Small Homes That Will Meet Today's Demand
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Building Board Cel-o-Rok Sheathing and Wallboard
Interior Finish Boards Cel-o-Rok Lath and Plaster
Cemesto Rock Wool Insulation
Triple Sealed Shingles
Bring in the view... bring in the breeze

for

A ROOM THAT LIVES
AND BREATHES!

Here's one way to make the kitchen the room it ought to be. Make it a room that "lives" with cheerful sunshine and a view... and a room that "breathes" through Fenestra Casements that swing out to scoop in the breeze.

Fenestra Steel Casement Windows are engineered to open at the touch of a woman's hand. Even over the sink or a serving counter (as shown here) a woman can always open this window with one hand—it never warps, swells or sticks. And Fenestra Steel Casements close to a firm, weather-tight fit.

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With Fenestra Steel Casements you can provide a right window for every room in the house. The Fenestra line permits a wide variety of window treatments with standardized, economical, easy-to-install units. For further information, write to Detroit Steel Products Company, Dept. AB-7, 2260 East Grand Boulevard, Detroit 11, Michigan.
YES, WE'RE BENDING EVERY EFFORT!

We've got our noses to the grindstone . . . And our ears to the ground . . . But, we still can't tell you definitely just when we'll be able to supply all the Wheeler Osgood products you want and need . . .

Main reason is that the bulk of our production is being channeled, through jobbers, into the emergency housing program. We're working just as hard as we can to fill all orders as rapidly and as equitably as possible.

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We're rather proud of our 57-year record . . . the Wheeler Osgood name is recognized as a dependable one for doors, plywood and other products. We want to keep it that way.

So, when you think of doors, think of America's finest—
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JULY
VOL. 68
1946
NO. 7

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Through the Sash and
Door Industry *

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Premier
ALUMINUM
Windows
Abolish Monopoly Power of Labor Leaders

The recent conduct of labor union leaders has afforded one of the most striking illustrations in our country's history of the danger the people always incur by permitting great power to be concentrated anywhere.

Whether great power becomes concentrated in government, in business leaders, in leaders of labor unions, or anywhere else, the result is the same: the power is always abused. Those who get great power always profess, often sincerely, to use it for some unselfish purpose—to protect the rights of those they represent, or to promote the public welfare. But there are almost no demonstrable instances in human history of great power having been disinterestedly used.

This affords us the key to the only real solution of our present "labor problem." The only real solution is to deprive labor union leaders of the enormous power they have been allowed to acquire. It will do more harm than good to increase the power of government to control the power of organized labor. The danger is in the concentration of great power anywhere.

How, then, abolish the present power of labor union leaders? The only rational answer is: 

Apply to and enforce against labor union leaders the same laws that are applied to and enforced against business leaders. The anti-trust law formerly forbade all monopolies, combinations and monopolistic practices in restraint of trade and commerce. There could be no greater restraint of trade and commerce than stoppage of the operation of most or all of the coal mines, the railways, the steel mills or any other large industry.

Suppose the operators of the coal mines or the presidents of the railways had met and joined in issuing an order to stop operation of all the coal mines or railways. They would have been confronted immediately with an injunction from a federal court. For their mere agreement to stop operation, much more putting it into effect, would have subjected them to fines and imprisonment for violation of the anti-trust law.

If a labor union or combination of unions has sufficient power to shut down most or all of a large industry it is plainly a monopoly. If it shuts down most or all of a large industry, it plainly restrains trade and commerce. Why, then, is it not unlawful for labor union leaders as well as business leaders to form monopolies and use their power to restrain trade and commerce?

It is not now unlawful for labor leaders to do what it is now unlawful for business leaders to do because of special class legislation passed by Congress. The Norris-LaGuardia Act and other laws passed within the last fifteen years repealed the anti-trust law as it formerly applied to labor unions, and thereby legalized and encouraged the acquisition and use of unlimited monopoly power by labor union leaders. Recent nationwide strikes in the coal mines and on the railroads threatening nation-wide disaster have been the inevitable results of this legalization of the acquisition by labor union leaders of nation-wide monopoly power.

We would have to increase greatly the power of government to enable it to control the present monopoly power of labor union leaders. And every such increase in the power of government is another advance toward national socialism—i.e., Fascism.

The solution of our present "labor problem" is not increase in the power of government over labor unions. The solution is abolition by Congress of the monopoly power of labor leaders over the American people.

James O. Dunn
There's a degree of electrical living for every home

A New Development in Electrical Systems for Homes

Electrical living is vital in modern homes... but there are varying degrees needed to fit different family income levels. By recognizing this fact, and using the correct degree for home you design or build, you will gain greater owner satisfaction.

Westinghouse engineers have made it easy for you to select the correct degree, by developing Four Degrees of Home Electrification for popular priced homes.

The booklet shown here illustrates and describes the Four Degrees, and specifies the wiring installation necessary to support the electrical equipment established for each degree. Ask for booklet B-377-

and this handbook has the technical data needed for designing any residential installation.

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Gentlemen: Please send me books marked below:
( ) The Four Degrees of Home Electrification B-3774 (Free)
( ) Home Wiring Handbook (Enclose $1.00 with order)

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America must have 11 million new homes within the next 10 or 12 years. These homes will be heated by the plants you design, specify or install. The heating facilities you select will be one of the major factors in determining market value, sales appeal and owner satisfaction.

A coal heating plant is the most economical of all to operate and maintain. It is the only installation that can be converted to all other types of heating — this is important.

When you design or build, play safe, provide coal storage space and chimneys adequate for any fuel. Design for coal ... "Fuel Satisfaction". It is economical, clean, quiet, odorless and abundant.
Wants to join NHPOF

To the Editor: I want to thank Mr. Samuel O. Dunn for his fine article in the May issue.

I want to tell you that I am ready to join the National Home & Property Owners' Foundation.

Send me the necessary literature.—IRA ROBY, Wabash, Ind.

Training builders

To the Editor: About a year ago I had a very interesting half-hour in your office discussing the training of building mechanics. You were most enthusiastic and well informed regarding the matter with which I, too, was most concerned.

Men passed by and I did not hear from you, so I began to wonder what had happened to your enthusiasm. Well, the answer came with the May issue of the American Builder. I must congratulate you on a splendid job of informing the building industry and public in general regarding training possibilities in this field, not only for the way you handled my particular job, but also the several others.

The article by Merrion, "If I Were a Young Man," passed on information which I had not been aware of—the effort that universities are making to train builders. Through this article I sent a young man, former graduate of this department, on his way to get just such a university training.

Please express my appreciation to Mr. Albert for the well written article and to Mr. Arent in arranging the spread which looked most attractive.—WALTER E. DURBAHN, Highland Park High School, Highland Park, Ill.

Cure for lumber shortage

To the Editor: I am writing to you in regard to the deplorable conditions which exist in our retail lumber industry and to get your reactions as to what I feel must be done to correct this situation. I know you have been doing a swell job of fighting for our industry and I would appreciate your comments.

To begin with, we are practically out of the lumber business. We have not received any lumber since October, 1945. I have just returned from driving over 2,000 miles in northern Minnesota and part of Canada, trying to find some lumber in order to stay in business. I visited a great many sawmills, mostly quite small, some good size, but was unable to secure any. These mills are disposing of their lumber as fast as they produce it, at good prices right at the mill and are not interested in shipping to a retailer. I even offered to buy at retail in order to get one car. However, I was even unable to do this. All along my journey I saw a great deal of construction going on. I failed to see a sign and permit number on any job. I am of the opinion that practically all the work which I saw was illegal.

The resorts at the lakes in northern Minnesota are busy building cabins, etc. I saw no signs or permits on these jobs. This condition of course exists in all parts of our country where lumber is produced. The lumber is not moving through the common channels of trade, namely, the retail dealer. The sawmills, to a great extent, are selling their product to truckers, etc., right at the mill. It is not, for the most part, moving out of the producing areas, any further than trucking distances. The condition is so serious that a very large percentage of the 23,000 retail dealers in this country are being forced to go out of business. The OPA is, without question, the real cause of the condition of our industry. They have through their pigheadedness and shortsightedness and shortsighted policies completely disrupted our industry. They have caused our black markets in lumber and now they have absolutely lost control of the lumber industry. They, of course, in their bare-faced way would deny that they have lost control of the lumber industry, but the facts are so evident that they cannot be denied. Actual statistics show that in the middle western states of Wisconsin, Missouri, Nebraska, Ohio, Illinois, Indiana, Minnesota and Iowa, forty-eight per cent of the retail dealers have received no lumber at all so far in the year of 1946. Other states will run very similar.

I firmly believe that the following drastic steps must be taken to prevent a complete collapse in legitimate lumber distribution:

1. Immediate price adjustments by OPA to lumber mills which will allow the mills to produce at a profit the various items needed in house and farm construction.

2. Immediate price adjustments on all related products which enter into construction work, such as brick, tile, hardware, plumbing, heating, electrical, etc.

3. A complete embargo on all lumber from any sawmill. This is drastic but is necessary to stop illegal movement of lumber. This embargo will help build up inventories to move into proper channels.

4. A very severe and drastic curtailment of all construction and a new priority system which will allow lumber to be bought for necessary construction. It goes without saying that lumber will be in short supply for several years and if we are to get any lumber at all, it can only be made available upon stringent priority, set up to come somewhere near balancing supply and demand. In this respect it will be necessary that proper allotments be set up in order that the large city investment builder does not get the lion's share of available materials, thereby leaving the farmers and veterans in rural areas unable to buy any materials.—FRANK L. EINSWEILER, Home Lumber Co., Galena, Ill.

Use it!

To the Editor: I have been in the building business since July, 1906, during which time I have done much reading in building publications and for many years I have been receiving, reading and profiting by American Builder.

I have been alarmed over the outlook for the building industry for quite some time and have been talking it over with comrades in the trade and find that most of them feel as I do about the matter.

I have an article partially prepared for newspaper publication and upon reading the Publisher's Page and the editorial of the May issue of your journal, I wonder if I may use some of the matter in it and make quotations from those articles.

Also, I would like to have the address of the "National Home and Property Owners' Foundation" and the amount of the annual dues so I can enlist and also get others to join me in the fight.—H. E. WINKLER, Nashville, Tenn.

Telling the public

To the Editor: I want to tell you that you made a very fine presentation of the lumber situation in your radio broadcast last month. I happened to be listening to the Mutual network just at the time this was going on, and it was interesting and to the point.

It is, indeed, important that the public know and get the proper angle as to why homes are not being constructed, and you explained it in a very fine way.—HY. GUHLEMAN, Secretary & Treasurer, Scruggs-Guhleman Lumber Co., Jefferson City, Mo.
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Good-looking

whether you’re inside looking out...

This exclusive Truscon design will produce striking architectural effects in keeping with the modern emphasis on horizontal lines. In addition, the unique advantage of completely controlled ventilation to suit varying climatic conditions, and the outstanding advantage of positive insect screen protection at all times, offers functional superiority that is difficult to match in any other type of window.

or outside looking in!

Recognition of the above Truscon features is rapidly expanding the usage of the Maxim-Air design in hospitals, institutions, schools and office buildings.

See SWEET'S for full mechanical details of this efficient, good-looking window.

Manufacturers of a Complete Line of Steel Windows and Mechanical Operators...Steel Joists...Metal Lath...Steeldeck Roofs...Reinforcing Steel...Industrial and Hungar Steel Doors...Bank Vault Reinforcing...Radio Towers...Bridge Floors.
Roddiscraft’s progressive policy is directly in line with modern practice—production on a scale designed to provide more plywood for everybody, to speed deliveries as much as possible, to maintain the high quality of Roddiscraft plywood. We believe this policy will not only mean the greatest good for the greatest number now, but also in the future when production more nearly matches demand.

The building of plywood in stock sizes provides the plus production needed to meet today’s requirements and eventually to keep warehouse plywood stocks adequate for immediate needs.
HEAT LOSS is continuous, but the rate of loss varies with the weather. When it is cold, heat loss is more rapid than when the weather is warmer.

HEAT SUPPLY should also be continuous, but modulated to whatever temperature is required to offset the heat loss.

MODUFLOW · · · maintains a continuous balance between heat loss and heat supply.

RESULT · · · “Comfort Unlimited”

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Every home, even those already built, can have the “comfort unlimited” that Moduflow brings. It isn’t necessary to wait until a new home is erected. Moduflow can be easily and inexpensively installed on practically any type of automatic heating plant.

FOR NEW HOMES
Of course, if you are designing or building a new home, you will want the heating plant to be completely modern with a Moduflow Control System. So, get the whole story of Moduflow without delay. Just mail the coupon for your free copy of the Moduflow Engineering Guide.

MODUFLOW is the name of Honeywell’s newest heating control system. It means modulated heat with a continuous flow. Moduflow will be a “must” in the better homes and apartments of tomorrow.
Your best customers know and

People pay attention
prefer Post-advertised products

When a manufacturer asks you to "watch for our ads in the Post," he's calling your attention to the best kind of local support.

For advertisements in the Post reach your best customers—the leaders, who are first to buy the new and better things.

And advertisements in the Post get attention. For people like to read ads in the Post—far more than in any other magazine.
WARNING 3 out of 5 will be built obsolete because of inadequate wiring?

A look at the wiring plans of many modern-looking homes now proposed shows that they will be built obsolete. They will be wired according to a concept of electrical usage that harks back to 1920 or before. Immediate needs and future requirements are only partially provided for.

We believe that adequate wiring adds more modernity per dollar to any home, whether it costs $5,000 or $50,000, than any other single element.

People want today's electrical aids to good living—the lamp where it is needed, the radio within easy reach, toasters that really toast, enough outlets to go around. They want to be ready for newer things—automatic kitchens, economical quick-freeze storage, electric blankets, televisions. But they need to be told how to prepare for these conveniences.

The successful promotion of adequate wiring—wiring that is capable of doing all that it is asked to do—isn't an easy job, but it is a job that can readily become one of your most effective selling tools.

We have prepared a number of booklets that will help you sell adequate wiring. Ask your G-E representative for them, or write to Section AW3-780, Appliance and Merchandise Department, General Electric Company, Bridgeport, Connecticut.
you'll be using this MODERN DOOR FRAME ... AT LOWER COST THAN WOOD JAMBS and TRIM INSTALLED!

A 14-to-1 bet, in fact... For compared to the costly, laborious piecemeal job entailing use of 14 separate parts—the approximate amount needed by the builder to construct the wood frame—the Aetna Steel Door Frame is "one piece" construction making installation ridiculously easy. It comes ready to install in standard sizes

STRENGTH • RIGIDITY • PERMANENCY

* Aetna Steel Door Frames are welded to form a complete integral unit of jamb and two sides of trim. Cannot warp or crack and mitres will not open. * Will not absorb moisture and swell ... size of frame will not change. Eliminates repairs because these steel frames cannot chip or damage. * Hinges are welded to frame at factory and spaced to fit most prefabricated wood doors. Strike plate cutouts will take any strike plate. * Designed to fit any type and thickness of wall. * Prime coated at factory. * Easy to erect ... Save labor costs ... Simplify supply problems.

For close to half a century, Aetna has specialised in the manufacture of Hollow Steel Doors and Steel Door Frames for industrial and public housing needs. Now, a revolutionary new development makes Aetna Steel Door Frames AVAILABLE TO HOME OWNERS...

IN ANY QUANTITY OR STANDARD SIZE

Ask your building supply or lumber dealer or write for name of the nearest Aetna Representative

AETNA STEEL PRODUCTS CORPORATION
COST OF GOVERNMENT—The Washington crowd that has raised such a storm of protest about increased home building costs has had nothing to say about increased costs of government. The comparisons of both taken against 1919, 1941 or yesterday afternoon would be Interesting. The relative results would be even more interesting.

WASHINGTON GUESSING—Despite strikes, past, present and future, civilian employment totaled 55,300,000 last month, exceeding the all-time high of 54,750,000 in July, 1943. Last fall the now Secretary of the Treasury, John W. Snyder, predicted a possible 8,000,000 jobless by the spring of 1946, with high unemployment existing through the year. As Washington re-conversion policies were all affected by such bad guesses it is no wonder that things are confused. It is little wonder, also, that the public believes less and less of what the bureau chiefs tell them.

3,000 A DAY—That is the number of homes Wyatt claimed were being lost each day that Congress delayed action on his pet Patman legislation. It is notable that he did not verbally chastise Mr. Truman with the charge that 21,000 houses were lost during the seven days the Chief Executive allowed the Patman bill to remain in the White House awaiting signature. Maybe the C.E. can do no wrong, or maybe the Housing Expediter found it a good idea to tell them now that there will be housing shortages again in the 60's, and school facility shortages beginning in the grades very soon.

ANOTHER BOWLES STATEMENT—In March Bowles said that 7 million sub-standard city homes of 1940 had grown to 10½ million by 1946. Census figures, however, reveal that only 4,300,000 occupied dwelling units are in need of major repairs now, as compared with 6,300,000 in 1940. Bowles just picks his figures out of the air to prove anything he happens to think needs proving at the moment.

SUBSIDY STYMIE—Up to mid-June the recommendations contained in the Lockwood Report had gone unheeded by Wyatt in some cases, by Bowles or Porter in others. It is probable that nobody in Washington has any intention of doing anything about adjusting ceiling prices on scarce items—at least until Wyatt has had a chance to put pressure on manufacturers to accept some of his 400 million dollars for subsidy payments. Possibly if industry would just take the 400 million to save Wyatt's face, he would then do something about prices.

SUBSIDY PAYMENTS—After several weeks the only industries to whom Wyatt had managed to peddle some of the 400 million were soft-wood-plywood, structural clay products and gypsum paper liner. The last heard from established manufacturers of softwood-plywood was that they neither wanted nor needed subsidies.

BRICK—In Chicago the brick shortage has nothing to do with the need for subsidies. The current absence of brick is due to strikes in the brick-making plants.

HIGH COMEDY—Every once in a while in the midst of the tragic mis-statements of Wyatt glibly tosses off there is a comedy relief. Recently, he said, "I say that we who have decent places to live cannot afford the costs of slums... Even if the slum is not in your city, you pay for the people in this slum... it is cheaper to clean out slums..." Wyatt probably has not seen the new slum seed he planted in the Edison Park section of Chicago. The Chicagoans who have seen them, and the people who "have decent places" to live adjacent to the new slums Wyatt planted, are not between despair and laughter at Wyatt's remarks about slums. Being Americans, they are laughing, but in the fall they will be voting.

U.S.E.S.—This agency is competing with private employment agencies in an unusual and brazen way. The agency recently circulated a news release strongly urging employers to list their employment needs with the U.S.E.S. After calling attention to the facilities of U.S.E.S., and the number and rank and file of local offices it has, the bogy of widespread veteran unemployment was emphasized. The release concludes, "Nor can the U.S.E.S. solve the problem unless every employer lists all his jobs at that one central agency. Back America by backing the Job Development Campaign." The release apparently was used for all industries because the one received by American Builder had the word "building" as a modifier of industry or field typed as a fill-in in four places. Just another example of government attempts to ruin private business. Anyone who had any experience with U.S.E.S. during the war will know it as an agency borrowed from Communist ideology.

MRS. ROOSEVELT—Motor and Equipment Manufacturers Association recently issued a bulletin entitled, "Cat's Out of the Bag," in which Mrs. Eleanor Roosevelt was quoted as follows: "It has been a long fight to get control of our economic system in the hands of the government, where it can be administered in the interests of the people as a whole. Now, Congress, under the influence of powerful lobbies, is rapidly trying to return control to big business..." That certainly is a frank admission of what the New Deal set out to accomplish.

BIG LABOR—One thing Mrs. Roosevelt did not mention is big labor. Actually what the New Deal wanted and still wants is to use big labor as a tool for communizing the country. The rank and file of big labor is to be on the threshold of getting too smart for its leaders, however, and Congress is finally getting the whole picture in its proper perspective.

HARDWOOD LUMBER—Southern Hardwood Producers, Inc., report that production of hardwood is running ahead of production last year. Hardwood flooring continues among the scarce building items, and will continue to be scarce until Wyatt excises his authority and secures a price adjustment.

BIRTH RATES TELL ALL—In the early thirties building experts predicted housing shortages for the 40's, based on the birth rates of the late 20's. Only the Johnnie-come-latelies have had any experience with U.S.E.S. It is a good idea to tell them now that there will be housing shortages again in the 60's, and school facility shortages beginning in the grades very soon.

THE A.I.A. SPEAKS—James R. Edmounds, Jr., president, The American Institute of Architects, stated recently, "It (housing) will rank as one of the five largest industries of the country and, as such, is entitled to and needs highly specialized attention within the government." Mr. Edmounds probably knows that housing has had increasing specialized attention within the government ever since L.A. was passed. If he likes the results, "American Builder" emphatically disagrees with him.

SORRY!—Architect Walter T. Anicka, Ann Arbor, Mich., whose "house of the month" appeared on page 95 of our June issue, should have been credited with the blueprint plans on pages 93 and 94, not Architect Norman R. Johnson, St. Paul, Minn.
Make this DeWalt Builder’s Saw the No. 1 tool on your power equipment list... and it will help you build your customers homes faster—better—and for lower costs than ever before!

The new model GE DeWalt, illustrated above, is available in 3 and 5 HP single-phase, capacitor motors—motors that have no brushes, no armature, no commutator to look after. Motor is totally enclosed, wound with Formex-Fiberglas insulation, and provided with grease-sealed-for-life ball bearings.

This DeWalt is a precision-built tool for builders. And you can buy it today at 1938 prices! Write for catalog now. Address: DeWalt Products Corporation, 17 Fountain Ave., Lancaster, Pa.
Douglas Fir Doors
are helping solve the urgent need for housing

... THAT'S WHY IT MAY BE DIFFICULT TO BUY THE EXACT DESIGN OR TYPE OF DOOR YOU WANT.

Durable Douglas fir doors — together with other necessary building materials — must be channeled to meet the needs of the Reconversion Housing Program.

Even though Pre-fit and Factri-fit Douglas fir doors are being produced in ever-increasing quantities, there may be further delays in filling orders for non-housing uses or for housing which does not come under the program.

Distributors and dealers will be delayed in building up inventories. For a time, at least, the supply situation will be difficult. But as production steps up and demand subsides from present overwhelming levels, there will be plenty of these fine, precision-made doors to meet every demand. We suggest that you keep in touch with your regular source of supply for any changes in availability.

The National Association of Fir Door Mfrs.

When Douglas fir stock doors are again readily available for general needs, you can be assured that they will be the finest doors which can be produced by modern precision methods. These sturdy, attractive, durable doors — made of all-heartwood Douglas fir — feature refinements which save time and labor on the job and assure better installations every time.
Husbands are smart when they pick Certain-teed Asphalt Shingles and Roofing Products. For no part of a house so quickly stamps it as modern or down-at-the-heels as its roof. A smart, colorful, weather-tight, fire-resistant roof is a sound investment anyone can appreciate. Build your roofing business with easy-to-sell Certain-teed Asphalt Shingles. They have what it takes to make friends... eye-appeal for the home owner and profit for the dealer and roofer.

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BUILDING PRODUCTS

CERTAIN-TEED PRODUCTS CORPORATION  
120 SOUTH LA SALLE STREET  
CHICAGO 3, ILLINOIS
YOU'LL FIND MANY CUSTOMERS for houses of the type shown above; particularly since advanced principles of design will enable you to offer a great deal for the home owners' money and still keep your prices down.

Like everything else, there is a story back of Answer Home No. 3.

Frankly alarmed at the soaring cost of home ownership, Anthracite Institute determined to do something.

Acting upon the conviction that heat is a necessity only part of the year; that money could therefore be saved by a scientifically engineered heating arrangement, the Answer Home with the Simpli-Fire Room was developed.

1. Conveniently located, a few steps down from the kitchen, the Simpli-Fire Room eliminates all need for the costly, old-fashioned cellar.

2. Heating costs, too, are lower, since the Simpli-Fire Room is designed specifically for anthracite, the economy quality fuel.

3. With the Simpli-Fire Room, the use of anthracite is easier and more convenient than anyone ever dreamed possible. The storage bin is within easy reach of the heater. Ashes are removed outside the house. Ash shoveling is a thing of the past—along with dust and dirt!

4. Type of heating is optional—steam, hot water, or warm air. Specifications bearing the Seal of Approval of the Anthracite Institute are available for each system.

Plenty of heat is assured with warm, healthful floors.

ANTHRACITE INSTITUTE
101 PARK AVENUE, NEW YORK 17, N. Y.
HERE'S WHAT CAUSES 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.

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CEMENT MANUFACTURERS SINCE 1830
No. 1 Is Trade-mark Protection

With Sherlock "Homes" it's more than surface values—he looks for the name stamped on the back of every panel! Because protection is important. Of course that places the burden of proof—the responsibility for quality and service on the manufacturer. But, it also instills product acceptance and confidence in thousands of consumers and dealers everywhere. More than that, Trade-mark protection makes selling much easier and much more profitable. Only Inselbric gives you this protection, plus such other built-in features as Encased Nailing, Anchored Face, Copper Reinforced Corners and Precision Shiplap. That's why Inselbric proudly stamps the name on the back of every panel. And that's why alert dealers insist upon the name—they know it's wise to be identified with such trade-mark protection and prestige...

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The Nation's Fastest Selling Insulated Brick-Design Siding

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SOUTH BEND, IND.

JONES & BROWN, INC.
NATIONAL DISTRIBUTORS OF INSULBRIC AND INSULSTONE
PITTSBURGH, PA.
INSIDE AND OUT
YOU CAN USE...

Alcoa Aluminum

One of the outstanding advantages of Alcoa Aluminum as a building material is the fact that it is not limited to either inside or outside use. You gain by using it both places.

Inside it brightens up the home—makes cleaning easy—will never deteriorate. Outside it resists the weather... can't rust—can't rot—can't warp.

Aluminum reduces maintenance all around the house. It adds eye-catching sales features and assures satisfied buyers. Plan now to include this versatile building material in your homes of the future. ALUMINUM COMPANY OF AMERICA, 1914 Gulf Building, Pittsburgh 19, Pennsylvania.
Do you know your home-building client?

Better Homes
and Gardens

What does he say about built-in storage space?
Yes. He says yes—yes—lots of it!

About built-in furniture?
Thumbs down, mostly—he wants to shove it around.

About picture windows?
Loves 'em—6 out of 10 want them.

Living rooms extending into terraces?
More than 1 out of 3 say yes, by all means!

How many stories?
One or one and a half—tendency is to flatten out.

About lot size?
Big and bigger! 65% of people prewar put up with 10,000 sq. ft. or less; only 27% postwar are willing to put up with that.

How about basements?
Most folks want them.

How about living-dining rooms?
Not quite 3 out of 10 will have this combination.

Eating space in the kitchen?
9 out of 10 say yes.

Utility rooms?
Yes—emphatically! 7 out of 10 say so.
(Better Homes & Gardens has done some beauties for you.)

Hobby rooms?
They've caught on like wildfire.

About house style?
1 out of 3 for Cape Cod. But be careful—the rest of the information indicates a modern kind of Cape Cod, with all the advantages of big windows and modern layout.

All this and vastly much more is yours for the asking—our F. W. Dodge Report survey on 11,428 home-building families who are at the cash-on-the-line stage (no dream stuff). The survey not only asks preferences, but finds out where these families eat or play or read, where they'll store blankets, checks built-ins piece by piece to see what they really want, finds out about money in the bank, the number of youngsters, almost everything except the color of their eyes. Write on your letterhead for the complete survey—it's part of Better Homes & Gardens' service to builders.

AVERAGE CIRCULATION 2,650,000
Here are a few outstanding advantages of Santophen 20, when suitably formulated and applied:

**How to prolong the life of wood**

You can extend the life of wood for many years and minimize future repairs and replacements, by specifying Santophen 20* for the preservation of all types of wood construction.

Santophen 20 is Monsanto's pentachlorophenol, technical. When properly formulated and applied, it protects wood against rot and insect attack — preserves lumber, finished millwork, heavy timbers, plywood, cellulose wall board and cellulose fiber insulation.

Many leading architects and builders specify a preservative treatment using Santophen 20 wherever wood is used in construction — homes, industrial building, and railroad, highway and public utility properties.

Further information on Santophen 20 will be furnished on request. Write MONSANTO CHEMICAL COMPANY, Organic Chemicals Division, 1700 South Second Street, St. Louis 4, Missouri.


**Santophen 20**

- Doesn't discolor or stain wood. Treatment is clean.
- No objectionable odor remains after treatment.
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Serving industry. Which serves mankind.
Every so often, new ideas ... new materials bring new production techniques. The FRITZ B. BURNS Post-War House in Los Angeles is an example of construction utilizing the very best in post-war thoughts that architects, builders and manufacturers have to offer.

The COMMODORE, General's new Ledge type, Swing-Spout Kitchen Faucet, is an excellent example of how reduction in weight, by construction utilizing stampings and interchangeable machine fittings, goes hand in hand with increased utility and beauty. Significant to those in the plumbing trades is the fact that the Fritz B. Burns Post-War House is equipped with the COMMODORE.

Ask your wholesaler for General's COMMODORE!
Build with

Stran-Steel

Easy to Design with ... Easy to Build with

Architects find Stran-Steel practical and economical to use. It provides durable, rigid, fire-safe framing of lightweight steel, yet permits wide flexibility in working out designs.

Builders like to work with Stran-Steel. Pre-cut to required lengths, the framing members are assembled with self-threading screws. Other building materials are simply nailed to the frame by means of the nailing groove, a patented feature of all Stran-Steel studs and joists, which grips nails as in a vise, holds them permanently and securely. The frame goes up quickly, without the use of special tools or equipment.

Prospective Buyers are quick to appreciate the advantages of Stran-Steel. It gives homes, apartments, stores and industrial buildings a greater investment value, since sag-, rot- and termite-proof framing means lower maintenance costs.

For full 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, Michigan
Unit of National Steel Corporation
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.
National Membership Drive
Gathering Momentum

NAHB is conducting a membership campaign through its affiliated local associations. The drive, now underway and ending December 31, this year. At the 1947 Convention awards will be given to each of the groups into which local associations have been divided. In addition, a grand award consisting of a trophy donated by the Home Builders Association of Dallas will be awarded to the local association in the opinion of the regional vice presidents of the national organization has made the most outstanding contribution to the success of the home builder movement and the solving of its problems. Associations with 200 or more members, as of Jan. 1, 1946, were: Portland Home Builders Assn. (Ore.); Home Builders Assn. of Allegheny Co. (Pittsburgh); Chicago Metropolitan Home Builders Assn.; Builders Assn. of Metropolitan Detroit; Seattle Master Builders; Home Builders Assn. of Metropolitan Washington (D.C.); Home Builders Assn. of Greater Cleveland; Home Builders Assn. of Dallas.

Detroit Builder Aids Wyatt

One of the nation's leading home builders and prominent in NAHB activities, Harry J. Durbin has been retained as a special consultant on problems of the industry arising from the so-called Veterans Emergency Housing Program, National Housing Expediter Wilson W. Wyatt has announced.

Mr. Durbin, who will serve without compensation, has operated his own building business in the Detroit area since 1919 and is now a vice president of the Builders Association of Metropolitan Detroit.

NAHB Announces 1947 Convention and Exposition Plans

PLANS for the 1947 Convention and Exposition of the National Association of Home Builders already are being made, according to Joseph Meyerhoff of Baltimore, association president. With the continued intensive interest throughout the entire country in all phases of the home building industry, and with the many problems with which the members of the industry are being confronted, it is expected that next year's Convention will be even better attended than the one held in February of this year, Mr. Meyerhoff said.

W. Hamilton Crawford, of Baton Rouge, La., vice-chairman and treasurer of the 1946 Convention and Exposition, has been appointed chairman for 1947. Paul S. Van Auken, who served as Convention and Exposition Director in 1946, will manage the 1947 meeting and show.

"In recent weeks very definite plans have been formulated in anticipation of an outstanding event next February," Mr. Van Auken declared. The Stevens Hotel, Chicago, again has been selected as Convention and Exposition headquarters. Dates officially will be February 24 through 27, with the possibility that the Exposition will be open for inspection on Sunday, February 23.

"An entire new floor plan has been laid out carefully with a view to giving exhibitors larger spaces. In doing this it has been necessary to sacrifice the number of individual spaces available by approximately forty booths," he continued. "The management feels, however, that the larger spaces with wider aisles will meet with the wholehearted approval of the exhibitors. The larger booths will run 10 ft. x 10 ft. in size, or larger, with only a few spaces smaller. The cost per square foot of exhibit space has been reduced."

The Exposition held in February of 1946 exceeded all expectations in attendance. The registration list, which was published in March and mailed to all of the exhibitors, showed a paid registration of about 5,000 and listed over 6,000 especially invited guests of the exhibitors, for a total attendance of over 11,000.

An analysis of the paid registrations disclosed 3,220 home builders and realtors, 17 prefabricated home manufacturers, 239 subcontractors representing every branch of the residential building industry, 754 suppliers and manufacturers, including dealers and distributors, 353 representing mortgage lending, banking and financing interests, 105 architects and engineers, and a group of 145 comprising housing consultants, government officials, building trades union representatives, and trade association executives.

The guests—more than 6,000—admitted to the exposition on exhibitors' invitations were not classified, but included a substantial number of subcontractors, dealers and distributors from every section of the country.

One thousand feet of technicolor motion picture film showing close-ups of the various exhibit booths were taken at the Exposition and copies of these films are being shown at local association meetings throughout the country during the summer and fall months, thus bringing the Exposition to those who were unable to attend.

Already 65 per cent of last year's exhibitors have indicated their intention of participating next year and many have requested more space, according to Mr. Van Auken. It is planned to send the exhibit prospectus and floor plan to exhibitors early in September, he said in conclusion.
By Frank Cortright
Executive Vice President
NAHB

Unless the Congress adjourns before July 15th, or before the House and Senate have passed a concurrent resolution against the President’s Reorganization Plan No. 1 of 1946, the National Housing Agency will be established for all time. The dictatorship of an NHA Czar was accepted during the war housing crisis for patriotic reasons. Now, however, we are faced with permanent direction and regulation of all phases of the building industry. The chances of concurrent action by both Houses appear to be slight. Pressure of legislative matters may well hold the Congress in session beyond July 15th. Therefore, unless time works in our favor, or a united construction industry demands congressional action to reject this permanent control, the prewar days of a free enterprise operation will become a fond memory.

The wording of the NHA section of the Reorganization Plan states that "the agencies and functions of the National Housing Agency established under the First War Powers Act, 1941, by Executive Order 9070 of February 24, 1942, are consolidated to form a permanent agency of the same name." It then provides for the permanent change in name and stature of the executive heads of all constituent agencies from that of an Administrator to a Commissioner answerable to the NHA Administrator, and would permanently abolish whatever Boards these agencies may previously have had. The duties of the National Housing Administrator are defined in part as, "general superintendence, direction, coordination and control of the affairs of the NHA and its constituent units: The promulgation of such rules and regulations as the Administrator deems necessary to carry out his responsibilities under the provisions of this plan; and the review and approval, to such extent as he deems necessary of the rules and regulations made by the Commissioners."

Most drastic changes in our political, social and industrial economy are the result of (Continued to page 126)

Long Island Starts New Training Program

Realizing the need for training new mechanics in the building and construction industry, three contractors’ employers organizations and representatives of the local A. F. of L. Carpenters Union have formed an Apprenticeship Training Committee in Nassau County. The program incorporates a four-year apprenticeship training period, embodying the instruction of carpenter apprentices while on the job and also a supplementary classroom session two evenings a week.

The organizations sponsoring the committee are: The Building Trades Employers Association of Long Island, Inc., The Nassau and Suffolk Contractors Association, the Long Island Home Builders Institute, Inc., and the Nassau County Locals of the United Brotherhood of Carpenters and Joiners of America.

Denver Builders Association Fights Vandalism

Already plagued by material shortages, builders in the Denver area have had their properties attacked by vandals. In a move to counteract this activity the Denver Association of Home Builders is supplying its members with 14 x 22 in. signs like the above for attachment to the building.
User appreciate the way new Crane faucets open and close at a finger's touch, thanks to Dial-ese. Seats are easily replaced and single unit fits all Crane faucets, simplifying maintenance.

Dial-ese is an exclusive feature found in all new Crane plumbing trim and typifies the sound engineering-back of the Crane line.

- Water pressure below seat means easy closing . . . prevents dripping.
- Stem threads are lubricated.
- Short stem means less friction.
- Stem packing below threads prevents corrosion.
- Lock nut prevents turning—keeps packing joints tight.
- Entire unit replaced quickly like a cartridge.
- One unit fits all Crane trim.

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NATION-WIDE DISTRIBUTION THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING DEALERS
The new Weyerhaeuser 4-Square Home Building Service grows and expands constantly. It is never static. It is always up-to-date. New developments are always taking place in the home building field. Accordingly, Weyerhaeuser, in cooperation with leading architects, adds a new home each month to this growing collection of the latest and best in home designing.

Here is a Service that you will enjoy using. It is new and different. It is complete. Every house in the Service is architect designed and Weyerhaeuser engineered. The majority of the designs lie within the building limits of present conditions.

See your 4-Square Lumber Dealer. Acquaint yourself with this Service. Use it in your selling.
A new high in home planning and home building services has been established in the Weyerhaeuser 4-Square Home Building Service. This service is available for the use of contractors and builders through their local retail lumber merchants.

The new Weyerhaeuser 4-Square Home Building Service is more than a planning guide—it is a veritable encyclopedia of home building information.

It is a large, impressive book—over 200 pages—11"x18"—printed in two colors, with many of the homes shown in full color. It illustrates in complete detail scores of popular houses developed by leading architects and sponsored by Weyerhaeuser. Also included in this encyclopedia is the well known book THE HIGH COST OF CHEAP CONSTRUCTION, which you'll be glad to review with your home building prospects because it illustrates good construction, the kind of construction that enhances your reputation as a builder of quality homes. The Service includes working drawings for every house design.

Weierhaeuser Sales Company
First National Bank Building • Saint Paul, Minnesota
WHY PROMINENT BUILDERS USE YOUNGSTOWN KITCHENS

This is typical of many Dvorak-built homes and housing units. The compact, good looking Youngstown Kitchen is shown at the left.

ROBERT E. DVORAK and his son, who have built and sold hundreds of attractive low-cost homes in the Cleveland area.

"Attractive, well-planned...buyers like them"
ROBERT E. DVORAK, Cleveland, Ohio

Mr. Dvorak is only one of many large-scale builders who know from experience the many advantages of Youngstown Kitchens. You should have complete information on this modern steel equipment that makes homes easier to sell. Let us send you the booklet, "The Builder's Kitchen," that gives all the facts.

MULLINS MANUFACTURING CORPORATION
Warren, Ohio
Porcelain Enamel Products • Large Pressed Metal Parts
Design Engineering Service

"The modern appearance of Youngstown steel kitchens, their efficient use of space, and their durability, are a distinct contribution to the sale of our homes," says Mr. Dvorak. "We consider them indispensable to our merchandising program.

"In addition, their all around economy ties in perfectly with our constant aim to cooperate with the National Association of Home Builders, in their campaign to provide better homes for less money. Equipment like this makes it far easier for private enterprise to take care of all the nation's housing needs."
The value of three hinges on the front door is generally accepted, but good construction demands three hinges on every door of a house—inside doors as well as outside doors.

The third hinge on a door helps prevent warping, keeps doors swinging free and true, and assures perfect fit of latch and lock. How much more important in today's construction than ever before!

It can easily cost you more to repair a single warped door later than to put three hinges on every door. Besides, home owners really appreciate the triple hinging of doors—a visible mark of good construction.

Remember to triple-hinge all your doors...for better construction...for greater customer satisfaction. The Stanley Works, New Britain, Connecticut.
Here's the "Camel" that fits
GI plans today!

PRODUCTION GOES HIGHER AND
HIGHER in response to the tremen-
dous demand for the CAMEL WATER
SAVER—the water closet that pro-
vides Case quality within the limita-
tions of "GI" budgets.

One of the most popular and practical
fixtures we have ever developed, the
CAMEL has the merits of neat, modern
appearance and thorough, quiet flush-
ing with minimum water consumption.
Free-standing design, vitreous china
construction and efficient fittings make
this a "luxury" bathroom appointment
at a cost that Joe and Jane can well
afford.

Case plumbing fixtures are distribut-
nationally. See your Classified, Tele-
phone Directory or write:

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

The famous Case CAMEL WATER SAVER Closet Combination
is the ideal fixture for Veterans' housing and remodeling.
A little extra glass provides an added "touch of quality" in a house that always increases its desirability in the eyes of a prospective buyer or tenant. To give the houses you build this special sales appeal doesn't involve but negligible outlay. A few expensive applications of glass do the job — because every nickel you spend for glass shows up in a way that can be seen and appreciated. A little extra glass means a lot of extra charm.

There are many ways that even the lowest-cost homes can be improved with glass. A few glass blocks around the front door or in a dark stairwell, for instance; a full-length door mirror in several rooms; perhaps an extra shower enclosure made of Carrara Structural Glass — such applications as these are simple — but they never fail to increase sales appeal... and add to your profit.

Send for our free booklet which contains many suggestions for the use of glass in homes. It includes details like the one on this page showing exactly how each installation is made. Use the coupon below.

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**Pittsburgh Plate Glass Company**
2161-6 Grant Building, Pittsburgh 19, Pa.

Gentlemen:
Please send me, without obligation, your new book on the use of glass in the home.

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"PITTSBURGH" stands for Quality Glass and Paint

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Whatever your hauling requirements, large or small, heavy or light... GM offers you the exact kind of trucks you need to do your job. Postwar GMC pickups, panels, stakes, platforms, trailers and chassis units are the best GMCs built. They have engines of the same basic design as the famous "270" which powered nearly 600,000 GMC-built Army trucks. They boast heavier frame and axles, sturdier clutches and transmissions and bigger brakes, in addition to such prewar GMC advantages as Turbo-Top Pistons and Recirculating Ball-Bearing Steering. GMCs are all-built. They're built for your business.
"Plan good Heating for your small homes."

**AMERICAN-Standard quality products cost no more than others**

You can have quality heating for the low-cost or moderate-priced homes. For when you specify American-Standard you get the finest heating equipment money can buy. The units illustrated are among those particularly fitted for today's big market of small and medium sized homes.

Whether you want Radiator Heating, Warm Air or Winter Air Conditioning there is an American-Standard product to fit your installation requirements. Over fifty years of engineering experience and constant advancement have made American-Standard a by-word for sturdy construction, sound design, and efficient service. Consistent advertising has taught thousands to look for the American-Standard Mark of Merit.

We suggest that you check with your Heating and Plumbing Contractor. He will be glad to advise you on the current availability of the products you desire... also to explain our convenient F.H.A. Time Payment Plan for modernizing work. American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pa.

**LOOK FOR THIS MARK OF MERIT**—It identifies the world's largest line of Heating and Plumbing Products for every use... including Boilers, Warm Air Furnaces, Winter Air Conditioners, Water Heaters, for all fuels... Radiators, Convectors, Enclosures... Gas and Oil Burners... Heating Accessories, Bathtubs, Water Closets, Lavatories, Kitchen Sinks, Laundry Trays, Brass Trim... and specialized products for Hospitals, Hotels, Schools, Ships and Railroads.
RUSSWIN "TEN-STRIKE" Cylinder Lock Line

A truly great advance in cylinder locks. 10 outstanding sales advantages...

1. **STANDARDIZED CASE** - 25 lock functions available in one size case. Over 800 possible different combinations.
2. **CASE IS SMOOTH** - no bosses or projections means better fit, easier mortising.
3. **HUBS, LATCH BOLTS and DEAD BOLTS** are forged bronze; all interior working parts are extruded or wrought metal, to withstand abuse and assure long service.
4. **ARMORED FACE** protects against tampering. By changing the face plate, dealer can adapt the lock to various functions and can change the finish. Rabbed front can be supplied.
5. **THE FIRST LOCK with REVERSIBLE anti-friction Latch Bolt.** Easy for dealer to reverse. **ADJUSTABLE FACE PLATE** makes the lock adaptable to any commercial door bevel.
6. **BALANCED KNOB ACTION** - same spring tension in either direction gives lock perfectly balanced knob action.
7. **ALL LOCKS** are available with anti-friction (3/8" throw) or plain (1/2" throw) latch bolt. Lock can be changed to either type.
8. **DEAD BOLT LOCKS** are available with either 3/8" or 1" throw. By stocking both lengths of dead bolts and turn piece hub dealer can change easily from standard to long throw.
9. **FAMOUS RUSSWIN ADJUSTABLE BALL BEARING PIN TUMBLER CYLINDER.** Adjustable for doors from 1 3/4" to 2 1/2" thick.
10. **TWO LINES** — **Standard:** 1" x 8" front for 1 3/4" doors, 2 1/2" backset (available in special 2 3/4" backset). Case is the same for all types of lock functions.
    **Heavy Duty:** 1 3/4" x 8" front for 1 3/4" and up doors, 2 3/4" backset (available in special 2 3/4" backset) otherwise identical with Standard series.

**RUSSWIN "TEN STRIKE" LOCKS** represent a much needed development in simplifying cylinder locks. By means of a few interchangeable parts a lock can be adapted to different functions. These improved locks will be available soon. Russell & Erwin Division, The American Hardware Corp., New Britain, Conn.
How to INSPIRE a doorway

A frame of Insulux Glass Block around a doorway means extra light in this usually dark spot—a friendly and modern appearance that home buyers like.

Besides adding the modern note that people who are building and buying new homes want, Insulux does an important functional job that other materials cannot do. Softly diffused natural daylight pours in—and prying eyes are barred.

Insulux Glass Block is a favorite building material with progressive builders because of the sales appeal of natural daylight. The uses for Insulux panels are many and varied—in entrance halls, kitchens, bathrooms, stairways—wherever light will make a space more livable and attractive. In these places Insulux can aid in the resale of the home.

For further information on the uses and advantages of Insulux Glass Block, address Dept. C-72, Owens-Illinois Glass Company, Insulux Products Division, Toledo 1, Ohio.

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Day or night, you can have your demonstration. You can see how Homelite generators operate brilliant floodlights as well as electric tools.

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Veteran Vinson was vexed . . .

But not for long

His architect and builder
Turned to Ceco...Construction
On his home went ahead

In a foxhole on Okinawa, Veteran Vinson made a promise to himself. When he got back he was going to build a home of his own. And he kept that promise. He watched the basement and foundation walls go in and then it happened. Previously specified materials suddenly were unavailable. But his architect and builder were alert. They called on Ceco. New designs were drawn and available products substituted. Construction was resumed—he obtained a better home.

Ceco does more than design and manufacture fine construction products. Besides their wealth of technical engineering knowledge there is constantly available to you construction know-how gained by many years of experience on the job, in the field. In 23 offices strategically located from coast to coast, Ceco stands ready to help solve your problems without delay and with technical skill. In these days of shortages, Ceco often can show you how to adapt available products so the job can go ahead. In the matter of hard-to-get materials, Ceco is doing all it can to rush production for you.

Ceco Steel Products Corporation
General Offices
5701 W. 26th Street, Chicago 50, Illinois

Here are the Ceco products that helped solve Veteran Vinson's problems:

- Metal joists for floors
- Metal casements and screens for window openings
- Metal basement windows and screens
- Metal lath and accessories for ceilings and partitions

Construction products CECO ENGINEERING makes the big difference
In the homes you build, be sure to provide for conveniently located telephone outlets. Your clients will appreciate this extra, modern touch.

During construction or remodeling it is easy and inexpensive to install telephone conduit within walls leading to neat wall-plate outlets wherever needed for maximum convenience. And when telephones are put in, the wiring will be concealed.

Good telephone arrangements are good indications of quality construction. Your Bell Telephone Company will be glad to co-operate in planning them. Just call the nearest Telephone Business Office and ask for “Architects and Builders Service.”
The growth in popularity of the Picture Window has been phenomenal. Thermopane, L-O-F’s transparent, multiple-pane insulating unit has won wide and enthusiastic acceptance as the ideal glass for large window openings.

**FREE FOLDER CONTAINS FULL DATA**

Send for our folder which, in addition to the data at right, includes full glazing instructions. Write to Libbey-Owens-Ford Glass Company, 1376 Nicholas Building, Toledo 3, Ohio.

Thermopane—the L-O-F windowpane that insulates. Dehydrated air is hermetically sealed between its panes with the metal-to-glass Bonder-metic Seal. Thermopane helps cut heating bills, adds comfort and reduces the possibility of condensation on the glass.

The following sizes have been established as standard for Thermopane manufactured with two lights of \(\frac{3}{4}\)" Polished Plate Glass separated by \(\frac{3}{4}\)" air space:

- \(48\frac{1}{2}'' \times 35\frac{1}{2}''\)  \(50'' \times 96\frac{1}{2}''\)
- \(48\frac{1}{2}'' \times 55\frac{1}{4}''\)  \(58'' \times 64\frac{1}{2}''\)
- \(48\frac{1}{2}'' \times 75''\)  \(58'' \times 72\frac{1}{2}''\)
- \(50'' \times 48\frac{1}{2}''\)  \(58'' \times 80\frac{1}{2}''\)
- \(50'' \times 56\frac{1}{2}''\)  \(58'' \times 96\frac{1}{2}''\)
- \(50'' \times 64\frac{1}{2}''\)  \(58'' \times 116\frac{1}{2}''\)
- \(50'' \times 72\frac{1}{2}''\)  \(60\frac{7}{8}'' \times 35\frac{1}{2}''\)
- \(50'' \times 80\frac{1}{2}''\)  \(60\frac{7}{8}'' \times 55\frac{1}{4}''\)
- \(60\frac{7}{8}'' \times 75''\)

By adopting the above sizes, which have been established by manufacturers who make sash units for Thermopane and which are based on American Standards Association 4" modular construction, design, supply and installation will be simplified.
Why are K&M "Century" Asbestos-Cement Shingles the best for you to use?

* Here's why you should build with K&M "Century" Asbestos-Cement Roofing and Siding Shingles:

First, "Century" Asbestos-Cement Shingles build customer satisfaction and goodwill. Their asbestos-cement composition means they're proof against fire, vermin, rot and weather. They never need painting or maintenance. They grow tougher with age, and last forever.

Second, "Century" Shingles are economical to apply. Their 24" lengths speed up your job of laying, lowering your labor costs. And speed is an important factor these days.

And don't forget ... K&M has been making asbestos-cement shingles longer than any firm in this country. That's a pretty good index of quality ... and a quality job is your stepping stone to prestige and continued prosperity. Yes, "Century" Roofing and Siding Shingles are your best bet.

"Century" #37 Graytone Siding and #30 Green Roofing Shingles give this Maryland barn its simple beauty ... and its sturdy, lifetime construction.

Original manufacturers of asbestos-cement roofing shingles in this country

Keasbey & Mattison Company • Ambler • Pennsylvania
Reconversion Housing makes necessary the allocation of Douglas Fir Plywood

--- as a result the supply situation is being temporarily aggravated

... and by the Reconversion Housing Program, means that a substantial proportion of the Douglas fir plywood industry's current production is being allocated to housing contractors, stock cabinet manufacturers, prefabricators and distributors.

As a result, the supply situation for all other industrial and construction uses will continue difficult in the immediate future. However—more plywood is being produced today than in pre-war years, and once the present overwhelming demand for housing has subsided, supply for all users should be adequate. Anticipate your needs as far in advance as possible—and discuss your requirements with your regular source of supply.

DOUGLAS FIR PLYWOOD ASSOCIATION - TACOMA, WASHINGTON

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LET DEFOE SHOW HOW

You Can Afford

The Very Best

... in design and workmanship
... in comfort and convenience

WHEN you buy Defoe you will acquire a fine heritage of beauty and common sense in design brought into being by workmen skilled in a traditionally fine craft. And remember, Defoe builds homes—the kind that fit naturally into any American couple's scheme of living. No trend toward freak design has been permitted and there will be no compromise materials or construction methods employed.

HOUSING DIVISION
DEFOE SHIPBUILDING COMPANY Dept. AB-7
BAY CITY, MICHIGAN

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Street: ____________________________________________
City and State: ____________________________________

The Federal Government has just announced details of a nation-wide emergency housing program which will necessitate changes in the original program for the construction of Defoe Homes. The brochure offered in the attached coupon shows architect's drawings of several houses which can be built by the Defoe system. It also explains how the Defoe method works and pictures some of the unique features which Defoe will offer.
Here to serve you is a new, profitable working tool—a practical file of KIMSUL® application methods, worked out by insulation engineers to help you do a perfect job in a minimum of time.

Proved in practice by thousands of builders, these are tested methods for simplifying your operation. They show you in full technical detail—with 40 accurate drawings and sketches—how much more easily prefabricated many-layer KIMSUL blanket insulation is applied in new or existing construction.

Learn how much better and easier it is to work with this superior insulation. Mail the coupon for your free, factual Application Data File today.

We are producing all the KIMSUL Insulation we possibly can, but due to the great demand, your dealer may have some difficulty in supplying your requirements as promptly as usual.

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KIMBERLY-CLARK CORPORATION
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KIMBERLY-CLARK CORPORATION
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Address: _________________________________________

City: _______________ Zone: _______ State: ________

*KIMSUL (trade-mark) means Kimberly-Clark Insulation
Two lines of PITTCO METAL
now available for Store Fronts of distinction

PITTCO Store Front Metal is functional as well as artistically, designed to fit every store front need. The Pittco De Luxe double face metal is both a safe and attractive display structure for "open vision" display windows and partitions with glass panels. Reversing the members permits glass to be set from a single side—a decided advantage when working above normal grade levels. The extruded method of manufacture assures rugged strength, clean, sharp profile, lasting color and perfect finish. The variety and imaginative styling of Pittco De Luxe mouldings help architects create impressive, individualized store fronts of high quality.

Pittco Premier, though lighter weight and more moderately priced than Pittco De Luxe, embodies the same thoughtful planning and inspired styling which have made the De Luxe line an outstanding success. Like Pittco De Luxe, the Pittco Premier was designed as a unit giving inherent harmony which permits the architect to develop a variety of attractive store front combinations. Pittco Premier construction can be set more quickly than any other metal construction, effecting a substantial saving in setting time. Practicality plus the high degree of architectural beauty in the Premier line makes possible the creation of economical, sales-winning store fronts.

PITTCO STORE FRONT METAL
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"PITTSBURGH" stands for Quality Glass and Paint
A KOHLER bathroom
has quality appeal and practical appeal

The appeal of attractive clean-cut lines, good proportions, well-matched designs, lustrous easy-to-clean surfaces, and the practical value of smooth-functioning working parts—these are satisfactions that home-owners have learned to associate with Kohler fixtures and fittings. This confidence inspired by Kohler quality is an advantage to you. It means that home-owners for whom you provide Kohler plumbing are immediately assured that their sanitary facilities will be efficient for health protection, and will add both to the comfort of living in a home and to the ease with which it can be rented or sold.

The Kohler fixtures and fittings in the bathroom above include the Gramercy vitreous china lavatory with built-in fittings and roomy shelf; the Cosmopolitan recess bench bath, with maximum strength and rigidity assured by cast iron construction—and equipped with the efficient Triton shower mixer; and the quiet Wellworth close-coupled closet.

The high standards of Kohler quality are now a 73-year-old tradition, carefully maintained, and safeguarded through every step of production by unity of supervision in one plant. Write for information you need on Kohler products now available. Kohler Co., Dept. 7-AB, Kohler, Wisconsin.
You'll satisfy both tenants and owners when you specify Servel Gas Refrigerators for your new apartment houses. This modern gas refrigerator never makes a sound, never annoys. And despite constant use, Servel does its job silently... without wear. As 2,000,000 users have proved, it stays new, even after 10, 12 or 15 years of service.

These outstanding advantages of Servel—permanent silence and lasting dependability—are the result of a basically different operating method. Servel is the only refrigerator that freezes with no moving parts. There's no machinery to get noisy or wear. A tiny gas flame does all the work...circulates the refrigerant that produces constant cold and plenty of sparkling ice cubes.

So be sure to provide outlets for Servel Gas Refrigerators in your current designs and construction work. For installation data and full information, consult Sweet's Catalog. Or write today to Servel, Inc., Evansville 20, Indiana.
**Housing Picture Looks Brighter**

The Wyatt program has failed. It was foredoomed to failure from the day it was announced. The reasons are that it was predicated on a trumped-up emergency that did not exist; it was inspired by public housing advocates as another strong bid for government control of all home building; it was dictated by OPA as a part of that agency's master plan to continue itself in permanent control of prices; and it denied the fact that private builders had started dwelling units at a rate which, if restrictions had been removed promptly, would by now have reduced housing shortages from the acute stage.

The home building industry has known all this for months. Unfortunately, large segments of the public did not know it. Nor did most of the recently discharged veterans know it. Practically the only voices they heard were those of Bowles and Wyatt saying that private industry was impotent; that there was an emergency; that the government was taking strong and necessary action to solve everything. But veterans and other Americans saw hundreds of thousands of incomplete homes standing in every part of the country.

What is the situation in Washington? The public housing crowd also know that the program has failed, and that it is backfiring. They are trying frantically to salvage something from the wreckage, to find some way to produce something, or to claim some of the credit for what home builders started before the Housing Expediter moved in. Wyatt, who asked for 600 million dollars to use as subsidy payments to manufacturers, is having a hard time trying to get rid of two-thirds of that amount. The public is asking embarrassing questions, and the only results of six months of loud talk in Washington that the veterans have seen are groups of sub-standard emergency hovels, usually erected in anti-New Deal residential areas for obvious political reasons.

The Bowles-Wyatt strategem to help socialize the home building industry, and labeled Veterans' Emergency Housing Program, is about to blow up, and Washington politicians know it. As the next move, the public housing crowd has provided Mr. Truman with a part of the President's Reorganization Plan No. 1, by which NHA will become permanent and far more powerful. If they get away with that, the Wagner-Ellender-Taft bill will be passed with greater vigor than ever. Victory for both will mean the end of private home building.

No such end is in sight, however. Both Congress and the public are rapidly getting fed up with bureaucratic jockeying for power at the expense of the national economy. There is every reason to believe that if home builders continue to press the fight intelligently and vigorously, private home building will start on a large scale before the end of the year.

In the meantime, Wyatt, if he will accept the Lockwood Report as a guide, force OPA to act at once, and separate himself from public housing theories and legislation, can still become an Expediter, gain the political stature he seeks, and emerge as a man of proved ability in the conduct of public affairs.
An undeveloped rolling site, better than a block long, in the center of a well-developed area in Henderson, Ky., with large, old established homes bordering the site on the east and a group of new standardized one-story houses all built from a typical pattern flanking it on the west, presented a challenge to Talmage Hocker and Carlos Jagoe of Owensboro, Ky. These men, with a background of building and designing ability, saw the possibilities of developing a community of reasonably priced houses with a variation of floor plans and exteriors.

Taking time off from the many duties that pressed upon them as manager and president, respectively, of the Daviess County Planing Mill, Owensboro, Ky., these men started to work on the project at a time when restrictions due to the war began to make their task burdensome.

Taking advantage of the contour and the many fine old trees that were found upon the site, the builders varied the size of the lots and the houses to conserve their beauty.

This project consists of a total of sixteen houses, eleven having five rooms and five having six rooms each.
Houses for Today's Market

The houses can hardly be classed among the most progressive residential work, yet the careful arrangement of the floor plans and the willingness to improve upon convention in design elements represents an advance in this simple and conservative type of house design.

In general the houses that comprise the Cardinal Lane development are wider than they are deep. With one exception the garages are all detached, being placed toward the rear of the property. All living rooms are of good size with a complete wood-burning fireplace in each. Dining space is unusually generous, each house having a fair sized kitchen and separate dining room. A full basement provides ample storage and utility space.

Use of standard lumber sizes and repetition and variation of basic floor plans made for economical construction methods.

A duplicate of the Henderson development is now being built for veterans in Owensboro, Ky.
These Small Homes Really Are Small

They suit today's market among young veterans and other shelter seekers

TO HELP lick the twin menace of housing shortage and rising building costs the house that is actually small in size can do a big job. Taking less of scarce and hard-to-get building materials and less of building labor, the really small house goes up fast, requires smaller financing, is within the reach of more buyers or renters and gives quicker action to any program for relieving a community's housing shortage.

Frequently the home design that is labeled "small" turns out to be plenty big and expensive when the foundation is dug and the pictured plans are translated into bricks and lumber at the building site. A little added here and added there finally builds up into a sizable project that is difficult to complete under today's conditions within a reasonable time and at a reasonable cost. Quick action is wanted now, and the cost held down as low as possible.

This line of thinking has produced the home designs illustrated here. They are small homes that really are small. They are simple and easy to build. They require

LARGE glass expanse and a tandem-type garage are attributes of this compact plan.

A FIREPLACE and many windows, providing for ample light and air, distinguish this plan.
THIS HOUSE, while small enough to be built on the limitations of a 60-foot lot, gives the appearance of a substantially larger unit. A minimum of scarce building materials and of equally scarce building labor. Yet each is big with potential home comfort and satisfaction—a well designed dwelling that would grace any neighborhood.

These designs are some created by Thomas, Grainger & Thomas, prominent Seattle architects, for building contractor Solon B. Parker for his “Evergreen Homes” development north of the city, in the general neighborhood of the Seattle Naval Hospital. He is presently building 48 of these houses to sell at from $6,750 to $7,000, each on a developed lot averaging 70 by 125 feet.

This tract has been opened by Carroll, Hillman & Hedlund, Inc., for the G. I. program of small homes. A similar and somewhat larger tract lying to the south of Evergreen Homes and known as “Ridgecrest,” also sponsored by Carroll, Hillman & Hedlund, will be built up with small homes of the same type. Active on this project are Allen MacLean, building 95 houses; A. D. Johns, building 95 houses; and Hykes Construction Co., building 96 houses. (Continued to next page)

AN OPEN PLAN created by having the living-dining-kitchen area combined in one space.

UNFINISHED second floor has space for future rooms; addition has service area.
ABOVE AND RIGHT: This plan provides the core for future expansion into a comfortable, convenient and economical two-bedroom house, meeting the needs of many young couples who want to build today. The exterior follows a simple, straightforward treatment with sufficient breaks to provide light and ventilation.

THE MODIFIED MODERN, with full length windows to take advantage of solar heating (shown at left, and plan above) is the nucleus of another comfortable and economical two-bedroom house. The "works" of this unit are designed to accommodate the expected expansion. By "works" we mean the kitchen and utility areas.
When, in January, Wilson Wyatt announced a goal of 1,200,000 dwellings to be started in 1946—28 per cent higher than the greatest housing year on record—builders and the public alike were inclined to view the job as perhaps an impossible assignment. But already, the builders have surpassed the established quota for the first quarter of the year.

Of the total of 1,200,000 units to be started, Mr. Wyatt set 151,000 as the mark for the first quarter and 287,000 for the second. By the end of March, it is estimated that builders had actually started or were prepared to begin work on 171,000 units. These are more than 20,000 above the first quarter’s goal, because they do not include the 17,000 conversions and trailers counted in the housing expediter’s expected 151,000. The 171,000 units are, in fact, conventionally built housing and permanent prefabricated homes for which building permits must be secured in most urban areas, or they are temporary federally-financed units provided for veterans by transfer from previously war-congested localities.

Preliminary estimates show that when April’s 75,000 dwellings have been added (making 246,000 started or scheduled to start in the first 4 months), builders achieved about three-fifths of the anticipated half-year goal of 400,000 permanent or relocated units. The rush to start certain types of housing before issue of the limitation order of March 26 probably pushed forward the date for units that would not have been allowed, and kept other types of units from getting to, or beyond, the drawing board. Accordingly, April saw a decline in momentum. Prospects nevertheless look bright for achieving the half-year goal at least by the end of June, since in April the country was just entering the busiest building season in two decades.

Indications are, however, that dwellings started today take somewhat longer to complete than in normal times when materials are readily available. The fact that 1,200,000 units may be started by the end of 1946, therefore, does not guarantee 1,200,000 homes for veterans to occupy. Though field survey results show that building time will probably be less for houses started this March than for those begun last September, construction time must be reduced still further. Only then will the number of dwellings available for living keep pace with the excellent record of the number started.

Where are the materials and labor to do the job? The materials question has received extensive attention. Those responsible for handling this problem hope that under existing regulations, assuming some adjustments in conventional plans, there will be a flow of materials adequate to assure achievement of our entire 1946 construction program, non-housing as well as housing.

Somewhat less attention has been paid to the question of labor; yet there has been a tremendous amount of speculation regarding the adequacy of the supply of skilled craftsmen for the 1946 program, particularly the housing part, and at the same time, about the possibility of disemployment of journeymen on nonresidential building. The best reason that the labor supply problem has not received fanfare equal to that of the materials problem is the fact that it deserves less. Reliable estimates point to a labor supply on the whole fully adequate to accomplish the 1946 construction program. Here are some of the considerations that permit us to arrive at this conclusion:

First, how much construction labor will be needed in 1946? The Bureau of Labor Statistics estimates that a total of 1.9 million workers will be needed at the September peak, of whom half, or nearly 950,000, will be required in nonfarm housing, about a fourth, 472,000, on other building, and the remaining fourth on nonbuilding construction such as utilities work, streets and highways, and reclamation and development projects. Compare

![American Builder Chart. Source: Bureau of Labor Statistics.](image-url)
available in 1946, there may not be a balanced distribution according to skills. Without the proper occupational distribution of the workers, the program breaks down.

The Bureau of Labor Statistics estimates that of the nearly 1.9 million workers to be needed at the 1946 peak, 46 per cent must be semi-skilled and unskilled workers for which there is a potential supply greatly exceeds predictable requirements. Excluding superintendents and clerks, something over half the total (984,000) must be skilled workers; a fourth (471,000) must be journeymen carpenters. In 1942, the estimated number of skilled workers in 8 of the important trades and in all the other trades together compared as follows with new construction requirements at peak in 1946.

**COMPARISON OF EMPLOYMENT**

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<th>OCCUPATIONS</th>
<th>1946 requirements on new employment on all construction</th>
<th>1942 estimated employment on all construction</th>
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<tr>
<td>All skilled workers</td>
<td>984,000</td>
<td>1,147,000</td>
</tr>
<tr>
<td>Bricklayers</td>
<td>75,000</td>
<td>86,000</td>
</tr>
<tr>
<td>Carpenters</td>
<td>471,000</td>
<td>517,000</td>
</tr>
<tr>
<td>Construction machinery operators</td>
<td>47,000</td>
<td>87,000</td>
</tr>
<tr>
<td>Electricians</td>
<td>43,000</td>
<td>52,000</td>
</tr>
<tr>
<td>Lathers</td>
<td>12,000</td>
<td>14,000</td>
</tr>
<tr>
<td>Painters, decorators, and glaziers</td>
<td>102,000</td>
<td>84,000</td>
</tr>
<tr>
<td>Plasterers</td>
<td>44,000</td>
<td>38,000</td>
</tr>
<tr>
<td>Plumbers and Steamfitters</td>
<td>79,000</td>
<td>103,000</td>
</tr>
<tr>
<td>All other skilled workers</td>
<td>111,000</td>
<td>171,000</td>
</tr>
</tbody>
</table>

*Including minor building repairs

The 1942 employed and skilled labor force on all construction was enough to be and spare for the 1946 new construction program, except in the case of 2 trades—the painters and the plasterers. In these trades, the deficit amounts to 24,000 workers, 18,000 among the painters alone. If the characteristics of the construction being undertaken in 1942 are taken into account, however, it is easily seen that many more painters and plasterers were undoubtedly available though not being used in the construction industry. Painters and plasterers are employed largely in building, but most particularly in residential work. This type of work was at low ebb in 1942. On the other hand, while the industrial and military building program was at its height at this time, painters and plasterers were not likely to be needed for anything like the numbers that a commensurate residential building and repair program would require. barracks, huge refineries, shipyard shops and ways, large aircraft assembly plants, and ordnance work are more than adequate requirements than could be accommodated by the potential unemployed in these trades. C. T. Bowersham, director of the apprentice training service of the United States Department of Labor, said in a recent interview with the writer, "The demand for skilled tradesmen is still high, and the supply of skilled tradesmen is still ample." He added that the demand for skilled tradesmen is still high, and the supply of skilled tradesmen is still ample. In addition to the demand for skilled tradesmen, there is also an acute shortage of skilled labor force on all construction. In May 1946, over 1,350,000 workers were engaged on building. Most of these are a potential labor supply for housing, yet it is estimated that only 950,000 will be required for building homes during this year's housing peak. We shall see how good these prospects for the remainder of the construction program.

## Recruiting Program Showing Results

The size of the 1942 skilled labor force on construction is only temporary insurance against shortage. Unless new workers are introduced constantly into the construction industry and sufficient numbers are being employed, the shortage may yet occur because of the retirement and death of skilled workers or their transfer to other industries.

In anticipation of this danger, there is now in progress a nationwide campaign on the part of construction and building trade associations, the building trades unions, and the Apprentice Training Service of the United States Department of Labor, working together, to expand the number of apprentice-training systems and programs over the country and add materially to the number of apprenticeship and journeymen. The success of this cooperative effort has already been remarkable. A somewhat incomplete count shows a minimum of

**Expenditures on New Construction**

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<th>Years</th>
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<td>1945</td>
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**Residential Building**

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**Nonresidential Building**

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**Commercial and Public Utilities**

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**Streets and Highways**

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**American Builder Chart. Source: Bureau of Labor Statistics.**

The 1942 employed and skilled labor force on all construction was enough to be and spare for the 1946 new construction program, except in the case of 2 trades—the painters and the plasterers. In these trades, the deficit amounts to 24,000 workers, 18,000 among the painters alone. If the characteristics of the construction being undertaken in 1942 are taken into account, however, it is easily seen that many more painters and plasterers were undoubtedly available though not being used in the construction industry. Painters and plasterers are employed largely in building, but most particularly in residential work. This type of work was at low ebb in 1942. On the other hand, while the industrial and military building program was at its height at this time, painters and plasterers were not likely to be needed for anything like the numbers that a commensurate residential building and repair program would require. barracks, huge refineries, shipyard shops and ways, large aircraft assembly plants, and ordnance work are more than adequate requirements than could be accommodated by the potential unemployed in these trades.
American Builder, July 1946.

30,000 building trades apprentices on active file by the end of April 1946. From the last of August 1944, to the end of April 1946, the number of apprentice systems had almost doubled (from 771 to 1,457) and the number of subscribing contractors had risen over 2½ times (from 11,189 to 29,762). During the first 4 months of this year, alone, there has been a jump of 30 per cent in the number of registered systems and 36 per cent in the number of cooperating establishments. By the end of April nearly 5,700 contractors were apprenticing workers in the painting trades, over 6,400 in the wood-working trades, 5,600 in the pipe trades, 4,100 in the electrical trades, 2,100 in sheet metal, and 4,300 in the trowel trades. The numbers are rising daily.

Veterans constitute nine-tenths of the new apprentices hired in recent months. Indenture of veterans under approved systems of apprenticeship has been greatly speeded by General Omar N. Bradley’s official recognition of Joint Apprenticeship Committees as accredited agencies for training veterans under the G. I. Bill and Public Law 16, 78th Congress (providing training for service-incurred disabled veterans). But further than this, employers and labor unions together, recognizing their duty toward the veteran and the need for expanding the industry’s skilled labor force, have been waiving the usual age limitations, allowing credit for previous experience and education, whether secured in or out of the service, and allowing more rapid advancement to individuals on account of demonstrated exceptional ability.

Skilled Labor Force Is Expanding

Analysis of 94 new building trades apprenticeship standards received from local areas at the Federal Apprenticeship Training Service office during January 1946 showed the following provisions in the indicated proportions:

- 48 per cent provided for maximum age exemptions
- 88 per cent allowed credit for previous experience and education
- 10 per cent allowed more rapid advancement on account of demonstrated exceptional ability, and
- 14 per cent provided that class attendance in related instruction be paid for during working hours.

In the case of the age exemption, the usual practice is to consider applicant servicemen as the same age they were when they entered military service. It may be assumed that the percentages shown above are the minimum, since the practices mentioned are frequently introduced after the basic standards have been reported and, while reflected in minutes, are not written into the registered standards. In many areas, in fact, the reported ratio of the number of apprentices allowed to total number of journeymen remains the same, apprentices have actually been hired in much greater numbers, in some cases to the extent of doubling the allowed quota.

The fact is that the skilled labor force in the building trades is expanding at an increasing rate. What is more, there are indications of an attempt on the part of some of the existing locals to overlook temporarily rules that may prevent speedier operations of the skilled workers already on the job. Most striking of all is the agreement announced January 13 between the Joint Industry Board of the Electrical Industry and the International Brotherhood of Electrical Workers, Local 3 of New York City, providing unrestricted use of the most modern technological methods and high-speed labor-saving tools and devices to reduce building time and costs for the duration of the housing emergency. What is more, it was agreed to work two 7-hour shifts at regular time, instead of returning to the pre-war 6-hour day. The agreement affects 10,000 skilled electrical construction workers and 364 contracting companies in New York City.
Canadian prefabricated house manufacturers are well established and have planned program for expansion of their facilities.

Besides a boundary and many points of common interest, the United States and the Dominion of Canada have many common problems; at the present time not the least of one of these is a shortage of adequate housing accommodations. In Canada, as here, veterans and non-veterans alike find that "Home Sweet Home" is in short supply, and for most of the same reasons—unrealistic government regulation and control; the migration of large numbers of families to war industry centers; the accelerated wartime marriage rate; critical shortages of essential building materials, and wartime restrictions on residential construction.

A plane view of Halliday plant in Burlington, Ont. And in Canada, as in the United States, the manufacturers of prefabricated houses are expanding their production while planning increased plant facility programs to meet further the vast pent-up need and demand for new homes.

Last month, in its feature article, "Prefabrication Today," American Builder reported on the prefabricated home manufacturing industry in this country. To imply that a monopoly on this lusty and dynamic industry exists in the United States is erroneous and an injustice to our good neighbor to the north. In Canada, prefabrication also emerged from the war as a vital and established factor in the field of residential construction, and as in this country, holds great promise of becoming even more important in the years immediately ahead.

The established Canadian prefabricators are also busy coupling the research and development experience gained in prewar years with the production "know-how" obtained from turning out sizable quantities of war housing to forge their position in the residential building field, similar to their counterpart in our own country.

More common ground is found in the similarity of problems confronting the industry in both countries. Public acceptance of prefabrication is a matter of major concern to the Canadian producers, and they too have the big obstacle of developing a sound and economical method of merchandising and distribution. Because the
The prefabricated home industry as a whole faces these difficulties it is cooperating as a unit in overcoming them to the end that prefabrication can ultimately be a leading producer of medium- and low-cost housing.

Methods of prefabrication used by most of the qualified Canadian manufacturers do not differ materially from those used by the established firms in the United States. Generally speaking, three types of wall units are prefabricated: the full-size wall unit containing door and window openings; the 4' x 8' panel unit, with stock units for plain wall, door and window panels, and filler panels to fit particular dimensions; and, plain wall units extending between openings and from edge of opening to opening to house corner. Window and door frames are inserted between these solid units.

Canadian prefabricators are aware of the need for the widest dissemination of information about their product and are quick to point out that the prefabricated house is not a "new product"; rather, they assert, it is "a new method of producing homes that has come to be known as prefabrication." They stress that their homes are completely engineered for maximum comfort, strength and convenience, because superior construction can result only from quality materials efficiently assembled with mechanical equipment under the most favorable conditions. Further, they tell you that, despite the long Canadian winters, prefabrication provides year-round employment which holds out great appeal to labor while resulting in increased productivity of the worker. They also let you know that although the greatest production of prefabricated houses is in the field of one, two or three bedroom homes, of one or one and one-half stories, they have made countless attractive, well planned and designed larger units.

Among the leading firms in Canada manufacturing prefabricated houses are: Canadian Prefabrication, Inc., Quebec; North American Buildings, Ltd., Winnipeg, Manitoba; Prefabricated Buildings, Ltd., Vancouver, B. C.; and Harry Thompson, Ltd. (operating Chinook Building Supplies), Edmonton, Alberta.

The Prefabricated Home Manufacturers Institute, Washington, D. C., serving as the nerve center of the prefabricated home industry, also serves as a bond between the Canadian and American prefabricators.
STRAIGHTFORWARDNESS of design and low roof line give beauty and charm to the southwestern Ranch House shown above.

New Type Planning Provides for Clean Heating

Utility heating room saves time, labor and materials by eliminating need for full basement while retaining desirable features of a basement heating plant.
Coal Heat

Coal heat side through a small door in the lower wall of the heating room, there is little opportunity for the ashes to get into the house.

In the modern trend, the room is a part of an efficient kitchen-heating-laundry work wing. It is sunk slightly below the frost line (about 3½ feet) to save excavation costs and extensive waterproofing. Warm floors are assured by circulation of heated air from the heating room through two grilles leading to the space between the first floor and ground level. Any conventional system—warm air, steam or hot water—can distribute the main flow of heat. This is particularly important today when a builder may not be able to get delivery on the system of his choice or finds it practical to shift from his first preference for other reasons.

The work areas in these Evans-designed homes come in several sizes, ranging from compact, well-equipped kitchen spaces planned for functional use, including ample room for dining, to a kitchen-dining-laundry-storage-and-play wing. Another kitchen has a skylight cut into the low-sweeping roof and features a wide shelf for flowering plants just at table level. Living and sleeping areas in all the houses are carefully planned, too, for light, roominess, comfort and beauty, with special attention to outside living and play space.

MODERN, compact, low cost, with a high degree of livability, are features of the four-room house and plan shown at right.
ARCADE through block on Main Street provides ready access to parking facilities.

That popular wartime diversion of the "stay-at-homes"—postwar planning—is rapidly being translated into a comprehensive program of action in the prosperous Southern Minnesota community of Le Sueur. With a population numbering around 2,500, the city is well known nationally as the home of Green Giant peas and Niblets corn, a tribute to the quality of the products grown in the vicinity and to the aggressiveness of the city's most important industry.

Early in 1944, the Le Sueur Commercial Club, an organization of the business men, determined that if the city was to continue its growth and prosperity in the postwar years it would have to be modernized to meet the competition of postwar conditions, and thereupon established a Postwar Planning Committee to map out a program.

Forward-looking businessmen's organization creates committee to study needs of thriving community. Ambitious program contemplates complete modernization of business district, including building of new facilities to meet the expected substantial postwar growth.

Under the direction of General Chairman L. E. Felton and Secretary P. E. Benson, six committees were created. Each was given the responsibility of surveying the conditions in its field and making recommendations for improvement or development. The committees appointed were: Residential Development Committee; Commercial Development Committee; Public Facilities Committee; Schools Committee; Finance Committee.
Committee, and Publicity Committee. In their work the various committees used the services of the prominent Minneapolis architect and town planner, Robert T. Jones.

The Commercial Development Committee, whose accomplishments American Builder reports in this issue, devoted itself to determining what would be necessary to make Le Sueur "a more attractive place to shop and do business."

Shown on these pages is the result of the committee's work. It is proposed that both sides of Le Sueur's principal thoroughfare, Main Street, be completely modernized.

A feature of the modernization project is the building of a cantilevered canopy over the sidewalks, to the full length of the shopping district, on both sides of Main Street.

Another part of the plan proposed for the commercial area is the extensive development of the alleys in the Main Street block for sorely needed additional parking space. To provide ease of access to these expanded parking facilities arcades will be cut through the existing buildings. This simple improvement will go a long way toward relieving the present congested condition of the street—typical today of most communities.

In a forthcoming issue American Builder will complete its report on the program proposed for Le Sueur. Part II will cover the residential project of Green Acres, a subdivision for family living, and a description of the proposed new facilities for the city.

This study of Le Sueur's shopping district shows proposed alley parking development, designed to accommodate 130 cars, with arcades cut through business blocks.
An Adaptation of the Popular Ranch House

DESIGNED by Raymond Harry Ervin, architect of Denver, Colo., for D. C. Burns of the same city, this house located on a corner lot has a compact and well related arrangement of living, dining, and food preparation area with conveniently isolated sleeping quarters and baths well separated from sound and distractions of the living room. Six rooms, a sleeping porch, two baths and attached garage are included within the overall perimeter of this house. An important plan provision, all too frequently given slight attention, is the deep walk-in type of closets adjoining each bedroom. The exterior walls are of varied colored brick topped with a wood shingled roof blended in color to match the walls. House is heated by a gas-fired forced hot air system located in basement.

LOW, sweeping lines with large glass expanse characterize this dwelling. Materials are used with skill to produce pleasing results.

ROOM reflection is caught in glass fireplace frame in living room.

BRICKWORK used in base course, window sills, entrance and bay projection differs in color from that on outside walls and adds a note of interest to the house. Complete plans and elevations are shown in the blueprints opposite.
Spaciousness—Keyword of Tri-Level House

PROGRESS in residential design was handicapped, for a long time, by the almost exclusive attention paid to the plan. It was exciting to discover that the tiresomely standard room arrangement could be varied and improved for modern family needs. One could either mask the new plan with a traditional envelope or could project it starkly, using a few new tricks.

The house shown above and outlined in detail on the adjoining page is a pleasing compromise between the traditional and the extreme modern. The designer in this case has produced a three-level arrangement that can be placed equally well on either a level or sloping lot. This plan shows a reversal of the normal three-level concept, by placing the bedrooms at the ground level, and the living and serving areas at the upper portion. The openness in this part of the plan is to be commended. Dining space is a continuation of the living room. Kitchen is separated from dining space merely by an extended counter, permitting this level to appear as one large room. Ample storage space is provided throughout.
The Walk-Over Shoe Store in Memphis, Tennessee, is an example of contemporary design by Hanker and Heyer, architects, for developing maximum rental area in an old structure.

In remodeling the Walk-Over Shoe Store, which was located in an old four-story building in Memphis, the architects, Hanker and Heyer, found that the only things of value they could use were the exterior walls and the floor joists. A great deal of adjustment in the structural elements had to be made to accommodate the new elevator and stairs. In referring to the problems that were constantly confronting him, Mr. Heyer says: "I guess every remodeling job has its share of interesting situations to meet. I believe that I could write a book on my experiences encountered during the course of the construction period." Calling attention to the floor plans, he says: "We have done away with the old method of setting aside an entire floor just for the use of stock. Instead we have established on each floor a stock room that surrounds the sales area, permitting each department immediately to have access to the particular article involved.

All compartments are projected, so that new boxes can be provided with interest, and are adaptable for heavy traffic. A natural provision is made for canopies, cabinets, or direct access.

Carrying this to its logical conclusion as the architects assure us, it is possible for a retailer to build a new department with all the advantages and at the same time create an atmosphere in which his customers are drawn to him and his business.

A COMBINATION of black vitrolite and light gray marble spandrels with stainless steel mullions adjoining the windows reflects the dash and directness that is characteristic of this treatment. The company name sign placed on the face of the vitrolite in contrasting color adds to the over-all contemporary building design.
New Through Complete Modernizing

to the stock pile pertinent to its particular needs.

All walls throughout have been completely replastered. Where projections permit, due to the design of that area, then shadow or display boxes are recessed into the walls, providing opportunity for some interesting displays. Ceilings throughout are covered with acoustic tile and all floors are covered with a heavy carpet extending from wall to wall. Glass is introduced as a structural element on the second floor to provide support for the overhanging canopy above that conceals the indirect lighting.

Care has been exercised in selecting the wall and display cases as well as the loose furniture to have it conform to the design of the interiors. The remodeling of this store demonstrates how far a little creative effort can go toward providing an attractive building that is an asset not only to the owners but to the community as well. Its accomplishment is encouraging proof that achievement of better building is dependent on the willingness of the owner, architect and builder to sit down and rechart the desired facilities and then translate them into honest contemporary expression.
EXTENSION of roof lines forms canopy over entrance, providing protection from elements.

Bungalow Apartments—The Answer to

WHAT we build now, in haste, will last for a long time. The temporary housing that is being erected all over the country for the veteran, under the stress of a so-called emergency program, has a habit of remaining as a permanent contribution to the community in which it has been placed. We cannot afford to build less wisely for the veteran than we have in the past when the pressure was not so acute.

The need for the veteran, in addition to individual homes, is rental units available to the person who as yet is still undecided as to where he wants to settle down. The building illustrated on these pages is an answer to this problem.

This structure contains seven separate apartments with both front and service entrances. Each apartment contains a good-sized living room with an adjoining area set aside for dining purposes, two fair-sized bedrooms, small but efficient kitchen, bath and utility room. Three large closets provide ample storage space. Each apartment is operated entirely separate from the others, having its own hot water supply, laundry tubs, and heating units composed of two gas-fired furnaces placed just below the floor line. There is no basement under the building. Surface dirt has been removed from under the floors, permitting free circulation of air. Exterior walls are painted common brick.

BELOW is a view on side street, following a similar pattern obtaining on opposite side, providing a large interior service court.

The Don E. Vestal Co., builders, Denver, Colo., in developing the multiple one-story apartment building located in the outlying district of this metropolitan area, has given us the answer to what the veteran is looking for in the way of shelter.
LONG, low lines blend this structure in with surroundings. Offset of adjacent units is employed for added light and interest.

To the Veterans' Housing Problem
Dear Sergeant Brown:

Yes, indeed, we certainly remember your letter written from an island in the South Pacific more than a year ago. We recall that you wrote of the heat, malaria and the lousy. You said that if you survived you wanted a new home of your own for your wife and the baby just as soon as you had a job. Now we are glad to learn that you did survive, that you have the job and are ready to purchase the home you dreamed about. Your present bitterness at being unable to find such a house is understandable. As you say, the builders in your town are just as anxious to construct these homes as you boys are to buy them. You and millions of others like you are confused by the things you are told and you are wondering what's wrong with this Veteran's Housing Program.

In the first place, Sergeant, you must realize that there are many reasons why homes, like automobiles, shirts and radios, are not being produced at a rate sufficient to meet the demand. Government under-programmed housing during the war and belatedly lifted the restrictions only after giving industrial construction a substantial head start. Thousands of strikes, particularly the major strikes in lumber, steel and coal have further reduced an already seriously inadequate supply of building materials. The net result is that houses now under construction are requiring at least double the normal period of time to complete and hundreds of thousands of additional units are not being started because there is no assurance that the materials necessary for their construction will be available for many months to come. The fact is that the wholesale building industry is now in danger of being rapidly regulated to death.

State of Emergency for Veterans' Housing

A little more than six months ago, it was determined by President Truman that a state of emergency should be declared for Veterans' Housing. He instructed the Civilian Production Administration to set up a system of priorities (HH) designed to channel approximately half of most critical building materials into the housing program for you veterans. The President then appointed a National Housing Expediter (Louisville's ex-mayor, Wilson W. Wyatt) and delegated to him greater authority than has been given to any single administrator in the history of the country. This authority gave Mr. Wyatt the right to direct all other agencies of government to take those steps necessary to provide an unprecedented amount of new homes for you and other veterans. Mr. Wyatt's first step was to announce a private enterprise goal of 2,500,000 homes in 1946 and 1947 and the re-location of 200,000 temporary war units around universities and in highly congested cities. The nation's home builders entered into a partnership with government to produce houses for you. We have hoped this partnership would work. We have met with government daily, weekly and monthly in an effort to solve the difficult problems involved. That we have kept faith is best evidenced by FHA's approval of more than one-half million priorities for which builders have the land, financing and ability to construct new homes immediately.

Program Is Boogying Down

Unfortunately these houses are not being produced on schedule. As you drive about your town today you see hundreds of houses stalled at all stages of construction while only a few are being completed. Beyond this you see an unprecedented amount of commercial and industrial construction. Knowing of the country's immense war production record you undoubtedly wonder after six months of programming and expediting so little new housing is being completed. The fault lies largely in the totally inadequate supply of less than twenty critical building materials and in the fact that veterans' housing is not receiving under the HH priority system a sufficient percentage of the building materials that are produced. The OPA refused to permit manufacturers of building materials a satisfactory profit last year when the price adjustment should have been made. Price increases made during the last few months will eventually assist the program, but unfortunately serious black markets have developed and construction costs have constantly risen. Delayed construction and substitute materials have increased the cost of housing many times the amount price increases would have involved. Excepting for a few materials, the HH priorities are a blank check on an overdrawn account.

You have expressed surprise at the amount of commercial and industrial construction. Here are the facts. On December 7 the emergency for veterans' housing was declared. On January 2 the Housing Expediter took over. On February 15 the OPA indicated that a limitation order on commercial and industrial construction would be issued. Nearly six weeks later, on March 26, the order came out. During the preceding weeks and months hundreds of millions of dollars of war-deferred commercial construction went under the wire by constructing at least part of the foundation. The government has gone on talking about releasing 850,000 prefabricated houses for veterans. The.va has failed to do so. Perhaps some day in the future they will.

Housing Program Is Bogging Down

Where Are the Prefabricated Houses?

Since the Wyatt program calls for 850,000 prefabricated houses, you are wondering why some of them are not available. Although more than 200,000 conventionally constructed houses are under way, very few prefabricated houses have as yet been erected. The government has gone a long way in giving this new type of construction preferential treatment and prefabs should be appearing in some communities in the not distant future. The government will guarantee up to 200,000 of them at any one time and, if they cannot be sold, will purchase them on the basis of 90% of the standard sale price. The home builder, using conventional methods of construction, is confident that he can build houses more economically than the prefabricator. When economies are proven, he will avail himself of the methods and products of prefabrication. In the meantime, conventional housing is being retarded because some of the materials are going to prefabricating plants at the expense of houses now under construction.

Where Are the Houses Being Built for Rent?

Although we constructed several hundred thousand housing units for rental during the war period, OPA has made it practically impossible to build such units for you veterans. The formula housing units costing $3,000 or more is not eligible for a desirable type of government insurance under the Advisory Committee on Housing Construction.

Can OPA be valid about the statement of the other writer that prefabrication is going to be the answer to our housing problem? Some dealer in prefabs has written that he thought the prefabricator was going to be a success. I think the other falls was even more correct than Mr. Brown's.
How Soon Will You Get A Home? Payne There is a CPA advisory commit- home building economy. Only by this means

Unfortunately we cannot give you a direct of screening applications for commercial and of during those terrible days on that island

Chester Bowles has predicted that "the private home building industry will fail" in doing the veterans' housing job and has

They have been given a preferential position by law and are now demanding a high priority for some of the materials so urgently needed. They are the men who know the facts and who have your interest at heart. The information they give you will be based upon practical knowledge and will be uncolored by political interests or expediency.

What Can You Do About It?

There are a number of things that you as a veteran can and should do to assist in the present housing program if the privately-con-structed homes you want are to be built.

FIRST. Consult with home builders, dealers, mortgage brokers, realtors, producers of building materials, and others in your com-munity concerned with the production, financ-ing and sale of housing. These are the men who know the facts and who have your interest at heart. The information they give you will be based upon practical knowledge and will be uncolored by political interests or expediency.

SECOND. Don't buy or rent any property unless you are convinced that it is fair value from the standpoint of reproduction cost. During the last five years the cost of housing, like everything else, has moved up very substantially. Experts disagree as to the trend of construction costs during the next decade. Although some economies will be effected when building materials are in am-ple supply and labor performs a full day's work, it is believed by many that there will be no substantial, permanent, recession from the present cost plateau. Speaking gen-erally, however, the properly priced new house is available at a lower cost and is a better value than existing properties at to-day's price level.

THIRD. There is a CPA advisory commit-tee in your town set up for the sole purpose of screening applications for commercial and industrial construction. This order should channel building material into the Veterans' Housing Program and away from desirable and non-essential construction. Learn the conditions of the order and with other vet-erans demand that it be enforced in your community.

FOURTH. Learn what the veterans' app-rentice training program will do in attract-ing labor into the building trades. When and if the housing program really gets under way, a shortage of skilled mechanics will develop. You veterans should know of the substantial benefits paid by government to veterans while learning their trade and you should discuss with labor groups the prob-lems of Increasing the labor supply and the productivity of labor in home construction.

FIFTH. Demand that your local and na-tional officials consult regularly with the home building industry in all its branches and give it support in its stand that private enterprise can do the veterans' housing job. There is no voice in the country today as strong as that of the veteran. It is immensely important that you be fully aware of the prob-lems involved in the production of homes. It is you who can most successfully defeat attempts of proponents of public housing to sabotage the private enterprise program. The veteran's need must not be exploited.

Private Enterprise Can Do the Job

To sum it up, Sergeant Brown, your housing program is seriously bogging down. Our industry has the desire, the skill, the land and the financing to provide by private enterprise methods all the housing that is required. What we need is less legislation and less regulation. We will build as many housing units. The Reorganization Plan No. 2 of 1926 without government assistance, Housing Program and away from deferrable non-essential construction. Learn the conditions of the order and with other veterans demand that it be enforced in your community.

AN OPEN LETTER

By Frank W. Cortright

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

In typical OPA fashion, the formula has been set at rent levels for new housing which must not be more than 20% higher than the pre-war rentals for comparable accommodations. Since land and construction cost have increased from 50% to 100% throughout the country it is obviously impossible for anyone to produce good rental housing under this requirement.

Experts disagree as to the present cost plateau. Speaking generally, however, the properly priced new house is available at a lower cost and is a better value than existing properties at today's price level.

Unfortunately we cannot give you a direct answer to this question. Our industry produced nearly a million homes in the year 1926 without government assistance or regulation. We have come a long way since then and could produce double that quantity provided building materials were available. As it is now each week sees new regulations added to regulations. A thoroughly skilled and potentially unlimited con-struction industry is straining to provide you with the homes you so well deserve. Work-ing always with the lowest priorities during the war period we produced more than a million homes for war workers. Whether or not we can do a better job for you veterans will depend entirely upon the speed and ef-fectiveness of remedial action by govern-ment.

Can Government Legislate Housing?

Of course, if you want a remodeled army barracks, the Federal Public Housing Author-ity is moving ahead with their program for 200,000 of such accommodations to be com-pleted by the end of the year. They have been given a preferential position by law and are now demanding a high priority for some of the materials so urgently needed for houses now being built by and for veterans. Furthermore the administration is eagerly pressing for a public housing bill known as the W-E-T Bill (S. 1592) which if passed by the House before it recesses this month will initiate an immense public housing program, starting with 500,000 public-housing units. The Reorganization Plan No. 2 now before the House would establish a government NHA to program and control the entire building industry for all time. All of these proposals lead to the socialization of the home building industry following the pattern established in England and other European countries. We are carrying an all-out fight to prevent this and we know that it has no part in the kind of free enterprise economy you and other veterans fought to preserve.

How Soon Will You Get A Home?

Unfortunately we cannot give you a direct and satisfactory answer to this question. Our
HAVING a kitchen that is "just right" has always been the dream of the American homemaker. Every woman wants a kitchen styled to express her own taste and personality. She wants it to be gay; she wants it to be comfortable; she wants it to be "homey."

Yet, basically, the kitchen is a workroom, and, as a workroom, it should meet certain requirements for functional service according to the highest engineering standards. Every woman wants a kitchen in which the job of preparing, cooking, serving and storing food for the family can be done with the least possible trouble in the shortest possible time.

The General Electric Company Home Bureau's "kitchen fashion" campaign is designed primarily to show American women how these two wishes—the wish for a functional "working kitchen" and the wish for a homey, individualized kitchen—can be granted through proper planning.

Only five per cent of the kitchens in the United States are adequately equipped for the best functional service. The Home Bureau seeks to prove to the other 95 per cent of American women that the same low-cost, mechanically perfect, easy-to-maintain "working kitchen" units can be used as the basis for innumerable kitchens in which the owner's personality has full chance for expression in the furnishings and decorations, exclusive of the basic working units.

"When you buy a car," says Victor Civkin, head of the Home Bureau architectural engineering service, "you don't question the manufacturer's wisdom in placing the carburetor or the spark plugs in definite positions. You accept the fact that he knows more about the subject than you do."
the Kitchen Most Important to Home Seekers

For the same reason, Mr. Civkin believes, housewives may well accept the wisdom of such a large home appliance manufacturer as General Electric in deciding the proper relative positions of the range, sink, refrigerator and cabinets.

But General Electric does not pretend to be an expert in kitchen design, just as a car manufacturer does not have to know how to build a garage to house the car.

According to the Home Bureau, the refrigerator should be placed near the outside door for easy receipt of raw materials, the range should be near the dining room door where cooked food is delivered, and the source of water should have an inbetween location.

This threesome can be set up in a straight line against one wall, if space is limited, or it can be arranged in an L-shape or a U-shape.

Around this "working kitchen," the housewife fashions the rest of the room. It can be New England colonial, French provincial, American gothic, South American, Swedish, Polish, or any other style. And the chosen style can be developed through decorative treatment of doors, windows, floors, walls and furnishings —without worrying about the range-sink-refrigerator-cabinet setup.

Many department store designers are planning a program of cooperation with the "kitchen fashion" idea by aiding housewives in choosing and carrying through a decoration scheme.

Meeting the possible objection that stark white kitchen equipment gives the room a bare, laboratory effect, Mr. Civkin points out that producing the basic units in color is impossible under mass-production methods. He adds, "In any well-planned room, a certain amount of white should be used. Why not let the basic working units in the kitchen provide needed white space and use color in supplementary decoration? The chances are that if appliances were produced in color, housewives would have the walls painted white, anyway."

Kitchen planning experience over a long period of time has proved the value of considering the "working kitchen" as a unit of a certain size and type, rather than having a builder or architect arbitrarily plan a kitchen and then try to fit necessary equipment into the allotted area. Such a plan, moreover, does not curtail the possibilities for individualized kitchens, since the same "working kitchen"—U-shape, L-shape or one-wall—standardized as to size and equipment and arrangement, is adaptable to many room plans and lends itself to hundreds of style schemes, with variety coming not in the "working kitchen" layout but in architectural and decorative treatment of the rest of the area.

Any one of the basic "working kitchen" shapes, according to Mr. Civkin, can be used as the major and determining factor in establishing the size and shape of the kitchen in order to save time and assure a practical kitchen layout without waste space and designed to accommodate the necessary standard equipment.

Then let the housewife fashion the room to suit her own preferences in color and style. The American woman wants individuality expressed in her home. Express that individuality, by all means, the Home Bureau advises. Have "kitchen fashion." But don't sacrifice efficiency to style.
Homestead Addition—A Small Home Development

ROCHESTER has frequently been called the fastest growing city in Minnesota. At present it has a population of approximately 30,000 people. There are very few large tracts of land within the city limits that are not subdivided. The Homestead Addition was perhaps the largest undeveloped tract within the corporate limits, covering 80 acres. It lies a mile and one quarter from the main business section and at the east city limits.

The development of this land was begun in 1940 by the Mayo Properties Association for the purpose of providing additional moderately priced housing. Ellerbe and Company, architects and engineers, St. Paul, Minn., designers of a large number of buildings for the Mayo Foundation, were assigned the task of preparing plans for the entire project. After looking over the site it was decided to avoid a grid pattern, and instead develop the area so as to eliminate the objections of having through streets. The plan adopted provides for one through street starting at the main thoroughfare on the north and extending in a gradual curve to the south. The secondary streets run in a continuous serpentine road that crosses the through street and forms courts on either side of it. This arrangement has a fewer number of lineal feet of streets and roads than would be required by any other type of layout.

An area of approximately 15 acres has been set aside for future school buildings which will be erected when the need becomes apparent. A small triangle separated from the main tract has not been developed, this being considered as the possible site of a future park. The developed area provides for 160 lots in the north section and 90 lots in the south portion, these two areas being divided by a small creek which winds its way in and through this tract. The old concept of having sidewalks placed on either side of the street has been entirely done away with. These will be installed between the lots in the place where the “alley” is normally located. Recreational areas for children will also be provided.

This entire project was planned as a progressive development covering a period of about five years. However, when the housing shortage became acute during the war years and shortly afterward, it was decided to speed up the work and not only develop the land but also build the houses under one contract if possible. To that end Conrad Hamm, contractor, St. Paul, Minn., was...
Conscious of the tremendous growth within its borders, the Mayo Properties Association, through Ellerbe and Co., architects, St. Paul, Minnesota, has launched upon a large scale community development of medium priced homes complete with schools and parks in Rochester, Minnesota.

called in and told to proceed. Ten of these are now completed or are nearing completion, and excavations for 25 more houses were complete (as of March 15). A total of 117 houses is contemplated being built in 1946. It is hoped that the other eighty will be under way shortly. The balance of two hundred and fifty houses will in all probability be completed in 1947.

The houses are all planned so that the living room is always facing toward the south and the garage is always turned toward the street. The living rooms have large windows which extend nearly to the floor. In the bedrooms the window sills are quite high so that it will be possible to use outside walls for furniture locations. All windows are side sliding with double glazing and weatherstrips. There is a full basement under entire house. A gas-fired warm air furnace provides heat.
Pittsburgh Builder Develops Basementless House Project

The first postwar housing development in the nation to feature radiant heating is nearing completion in Pittsburgh, Pa. Designed and being constructed by youthful Frank Corace, whose father is a retired building contractor and whose brother, James, an ex-Marine, is supervising the construction, and located in a residential area called South Hills Acres, the 33 one-story, five and six-room houses are described as "utility-type, streamlined, livable homes."

In these houses Mr. Corace departed not only from the conventional type heating system, but established a precedent for residential development construction in Western Pennsylvania where the hilly terrain has forced two-story house building in past years.

Although the ground in South Hills Acres is rolling, the house sites have been so well located that it was possible to build them on one floor and give them 51 feet of frontage, with an eye-appealing horizontal view.

All lots are 60 ft. or more in width and range upward from 80 ft. in depth. The typical lot in the Pittsburgh area is closer to 40 ft. in width, thus this is one of the few times—in the medium-low cost field—that "vertical" construction has been avoided. Prices for the Corace houses range from $6,900 to $8,900, inclusive of the lot.

In comment, Mr. Corace stated that he had wanted to build one-story basementless houses for many years, but in the past always yielded to tradition because of the danger of dampness. "But," he said, "with the advancement of radiant heating during the war I decided to install this type of heating to solve the problem of a cold, damp floor in my first peacetime project."

Construction techniques employed by Mr. Corace on this project have served to expedite his construction program. Foundations are practically identical—the concrete footings are topped by a 3 ft. course of concrete blocks. Inside the perimeter, a gravel fill, ranging from 6 to 8 in. deep in accordance with drainage requirements, is spread.

Sinuous coils of 1 1/4 in. wrought iron radiant heating pipes were fabricated at the site of each house. Coiling and bending was easily accomplished by means of an electric-hydraulic portable bending device of Mr. Corace's own design, that utilizes the hydraulic mechanism from an old dump truck.

Efficient and quick fabrication of the wrought iron pipe coils is one of the reasons that Mr. Corace gave for being able to achieve lower costs. All floor plans were laid out so that the same degree of bend—180 degrees—was used for every coil. Pipes are 12 in. on center. On the coils have been positioned on the gravel fill, welded together and tested under 250 pounds pressure, the 5 in reinforced concrete floor slab is poured. Mastic asphalt tile is being used for finish flooring.

Hot water supplied from gas-fired boilers is circulated through the radiant heating system by a small pump. The pump action is controlled by an ordinary wall thermostat while an aquastat regulates water temperature.

In one of the project's typical three-bedroom houses, the combination living room-dinette is 21 ft. x 11 ft. 4 in.
Development of 33 one-story, five and six-room houses in Pittsburgh area will feature radiant heat. Project is builder's first experience with plan, and first operation in three years because of materials situation and the kitchen is 11 x 7 ft. Since the houses are basementless, the boiler, water heater and laundry facilities are located in a utility room that measures 9 x 11 ft. and adjoins the kitchen. One bedroom, having two closets, is 10 ft. 9 in. x 12 ft. and the other two bedrooms, with one closet each, are 9 ft. x 11 ft. 4 in. and 11 ft. 4 in. x 12 ft. Metal-framed windows are used throughout and the living room window is approximately 6 ft. wide x 5 ft. high.

Garages are attached to all houses, some being on grade and the others below grade, depending upon the degree of slope in the land. Some open in the front while others have entrances in the rear. All garages are 9 ft. 4 in. x 24 ft. with concrete floors and cement plaster walls.

Exterior walls of the houses are brick veneer with cut stone being used to enhance the appearance of the fronts. Interior walls are tinted plaster on rocklath. Composition roofing is used throughout the project.
Decay a Hazard in Basementless Houses on Wet Sites

Protection of the substructure timbers from excessive moisture by the use of an asphalt roll roofing as a soil cover

By Jesse D. Diller

In the period of extensive defense-housing construction of the past few years, many basementless houses were erected on poorly drained sites. Little or no ventilation was provided under some of them. In such houses the moisture content of the sills and joists may become very high, and wood that is green when installed cannot dry promptly enough for safety. Some of the government-built houses are situated on leased sites and were intended to serve only as temporary quarters for war workers and their families. However, because of the present great shortage of houses, many of them will remain in service for an indefinite postwar period.

In November, 1941, the Division of Forest Pathology initiated a study of houses without basements in the vicinity of Washington, D.C., to determine the decay hazards to wooden substructure and practicable methods of decreasing them. Of these, one of the most effective was to cover the soil under the house to keep it from supplying moisture. Of the houses in the general study, four typical, basementless houses, on moist sites in the southeastern part of Washington, D.C., were selected for the test of roll roofing as a soil cover. The houses were made available and covering materials furnished through the cooperation of the Public Works Department, U.S. Navy, and the Post Engineer, Bolling Field, U.S. Army Air Forces.

The houses in the test were built in 1941 and have been continuously occupied. They were built on piers of poured concrete that averaged about 30 inches in height. Instead of a foundation wall, mineral-board skirting of 1/2-inch thickness, which extends down into the soil, was placed against the piers along the outside edge of the building. Vents were cut into the mineral board at regular intervals to provide air circulation for the "crawl space" under the house, but when all vents were open the active ventilation area under one pair of test houses was only one-sixth, and for the houses in the other pair one-third to two-fifths respectively, of that required by the formula.² During the winter months the occupants usually closed the vents for warmth, and for the entire study period vents were closed more often than open. The soil under the houses is clay, and water sometimes stood under

(Continued to page 122)
How to Save Time in Laying up Bricks

FROM St. Gedeon, Lac St. Jean, P. Q., Canada, P. A. Bolduc writes and submits the following method for saving time in laying up soldier and rowlock courses of brickwork: "Instead of having an unwieldy level to contend with, I simply use a small square which is placed alongside an upright brick. By the use of such a method approximately 50 per cent of the time used in setting up the brick can be saved."

The How-to-Do-It column is glad to hear from its friends in these far-away areas.

How to Make a Nailing Block in Masonry Wall

JOHN F. HURST, Blanding, Utah, in submitting the following, states: "To provide nailing blocks in a masonry wall that will not pull away, take a piece of wood the same size as the back bricks. Cover two sides and the face with metal lath and lay them in the wall in the same manner as the brick are laid. These will make excellent nailing blocks for frames, casings, baseboards, etc., and will remain in position indefinitely."

How to Make a Tee Square

J. G. CALDWELL, San Mateo, Calif., who is a regular contributor to the How-to-Do-It pages, says in submitting the following suggestion: "This tee square was made and used to cut sheetrock. The wallboard may be cut on edge or on the floor. A yard stick can be glued onto the blade to save time."

How to Make a Combination Saw Horse and Door Jack

FROM Wm. R. Bollman of Gridley, Calif., comes the following suggestion: "Instead of bothering with a door jack on the job I have made a saw horse which serves a dual purpose as well as providing a handy place to keep tools while at work. Take two 2x4's of a predetermined length. Cut a notch in one end of the 4" surface of one piece 6" long and 1" deep. Cut a notch in the opposite end of the other piece 6" long and 3/4" deep. Then place a 3/4" thick block between the two 2x4's, nailing them securely together. The view below shows the appearance of the horse from the top."
How to Make a Garage Door Stop

J. BROWN, Halifax, Nova Scotia, says: “A very efficient door stop can be fashioned out of a piece of hardwood 2x4” shaped in accordance with the drawing. This stop is balanced on a wood support driven into the ground. Place stop in the position where you want it to stay open. A push on the door causes it to bump against the beveled part of the stop. The stop tilts and the door hits the inner section of the slot. Due to its balance it comes up and locks the door in place.”

How to Fasten Screens to Window Frames

HAROLD O. AKESON, East Orange, N. J., submits this idea as being valuable at this time due to the shortage of certain kinds of hardware. He states: “Hardware on the outside of the window frame due to its exposed position has a tendency to rust and streak the adjoining woodwork. This may be remedied by the method suggested. Locate screws on the screen frame, drill small hole and drive in screw. Cut off the head with a hack saw. Locate corresponding holes in top of window frame opposite to those of screen. Drill 3/8” hole so that the shank of screw makes a loose fit when screen is put in place.”

How to Make a Studding Gauge

J. G. CALDWELL, San Mateo, Calif., says: “When cutting header, cripples, etc., for a house, screw hinges to the fence on the saw table as shown. “This is very rapid and eliminates all mistakes due to the fact that no measuring is necessary. If ten 2’6” door heads are required, then flip the hinge marked 2’6”, but the header against it and start sawing at the cutting line. “The hinges are marked on both sides.”

$5 for an Idea

HAVE you a job pointer, a short cut or a method of solving some building problem? We are sure you have some time- and labor-saving kink you would like to pass along to the fellow members of your craft. Send us a rough draft of your idea. For any idea submitted which is found suitable for publication, American Builder will pay $5. Address material to Managing Editor, American Builder, 105 W. Adams St., Chicago 3, Ill.
NEW PRODUCTS
Offered by Manufacturers

FURNITURE STYLE HEATER AB7603
A NEW trend in fuel oil space heater design has been revealed with the presentation of the period furniture style heaters announced by Duotherm Division, Motor Wheel Corp., Lansing 3, Mich.

The Hepplewhite model has a Duotone walnut brown finish. An added feature is the large front radiant door which supplements those on the sides. The Chippendale model has a light blonde furniture finish that permits the heater to fit in with any color scheme. Both the Chippendale and Hepplewhite designs are offered in two models.

CHROME PLATED ALUMINUM FIXTURES AB7604
"CAMCHROME" bath and kitchen fixtures are now in production at the plants of Camp Manufacturing and Sales Co., 105 So. 10th, Tacoma, Wash. They are of aluminum with polished chrome, color chrome and baked enamel finishes. They are light yet strong, and moderately priced. The line includes square and round towel bars in 18 to 36 in. lengths, triple arm swing bar, plate glass shelves, toilet tissue holder, soap dish, wash cloth hook and tumber and brush holder. Orders from dealers and builders are now being filled.

COPPER ROOFING CLIPS AB7606
SEAL-ALL clips, manufactured by Seal-All Clip Co., P.O. Box 302, Flint, Mich., can be nailed on the shingles when installed or repaired. The clip has a lower leg, a shoulder, an upper leg and an engaging point. The point holds the clip in place. The shoulder enfoils the lower edges of overlaying and underlaying shingles when installed or repaired, between the top edge of the second underlaying shingle section and the bottom edge of the first underlaying shingle, with the point in position to engage the overlaying shingle when set in place with a slight hammer blow.

The clips are simple, easy to handle, and do not require special tools for their use. They are manufactured for use with varied thicknesses and materials, and are supplied in regular copper, medium copper, regular galvanized and giant copper.

FIBERGLAS ROOFING MOP AB7607
A MOP unit, designed to cut costs and save time in applying bitumen to a roof deck or built-up roofing felts, has been announced by Owens-Corning Fiberglas Corp., 1833 Nicholas Blvd., Toledo 1, Ohio. The product consists of warp-like bundles of glass yarns, 36 in. in length and weighing approximately two pounds. Two or three of the bundles are attached to a handle to make a mop.

An outstanding feature of the Fiberglas mop unit is its long service life. In use, the ends of the yarns in the unit fray out, making each yarn a miniature brush. This contributes to a smooth application of the bitumen, thus reducing waves due to mopping and helping to eliminate trapped air pockets which sometimes cause failures in the finished roof.

PACKAGED HEATING UNIT AB7609
THE Persiro Manufacturing Corp., 275 Jefferson St., Newark 5, N.J., has announced the production of two Whirl-O-Magic models—Model W-2, which has a 125,000 B.T.U. output and readily heats up to a six-room house, and Model W-3, which has a 75,000 B.T.U. output and easily heats up to a six-room house.

This heating unit combines boiler, fuel oil burner, domestic hot water system and complete factory-installed combustion controls in an extremely compact, modern cabinet, 36 in. high, 42 in. long and 22 in. wide. The front view of the Whirl-O-Magic fingertip control panel shows the complete factory-installed combustion controls consisting of steam pressure gauge, aquastat (summer control for domestic hot water supply), one-piece shock-mounted power unit (consisting of water impeller, blower, motor and fuel pump), junction box, protector relay, low-water cutoff and pressuretrol, combustion head and water level sight gauge.

By eliminating the conventional large boiler and hot water storage tank and delivering the unit to the home completely ready for installation, the time required by builders to equip a home with a heating and hot water plant is reduced to a matter of hours. The Whirl-O-Magic is adaptable to steam or hot water heating systems and will produce heat and a constant supply of domestic hot water instantaneously.

CARBIDE TIPPED DRILL-BIT AB7618
THE New England Carbide Tool Co., 60 Brookline St., Cambridge, Mass., has announced an addition to its tool line—a carbide tipped Cyclone drill-bit. The bits are made in stock sizes starting at 3/16 in. up to and including 1 1/8 in. diameter by 1/16 in. The bits can be used in any standard electric rotary drill. They are used in the metal working industry for drilling chilled iron, cast iron, cored holes in aluminum and other types of non-ferrous materials, and easily drill concrete, brick, cement, wall-tile, etc.

(Continued to page 100)
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Remember, Twindow is the window with built-in insulation ... a modern, practical means of improving the heating and air-conditioning characteristics of buildings you design or construct. Send the coupon now for additional information on Twindow. Pittsburgh Plate Glass Company, 2233-6 Grant Building, Pittsburgh, Pa.
The attention required has been reduced to a vanishing point. In semi-automatic hand-operated models less than one minute is required. No shaking of grates, no cleaning of fires, no clinkers with this furnace. The unit is of heavy steel, all joints welded, and the outside casing is furnished in white enamel or a variety of colors.

The manufacturer is Worsham Co., Inc., 7329 Lohmeyer, St. Louis 17, Mo.

SYNTHETIC PLASTIC COATING AB7608

The Flintkote Co., 30 Rockefeller Plaza, New York 20, N.Y., has announced addition of another product to its line of industrial coatings, to be known by the trade name Flintred. It is described as a synthetic plastic anti-slip coating which is applied by trowel over steel, concrete, aluminum, galvanized iron, hard tile and wood floors. On clean steel it serves as a corrosion resistant protective coating in addition to its function of overcoming slipperiness. It is available in red, green and slate blue, ready for application in trowel coats of approximately 1/16 to 3/8 in. thickness. The material is characterized as resistant to water, gasoline, oil, alcohol, ordinary fats and greases.

NO-SCALD MIXING VALVE AB7602

The Moon patent mixing valve, just getting into production, is a step forward for kitchen sinks, lavatories and shower heads. Connecting hot and cold supply pipes, a sideways movement of the valve handle determines accurately the temperature of the outflow and then a down movement of the handle increases the flow to the desired quantity. Thus the danger of scalding is eliminated.

These valves of chromium plated brass and stainless steel are made by Ravena Metal Products Co., 6518 Ravena Ave., Seattle 5, Wash. National distribution will be through all plumbing jobbers and dealers, and a few eastern and central manufacturers will be licensed to produce and assemble these Moon valves. They are priced to compete with present values.

READY-MIXED CHROME PAINT AB7613

READY-MIXED paint which has a natural silver chrome finish has been announced by Alumate Corp., 1523 Grande Vista, Los Angeles 23, Calif. The patented stabilizer used in its manufacture gives package stability and prevents the paint from darkening in the can even after opening. Chromatone is packaged ready for instant use. No separate mixing of paste or powder is necessary. Being both a rust and heat resistant coating, it may be used successfully on heaters, radiators and plumbing fixtures.

SELF-CONTAINED GRILLE AB7611

The supply of warm air for any given room is automatically controlled by a new register designed by Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. So., Minneapolis 8, Minn. The device, called Grad-U-Flow Register, requires no electrical or mechanical power other than that which it generates itself through temperature changes.

Drawing its own power from changes in temperature, the register “motor” consists primarily of a remote temperature bulb, a bellows and a lever which positions the dampers to maintain the required temperature. In operation the bulb, which is mounted under a cover on the front of the grille, reacts to changes in temperature of the induced air from the room and causes the bellows to either expand or contract. The grille can be mounted quickly and easily by means of only two screws, and it can be removed for cleaning in a few seconds.

CONCRETE RODDING MACHINE AB7604

A MACHINE to speed concrete floor laying has been introduced by Whiteman Mfg. Co., 3249 Casitas Ave., Los Angeles 26, Calif. It rods the slab to a perfect level and at the same time paddles and vibrates the concrete throughout the entire depth and area, thoroughly compacting the slab and bringing the moisture to the surface preparatory to floating or finishing operations.

The rodding machine comes in two sizes, Model 44 having an overall width of 8 ft., weight 400 lbs., and powered by a 2 1/2 h.p. engine, and the Model RS, 5 ft., 164 lbs. in weight and with a 1 1/2 h.p. engine. The necessity for hand rodding is eliminated by using this machine.

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The Grasshopper and The Ant...

REMEMBER the old fable about the grasshopper and the ant? The grasshopper sang and hopped and ate to his heart's content all summer while the party of the second part, with an eye to the future, worked hard and planned for the winter ahead. You know how well the latter's philosophy worked out. Which reminds us a little of advertising under today's conditions. Sure, everyone is oversold but it's anyone's guess how long this sellers' market will last. When all the fireworks are over, it will be the well known brands of building products that will continue to enjoy good sales. "Paving the way for future business" might be a good way to describe National Gypsum's campaign now running in the Saturday Evening Post and other publications. In the big building years ahead, Gold Bond Dealers are sure to benefit. National Gypsum Company, Buffalo 2, N. Y.
Handling of Armstrong's Insulating Wool is easy because it is light in weight, resilient, and compressible. This means it can be packed in small containers, easier to handle on the job, easier to store in the warehouse. Damages, so often caused by rough handling or accidents, are greatly reduced by the strong glass fibers of Armstrong's Insulating Wool and the protective vapor barrier and breather papers which completely encase the material in roll and batt blankets. It goes in fast, saving time and money.

Armstrong's Insulating Wool is made of Fiberglas** for highest efficiency, as well as highest durability. It will not burn, settle, or decay. For complete information and samples, write to Armstrong Cork Company, Building Materials Division, 1607 Lime Street, Lancaster, Pennsylvania.

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As a vital service to veterans and builders, Hotpoint is allocating complete electric kitchen ensembles to builders to give immediate assistance to service men seeking modern home conveniences. The Hotpoint program provides efficient appliances TODAY to help establish FUTURE reputations for builders and architects for creating quality houses that emphasize comfort and convenience.

Selected builders only will be allocated these HOTPOINT "HERE TODAY" KITCHENS through Hotpoint distributors. They'll cooperate with dealers, electric utilities, and service contractors to get Hotpoint Electric Kitchens into every G. I. home possible, and will receive assistance from Hotpoint distributors in providing favorable financing to veterans.

Builders will establish reputations!
Far sighted, progressive builders and architects who work with Hotpoint in this nationwide program will receive the first complete electric kitchens in their communities, and the selected builders who participate will receive lasting benefits in prestige. Their reputations will grow with satisfied home owners. Publicity, national in scope, will reflect on them and when localized in their communities will secure their places in the home-building future of America.

If you want to be one of the fortunate builders to participate in the HOTPOINT "HERE TODAY" KITCHEN PROGRAM, consult your local Hotpoint distributor. Edison General Electric Appliance Co., Inc., 5641 West Taylor Street, Chicago 44, Illinois.

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BUT...

it's the INSIDE that shows the difference in heating engineering with Thermaflo's scientific BAFFLES!

- There's nothing new about a metal fireplace unit that is complete from firebox to chimney throat... that provides a form for masonry... that circulates warm smoke-free air throughout the room.

BUT THERMAFLO IS NEW AND NEWS... because Thermaflo does all this—Better! Only Thermaflo scientifically baffles all incoming cold air directly to the hottest part of the firebox, thereby producing maximum heat per pound of fuel consumed.

THERMAFLO is a Quality product throughout. All bends are reinforced... 3 inch steel stiffener prevents warping of back plate... Thermabar supports keep wood off wall assuring steady draft... Smooth working damper control sets at all positions... Entire firebox is constructed of heavy steel plate 3/16 of an inch thick.

Ask about our exclusive franchise—Write today for literature.
With Flintkote Materials...
LOW COST HOUSING DOLLARS MAKE A LOT OF SENSE

FOR THE ROOF, use Flintkote Thikut Shin- 
gles. Two layers of heavy stabilized asphalt 
satting...two layers of mineral granules... 
form the butt of this durable shingle. Extra 
weather-fighting material where it really 
counts...on the exposed part of the shingle. 
Virtually two shingles for the price of one.

INSULATE THE HOUSE with Flintkote Insula-
ting Wool, made of Fiberglas®, and 
save fuel. This well-known material has 
high insulating value...is non-combus-
tible...will not absorb moisture...is 
light in weight...and is available in 
several sizes and forms to meet most every 
requirement. A sound investment for any 
house.

INSULATING WOOL: Made of Fiberglas®

AND FOR THE EXTERIOR, durable, economical 
Flintkote Asbestos-Cement Siding gives you 
a bonus in beauty. Interesting effects may be 
stained by combining two or more styles of 
Flintkote Asbestos-Cement sidings, or by 
combining these attractive sidings with other 
sidewall material.

Dampproof Foundations with Flintkote 
Static® Asphalts. This asphalt emulsion 
will not crack at low temperature; flow 
under heat; craze, alligator or oxidize 
when exposed to water or weather. Quick-
ly and easily applied by brush or spray. 
Static offers positive money-saving pro-
tection for foundations in any climate.

AND THERE YOU HAVE IT
From top to bottom a house that's snug 
and serviceable. Designed for modest 

budgets. Built for years of service... 
because it's built with Flintkote quality 
products. Flintkote Materials are backed 
by more than 45 years' leadership.

For building, remodeling or renovation, 
remember...with Flintkote Materials, 
building dollars make a lot of sense.

THE FLINTKOTE COMPANY
Building Materials Division
30 Rockefeller Plaza, New York 20, N. Y.
Atlanta • Boston • Chicago Heights
Detroit • East Rutherford • Los Angeles
New Orleans • Waco • Washington
* 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
4145 Penobscot Building Detroit 26, Mich.

Better Concrete Faster
with CALCIUM CHLORIDE

ONE of Adirondack Log Cabin Company’s popular-priced postwar prefabricated houses.

Prefabricator Acquires Facilities for Manufacturing 4000 Homes a Year

ONE of the largest real estate deals involving factory buildings for the exclusive manufacture of prefabricated houses was recently reported by the Adirondack Log Cabin Company, Inc., and its subsidiary, the Pre-Fab Housing Company, Inc., with the announcement of the purchase of the Arthur A. Johnson-Bossert-Bailey Mill at Patchogue, Long Island, one of the largest plants in the East for the production of prefabricated houses.

The mills, which have been enlarged from time to time, consist of nineteen brick and frame buildings covering an area of approximately eight and one-half acres, located adjacent to the Long Island Railroad and on the Patchogue River. Available at the latter are three bulk-headed slips and landing docks sufficient in size to allow large ships and barges to enter for the quick unloading of lumber and building materials for the mills, and also affording a practical and inexpensive means of shipping finished prefabricated house to coastal cities. The nineteen buildings contain a total of 143,500 square feet of usable floor area, including offices, garages and three large dry kilns.

Acquisition of the additional facilities will make it possible for the Adirondack company and its subsidiary to better serve their fifty-eight distributors, all of whom are located in the East. These distributors represent the company on an exclusive franchise basis for the sale of Cape Cod houses, log cabins, and other structures. According to the company, fifty additional distributors and dealers will soon be added in order to obtain representation in territories that are not now covered.

Organized in 1931, the Adirondack Log Cabin Company manufactured and erected hundreds of log cabins and conventional type dwellings prior to the war. The acquisition of the Johnson-Bossert-Bailey mills adds another link to the company’s present facilities for manufacturing and shipping prefabricated houses. The four mills presently under contract with Adirondack are located in Richmond, Glens Falls, Brooklyn, and Long Island, New York.

The company states that it plans to devote ten buildings, with approximately 50,000 square feet of floor space, exclusively as a wholesale division to serve developers and builders on a year-round basis. Three buildings, with approximately 25,000 square feet of floor space, will be devoted to the manufacture of radio cabinets, furniture and other wooden items. In addition to the line of conventional type Cape Cod houses, the company plans to build garages, pool houses and farm tenant buildings.

Displays will be maintained at the company’s showroom at 126 East 45th Street, New York City.
Spacers are placed about 30" to 36" centers. A few nails hold the four 8" form boards in place. The boards can be used later as roof sheathing. Concrete will encase ends of beams to provide a fire stop and support for a bearing partition.

Complete form with ¼" reinforcing rods clipped in place. Sill is clipped to beam and space has been provided for heat duct.

A rigid steel and concrete floor is easy to install—easy to sell.

You will find that you can quickly adapt your plans and methods to provide your houses with J&L Junior Beam steel and concrete floors. The job will move smoothly and money will be saved by eliminating troublesome plaster cracks, sagging doors, stuck windows and creaking floors. At a glance your prospects will see the advantages of the strong non-shrinking, vermin proof, fire resistant, rigid steel and concrete floor.
NO WONDER THIS MODERN PIPE IS A PROFIT-MAKER!

LOOK AT THESE FEATURES:

- Root growth and infiltration prevented.
- Light weight, long lengths—easier to truck, handle and install.
- TAPERWELD® COUPLINGS need no cement or joining compound.
- Can be installed in wet trench—tight joints readily made, in or under water.
- Sewer lines ready for testing or use at once. Trench may be back-filled immediately.
- Does not break or crack easily; non-metallic.
- Can be sawed to any length—all pipe usable. Can be connected to other kinds of pipe.
- Non-rigid, withstands soil settlement.
- Performance proved by 50-year record underground.
- Advertised in leading home and farm magazines.

ORANGEBURG is the ideal pipe for house-to-sewer to septic tank connections, industrial waste drainage, conductor and irrigation lines. The PERFORATED type is specially designed for septic tank filter beds, foundation drains, farm and muckland drainage. Mail the coupon today!


ORANGEBURG
The Root-Proof Pipe

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

THE FIBRE CONDUIT COMPANY
ORANGEBURG, N. Y.

Please send catalog on ORANGEBURG PIPE.

Name
Address
City

American Builder, July 1946.

WRAPPED IN COTTON
to last for centuries

Egyptian mummies, wrapped in cotton centuries ago, are still well preserved by the sturdy, long-lasting qualities of cotton fibers.

That, Mr. Architect and Building Contractor, is the same kind of protection and permanence you get out of tough cotton fibers found in Lo-"K" flameproofed COTTON INSULATION.

The resistance of Lo-"K" to moisture, mildew, rot and decay—the protection it offers against fire—the fact that it never sags or settles—are special Lo-"K" factors which guarantee uniform, lasting efficiency.

Its low "k" factor of only .24 for 1-inch—(a lower thermal conductivity than rock wool, glass wool, cork board or chemically treated wood fibers)—provides anywhere from 4% to 36% greater insulating effectiveness.

Recommend Lo-"K" for all types of homes and industrial structures with the assurance that there isn't a finer, more modern, more economical insulation on the market. Lo-"K" is made in convenient, easily handled rolls to meet all standard construction practice. Write today for full particulars.

Lockport Cotton Battening Company
Dept. 27-19 Lockport, New York

Gentlemen: Send me the facts about Lo-"K" better building.

ARCHITECT
DEALER
CONTRACTOR OR BUILDER

Please send circular on Lo-"K" Cotton Insulation for better building.

Name
Address
City
Zone State
Automatic Heat for Every Size Home

Chrysler Airtemp automatic furnaces and boilers bring the convenience and healthful comfort of automatic heat to small homes as well as large.

They make any new dwelling more attractive to buyers. You can be sure of public acceptance—Chrysler Airtemp products have an excellent record of performance wherever used, and behind them stands Chrysler Corporation, world-famous for outstanding engineering and mass production achievement.

Gas, oil or coal—warm air, steam or hot water—there's a Chrysler Airtemp for each fuel and every type of heating system. In addition, there are large capacity automatic water heaters to serve all sizes of homes.

There's also a revolutionary heating and cooling combination for year-round home air conditioning. It's a warm air furnace which is combined with a Chrysler Airtemp "Packaged" Air Conditioner.

Products with outstanding names increase the value of new homes. Home builders will find that it's good business to install Chrysler Airtemp products.

For G. I. Homes

This low-cost automatic central home heating furnace is ideal for the veterans' building program. Gas or oil-fired, it has many features of much higher priced large furnaces.
To help increase
"Take-Home Savings"

The Treasury Department has published two new booklets to help you and your employees realize the utmost benefit from your Payroll Savings Plan—benefits proportioned to the extent your employees add to "take home savings" by buying and holding U.S. Savings Bonds.

"Peacetime Payroll Savings Plan" for key executives offers helpful suggestions on the conduct of the Payroll Savings Plan. In addition, it quotes leaders of Industry and Labor and their reasons for supporting the Plan.

"This Time It's For You" is for distribution to employees. It explains graphically how this convenient, easy thrift habit works. It suggests goals to save for and how much to set aside regularly in order to attain their objectives. If you have not received these two booklets, or desire additional quantities, communicate with your State Director of the Treasury Department's Savings Bond Division.

See your Payroll Savings Plan through to maintain your share in America's future. It is sound economics and a powerful force for good today—and tomorrow—as a safeguard for stability and a reserve of future purchasing power—money that is kept within your community.

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 Advertising Council
LATEST "KNOW HOW" ON SUMMER COOLING

Balsam-Wool data sheets!

- You’ll want this complete file of Balsam-Wool Data Sheets because it gives you the latest, most complete information on insulation application. Here’s a really valuable source of insulation reference data—carefully compiled, accurate and trustworthy. Send today for your set of Balsam-Wool Data Sheets—yours for the asking.

Balsam-Wool

SEALED INSULATION

BALSAM-WOOL • Products of Weyerhaeuser • NU-WOOD
Homes with this "new quality

TRYED...PROVED...SUCCESSFUL
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.
of living" stay modern longer

Servel All-Year Gas Air Conditioning provides greater comfort, greater resale value for homes

This revolutionary new Servel equipment—complete in one simple unit—permits homeowners to select just the climate they want indoors—the year round! In summer it circulates refreshingly cooled air, delightfully dehumidified, and filtered clean of pollen, dust and dirt. In winter the same unit provides clean, draft-free, properly humidified warmth. Through any season, just a simple fingertip adjustment of the Selectrol control brings the desired indoor climate.

In addition to year-round benefits of comfort and health, Servel All-Year Gas Air Conditioning offers your clients increased "dollar value," too. Mortgage loan officers all over the country agree that homes containing this equipment will stay modern longer. They are prepared to offer better than usual financing terms on homes containing the unit.

Get full details of Servel All-Year Gas Air Conditioning from your local Gas Company, or write Servel, Inc., 1607 Morton Avenue, Evansville 20, Indiana.

"No. 6 Jefferson Lane," one of a series in Good Housekeeping's "Homes America Wants." Emil A. Schmidlin, Architect.
The Barcol OVERdoor on Residence Garages

Barcol OVERdoors have a number of distinctive features which are important where you want a garage door that will close tightly yet work easily. Tailored twin-torsion counterbalancing springs are used, mounted on the wall directly above the opening. They are neat in appearance, quiet, safe, and can be individually and accurately adjusted. Self-latching bolts, which engage automatically when the door is pulled down, add much to the efficiency, speed, and ease with which the Barcol OVERdoor can be opened and closed. Roller-crank closing action provides tight and weatherproof closing. At the same time, this Barcol feature prevents the door from jamming when closed, or sticking and binding when in motion. Continuous vertical track brackets not only increase the structural strength and durability of the supporting framework, but also give added protection as they cover the cables that carry the door weight. Only the Barcol OVERdoor has ALL of these features. For lasting satisfaction, specify and install the Barcol OVERdoor on all types and sizes of residence garages.

FACTORY-TRAINED SALES REPRESENTATIVES IN PRINCIPAL CITIES

BARBER-COLMAN COMPANY

American Builder, July 1946.

New Southwestern Office for American Builder

RECOGNIZING the importance of rendering adequate service to its growing list of advertisers and subscribers in the southwestern area, American Builder has moved its Dallas office to more spacious quarters in a newly remodeled and modernized office building located at 2009 Maple Ave., Dallas 4, Tex.

Advertising and subscription sales in the southwest will continue to be handled by Joe Sanders, who moved to Dallas four years ago to take charge of these activities for American Builder.

New Branch Office for Northern Wood

GROWTH of the sales and dealer organization of Northern Wood Products Co., Holland, Mich., manufacturers of Weather-Vane interchangeable screen and storm sash windows, has necessitated the opening of sales and advertising offices in Detroit. The offices will be under the supervision of Edward A. Epstein, sales manager, and are located at 2100 Penobscot Building.

E. A. EPSHTN

Northern Wood Products began manufacturing the Weather-Vane line of interchangeable storm windows and doors two years ago. Growth of the business has been so rapid that their dealer organization now covers the entire United States. National advertising and dealer advertising have brought wide acceptance.

Correct Nailing Poster

THE Texas Company has made available a poster which stresses the importance of correct nailing of thick butt strip shingles. This is in accordance with the roofing industry effort to promote the six-nail method of application where shingles may be exposed to high winds.

Exact nailing positions are carefully indicated. This poster also illustrates the four-nail method for normal-wind areas.
Broader horizons stretch out before the architect, the designer and the builder who include the Masonite* Presdwoods in their source book of basic materials. These dense, strong hardboards are used in ultra-modern surroundings for people on the move, as illustrated. They help transform dull dwelling interiors into gay, useful units for living. And they recommend themselves as quality ingredients for new-home construction.

Lurelle Guild, designer of the club car interior shown here, has utilized Presdwoods for side-walls, panels, head-linings and built-in furniture — practically everything but the chairs and flooring.

Your business will profit by the distinct advantages of the workable, versatile Presdwoods. They will take and hold — practically every type of finish. There's no grain to rise and mar fine surfaces, no tendency to splinter, crack or check. Too, these Masonite hardboards have a warm rich beauty of their own (at right, in illustration). Flat and smooth, they take and hold bends. They're easily worked with ordinary carpenter's tools.

Write for complete data on all Masonite building products to Masonite Corporation, Dept. AB-7, 111 West Washington Street, Chicago 2, Illinois.

*"Masonite" is a trade-mark registered in the U. S. Pat. Off. and signifies that Masonite Corporation is the source of the product.
A whiter white for your buildings, with
EAGLE Ready-To-Use WHITE LEAD PAINT

Plan to give your buildings the brilliant white gloss of new Eagle Ready-To-Use White Lead Paint! It's a whiter white... and it stays white longer. Besides this unique advantage, don't overlook the exceptional smoothness of Eagle RTU White Lead Paint. It literally flows on, covers completely, leaves practically no brush marks. Because it's ready to use it's a real time-saver, too.

Being lead, this marvelous paint defies wear and weather... has all the tough, protective qualities made famous by white lead for over 2000 years. No other paint surpasses its combination of beauty, durability and economy. Backed by 103 years of Eagle-Picher painting-making experience—you assure of highest quality. Eagle RTU is being made available as rapidly as production will permit. Two forms: Primer Sealer and Outside White Finish Coat. One, two and five gallon pails:

THE EAGLE-PICHER COMPANY
Cincinnati (1), Ohio
Member of the Lead Industries Association

OLD RELIABLE SINCE 1843

EAGLE PURE WHITE LEAD Paint

New Assistant Sales Manager for Insulite

APPOINTMENT of K. T. Batchelder as assistant sales manager, assigned to field supervision of Insulite siding sales, has been announced by M. C. Fairfield, sales manager. He will make his headquarters at 205 W. Wacker Drive, Chicago, Ill.

Mr. Batchelder has a background of 16 years' experience with Insulite, a division of Minnesota and Ontario Paper Co. Since January, 1940, he has been in charge of railroad sales.

New Position for Wardrop of Pittsburgh

APPOINTMENT of Robert Wardrop as assistant manager of glass advertising and promotion for the Pittsburgh Plate Glass Co. has been announced by Edward L. Patton, manager of glass advertising and promotion.

Mr. Wardrop recently completed his terminal leave as a Lieutenant-Colonel after four years' service with the Army. He has been with Pittsburgh Plate Glass Co. since 1935. Prior to his entering the Army, he was manager of the firm's Duluth, Minn., warehouse for more than three years.

New Positions at Pressed Steel

RAYSSON, general sales manager of domestic appliance division of Pressed Steel Car Company, Inc. has announced the appointment of Roy Hert as supervisor of advertising and sales promotion for Presteline major household appliances. Mr. Hert will have his office in the domestic appliance division headquarters at 666 Lake Shore Drive, Chicago, Ill.

J. B. Blanton has been announced as assistant general sales manager of the domestic appliance division.

Southern Branch Manager for Kay-Tite Company

IN LINE with increased distribution. George Kay, president of the Kay-Tite Company of West Orange, N. J., has announced the appointment of Mr. L. G. Sarafian as manager of the southern branch.
Half your customers need new window screening

- Yes... surveys show that 54% of the Home-Owners in your section need new screens badly. This time, they say, they want screens that cannot stain... that cannot give their homes "black eyes" under the windows! So sell THEM LUMITE, the modern plastic screen cloth that not only cannot stain... ever... but also cannot rust, bulge, dent or sag!

Your customers know about LUMITE (advertised consistently in all leading consumer home magazines).

Your customers are ready to buy LUMITE (they've had to make their old pre-war screens do up to now).

So... TELL YOUR CUSTOMERS ABOUT LUMITE, made by the world's largest makers of plastic screen cloth! And if you need additional information or samples, write us today.

LUMITE DIVISION, Chicopee Manufacturing Corp. of Georgia; 47 Worth St., New York 13, N. Y.

HERE'S WHY LUMITE "SELLS ON SIGHT"

- Cannot stain
- Won't rust or rot
- Never dents or bulges
- Needs no painting
- Color cannot fade
- Easy to frame
- Lighter in weight
- Sensibly priced
- Lasts years longer
- Woven of Dow's Saran
- Strong! (Lumite is woven of heavy gauge plastic filament—0.015")

LUMITE
MODERN PLASTIC INSECT SCREEN CLOTH
**STANLEY NAIL HAMMERS**

**Put Skill In Your Hands**

For a good nail hammer, specify Stanley No. 511½ — first choice of carpenters and skilled woodworkers for its driving and nail pulling qualities.

Head is drop-forged from selected steel, heat treated and hardened for strength and toughness. Handle is shaped from young, straight grain hickory. Head is securely wedged to handle.

Look for the Stanley trade mark on the head of the hammer you buy.

**THE TOOL BOX OF THE WORLD**

STANLEY

Trade Mark

HARDWARE - HAND TOOLS - ELECTRIC TOOLS

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**Arneson Named General Superintendent**

**Gus N. Arneson**

GUS N. ARNESON, a well known authority on plywood and the adhesives used in its manufacture, has been named general superintendent of Washington Veneer Co. of Olympia, Wash.

He returns to the Pacific Northwest after working on a war assignment at the U.S. Forest Products Laboratory for the past three and a half years. Arneson was one of the skilled technicians in the industry called into the laboratory when its functions were expanded to answer the multitudinous problems involved in maximum utilization of wood by the Army and Navy.

As a principal technologist at the laboratory, he assisted in planning and carrying out research in plywood, glues and laminated construction vital to the military. His work also included the preparation and interpretation of specifications of plywood and glues required to meet the varied needs of the armed services and industries supplying them.

Since his graduation from the University of Washington school of forestry in 1927, Arneson's entire business experience has been in plywood with his work being divided about equally between production and research. For eight years he was employed by The Wheeler, Osgood Co., Tacoma, Wash., plywood and door manufacturers, where he held supervisory positions in several production departments.

From then until the time he was selected for the war-expanded work of the government laboratory, Arneson was chief of the research department of the plywood industry trade association—Douglas Fir Plywood Assn. of Tacoma.

Mr. Arneson is a senior member of the Society of American Foresters and a member of the American Society of Testing Materials. In the latter organization, he serves as technical advisor on plywood for the committee on wood.

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**Wright of L-O-F Dies Suddenly**

**North A. Wright**

NORTH A. WRIGHT, public relations director of the Libby-Owens-Ford Glass Company, Toledo, Ohio, died suddenly June 14, in his home, Perrysburg, Ohio. He was 49.

Born in Atchison, Kans., Mr. Wright had attended the University of Kansas. He was engaged in commercial flying and sales work before coming to the Toledo firm in 1933.

Mr. Wright was associated with George F. MacNichol, Jr., vice president in charge of sales at L-O-F. Since the war, he had been director of the public relations department having general direction of advertising, sales promotion, press relations and design.

During the war he served as a director of The Producers' Council with headquarters in Washington and was on liaison duty between L-O-F and various governmental agencies in expediting war materials and in developing new war products.
Shipments are being made of the new Residence Unit Locksets for Bathrooms and Bed- rooms, and latch sets for Interior Doors.

Our original production schedule called for exter- nior and interior Unit Locks in what seemed at the time to be optimistic quantities. The responses to our initial announcements far exceeded our expectations. In order to get into volume production at the earliest possible moment, we revised our schedule. Effort has been concentrated on production of interior Unit Locks because the average small home has only two exterior doors compared to at least eight or ten interior doors.

In the meantime we suggest that suitable exterior locksets (shown in wide variety in our Catalog) be selected and used until the new Residence Unit Locks for exterior doors are available.

E. L. Teich, Chief Engineer; S. P. Morgan, Factory Manager; Geddes Parsons, Asst. Sales Manager; H. S. Parsons, Eastern Sales Manager.

P. & F. Corbin
DIVISION OF AMERICAN HARDWARE CORPORATION
NEW BRITAIN, CONNECTICUT
"Good Buildings Deserve Good Hardware"
American Saw Mill Executive Dies

W. E. GUILD, vice president and general manager of the American Saw Mill Machining Co., Hackettstown, N. J., died recently at King's Mountain Memorial Hospital, Bristol, Tenn., at the age of 45. His sudden and unexpected passing occurred while returning by plane from a business trip to Chattanooga, Tennessee, on which he was accompanied by R. D. Prosser, president of the company.

Can You Sell an Idea?

For the past six years this new awning has been selling at a fast pace throughout the Southwest. The Polar awning adds so much to the appearance of any home, or business location, that orders are received unsolicited from buyers who have no knowledge of the cooling effect of the awning, or its permanence.

The Polar Ventilating Awning is a series of double, overlapping redwood or red cedar strips, assembled into a permanent awning of any size or shape. This awning will retain its good looks for the life of the house to which it is attached. It can be finished in various colors and designs. Room temperatures are reduced—generally as much as 12 degrees—when the Polar awning is installed.

An enlarged organization is now assigning exclusive sales franchises throughout the United States. National advertising and sales promotion are scheduled. The Polar franchise system calls for a reasonable but modest plant investment, and opportunity for large earnings. Earnings have already been proved by franchise experience in each section of the United States except extreme north central states.

Territories are still open in northeast and north central states. It is expected that all franchises will be assigned by February, 1947. Individuals or firms with good business experience, capable of intensive operation, are invited to write for complete franchise information to John Ericson, Gen. Mgr., Polar Division, National Ventilating Awning Co., 607 College Ave., Dallas, Texas.

American Home Show

THE Construction Industries Exposition and Home Show of Southern California opens on July 12, continuing through July 21 in the Pan Pacific Auditorium, Los Angeles, Calif. Participating operators of the show include 15 building and allied trade associations, marking the first time that so many organizations in Southern California have joined for the purpose of staging an exhibition.

Officers are: M. J. Brock, president; Earl S. Anderson, 1st vice president; Frank Jani, 2nd vice president; Lawrence Gibbs, secretary, and A. L. Stone, treasurer.

The Southern California chapter of the NAHB is one of the sponsors.
Developed FOR SMALL HOMES!

✓ COMPACT
✓ CONVENIENT
✓ CONVERTIBLE

Compactly built to fit small space and convenient to operate, the No. 1 Series National HEAT EXTRACTOR can be converted—after installation—to automatic firing with oil or gas.

Discriminating builders and buyers of small homes can enjoy all the big-home advantages of Hot Water or Steam heat, with this No. 1 Series National HEAT EXTRACTOR. This compact, dependable boiler was especially developed for the smaller home, where space is always at a premium. Its water-insulated base provides an extra measure of safety in kitchen, utility room or rumpus room installations, and a copper coil may be added to furnish an adequate supply of domestic hot water—both summer and winter.

Send for our booklet "Plan To Be Comfortable."
There's no obligation, of course.
Modernfold doors are here again!
From thirty to forty-five days after your order is placed, you may have standard Modernfolds. These smart, space-saving doors fit perfectly into the construction requirements of the times. They come to you complete with all hardware, screws, track, etc. They can be installed in the average opening in less than an hour.

Standard sizes available are 6'8½" and 8'0" opening heights. Widths from 2'10½" to 8'2" and combinations. A wide variety of colors from which to choose will harmonize with any decorative scheme.

The nation-wide Modernfold distributor organization is ready to supply you with or without priority. Write, phone or wire for name and address of your nearest Modernfold distributor.

Decay a Hazard in Basementless Houses—
(Continued from page 92)

them for days after rains. As a result, the air under the houses became very humid, causing the moisture content of the timbers of the substructures to rise well over 20 per cent during the winter and spring of 1942, in the four houses under observation.

At approximately 3-month intervals during a 4-year period, moisture content of the substructural timbers was determined by means of an electrical resistance moisture meter. This instrument, with needle points that penetrate 5/16 inch, provides quite accurate determinations to 28 per cent, though only very approximate determinations at greater moisture contents. The readings were taken on sills and joists at 25 to 45 locations under each house. The recorded moisture value at each location represented an average of three instrument readings taken within an area of approximately 1 square foot. Whenever possible both sill and joist readings were included in each average. All moisture readings were corrected for temperature to a 70°F. base. At each inspection air temperature readings were taken, one at each of the four corners and one at the center of the house.

After these measurements had continued for a year, and about 6 weeks before the first 1943 moisture measurements, the soil under the two wettest houses was covered; the other two were left unchanged, as checks. Two grades of asphalt roll roofing were tested as cover materials. Under one house (FP 5) the roofing used weighed 55 lbs. per roll of 108 sq. ft. and under the other house (FP 15) the 90-lb. grade was used. The roofing was rolled out on the surface, with an overlap at the edge of approximately one inch, but without fastening. The soil was not leveled prior to application of the roll roofing. Readings of moisture content of sills and joists were continued under all four houses for the next three years, 1943-1945 inclusive.

Within six weeks after laying the soil cover the moisture content of the sills and joists in the two houses with the cover had started to drop despite closed ventilators, and in less than 5 months was only two-thirds of that in the houses without cover. During the subsequent 2½ years, the houses with covered soil averaged 16 and 18 per cent respectively, against 27 and 25 per cent during the year before cover. They never exceeded 20 per cent and were thus safe from decay, while the houses without soil cover each winter at one or more points had moisture contents of 30 per cent or above and thus were in the danger zone. In these two houses heavy condensation appeared on the sills and joists, especially near the cold outside wall. Condensation was evident in November and persisted through mid-May. In one of the two houses with soil covering, condensation was evident during the winter of 1941-42 but after the soil cover was applied, no condensation was observed. Unfortunately manipulation of ventilators by the occupants resulted in more ventilation under the houses with soil cover than under the check houses at certain times, but the difference in ventilation was usually negligible. In the first pair of houses it only once exceeded 10 per cent of the ventilation required by the "2½" formula, and for the second pair only 3 times exceeded 20 per cent of the formula. Some of the largest differences in moisture between houses with
The need for high speed cutting resulted in radial power saws. But Comet Saws offer more than exceptionally high cutting speeds. They also assure extremely high accuracy. This Comet combination is superior in every way. Moreover, Comet speed and accuracy remain at high level through years of constant operation. Comet performance is a product of Comet construction. Order from your dealer or write direct.
IF A DOOR COULD
MAKE A LAST REQUEST
BEFORE BEING
HUNG-

It would say... "GIVE ME THREE HINGES"

"Then I will be a credit to the home... a permanent, satisfactory moving part. I will be hung efficiently, swing silently and smoothly... and serve faithfully as long as the building stands.

"Three hinges will cost only a few cents more but they will keep me out of trouble for life.

"Three hinges will prevent me from sagging, sticking, warping. They will prevent my latches and locks from getting out of alignment.

"Three hinges will support me as I should be supported and I will cause no inconvenience, nor repairs, nor replacement expenses to my owner."

Recommend "three hinges to a door" and you will be giving your client the best construction he can get—satisfactory, substantial, permanent. He will recognize and appreciate your good judgment the longer he lives in his home.

McKINNEY
MANUFACTURING COMPANY
PITTSBURGH 12, PENNSYLVANIA

and without soil cover occurred when all or nearly all vents were closed on both. It was evident that opening and closing of the few vents provided in these houses had relatively little influence on the moisture content of the sills and joists in the 3-soil-covered houses during the 3-year period; but for the houses with closed vents the crawl space temperatures ran approximately 5° to 6° F. above those having open vents. As yet no differences have been noted in the effectiveness of the two weights of roofing: the 55-lb. was as effective as the 90-lb. roofing. Preliminary tests with an asphalt felt (15 lbs. per 108 sq. ft.) and also with an asphalt paper under other houses indicated that both are effective as moisture barriers for approximately 18 months, but are not sufficiently durable when in contact with soil. Gravel and coarse sand have been suggested as soil covers. They would have the advantage of permanency, but it would be expensive to install such a cover in houses already built, particularly when the crawl space is 2 feet or less, and their efficiency is uncertain. Under average conditions, roll roofing can be installed in a low crawl space over 700 sq. ft. soil surface less than 1½ man-hours, and at a cost of less than 2 cents per square foot for materials. Just how many years the roofing will remain effective as a moisture barrier, when in contact with the soil, can be determined only by extended observation.

The foregoing results indicate that in basementless house excessive moisture in joists or solid sills can be reduced and dangers of decay averted, by covering the soil under the house with roll roofing. Tests on additional houses and laminated sills are in progress and will be reported later.

Crump Celebrates Anniversary

THE twenty-fifth anniversary of its entry into the general contracting field in the Pittsburgh and Western Pennsylvania district has been marked by Edward Crump, Jr., Inc. of Pittsburgh, Pa.

Established in 1921, the Crump organization has been widely known throughout this area where it has specialized in commercial and industrial construction and the modernization of existing buildings.

Edward Crump, Jr., president of the firm, was recently appointed chairman of the Committee for the Revision of Pittsburgh's Building Code by Mayor David L. Lawrence. The new code will be flexible so that it may absorb systematically all new developments.
Build Airplane Hangars with RILCO Glued, Laminated Wood Trusses and Arches

- Get Rilco framing members into your building plans. Write for information. See what you can do with these modern Trusses and Arches. Rilco Arches were used extensively by Army and Navy in Hangar Construction. They meet their requirements as well as strict building code specifications.

Rilco trusses and arches are of glued, laminated wood construction. They are carefully engineered for all loads and stresses. They are factory-fabricated to precision standards and are delivered ready for immediate erection. Strong, durable, light in weight, they are easy to handle and go into position quickly.

CHOICE OF MANY TYPES

Write for descriptive information. There are many types of Rilco framing members for hangars, stores, warehouses, garages, gymnasiums, recreation buildings. You can build it better and faster with Rilco Rafters, Trusses and Arches.

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PORCELAIN ENAMEL

Store Fronts . . . Facades . . . Signs

Thousands of installations of SEAPORCEL Porcelain Enamel throughout the country are our testimonial advertisements. We've fabricated store fronts, building facades, sign fascias and advertising signs that sparkle, are colorfast and clean . . . and remain so. We've fabricated brilliant and durable murals in glowing colors.

SEAPORCEL* can be executed in any color and tint, and is available in standard finishes of gloss, semi-matte, "terra cotta" and "granite." It is fire-proof, corrosion and acid resistant; will not crack or craze when exposed to thermal shock.

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- Polished stainless steel mirror frame
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  Set in recessed pocket (patent pending)
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For more information on Grote Bathroom Cabinets, write, wire, or phone today.

- ALL THESE FEATURES—

THE GROTE MANUFACTURING COMPANY, INC.
BELLEVUE, KY. — OPPOSITE CIN., OHIO

Cortright's Column—
(Continued from page 36)

laws passed by the Congress. They are introduced as bills, are assigned to experienced committees and subjected to weeks of testimony and debate by expert witnesses. They are then debated on the floor of both Houses, and often returned to a conference committee which gives further study to the provisions of the bill before final action. It is this protracted procedure which safeguards our legislation and results in good government. This proposal to perpetuate the NHA as a directing, programming, controlling and research bureau of government is not required to go through the congressional gamut. It is a proposal by the President which, if not specifically rejected by the Congress, automatically comes into effect. The Congress, swamped with important legislation and naturally eager to return home to report to its constituents before the November elections, probably will not have the time or interest to consider and reject this tremendously important matter. It certainly will not act upon it unless a thoroughly aroused industry demands action.

Since the establishment of the NHA more than four years ago the advantages and disadvantages of centralized control of all government agencies concerned with the construction, financing and insuring of housing have been carefully studied by those most affected. Several years ago the industry agreed that whatever advantages there might be were far outweighed by the disadvantages. Those groups with the most at stake have taken the position time and time again before congressional committees. Home builders have opposed a permanent NHA for reasons based upon their experience in working under the setup for more than four years. They have seen the inadequacy and inefficiency of much of the government operation. They saw an NHA honeycombed with proponents of public housing and shot through with a controlled economy ideology. They are convinced that public housing and private enterprise cannot live under the same roof. And, most important of all, they demand an independent, unrestricted FHA. FHA from the outset has established new patterns of mortgage finance, lending, planning and construction standards. It must be permitted to function to its maximum capacity in serving the public, and in so doing, serve the home building industry.

Since it is not safe to gamble upon the Congress recesses before the sixty-day period has expired, it is obviously necessary to inform the Congress as to the position of the industry—in demanding that the NHA provision of the Reorganization Plan be rejected. This means writing your representatives and senators at once. It means that you must write your bankers, suppliers, labor and civic officials to do the same. Before the war the FHA operated very satisfactorily under the Federal Loan Agency and with the termination of the emergency it should automatically return to that status. Without the use of scareheads and red ink it is difficult to convey to you the urgency of immediate action by you. If less you are willing to accept permanent domination of the home building industry by the NHA, the time has come for you to act and act promptly!

Accounting System for Builders

A NEW specially designed accounting system for contractors and builders has been produced by Tallman, Robbins & Co., 314 W. Superior St., Chicago, Ill. This combines the accounting records with a Job Record, Payroll, Cost information and Tax Data all into one convenient unit.

Outstanding features of the system are its use of building terms and items not only in the instructions but also in the printed headings of the forms themselves; its "Job Memo Randa," for jotting down important facts for use on current and future jobs; its presentation in easy form of all facts and figures so that figuring income and other taxes is simple itself; and most important of all, the entries are set up in such a way that actual costs of jobs may be compared with estimates.
Everywhere in the building field contractors and workmen go for MallDrills. They like their ability to deliver low-cost holes in metal, plastics and wood in a hurry . . . their stamina and cool operation under load . . . their pistol grip feel and light weight that eases handling and lessens fatigue . . . their compactness of design that facilitates use in close quarters and cramped positions . . . and the quick, easy servicing of the commutator and replacing of brushes without dismantling the drill.

MallDrills are ruggedly constructed of the finest materials for long continuous service with die cast aluminum alloy housings, helical cut, hardened steel alloy gears, 3-jaw geared chucks with Chuck Key attached to electric cord and universal motors. 

**5 POWERFUL MODELS**

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<tr>
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<th>5/8&quot; capacity</th>
<th>2500 r.p.m.</th>
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Each MallDrill is available in 2 voltages—110-volt AC-DC or 220-volt AC-DC.

Ask your dealer or write for literature on MallDrills, MallSaws, Mall Concrete Vibrators and Mall Chain Saws.

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Yes, because of its high quality construction, modern design and sparkling chromium finish, this DeLuxe matched set of Cabinet Hardware is a profitable one for you to sell. One of National Lock's four different matched sets that is profit-packed, easy to sell and will bring new customers to your store.

**MODERN PACKAGING reduces handling expense**

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*Ask your favorite jobber about National Lock's eye-catching modern Display Boards that sell hardware on sight.*
Beneath the satin smoothness and graceful lines of Barrows Builders Hardware there is the endurance of timeless bronze and brass. Here beauty of line becomes beauty in service. In every step—design, pattern, moulding, machining, finishing—durability and permanence are prime ingredients. That's why a reputation for enduring quality is as much a part of Barrows Craftsmanship as is its provision for ease of application and its long record of fine metals moulded to render fine service.

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NORTH CHICAGO, ILLINOIS
INSL-COTTON

Insulation

Accepted
• By the Government
• By Builders
• By Contractors
• By Architects
• By Consumers

Because

EASIER TO INSTALL

Insul-Cotton is as easy to install as unrolling a rug. It is harmless to skin and clothing, contains no abrasives or flying particles to injure workmen. No special tools are required for installation.

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Insul-Cotton is the original flame-proof, fire-retarding cotton insulation. It will resist fire, even when subjected to the flame of a blow torch.

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Insul-Cotton is certified and approved by a Government inspector stationed at the plant. It exceeds technical requirements for approved insulation in FHA, FPHA, and HH-1-528 specifications.

Transmits Less Heat. With an "k" value of 0.24, Insul-Cotton transmits less heat per inch thickness than any other type of insulation material available today. It is from 4% to 36% more efficient—lowers temperatures as much as 12° in summer—saves up to 30% on fuel bills in winter.

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You can do this to many untreated concrete floors, but not to a Lapidolized floor!

LAPIDOLITH

Lapidolizing is just as easy as washing a floor. The first treatment is the only treatment—the first cost is the only cost.

EASY TO APPLY

LAPIDOLITH liquid (patented) thoroughly hardens concrete floors for heavy-duty service without interrupting work schedules... saves the cost and inconvenience of patching and retopping.

TO TIMES HARDER

LAPIDOLITH penetrates quickly and deeply, reacting with the lime in the cement to form a close-grained, granite-like surface 10 times harder than untreated concrete. Dusting is eliminated; danger from alternate freezing and thawing minimized; floor protected against action of oils and many chemicals. Excellent for terrazzo floors, too.

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Any House is a Better House
WITH
CONCRETE FLOORS

Any house, whether built of concrete, brick or frame, can have the advantages of a firesafe, sag-proof concrete subfloor. And nothing that a contractor can build into a house of any material will give the owner more in firesafety, structural stability and security or contribute more to durability, low maintenance expense, low annual cost.

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Use of concrete for walls, floors and partitions and cement-asbestos for roofs will help conserve other building materials which are in limited supply and thus permit a larger volume of urgently needed housing to get under way without delay.

Tell Your Customers
The fact that concrete materials are readily available will interest prospective home builders, business men, industrial plant engineers, farmers and others in every community. Advertise this fact to your customers now in every possible way.

Literature containing helpful suggestions on advantages of concrete for home, industrial and farm construction is available on request. Free in United States and Canada.

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A national organization to improve and extend the uses of concrete ... through scientific research and engineering field work.
This booklet gives nine good reasons for home-building with wood and a clinching argument for using the versatile, workable, durable, beautiful Western Pines. It's a booklet your home building prospects should read now. YOU CAN HAVE A COPY FREE. Order today, specify Booklet No. M-30.

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RYERSON

New Officers for American-Standard

THE board of directors of the American Radiator & Standard Sanitary Corp., has announced the election of Theodore E. Mueller of Pittsburgh, Pa., as president of the corporation. He formerly held the post of vice president, general manager of manufacturing.

T. E. MUELLER

Mr. Mueller succeeds Henry M. Reed who, since 1938, has been both president and chairman of the board of the corporation. Mr. Reed will continue as board chairman.

The board of directors also announced the election of Henry M. Reed, Jr., as vice president, general manager of manufacturing. Mr. Reed began his association with the Standard Sanitary Manufacturing Co. in 1926 in the engineering department of their Louisville works.

Mr. Mueller began his association with the company in 1904 at the Pittsburgh works of the Standard Sanitary Manufacturing Co. He is a director, and member of the executive and finance committees of the corporation.

T. E. MUELLER

HENRY M. REED

In store, office, factory or residential remodeling, use American floor sanders to resurface the floors and give them "new-wood" beauty. Write for complete description, details and prices, no obligation.

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No see-through water

Other sizes and finishes available.

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American Builder, July 1946.
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WITH "PYROFAX" GAS SERVICE

- Specify "Pyrofax" gas, the overwhelming favorite, for every home you plan or build beyond the mains. No service interruptions — better cooking — automatic water heating — silent Servel refrigeration are some of the advantages of this modern gas service. A New Freedom "Pyrofax" gas kitchen, with the famous Magic Chef gas range, is sure to bring client satisfaction.

PYROFAX TRADE-MARK

SUPERIOR GAS SERVICE FOR 25 YEARS

COOKING  
WATER HEATING  
REFRIGERATION  
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BEYOND THE GAS MAINS

MAIL THIS COUPON NOW!

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Please send me all the facts on "Pyrofax" Gas and Information Sheets on installation.

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Sisalkraft gives new homes the finest in year 'round building paper protection against moisture, dust, dirt and driving winds.

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Sisalkraft gives new homes a moisture-proof wall — retards the passage of moisture-vapor into the wall space where condensation can cause damage to the structure.

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Sisalkraft costs no more applied than less substantial papers. There's no waste of material, fewer nails, and no battens required. Send for your free Sisalkraft sample and complete information.

*The Symbol of Money-Saving SISALKRAFT Products

Guardians of home comfort — protectors of home investment — Sisalkraft products are tough and flexible, easy to handle, low-in-cost, reinforced with thousands of crossed sisal fibres.
ADD VALUE
To Every House You Build
with a
HEATILATOR FIREPLACE

Read the "Houses For Sale" column in your newspaper. The Heatilator Fireplace, if present, is always mentioned. Why? Because a Heatilator Fireplace is the most important added feature in the living room.

For only a few dollars you can add the extra value of a Heatilator Fireplace to the houses you build, make them easier to sell, and at a better price.

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Heatilator, Inc., 175 E. Brighton Ave., Syracuse 5, N. Y.

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Heatilator Fireplace

Overhead-Type Steel Garage Doors

STRAND Building Products Company, 954 Bohr Building, Detroit 26, Mich., has announced its new steel garage door. The door is perfectly balanced and operates with finger-tip touch. It is electrically welded, forming a complete unit of steel. The smart, modern design of the door lends itself to virtually any garage design, and it may be finished to harmonize with any color scheme.

One of the numerous features is the heavy rubber seal strip across the bottom of the door. This strip may be trimmed to fit uneven garage floors, thereby providing a very close seal.

The unit is fully assembled at the factory. The operating mechanism was designed to be entirely trouble-free, and requires lubrication only twice a year. The trussed frame eliminates sagging, warping and weaving of the door.
NEW! another Miracle way to cut costs

BOND FIXTURES FAST!

NO DRILLING!
NO SCREWS!

MIRACLE ADHESIVE holds fixtures firmly to any wall surface—anywhere.

MIRACLE is a quick-setting, war-tested, "on-the-job" adhesive requiring no heat or pressure to effect a lasting, waterproof, flexible bond. With it you can install metal, glass, tile, cork, plastics and wood without nails, screws, bolts or other disfiguring fasteners. MIRACLE speeds work and cuts costs on building and modernization projects!

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THE GETTY
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Under Screen

WOOD CASEMENT OPERATOR

Preferred by leading architects and builders and originated by Getty, this efficient, practical window operator is designed for use with wood sash. Rugged in design, the Getty worm and gear construction is sturdy, with no backlash. Positive casement control is assured at all times. Its inherent strength and simplicity assure life-long, trouble-free operation.

Easy to install. Only two simple measurements: 2 1/4" from jamb; 1" minimum from sash. Only six screws in entire installation.

Low in cost. High quality zinc die casting.

Can be used without screens as well as with wood, metal, or roll screens.

Long-wear cadmium-plated steel channel guides for butt or extension type hinges.

Lubricated for life at the factory.

Standard statuary bronze finish (EBL). Also in standard plated finishes.

GETTY BUTT HINGES. A full line of Loose-pin and Tight-pin hinges with ball tip or flat button tip. Also Loose-joint hinges. Available in a wide variety of sizes and sections; extruded from solid bronze. Extrusion assures a greater density of structure and freedom from pits or porosity often found in sand castings. All are template drilled and come in standard finishes.

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Whiteman Concrete Equipment is the answer . . . for better, compact and level slabs . . . with machine economy. The portable Lightweight Rodding Machine shown above is Model "RS" . . . for slab width 3 to 12 feet. Also in Model 44 . . . for slabs 10 to 20 feet. HAND GRILL TAMPER, at left, tamps down larger aggregate.

LIGHTWEIGHT FLOATING-FINISHING MACHINE MODEL "J"—the "perfect" mechanical troweling machine. 35" diameter. Also in 45" diameter. Write or wire for details and nearest distributor.

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THIS PUMP CAN HELP YOU
LOWER CONSTRUCTION COSTS!

Marlow "Water Wizard" Model 12
This rugged little pump can save you money on nearly every construction job. Use it to dry excavations, feed mixers, supply water. A Marlow Model 12 easily handles 3,000 gallons per hour and pumps up to 15,000 gallons on one gallon of fuel. It is made to last for years—you can't beat a Marlow for strength.

Light and Compact
A Marlow Model 12 weighs only 70 lbs. in aluminum; 88 lbs. in iron, complete with dependable Briggs & Stratton 4-cycle engine. It's so light and compact you can take it practically anywhere. Other "Water Wizards" are made up to 10-inches, capacities to 240,000 gallons per hour. They are fully guaranteed and have thousands of enthusiastic users. Send today for bulletin and name of nearest distributor.

Dept. 87, RIDgewood, N. J.
Manufacturers of the World's Largest Line of Self-Priming Centrifugal Pumps.

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THIS IS A WET BASEMENT PROBLEM TO THE BUILDER AND HOMEOWNER
A. WATERPLUG, a quick-set hydraulic compound, seals streams of active water and seepage from below grade begins in from 3 to 5 minutes.
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.

Armstrong Builds Fiberboard Plant
CONSTRUCTION has started on Armstrong Cork Company's new fiberboard plant at Macon, Ga. The factory building will be about 1250 ft. long and about 400 ft. wide. The plant is scheduled to go into production in the fall of 1947, utilizing loblolly pine, which is available in large quantities in the Macon area and which produces a high quality fiberboard. This will be Armstrong's eighteenth factory in the United States and will give greatly increased capacity to supply the growing demand for this product, marketed under the trade name Temlok.

The product is used as an insulating sheathing for residences and other buildings, and as an interior finishing material in homes, stores, and other commercial structures. It is also employed for insulating roofs and refrigerated cabinets and is the base product in insulated brick siding and in Armstrong's Cushiontone, a material for acoustical correction and noise quieting in stores, offices and schools.

Biggs Named Works Manager
R. W. BIGGS has been named works manager of the Ambrose, Pa., plant of National Electric Products Corp., succeeding Neil C. Lamont who has reached retirement age. The appointment was made recently by W. C. Robinson, president.

Mr. Biggs' first production responsibility was in the Lorraine, Ohio, works of National Tube Co. In 1938 he became assistant superintendent of the Jones & Laughlin Steel Corp. works in Aliquippa, Pa. Five years later, he was advanced to the post of production manager of the J. & L. McKenzie Co., Pa., works. During 1944-45 he served as works manager.
Use the Sterling Sander for all types of jobs on wood, metal and plastics. Excellent for sanding dry wall construction, undercoats, primers and finished coats of paint. The Sterling 1000 is many times faster than hand sanding... it's simple to operate, vibration-less, light weight.

Write for descriptive folder now! Sterling Tool Products Co., 370 East Ohio Street, Chicago 11, Illinois.

MODERN
CIRCUIT PROTECTION
FOR YOUR HOME—
FRANK ADAM ELECTRIC CO.
ST. LOUIS, MISSOURI

28 Ways to Style Stucco Homes with Color
All Shown in New Bondex Color Chart
Sent FREE to American Builder Readers

Here's the key to keen interest in stucco homes — the new color chart which gives you exterior decorating ideas that will make stucco homes big news in your town.

Sent free by the makers of Bondex which outsells all other waterproof cement paints. Ideally suited for stucco because it waterproofs, preserves and beautifies. Use the coupon below.

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Please send me your new Bondex Color Chart.

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Mail this Coupon Today for Valuable Information
PROTECT YOUR BUILDINGS with WOODTOX

WOODTOX is recommended for treatment of exterior woodwork against decay, mold, termites, vermin, warping and shrinking.

For prevention of mold, decay, moisture deterioration and termite damage — all exterior woodwork should be treated with TIMBERTOX.

For dimensional control, WOODFIX is unrivaled for resisting warping, shrinking, checking and grain raising. For interior woodwork.

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