom, one- and two-story houses, ranging from traditional bungalows to comfortable ranch house types, all completely equipped. Two of these are shown at the bottom of page 72. Of the thousand pro-grammed, only one hundred of these homes had reached the construction stage when the requirements of the Wyatt program forced a change to a rigid pattern of standardization. In designing the "standardized" house, which was to complete their 1,000 house veterans' program, Alfred Levitt, the architect of the firm (although he is without any formal training in architecture) developed a plan which of necessity related construction, equipment, and room arrangement together to avoid excesses in one or more directions at the expense of inadequacy in others. Other considerations were the size and arrangement of rooms to permit the use of standard flooring and ceiling joists; the planning of the structural framing to provide for economical installation of preassembled units, heating ducts, wires and other items, while simultaneously taking into account the require-ments of Levitt's production-line precutting techniques and maximum use of mechanical equipment in their operations.

The basic plan finally evolved—a two-story six-room house—measures 24' x 25' 6", and includes a full basement (see floor plans at right). Alfred Levitt points out that the full basement provides space for the owner to add such personal features as a game room, darkroom, workshop or other recreational activity, and also space for additional storage,

BELOW: Steel cabinet in extra bathroom is shown below.





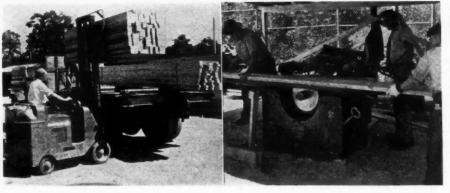
CAREFUL planning has resulted in maximum use of available floor space in the Levitt house. Note particularly the compact efficiency of the kitchen-dinette layout.

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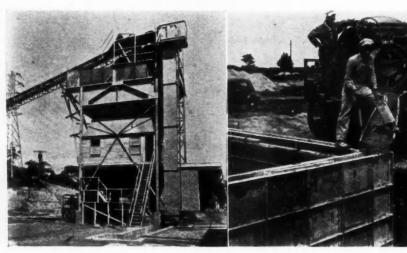
American Builder, December 1946







THE PHOTOGRAPHS on this page show in remarkable detail the extent to which the Levitt organization is organized and mechanized. Every element of residential building that can be simplified or standardized has been carefully studied from the viewpoint of its being done on a mass-production basis. Assemblyline techniques, power tools and mechanical equipment are fundamental to the system and extensively used.



all at less cost than if the size of the main structure were to be enlarged to take care of any of these items.

The first floor has a living-dining room of generous size-with the fireplace located on the interior wallfor those who prefer to have their dining separated from the kitchen. For those who have no objection to having their meals in close proximity to the kitchen the plan provides a compact, well-arranged work center and an adequate, convenient dining space. The specifications for the veterans' houses originally provided for an automatic laundry and refrigerator. However, as Bill Levitt quickly proves, steadily mounting costs, due in large part to Washington ineptness and bungling, precluded the inclusion of these desirable extras within the limits of the government's arbitrarily established ceilings.

Another example of ingenuity in the Levitt plan is to be found in the third bedroom. There, rather than cut down usable wall space and crowd the room with a closet, a roomy metal cabinet is installed in the usually wasted space behind the door. Thus this room can be readily used as an extra bedroom, child's playroom, sewing room, or study, a feature appreciated by veteran buyers.

The achievement of varied design, necessary to avoid monotony in so large a development built around a single floor plan, required skillful handling and planning. The problem was solved by having ten different exteriors which, when combined with different roof styles, exterior finishes, spacings, setback, attached and detached garages and generous landscaping, result in a pleasing variety of sufficiently dissimilar homes to meet individual tastes and needs. These variations are further supplemente ience Sh

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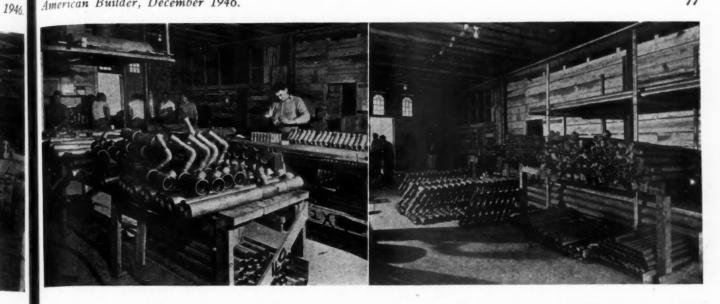
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Shop and site fabrication utilizing the best of tried methods is almost a fetish with the Levitt organization. They have had long experience in this field but continue to study these important time- and money-saving factors. It would seem, however, that they already have their precutting and pre-assembly operations so refined that waste of any kind, labor or materials, is at an irreducible minimum.

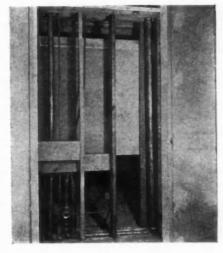
The photographs on these pages give the reader an idea of the Levitt's precutting and other mass production techniques. The precutting production line is set up in close proxmity to the railroad siding over which raw materials arrive. Lumber, to take one item as an example, starts along a series of roller tracks through power saws and planers to come out transformed into studs, oists and rafters. Since only one lan is used there is virtually no resetting of the saws and a negligible amount of handling is required. When the lumber reaches the end of

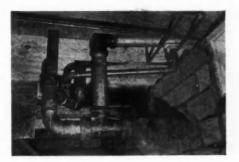
mented by the addition of attractive the line it is ready to be "packaged" as a part of a single house. These "packaged" pieces are then hoisted to a truck and hauled to a specific site, or stored for use when construction has advanced to the stage where they are needed. Here again handling is kept to a minimum.

> Doors, frames and windows are fabricated in a millwork shop which is also located so that materials arriving can be quickly and economically handled. Even foundations are put into place by production-line methods. When the forms are set the concrete is brought from Levitt's central mixer (see photographs on opposite page) and the walls are poured in rapid succession. The only failure in the production line method

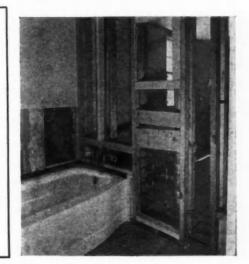
(Continued to page 154)

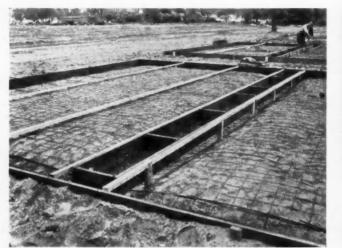
THE "DEADLY" efficiency with which the Levitt's approach their job of building houses by mass-production is evident by the pictures on this page showing but one step in their construction operations-preassembly and plumbing installation.





Foundations	Concrete, 10" wall
	Johns-Manville Asbestos Shingle Siding;
	Red Cedar Shingles; Stucco
Roofing	Johns-Manville, 210 lb. asphalt strip shingle
Flooring	Kentile Asphalt Tile
Interior Walls	Sheetrock, taped joints
Insulation	Rockwool, 2" walls, 4" ceiling
Plumbing Fixtures.	Briggs Beautyware
Plumbing	Chase Copper
Wiring	General Electric
Heating	Chrysler Airtemp, automatic, gas-fired
Water Heater	Rheem Arrowhead
Range	J. B. Slattery insulated
Bathroom Cabinets.	Miami-Carey
Garage Doors	Berry Aluminum, overhead type

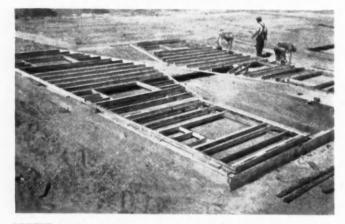




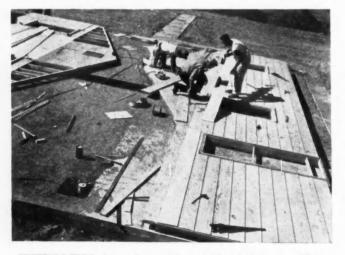
SLAB form ready for pouring. Cold air return runs across center.



CREWS assembling and erecting exterior walls on slabs.



PRECUT framing members are assembled in jigs, nailed in place.



EXTERIOR-TYPE plywood cut in 8- and 10-inch strips for siding.

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**Efficiency Gives Vets** 

### Careful planning of floor space plus maximum use of precutting and mass assembly techniques hold costs to a minimum on South Bend, Ind., project

**C**AREFUL engineering of room space, varying colors and exterior designs for standard floor layouts, use of modern tools and home equipment, and efficient precutting and assembly of building materials are the reasons behind the high quality and value of the small homes for veterans being constructed in South Bend, Ind, by Place & Company, Inc. Virgil A. Place, president of the company, and for many years an Indiana realtor and builder, decided early in 1946 that he could use two standard plans, a two-bedroom and a three-bedroom, apply a gridiron pattern to a plot inside the city limits, and by using up-to-the-minute design and construction techniques, provide small homes for veterans at prices they could afford.

The two plans were developed by Ivar O. Wandell. It will be noted from the floor plans of the two designs, shown on the following pages, that the overall dimensions of both are identical, and that with a few minor changes in room dimensions, and relocation of the bathroom and the gas furnace, the two-bedroom design is easily expandable to a three-bedroom house.

Place, with his son and son-in-law as key figures in the company, took the undeveloped site, installed water and utilities, laid out and paved streets, then divided his building space into lots 40 and 42 feet wide. Fourteen-foot alleys run the full length of the block between parallel streets. In order to eliminate the possibility of monotony from straight lines of house fronts on both sides of the street, houses at the ends of the blocks are set back 25 feet from the sidewalk lines. Working toward the middle of the block each house is set back a few feet farther from the sidewalk than its neighbor nearer the corner.



THESE two- and three-bedroom homes for veterans in South Bend, Ind., are selling for \$6,950 and \$7,650.

### **Good Low-Cost Houses**

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Houses in the middle of each block are 40 feet back of the sidewalk. Standard width roadways were built with nine inches of gravel topped with hot asphalt. A cement lead from the sidewalk to the front door, and around one side to the rear door, is provided for each house.

Confronted with the universal headache of material shortages that has plagued every builder in the past year. Place leased an old two-story stable, assigned the upper floor as a warehouse space, and installed his office and some of his precutting and millwork prefinishing operations on the first floor. A yard at the side is used for lumber storage, and for most of the precutting of framing and truss members. After failing to get many materials and most of the required kitchen, plumbing and heating equipment and fixtures through the normal distribution channels, one of the members of the company was assigned to travel the country in search of the items needed. Place decided at the start that he could effect no economies if he was to be held up waiting for materials and equipment. Accordingly, no work was begun until everything needed for the houses was on hand in the warehouse. This included not only the building materials, and the equipment included with each house, but other equipment which the owner would have to buy separately, such as refrigerators. Place took the stand that if veterans who were buying the houses could not purchase refrigerators and other equipment from local retailers, it was his responsibility to make them available.

The plot will accommodate ninety-eight houses, and by ate October thirty were finished and occupied. Fiftytwo were under way. The two-bedroom units were selling for \$6,950, and the three-bedroom units for \$7,650. In addition to these, Place has also completed twentythree houses selling for \$10,000.

All the houses are basementless, constructed on reinforced concrete slabs. In each slab there is an 8-inch by 22-inch cold air return trench, running the full width of the house. The slab is mopped with Flintkote asphaltic compound, and sleepers are embedded as nailers for the



GABLE end wall being raised. Opposite end ready to raise.



GOOD supply of portable power hand saws speeds work on site.



FOURTEEN Teco truss rafters eliminate bearing walls.

American Builder, December 1946.





A GOOD-SIZED laundry room includes clothes drying facilities.

PARTIAL view of kitchen with cabinets, range, refrigerator.

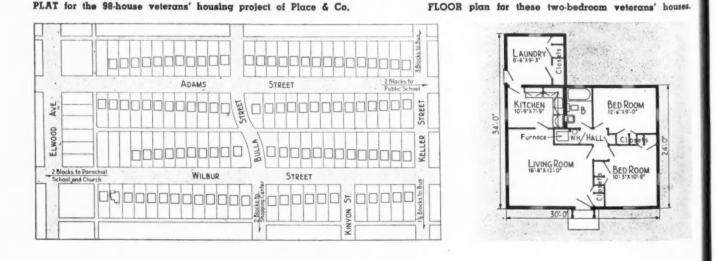
subfloors. Unable to obtain full quantities of any given type of hardwood flooring, Place hit upon the idea of buying maple, birch and beech, and then using all three species mixed on the same floor. With a little attention on the part of the carpenter in blending the species, unusual and pleasing floors have resulted.

In order to eliminate interior partition framing, and save labor as well as about 400 board feet of lumber in the two-bedroom houses. Teco split-ring connectors were used to build 24-foot span trussed rafters for all roof construction. Due to delayed shipments of material, it has been possible to cut only four houses at a time. At this rate, Place's experience is that rafter fabrication has been at the rate of ten an hour with two men, assembly at the same rate, and erection at the rate of thirty rafters an hour with four men. Place estimates that further labor savings would be made if deliveries of materials would permit cutting ten houses at a time. Place states also that the trussed rafters enable him to make use of storage wall units, built in his shop, as non-bearing partitions. Rafter chords, struts and braces are all fabricated in the yard at the warehouse, fitted with the Teco connectors, and trucked to the job site for assembly.

Copper tubing, except to hold the meter, is used throughout. The plumber has his shop at the job site, and completely prefabricates the entire plumbing tree. It is set in the concrete slab, and braced vertically until the partition walls are installed. All partitions are non-bearing, plastered on gypsum lath. In effect, they are 2-inch solid plaster, floating walls, secured top and bottom and to abutting walls and partitions with continuous strips of metal lath. The lead from the water mains is threequarter inch pipe, and copper tubing is used from the shut-off box to the house.

Elimination of baseboards, and use of only a strip of quarter-round at the junction line of the floors and walls, is accomplished by finish plastering down to the concrete slab.

All studding for outside walls is precut and marked at the warehouse yard. At the job site a template in the form of a slotted plate is laid along the edge of the concrete foundation. Workmen place the precut, marked studs in the slots provided for them, nail the plates, and then apply precut siding. If the wall contains a gable end, the siding overlaps slightly. When it and the moulding are applied, Skilsaws are used for trimming and for cutting louvres. The wall is then hoisted, as shown in an accompanying photograph, and braced until the abutting walls are erected and connected. Framing, siding and shingling require from 62 to 69 man-hours. Red cedar shingles are used on all roofs. On some of the houses they are double-coursed for siding.



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Siding on most of the houses is Douglas fir plywood. The plywood is ripped in two widths, 8 and 10 inches. Above the window ledges the ten-inch strips are lapped  $1\frac{1}{2}$  inches, while below the ledges the narrower strips are lapped three-quarters of an inch. All the plywood used for siding is resin-dipped exterior.

All door frames are steel, manufactured by the Richmond Fireproof Door Co. The door frames are placed on small plywood blocks resting on top of a slotted sleeper to avoid the necessity of trimming the finished hardwood flooring around the frames.

Morrison gas-fired furnaces with White-Rodgers controls supply the heat. In order to provide heat outlets in every room and eliminate completely any duct work, the central hall ceiling is dropped to a height of 6 feet, 6 inches above the floor. The space above the low ceiling is used as a plenum chamber, from which, due to the central location, a hot air register reaches every room. A Rheem gas-fired hot water heater is standard equipment. There are five cold air returns in the small house, and six in the large one.

A closet in the laundry room is designed as a clothes dryer. With the door cut off several inches above the floor a forced draft of warm air enters through a register from the plenum chamber. Three-inch Cellulite cotton batts provide insulation in the houses.

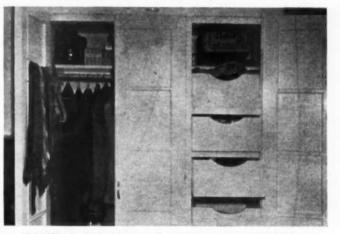
Electricity is provided by means of three-wire, 220 volt leads in all houses. A 70-ampere Trumbull circuit breaker is installed in the control box. There are three outlets in the kitchen, and a fluorescent light over the sink. There are four base plugs in the living room of the smaller house, and five in the living room of the threebedroom house.

Standard Sanitary plumbing fixtures and Faries medicine cabinets are installed in all houses. Youngstown Kitchens by Mullins are provided. An accompanying photograph shows a typical kitchen installation. Magic Chef stoves and either Frigidaire or Servel refrigerators are held in stock by Place for sale only to buyers of the houses. All windows are R-O-W removable sash, equipped with interlocking weatherstrip, with the weatherstrip on one jamb removable. Floors are hardwood with air circulating underneath, except in the kitchen and bathroom where floors are inlaid linoleum. The houses sell just as rapidly as they are completed, and the veterans are losing little time sowing grass and beginning the work of landscaping. Virgil Place intends to double his production next year, contingent on his ability to get materials, preferably through normal channels.

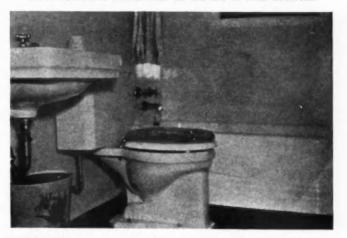
AT right below are a few of the 23 higher-priced homes completed by Place & Company and sold to veterans. Below is floor plan for the three-bedroom low-cost house.



LIVING rooms in the two-bedroom homes are 15x161/2 feet.



ROOMY, built-in closets such as this are in each bedroom.



BATHROOMS are conveniently located, include quality fixtures.







GENERAL view of the Burns Brentwood subdivision of 300 acres which will eventually contain 1.400 homes.



# **Developer Burns**

Mountain builder under way with single family and apartment developments. Shows progress in face of shortages. Expects acceleration of operations with controls removed.



FLOOR plan of Crawford six-room prefab.

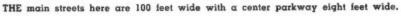
BEDROOM

BED ROOM

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FLOOR PLAN FLOOR plan of five-room Cemesto prefabricated house used by Burns in large project.





ONE of the twenty-two Crawford prefabricated houses which have been erected.



BULK of the houses will be these five- and six-room Cemestos.

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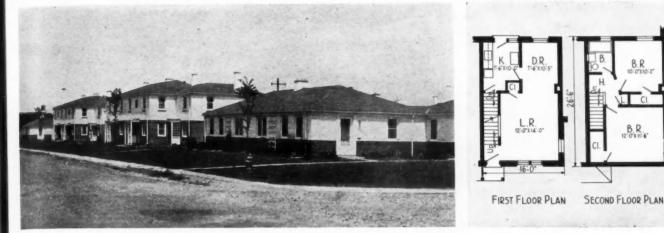
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COLONIAL GARDENS apartment project of the Burns Realty & Trust Co. At right is floor plan of two-story apartment.

### of Denver Will Erect 1,400 Homes for Veterans

**T**WO large housing projects being developed in Denver, Colo., by Franklin L. Burns, president of the D. C. Burns Realty & Trust Co., will contribute 1,400 new units to the estimated 15,000 needed by the rapidly growing mountain metropolis.

The first of the projects, the Burns Brentwood Subdivision, consists of three hundred acres, with one-level single family houses on lots 50 by 131 feet. In October, twenty-two Crawford prefabricated houses were under way, and thirty Cemesto houses were in various stages of completion. All the rest of the development will be Cemesto single-wall and partition units. The prefabs have six rooms, and the Cemestos are available in both five- and six-room sizes. Between 50 and 75 per cent of all the remaining houses will be three-bedroom units, and all the garages will be two-car.

Particularly outstanding is the color harmony Burns has achieved on the exteriors of the first block of Cemesto houses now nearing completion. Several pastel shades used in varying

combinations on outside walls and roofs present an extremely pleasing color symphony. Main streets through the subdivision are 100 feet wide with a center parkway over an 8-foot water right of way. Other streets are 60 feet wide, 30 feet from curb to curb. Integral sidewalks and curbs are used throughout.

The Cemestos are basementless, and built on a concrete slab. To insure against cracks in the slabs, 2x4 frames are built, and filled with dirt to a level three inches below the tops of the frames. Filled with water and left to settle overnight, pea gravel is added the next morning, wire mesh is placed, and concrete poured. Finished floors are asphalt tile, with a different pattern used in each room. Ceilings are Sheetrock with taped joints. When the houses are complete Insul-Fluff insulation is blown between the ceiling joists.

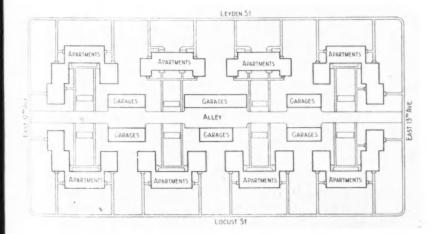
Heat is supplied by a Jackson & Church overhead delivery, forced warm air system, thermostatically controlled. Standard equipment in-

cludes Eljer plumbing fixtures and Mission hot water heaters. There are six electrical outlets in the living room, and four in the kitchen. Porch roof ceilings are plywood. The Crawford prefabs are equipped with Atlas filtered heating systems.

Framing and roof trusses for the Cemestos are all precut on the job, and plumbing trees are prefabricated in a plumbing shop at the job site. Lumber for the Pratt roof trusses is trucked to the job site from a material warehouse on the subdivision. Jigs are set on templates, truss members are cut, the trusses are built on the ground, then raised into place. All interior partitions are non-bearing.

Plumbing units completely assembled, with all lead surfaces and traps wiped in advance, are set in the foundation, and the house is then built around the plumbing unit or tree. Before power was available on the site, a portable generator mounted on skids was used for the operation of power saws, and in the plumbing shop.

(Continued to page 156)







FLOOR plan of the one-story apartment.



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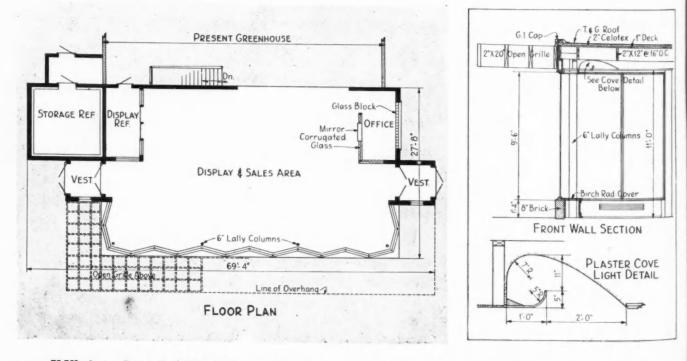
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THE absence of extended bulkheads under window wall permits great flexibility for Interior arrangements.

### **Smart Architectural Design Invites Customers**



PLAN of new flower shop. This building was placed at one end of present greenhouse after the old wall was removed.

The huge expanse of glass forming the display windows which extend to the ceiling of showroom has the effect of opening the entire interior of the flower shop to the view of customers and motorists

A Glenview Roads in Wilmette, Ill., there has been erected for George Mangel, head of the Mangel Company Florists, one of the outstanding examples of modern design as applied to commercial construction.

This retail flower shop, which is an addition to the present greenhouse, has been designed by Donald S. King, of the office of Arthur Swanson and Associates, architects, Chicago. The Carroll Construction Co., of Chicago, were the builders.

On these two pages are illustrations of the result of skillful planning for sun control. Large glass areas to the west were essential in order that the entire interior display be opened up to the view of customers and passing motorists. The "eggcrate" type of canopy, built up of wood construction and supported by steel framing which extends back into the structure, provides the means of controlling to a great de-gree the direct action of the sun. In addition to the canopy the display windows are constructed in a "sawtooth" design; therefore the angular placing of the glass panels deflects the sun's rays, allows full vision into the shop, breaks the monotony of the conventional display front, and provides an ever changing perspective of the displays within.

The floor of the display room is asphalt tile laid over a concrete slab. A suspended acoustical ceiling of Celotex panels is used for the salesroom area.

A combination of cold cathode tubes placed in concealed ceiling coves, and flush louvered reflector units, insures high level illumination free from all ceiling obstructions. A large display refrigerator together with a storage unit provides ample space for display of cut flowers.

Ample parking space has been provided all around the new building which stimulates a high volume of cash-and-carry business.

/E

A DETAILED exterior view at upper right shows to advantage the sawtooth arrangement of windows and heavy canopy above. In the night view shown in the center, the interior sparkles as a rare jewel. Right, George Mangel's office adjoins display room.





THE extended canopy, besides being utilitarian in its use, gives form and expression to an otherwise straightforward design.

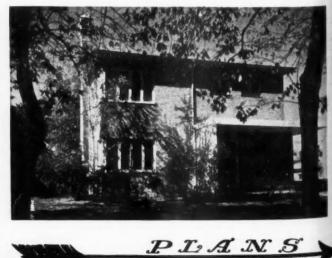
### **House Has Simple Yet Effective Lines**

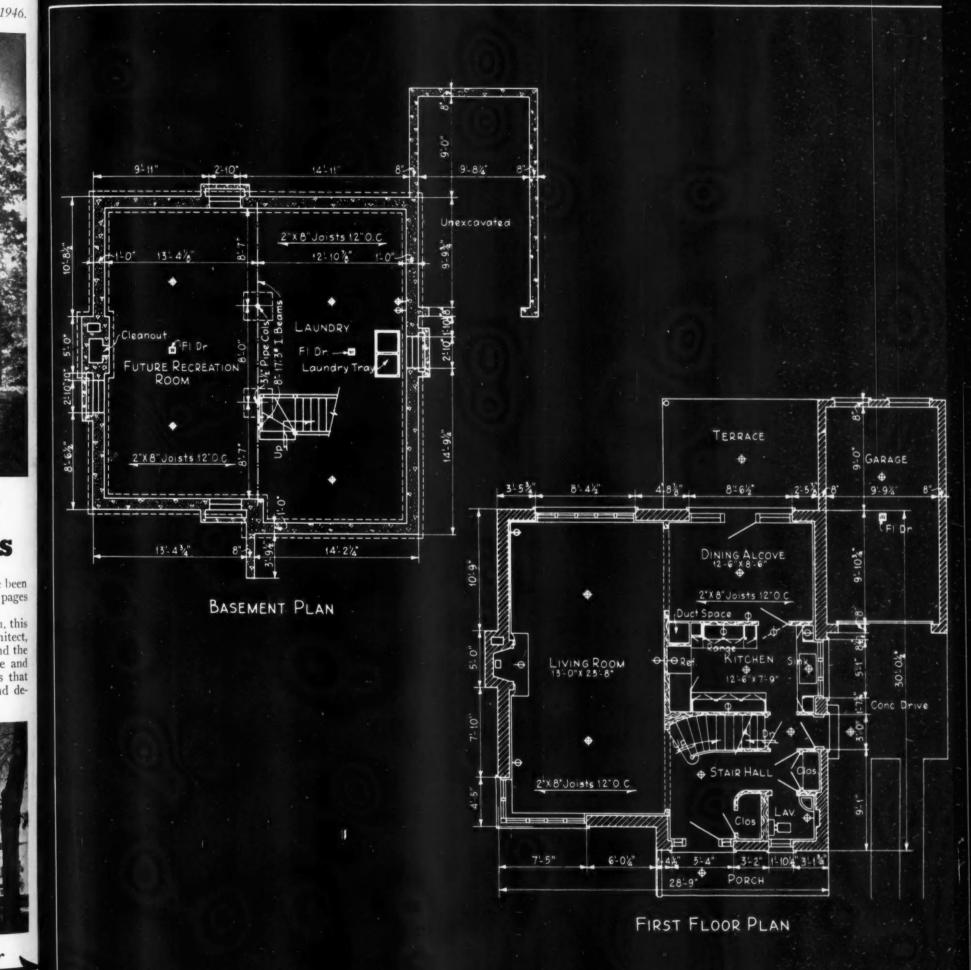


THE simple fireplace with its broad band of marble around the opening is centered on the side wall of the formal living room.

A COMBINATION of common brick, wood trim painted white, and casement windows has been blended together to produce an interesting composition. This type house is one of the most economical to build and maintain because of its simple plan outline. **G** OOD design is ageless. This is known to have been true in the past. The house shown on these pages indicates that it still holds good today.

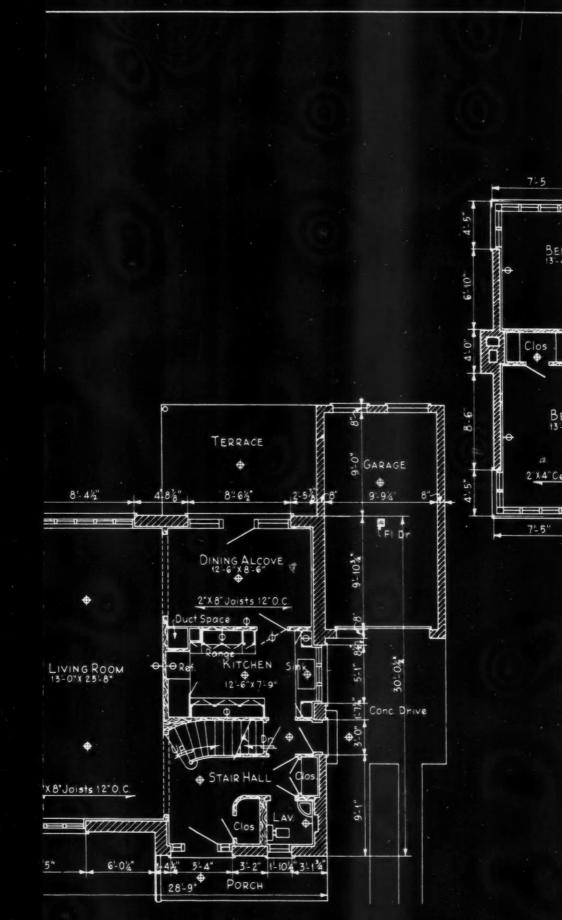
Built in 1935 for the Chicago Evening American, this model house designed by Ronald F. Perry, architect, Chicago, Ill., has withstood the ravages of time and the onrushing years, and today is just as up to date and modern in its planning and design as the houses that are being built now. Floor plans, elevations, and details are shown on the adjoining blueprint sheets.



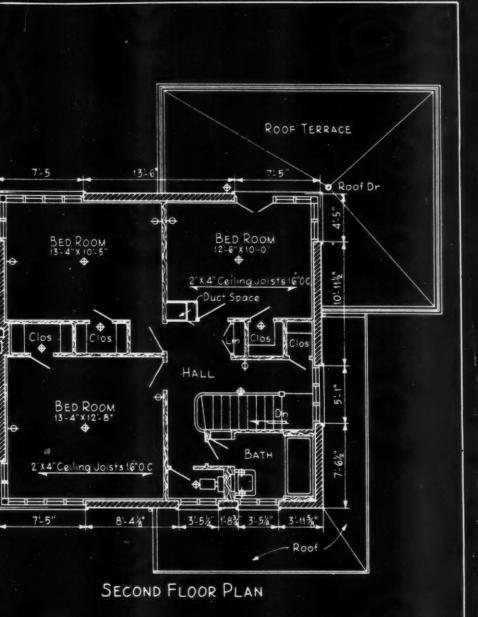


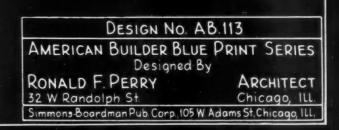
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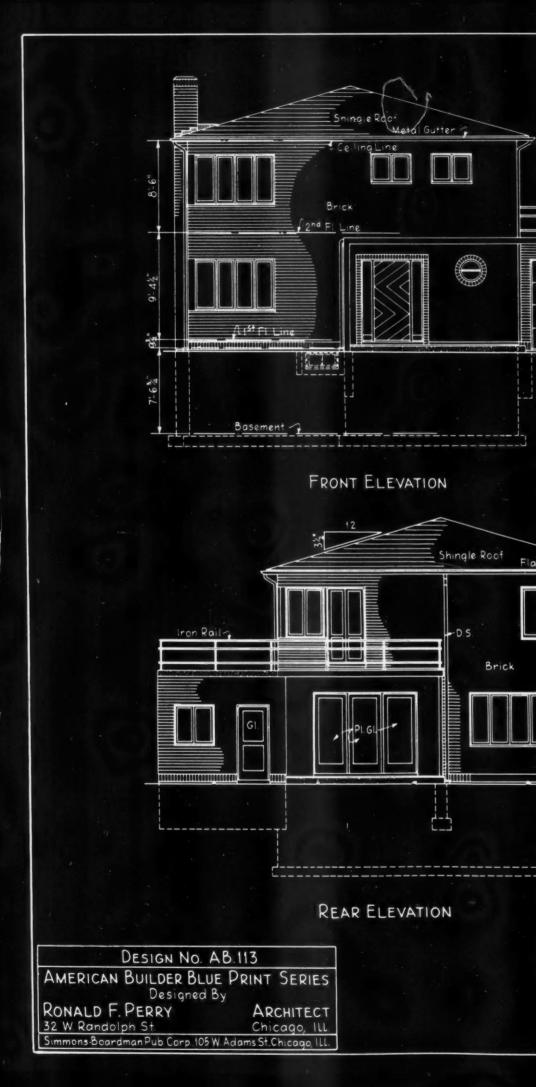
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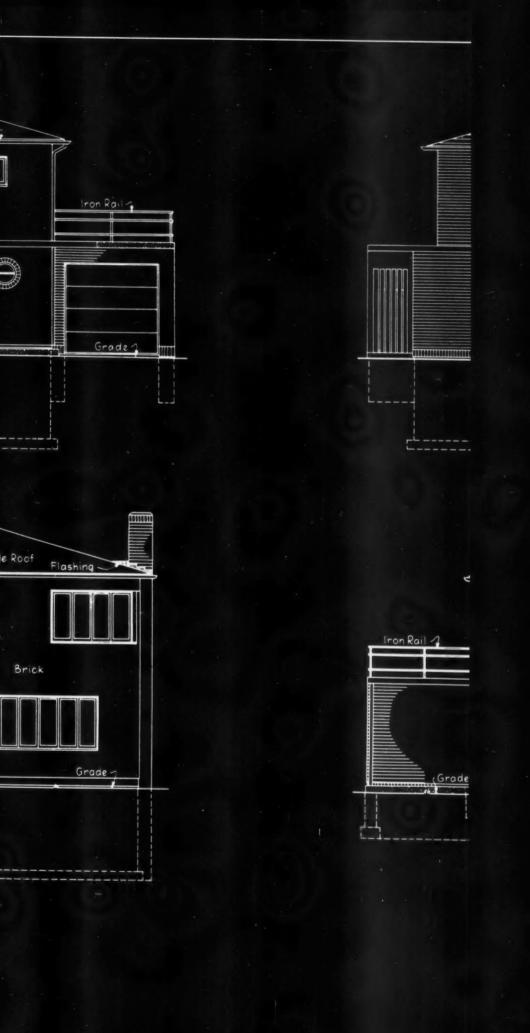


FIRST FLOOR PLAN

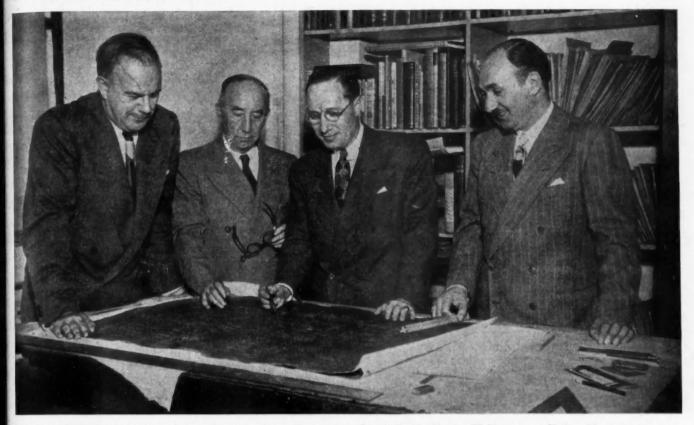






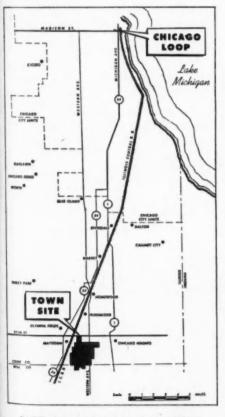






PHILIP M. KLUTZNICK, third from left, studies blueprints with associates Jerrold Loebl, Charles Waldman, and Nathan Manilow, treasurer.

### Klutznick Plans \$70,000,000 Housing Project



PLAT showing location of new Olympia Fields housing development and its relation to metropolitan Chicago.

#### Former FPHA commissioner organizes firm to build homes and apartments adjacent to Chicago for 25,000 middle-income persons

A \$70,000,000 city will be constructed on 2,300 acres of rolling land 55 minutes south of the Chicago loop, according to plans announced early in November by American Community Builders, Inc., of which Philip M. Klutznick, former FPHA commissioner, is president.

Initial construction, to start after the winter months, is calculated to meet the need of veterans under the emergency housing program. Financing will be done under the FHA plan.

Present plans call for houses to sell from \$7,000 to \$10,000 with provision for 600 rental units. The initial program will accommodate 5,500 families and a later expansion is planned for approximately 3,000 more. The first program will probably provide 2,800 single-family units, 650 twin houses for 1,300 families, 200 "town and country" homes for 800 families, and apartment buildings for 600 families. According to present Illinois Central suburban train schedules, the town will be approximately 55 minutes from the Chicago loop.

Sites in the town have been reserved for churches- of various de-

nominations, one high school, and five elementary schools around which the five neighborhoods will be centered. About 475 acres of the town, bordered by the Michigan Central and Belt Line Railroads, will constitute an industrial area. Only non-nuisance industries will be considered.

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There will also be a town hall containing all the municipal agencies. Entertainment facilities will include bowling alleys, theatres, playgrounds, a swimming pool, and picnic spots.

a swimming pool, and picnic spots. Nathan Manilow, president of the Manilow Construction Co., is treasurer of the newly organized American Community Builders. Other officers include: Jerrold Loebl, member of Loebl and Schlossman architectural firm, vice president; Hart Perry, former special assistant of veterans' housing for FPHA, secretary; Carroll Sweet, president of L. B. Harris Co., and Charles Waldman, engineers.

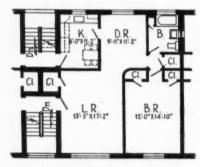
Elbert Peets, Washington, D. C., who collaborated in the planning of the towns of Kohler and Greendale near Milwaukee, designed the basic plan for the community in conjunction with Loebl and Schlossman.



### **Apartment House for Veterans** LEFT: Charles E. Joern, president of Wm. Joern & Sons. Right: Edwin R. Mittlebusher, architect, Chicago, Illinois,

After more than two years of preparation, the Homestead Apartments, a \$3,-500,000 program, are now under construction in La-Grange Park, Illinois, by Wm. Joern & Sons, builders

BIRD'S - EYE view of scale model of the entire project. Note the wide courts with opportunity for sunlight to filter into all areas. This view is taken from the western entrance of the development. Photo by Hedrich-Blessing Studio

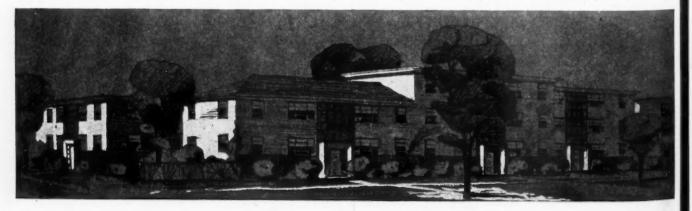


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TYPICAL 4 ROOM APARTMENT TYPICAL 5 ROOM APARTMENT ALTERNATE 5 ROOM APARTMENT ABOVE are shown a number of typical apartment layouts. Other plans are available by variation of basic units.

ARCHITECT'S rendering of typical court building. The two-story units are placed in foreground with three-story units in rear.



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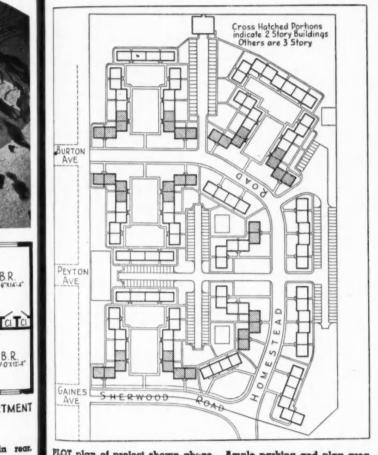
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### The Largest Private Enterprise in the Chicago Area

NE of the outstanding projects of the present day that has been undertaken by private enterprise is the \$3,500,000 veterans' apartment now under construction by Wm. Joern & Sons, builders, in LaGrange Park, Designed by Edwin T. Mittlebusher and Howard TIL T. Fisher & Associates, architects, Chicago, it is indicative of the fact that in spite of low rental ceilings and high construction costs, if economy is exercised in the plan arrangement and all excess appendages are eliminated, it is still possible to construct a series of buildings of this type and yet retain all the elements of good design.

This is the largest private apartment house enterprise in the Chicago suburban area. The community will be known as the Homestead Apartments and will cover 17 acres of a site that was once the farm of the first mayor



PLOT plan of project shown above. Ample parking and play area.

in LaGrange Park. The project will consist of 19 build-ings containing 336 apartments of 31/2, 4 and 5 rooms. The proportion of the apartments will be 46 of the 31/2's, with five types of 4's totaling 230, and four different variations of the 5's for a total of 90. It will be built at Sherwood and Homestead Roads, just two blocks from the Burlington Railroad station at LaGrange Road.

Edward J. Kelly, district director of the Federal Hous-"The ing Administration, when interviewed stated: FHA has been associated with the sponsor's architects and technicians in the planning of this project, and its construction will be a matter of pride to this office. Because of the excellence of the planning, this project should prove to be an inspiring pattern for other sponsors of similar projects. It is our earnest hope that many other like projects will follow. We are more than proud to be associated with sponsors of rental projects, and we are equally proud to be associated with this one.

The Homestead Apartments have been planned as an integral part of the LaGrange Park's "Tomorrow's Town" development, as set forth by the postwar plan-The land planning was done by Kincaid, ning group. Oneal & Gardner, with Seward Mott, Washington, D.C., as consultant. Edwin H. Hancock was the local engineer on the project. All engineering work for the streets, sewers, light conduits, water, gas and other utilities has been completed and the top dirt cleared from the surface ready for construction work. All materials and necessary items have been located and are available, therefore it is expected that the buildings will be ready for occupancy by Oct. 1, 1947. It will be 100 per cent veteran-rented. Enough qualified veterans have already applied to more than fill the quota.

There will be electric laundries and individual freezer space. Children will be welcomed and streets have been laid out on a curvilinear basis which minimizes traffic hazards and adds further interest to the architectural effect. Off-street parking will be used, ample garage and parking space being available. In addition to each individual building, the entire area will be extensively landscaped as a unit, with 158 large Norway maples and American elms forming the nucleus for several thousand trees and shrubs.

"This apartment program meets a dire need of the community, and fulfills the urgent demand of veterans and their new families for adequate, livable and permanent housing. This development will help solve the pressing housing shortage," said Charles E. Joern when interviewed by American Builder.

ARCHITECT'S sketch of buildings at Homestead and Sherwood Road.

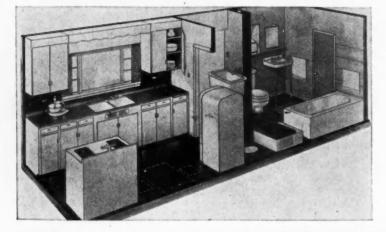


# The Heart of the Home in One Package

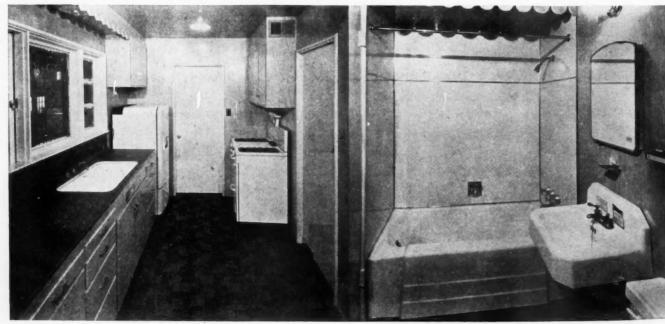


Kitchen, bath and utility room are built complete in Mobilcore shop and trucked as a unit to house foundation

LEFT: Standard Model Mobilcore coming off assembly line in fabricating shop. Below, architect's rendering of finished kitchen, utility room and bathroom, and basic plan showing how Mobilcore fits into modern home design. At bottom of page, kitchen and bathroom are finished, equipped, piping installed, ready to connect to service mains.







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A NEW development to speed up GI housing and to stabilize costs on the expensive and complicated "half" of the home building project has recently been made by Timber Structures, Inc.; and the finished product, known as "Mobilcore," is already flowing out onto home building jobs within trucking distance of that company's plants in Trenton, N. J., and Portland, Ore.

The photographs on these pages give a good idea of what the Mobilcore is—a rigid, transportable structure, 24' long, 8' wide and 9' high, containing a complete, fully equipped and finished modern kitchen, bathroom and dinette or utility room. This unit is built by skilled mechanics on an assembly line inside the producer's shop and, when complete in every detail, is securely wrapped and loaded onto a low-bed highway trailer for delivery to the job site, where it is unloaded onto a prepared foundation; the balance of the house is then built up around it.

When an American Builder editor visited the Portland operation late in September he found shop facilities at the Timber Structures plant for turning out ten of these Mobilcore units per week. However, present difficulties in obtaining regular shipments of some of the plumbing fixtures required had, so far, prevented this expected output. Among the major customers for these units in the Portand area he found two large operative builders with current G.I. housing projects. One of these is Builders, Inc. (Otis Vowels, Harold Rogers and George J. Rossi), which has built 54 homes around the Mobilcore assemblies; and the other, W. C. Smith, Inc., is now building 100. Both these developments are in the east suburban section and are planned to sell in the \$8,000 bracket. The pre-built kitchen, bath, utility room units have come onto these jobs in a most satisfactory way, these builders report.

It was further explained that considerable flexibility is permissible in both the floor plan arrangement and the mechanical equipment provided. Builders and architects planning any considerable number of houses can consult with the company's engineers as to these points. The final delivered cost is worked out for each deal and the price fixed, thereby stabilizing for the builder that most troublesome and costly "half" of the job.

A nation-wide service is being set up by Timber Structures to cover all the important home building areas with fabricating shops, from which these core assemblies can be trucked out over an average radius of 100 miles or more.





LOADING, highway hauling and unloading at building site are pictured above. Average weight of unit is about three tons.

UTILITY room ready for use when Mobilcore is placed on foundation and service piping is connected. Utility core includes heating unit, laundry tray and domestic water heater.



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# **GREEN ACRES** Le Sueur, Minnesota

### American Builder, December 1946.

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A development that tends to establish a pattern for postwar planning in other smaller communities is now in progress on the outskirts of this thriving city

ARCHITECT'S rendering showing bird'seye view of entire development. Curved streets, cul-de-sacs, parks are featured.



CONSTRUCTION under way. This view indicates the progress that is already being made.

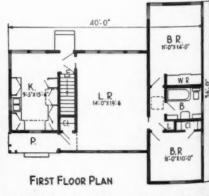
ONE of the smaller, compact types, suitable for the G.I., now under construction.

**O**NE of the projects of the Le Sueur Postwar Planning Committee's program which was inaugurated more than a year ago was that of planning and developing a new residential subdivision.

The July, 1946, issue of the American Builder presented a story describing how this business men's organization prepared a program for the complete modernization of the business district, including building of new facilities to meet the expected growth of this thriving community.

The planning of the new subdivision was considered most important in view of the ever increasing evidence of a healthy and active demand for new homes.

The Le Sueur Development Asso-



FLOOR plan of the house at left. All rooms of house radiate from living room. dev citiz fou Aft was sch plo also rap dev ( inte the thr SOU cor 1 be at pla to an tur ha eff ad eli of op yo of un no be

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THIS house in process of construction is one of the larger types planned for this development. Floor plans are shown below.

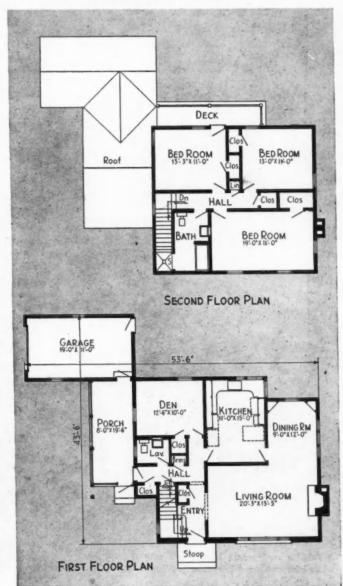
ciation was formed with the sole purpose of buying and developing land properties for residential housing. Those citizens who invested money cannot receive more than four per cent interest under the Articles of Incorporation. After a great deal of investigation a thirty-two acre tract was purchased. It is ideally located with respect to schools, shopping district, churches and centers of employment. It is out of the way of heavy traffic. It is also free from any natural or created hazards. The topography of the land also lends itself well to economical development.

Good subdividing is not simply blocking off an area into lots which can be surveyed, staked and recorded. On the contrary, it means the creation of real estate values through devising a layout which is not only economically sound but which provides to the maximum degree those conditions bringing about pleasant and healthful living. In order to assure obtaining a subdivision which would

be modernly planned, with attractive surroundings and at a cost within capacity to pay, Robert T. Jones, town planner from the University of Minnesota, was engaged to study and prepare plans. The plan that was accepted and which is shown on these pages has a number of features, such as curvilinear streets to minimize traffic hazards and produce a more interesting architectural effect; cul-de-sacs—dead end streets that offer distinct advantages; no alleys—the tendency toward a wider lot eliminates the necessity, and also enhances the appearance of the neighborhood; two parks and playgrounds—these open areas provide excellent and safe places in which the young children can play.

All these features offer home builders security because of the safeguards created by careful planning. The underground improvements and the various utilities are now being installed. The construction work on a number of houses has already been started as shown in the accompanying photographs. Needless to say, the shortage of building materials has held in abeyance a large number of owners who are anxious to build.

In all the planning of this subdivision, the primary objective has been not only to plan so that it will appeal to home owners as a desirable place in which to live, but to make it economical as well.



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A RAMBLING Mediterranean type house with a Florida flavor such as this looks best with a roof which is of cool color.

A FUNCTIONAL, modern home such as this in a wooded area would look well with a brown roof and red chimney above the sidewalls in a natural finish.

A GREEN roof would blend well with white trim and a red brick front on Cape Cod or New England Colonial style.

# Takes Its Cue from the Roof

WITH the wide range of colors and color combinations available in roofing materials, especially in the asphalt shingle group, color has become an increasingly important factor in exterior home finishing.

There is nothing complicated or very technical about the use of color on a house providing a few basic principles are understood and carefully followed. Since the roof is the dominant and permanent feature in the color plan of most houses, it is an excellent place to start the study of colors.

In arriving at color choices or combinations, the first thoughts are in terms of the primary colors and the feelings they create. Red is the warmest color. Yellow is gay and sunny. Green is quiet and restful. Blue is cold and dignified. Purple is austere and formal.

Color may be used in contrast, blend or accent. Blending colors are eyepleasing neighboring colors, such as a light green and a dark green or a cream and a yellow. Contrasting colors are opposites, tones of opposing values but yet not clashing, such as blue green and a red brown. The accents are striking color touches, used sparingly but boldly to introduce an individual or different color note into some special house detail such as a turquoise door, a flame-red shutter or chrome yellow terrace pottery.

In laying overall plans, it is well to bear in mind there are at least a dozen good opportunities for using color in addition to the roof—doors, shutters, sidewalls, masonry, trim, window sash, flower boxes and flowers, doorstep, awnings, outdoor furniture, breezeway or terrace, etc. It is customary to strive for some points of sharp contrast in these places. One rule it is well to bear in mind always is that the charm of a light-colored house is to be offset by darker trims and the dark house is brightened by light touches.

In warm climates, as a general rule, light colors are used for the house walls and cool colors for the roof. One of the principal reasons for this, of r 1946.

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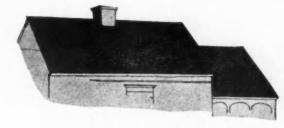
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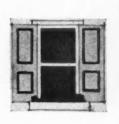
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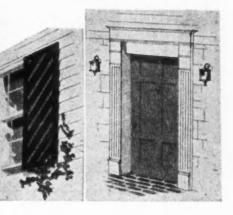
American Builder, December 1946.

A few hints on choosing the right exterior house colors in relation to style, climate and setting

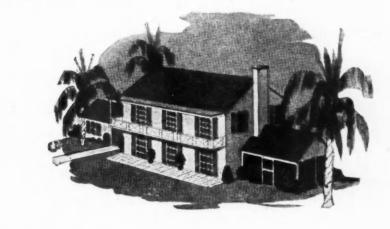


THERE are more than a dozen places to use color to good advantage on a house in addition to the roof — doors, shutters, trim, etc.

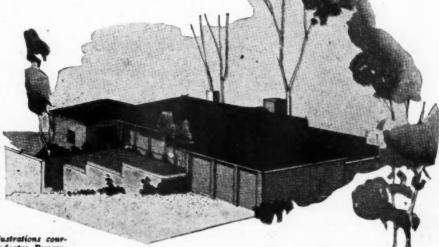




THIS architectural style from the West Indies is dignified when the roof and shutters are in dark colors that reflect the owner's hospitality.



A DARK brown roof above lighter brown sidewalls will make this California Modern blend well with the natural landscape.



course, is that light colors reflect rather than absorb heat. Greens, blues and silver grays are cool colors that make a house appear comfortable and restful to the eyes.

In temperate or northern states the tendency is to use warmer colors as the safest choice. Yellows, creams, tans are good. Here, too, darker roof colors may be used with warm browns, nich reds as bright accent tones.

Color helps a house to express feeling. Gay, bright colors are informal and inviting while rich, dark colors suggest dignity. Color may be used to shrink or stretch the appearance of size. White is expansive and dark colors tend to restrict—blue recedes, red comes forward. Color can be used to emphasize the points of a house that are attractive and to subdue those that are less desirable. Contrasting colors are used to bring features out and soft blending colors tend to conceal them.

When it is desirable to make a house appear reserved and formal, color areas should be largely unbroken. This is achieved by using blending tones rather than colors that contrast or accent. A house may be given a gay and lively appearance by turning to yellows or reds for accent with light or contrasting areas to set them off. Cozy and relaxed effects may be accomplished by using soft ivories and creams with tones of brown, green or rust for punctuation.

A tall house may be made to appear lower by application of a dark roof and dark upper floor shutters. A squatty house will appear taller when a bright roof is used to draw the eyes upward.

The setting and orientation of a house should always be considered when choosing color. No one house should clash with those adjacent to it and all should blend with the general feeling of the street. If a low house perches high on a hill so that the roof is projected against the blue of the sky, a warm red makes a good roof color. If the house on a knoll or hill is tall, deep midnight blue or black is good for the roof.

> Source material and illustrations courtesy Asphalt Roofing Industry Bureau.

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THIS house is being sold to veterans in Oklahoma City for \$7,500 including one-car garage and concrete drive.



BEN C. WILEMAN



BUILDERS in Oklahoma City urge veterans to seek good housing and invite them to inspect houses under construction at any time.

# **Typical Oklahoma City House for War Veterans**

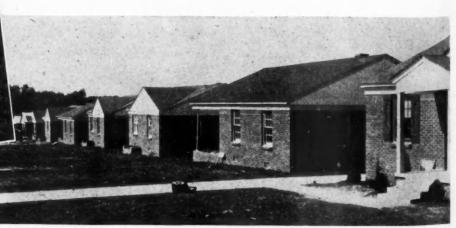
Good planning, efficient operation and best construction provide maximum in livability at minimum prices

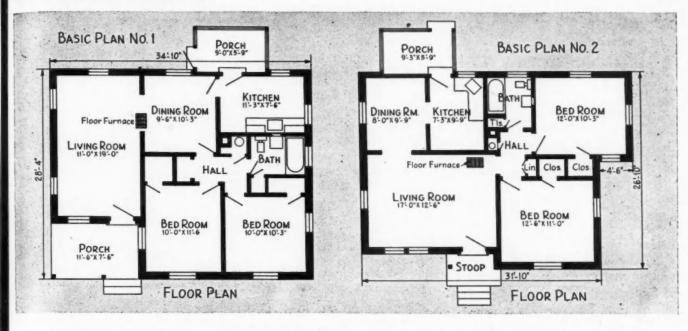
**O**<sup>NE</sup> of a number of Oklahoma City home builders who are providing excellent low-cost housing for veterans is Ben C. Wileman. Mr. Wileman has under way now 161 five-room brick veneer houses in three different areas in and adjacent to Oklahoma City.

Using two basic floor plans, shown here, with five elevations on one and seven on the other, sufficient variation in appearance is achieved to eliminate the monotonous appearance of row housing. Minimum lot width is 50 feet with practically all of them running 140 feet in depth. Concrete sidewalks and a concrete garage driveway are included with each house whether a garage is built or not.

Gable ends are sided with asbestos shingles and roofs are covered with Johns-Manville asphalt shingles. Roach & Musser's "Thrift-T" windows with built-in metal weatherstrip are installed in the houses, with most of them the 30-inch size.

These houses are set on beam-type footings fourteen inches wide and eighteen inches deep. One-half inch reinforcing bars are placed three inches from the top and three inches





THESE TWO basic floor plans with 12 different elevations are being used in Mr. Wileman's 161-house project.

from the bottom. Floor joists are 2x8 and ceiling joists and rafters are 2x6. All framing is wood with wood or gypsum sheathing. Interior walls are covered with one-half inch recessed edge Sheetrock covered with wallpaper in all rooms except the bathroom. Ceilings are painted with Textone. A special molding is used at the ceiling line to eliminate the need for a wallpaper border. All interior woodwork and trim is natural finish.

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Excellent oak flooring is used in all rooms except the kitchen and bathroom. The kitchen floor is covered with linoleum and the floor in the bathroom is tile with a tile baseboard. Bathroom walls have a high wainscoting of either heavily enameled exterior-type plywood or Johns-Manville Flexboard. A generoussized towel closet is built in each bathroom.

In addition to adequate closet space in each of the two bedrooms, a large linen closet with built-in drawers in the lower half and shelves above is placed in each hallway adjacent to the two bedrooms and the bathroom.

The bathroom fixtures in the first houses completed by Wileman were supplied by Kohler, and that or equivalent quality equipment will be installed in bathrooms in all 161 houses. A gas-fired automatic hot water heater is installed in each house in a small enclosed accessible compartment next to the chimney.

The climate at Oklahoma City resaw and th quires that houses be planned to take Mr. Wilema advantage of prevailing breezes in quires about the hot summer months, and Mr. each of the Wileman always places at least one, under roof.

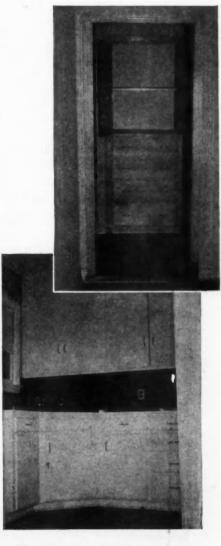
and when possible both, bedrooms on the south side. Four-inch J-M rock wool batts are installed in all attics as protection against both extreme exterior heat as well as cold.

Heat is supplied by a gas-fired floor-type furnace manufactured by the John Zink Co. of Tulsa, Okla.

The well designed kitchens include built-in cabinets and linoleum-covered work counter. There are two electrical outlets in the kitchen, one double plug above the work counter and the second on a wall to take care of an electric refrigerator or other appliance. Each living room has four electric outlets, one in the dining room, two in each bedroom, and one on the rear porch, which is enclosed with copper screen. All window screens and screen doors have copper mesh.

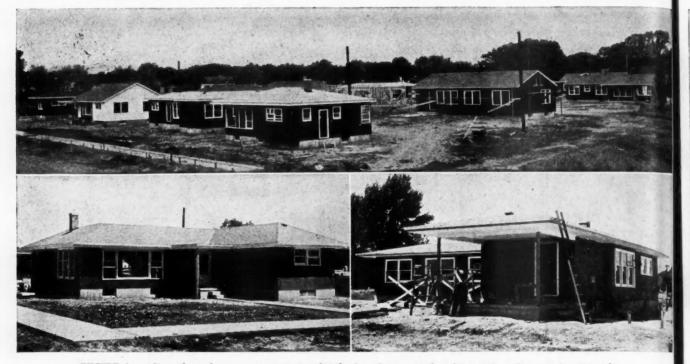
Mr. Wileman is selling these fiveroom brick veneer homes to veterans for \$7,500 including a one-car garage equipped with an Overhead door. This makes payments for the veteran about \$51 a month including interest, principal and insurance. The same house without a garage is being sold for \$6,700, which makes payments about \$46 per month. This does include a concrete driveway, however.

To speed up man-hour production in building these homes, Mr. Wileman has used a portable Kohler electric generator which supplies sufficient power to run four portablepowered hand saws or one cutoff saw and three portable hand saws. Mr. Wileman estimates that it requires about 150 man-hours to get each of these houses ready to put under roof.



ONLY the best in kitchen, bathroom and other built-in equipment is being used in these houses. Above is a partial view of the kitchen and a large hall linen closet.

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EXCEPT for siding, these houses are now completed after eleven months of expensive, discouraging struggle.

# "No Incentive to Build under Government Controls" . . . Says Wisconsin Builder

E. A. Precour, Oshkosh, struggled against heavy odds for eleven months to maintain quality and high standards of construction to complete 21 houses, except for siding, out of 49 planned for 1946



FOURTEEN houses are finished and livable inside but have no exterior siding.



LAST January, E. A. Precour, of Oshkosh, Wis., encouraged by numerous promises of help to home builders by the government, planned the erection of forty-nine houses during 1946. In eleven months he managed to complete twenty-one, except for siding.

In January of this year Mr. Precour started ordering materials but it was not until March that Douglas fir framing lumber began to arrive. It was wet and as each car was received, the lumber was piled in the yard, stripped and allowed to dry while workmen were putting in foundations and utilities.

The first framing was erected June 1, three months after the first lumber was received because that amount of time was required to do a good airdrying job.

Realizing fully that he was confronted with an unusual set of conditions, Mr. Precour set out immediately to devise ways and means of cutting costs. As a result of extensive wartime experience in precutting on large construction jobs, he set up a shop on the project site containing five radial saws of various sizes, six hand type electric saws, four bench saws, drill presses, jointers, sanders and other portable tools.

In describing the results obtained here, Mr. Precour says: "With our precutting methods, erection costs have been reduced between 30 and 40 per cent. On this housing project we took the very best designs of T. H. Irion, a young and talented architect, but never sacrificed one feature in favor of precutting, and every house is different. We set up cutting lists for each house, used plenty of heavy crayon to identify various framing members, and gave our saws no more than two such lists at any one time. This was done to forestall congestion and confusion in that department."

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Continuing, Mr. Precour says: "If all our houses had been alike we could have repeated the same cutting lists over and over, thereby making further savings. Our records indicate that the average time required by men at the saws to completely cut out one house, including all the rafters, headers, trimmers, bridging, etc., is thirtysix hours. I believe the few additional hours saved by repeating the same plan over and over does not justify the monotonous and drab appearance of a finished project with all houses substantially of the same appearance."

"The fact that we were able to finish twenty-one houses, except for siding, in eleven months," says Mr. Preer 1946. American Builder, December 1946.

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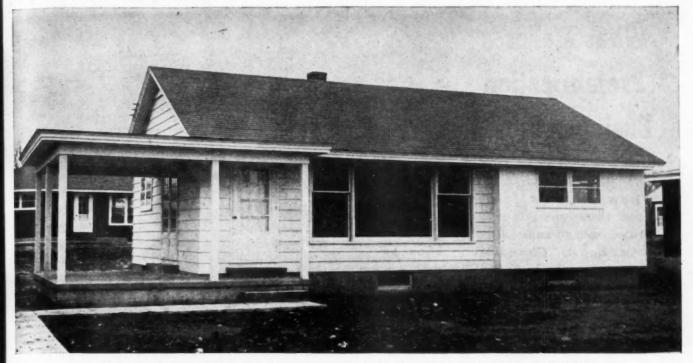
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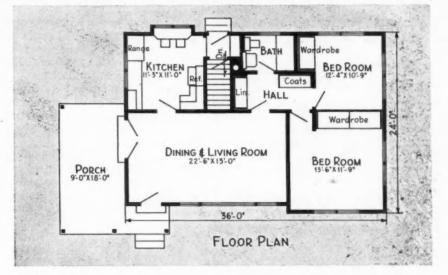


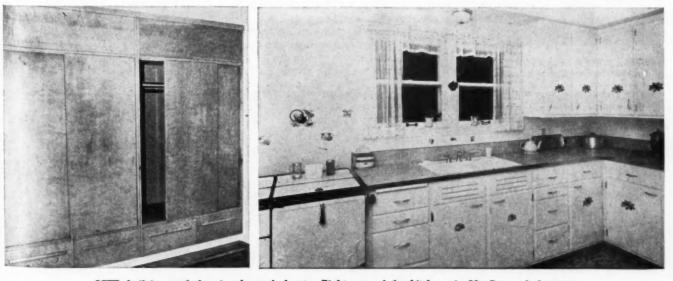
THIS is one house which E. A. Precour has finished. He started out to build 49 homes in 1948.

cour, "does not establish a new record for slowness, and certainly not for speed. It does contribute heavily to the cost of the finished houses. If the government had not done a thing in the way of living up to their promises, we could still find cause to rejoice, but, aside from failing in this, they had all their numerous agencies out buying materials away from us, and hoarding them."

Commenting on the abolition of OPA price ceilings on building materials, Mr. Precour ventured the opinion that "this is indeed wonderful news. It gives us a ray of hope that soon it will not be a crime to build and create national wealth and culture. There is small hope for the

There is small hope for the (Continued to page 158)





LEFT, built-in wardrobes in place of closets. Right, one of the kitchens in Mr. Precour's houses.

A

# What Makes a Prefabrication Business Grow?

"Power tools plus good management and sound merchandising," says E. A. Chandler



LATE model Well Built factory-built home.



POWER tools help "mass-produce" cabins.



WELL BUILT'S garage line features models with metal upward-acting doors.



WELL BUILT Manufacturing Company's recently completed new factory at Somerville, N. J.

To the average motorist approaching Somerville, N. J., from the east on State Route 29, the Well Built Manufacturing Company's recently completed office and factory building probably appears to be "just another small manufacturing plant." Few would guess—even if they were to give the plant more than passing notice—that a set of circumstances and a hobby were responsible for the establishment of a business that is now the thriving and profitable Well Built organization, working on a three-shift basis in an attempt to fill its volume of orders.

However, such is the case—and the story back of it is so characteristically American and typical of what a young man with an idea, and the determination to see it through, can do that *American Builder* feels its readers will be interested.

It all started in 1939, when a young bridegroom, then working as a factory inspector for a nationally known manufacturer of building materials, couldn't locate a garage for his new car. His landlord suggested that he get "one of those new-fangled, knockdown affairs," pointing out that he could take it with him when he moved.

Then, as Mr. Chandler—Edward A. Chandler, now president of Well Built—relates it:

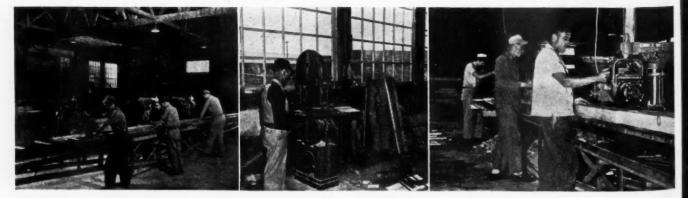
"Because I was unable to find a prefabricated garage on the market that looked worth the price I decided to put my longtime hobby of wood-

working to practical use and build one. During the next month I spent all of my time—and some of the company's too, I guess, because I lost my job—working in an open field nearby building a portable garage.

"When I moved it to the site in back of our apartment I had the help of several neighbors who were in the same predicament for a garage as I had been. They thought the idea a good one and, within a week, agreed to finance me for materials, and I went back to building portable garages in an open field. By the time winter set in I had enough orders to keep me busy for several months. On the strength of those orders I rented a building near Somerville with the understanding that the rent would be paid at the end of the month. From then and there Well Built grew to what you see today.

The Well Built Manufacturing Company has a sizable, efficiently laid out and well equipped plant—and obviously it is the pride of Mr. Chandler's life. He proudly tells you how he employed his first helper and then, as business increased, hired more men and turned to power equipment to keep costs down while production kept mounting. He says: "To meet the constantly rising costs

"To meet the constantly rising costs and the increasing shortage of building materials, I designed the setup which is shown in the photographs below. It reduced my cost of cutting (Continued to page 128)



STREAMLINED handling and Walker-Turner power equipment enable Well Built Manufacturing Co. to achieve mass production economies.

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American Builder, December 1946.



## Prefabrication Gains Stature During Past Year

#### Production of factory-built homes makes sound gains despite continuing shortages of materials and plant facilities

**N**OT unlike every other branch of the nation's vast and complex home building industry, the manufacturers of prefabricated houses have concluded that 1946 has been a bad year. And they would like to forget it, if they could.

To imply, however, that the prefabricators have failed is to imply that the private building industry as a whole has failed. Nothing could be further from the truth.

In retrospect, the fantastic "sights" and "targets" set for the prefabricators early in the year, when the illconceived Wyatt program was foisted on the entire industry, now take on nightmarish proportions. It will be recalled that the overall program called for "construction of 2,700,000 *low and moderate-cost homes*" (the italics are ours) during 1946 and 1947. Of these, Mr. Wyatt said, a total of 850,000 were to be "permanent prefabricated houses, and houses assembled on-site from prefabricated parts and materials."

An additional "novelty" of Wyatt's emergency measures was in the form of an unwanted sop-its name, "guaranteed markets." Even though a negligible number of the less practical of the 200-odd prefabricators, who were in business at the beginning of the year, took seriously the Wyatt "targets" and avidly eyed the government guarantee for their product, their more practical and experienced contemporaries well knew the utter impossibility of attaining the production so glibly mouthed by NHA spokes-men. From the outset, they were cognizant of the shortage of adequate plant facilities, the critical materials situation, and other factors which precluded anything like a 250,000 unit production schedule this year.

On these points, Harry A. Steidle, manager of the Prefabricated Home Manufacturers Institute, in a vigorous statement to the American Legion Housing Committee, recently said:

"Two hundred producers of wellengineered, highly acceptable, FHAinsurable prefabricated homes with all the necessary manpower and equipment for the year-round production of 300,000 houses on a single-shift basis are working at roughly 20 per cent of their capacity while certain 'planners' and 'visionaries' of NHA are scouring the country to get big inter-

ests into the business of producing socalled 'industrialized' houses. More than 200 prefabricators do not require financial aid nor guaranteed markets. They are confident that their homes have public acceptability [a fact apparently overlooked by Mr. Wyatt in his frantic efforts to achieve his "targets"—Ed.], FHA-insurability, and that open competitive conditions and mass-production methods will bring economies that will be shared with the buyers. Adherence to this unproven, impractical and visionary program will require complete allocation of certain critical materials."

Moreover, the prefabbers are apprehensive lest the fanfare and propaganda accompanying the Wyatt program will ultimately boomerang and perhaps discredit their small but lusty industry. The record now proves a substantial part of the fears of these serious-minded producers of factorybuilt houses. The following figures, although unverified, are from Wyatt's latest report giving production for the first 9 months of the year:

first 9 months of the year : Beginning with January, when 1,200 units were "shipped," production gradually increased to a peak of 3,800 in July, after which it slackened off because of the insurmountable continuing shortage of materials. As the result, only 24,900 factory-built homes had been produced by the end of the third quarter of 1946, or about 13 per cent of the Wyatt "target," this despite priority regulations, material allocations, guaranteed markets, and all the other drastic Wyatt panaceas.

On the other side of the picture, however, genuine, worthwhile progress can be reported among the better established prefabricators. In the first place, they have ignored the hysteria of the moment and have gone ahead with their plant expansion programs as rapidly as possible. Another gain that can be reported is the focusing of attention on the advantages of prefabrication.

Also on the prefabbers' plus side is that American ingenuity and inventiveness have been brought into full play in the field of prefabrication. Today experimentation is going on full speed in every section of the country. Thus, the manufacturers of prefabricated homes have made lasting, although unspectacular, progress toward their ultimate destination.

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ABOVE, left to right: F. H. Callbeck, FHA inspector, John Cole and Ralph D. Woodruff.

### Pomeroy Organization Finds American Houses Units "an Ideal Solution"

DONALD T. POMEROY

**B** ACK in 1932 when home building was sinking to its lowest level of production in a generation, a national organization for prefabricating houses—American Houses, Inc.—was born. Since then, the years of effort plus the know-how that can come only from actual experience have resulted in the establishment of a unified nation-wide building method. During the war years this method was put to its severest test when over 20,000 units of various types were constructed. While this record is in itself impressive it demonstrated that the product was sufficiently adaptable so that the same method is usable for a single dwelling unit or an apartment, one story or two.

American Houses, Inc., does not standardize design or equipment; as in conventional construction, these features remain at the option and according to the taste of the individual. The basic parts or super-structure of the house are shipped pre-assembled in panels, factory-fitted with doors and windows, complete with hardware. No trick fasteners are used; panels can be quickly and accurately erected by carpenters using only hammer and nails. All lumber conforms to standard dimensions, an important detail when future alterations or additions are considered. Only the *basic* parts of the American House are standardized; their flexibility of use permits a choice as to architectural design, surfaces, colors, composition, room size and arrangements.

The product is sold only through builders or contractors who erect the house on a site as in conventional construction, arrange for all masonry, mechanical equipment, and painting. Because the price to the builder or contractor is fixed he can, under normal conditions, quote within firm limits the final cost of the house to the purchaser. During its fourteen years American Houses has sold to builders from coast to coast and the latter have used the units for developments ranging from a few houses to hundreds on a single site.

One such project is now nearing completion in Syracuse, N.Y. There a group of local business men, under the leadership of Donald T. Pomeroy, of the Pomeroy Organization, have completed their first group of 32 houses, the construction being done by a local firm, Woodruff Construction, Inc.

Late last fall Pomeroy, whose organization is not in the building business but handles all phases of development from land acquisition and planning through financing and management, let a contract for the erection of five houses, as an experiment. The success of these attractively finished dwellings, occupied through last winter, prompted the project of thirty-two and an additional eighty which are now in the construction stage.

The houses have one basic floor plan, with three varying elevations. Additional touches of design, roof color, setback from the street and lot placement are added by John Cole, who is in charge of design and development for the organization. "John Cole," Don Pomeroy will tell you, "adds the charm we want and, because of his familiarity with local taste and desires, dresses them up to appeal to the market."

Each house, with an overall size of  $24 \times 32$  feet, has a living room, dining room, kitchen, two bedrooms and bath, all on one floor, with ample space in the attic for storage, and another bedroom,  $11 \times 16$  feet, to be added later if desired. They are erected on lots  $52 \times 139$  feet and, while not providing garages, make allowance for future construction by running the driveway to the rear line of the house. The houses are basementless, and each is heated by two Coleman automatic gas-fired forced air floor furnaces.

American Houses, from its plant in Allentown, Pa.,

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STREET scene showing Pomeroy houses in various stages of construction. Program calls for lathing and plastering in groups of ten.

220 miles away, ships the houses for the project in panels, by truck and freight car. Each truck carries parts for one complete house, which are unloaded on the site; each freight car contains parts for two complete structures, and these are unloaded at a siding next to Woodruff Construction Company's ample storage sheds and trucked to the site as needed.

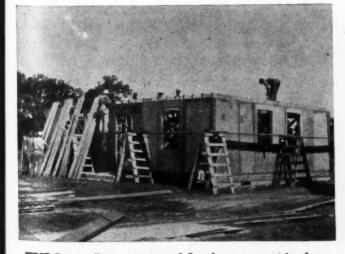
Ralph Woodruff, whose firm is erecting the homes, has been in the general contracting business for more than twenty years and, in addition to the "guinea-pigs" erected last fall, also has erected twenty-five P&H (Harnischfeger) pre-assembled homes in the area. The American Houses are located in an addition to the original Kirschwood tract where, in 1942, Woodruff built sixty-three homes of conventional construction, also for the Pomeroy Organization.

In the present operation, all foundation walls-of poured concrete-were laid first, ready for the panelized units as they arrived. Plans called for the enclosure of ten houses at a time, following which contracts for lathing and plastering on all ten were let and executed while the second ten were being readied. Rocklath is used for the plaster base, in the interest of speed. The job has an exceptional look of "cleanness" about

it, since all parts come from American Houses accurately cut to fit, and there are no loose boards or sawed-off ends of framing lumber cluttering up the tract. Grading, installation of sewers, water and other utilities are all taken care of before any of the panellized parts are placed upon the foundation.

Financing is done by The City and County Savings Bank of Albany. This was the first job in the area under the extended Title V1 of FHA, and Pomeroy has nothing but praise for the district FHA office and its director, Joseph H. Murphy, of Albany. "Those boys went to bat for us and, where procedural regulations stymied them, worked their heads off to clear them up in order that we could get under way," Pomeroy declares. "The same thing has been true of their inspection service; they are always there 'on the button' in order that we may get our inspections cleared and maintain the speed which is the crux of this kind of operation."

Mass production ordinarily makes for montony, but that is far from the case in the Kirschwood tract. In addition to the variations in exterior finish-asbestos siding, clapboards, wood shingles-all planned by John Cole, individual setbacks, variety of front elevations, in shutter and window trim and in roof colors, all add up to create a



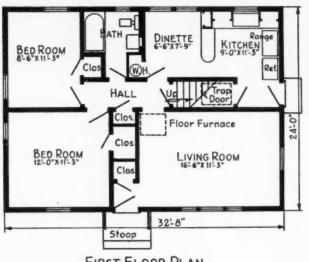
FIRST floor walls are up; second floor beams are set in place.



WOODRUFF firm uses "convenience horses" in place of scatiolding.



ABOVE: One of the Pomercy-American Houses completed homes.



FIRST FLOOR PLAN

harmonious development, in which every house is a distinct and individual unit.

American Houses, Inc., has plants with complete facil-ities for manufacture and distribution scattered throughout the country. They stress that their system causes no dislocation of manpower because local facilities are used and the architect, builder or contractor, plumber, electrician and others are employed just as in conventional construction. A further point made by American Houses is that their construction method has been laboratory-tested to insure flexibility of use, beauty of design and eco-nomic utilization of space. All prefabricated sections have been tested by the U.S. Bureau of Standards.



THIS HOUSE has same basic floor plan as one shown at top.

American Builder, December 1946.



PHOTO above shows assembly of steel flooring in Steelcraft unit.



THIS MODERN, compact kitchen is illustrative of the manner in which the steel and aluminum houses are furnished.



ABOVE picture shows a completed Steelcraft home in use.

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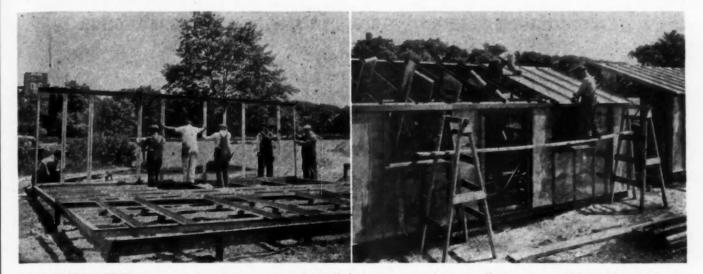
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THESE PHOTOGRAPHS show erected steel framework and installed aluminum panels in the Northwestern prefabricated metal homes.

# **Steelcraft Homes Provide Living Quarters for N. U. Students**

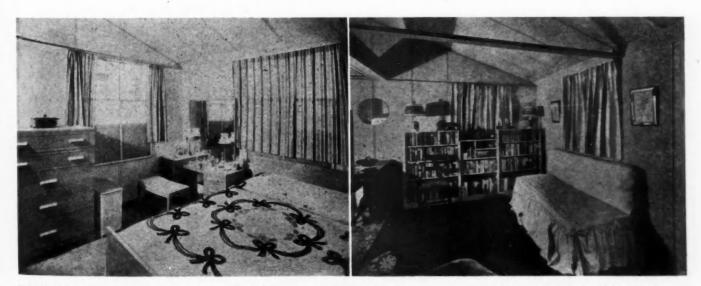
MMEDIATELY following V-J Day, The Steelcraft Manufacturing Co., Cincinnati, conceived the idea that the prefabricated steel and aluminum basic barracks unit they were producing just before the end of the war could be engineered into peacetime housing units. Plans pointed to producing these for dormitories for returning veterans at universities and colleges.

After weeks of study and planning, the former barracks units were revised into standard one- and two-bedroom houses, 18-bedroom houses and 18-bed dormitories. Tools, dies, jigs and fixtures were made and early this year the company began to prefabricate their first steel and aluminum house, believed to be the first of its kind on the American market. Since then hundreds of prefabricated steel houses and other structures have been produced and delivered throughout the United States, many of them to provide homes for veterans at universities and colleges.

As an example, Northwestern University, Evanston, Ill., faced with the largest enrollment in its history and the resulting lack of space in its dormitories, decided to use prefabricated buildings. Seeking early delivery University officials determined upon prefabricated steel and aluminum units which Steelcraft shipped as fast as the buildings were erected by the contract builder, R. C. Wieboldt Co., of Chicago. The entire project, which is now providing housing for approximately 1,000 veterans and faculty members, was completed within 90 days, in ample time for the faculty and students to begin housekeeping in their newly erected prefabs before the 1946 fall term commenced.

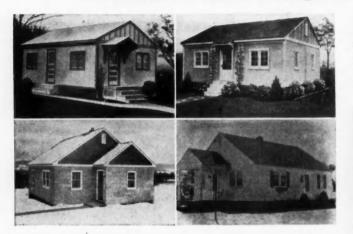
The photographs show actual construction, completed homes and the finished interiors of some of the homes comprising the Northwestern University project. It is to be noted that modern furniture and utilities make these homes attractive and comfortable.

All parts for the Steelcraft prefabricated steel and aluminum homes were packaged in convenient bundles and shipped to the campus grounds from the company plant The interior walls and roof are insulated with  $\frac{1}{2}$  inch rigid insulation which comes in a neutral shade that can be painted, papered, veneered or left without decoration. The panels are joined with batten strips, which give a pleasing effect and break up the monotony of a plain surface. The floor is plywood.



PHOTOGRAPHS above show (left) a furnished bedroom and (right) the living room in one of the Northwestern University homes.

# **Ford Shows Marked Progress in Design and Construction**



TEN years of design progress in Ford Factory-Built Homes. Upper left, a 1936 model: upper right, a product of 1937; lower left, the 1939 version; and, lower right, Ford's last prewar model, built in 1941. A MONG the pioneers in the prefabricated home manufacturing field is the Ivon R. Ford Lumber Co., McDonough, N. Y., whose Ford Factory-Built system of prefabrication dates back to 1935, when Mr. Ford first built and assembled an experimental prefabricated house in his home community. Since that time the sys-



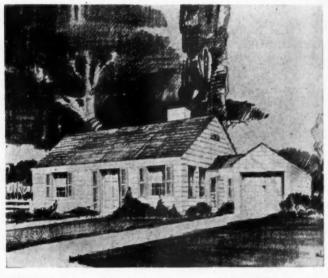
1948 Ford house shown above represents a decade of progress.

# **Develops Metal, Concrete House**

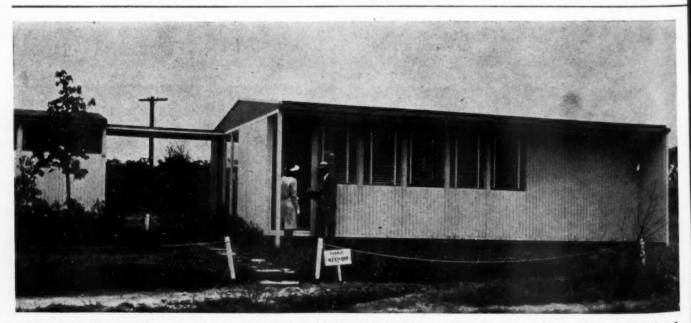
**HIS** is a 'lumberless,' 'nailless,' 'cheaper than wood,' 'steel and concrete' home," said New York architect William K. Dowling, showing *American Builder* the house he produced for N. K. Winston Associates, prominent New York developers and builders.

In explanation, Mr. Dowling pointed out that he used light steel framing and two-inch precast slabs of concrete bolted together for the framework and that the walls, flooring and roof are also of concrete. Exterior walls may be covered with frame or asbestos sheathing or shingles. Inside partitions consist of doubled up plaster construction. Double-hung aluminum windows, equipped with hardware, sash balances and weatherstripping are used throughout.

The heating system, in the house shown to the right, consists of an oil burning, hot air furnace supplying heat through metal ducts and registers. Mr. Dowling plans, however, to use radiant heating in his next model.



SHOWN above is architect's rendering of Dowling-Winston house.



GENERAL PANEL'S "minimum house" of conventional materials, dubbed "B-16" by the government, which will be mass-produced.

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tem has been employed to provide several hundred yeararound homes in Central New York State. And, with these homes all located within a few miles of the factory, it has been possible for the Ford organization to study them in actual use over long periods.

In a Ford Home, floors are built in sections up to 8 ft. wide and 24 ft. long. The finished floor is applied with special screw nails which extend through the sub-floor into the joists. Floors are sanded and finished in the factory except for the final coat of wax which is applied just before occupancy. Walls and partitions are built in panels full ceiling height and room length so that no joints are exposed.

Sheathing and interior wallboard are both glued and nailed to the framework. Doors, windows, trim, wiring and insulation are all factory installed. Ceilings are built in panels 8 ft. wide and 12 ft. long and, like the sidewalls, are fully insulated. Roof panels are 4 or 8 ft. wide and extend in one piece from eaves to the ridge. Panels are fastened together with bolts and lag screws, and roof shingles and siding are applied after sections have been erected, to eliminate the need for battens.

#### RID ADW RVAN RVA

Plan of the house shown at left opposite. Small but compact, with all rooms accessible from a central hall, it represents the utmost in economical distribution of space.

# **General Panel Builds "Moderns"**

**D** UBBED "B-16" by the government, the General Panel Corporation of California will build 10,000 fourroom houses of the type shown opposite by the end of 1947, according to Carl B. Dahlberg, president. They will be manufactured, under license from General Panel Corp., of New York, in the Burbank, Calif., Lockheed factory purchased by the firm from War Assets Administration.

The "B-16" house, a two-bedroom, modern structure, is based on a construction system designed by Konrad Wachsmann and Dr. Walter Gropius, chairman of the school of architecture at Harvard University. Constructed entirely of insulated panel units 3 ft. 4 in. x 10 ft. which lock together by means of a patented device, General Panel houses have considerable structural versatility.

Dimensions of the "Minimum" house (shown in the photo) are: Overall (house only)—30 ft. x 26 ft. 8 in.; garage—10 ft. x 26 ft. 8 in.; living-room—16 ft. 8 in. long x 13 ft. 4 in. wide, to closets; dinette—10 ft. square, including kitchen cabinets; kitchen—6 ft. 8 in. x 5 ft.; master bedroom—13 ft. 4 in. x 10 ft.; bathroom—6 ft. 8 in. x 5 ft. 2 in.; and small bedroom—10 ft. x 10 ft.

# General Houses Announces Expanded Production, Distribution Program



A 1935 General Houses house as it appears today-11 years later.



**D**URING the years prior to the war, General Houses, Inc., Chicago, carried on an extensive program of development and research, and manufactured and merchandised a substantial number of steel panel and steel frame houses similar to the ones shown above and below. With the advent of war the company, established in 1929, turned its attention to the production of prefabricated houses of lumber, suitable for mass production, and is now planning volume output to meet the demands of its dealer organization of 238 franchised outlets.

In a recent announcement, John Cummings Lindop (left in group above), chairman of the board of General Houses, revealed the appointment of Frank M. Roberts (center, above) as president, and the retention of Architect Howard T. Fisher (right, above). Mr. Lindop, nationally known for his building developments in the (Continued to page 156)



SHOWN above is another early version of General Houses homes.

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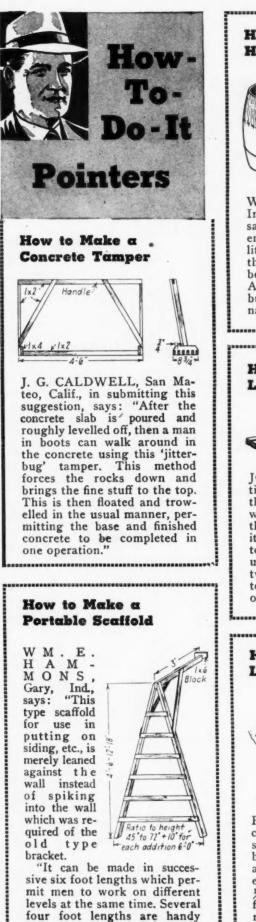
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How to Make a **Handy Nail Bucket** Rospi WM. E. HAMMONS, Gary, Ind., in submitting this idea, says: "Since we have so many empty nail kegs around I do a little work on them and make them into nail buckets that can be carried around like a pail. As shown in the drawing two buckets can be made from one nail keg.' How to Remove Linoleum from Floor JOE TROTTNER, in submitting this idea, states: Loosen the edge of linoleum along the wall for about four inches, then slide a 2x4" piece beneath it. Another 2x4 is placed on top, and then C clamps are used to clamp the linoleum between the 2x4s. It works best to start from the shortest side of the room. How to Make a Self-**Locking Form for Steps** FROM Jacksonville, Il1., comes the following: To make small flights of concrete steps between solid walls build forms as follows: Nail 8" piece on each end of riser, cut 2x2 brace 1/2" longer. Drive wedge tight, fill the space between brace and riser at center, then pour concrete.

# AMERICAN B

# Simplified Detailing Adaptable to Present Day Modes By R. J. Alexander

PLATES D-24 and D-25 of this series of detailed cornice construction, exterior mouldings, and interior trim members, were applicable to the residence of traditional design. This month's plate shows the same construction details and mouldings in a manner that is more in keeping with present day trends.

There has not been a complete casting away of the old established traditional designs of Colonial, English, etc., but there has been an inclining to a more functional type of design. This new type has been referred to as contemporary in some areas, transitional in others. It is referred to in this article as functional. The details, features and characteristics of the design may vary in different localities.

The functional design is featured by a straightforward use of the materials available. Simplicity is emphasized to a marked degree. When properly detailed and constructed, the design has distinction without being burdened with fussy detail and unnecessary frills.

Roofs, generally, are as low as good construction and use of materials will permit. Cornices are constructed as a roof overhang and not as an excuse for elaborate ornamentation. Entrances are likewise simple and functional. Exposed rafter ends of plain design and painted white, contrasting with red brick or buff stone make an interesting combination. A hanging metal gutter or a simple moulded wood gutter is also appropriate.

Stone and brick in broad horizontal patterns for exterior walls, with substantial looking chimneys and fireplaces, are in keeping with this design. Double coursed cedar shingles or wide wood siding featuring the horizontal lines and shadows offer additional suggestions.

Shingles with an exposure graduated from 53/4 in. to 5 in. for the lower third portion of the roof, and the balance from 5 in. to 4 in., will provide a covering where the horizontal emphasis is continued.

Similar design characteristics are used for the interior of the house. Mouldings are designed to solve a problem in the most simple and practical way without sacrificing appearances. Materials, especially wall coverings, are new and varied.

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# N BUILDER'S BETTER DETAIL PLATE

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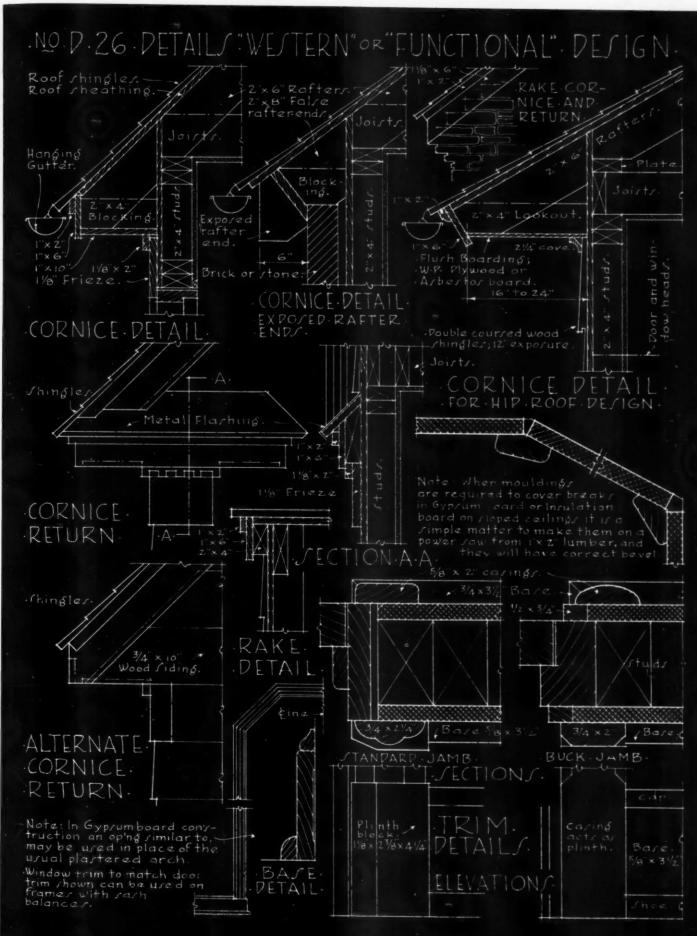
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CHARLES IVERSON wrecking old farm home for lumber to build new structure.



BUILT in 1886, this house provided lumber.

**B**UILDERS generally may be stymied by the shortage of lumber, but not Charles Iverson of Bear Lake, Michigan.

When new lumber was not to be had, Charles Iverson didn't let that stop him. He started to wreck old farm homes and odd buildings, long since abandoned, to get the lumber to build the homes needed in the community.

And he's still at it—and building good houses at low cost.

Irving Johnson's new home is a case in point. Just before he went into the army, he bought an 80-acre farm. The farm house had been built in 1886 by the Starke Lumber Company at a time when this section of Michigan was one of the principal lumbering centers—when the Dynamite Bar at Muskegon was known far and wide as the mecca of the lumberiacks.

Irving Johnson was far-sighted. He asked Charles Iverson to fix up the old house in his absence.

Charlie found remodeling an impossible task. The old house had been neglected too long to make anything of it. But the lumber was as good as when the house was built —the finest Michigan white pine. So after consulting Mrs. Johnson, Charlie got his wrecking bar and went to work.

The old house was torn down, the lumber carefully saved, and when Irving Johnson returned, he found himself the proud owner of a wellbuilt six-room house, completely equipped with refrigerator, range,

electric laundry, electric water system and warm air heating. The house is sheathed in asphalt felt and insulated throughout. The foundation is concrete block, and the green, thick-butt asphalt shingle roof, offering pleasing contrast with the white clapboard sidewalls, is laid four inches to the weather and tied firmly to the roof deck with six nails in each strip shingle.

The only new lumber used was 100 lineal feet for the water table at a cost of \$26.

Charles Iverson then built a new home for himself with the lumber left over from the Johnson home, plus some obtained from razing an old warehouse.

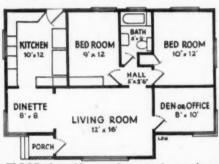
On the job, where he was tearing down another old farm house where he shortly will erect a new one on the old foundation, Charles Iverson said, "There is nothing unusual about what I'm doing. It was either get lumber in this fashion, or get out of business. And I just didn't feel I could afford to do that. City builders may not have the same chance I have to keep building, but there's plenty of good lumber scattered all over the country in dilapidated farm buildings—enough to keep lots of us going."

But even Charlie couldn't beat the electric company. While the Johnson house is completely equipped with electrical servants, the highline is still a mile away from the house. Shortages of materials, the power company says, prevent extending the line.





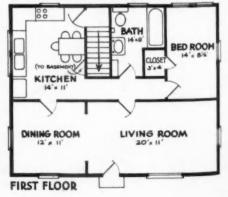
LEFTOVER lumber from the Johnson home helped build above house for Chas. Iverson.



FLOOR plan of Iverson home is shown above.



NEW Johnson home is simple, compact. There are two extra bedrooms on second floor. Roof is of thick-butt, asphalt shingles; asphalt felt over sheathing acts as insulation.



"Rock of Gibraltar

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It takes rugged design ... rugged materials ... rugged construction ... to make overhead type doors that can take years and years of ups and downs. That's why so many architects specify Ro-Way—the doors that are *rugged* through and through. Solidly built of quality materials, only Ro-Way offers these

# 5 EXTRA VALUE FEATURES

Friction-Reducing Track
 "Double-Thick Tread" Track Rollers

Tailor-Made" Power Springs

"Crow's Foot" Outer Bearing Support

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5 Parkerized Rustproof Hardware

All this extra value—at no extra cost! It all adds up to satisfied clients. So isn't it smart business always to specify Ro-Way? Try it on your next job, and see for yourself. Write for complete new catalog—no obligation. See our catalog in Sweet's. Sales and installation service grailable patienwide.

ROWE MANUFACTURING COMPANY

There's a Rollay for every Doorway!

716 Holton Street

Galesburg, Ill., U. S. A.

D is the word for

FAD

YPE DOORS

# CUT BUTT MORTISES 6 times faster...100% accurate

Just one job can easily pay you back the small cost of the Stanley-Carter Hinge Butt Router and Templet. Cuts a smooth, perfectly flat butt mortise at least six times faster than hand operation . . . up to 75 doors and jambs a day. Doors hang perfectly with uniform opening on all sides. No recutting, shims or hinge driving. The job is perfect . . . and permanent.

Depth of cut adjusted by turning motor in base ... one turn for  $\frac{1}{16}$ ", half turn for  $\frac{1}{32}$ " and quarter turn for  $\frac{1}{64}$ ". Templet fits any size door and reverses to fit jamb.

There's extra money for you in this Stanley-Carter Hinge Butt Equipment. Write today for complete information. Stanley Electric Tools, Stanley-Carter Sales Dept., 133 Elm Street, New Britain, Connecticut.

# CARTER (STANLEY) TOOLS



# A Wish For Christmas

A home for every man. A home wherein he can find rest and contentment—not a temporary place to live, but a real home—that's our wish. It's a job for all of us during the coming New Year, and we at Tylac will contribute our share.



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ontemporary ... for years to come

GLEAN contours and faultless performance have won renown for the Case T/N\* Water Closet as a major advance in design. It is a free-standing, one piece non-overflow fixture. Equally well adapted to old and new surroundings, and to the space restrictions of today's and tomorrow's buildings, the T/N is now in rapidly expanding production. Distributed nationally—see your Classified Telephone Directory. W. A. Case & Son Mfg. Co., Buffalo 3, New York. Founded 1853.

Foremost in demand... the Case 1/N

118

American Builder, December 1946.



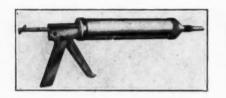
**NEW PRODUCTS Offered by Manufacturers** 

AB12614

# CAULKING GUN

AB12601

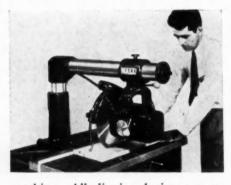
Precision-made by highly skilled mechanics, the Beaver caulking gun uses cartridges or bulk compounds without changing any parts. Nozzles, machined from steel bar stock for accuracy and strength, are threaded on to avoid bayonet joints which wear and come loose.



Other special features are positive ratchet drive and an extra heavy gauge barrel. Its perfect fitting parts make operation easy. This professional tool, guaranteed to give lifetime service, is manufactured by Western Reserve Mfg. Co., 2710 East 73rd St., Cleveland 5, Ohio.

#### NALL RADIAL WOODWORKER AD12611

Simplicity and ease of operation are the ultimate aims in the design of the new radial arm woodworking ma-chine developed by Equipment Engineering Co., St. Charles, Ill. All con-trols are located at the front of the



machine. All aligning devices are enclosed so there is no interference from sawdust or other foreign matter.

The carriage is something new in radial saws. The mechanism travels on three endless chains of steel balls thus eliminating expensive roller bearings. Another unique feature is that the same lever used to clamp the machine in its various adjustments is also used for releasing the tapered finder pins.

Elevation of the machine above the table is accomplished through a set of spiral miter gears (also totally en-closed) operated by a crank conveniently located at the front of the table.

The frame of the machine is of welded MORTAR AND PLASTER MIXER pressed steel, cross section thus eliminating the undesirable (or twisting) torsional movement usually encountered in the operation of this type of machine.

#### NEW SHOWER HEAD

New product of the Pagliuso Engineering Co., 113 W. Harvard, Glendale 4, Calif. is the Peco Shower Head. Approximately  $3\frac{1}{2}$  inches in length and  $1\frac{1}{2}$  inches in diameter, made of solid brass, precision machined and finished in durable high lustre chromium, this compact unit is designed to fit 1/2 in. N.P.T. outlets.

Conveniently located above the dif-fuser is a large knurled adjusting sleeve which controls a full range of

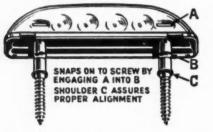


spray adjustment from soft relaxing spray to invigorating needle point. Because the serrations are automatically cleaned by opening and closing the adjusting sleeve, there is no cloggine and no distortion of the spray. Another important feature is that the control mechanism is entirely free from contact with water and thus not subjected to corrosion and lime deposit. The manufacturer states prompt delivery is assured.

#### **NEW SASH LIFT**

#### **AB12603**

The new sash lift designed by the Ideal Brass Works, 250 East Fifth St., St. Paul, Minn., has the unique feature of being readily removable for painting sash without disturbing screws or alignment. When it is in place, screws do not



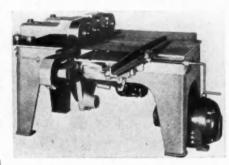
show, and the lift is sturdy and attrac-tive. To install, snap lift over two specially designed screws; to remove, merely pry off with a screw driver. The sash lifts are finished in brass, bronze, aluminum, steel and stainless steel.

#### AB12613

A small mortar and plaster mixer aptly named the Mixmortar and operated by electric or gas engine power will be introduced to the trade early in 1947. Product of the Northwest Tube & Metal Fabricators, 2658 S.E. Tenino St., Portland 14, Ore., this mixer using sand, lime putty and cement can make three cubic feet of perfectly mixed mortar in four minutes, and, to a base of ready mixed mortar, will mix cement to five cubic feet of mortar in five minutes. It is easily loaded through the loading guard on open top and easily unloaded by lowering the pouring lip over the edge of the wheelbarrow or mortar cart run alongside it.

#### GENERAL PURPOSE SAW AB12606

A new general purpose saw, for use wherever quality workmanship and high production ripping and sizing work are required, has been introduced by Muskegon Machine Co., Newburgh, N.Y. Built on an exceptionally sturdy one-piece



prefabricated steel main frame, it will edge or size panels from  $1\frac{1}{2}$  to 37 inches in width. Wider stock may be handled with an extension to the carriage. A twelve-inch saw will rip stock up to 2 inches thick.

#### JIFFY SKETCH PAD

AB12612

A scale drawing pad on which properly proportioned drawings can be made without use of ruler, drafting board or T-square has been intro-duced by Jiffy Sales Co., 1900 Euclid Avenue, Cleveland 15, Ohio. The Jiffy Sketch pad contains 75 sheets of high quality tracing tissue enclosed within a cover jacket that consists of four cardboard flaps, on three of which are printed various scales. By simply folding back the cover flap and placing one of the tissue sheets over the scale that is desired, an accurate scale drawing is made.

(Continued to page 120)

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# Modern Store Fronts for the entire neighborhood

SUN DRUGS

THOROFARE

pay off in profitable jobs for you!

Today throughout the country, Chambers of Commerce committees, civic groups and community planners are giving much thought to the "Modernizing of Main Street." They know what this means in civic pride, prestige and the all-important consideration of "keeping business at home."

Chambers of Commerce Back This Idea. By planning together and remodeling together, local merchants are finding that business which formerly went to the larger shopping centers nearby is being attracted to them. So, the enthusiasm is there-your market for really worthwhile modernization jobs in groups is waiting for you. Why not go after it-strong! And remember, too, that this subject is given a lot of push by our consistent program of modernization advertising in twenty-one leading retail magazines. Merchants are impressed with the fact that they can attract more customers, sell more goods, make more profit by modernizing their stores — inside and out — with Pittsburgh Glass and Pittco Store Front Metal.

Your Leadership Needed. Let us suggest that you tie-in with your local civic fathers and other planning groups—check your local merchants and architects. The harder you go after this idea of group modernization the greater will be the impetus behind the move-

b- ment. And the greater will be the number of jobs coming your way.

"MODERNIZING OF MAIN STREET" means more profitable jobs for you. It means greater civic pride . . . increased business for the local merchants. This illustration of group modernization of stores in Mt. Lebanon, Pa., is a fine example of what can be done to bring beauty to the community and really worthwhile modernization work to you. Architect: Thomas B. Gormer.

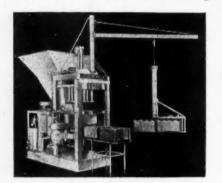
> Let Us Help. If you need help in solving any modernization problem connected with the application of Pittsburgh Products, feel free to consult our specialists. Their wide experience and knowledge, through thousands of successful installations all over the country, are at your disposal.

Send for Free Book. Right now, fill in and return the convenient coupon below for your free copy of our booklet containing data and illustrations of a wide variety of Pittsburgh Glass and Pittco Store Front Metal jobs. You shouldn't be without it.

"PITTSBURGH" STORE FRONTS AND INTERIORS	Pittsburgh Plate Glass Company 2479-6 Grant Building, Pittsburgh 19, Pa. I want to go after the idea of group modernization in my territory. Without obligation on my part, please send me a free copy of your booklet, "How Eye-Appeal—Inside and Out—Increases Retail Sales." Name Address CityState
(24 G)	for Quality Glass and Paint IEGLASS COMPANY

RE CREAT BARD'S PELICAN

The new Lith-I-Block machine is an automatic, plain pallet, vibrating stripper of sturdy, yet simple and compact design. Producing two 8-inch blocks per cycle of operation, the machine has a rated capacity of 480 eight-inch blocks per hour. All standard sizes of block as well as brick and chimney block can be produced on this machine. By merely interchanging the hardened abrasion resistant mold box liners and cores, the changes to various sizes are accomplished rapidly. The machine discharges pallets with finished units on a frame from which the pneumatic off-bearing device removes two pallets at a time, thereby reducing the cycles of operation for the off-bearer by one-half. Maintenance is reduced to a minimum through



the use of air for the automatic pallet feed, the stripper head, the pallet support and the feed draw. This feature also contributes to the machine's silent operation. It is a product of the Lith-I-Bar Co., Holland, Mich.

AB12610

#### NEW TYPE THERMOSTAT

A compact, gracefully patterned and smartly finished room thermostat was recently introduced by Cam-Stat, Inc., 2037 South La Cienega, Los Angeles, Calif. It extends less than an inch from the wall, and is easily and quickly installed to a conventional conduit box.



No electrical parts are exposed underneath the screen, and all current-carrying parts are enclosed within the bakelite housing behind the wall plate. It is suitable for either line voltage or low voltage currents with a carrying capacity of 1500 volt-amps, ½ h.p., and 125 volt-amps pilot duty at 120 through 24 volts A.C.

#### AUTOMATIC WINDOW LOCK AB12609

A new automatic window lock, which provides locked windows all the time, whether open or closed, has been developed by The Perfect Manufacturing



Co., 137 North 59th St., Seattle 3, Wash. It allows for ventilation with safety against window prowlers and prevents children from opening windows and falling out. Made of reinforced steel, attractively cadmium finished, this window lock is easy to install. It comes attached to a two-color individual display card, complete with screws and instructions, packed one dozen to counter display box.

#### QUICE-ACTION SCAFFOLD UNIT AB12602

A new type scaffold unit, of welded, tubular-metal construction, is being manufactured by Bil-Jax Manufacturing Co., Swanton, Ohio. Consisting of only five light-weight, compact, easy-to-handle parts, a standard unit with accessory pedestals provides flexibility of adjustment equal to five different sizes of other makes of scaffolding. Proved in actual platform use to withstand heavy loads, these units are applicable to unusual scaffold needs, and easily adjust to difficult applications such as stairways and narrow hallways.

#### WATERPROOF WALL SURFACING AB12604 Tuffalt, Inc. of Pittsburgh, Pa., is promoting a new use for its waterproof textured wall surfacing—Tuffalt RB. By combining two separate operations of

Tuffalt RB a finish resembling cement, plaster, or stucco in both texture and color is achieved. Such finishes are obtained by applying a second coat, above grade, that has both texture and color, to the first coat of jet black. A surfacing material for exterior walls and founda-

## American Builder, December 1946.

tions, Tuffalt RB resists moisture, salt air, soil acids, and salt water. It will not flow or run from a vertical surface at extremely high temperatures or become brittle at low temperatures. It adheres securely to dry or damp surfaces, even to moist mortar. Neither heat nor skill is required to apply Tuffalt, which can be put on with a broom, brush, trowel, or spray.

#### QUICK-DRYING FLOOR FINISH AB12605

Lignophol quick-drying, a new preservative and finish recently put on the market by the Building Products Division of L. Sonneborn Sons, Inc., 88 Lexington Ave., New York, is said to penetrate, preserve, seal and finish all types of wood floors in one application. Only fifteen minutes are needed for drying time, then the area treated can be rubbed down. In addition to preserving the wood, Lignophol resists abrasion, seals the surface, and does not chip or crack. It is ideal for residential and other normal-service floors.

#### CABINET SINKS

AB12607

Am

New and unique is the cabinet sink, product of the Robot Appliances, Inc., Detroit, Mich. The duo-sink adds double depth to the sink bowl. It can be used for rinsing dishes or, because



it is removable, it can be used for a number of kitchen chores. A portable electric clothes agitator converts the sink bowl into an auxiliary clothes washer for laundering two pounds of dry clothes at a time.

#### CHECK NUMBERS AND MAIL COUPON FOR INFORMATION

American	Builder,	105	West	Adams	Street,	Chicago	3,	Illinois
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AB12602	AB1	2605	AE	312608	AB126	11 Al	B1261	4
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When you address inquiries direct to manufacturer concerning a new product described here, please mention that you saw it described in American Builder.

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# **Home Buyers Appreciate** This Better Type of Heat

Give your new homes prestige and extra value by installing a Chrysler Airtemp Winter Air Conditioner. It's a better type of heat. Fully automatic, it filters and warms the air-with just the right amount of moisture added-and gently circulates it throughout the house.

Turn to Chrysler Airtemp for America's most complete line of home heating equipment. There's a size for every home and a model for any type of fuel-gas, oil or coal. Specify Chrysler Airtemp Winter Air

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Conditioners, gravity furnaces, boilers for steam, hot water or vapor systems. In every line you'll find a Chrysler Airtemp product that is ideal for your requirements.

And behind each product stands Chrysler Corporation, world famous for quantity production and engineering skill - your assurance of high quality at low price. Chrysler Airtemp equipment is definitely a modern sales feature for builders. Write today for full details.



BOTH COOLING AND HEATING

Another great Chrysler Airtemp product for your new homes is the year-around Air Conditioner which heats in Winter and cools in Summer.

REFRIGERATION

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AIRTEMP DIVISION OF CHRYSLER CORPORATION DAYTON 1, OHIO

In Canada: Thermo-O-Rite Products, Ltd., Toronto

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COOLING



sold, with nary one complaint! The reasons are solid. Thermaflo is constructed of heavy steel plate. Bends are reinforced. Thermabar support, 3 inch steel stiffener on inside wall (see "A"), prevents warping of plate.

Thermabar supports on front of -> plate (see "B"), act as stiffeners and keep burning wood off wall, thus assuring good draft while also preventing warping. A triumph of modern engineering, Thermaflo climaxes its advantages by baffling the incoming cold air directly behind hottest part of firebox.

INSIDE

VIEW

There's nothing finer than ...



Division of Eastern Connecticut Welding Corp. **New London** Connecticut

# **Catalogs** and **HOW-TO-DO-IT INFORMATION**

283-VIBRATING CONCRETE BLOCK MACHINE-is the subject of a two-color descriptive pamphlet by J. W. Appley & Son, 831 Ninth St., North, St. Petersburg, Fla. Pictorial content features the machine and the eight block sizes it produces, while the text covers specifications and methods of operation.

284-METAL LATH SPECIFICATIONS-prepared by the Metal Lath Mfrs. Association, Engineers Bldg., Cleveland 14, Ohio, are now available in the 1946 edition. In 31 pages the book gives new and up-to-date information on usages and applications of metal laths and specific details on 21 different building services where metal lath products have proved their worth.

285-WESTERN PINE CAMERA VIEWS-is the title of a 28-page booklet devoted exclusively to various examples of how Western Pines are being used to bring new sparkle, striking beauty, and warmth to homes. Through the use of photo-graphs, the book, starting with the exteriors, features a room-by-room tour of several different types of homes in which Western Pine contributes toward livability and charm as well as durability and economy of upkeep. Prepared by, and available from, the Western Pine Assn., Yeon Bldg., Portland 4, Ore.

286-SHINGLE STYLE GUIDE-A new booklet just released by The Barrett Division, Allied Chemical and Dye Corp., 40 Rector St., New York City, describes and effectively illustrates in color various shingle styles and colors. Besides featuring numerous full-page close-up views of houses roofed with Barrett's shingles, the booklet also gives pertinent information on other Barrett building products such as rock wool insulation, roll roofings, and built-up roofing.

287-THE ZAGELMEYER SYSTEM-of molding and casting con-crete blocks is covered at length in a folder published by the Zagelmeyer Cast Stone Block Machinery Co., Bay City, Mich. Opening with a lengthy comparison of the Cast-stone system versus the "dry-tamp" system of making concrete blocks, the pamphlet goes on to feature illustrations of the blocks in the process of manufacture, and illustrations featuring the adaptability of the blocks for construction purposes.

288-GLUES: RESIN, CASEIN, SOYBEAN-Their laboratory development, their importance to the building industry, their general specifications, and suggestions for their specific application are topics covered in a booklet available from I. F. Laucks, Inc., 911 Western Ave., Seattle 4, Wash.

# SERVICE COUPON-CLIP and MAIL to CHICAGO

Readers Service Department, American Builder,

(December, 1946)

105 W. Adams St., Chicago 3, Ill.

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.

#### The new Mueller Climatrol Type 101 Gas-Fired Gravity Furnace: 2 sizesmaximum B.t.u. input 90,000 and 135,000. AGA approved for operation with natural, mixed, or manufactured gas, liquefied petroleum gas, and at high altitudes.

Announcing-

# The New Mueller Climatrol Type 101 Gas-Fired Gravity Furnace

Provides clean,
 convenient heating with
 up-to-the minute
 efficiency for your
 "small home" clients

The new Climatrol Type 101 Gas Gravity Furnace gives your clients the true indoor comfort they demand today. Designed for gas, it furnishes clean, dust- and dirt-free heat. Automatic thermostat-controls maintain temperature at a comfort level. Burner, heat exchanger, and controls are designed for maximum efficiency and economy. The attractive styling and dependable performance of this new furnace win hearty approval of home owners. You can recommend the new Mueller Type 101 with confidence and pride, for the many small-home projects within its capacity range. Write for complete information.

L. J. Mueller Furnace Co., 2016 W. Oklahoma Ave., Milwaukee 7, Wis.



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OWAL WARM AIR NEATIN



All aluminum castings. Disengaging handle at 4' height for easy rewinding.



should be ready to sell this useful,

new appliance.

# American Builder, December 1946.

#### Manufacturers Organize Building Products Institute

**R**EPRESENTATIVES of 200 companies and associations engaged in the manufacture of building materials and equipment have formed a new factfinding and economic research organization to be known as the Building Products Institute.

Douglas Whitlock, formerly chairman of the advisory board of the Producers' Council, was elected chairman of the group. In announcing the formation of the institute, Whitlock stated that other manufacturers and associations interested in the construction industry will be invited to membership in the organization.

"The purpose of the institute," Whitlock said, "is to assemble, analyze, and disseminate facts about the production of building materials and equipment and about the progress of construction, including housing."

The institute also will analyze and make recommendations with respect to proposed legislation affecting the construction industry and will cooperate with other branches of the industry in preparing recommendations designed to stimulate a maximum volume of construction, to lower the cost of building, and to stabilize construction activity.

In addition, the institute will study the effects of existing federal controls under which the building industry now operates.

Emphasis will be placed on the collection of facts and figures with which to check and verify statistical information released by various federal agencies with respect to construction trends and activity.

The services of nationally known consultants will be retained. Miles L. Colean, former assistant administrator of the Federal Housing Administration, will be the institute's economic consultant.

The offices of the institute will be located at 1756 K Street, N. W., Washington 6, D. C.

## New Security Plan for G.I. Home Buyers

**P**ROTECTION of families of G.I. home buyers is guaranteed in a new service instituted by Allied Building Credits, Inc., of St. Paul, it was announced recently by W. A. King, president.

Under provisions of this service, known as the G.I. Home Security Plan, a continuation of monthly payments on the home is guaranteed in the event of the death of the veteran. Full payments, including principal, interest, taxes, hazard insurance and all other portions of a normal monthly payment, are made during the critical period of family adjustment following the death of the mortgagor.

To put this plan into operation, arrangements are made between Allied Building Credits, Inc., and approved home builders throughout the nation. All veterans under fifty-five years of

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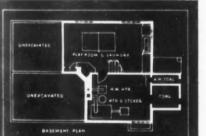
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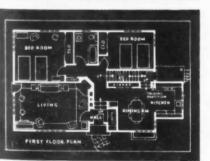
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- INITIAL COST ECONOMY. A hand-fired coal furnace is the least expensive of all central heating plants. A U T O M A T I C HEATING. The cost of a stoker-fired coal fur-nace is no greater than the cost of a good in-stallation using any other fuel, over a period of time... economy in cost of fuel is the saving.

# **BASEMENTS BUILT** FOR MEAN BETTER LIVING

HEATING PLANT

It's easy to build homes on These have a Easy Street. pleasing variety of appearance. All have the same first floor plans, plus identical half-basements designed for modern coal heating plants . . . making excavation easy for the builder and payments easier for the buyers!

BIN

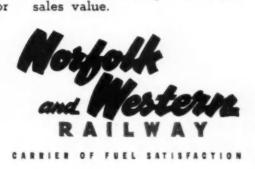
This basement plan provides an ample, well lighted play-room-laundry at less than one-third of the cost of equivalent space on the first floor. The stoker-fired coal furnace, which makes heating costs less in the long run, is located for

PLENTIFUL FUEL SUPPLY. We have a three thousand year coal reserve. Other fuels may be exhausted while your building is still relatively new.

FULLY AUTOMA-TIC HEAT The ulti-mate in cleanliness, safety, comfort, con-venience and economy, is a bin-fed, ash re-moval, coal-burning stoker — the cost is little more than a regular stoker.

CLEAN, SMOKE-LESS FUEL. Coal to-day is sized, cleaned, and dustproofed at the

CONVERSION POSSIBILITIES A conversion burner can be installed economi-cally in a coal furnace. The reverse is not pos-sible. Be safe ... provide for coal. V



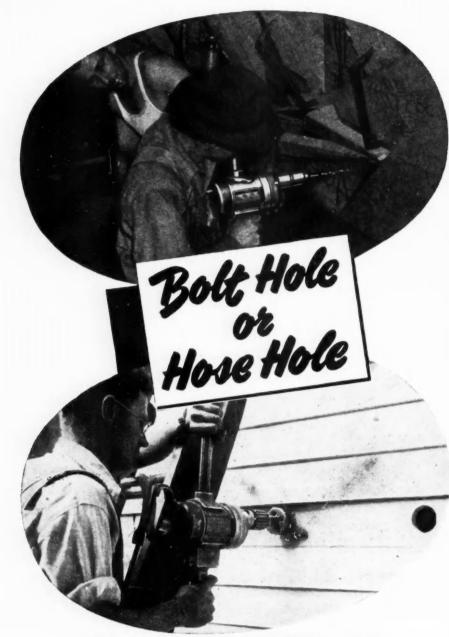
easy access and a minimum of operating effort. Economical houses with basements like these are the kind of homes our veterans are looking for.

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When you design or build, remember a coal heating plant is the only installation that can be converted to all other types of heating - play safe, provide coal storage space and chimneys adequate for any fuel. Coal is economical, safe, clean, quiet, odorless and abundant . . . basements built for coal mean better living and better



# You can make BOTH with this ONE electric drill

Buy just one Stanley Electric Drill and get two hard-working tools...a drill for wiring, small pipes and bolts...a hole saw for insulation hose, heating and other large openings. Interchangeable in a matter of seconds.

Electric drill sizes... $\frac{1}{2}$ ",  $\frac{5}{8}$ " and  $\frac{3}{4}$ ". Hole Saws to cut hole diameters from  $\frac{3}{4}$ " to  $\frac{31}{2}$ ",  $\frac{7}{8}$ " deep. Write for folder on complete line. Stanley Electric Tools, New Britain, Conn.

# DRILLS, SAWS, HAMMERS, GRINDERS, DISC SANDERS



### American Builder, December 1946.

age who purchase homes from such dealers automatically come under the provisions of the G.I. Home Security Plan. The cost of this protection, which on the average amounts to but a few cents a month, is included in the monthly payments on the home. Plans are under way to make this service available at a later date to other home owners.

# National Radiator Sponsors Course in "Heating Salesmanship"

AS a result of an industry-wide study to determine the most practical approach to the training problem, a real training course in "Heating Salesmanship" has been developed by The National Radiator Co., Robert S. Waters, president, has announced. The course will be made available to contractordealers and wholesalers on a non-profit basis.

LaSalle Extension University, Chicago, was selected as the source of the training. Application for enrollment should be sent directly to the Sales Training Dept. of the firm at 221 Central Ave., Johnstown, Pa., or given to an NRC Heating Division Sales representative. The actual training will be sent to the enrollee from LaSalle University, together with full instructions. A brochure describing the course in detail is available from The National Radiator Co.

The course marks a most important development in the merchandising of heating products. It is designed to aid the heating contractor-dealer to effectively reach the market for radiant heating equipment being created by modernization, as well as new housing. DC

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# Oklahoma Home Show Draws 30,000 Visitors

THE Greater Oklahoma Home Show held in Oklahoma City's Municipal Auditorium, October 19 through 27, was the first show of its kind in Oklahoma since the war. Pioneering in the postwar era, directors of the show staged a successful show, both financially and otherwise, despite various material shortages that now hamper the entire home building industry.

Approximately 30,000 persons passed through the auditorium halls to witness 85 booth displays, a stage show and a full-sized, completely furnished home constructed on the floor.

A miracle of construction was the display home built in the auditorium. Completed in only six days after it was started, that alone makes it a marvel of construction and an example of complete cooperation.

Surely, this breakneck construction speed would not have been possible were it not for the complete cooperation of builders, materials dealers and all hands involved. Plans were made weeks in advance and the materials needed were assembled and ready.

The American Institute of Architects furnished a display which presented home designs that had been dormant on eal

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DONE EASIER AND

"The Machine Experience Built"

A FEW OF MANY OPERATIONS

FASTER

Here it is

CROSS CUT—True, accurate, cross cuts are assured on the NALL. The positive indexing and locking of the arm, square to the fixed guide, makes every cut a PRECISION.cut.



MITER-Accurate miter cuts in any positions are assured by a calibrated scale and positive in-dexing at 0°, 45°, and 90° The rugged internal lock prevents any arm movement.



THE

NALL

ON

NALL

1200

**RIP**—The fast change of the motor to a position parallel to the guide and the rigid locking assures true ripping without blade bind or burn. scale measures the width of rip without the use of a rule



BEVEL MITER-The Motor can be tilted to any position and locked rigidly. A calibrated scale on the motor and indexing at  $0^{\circ}$ , 45° and 90° assures accuracy. The arm is then placed in amiter position for true combination bevel miter cuts.

ST. CHARLES, ILL.

# Mell ... In Design ... In Construction In Performance

THROUGH close personal contact with thousands of wood-All you need do is stand in front of the NALL and make the

**C**woelker

changes from one operation to another without ... bending ... stretching ... or climbing. Then you will understand

what we mean when we say:

The NALL is Easy to Operate : Each adjustment is within easy reach from the operation point of the machine. Each of the Mitter, Bevel and Rip adjustments are ONE hand operated because the indexing and the locks are combined in one simple mechanism.

The NALL is Simple: No complicated adjustments. Although each index and lock is old in principle, they are adapted for the first time to Radial Arm Machines. The carriage principle (rides smoothly on an endless chain of balls) dates back to 1896 and has been used successfully e /er since where frictionless reciprocal motion is needed, but this is the first time it has been applied to Radial Arm Machines.

The NALL is Accurate: This is not an idle claim. NALL accuracy originates in the factory. The NALL is made in a new plant of 100,000 sq. ft.—a plant which spe-cializes in NALL production. The NALL adjustments are so simple anyone can loosen a cap screw or two and align the machine in the matter of seconds . . . if it ever becomes necessary.

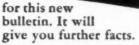
The NALL is Versatile: It will perform every operation possible in the best of other Radial arm machines-and it will do them much faster because the NALL is EASY to OPERATE.

The NALL is Sofe: The guard can be adjusted with one hand. The Kick Back is curved to the shape of the guard so when in cross cut position it does not "jab" its way into the operator's mid section. The Kick Back need never be removed for any operation... and it will not rattle. NALL accuracy also assures safety.

The NALL is Rugged, Yet Lightweight: Nall has a table more strongly reinforced than any other small machine. The steel, ground, polished and chromium plated column and arm; the aluminum yoke, motor housing and guard with steel inserts makes the machine more rigid yet lighter than other Radials.

e at so little cost!





128



LEGION UTENSILS CO.

40th AVENUE & 21st STREET

Long Island City 1, N.Y.

their boards during the war period. Visitors got a look at their homes of the future.

Many more displays were on exhibit, presenting the very latest in home appliances, fixtures and building materials. Such new developments as a window screen that kept sunlight out but allowed air and daylight to enter, were on exhibit at the show. Many other new appliances were also exhibited.

A stage production, which was in keeping with the dignity of the show, was presented twice a day in the after-noon and evening. This portion of the show attracted tremendous crowds and was a pleasing feature of the show.

Officials of the show have announced that it was a complete success in every way. Exhibitors on the floor were able to show their goods to thousands of people, and they made many sales of their products.

The show will probably be an annual affair, growing larger and better each In future years, building materials vear. will be more plentiful and as a result there will be more to show.

## **Legion Housing Committee Conducts Hearings in** Washington

DURING the week of Nov. 3 the American Legion Housing Investigating Committee, which was appointed at the national convention in San Francisco, met in Washington and conducted hearings. Both industry and government representatives appeared before the committee.

According to reports, the industry representatives were accorded cordial receptions and there was every indication that the Legion was not being misled by public housing propaganda aimed at them. At one point a public housing advocate, who preceded the industry representatives, claimed that more housing was being built under the Wyatt plan than builders had predicted. One of the Legion committeemen promptly produced a series of charts showing what

a failure the Wyatt program really is. Ivan Carson, chief of the OPA Rent Division, was asked how rent ceilings on new homes were calculated. He admitted that he did not know. He also admitted he did not know what constituted a fair return on rental property. He was unable to tell why there is a housing shortage or when the shortage might be solved. Carson was asked by one of the Legionnaires if he knew anything of the history of rent control in other countries and admitted he did not. Finally one of the Legionnaires, apparently not impressed by Carson's qualifications to manage the Rent Control Law. asked him to outline his qualifications. His only answer was that he had been in OPA four and a half years and knew all about it.

After hearing all the testimony, the Legion Committee was due to report its findings and make recommendations to the American Legion Executive Committee late in November.

American Builder, December 1946.



MAKE PRINTS . . BLUE PRINTS .. PHOTOPRINTS in 1/5 the time -saves up to 80%

WHY delay important work waiting for blueprints, black-and-white prints and photoprints, black-and-white prints and photoprints—when you can make them in your own office or plant, in less time, at less cost? Use the TORNADO Duplicator, the modern device that duplicates anything!

Reproduces quickly, accurately, economically—drawings, tracings, documents, letters, etc. Reprints documents, letters, etc. Reprints up to 24" x 34" on a 24x36 sheet, or makes several smaller prints in one operation. Anyone can oper-ate. Takes little space. The modern, low-cost way to make prints of anything!

Request complete details and free demonstration. BREUER ELECTRIC MFG. CO. 5126 N. Ravenswood Ave., CHICAGO 40, ILL.

## What Makes Prefabrication **Business Grow?**

(Continued from page 104)

studs and rafters from \$300 to \$90 for a 30,000 foot carload of lumber; cut waste from 10 per cent to less than 1/10 of 1 per cent; and decreased handling costs by 50 per cent.

"Three Walker-Turner radial saws, equipped with 3 h.p. motors, were set on channel beams on a 40-foot roller conveyor table which reached to the railroad siding. Lumber moves from the car directly to the conveyor table. The two outer saws are moved and set by control handles placed at both ends of the table. A turn of the handle moves and sets the saws exactly on the mark to 'within a hair.' Changeover from one job to another is accomplished in a few minutes.

With this setup, three 16 foot 2 x 4's, for example, are passed from the car to the conveyor table at one time. The saws are set and three cuts made simultaneously, producing six 6 ft.  $67/_8$  in. studs and three 2 ft. 10 in. studs in one operation.

"Thus," Mr. Chandler concluded as we walked back into his office, "you see what I mean when I say that good management, good men and good machinery are all essential to pioneer with profit-and later on meet all comers with quality, speed and price."

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# October Cover Designed by **Richard B. Pollman**

IN the October issue of the American Builder the ranch house used on the front cover and in the story on pages 84 and 85 was designed by Richard B. Pollman, Detroit, Mich. His name was omitted from the copy.

Mr. Pollman has just recently released a new plan book called, "Designs for Convenient Living." In addition a 1/4" scale, full color, cardboard model of each of the homes shown in the plan book has been prepared, and may be purchased for a nominal sum. These models come knocked down and are placed in a large envelope with a picture of the home on the front, and a floor plan shown on the reverse side. This material can be obtained through the Home Planners Incorporated, General Motors Building, Detroit 2, Mich.

# **General Panel Houses to Be Distributed on West Coast**

ENERAL Panel Corporation of New York has entered into an agreement with Celotex Corporation for West Coast distribution of General Panel houses, according to George E.

\* \* \*

Swenson, assistant to the president of Celotex Corporation. At the same time, Swenson's

election to the board of directors of General Panel of New York was announced by Konrad Wachsmann, president of General Panel.

An executive of Celotex Corporation for 24 years, Swenson became assistant to the president in 1940, after 18 years as sales manager of the building department. He had previously been associated with the Barrett Company and Johns-Manville.



GEORGE E. SWENSON

He will serve as liaison between Celotex distributors in six western states and General Panel Corporation of California, manufacturers of the panel house.

Under license from General Panel of New York, the California corporation has launched a \$22,000,000 building program for the Pacific coast. Production schedule calls for 10,000 four-room houses for west coast distribution alone during 1947, according to Swenson.

## **Project to Study Improved Uses of Coal for Home Heat**

**R**UDARD A. JONES, one of the nation's outstanding **n** younger architects, has been appointed a research asso-ciate professor in the University of Illinois to carry on a

new three-year study on planning and design for use of coal in home heating. A graduate of Illinois, he has more recently been an assistant professor in engineering and architecture at Kansas State College, Manhattan, Kans.

The new project at Illinois will deal with subjects such as coal storage and handling, ash handling, furnace or boiler location, and the arrangement of heating facilities for most convenient use of coal. It will involve study of equipment and house plans, and development of

suggestions for builders and home owners. The research, arranged through the Small Homes Council at the University, is a co-operative project financed through Bituminous Coal Research, Inc., the research agency of the soft coal industry.



RUDARD A. JONES

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Toledo 3, Ohio

Spinner or (4) Sanderplane, no obligation.

511 So. St. Clair St.

FLOOR SURFACING MACHINE CO.

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Theater goers like comfort. Theater operators know that the public demands comfort. This requirement can be satisfied—with a properly installed J & C Power Heater on the job. Patrons are assured warm, clean, humidified air, mechanically circulated - the one-piece, welded construction insures a gas-tight unit. Cabinet is compact with trim lines. These are features which make J & C Power Heaters ideally suited for any heating job-whether 160,000 or 3,000,000 B.t.u. output is required, for J & C units were specifically designed for schools, churches, theaters, stores, apartment buildings, garages, and homes. J & C units are oil, gas, or coal fired. For maximum coverage of the entire heating field, sell the heating line with the maximum advantages—J & C POWER HEATERS. Contact the nearest J & C distributor for complete information.

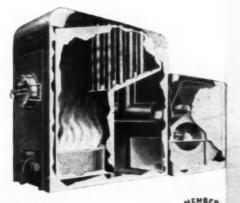
PAY US A VISIT AT THE 7TH INTERNATIONAL HEATING AND VENTILATING EXPOSITION LAKESIDE HALL, CLEVELAND, OHIO JANUARY 27-31 . SPACE 871-877

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JACKSON & CHURCH COMPANY · SAGINAW, MICHIGAN

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WHETHER it carries the patina of age or the brilliance of over-the-counter newness the finish of BARROWS BUILD-ERS HARDWARE is its final touch of fineness. The test of good hardware comes first at its purchase, and finally, as it is *lived with*. And in both tests, as in its easy application, strength, and smooth operation, you can always...

FOR

# BANK ON



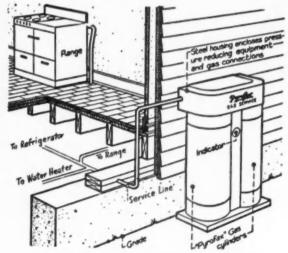
# American Builder, December 1946.

# **Gas Service Beyond the Mains**

Liquefied petroleum gas industry gearing its output and service to satisfy huge new home market that is developing in rural areas

THE liquefied petroleum gas industry, now in its twenty-fifth year, is bringing the convenience of city gas to more and more home owners beyond the reach of city gas mains. Pyrofax gas, manufactured by the Carbide and Carbon Chemicals Corporation, pioneered the field of "bottled" or "tank" gases for cooking and heating fuel. Since 1921, which marked the beginning of present methods

Since 1921, which marked the beginning of present methods of distributing and selling liquefied petroleum gas, steadily improving distribution practices, lower prices, better equipment and appliances have all contributed to universal consumer acceptance of the product. Installation equipment has been simplified and refined while at the same time appliances consuming the gas have been improved so they give better service with less gas consumption.



LIQUEFIED petroleum gas service is simple to install and economical to maintain.

During the war years, the liquefied petroleum gas business operated under a restraining order. While sufficient tank cars and cylinders were allotted to take care of existing business, no new installations were permitted until about a year ago. Members of the industry, however, did a wonderful job by carrying on in the face of seemingly insurmountable difficulties and, in addition, by supplying thousands of war plants with propane and butane for heat treating, carburizing and for use as a fuel where heat was required. Butane, too, was and is used as a basis for synthetic rubber.

The industry is again devoting its efforts to producing the product for better living, and industry officials predict that big years lie ahead. Although there are now over 2,000,000 users of this type of gas, the service has reached less than 20 per cent of its potential. Over 12,000,000 families remain in this country without the use of gas for cooking and other household tasks. A large inroad on this potential is assured, for during the last free selling years, 1935-1941, liquefied petroleum gas customers increased over 700 per cent while fuel deliveries increased over 1,000 per cent, indicating steadily increasing consumer acceptance of the product.

Today in the liquefied petroleum gas industry there exists a seller's market, as in most other industries. There are many thousands of prospective new installations awaiting bottled gas service, but industry leaders ask these buyers to be patient until full production of appliances, cylinders and equipment can be reached. Of the millions of homes to be built during the next ten years, a large percentage will be built beyond the mains in rural and suburban non-gas areas and the industry is gearing itself to satisfy this huge potential demand. 46

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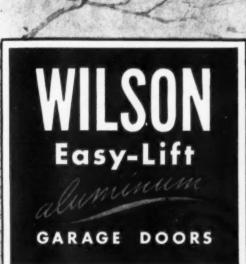
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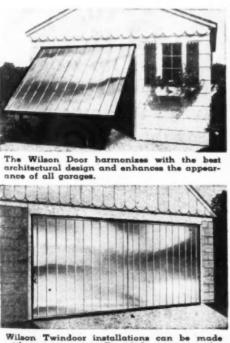
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Can't rust! . Can't rot! . Can't sag! Termite-proof! . Weighs only 101 pounds! . Hangs on lifetime lubricated ball bearings! • Requires no space inside garage! • No assembly on job! . No exposed weights, springs or balancing devices! • Easy adjustment for perfect balance! Takes paint beautifully! . No painting needed in most climates! Assures minimum maintenance cost! • Extremely simple to handle, store and install.



Wilson Twindoor installations can be made without center post. Extruded section on sides of each door takes special rubber weatherstrip-ping for weatherstright seal. Each door operates independently of the other.



**Profit and PROMPT SHIPMENT!** 

That's the Word, spreading from dealer to dealer and from builder to builder, up and down America. For no garage door fulfills all requirements so well as the Wilson Easy-Lift.

It's heavily braced vertically, horizontally and diagonally full length—welded by airplane type methods into a strong, rigid, light weight unit.

A touch of the fingers opens it; closes it. Patented dual lifting mechanisms concealed in each side of the door produce an unbelievably soft Floating Tension.

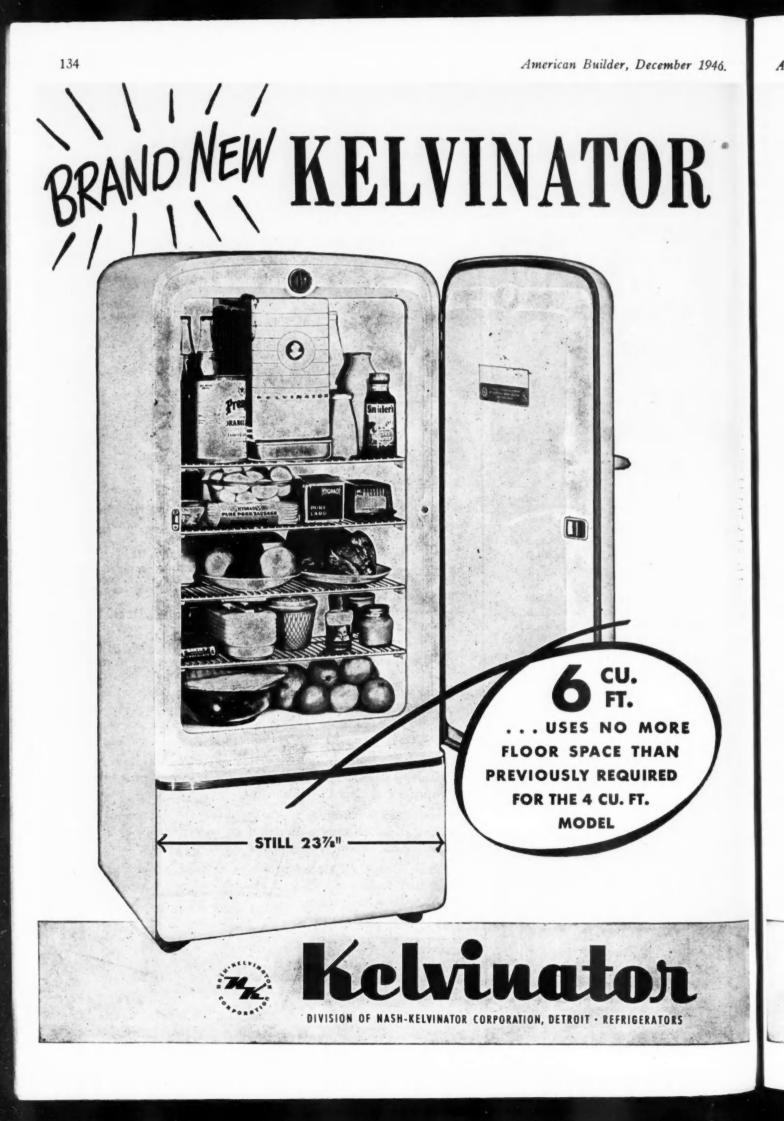
Wilson Easy-Lift Doors now are in volume production. For full information and details of our Profit Plan, -1 ---- · · · · ·

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Name Address

Nature of Business

Company\_



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# CU. FT. "SPACE-SAVER"

# SPECIALLY DESIGNED FOR APARTMENTS AND LOW-COST HOMES



Only 3<sup>7</sup>/8" higher but holds six cu. ft. instead of four

Architects, apartment owners and home builders will all hail the new Kelvinator "Space Saver" Six. It's made-to-order for the modern trend in con-

serving kitchen floor space to allow the installation of new electrical labor-saving appliances.

The gain of two cubic feet capacity over the four-foot model means that, with almost the identical floor space, the user enjoys halfagain-as-much storage space! The ample facilities of this new model make it ideal for apartments and low-cost homes.

From the users standpoint the "Space Saver Six" features all the well-known Kelvinator advantages. For those already familiar with Kelvinator's superior quality it will have a special "replacement attraction" where inadequate refrigeration storage capacity now exists.

Watch for the "Space Saver Six," the big, new Kelvinator model that fits in with everyone's modern kitchen planning.... Available early in 1947.

For full information write to Nash-Kelvinator, Detroit 32, Michigan

# Kelvinator Quality Through and Through!

Beautiful Exterior-Made of welded steel with a lustrous, long-wearing Permalux finish.

High-Speed Freezer-Made of stainless steel for permanence, beauty and faster freezing. Refrigerant circulates through two extra-fast freezing shelves to insure concentrated cold. Two stainresistant aluminum ice trays. Self-closing door. Greater storage space for frozen foods.

\* Room for Tall Bottles-More room for tall bottles on both sides of the High-Speed Freezer. Greater height between shelves provides more usable storage space.

ELECTRIC RANGES . HOME FREEZERS . WATER HEATERS

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52

Handy Chilling Tray-Dual purpose chilling and defrosting tray . . . an unbreakable, drawn aluminum container.

Sturdy Shelves-Strong, rigid, closely spaced welded-steel bars permit dishes to slide easily without tipping. Plated to retain their bright, shining appearance.

Extra Value with the Newest Kelvinator

EXTRA VALUE because of greater capacity is the prime feature of the new "Space Saver Six." feature of the new "Space Saver Six." **IN ADDITION** to the features shown above, there's the famous Polarsphere Power Unit, the quiet, trouble-free, money-saving mechanism that provides controlled tenperatures. It's hermanently lubris cold at in a housing of steel and permanently lubris sealed in a housing fans, or pulleys to cause noise or cated. No belts, fans, or pulleys to cause noise for accumulate dust-assurance of trouble-free performance.



With volume construction looming all over the horizon, equipment will be a keynote in successful operation. Comet cutting power on any construction job will be like money in the bank. Fieldtested Comets blazed their way to prominence on vitally important war projects. Contractors everywhere witnessed Comets perform with power, speed and accuracy. So today it's Comets for the work ahead! Order from your dealer or write direct.

CONSOLIDATED MACHINERY & SUPPLY CO., LTD. 2029-33 Santa Fe Avenue, Los Angeles 21, California



# Advanced Plywood Techniques In New Weldwood Building



FACADE of the recently completed new headquarters for United States P.ywood Corporation in New York City.

**U**NITED STATES Plywood Corporation's recently completed national headquarters, the eight-story Weldwood building in New York City, embodies a number of new building and architectural techniques in the use of plywood. For the first time wood surfaced panels acceptable for skyscraper interiors have been developed and used.

The building also features a leather floor, dramatic illuminated shadow boxes in a stainless steel facade, plastic window sills for easy cleaning, skylight concealed lighting and other unusual treatments. The entire building is a practical demonstration of new uses for plywood, new methods of application, new adaptations of established lines as well as an exhibition of new products, many of them representing technological improvements during war years.

Among the many "firsts" is a new form of interior low-cost plywood wall structure which makes possible the contrast of solid color binding lines with other squares or panels. Combinations of plywood in the natural finish, or painted with other materials, are an outstanding feature of the exhibit building, whole rooms being given over to obtain the actual effects. One wall of plywood paneling combines with three of wallpaper or of painted plaster surfaces.

Hardwood panels are shown in combination with plaster and painted sections indicating how new styles of application and new techniques of production bring high grade plywoods into the price class of average-cost homes.

The lobby is finished in Flexmetl—a welding of metal and wood veneer which is acceptable as fire-resistant for use in buildings more than 150 feet in height. The rounded corner, long desired in paneled rooms by architects and housewives alike, is achieved by the use of Deluxe Flexmetl, which is a thin wood veneer fixed to a metal back. This material is capable of being curved to fit interior corners.

One living room wall in the penthouse atop the new Weldwood building represents another "first." Prefinished walnut Weldwood plywood in panels 16 x 96 inches is grooved to permit an overlap joint with an opportunity for concealed nailing. This is the first commercial prefinished installation ever done by the company and this material will be known as Plankweld.



SEND FOR



Wherever a flat concrete surface is used-terrace. basement, driveway, sun room, porch, walk, etc.,it can be given beauty and distinction with Truscon ART-ROC Color and Hardener for concrete. ART-ROC Aggregate is dusted on before finish troweling and produces a richly colored, BUILT-IN surface which takes all kinds of punishment because it is much harder than ordinary concrete. The surface can be scored to simulate tile, random flagstones or any similar effect and thus given added distinction-over and above the distinction achieved by the use of ART-ROC color. ART-ROC involves very little labor and the cost is trifling. We invite your inguiries. Write Dept. AR-4, Truscon Laboratories, Division of Devoe & Raynolds Co., Inc., Detroit 11, Michigan.



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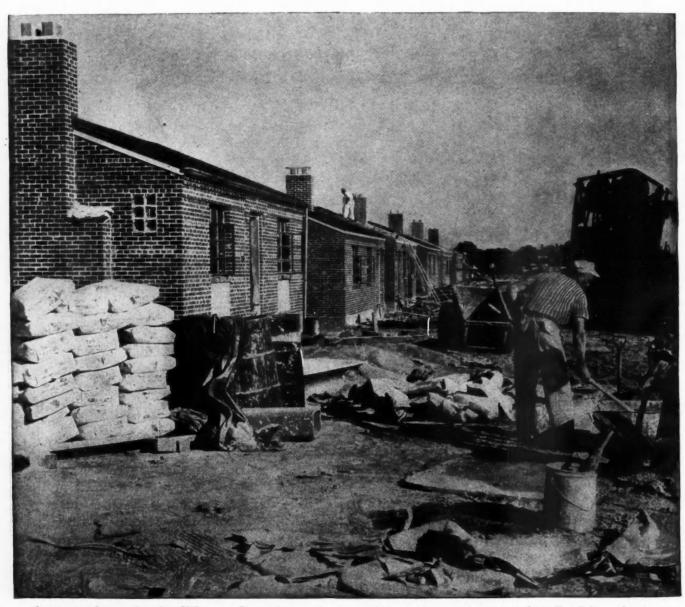
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# "The Homes that couldn't be



In construction at Croydon Hills, near St. Louis, are these H. B. Deal & Co., Inc., all-electric homes. Present plans call for the building of 500 such homes at four beautiful sites in the St. Louis area. They will be offered in three distinctive designs and in two different floor plans, but all will have the same complete General Electric equipment that is described on the opposite page. Veterans are getting preference for these homes, of course.



### GENERAL ELECTRIC EQUIPPED HOMES

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# built-WE'RE BUILDING!"

# "They're <u>All-Electric</u> Homes—with General Electric equipment—and they're priced under \$10,000!" says H. B. Deal & Co., Inc., of St. Louis.

E VERY ARCHITECT and builder knows that electric appliances stand high on the list of things people expect in today's new homes.

But when it comes to including these appliances as standard equipment in a home—and still keeping the selling price down —they're often doubtful. Many of them say, "It can't be done."

Well, it's being done! H. B. Deal & Co., Inc., St. Louis builders, are doing it right now. And here's what they have to say about their new development.

- "We're selling an all-electric home 'package' at a price that just about anyone can afford.
- "The kitchen boasts a General Electric Automatic Dishwasher and Disposall\*, as well as a Range and a Refrigerator. And we even include an electric clock and kitchen radio.



These dependable General Electric Appliances are standard equipment in Deal-built all-electric homes. The homes are financed by the First National Bank in St. Louis and appliances are included on the single, convenient "package mortgage." This makes only a minor difference in initial cost, while the economical operation, low maintenance, and long life of General Electric appliances can more than offset the slight increase in monthly payments. "Of course, the water heater in the basement is General Electric, too!

"And here's the *surprise* part of this 'all-electric package.' With the equipment included in the mortgage, the monthly payments are *only about \$3.00 more* than they would be if we hadn't put in any equipment."

Others are doing it, too! In Pittsburgh, Denver, Oklahoma City, Ft. Worth—all across the country—architects and builders are planning and erecting new homes with General Electric appliances included as standard equipment.

## **Consider these 3 advantages**

- 1. It doesn't cost you a cent to put in this General Electric equipment. And it usually costs the homeowner less than \$3.00 a month.
- 2. Your homes will be "first choice" with buyers. For people, today, want completely equipped homes, designed for better living, *electrically*.
- **3.** By offering such homes at fair prices, you're building a good reputation. And, in the long run, a good reputation is just about the biggest asset you can have.

#### Why choose General Electric?

Recent national surveys showed that 53% of all women prefer General Electric to any other appliances. This preference was *more than twice* that for the next most popular brand.

So isn't it just common sense to do as so many architects and builders are doing? Specify *General Electric*, the brand most of your customers want!

Let us help you plan your 1947 program. For complete information about all-electric homes, with special emphasis on kitchens and laundries, write to General Electric Home Bureau, General Electric Company, Bridgeport 2, Conn.

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

THE APPLIANCES MOST WOMEN WANT MOST!

**GENERAL** *Selectric* 



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CUT LUMBER and over 20 other building materials Fast ... Accurately ... in any Position ... at Less Cost!

Versatile Fred W. Wappat Electric Hand Saws

With a Fred W. Wappat Electric Hand Saw on your job, you have more power than you'll ever need (with thorough operator protection), assuring continuous high-speed cutting . . . you get absolute accuracy, thanks to visible cutting line and rigid, simple angle settings on saw frame . . . top performance is maintained whether saw is trimming sub-flooring, wall sheathing, or hung inverted for ripping operations

... your operating and maintenance costs are minimized through such features as the Fred W. Wappat lubricating system, and special Fred W. Wappat-designed gears, produced under our rigid shop standards.

In addition to working lumber, you can quickly fit your Fred W. Wappat Saw with special blades and cut over twenty other tough building materials, from insulating board to light metal sheets, still utilizing the Fred W. Wappat basic advantages! Write today for full information, or ask for free copy of Bulletin S-10.

High-Speed Portable Electric Tools . Radial Guides . Service and Parts for Wappat and Alta Tools

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This attractive development shows wide range of P&H styles.

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# **Available NOW!**



# AMERICAN BUILDER'S New BLUEPRINT PLANBOOK

Never before has a plan book of this character been offered to Home Builders and Home seekers.

Presented here are 12 complete blueprints (111 $\frac{1}{2}$  in. by 16 $\frac{1}{2}$  in.) suitable for accurately estimating the construction costs of these attractive homes and garages.

Cape Cods, Moderns, Ranch Styles and Colonials are all represented in this new Blueprint Plan Book.

All the homes in this book have been designed by nationally famous architects and selected from the pages of American Builder. They are exceedingly well planned and are adaptable to any climate both as to style and construction.

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This new conception of a workable plan book will aid builders and dealers in their planning and sales efforts.

American Builder takes pride in being able to offer this unusual plan book to its readers and others. Complete 1/4 inch scale plans are available through the American Builder plan service on some of the designs presented.

In making your plans for 1947 we feel sure you will find this book of great value in selecting a home that will be architecturally correct in design and construction and give years of lasting value to its owner.

Because of paper shortages only a limited quantity of this first edition is available. Orders will be filled as they are received.

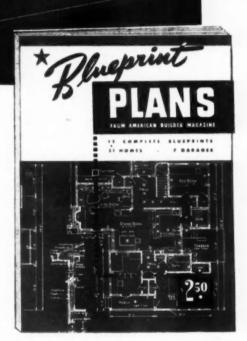


12 Complete Blueprints 21 House Designs Garages — Built-Ins



# Order TODAY







# \*Reference: A.S.H.V.E., 1946 Guide. Pg. 117, Table II; Pg. 119, Table II.

That's right ... Insl-Cotton's insulation qualities are so great that only 3 inches will give as much protection from heat or cold as a five-foot thickness of low density brick.

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Please send specifications of COTTON.	and full information on INSL-
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## **Plain Talk About** West Coast Lumber

By H. V. SIMPSON Executive Vice President West Coast Lumbermen's Association



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THE Douglas fir industry is accused of having exhausted its timber; of being a low wage paying industry; of being heavily in the black market; of shipping most of its lumber overseas; of improperly distributing the remainder and of so many other things that it is now time for plain talk. First let us bury the bugaboo of "timber famine." There

is more than enough old growth Douglas fir timber here in Oregon and Washington to meet the present housing crisis and many more crises to come; and more timber is growing every day.

We are not a low-pay industry. Our 120,000 employees are among the highest paid industrial workers in America. Average wage paid in the woods during August of this year was \$1.61 per hour and in the sawmills was \$1.31. Note these are average wages. The minimum wage is \$1.10 per hour. Some jobs pay as much as \$2.50 per hour.

Our lumber production is off slightly from last year. This is due in part to the shorter work week. Like most American industry, Douglas fir mills now are working five days a week instead of the six days they worked last year. More millsmany of them new-are in production this year. By year's end we will certainly equal last year's production, probably increase it. We are producing good lumber, which is being well graded. Our Grading Bureau had 41 field men in 1940; today it has 285 and would have still more if experienced men were available.

We are supplying all the housing construction lumberboards, dimension and timbers-the present housing program can absorb. There is no shortage of this type of lumber for the housing program in any part of the United States. Lumber is in storage in incompleted houses from coast to coast. There is a shortage of Douglas fir flooring, siding and shop lumber—a direct result of action by Mr. Wyatt's NHA. In June this agency decided it wanted plywood, and offered a \$7.50 per thousand subsidy on peeler or clear type logs. That sounded the death kneel of Douglas fir flooring, siding and shop lumber. Sawmills had no chance to compete for the very logs which would make the clear items. Net result is that today from Maine to Oregon and from Minnesota to Texas the wind is whistling through thousands of graying, unfinished houses-Wyatt's "Skeleton Homes" project. Although framed, many of these homes lack flooring, siding and shop items. Meanwhile, plywood is piling up in storage in the warehouses of the prefabricator, and plywood logs are piling up in inventories at the plywood plants. NHA blundered.

Lumber production will continue through the winter months at nearly full production while house construction will decline. By spring housing construction lumber should be in ample supply. Lumber has proved to be the most important item in housing but not the most critical.

Much has been said about the cost of housing and the cost of lumber for housing. Douglas fir lumber prices have in-creased, but the Douglas fir mill still gets only about \$500 for the lumber in an average, six-room house which may sell from \$8,000 to \$10,000.

There has been some maldistribution. Distributors and contractors have bought sawmills and some sawmills have increased their retail sales. Their action is directly attributable to government controls. In a free economy manufacturers would have continued to manufacture, distributors (Continued to page 150)

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# E-WARQUALITY

You can't beat these products for quality, sales, profits!

No other weatherstrip on the market offers your cus-tomers as many exclusive features. as NUMETAL Easily installed by any car-penter or homeowner It's officient it's permanent

FOR WINDOWS AND DOORS

American Builder, December 1946.

penter or homeowner It's efficient it's permanent it's inexpensive it's o best-seller it's con-veniently packaged in indi-vidual sets A perfect over-the-counter sales item for you Shipped prepaid on or-ders totaling two dozen sets or more. or more.

COMPLETE in handy package ready to hand your customer

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EATHER STRIP

Window sets packaged for 28", 30", 32" or 36" size double hung windows. Door sets packaged for 32"x80" ond 36"x84" sizes, or for any special size required Each set complete with weather-strip, accessories and instruc-tions.

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stands for. To new dealers who have not handled these products before, we offer this money-back guarantee: If you are not satisfied with the quality and prices return the merchandise within 5 days and your purchase price will be refunded.

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WE PAY TRANSPORTATION CHARGES—On ell minimum orders of these products we will prepay the full transportation charges to any point in the United States.



This is the easiest weather strip in the world to put on That's why it is one strip that any clerk, regardless of how inexperienced, can sell quickly it serves every purpose on any type door or window 100% pure, all-wool felt, reinforced with white metal Comes in 20-foot rolls, packed 12 to a display carton Shipped prepaid on orders of two cartons or more



*u***-LUME** REFLECTING HOUSE NUMBERS NOTE: Same style and design as our standard



These brilliont Nu-LUME Nu-I hese brilliont Nu-LUME Nu-merals sell themselves Made from a specially finished white metal that won't rust or tarn-ish. Hand hammered effect ish. Hand hammered effect finish makes them illuminate from flashlights, auto lights, street lights Shipped prepaid on orders for complete assort-ment of 12 of each numeral FREE display case with intro-ductory order



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Here is the biggest door bottom strip value you can offer your cus-tomers—and it's one of the biggest profit-makers you'll have in your store Made of extra heavy metal, and pure, pre-shrunk all-wool felt 3/16' thick Available in standard lengths of 30", 32", 36", 42", 48". Shipped prepaid on orders of three dozen or more.

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\* Speed Your Concrete Jobs-\* Remove Forms in Half the Time-\* Get Built-In Curing-

## with CALCIUM CHLORIDE in the mix

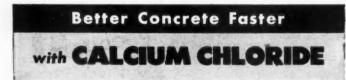
Put the proven best curing agent—calcium chloride — right in the mix. Get stronger, harder concrete faster. Then you can remove forms in half the time that plain concrete takes to acquire safe strength.

You simplify placing because concrete containing calcium chloride is more plastic. It chutes easier and faster—fills forms better and provides better finish.

Calcium chloride has been used for a quarter of a century and is now in use by leading builders throughout the nation to secure better quality and strength—greater speed and economy in concrete jobs large or small.

Facts on the greater workability, early strength, density and waterproofing have been checked and reported by the National Bureau of Standards and are reported in our Bulletin 28. Get your free copy by writing us now.

CALCIUM CHLORIDE ASSOCIATION La Salle Bidg., 1028 Connecticut Ave., Washington 6, D. C.



American Builder, December 1946.

## FREE FOR THE ASKING

Complete, authoritative, and up-to-date information about

# FINISHES FOR WESTERN KNOTTY PINES

This information, printed in a convenient folder, should be in the hands of every lumber dealer, builder, architect, and homebuilding prospect. It tells how to secure desired color effects—recommends a list of prepared finishes and finishes mixedat-the-job suitable for Knotty Pine — also gives helpful carpentry suggestions. We will be glad to send you up to 20 copies of this folder FREE. When you order, specify Folder No. 407.

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**Asphalt Saturated** 

Asphalt Saturated Felt should be applied under Texaco Asphalt Shingles, in new construction and in re-roofing, when shingles are laid directly over roof boards - as called for in directions contained in bundles.

• The cost is slight in relation to the benefits: prevention of condensation of moisture under shingles, added insulation, a tighter job.

• As the pitch is decreased the need for felt is increased. It is low-cost insurance against the possibility of leaks resulting from wind-driven rain during exceptionally severe storms.

• Lay the felt horizontally with not less than 2" laps. Scatter nail sufficiently to hold felt in place during application of shingles.

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THE TEXAS COMPANY ... manufacturers of Texaco Asphalt Shingles and Roofing

(in <u>new</u> construction)

for the best service from Asphalt Shingles

KEEP G. H. HOAB GOBOO BOBOO With MEDEC CECUS PALOTE

## PORTABLE POWER TOOLS

**B**UILD low-cost homes faster and make a greater profit for yourself by using Mall Portable Power Tools. They make critical man-hours and costly materials count for more homes by saving time, labor and material. Their power and stamina speed construction . . . their ease of operation simplifies building processes . . . their accuracy eliminates waste. Fewer men building more and better homes faster cut the cost for you and the veteran . . . make G. I. housing profitable as well as patriotic.

**MollSaw**—is fast and accurate . . . facilitates multiple cutting of like members . . . notches rafters . . . trims floor and roof decking . . . puts construction on a production basis. Scrap and excess board ends can be salvaged for use in concrete form construction. 4 powerful models with 2'',  $2'_{4}''$ ,  $2'_{78}''$  and  $4'_{2}''$  cutting capacities.

**MollDrill**— $\frac{1}{2}$ " is power-packed to drill wood, metal and plastics . . . is compactly designed to get into cramped quarters and difficult drilling positions. . . Drills 1" holes in concrete form boards for ties and clamps. Also  $\frac{1}{4}$ ",  $\frac{\pi}{5}$ ", and  $\frac{3}{6}$ " capacities. *Moll Concrete Vibrator*— $\frac{1}{2}$  to 3 H.P. places a stiffer mix concrete five times faster than hand pudding . . . eliminating voids and honey-combs. Variable speed Gasoline Engine operates 8 other construction tools.

Ask your Distributor or write Power Tool Division.

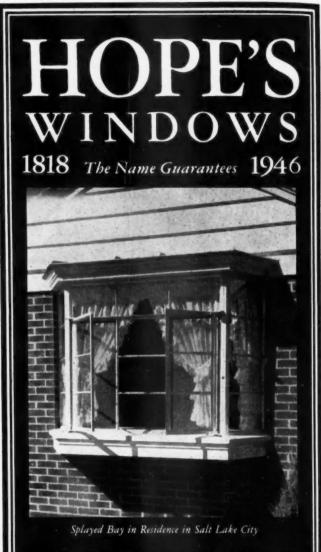
### MALL TOOL COMPANY

7737 South Chicago Ave. Chicago 19, Illinois ★ 25 Years of "Better Tools For Better Work"



American Builder, December 1946.

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## BAY WINDOWS

It is easy to imagine the extra sunshine let in by this bay window and the spirit of comfort and friendliness it creates in the interior.

HOPE'S Steel Casements offer many advantages in the design of bay windows. Narrower mullions are less obstructive to light; casements offer better control of ventilation and make cleaning easier and safer.

HOPE'S Steel Casements are provided in a range of standard sizes that give the architect and builder the widest opportunity for a pleasing variety in layout.

HOPE'S WINDOWS, Inc. Jamestown, N. Y.

THE FINEST BUILDINGS THROUGHOUT THE WORLD ARE FITTED WITH HOPE'S WINDOWS

1946

# **TOPS FOR ANY HOUSE!**



Reynolds Lifetime Aluminum Shingles being applied on a fine home in Kentucky. Note the attractive shadow line, the ease of application and simplicity of design . . . for a lifetime roof.

## REYNOLDS *Lifetime* ALUMINUM SHINGLES

THE ROOFS of Reynolds Lifetime Aluminum Shingles, now going on many a fine home, will be as much admired in 1997 as today. They will be just as weathertight, too – and forever fire-proof. Because aluminum is rustproof, these shingles need no painting. Those who want color can apply it once –and then let the roof "weather" gracefully, without thought of damage. Maintenance becomes an obsolete factor.

And, besides, this roof is *radiant heat reflective*. The air space between shingle and sheathing is faced by an aluminum surface, even if the outside is painted. That aluminum will reflect up to 95% of inside winter heat — will let through as little as 5% of outside summer heat. So you insulate when you roof with Reynolds Lifetime Aluminum Shingles. These same basic advantages are inherent in all Reynolds Lifetime Aluminum Building Products. They're designed to play an important part in today's building—now and in the future. Ask your regular supply source for more information—distribution is through established trade channels.



#### REYNOLDS LIFETIME ALUMINUM

#### SHINGLES



Completely interlocking, covering nails. Coverage, 8" x 14½". Shadow line, ¼".

#### CLAPBOARD SIDING



Individual clapboards fit together, covering all nails. 8" exposed surface, 12' lengths.

"SNAP-SEAL" ROOFING



Sheets interlock, all nails covered, weathertight. 6, 8, 10 and 12 feet, 24" coverage.

WEATHERBOARD SIDING



Sheet crimped in simulation of 4" clapboard. 8, 10 and 12 feet, 24" coverage.

CORRUGATED ROOFING AND SIDING



Extra thick (.027")-therefore sturdier, yet lighter. 6, 8, 10, 12 feet, 26" wide.

#### S-V CRIMP ROOFING AND SIDING



Same extra thickness means sturdier sheet yet lighter, 6, 8, 10, 12 feet, 24" coverage.

Also Aluminum Studs, Trusses, Window Frames, Garage Doors, camplete Houses.



'I want my Floors INSTALLED FAST and INSTALLED TO LAST—"

## The Tile-Tex Asphalt Tile Contractor Gives You That Kind of Service And That Kind of Product

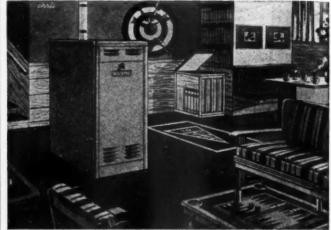
Builders everywhere recognize the extra values they get in flooring with Tile-Tex Asphalt Tile. They appreciate the intelligent, prompt, and expert installation service which a Tile-Tex contractor is equipped to render. They know from experience the advantages of Tile-Tex Asphalt Tile over similar types of flooring.

Here is an asphalt tile flooring that's made right, installed right, and performs right. Tile-Tex Asphalt Tile contractors are located in nearly all principal cities and towns throughout the country. Ask for the name of the one in your city and for a copy of the new Tile-Tex booklet "Floors That Endure."

#### THE TILE-TEX COMPANY, INC-Asphalt Tile Mfr. Subsidiary of The Flintkete Company Chicago Heights, Illinois 220 E. 42nd Street • New York City



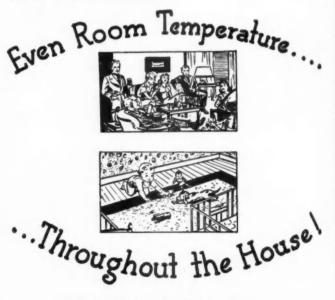




Home owners may differ in their tastes, but when it comes to heating their homes they all demand a heating unit that will provide dependable comfort. By installing a KOVEN WATERFILM BOILER you're giving your customers the ultimate in radiant heat that assures even room temperature throughout the house and a plentiful supply of domestic hot water at all times.

KOVEN WATERFILM BOILERS are the fastest steaming boilers on the market and their patented construction incorporates all the newest scientific improvements.

Attractively jacketed, these boilers are available in a variety of models suitable for large or small homes, apartment houses and industrial plants. Write for a copy of the free illustrated booklet.



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## HOW TO APPLY HOESS ALUMINUM CLAPBOARD SIDING

of rolled aluminum formed to interlock with other sections. When applied, the exposed surface is identical in appearance with wood siding.

Hoess Aluminum Clapboard Siding is a patented section

Each section of Hoess Aluminum Clapboard Siding is formed

Build Now!

with a "U" shaped channel at the bottom. The top edge is rolled over so that it interlocks with the "U" shaped channel of the piece above it, thus forming a weathertight seal.

Starle

Strip

In applying, a single clip is hooked under the top edge and nailed to the stud. Thus, there is no nailing through sections. Siding is free to move slightly to compensate for weather changes without undue strain on framing. Can be applied over sheathing, or without sheathing when a 2" blanket of insulation is used. Cutting can be done with a power saw using a metal cutting blade, or with shears or

standard hacksaw. Special corner pieces and bottom starter strips are supplied.

Many scores of builders now say Hoess Aluminum Siding with the Hoess patented system of interlocking sections is the answer to longer lasting construction in low cost housing. Phone, wire or write now. Our plant is in volume production. Prompt shipment can be made.

## METAL BUILDING PRODUCTS, INC.

Pioneer Fabricators of Aluminum Clapboard Siding

Address Dept. (13) 8825 Grinnell St., Detroit 13, Michigan



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Application

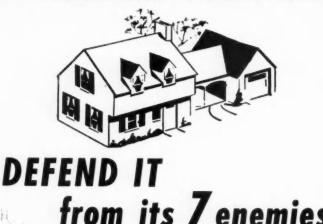
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IF IT'S WORTH BUILDING ... **.IT'S WORTH SAVING** 



You can protect any building against the harmful effects of wear, dirt, disintegration, weather, moisture, rust or cor-rosion, inside or out, with Sonneborn "Building Savers". The products in the chart below are a few of many which Sonneborn has developed to protect and preserve, renovate

and decorate wood, metal, concrete, masonry and other building surfaces-new or old, large or small. Sonneborn catalogs in SWEET'S give further informa-

tion. For descriptive literature on specific Sonneborn "Building Savers" to help solve particular construction or maintenance problems, write Dept. B-12.

SONNEBORN "BUILDING SAVERS"			
This Product	For This Purpose		
LAPIDOLITH	Hardening, wearproofing and dustproofing new or old concrete and terramo floors, other concrete surfaces.		
LIGNOPHOL	Préserving and finishing wood floors, trim, doors, paneling—in one application.		
CEMCOAT Filler and Dustproofer	Protecting and decorating cament and wood floors, porches, decks. Colors and transparent.		
TRIMIX	Improving quality and workability of con- crete and mortar mixes.		
STORMTIGHT (Liquid and Plastic)	Protecting and preserving, patching and re- pairing roofs of all types, new or old.		
S. R. P. ("Sure Rust Prevention")	Protecting iron, steel and other metal surfaces, inside and out, against rust and corrosion.		
SONOLASTIC Aluminum Paint (Ready-Mixed)	Protecting and brightening interior and ex- terior surfaces—metal, wood, masonry, wall- board, etc.		
SONNEBORN'S Caulking Compound	Caulking, pointing up, sealing, glazing, etc. Knife and gun grades.		
SONOMEND	Patching and resurfacing concrete or wood floors.		
FLOORLIFE CLEANER	Cleaning and waxing wood floors and lino- leum in one application.		
HYDROCIDE Coloriess	Protecting exterior masonry walls against dis- integration due to water absorption.		

SONNEBORN "BUILDING SAVERS" FLOOR TREATMENTS . WAXES . PAINTS AND PROTECTIVE COATINGS - CONCRETE AND MORTAR ADMIXTURES WATERPROOFING AND DAMPPROOFING CAULKING COMPOUNDS . ROOF COATINGS BUILDING PRODUCTS DIVISION L. SONNEBORN SONS, INC.

88 Lexington Avenue, New York 16, N.Y.

In the Southwest: Sonneborn Bros., Dallas 1, Texas

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(Continued from page 142) would have continued to distribute. Maldistribution can be charged specifically to OPA's pricing policy.

It was this government pricing policy which created such a state of unbalance that retailers, contractors, wholesalers and manufacturers tried to get a share of distribution profit. Manufacturers who have gone into the retail business have done so to secure the distribution profit. Contractors and distributors who have bought sawmills have done so in order to apply the distributor's profit to the production of the saw-No distributor or contractor has bought or optioned mill. a Douglas fir sawmill to get the profit in the manufacturing operation.

Geographically our lumber distribution has very closely followed the pattern established in prewar years except that more of our lumber has been shipped to Oregon, Washington and California, and less lumber has been shipped to the Atlantic Coast.

Our increased shipments to the West Coast are justified by the increase in population in this area, where the housing shortage is more acute than in any other section. Reduced shipments to the Atlantic Coast have been in part due to ship shortages and waterfront strikes, but were largely attributable to OPA pricing of lumber for water shipment.

Douglas fir lumber for export has constituted about five per cent of our shipments this year. Contrary to general impression, boards and dimension for export are priced much lower than boards and dimension for the domestic market. Ninety-five per cent of all Douglas fir lumber exported is in sizes not used in American home construction. Little or none of this material would have supplied siding, flooring, windows or doors for the American housing program. The completion of no American home has been held up because of this export business. In the meantime, exports of lumber have encouraged even larger imports-in itself sufficient justification for this business.

Recently President Truman lifted the import duty on lumber, handing over from the United States Treasury an estimated two million dollars to Canadian mills. Meanwhile, Canadian mills are compelled by their own government regulations to keep part of their lumber in Canada. The balance is offered for sale in export markets which, except for the United States, are free of price restrictions. The two dollar per thousand duty cancelled by our government will not attract any additional imports from Canada. Even if it should attract an additional 100 million feet, it would be at a cost to our government of about \$20 per thousand. Canadian restrictions limit the kind of lumber that can be expected from Canada and little flooring, siding or shop can possible come in. If any additional lumber at all is imported, it will be the type of which there is now no shortage for houses. Somebody gave the President bad advice. Nobody is badly hurt except the United States treasury and the taxpayer.

There is not enough lumber for all important uses today. This shortage will continue, to a diminishing extent, so long as the abnormal demand continues. Stocks of lumber at mills and distribution yards will not increase while demand con-Continuing high production is the only tinues excessive. solution.

We do have genuine troubles in the Douglas fir industry. All this year there has been a shortage of manpower, particularly in the woods, despite our high wages. There has been a continuing shortage of equipment although CPA has helped in some degree. We have had strikes in the woods and on the waterfront. There has been and continues to be a severe shortage of railroad cars. This last named shortage has made it impossible to comply with government channeling orders, even had they been logical. We have our own housing shortage in our sawmill towns and logging camps. On none of these problems has the government been of any substantial help

We do not think that the government will ever attack our real difficulties. Production of lumber is, has been, and always will be the job of industry. Almost without exception controls have hindered, not helped. We believe that the housing program has actually been delayed, not speeded, by Mr. Wyatt's program and the interference of government agencies. We think houses are priced too high; but we know that these prices were reached under OPA's alleged control of inflation.

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# QUALITY

Leaving nothing to chance—scores of tests, graphs, measurements—figures and figures—by columns; by rows of columns —are drilled and marshalled by our statisticians—are compiled *and analyzed*, while the individual operations are still in progress.

With our goal set high and Statistical Quality Control guarding each individual operation, you know that —

## IF IT'S PARANITE IT'S RIGHT!

Electrical Wires and Cables "Better Than Code Requires"



Distributed Through Wholesalers

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General Sales Offices: FORT WAYNE & INDIANA Manufacturing Plants: MARION, INDIANA + JONESBORO, INDIANA

Warehouses\* and Sales Offices: \*Atlanta, Ga.; \*Chicago, Ill.; Cleveland, Ohio; Dallas, Texas; \*Detroit, Mich.; \*Kansas City, Mo.; \*Los Angeles, Calif.; \*Newark, N. J.; Philadelphia, Pa.; \*St. Louis, Mo.; \*San Francisco, Calif.



SASH BALANCE

GRAND RAPIDS

antil

The Grand Rapids Invizible has many features of superiority, as has been conclusively proved in thousands of war time and peace time installations. Among these are ease of installation, actual invisibility, and dependable, efficient operation in all climates and under varying conditions. The same balance for upper and lower sash make them interchangeable and 10 sizes meet 95% of all residential requirements. Complete illustrated instructions are on every carton.

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Performance

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SEND FOR SASH BALANCE CATALOO which contains complete information on sesh balance sizes, directions for installing, etc. All fully illustrated.



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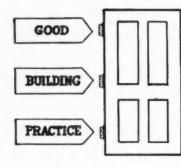


Home owners and builders applaud "Three Hinges To A Door" because they know what it means to the homes they build . . . that their doors will be free-swinging, smooth-operating and non-sagging for the life of the building.

They will appreciate too that the small extra cost to assure three hinges on every door in the house saves money, inconvenience and trouble that otherwise might be caused later by locks and latches out of alignment, door warpage, sagging and sticking.

Moreover, "recommending three hinges to a door" is an act that immediately indicates to your client that your eye is on the important details . . . that you are presenting to him the best examples of good building practice.

"Three Hinges To A Door" in your recommendations will always make a "hit" because it is sure to bring complete satisfaction.



Your reputation as a wise, reliable contractor will be made if you recommend always—"Three hinges to a door."



American Builder, December 1946.

## No Registers, No Radiators In New Type Heating

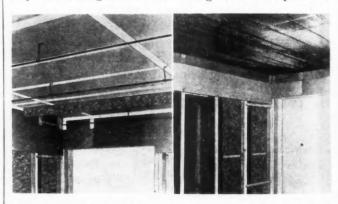
Source of the heat for this hot air system is conventional but distribution is not



THE home shown above, in Elyria, Ohio, is heated with a Panelaire system which eliminates the need for registers, grills or radiators anywhere in the house. Source of the heat is conventional but no heat is distributed directly into any of the rooms.

A Luxaire gas-fired forced air furnace circulates heat through ducts in stud spaces to a specially constructed space above the ceiling. The ceiling is heated and radiates its warmth downward. These heat rays warm the occupants, floor, furnishings and walls. There is very little variation in temperature in the space between the warm floor and the warm ceiling.

In this residence the ceilings on the first and second floors are suspended a few inches below the bottom of the joists. Sheetrock is nailed to the bottom of the joists. The warm air circulates in the narrow space between the Sheetrock and the suspended ceiling below. The ceiling must be suspended so



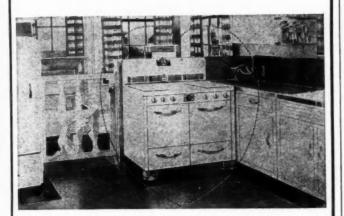
LEFT: Gypsum lath is fastened to bottom of joists and 3<sup>1</sup>/4-inch long metal hangers support 5/16-inch round rods to which is fastened metal lath, at right. Note galvanized metal baffle plats, to direct air travel, shown in photograph at left.

that warm air cannot only completely blanket the ceiling but so there is no interference with free circulation.

The warm air rising in the vertical wall stacks is discharged into the air circulating space above the suspended ceiling. Baffles or partitions direct the travel of this warm air so that it circulates over all the surface of the ceiling. Return air stacks are so located that, after the warm air has (Continued to page 160)

## THE KITCHEN IS THE HEART OF THE HOME

Plan a kitchen that has all the modern conveniences of gas even though you are building beyond the gas mains.

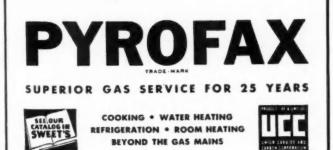


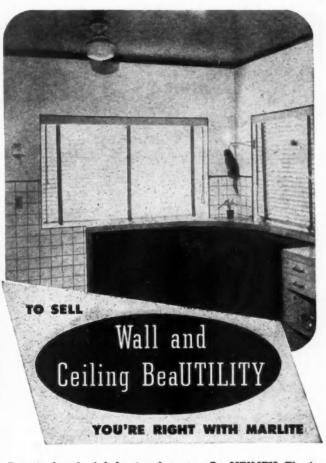
## Specify "PYROFAX" GAS SERVICE

"Pyrofax" gas burns just like city gas—it operates the same appliances such as a Magic Chef gas range, a silent Servel refrigerator, and an automatic water heater. "Pyrofax" gas brings new economy, convenience and cleanliness to country homes — with modern automatic "Pyrofax" gas service your clients will have no service interruptions, no dirt or odor. "Pyrofax" gas is distributed in most states east of the



Rockies. Write to Dept. **B3**, "PYROFAX" GAS DIVI-SION, 30 EAST 42nd ST., NEW YORK 17, N. Y. for complete information and the name of the nearest distributor.





Practical, colorful, lasting beauty = BeaUTILITY. That's what you sell - profitably - with every Marlite installation. This unique plastic-finished wall and ceiling material, leader in its field, is enabling thousands of dealers and contractors the country over to build business right . . . for the future.

With versatile Marlite, you literally trade old walls for new. Easily, guickly and economically installed, it fits virtually any decorating scheme. Easy to clean and keep clean, its high-heat-bake surface seals beauty in, seals dirt out. Applications? Every type of room in every type of building.

NOTE: Today Marsh's usually prompt, nation-wide Marlite service has been slowed by unprecedented demand. However, Marsh meuldings, Marsh Massic, and Marsh Bathroom accessories are available for prompt delivery—and every effort is being made to bring <u>all</u> Marlite deliveries back to normal. Marsh Wall Products, Inc., 123 Main St., Dover, Ohio.



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1/4-inch

plate.

ceiling is dis-

warm eiling. ir has



Photo by Maynard L. Parker

## These two types of FIREPLACE UNITS

#### will help you meet new building requirements

For plenty of circulating warmth—without smoke some homes require one type of fireplace unit, other homes a different type—depending on construction.

## 1. BENNETT Fresh=Aire FIREPLACE



Designed especially for tightly constructed, fully insulated, weatherstripped homes. Under these conditions a *Fresh-Aire Unit* gives benefits impossible with a recirculating type. Heats and circulates fresh air from outdoors.

## 2. BENNETT Warm-Aire FIREPLACE

This recirculating type is recommended particularly for camps, cottages, and southern homes without central heating. Cool air is drawn from the floor of the room through intake grilles into the heating chambers.



Both types permit unlimited freedom to design the mantel. And, both types

are guaranteed to provide evenly distributed. circulating warmth—without a trace of smoke.



BENNETT-IRELAND INC.

Chartered in 1906

1246 MARKET STREET, NORWICH, N. Y.

#### Levitt and Sons Complete Veteran Project-

American Builder, December 1946

(Continued from page 77)

experienced on this project has been the almost human impossibility of having every element of the construction, from nails to window glass, immediately available as needed. "The disrupted condition of the nation's distribution system was brought about by Washington controls," explains Bill Levitt. The degree to which Levitts carry slop assembly is shown in the pictures on this page. In their plumbing shop all the piping necessary to the system is gathered and pre-assembled for quick and easy installation at the site. Of course, proper planning has an important bearing on the success of this operation. It will be noted from the plan on page 75 that rooms requiring plumbing are located so as to use a minimum of materials while providing for ease of installation. It has been found that workmen on this single operation become so highly proficient that, according to Levitt's estimate, the pre-assembly is put together and installed in about one-half the time required by traditional methods.

In the exterior design, by avoiding complications in mass, by the use of unbroken roof and eave lines, and by the dependence upon well-chosen materials, the Levitts have succeeded unusually well in conveying the appearance of "bigness" in their veterans' homes. This is further accentuated by thoughtful placement of window and door openings.

All houses are completely insulated, windows and doors metal weatherstripped. Exterior finishes are of stucco, stained wood and asbestos siding shingles, vertical boards and battens. Strip asphalt shingles are used throughout the project for roofing. Interiors are of dry wall construction, with taped joints. An innovation found satisfactory from the standpoint of speed and economy in application and buyer appreciation is the use of asphalt tile flooring in all rooms. The acute scarcity of hardwood flooring necessitated a decision on an alternate; asphalt tile proved to be a sound choice.

Except for the refrigerator and automatic laundry, which had to be left out of the houses because of increased costs of other items, the houses are completely equipped. An automatic, gas-fired forced warm air heating system and 30-gallon gas-fired water heater are standard equipment in addition to the gas range. Metal venetian blinds are also furnished.

The Levitts always plan way ahead of their current building operations and buy Long Island acreage on an extensive scale. In their veterans' project the best of modern planning principles have been followed to achieve attractive, integrated neighborhoods and enhance the overall appeal and appearance of the development. Streets are laid out in curvilinear pattern which is found to reduce the area required for improvments—Levitt installed—and which increase the amount of land available for dwelling use while discouraging through traffic. Building plots range upward from a minimum of 7,500 square feet.

Although Bill Levitt makes it perfectly clear that his veterans' project of 1,000 completed homes this year has been built under the most trying conditions, his plans for an even larger program in 1947 are already formulated. He tells you, however, that his plans are in some measure predicated on his belief that "controls and restrictions of all kinds will have gone by the board when the building season gets under way." But, regardless, he will continue building on a large scale. The program contemplates 1,500 houses which he hopes to be able to sell under \$7,000, preferably \$6,500. Preference will be given to veterans whether or not it is a requirement of government because "in addition to myself, all the key men in our organization are 'vets' and we appreciate their problems." Bill Levitt concluded.

### Forest Industry Employment Approaches All-Time High

**T**O MEET the present insistent demand for lumber, plywood, paper, furniture and other wood products, the nation's forest products industries have increased employment to the highest total since the nineteen-twenties, according to the American Forest Products Industries, Inc., Washington, D.C. More than 1,300.000 persons are now engaged in supplying the nation with wood products and the figure is expected to top the all-time high for the industry before the year is out.

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umber, ts, the nployenties, stries, ns are oducts gh for Now Ready HOME BUILDERS MANUAL



A good contractor may not be a first class sales-man but with this big loose-leaf Manual at hand he can quickly give the prospect the information he is looking for. The contractor can insert extra pages of special information of local interest in the back of the Manual and thus make it a complete selling kit. It contains:

- A selection of 65 modern Net England Co-lonials and other popular 4 to 6-room types within the present average price ranges, designed by top flight architects.
- 2. A complete set of open Specifications which provide for the use of stock materials throughout and meet FHA and local building code requirements.
- 3. A completely itemized Material List Estimate form.
- Contractor's Bid and Budget Estimate forms, 4. in triplicate.
- Forms for any "extras" or changes in a 5. contract.
- A set of court tested Home Owner's Prop-erty Records and a 72-column Building Op-6. erations Chart.

Tell your prospect to sit down and look over this Manual. It will help crystallize his general ideas. You can then focus his attention on the particular services you have to offer. In case he wishes to borrow a page showing a certain house, or a certain section of the manual we can replace it for you at small cost if necessary. Send for a copy of this new type of selling aid today and give it a five day working tryout. Satisfaction or your money back.

250 pages, 65 illus., charts, 81/2 x 11, 3-ring Binder, \$5.00

American Builder and Building Age 30 Church Street, New York 7, N. Y.

Please send me a copy of the HOME BUILDERS MANUAL, for which I enclose check for the list price of \$5.00. I will give it a five-day working tryout. If not satisfied I will mail it back and you will refund my money.

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Address	
City	State



"21 Years of Rugged Service .... "EW!"

The above statement, made by Edward J. Zahn, Vice President of Zahn Dry Goods Co., tells more emphatically than we could, why you can recommend the use of Wright Rubber Tile with complete assurance. Installed in 1925 this Wright floor has withstood the shuffling of millions of hurrying feet. Subjected to the two-way traffic of the main store entrance, it has taken the full abuse of summer grit and winter mud. And yet a weekly mopping and waxing has kept it "looking like new" through all these 21 years.

It is this ability to stand up under the heaviest traffic that has earned for Wright Rubber Tile its reputation for long life, lasting beauty and low maintenance-that has established it as the quality floor that costs less to own. But please remember this when recommending or specifying Wright Rubber Tile-because of production problems we cannot make stock shipments, but orders for immediate installation will be filled in their turn. A partial list of representative Wright installations-some of which may be in your locality-will be sent on request.

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Structural. Junuary Reinforcing or Reinforcing Steel Bilding Steel other Bilding Steel Shipped from Stock

quick shipment from ten plants.

Joseph T. Ryerson & Son, Inc. Plants at Chicago, Milwaukee, St. Louis, Cincinnati, Detroit, Cleveland, Buffale, Beston, Philadelphia, Jersey City.



#### **Developer Burns of Denver-**

(Continued from page 83) Burns has been somewhat handicapped by lack of materials, and in order to get anything done was forced to detail one of his staff as an expediter to procure materials and equipment. He maintains, however, that procurement through the normal channels of distribution is faster and more economical than scouting for materials and maintaining a job site warehouse. It is expected that with the probable relaxation of controls this winter the development will go ahead at top speed. Recently completed by the Burns organization on the far northwest side of Denver is a group of bungalow apartments, and a combination of one- and two-story apartment buildings, called Colonial Gardens, all of which are linked together, yet each a self-contained unit having its own heating unit, hot water storage tank, laundry tubs, gas and electric meters, etc. Heating is done by individual gas furnaces located under the floor with a register at floor line, each furnace serving two rooms. In the two-story portions warm air furnaces are placed in the basement of each apartment.

This development is composed of eight individual buildings, containing four, five, and six units in each. Apartments vary from four to five rooms.

In the rear of each apartment group adjoining the alley are placed six- and ten-car garage units. \*

#### \* **General Houses Announces Expanded Production**

(Continued from page 111)

Chicago suburb of River Forest, Ill., has long been prominent in affairs of the National Association of Home Builders, and was, with Mr. Fisher, one of the founders of General Houses. Mr. Roberts, formerly an executive with the Houston Ready-Cut House Co., Houston, Texas, and more recently general manager of E. F. Hodgson Co., Boston, is well known throughout the industry, having been first president of

the Prefabricated Home Manufacturers' Institute. The "production model" on which General Houses plans to concentrate immediately is, according to Mr. Lindop, a



THE MODERN WAY

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Majestic

Fuel-less

**Home Incinerator** 

NO ODORS ESCAPE

The Majestic Co.

1127 ERIE STREET

HUNTINGTON, IND.

For complete utility and con-

venience in both new and modernized homes, plan

to include this odorless, safe, and sanitary unit for reducing wet-or-dry rubbish and garbage to ashes.

Compact and smartly styled, this ruggedly built

Majestic Portable Home Incinerator gives lasting, carefree service. Costs nothing to operate. Uses

only waste as fuel. Connects to any 8-inch furnace flue without draft interference. Unique downdraft through refuse speeds drying. Majestic's built-in type incinerator of similar design fits flush with wall in chimney recess of basement or utility room.

struction is now adapted to many Majestic Building Necessities.

Nationally Known and Advertised for 40 Years

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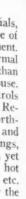
Today, more than ever before, you must know how

Write today for details!

Majestic-built units of heavy-gauge

formed steel proved so advantage-

ous for wartime needs that this con-



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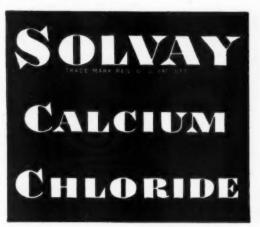
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## to Get PERFECT WINTER CONCRETE

Add Solvay Calcium Chloride to your Portland Cement mix, and

- REDUCE SETTING TIME, initial and final by two-1. thirds.
- GET HIGH EARLY STRENGTH ... 3 days strength 2. in one day . . . 7 days in 3. SOLVAY overcomes slow setting caused by low temperatures.
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MAIL THIS COUPON TODAY for FREE booklet giving the complete details . . . "Calcium Chloride and Portland Cement."

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to analyze building costs. If you want to become a successful builder, learn how to prepare a correct estimate in a hurry. Get in on the profitable work now available wherever you turn. Your success is assured if your estimates are right; otherwise you are licked before you start. The Tamblyn System of Estimating will make a real estimator

out of you in a few weeks of your spare time. We are so sure that you will want to learn it, that we will send you our complete home study course for ten days examination absolutely free. If you don't think it is the nest thing you ever saw, just return it and it won't cost you a cent. If you like it and want it, send us five dollars a month until you have paid the total price of only thirty dollars.

This estimating system is based on forty years of actual construction experience. It has been sold all over the world for more than twenty years. Thousands of estimators and contractors swear by it. Our offer isn't hot air and big talk. We don't give you a diploma or a lapel button, but we do teach you down to earth estimating which will bring you profitable business. profitable business.

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In more and more thousands of widely varied jobs, contractors all over the country are showing better profits consistently be-cause there are so many ways to build with Zonolite. Opportunities increase and problems simplify when light-weight, easy-to-handle Zonolite is specified. Whether the work is commercial or residential, the average customer is better satisfied-time and money saved for all concerned.



ZONOLITE **INSULATING FILL** 

Pour Zonolite Granular Fill in attic or loft, level to desired thickatticorior, levelto desired thick-ness, and pour between studs in sidewalls. Weighs about 6 lbs. per cubic foot. 100% freeproof— rotproof—verminproof. Won't irritate workers' hands. No masks required.



ZONOLITE INSULATING CONCRETE Used for floors in homes, com-mercial and farm buildings. Ideal for roof decks. Used to insulate hollow tile walls. To make Zono-lite Concrete simply mix Zono-lite Stabilized Concrete Aggre-gate, instead of sand, with ordi-nary cement. Weighs as little as 16 lbs. per cu. ft, when mixed.



ZONOLITE INSULATING PLASTER

Zonolite Plaster Aggregate is used in place of sand. It mixes and works easily. Can be mixed indoors. Won't freeze in winter. Cuts mortar weight ½. Resists cracking. Insulates against heat, cold, sound and fire. Widely used for fireproofing.



-new work or remodeling. Sticks to any clean, firm, water-resistant surface. Can be painted without losing efficiency.

## Mail Coupon Today for 4-Way Profit Facts



conventional home of Cape Cod design which presents no observable indication of prefabrication, although the construc-tion incorporates the precision and quality made possible by factory production techniques. The basic house consists of four rooms-a 12 x 20 ft. living room, two bedrooms, bathroom, utility room or basement, and a compact, efficiently laid out kitchen. The house is planned for the addition of two bedrooms and a bath on the second floor. \* \*

#### "No Incentive to Build"\_\_\_\_

#### (Continued from page 103)

builder, however, in the announcement that a ceiling price of \$10,000 will be held on new houses. My knowledge of mathematics tells me in no uncertain terms that as long as that sort of rule applies, the industry might as well declare a holiday. Imagine the disaster that can befall any contractor exposing himself to the financial risks in this market between the start and finish of even a small project.

We have twenty-nine more lots to develop in this project and we cannot cease until we do develop each of these lots. But we will proceed very cautiously indeed-and would cease if we did not already have an investment in these lots. It appears to me that the only way to build houses profitably is to build something very small, with no particular architecture, out of any kind of materials or substitutes, slap on paint and a 'For Sale' sign with a price somewhere below \$10,000 for a house that used to sell for \$3,000 or \$4,000. Incidentally, thanks to government propaganda, in doing this a builder stands a good chance of becoming a local hero. My houses are far above this class and I find I am being severely crit-icized because of that."

In building these houses, Mr. Precour has refused to compromise on inferior materials or workmanship.

At considerable extra expense, plus a lot of time and aggravation, all the materials needed to complete the twenty-one houses, except the siding, were obtained, without the necessity of expensive or below-standard substitutions.

All the houses have copper pipe for both cold and hot



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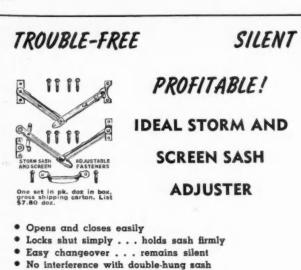
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- Zinc plated steel . . . Bakelite washers
- Screen attachments provide extra precaution against children unhooking and falling out window

Sold Only Through Hardware Distributors "Satisfaction Guaranteed"



Manufacturers of Builders Hardware Specialties, such as Ideal Screen Door Latches, Barn Door Latches, Storm Sash Adjusters, Screen Door Hinges, Casement Sash Friction Stays and Other **Popular** Items

## CHROMEDGE METAL TRIMS answer every "FLOOR" need!

• You'll find all types of mouldings for every type of floor application included in the big line of Chromedge Metal Trims. Butt edgings, threshold strips, 1/4-round shoe mouldings, cove base trims, stair-tread nosings-Chromedge has them all, in a full range of sizes for all floor-covering materials.

In fact, on walls, counters or floors -for service or for decoration-Chromedge Metal Trims assure a better job with least trouble. Write

for latest Chromedge literature! B&T Metals Co. The

936 1/4-ROUND SHOE MOULDING

STAIR NOSING 15 BUTT EDGING

13

234 THRESHOLD STRIP

water lines. Waste lines from the sinks are 11/2-inch copper pipe all the way to the sewer line under the floors. All plumbing equipment is Crane or Kohler with chrome on brass trim.

Gas-fired heating units, both gravity and forced hot air as well as hot water, are installed, the type of furnace depending on the design of the house. Two-inch rock wool insulation is used in walls and four-inch rock wool in ceilings.

Interior wall finish, except in bathrooms and kitchens, is dry wall-sheetrock with taped joints. The extensive amount of good quality cabinet work in these houses is an outstanding feature. They are made in the millwork shop housed on the project site, according to specifications and designs of T. H. Irion, the architect working with Mr. Precour. The use of sliding door wardrobes in place of conventional closets is another feature that demonstrates the sincere efforts of Mr. Precour to build well and incorporate the latest and best in the finished product.

## No Registers, No Radiators-

#### (Continued from page 152)

traveled over the entire surface of the ceiling, it is drawn down and returned to the furnace, where it is reheated and placed in circulation again.

A conventional room thermostat is used to regulate temper-ature, and response to the demands of the thermostat is as rapid as on conventional heating systems.

The first Panelaire system was installed in Utica, N. Y., about eight years ago and since that time this method has proved successful in temperatures that dropped as low as 15 o 20 degrees below zero. Advantages claimed for Panelaire neating include: 1. Warm floors because heat rays radiate from the ceiling to the floor; 2. Cleanliness because there are no registers or radiators in the rooms to set up air currents which usually deposit dust on walls and furnishings; 3. Simplifies furniture arrangement because there are no registers or radiators to interfere.

The C. A. Olson Manufacturing Co., Elyria, Ohio, designed this Panelaire system.



It's easy to install wall fixtures and accessories quickly, positively and economically with MOLLY SCREW ANCHORS. Secure without stress on wall material.

Easy for anyone to use in any material from thin fiber-board to solid concrete. Remove bolt to attach or replace wall fixtures . . . threaded anchor will not drop or loosen.

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**Include These Modernfold Advantages** In Your Specifications

In your plans you'll find many places for Modernfold. This accordion-type closure is metal-framed with a beautiful fabric-covering. Inspiring beauty . . . of course! But it's practical, too. This efficient door eliminates the swing area of conventional type doors . . . saves space . . . and provides an efficient, economical means of room division. See how you can use Modernfold in living rooms, dining rooms, bedrooms, closets, etc. Also in commercial buildings. Write today.



New Costle, Indiana Dealers in all Principal Cities in the United States and Many Foreign Countries

**NEW CASTLE PRODUCTS** 



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Here is a point-of-sale display that packs a selling punch! This National Lock Company display board is an eye-appealing, attention compelling salesman! It displays and demonstrates National Lock's modern, beautifully styled Chrome Plated hardware for greater sales and profits!

NATIONAL LOCK COMPANY

Cabinet Hardware Division . . . ROCKFORD, ILLINOIS

The No. 140 Display Board may be purchased separately or with the profit-packed assortment. Order one from your jobber today, and watch it do a selling job for you!





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#### **Production Record**

WHEN the 100,000th Berry aluminum garage door rolled off the assembly line of the Berry Door Corp., Wayne, Mich., on Oct. 16, it established a 13-month production record in the building industry.

In a simple ceremony in honor of the occasion, Glenn Berry, 39-year-old founder and president, gave credit for this amazing record to the adoption of wartime techniques, engineering principles and materials (in some cases improved upon), and the ability of his staff, principally veterans, to deliver the goods.

"Even though manufacturers of garage doors in general are not producing the volume they produced in 1941, garage doors are one of the few materials that have come even close to meeting the present day demand," Berry declared. "The 100,000 doors we have built have gone a long way toward satisfying that demand."



Berry aluminum garage door to Glenn Berry, president. Joseph Mazzeo, plant manager, presents 100,000th



capture foul air right now - as it rises-and whisk it out of the house before it has a chance to settle or spread.

By installing Blo-Fans in the ceiling-directly over the kitchen range-you take advantage of the natural rise of warm air. Greaseladen fumes aren't dragged across the ceiling. There's no chance for cross air currents to catch and spread them, soiling walls and furnishings.

- CHICAGO + HOUSTON + SAN FRANCISCO

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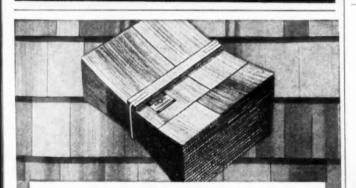
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## **BREEZE-**ASSURANCE FOR 1947

Home buyers want BAR-BROOK Fans because they know these efficient units assure fresh, cool breezes in hot weather. And builders like BAR-BROOK because of the low initial cost, inexpensive installation, and trouble-free performance. Inquire NOW about getting BAR-BROOK for your property in 1947.



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## The Roof That Built America Is the Favorite Today

In the face of changes and advancements in construction materials, Red Cedar Shingles have so proven their superiority throughout the years that they have never been superseded as a building product that gives maximum protection from weather on roofs and sidewalls.



BAR-BROOK Contractors and Builders

YOUR WATER PROBLEMS CAN BE SOLVED BY INSIDE APPLICATION, AGAINST PRESSURE



## THIS IS A WET BASEMENT PROBLEM TO THE BUILDER AND HOMEOWNER

WATERPLUG, a quick-set hydraulic compound, seals streams of active water and epage from entering through wall. Set begins in from 3 to 5 minutes after mixing ster is added.

Write for circulars descriptive, in photographic detail, of how to waterproof a basement, how to seal the surface of an old brick building which leaks, how to protect the exterior surfaces of manufactured block, brick, concrete or any type masonry with THOROSEAL.

**Request your Lumber or Builders' Supply** Dealer in your home city to order for you.

Standard Dry Wall Products, Inc. BOX X NEW EAGLE, PENNA.



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	American Builder	Marco Stairways
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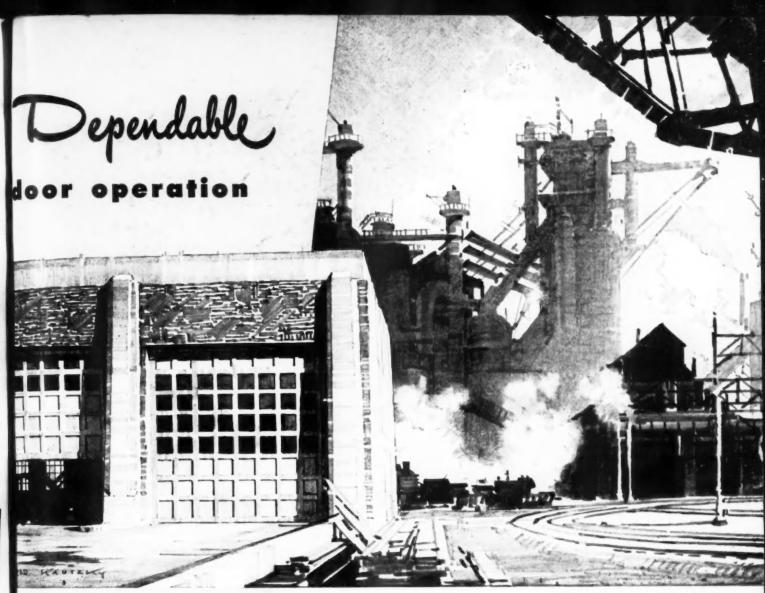
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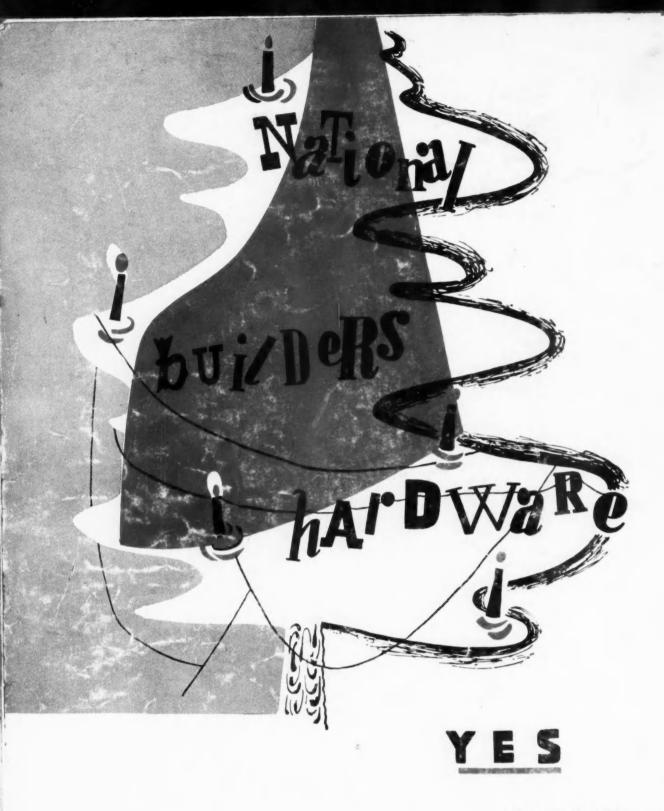


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