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SEPTEMBER, 1942
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AND BUILDING AGE

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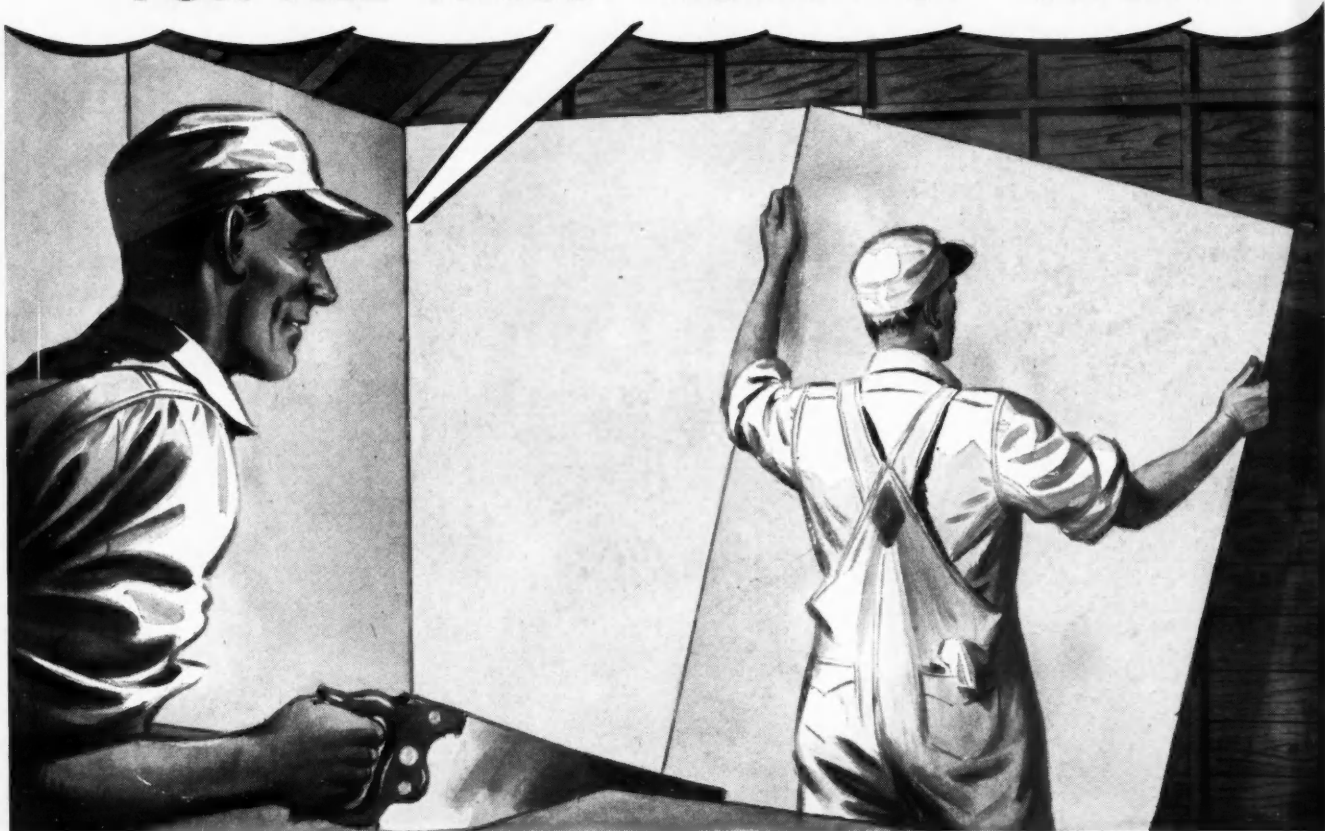
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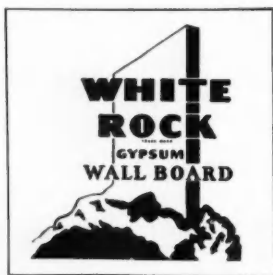
Can't Warp, Expand, or Contract! Meets Exacting Celotex Quality Standards!

EXTRA rooms—additions—remodeling—these are the jobs contractors must be prepared to handle now! Patriotic jobs they are, too—making living room for America's millions of war workers. And every last one of those jobs is a "hurry-up" proposition!

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Celotex Gypsum Products are not on the "critical" list. They are not affected by priorities. You can get them without waiting. Go to your Celotex Dealer and get all the facts, today! He can help you get that emergency job done in a hurry!



The word Celotex is a brand name identifying a group of products marketed by The Celotex Corporation. In certain territories gypsum lath, sheathing, wall board and liner board are sold by The Celotex Corporation as selling agent and not as principal.

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Published monthly by Simmons-Boardman Publishing Corporation, 105 W. Adams St., Chicago, Ill. Subscription price, United States, Possessions, and Canada 1 year \$2.00; 2 years, \$3.00; foreign countries: 1 year, \$1.00; 2 years, \$7.00. Single copies, 25 cents. Entered as second class-matter Oct. 11, 1930, at the Post Office at Chicago, Illinois, under the act of March 3, 1879, with additional entry as second-class matter at Mount Morris, Illinois. Address communications to 105 W. Adams St., Chicago, Ill.

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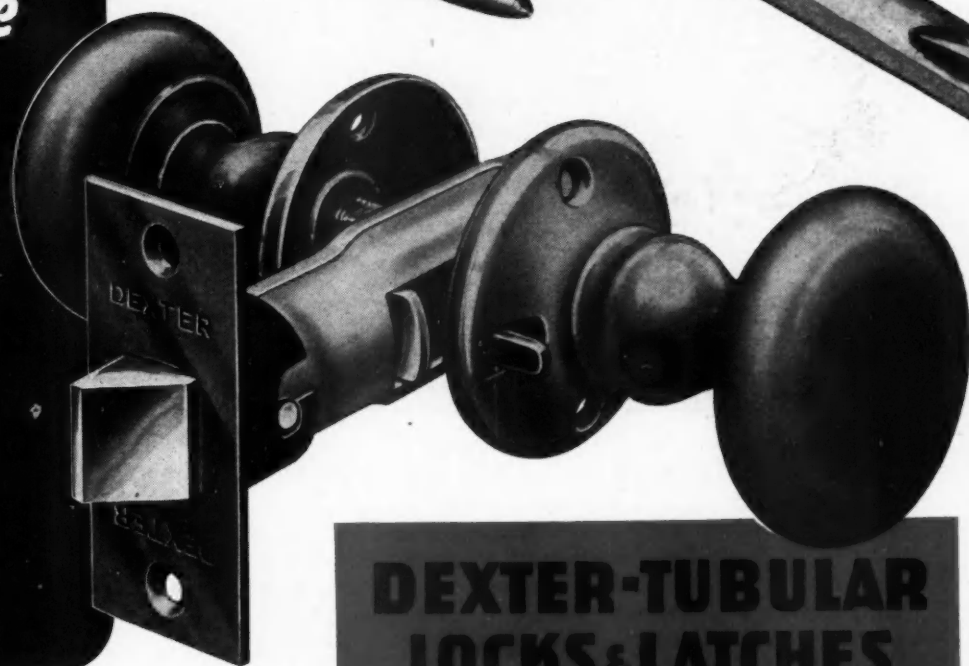
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BUILDERS HARDWARE . . . CABINET HARDWARE

If there is any uncertainty in your mind about what you can order or what you can get, please write us today. We can still supply many items listed in Catalog No. 27 (Cabinet and General Hardware) and Catalog No. 31 (Lock and Latch Sets) from finished stock on hand, without priority, in compliance with Federal and WPB regulations.

Hardware conform with the specifications given in the new Builders Hardware Manual of the War Production Board and can be supplied to those with qualifying rating. If you have not received the Commander Line Catalog, write for your copy today.

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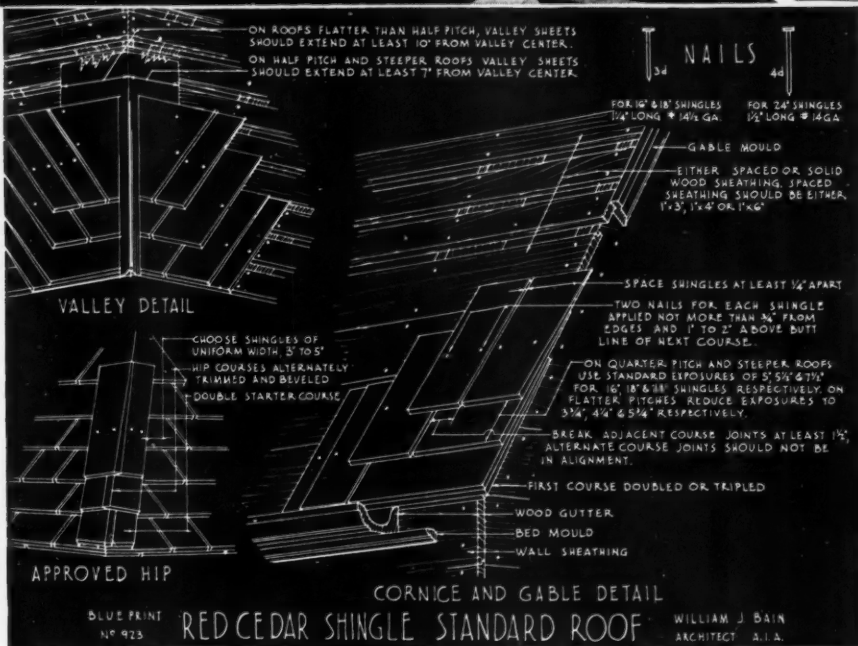
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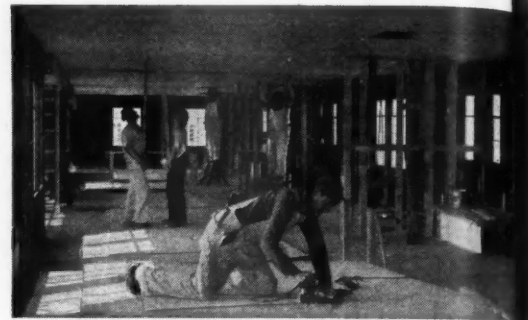


AN ANSWER

TO THE NEED FOR GREATER SPEED IN WAR HOUSING

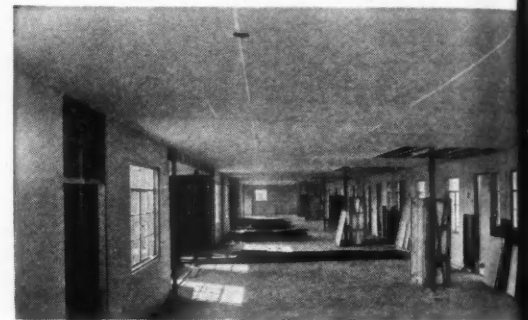
► **FULL WALL CONSTRUCTION** with *Upson Strong-Bilt Panels* for interior linings is saving *weeks* on numerous war housing jobs *now!*

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STRONG-BILT
PANELS**

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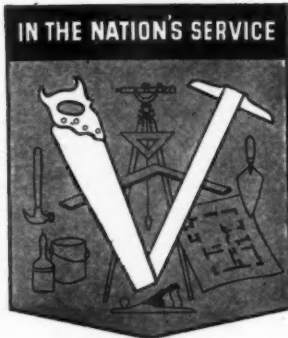
THE BEAUTY SURFACE FOR WALLS AND CEILINGS

AMERICAN AND BUILDING AGE BUILDER

64 YEARS OF CONSTRUCTIVE LEADERSHIP

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64th Year Vol. 64, No. 9
Founded Jan. 1, 1879.

AMERICAN BUILDER and BUILDING AGE (Originally "Carpentry & Building"), with which are incorporated National Builder, Permanent Builder and the Builder's Journal, is published on the first day of each month by the

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

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

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

Field Staff: C. L. Conley, J. H. Free, Jack Human, Woodrow James, William L. Taylor, Dick Whittington.

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

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A Tip for Builders from the W.P.B.

"ILLUMINATION must be sufficient for all visual tasks," says the W.P.B. in a recent booklet on war plant efficiency. "Light should be distributed evenly over the entire area. *Glare must be absent.* Dingy walls and ceilings cut down the efficiency of the lighting system and are bad for employee morale."

It was to fill these needs that research engineers for National Gypsum Company, the wall and ceiling specialists, developed the new Gold Bond Sunflex Deluxe wall paint. Sunflex Deluxe provides the higher light reflection without glare recommended by W.P.B. It in-

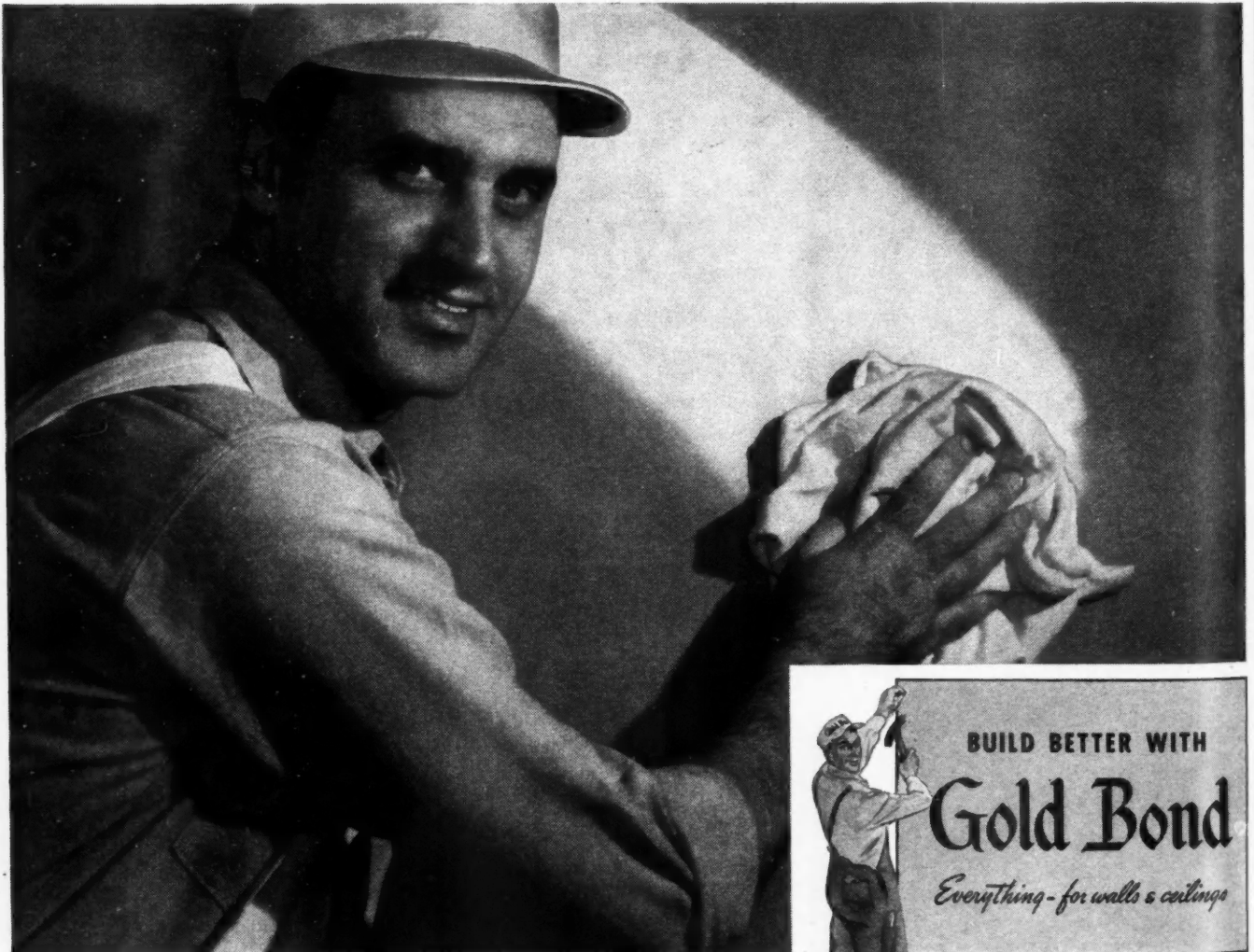
creases illumination, conserves electricity, protects against eyestrain, reduces accidents, lowers rejections, and speeds production.

When walls and ceilings are painted with Gold Bond Sunflex Deluxe, it's easier to keep lighting efficiency up and maintenance costs *down*. Sunflex Deluxe washes easily with ordinary soap and water. One coat covers practically any surface—even brick or concrete—and it dries in one hour without any objectionable paint smell. Rooms can actually be occupied the same day they are decorated—industrial plants and commercial

buildings painted without stopping work. There's no interruption to plant production.

This new low-cost washable wall paint is another example of the research leadership that has helped Gold Bond grow, in 16 years, from a company with one mill and a single product to an organization with 21 modern plants and more than 150 different products.

Sunflex Deluxe is handled by dealers everywhere. A post card will bring you a new color chart showing the full line of colors. Paint Division, National Gypsum Company, Buffalo, New York.



Use the New Washable Gold Bond Deluxe Wall Paint for any war time building, from defense homes to bomber plants. It dries in one hour, washes *clean* with soap and water, and improves illumination by reflecting more light without glare.

More than 150 products including
WALLBOARD...LATH...PLASTER...LIME
METAL PRODUCTS...WALL PAINT
INSULATION...SOUND CONTROL

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Publisher's Page

Post-War Prosperity—or What?

WE ARE TOLD contradictory things about the war. Some say we are fighting for the "American way of life"; others that everything will be different after the war is past. Some predict all our people will be reduced to poverty; others that the war will cause *economic* as well as political democracy resulting in none being rich, but all having plenty and security.

What is—or was—the "American way of life"? Do we want it after the war? If so, what should we do to save or restore it?

The writer passed through the depression of the 'Nineties in southwestern Kansas where all were poor because of crop failures and the depression. But prosperity in this country revived without government aid; and almost everybody's income and standard of living improved, although unequally.

World War I hardly interrupted this, which was then called "progress" and the "American way." But there was increasing discontent because of inequalities in wealth and income and agitation for government correction of business practices regarded as causing the seeming injustice—even agitation for Socialism to establish *economic* as well as *political* democracy.

Then in the 'Thirties came the Great Depression causing mass unemployment, reduced production, and New Deal government policies to reform a private enterprise system which certainly had broken down temporarily, and, as many believed, permanently. Full recovery failed to be accomplished before we had to enter World War II.

Our huge expenditures for war have demonstrated (1) our vast previously unused productive capacity and (2) that it is possible to provide full employment. But this is because the government's purchases for war have provided a huge *new market*.

So all our *wartime* experience really proves is that what we need to secure unprecedented production and full employment in *peacetime* is provision of a *peacetime market* equal to our productive capacity. It follows that *how* to provide that huge *peacetime market* is the real problem we must solve if, after war, we are to be a prosperous nation untorn by strife between classes.

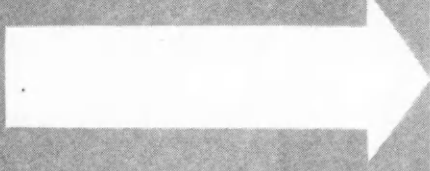
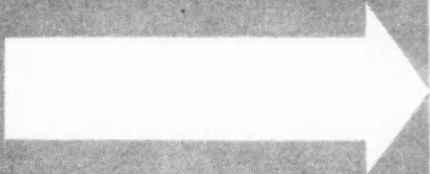
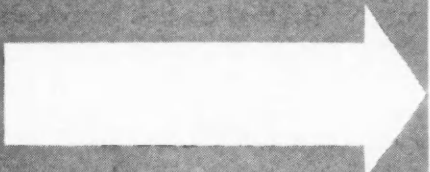
Who is to solve this vital problem? *All* of us—if it is to be solved; business men, farmers, wage-earners, politicians. But *how*? "Aye, there's the rub." We *should* each study it, and make government adopt, and adopt ourselves, policies which we sincerely believe will best promote the *national* welfare. But *will* we?

Probably many will. Probably many will not study or think, but will strive to promote their own selfish interests, wholly regardless of the national welfare. Many always have; and it was *they*—whether business men, farmers, wage-earners, or politicians—*who caused and so prolonged the recent Great Depression*.

What we need for the post-war period is *more democracy and equality in honestly studying, thinking, planning and working* to promote our own interest only in ways that will help promote the National interest. In that way we can insure abundance and security for all—and in no other way.

Samuel O. Drumm,

PRICE:



IMAGINEERING

★
SO MUCH
SO SOON
★

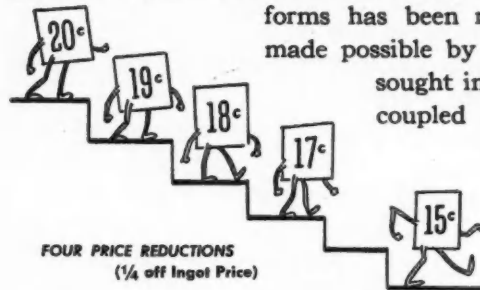
THE FORGOTTEN SUBJECT

HOW MANY HEADLINES have you read lately featuring low prices?

How many quotations have you received lately wherein price was the prime factor? Availability is what you consider first, these days.

WHILE YOUR BACK WAS TURNED, something big has been happening to aluminum prices. You may not have noted the change, unless you are using aluminum in war material.

TWO MAJOR CHANGES have taken place. The price of ingot is down to 15c per pound. Also the cost of making many fabricated forms has been reduced. These have been made possible by the fruition of many long sought improvements in techniques, coupled with greater volume, and abetted by revolutionary new equipment.



YOUR PRIVATE POCKETBOOK benefits now, because every pound of this cheaper aluminum is going into planes and other equipment. You're getting more bombers for your dollar.

LET YOUR IMAGINATION SOAR. Translate the meaning of much lower prices for Alcoa Aluminum into the *future* of your business. You'll come out with new answers, if you really engineer that imagination down to earth.

YOU COULD EVEN come up with something that would revolutionize your business, whether it is building, or manufacturing, or packaging, or printing, or whatever.

YOUR COMPETITORS, to use an old civilian phrase, are probably doing some Imagineering of that kind—getting ready for the day when.

OUR ENGINEERS could probably suggest some interesting angles for you to work on.

Aluminum Company of America, 2120 Gulf Bldg., Pittsburgh, Pa.

ALCOA ALUMINUM

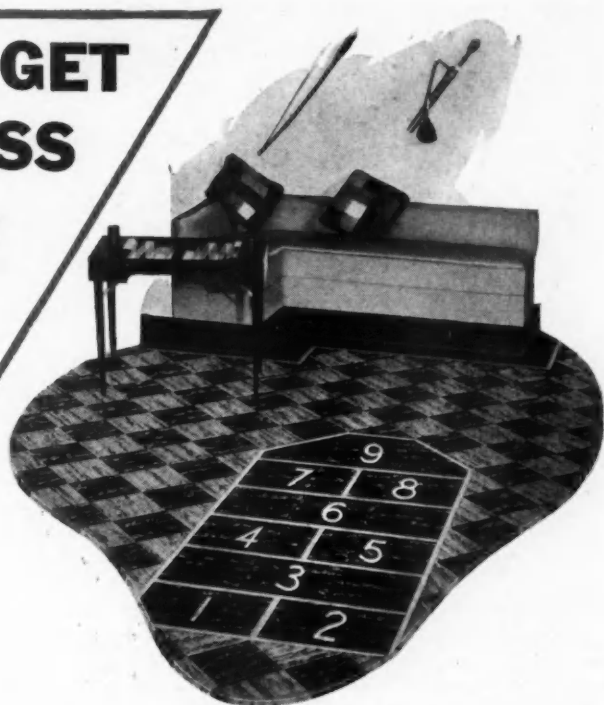




HOW TO GET BUSINESS

today

!



COMMERCIAL INTERIORS

Restaurants, stores, offices—all want to keep new looking now, want to attract customers. You can get this rebuilding business, without violating L-41, without using critical materials—IF you show business men why and how they will add color, beauty and WORTH-WHILE improvements. This they will do if you suggest a Kentile floor with your plans. Why should you? Because, by showing how a Kentile floor makes a permanent improvement (almost indestructible, moisture-proof, cleaned by mopping) and a beautiful improvement (unlimited possibilities with 15 sizes of tile and 44 colors) you give a REASON for your whole remodeling job. How can you? We will help you get this business! Read "how" in the box below. Then act now—to get building business profitably. Yes, today!

BASEMENT PLAYROOMS

Now, more than ever, basement rooms—a chance for people to build within L-41 limits, without critical materials—for folks who'll stay home more—to conserve other rooms—and, finally, perfect during black-outs. They're your opportunity—if you SELL—by being the builder who "thinks of everything," who relates everything in his design and color plans—including the one VITAL feature: a sound, dry, colorful floor. For years Kentile has been a favorite—the only type of floor that should be on concrete below grade—unaffected by dampness—super-durable yet resilient—remarkably economical yet unlimited in color and design. Previously this has been out of your province. Now you can use Kentile's appeal when selling. Read "how" in the box below—then act now, for profit.

KENTILE

Asphalt Tile

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➔ To help you get business, for our mutual benefit, Kennedy makes an unusual offer of cooperation. Now our 1,000 reliable, authorized applying-contractors will be at your service. They know flooring, know remodeling and playrooms, know what SELLS. They will work for or with you—any way you want. They will lend you samples to show or will go with you to see your customer, will quote directly to you or your prospect. They will bill you, confidentially, or will bill direct. In other words, you use the appeal of Kentile when selling. Our men lay the floor, you get a building job. This, today, is an opportunity. Now, without obligation, investigate by mailing the coupon. Ask us to send the nearest contractor for a talk or, at least, send for our complete, colorful advertising material. It tells the whole story, and will be mighty helpful to show when soliciting business. Act while you're thinking of it—now.

David E. Kennedy, Inc.
70 Second Ave., Brooklyn, N. Y.

- Yes, I want to sell basement play floors
 commercial interior remodellings
- Check one Please have your local contractor call me about it.
 Please send me name of your local contractor so I can call him when ready and also send me literature to show in meanwhile.

NAME _____

ADDRESS _____

CITY _____ STATE _____
() Builder () Lumber dealer () Owner () Architect

On and Off the Record

by *Structor*

News, Views and Comments

BREAD AND SALT—Even in war time some of the homely old customs of people moving into a new house continue. As I was being taken through a spick-and-span new Title VI house last week, the builder opened a closet.

"Look here," he said.

On the shelf stood a loaf of bread and a box of salt. They stood there in solitary splendor. The new buyers had put them there to bring good luck and an ever-full larder to the new household.

SMALL CONTRACTORS' POOL—By pooling their resources many small contracting firms are now going after government jobs that they could not tackle alone. It's a good idea and a lifesaver. There are still a large number of public housing projects to be built, which residential contractors by banding together in this fashion could handle. In New York, the American Contractors War Advisory Committee has been set up to help contractors and subs get together on government jobs. P. H. Wolf is chairman.

BUSY BRITISH—British builders are in the thick of one of the biggest, fastest jobs they have ever tackled. It is the housing of our great and growing *American* armies and air forces. So pressing is the need for building workers that 28,000 have been deferred from the draft until the job is done. One important structure which was estimated to take eight weeks to build was rushed through in eight days.

MAYOR OF ST. JOE—Waldo Tiscornia, Mayor of St. Joseph, Mich., appears to be in trouble with WPB over a small matter of \$800 worth of cast iron radiators, which he tried to get for his new home. WPB charges that he instructed the Auto Specialties Manufacturing Company, of which he is manager, to order the radiators under Maintenance and Repair Order P-100. Materials were delivered under an A-10 priority, but WPB found out they were not intended for repair and maintenance but for Tiscornia's own home. The Department of Justice, acting on behalf of WPB, has filed criminal charges.

This is the first action of such nature WPB has taken, and the Mayor is charged with violation of the Second War Powers Act. This Act gives the force of law to all priorities orders and regulations and provides penalties as high as one year in jail, a \$10,000 fine, or both.

SUBS CEILING—Legal lights of the Office of Price Administration hold that construction and repair work comes under a price ceiling—either a ceiling for materials or one for services, or both. This includes subcontractors as well, and all in all makes things very complicated.

It is rumored that OPA is considering putting a specific ceiling price on charges of plumbers, electricians, etc., adding still more complications to an already over-complicated industry.

THANKS, PETRILLO—Without realizing it, James C. Petrillo may be doing almost as much to clean up labor abuses as Westbrook Pegler. Petrillo's recent high-handed actions, such as barring a children's orchestra, amateurs and records from the air, have brought public resentment to the boiling point. Dictator Petrillo has given the American public a terrifying picture of what abuse of union power may mean. The result will probably be the placing of curbs on unrestricted union arrogance that will, in the long run, benefit the unions themselves.

When unions and their leaders learn that public power is a public trust, most of the objections to unionization and a closed shop will disappear. But when men like Petrillo flaunt their power in a public-be-damned fashion, they give a black eye to the whole union movement.

IN-MIGRANT—Every now and then those Washington "public servants" of ours dig down into some profound pedagogical source and pull out a new word that really has *class*. "In-migrant" is the latest. I'll wager some social service worker in the old USHA started that.

Anyway, "in-migrant" is being thrown around right and left by NHA, FPMA, and even WPB. Some of the WPB boys want to limit all sale of new housing strictly to "in-migrant" workers. In other words, put the temporary transient worker in the *latest and newest* houses. Forbid builders to sell to well-established families even though they are better and more reliable war workers than the in-migrants!

What we really need are some in-migrants in the government housing and construction bureaus with enough horse sense to end the present confusion and contradiction.

BLANDFORD'S OPTIMISM—National Housing Director John B. Blandford, Jr., gave an unexpectedly encouraging picture of the outlook for war house building during the coming year at a recent meeting with the Metropolitan Chicago Home Builders. He said the government's program calls for 270,000 dwelling units in the next twelve months to be built by private builders.

That speech made everybody feel good, but unfortunately material shortages have grown worse and the War Production Board has become even tougher. One wonders whether Blandford's optimism will prove as elusive of fulfillment as statements of his predecessors. Speeches and quotas won't mean a thing if the builders cannot get needed materials.

SAD STORY—The sad story of many home builders who could only stay solvent as long as they kept building is now beginning to be heard. The unhappy facts, it appears, are that many such builders were using advances from tomorrow's jobs to complete yesterday's.

FIRST SIX MONTHS—Private builders certainly did a remarkable job of home construction in the first six months of this year, the government's own statistics show. They built a total of 193,848 housing units during this period. Public agencies accounted for 107,952. Surprisingly enough, 131,100 of the total of private and public homes were built in rural nonfarm areas, the figures show.

FOOD AND SHELTER—Did you ever stop to think that of man's three basic needs—food, clothing and shelter—the last one, *shelter*, is the only one that can be accumulated for the future? Anyone who tried to store up food or clothing for the next twenty years would be considered a fool and a hoarder. But the man who buys a home and thereby assures a lifetime of shelter on stable terms is being merely wise.

This theme was made the centerpiece of a co-operative advertisement sponsored by a group of Long Island builders recently. It is one that carries great conviction, and might well be used by builders in other localities.

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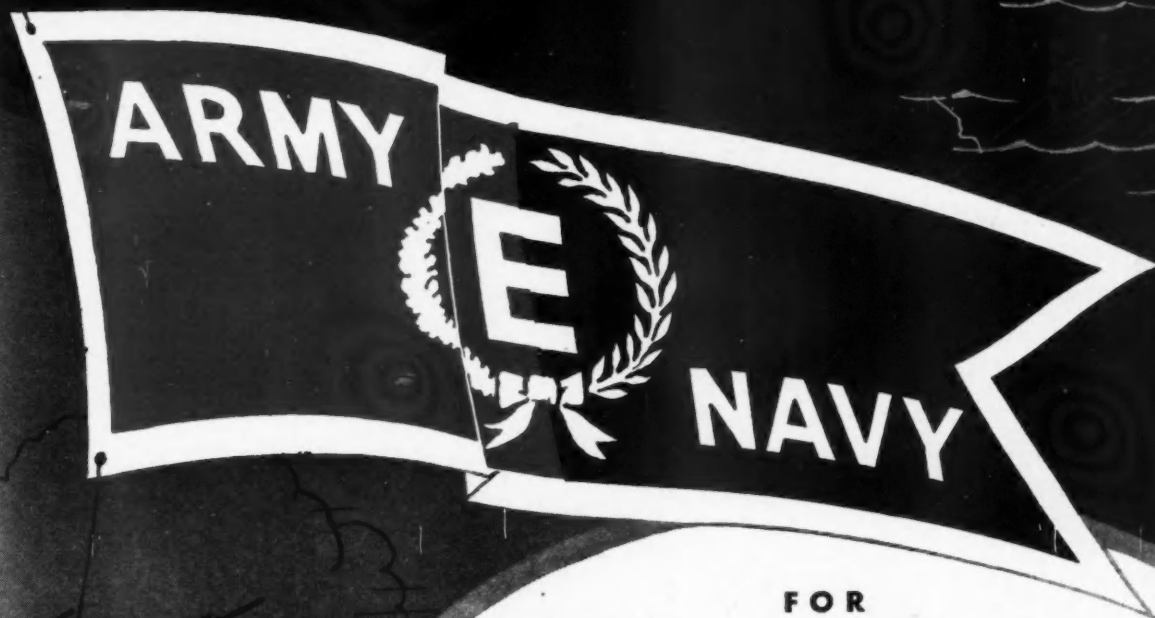
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FOR
Outstanding Achievement

☆☆ In the air — on land — on the sea and under the sea — precision tools of war manufactured by Minneapolis-Honeywell are proving their accuracy and dependability — just as M-H peace time temperature controls have done since 1885 . . . In recognition of outstanding achievement in war production, the Minneapolis and Wabash plants of Minneapolis-Honeywell were awarded, on July 27, the coveted Army-Navy "E" . . . This tribute to the Minneapolis-Honeywell organization is more than mere recognition. It is a challenge to produce new post-war miracles which will follow the research and engineering achievements produced to meet the war demands.

Minneapolis-Honeywell Regulator Company. 2810 Fourth Avenue S., Minneapolis, Minnesota.

☆

MINNEAPOLIS-HONEYWELL
Regulator Company



WASHINGTON

Review

*Latest Rulings
Affecting Builders*



FHA Helping in Change-over to Coal

THE CREDIT facilities of more than 5,000 private lending institutions operating under the FHA's Title I program are available to assist home owners in carrying out the heating and fuel economies so essential to the nation's war effort, Federal Housing Commissioner Abner H. Ferguson declared on August 1.

Because of wartime pressures on transportation, savings in consumption of fuel will become imperative during the approaching winter months, particularly in those areas where the supply of fuel oil will be sharply curtailed, Mr. Ferguson said.

In recognition of the urgent need for fuel conservation, the Board of Governors of the Federal Reserve System has amended its Regulation W, restricting the terms of most types of consumer credit, to exempt loans used to finance the conversion of heating equipment from one type of fuel to another, or to reduce fuel consumption by better insulation.

As a result, home owners financing such fuel-saving measures through FHA Title I loans can receive the maximum terms permitted by the National Housing Act. Such loans may run for as long as three years and are repaid in equal monthly installments.

Home owners in areas of short fuel-oil supplies who now heat their houses with oil-burners may finance the conversion of their furnaces to the use of coal through FHA-insured Title I loans, thereby assuring the comfort of their families during the winter months as well as helping in the solution of the critical oil supply problem.

Similarly, by installing improved insulation, or storm doors, storm windows and weather stripping, home owners can keep the heat in their houses and the cold outside. This will reduce fuel consumption, slash next winter's heating bills, and result in more comfortable, healthier living conditions. Such improvements also can be financed under the Title I plan.

Portland Cement Production Regulated

IN ORDER TO increase the production of portland cement by an estimated 20 per cent, the War Production Board has ordered a reduction to three in the number of types of cement produced.

This restriction is embodied in Limitation Order L-179 which became effective on August 23. The order also prohibits the ear-marking of any bins for particular customers, thus making storage capacity available to all purchasers, and requires portland cement to be tested according to certain specifications.

Requirements of the military construction program have greatly increased the normal demand for portland cement. The restrictions on the number of types which can be produced are expected to bring the total output into virtual balance with over-all requirements.

Used Machinery to be Inventoried

A NATIONWIDE inventory of used construction machinery to make it available for war production was announced on August 5 by the War Production Board. It is of particular interest to building contractors.

The survey will be carried out by the Used Construction

Machinery Section of the Construction Machinery Branch, H. O. Penn is chief of the section.

A construction machinery specialist will be appointed for each of the WPB regional offices and will be in charge of the inventory in that region. Inventory cards will be mailed to each owner of such equipment for a complete listing. Information sought will be the kind, type, size, condition, manufacturer, serial number, model number, year manufactured, year purchased, type of power, attachments, estimated cost of repairs, sales price (as is) and other pertinent data for each piece of equipment owned.

It is estimated by the branch that there are more than 500,000 pieces of vitally needed construction equipment throughout the country, many of them not now in use, or used but little. Track-laying tractors, cranes, shovels, draglines, pavers, mixers, scrapers, motor graders, pile drivers, compressors, and auxiliary mounted equipment are in urgent demand. Many of these tools in the hands of townships, counties and municipalities are used for only a few days a year and could be kept busy all the time for war construction. All having knowledge of used construction machinery are asked to cooperate.

Rent Control Expanding

PAUL A. PORTER, Deputy Administrator of the Office of Price Administration in charge of the rent division, on July 23 issued the following statement:

"A total of 369 defense rental areas has been designated by the Office of Price Administration. Beginning on the first of August the maximum rent regulations will have been made effective in 94 of these areas.

"Numerous inquiries are being received as to when a regulation will be made effective in many of the remaining 275 areas. It is the objective of OPA to make legal control effective first in those areas where the rental problem is most acute. Obviously there are many areas in addition to the 94 covered by a maximum rent regulation where the movement of rentals would justify immediate legal control. Investigations are continuing in a number of these places and it will be the objective of OPA to make the maximum rent regulation effective in these additional areas as rapidly as our administrative and financial resources permit."

Rehabilitation Basis for Rent Increase

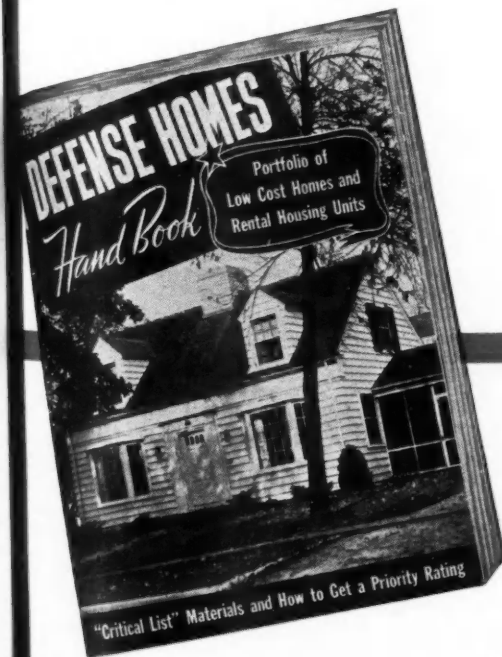
GENERAL rehabilitation of a residential property even though this does not include capital outlay for basic structural changes may be defined as a major capital improvement and may be the basis for an appeal for an increase in the maximum rent allowed under federal rent control, according to an interpretation just issued by OPA's rent division.

The basic maximum rent regulation permits rent adjustments upward where there has been a "major capital improvement." Under earlier interpretations of the basic regulation, allowance was not made for cost to the property owner of general rehabilitation of a run-down property, even though this might amount to hundreds or even thousands of dollars. It was made only for such large structural change as for example the addition of a new bathroom. The National Association of Real Estate Boards

(Continued to page 91)

HOW TO STAY IN BUSINESS DURING THE WAR

DURING THESE WAR TIMES, ESPECIALLY, NO BUILDING MAN CAN POSSIBLY AFFORD TO DO WITHOUT THE SERVICE OF AMERICAN BUILDER.



Free . . . Fill in the coupon at the right—attach your remittance for \$2 for a one year *American Builder* subscription or \$3 for two years—and mail. As soon as our subscription payment is received, a postpaid copy of our 180 page DEFENSE HOMES HANDBOOK will be mailed to you free of charge.

AMERICAN BUILDER *Is Supplying the Answer* IN EVERY ISSUE

American Builder today is a service geared to the wartime needs of building men. Its primary objective is to provide those who are not engaged in war work with the practical means of staying in business during the war, and to help those who are occupied with war building to do their work most successfully, speedily and economically.

WORK YOU CAN DO AT A PROFIT NOW

Ability to stay in business during the war means knowing what kind of work you can do under existing restrictions, where to find it, and how to do it at a profit.

To fully appreciate the thoroughness with which *American Builder* is helping building men achieve these requisites, refer to the issue you now have in hand or any of the coming issues. You will be astounded at the number and type of remodeling, repair and special jobs which *American Builder* is presenting, all in the category of jobs you can do at a profit now.

Not only will you find *American Builder* helpful in locating numerous outlets for your services, but you will find *American Builder* invaluable for its practical recommendations on how such jobs should be done. In each issue, you will find a wealth of information on how you can build with a minimum of critical materials or without critical materials at all. You will see how corners may be cut on costs here and there. You will find design ideas for a variety of jobs. Time and material saving slants will constantly be brought to your attention.

GUIDE TO WAR HOME BUILDING

If you are building war homes, *American Builder* should certainly be at your disposal at all times.

You will find in *American Builder* the latest achievements in war home designs—designs actually used, designs with the most outstanding qualities of beauty and utility, designs which may be executed with the greatest speed and economy.

In *American Builder* you will find new short cuts, the most advanced construction methods, which are being used to cut down on building time. You will see how critical materials are being eliminated and how substitute materials are taking their place. In fact, *American Builder* will serve you as an up-to-the-minute war building manual on every conceivable aspect of the work you have to do.

CLIP AND RETURN THIS COUPON NOW

AMERICAN BUILDER, 30 Church Street, New York, New York

Enter my subscription for 1 year (2)

2 years (\$3)

Enclosed is \$..... in full payment.

New

Renewal

INCLUDE WITH MY SUBSCRIPTION, AT NO EXTRA COST,
A POSTPAID COPY OF DEFENSE HOMES HANDBOOK.

Name

Street..... City.....

State..... Occupation.....

9-42 This offer good only in United States and Canada.

Two Letters . . .

1916

that tell a story of the type of dealer-manufacturer relationship that is the very foundation of our great American industries



C. L. Bloker, President, The Bloker Lumber Company, Lindsey, Ohio who wrote these two letters to Johns-Manville more than a quarter of a century apart.

THE BLOKER LUMBER CO.
DEALERS IN
LUMBER

FLOORING, SIDING, LATH,
SHINGLES, CEDAR ROOFING
AND BUILDING TILE, SLATS
AND J. M. ASBESTOS ROOFING,
CEMENT, LIME, WALL PLASTER

LINDSEY, OHIO, May 2nd, 1916.

H. W. Johns-Manville Co.,
New York City.

Gentlemen:

I have sold a lot of your roofing in this locality and feel sure I can do a large business as it takes well.

One big thing that the people notice is that it never costs a cent for repairs—I never have to go back with the paint pot or tar kettle; also the fire protection is a big thing.

Your fine ads are making everybody acquainted with you and your roofing so I don't have much trouble to make sales at a good fair profit.

I am perfectly satisfied and so are my customers. I don't have to cut and slice my price because I have no competition and I also like the way you help me when I need it.

Very truly yours,
The Bloker Lumber Co.,
Per, *C. L. Bloker*

1942

THE BLOKER LUMBER COMPANY
DEALERS IN
LUMBER AND BUILDER'S SUPPLIES
PHONE 6700

LINDSEY, OHIO July 2nd-1942.

Johns-Manville Sales Corp.
22 East 40th Street
New York, N. Y.

Gentlemen:

On May 2nd, 1916, I wrote you a letter telling you why I liked the Johns-Manville Line.

It is indeed a pleasure to be able to write you this letter twenty-six years later and reaffirm the statements made in my previous letter.

Your constant improvement in products and the supporting promotion has more than surpassed our fondest hope of 1916.

Based on this past experience, I am sure you will continue this march of progress. We are quite confident that our firm will be more than willing to again write you a letter like this in May 1968.

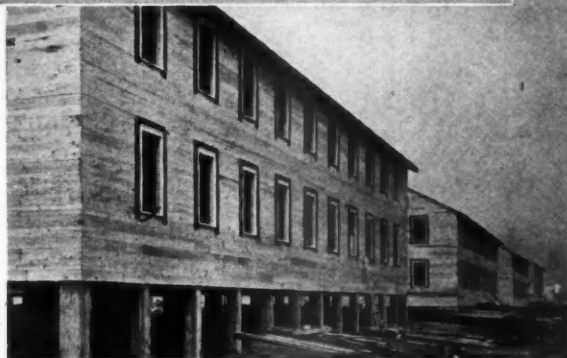
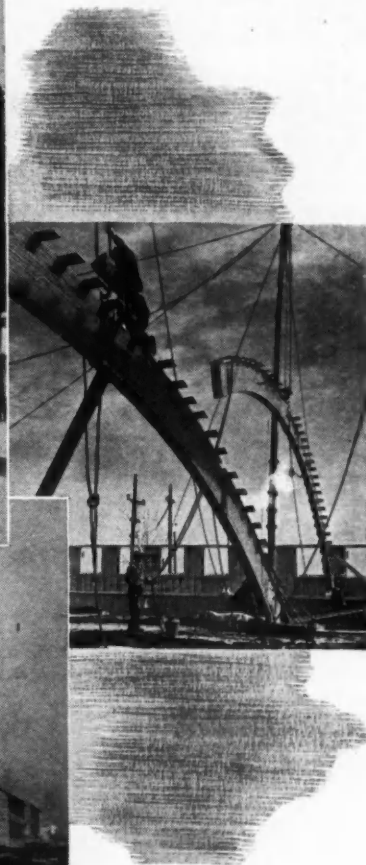
Very truly yours,
The Bloker Lumber Co.
C. L. Bloker

Naturally Johns-Manville is proud of these two letters. The "march of progress" Mr. Bloker refers to will be steadily carried on. It is interesting to note that in 1916 the J-M "line" consisted almost entirely of asbestos roofing products. Today, as a result of constant research and development, Johns-Manville offers its dealers a wide variety of fast moving, profitable building materials. All of them are supported by continuous J-M national advertising . . . all enjoy the wide public acceptance of the Johns-Manville name. Johns-Manville, 22 East 40th St., New York, N. Y.



Johns-Manville
Building Materials

"More sailors? Aye, aye, Sir!"



In the expansion program going on full-speed behind the gates of the U. S. Naval Training Station at Great Lakes, new drill halls, barracks, shops, roads had to be *quickly* built. To help meet this need for *construction speed*, thousands of barrels of Lehigh Early Strength Cement have been used.

You know, of course, why Lehigh Early Strength Cement has been used in this and in so many other war-inspired projects. *To save construction time!*

Concrete for foundations, roads, runways, piers—ready for service in 1/3 to 1/5 the normal time!

Concrete ready for service, sometimes, overnight. For when Lehigh Early Strength Cement is used, you have service-strength concrete 3 to 5 times quicker than if normal cement had been employed.

Though, in wartime, it is speed that counts, Lehigh Early Strength Cement offers many other advantages that peacetime construction finds important. For further information write to the Lehigh Service Department.

Lehigh

EARLY STRENGTH CEMENT

for service-strength concrete in a hurry

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

Looking Ahead To The Post-War Home

*When America can
again build freely,
what will the new
homes be like?*

"—Not Necessarily Radically Different"

Chicago

Editor Post-War Home:

It is my personal opinion that one of the greatest mistakes we can make (in "post-war planning") is to over-emphasize large scale operations; because the large potential volume of employment comes from private home building. By the same token we should not necessarily think of the post-war home as having to be radically different from the homes being built today, with the possible exception of changes due to new materials, new equipment and new methods of construction.

Analysis of income indicates that there will be a larger demand for the medium priced home following the war than has been true for several years and that there will be practically an unlimited demand for small homes. In fact, everything points to a very large volume of home building at the conclusion of the war. This is based on the fact that individual credit will be unhampered by long term commitments, and a greater number of our people will have accumulated savings through their purchases of War Bonds.

The crux of the first few years of post-war planning success will be our ability to maintain full employment. This will depend for the most part on our ability and willingness to plan conversion to peacetime production, the retention of such controls as may be necessary to prevent inflation, and the demobilization of our armed forces in accordance with their importance to industry rather than their unimportance to the military, which was the controlling factor in the last war.

RUSSELL G. CREVISTON, Chairman,
Post-War Planning Committee,
The Producers' Council, Inc.

"—An Alternate to the Grandiose Dream of Public Housers"

Chicago

Editor Post-War Home:

It is pleasing to have a voice raised in behalf of the place of private home building and home ownership in the nation's post-war economy. Therefore, your inquiry as to my ideas on the subject was most welcome, even if a doubt sometimes comes to our minds as to whether we have a right to spend so much time thinking about after-the-war before we have begun to win.

For more than a year, the committee on housing of the United States Savings and Loan League has been emphasizing the need for the private construction industry to have a plan, something which can be set up as an alternative to the grandiose dream of public housers. That plan, it seems to me, must be extremely practical, must deal with customers and family incomes and credit habits as they are and not as we would wish them to be in an ideal private enterprise economy. So much for the goal.

The start which some of our more forward looking builders had made on construction of entire communities of homes, rather than of unit by unit residential developments, points an interesting direction for post-war home construction. I believe that the post-war private home construction program will be embodied to a considerable extent in the building of whole communities, the garden city type of development of which England made so much use between the two World Wars.

Such communities have the immediate advantage of building

homes catering to a specific income group of population, and thus, offer the customer a made-to-order neighborhood of his own type of people and the same general standard of living. They will combat much of the indecision about home ownership which arises when people consider the rapid obsolescence of a neighborhood in our modern civilization. As to the type of building materials used, I think we can expect in these communities of homes to see all kinds and varieties, but, I feel that revolutionary types of home design or materials will not be likely to be found alongside the more conservative time-tested types of architecture and building materials in the same communities.

Of course, in the smaller cities and the towns where so much of our home building goes on unsung and unthought about, we can expect post-war construction to follow individual home patterns, the building of one house and then another, as the demand arises. Even in smaller cities than our metropolitan areas, however, builders may well turn to planned community development and find it a successful venture.

As to the prospect for American home building after the war, that seems to me tremendous, provided of course, as I said above, the private construction industry sees the situation realistically and fights for the business against the public housers with plans and products which give them the edge in the competition. A great backlog of purchasing power is being built up by the emphasis on thrift from the heads of the government down through all our economy. The possession of war bonds by scores of millions means purchasing power after the war. Such dollar volume of purchasing power may well mean that larger down payments can be made on homes and that they can probably be bought and paid for in shorter time than the twenty to twenty-five year mortgage terms of some years back. The private home building industry, however, must not depend upon this fact, but must make its plans so that it can offer a low-down-payment home ownership plan; and I think it can and should do it without asking the government to make the guarantees.

The increasing emphasis on the community development type of home building which I foresee after the war will mean, of course, that home financing will be done much more on the large scale plan than has been characteristic in the past century. Savings, building and loan associations are cutting their teeth on financing of many-unit home developments by way of some of the war housing which they finance these days. This experience will pave the way for more efficient handling of financing for whole communities of homes when the demand arises for it. In this connection it should be recalled that the English Building Societies which are the counterpart of our same savings and loan type of institution, were the backbone of the financing for the great housing boom of the early 1930's in Great Britain; and that boom was largely the result of building homes in groups rather than singly. In other words, I see no reason for new systems of finance, new institutions or agencies to finance post-war home construction for owner occupancy.

The availability of mortgage credit in the post-war period will be assured. Most of the savings and loan institutions whose loans have made up a \$25,000,000 to \$35,000,000-a-month outflow into the home owner's hands for the past two or three years are investing more and more heavily in government bonds these days. Their cash position is at its most favorable point. They will be able to meet any reasonable loan demand from the private home

(Continued to page 22)



Right in your community...
HOMES NEED RE-ROOFING!

Right in your community...
HOME OWNERS KNOW TEXACO!

RE-ROOFING means business right now. And good, profitable business too—because home and farm owners have money to buy the new roofs they need!

Asphalt shingles head the list as the most popular for re-roofing and new roofs. In fact, asphalt roofing is the most popular type of roofing in America—a 2 to 1 favorite over all other types combined!

Texaco makes asphalt shingles and roofing —from its own asphalts that are 99½% pure— offering eye-appeal, endurance, economy and fire-resis-

tance. And — *Texaco is a name that millions know.* So — go after this profitable re-roofing market with the most popular type of roofing in America and a name that millions know — Texaco.

★ ★ ★

Texaco Asphalt Shingles and Roofing are available to Texaco Roofing Dealers through a large network of Texaco warehouses—east of the Rockies. Drop in, write or telephone your nearest Texaco Roofing Dealer today, or write to The Texas Company, Roofing Sales Division, 135 East 42nd Street, New York, New York.



TEXACO



SHINGLES and ROOFING

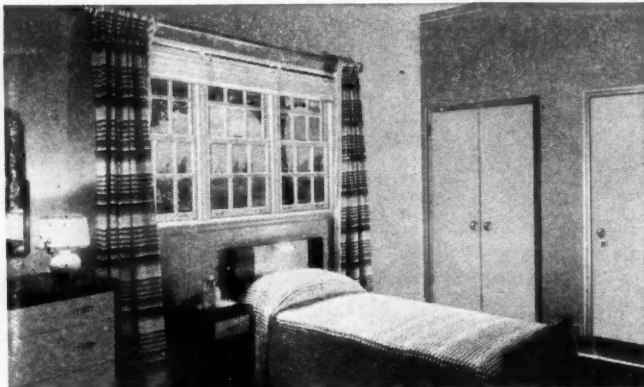
Made with Texaco's own asphalts 99½% pure



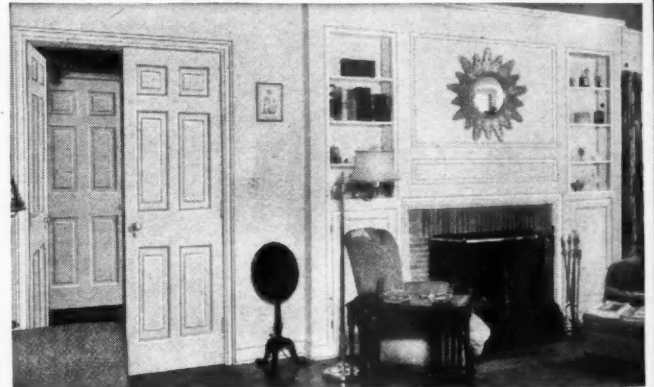
MORE
for
the money—

IN LOW-COST HOUSING AND REMODELING!

• Wartime conditions are a challenge to ingenuity in providing unusual value in low-cost housing and remodeling. Yet, many a problem can be solved—quickly, easily and satisfactorily—with Ponderosa Pine stock doors, frames and windows. For Ponderosa Pine not only offers a definite means of making houses more livable, more functionally desirable, but its stock designs help reduce building costs as well. Here are just a few of the ways in which woodwork of Ponderosa Pine can aid you:



GETTING THE MOST OUT OF SMALL SPACE—Every inch of space is useful in this interesting bedroom of a small defense home. The grouping of stock Ponderosa Pine windows provides plenty of light and air—makes the room look larger. Notice the attractive modern doors of Ponderosa Pine—especially the double closet doors. Ponderosa Pine doors, frames and windows require the very minimum of critical metal.



FUEL CONSERVATION—In the photograph above, well-placed doors of Ponderosa Pine permit shutting off unused rooms to save fuel—or help to provide greater privacy for housing defense workers. These graceful doors will fit well and function with ease, due to the precision-made stock frames of Ponderosa Pine. Ponderosa Pine provides *durable* doors, frames and windows—gives great value in every job.



GREATER UTILITY—AT LOW COST—Here's an ingenious, space-saving arrangement that can be used effectively in small defense homes, where privacy is desired and space is limited—made possible through the use of folding doors of Ponderosa Pine. Notice, too, the graceful, architecturally correct entrance. Because it is so durable, Ponderosa Pine creates homes that *stay* charming. Ponderosa Pine stock doors, frames and windows are low in cost—readily available—suitable for all types of construction.



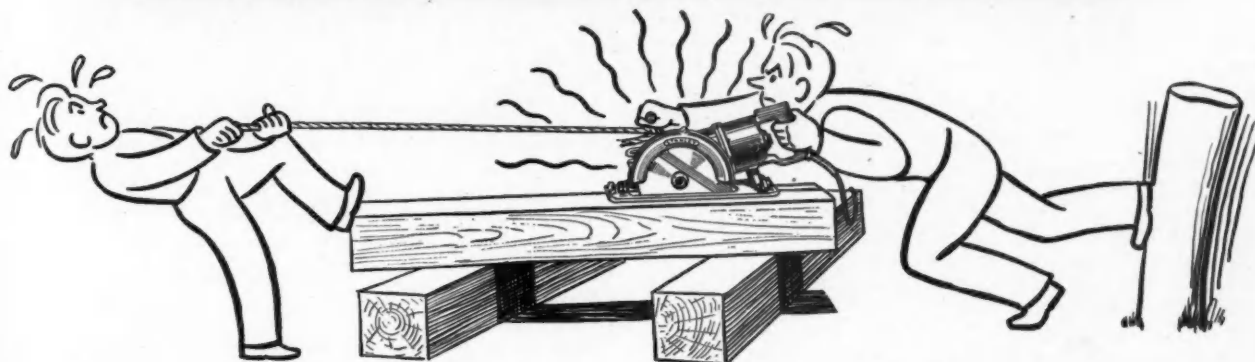
get **THE NEW
OPEN HOUSE!**

You will find this book an indispensable aid. It is full of ideas for making homes more attractive and more livable under present conditions in both new construction and remodeling.

A free copy is yours for the asking. Write Ponderosa Pine Woodwork, Dept. XAB-8, 111 W. Washington Street, Chicago, Illinois.

Ponderosa Pine
WOODWORK

Electric Tools are HARD TO REPLACE



AVOID OVERLOADING and get ALL the efficient service that is built into STANLEY SAFETY SAWS

Overloading an Electric Saw puts a strain on the motor, reduces its efficiency and soon puts it out of action for costly repairs. Most overloading is caused by forcing dull blades. Keep them sharp. Have the blade running full speed before contacting the work. Keep the blade at high speed for faster, smoother cutting and lower current consumption.

You can get *all* the long service that is built into Stanley Electric Saws by following the simple instructions for maintenance that are packed with the tool. New instructions will be sent on request.

If parts wear out, have the saw repaired or rebuilt. Stanley is maintaining its usual repair service, and keeping repair parts available during the emergency. Stanley Electric Tool Division, The Stanley Works, New Britain, Connecticut.



PROPER CARE WILL KEEP YOUR STANLEY ELECTRIC SAWS ON THE JOB

- ★ **KEEP BLADES SHARP** ★
Dull blades overload the motor and make poor cuts. A little time out for sharpening saves a lot of time and trouble on the job.
- ★ **DON'T OVERLOAD** ★
Don't force the saw. Have blade running full speed before contacting the work. Keep blade at high speed for faster work and less wear on motor and machine.
- ★ **KEEP SAWS LUBRICATED** ★
Follow instructions received with the saw, being sure to use the proper grease. The finest steels will wear rapidly if lubrication is neglected.
- ★ **KEEP SAWS CLEAN** ★
Blow out holes in motor housing with air blast frequently, to remove dirt and sawdust accumulation.



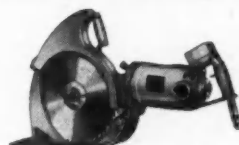
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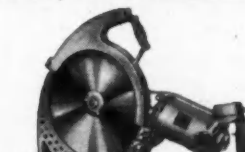
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W9-3¼" cap.



CC12-4" cap.



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STANLEY SAFETY SAWS

★★★★★★★★★★★★★★★★★★★★

LOOKING AHEAD To The Post-War Home

★★★★★★★★★★★★★★★★★★★★

(Continued from page 18)

building industry after the war; and leadership within the industry is now working on how they can do that most efficiently.

Unquestionably post-war home building will continue the trend of the last year or two before the war, viz., major emphasis upon the low cost type of home. We are going to have to build more \$4,000 houses and better houses for \$4,000 if we expect to make a real appeal to the group who should own their homes, but who are now convinced it's cheaper to rent. Prefabrication will doubtless figure prominently in post-war home building. Complete-prefabrication of homes, however, requiring the factory on the spot where the houses are going up, seems to me still far in the future without practicability in our generation. Post-war housing will be characterized by unprecedented amount of improvements in conveniences, since a fallow period is inclined to produce a multitude of ideas useful in the productive area which follows.

I wish to add a final word about my belief in the great need for private home building and home ownership in the post-war economy. I mean home ownership for people with small incomes as well as for those with medium and high incomes. If we surrender to a federal instrumentality or to planners within government agencies, the right to serve the small income families of America with a good, durable, attractive and convenient home, we will have lost one of the benefits of our democracy for which we are fighting a costly war. Home ownership is a great builder of responsibility in the individual, without which responsibility democracy can never be strong or very long successful.

MORTON BODFISH, Executive Vice President,
United States Savings and Loan League.

Freedom and Individuality Will Rule

New York, N.Y.

Editor Post-War Home:

Your idea of considering basic trends and characteristics is very commendable. The title you have selected, and particularly the subtitle "When American Can Again Build Freely," is a most inspiring thought. There are so many phases of our lives that might come under this same expression.

Let us consider, first, America will not be regimented. All restrictions, many of them necessary, which have been imposed in the past ten years, including the war period, are building up to a most fervent determination that we will be free and not regimented. Fundamentally, Americans are satisfied with their America, perhaps so well satisfied that we have allowed our fences to get down. When these fences are mended, America will revert basically to its ideals of freedom.

After the war, America may have the highest degree of commercial and industrial development the world has ever known, and may not. It may have the highest standard of living, as it has had in the past, and it may not. Regardless of this, Mr. America will still have his desire to be individual. If he wishes to erect a building for his home or his business in a certain spot, designed to his own individual taste, satisfying his needs and that of his business, he will most certainly continue to do so.

In the past, architects and builders have interpreted these desires, and built accordingly. Any type of public works, re-zoning, housing or urban development which does not include this individual expression of freedom will not serve America. The architect and the builder in the past have been criticized in the America as built. Also their opposition to a regimented type of building has been criticized; but the criticism should be rather that the architects' and builders' services could not be used on all building.

Design, style, and all that go for better living will appeal to the post-war home builder, and there will not be houses with straw roofs and matt floors containing all of the mechanical necessities. They will be balanced and completely designed for better living.

F. J. PLIMPTON,
Ass't Gen'l Sales Manager, Vermont Marble Co.

Secretary Jack McCarthy Optimistic

Springfield, Ill.

Editor Post-War Home:

In considering the post-war home building problem, lumber dealers should give attention to who will be their customers, what will be their age, what will be the size and type of their families, what will be their financial and income status.

We will still have most of our customers, those who have been dealing with us for years, but the tendency may continue toward a small family, despite the increasing birth rate at the beginning of the war and the newly married couples. The average age will be older because of the decrease in marriages during the war, which will cause a tendency among such couples to settle down and have a more mature outlook on life and be interested in more permanent values for their investments.

At the end of the war, personal savings should be relatively large, and thus consumers will be in a position to buy all sorts of commodities; and in many cases will have necessary down payments for homes. Both business and Government will be taking measures to provide full employment which means steady income; and it is to be expected that wide fluctuations in farm income will be avoided. All of which makes our post-war population excellent customers from a credit viewpoint.

It is highly possible that the war era will develop new products and new methods of using building materials; but the general public will have become accustomed to alternates and substitutes during the war period that will leave them very tolerant towards new products and methods.

Altogether, it is my opinion that the prospect for private home building, at the end of the war era, will be very good.

J. D. McCARTHY,
Secretary, Illinois Lumber & Material Dealers Ass'n, Inc.

Foresees Small Home, Big Windows

Pittsburgh, Pa.

Editor Post-War Home:

There are certain general conditions which should be reflected in post-war housing. One is that there will be a long period in which no one will have any great supply of excess funds, because this job of paying for our present activities will be long and arduous.

I think, generally speaking, homes will be more modest in character than in the prewar period, because there will be few who can afford anything but the simplest. There should be a continuation of the present trend toward functional houses which take into consideration more and more the living habits and the needs of the occupants.

It seems reasonable to assume that there will be a continuation of the development of acreage on the outskirts of large cities, and that the houses erected will, in general, be built by large companies who specialize in volume production. I feel that these companies will appreciate the value of originality in exterior appearance and will steer away from the row-after-row of cheese boxes which have been the bane of former low cost housing.

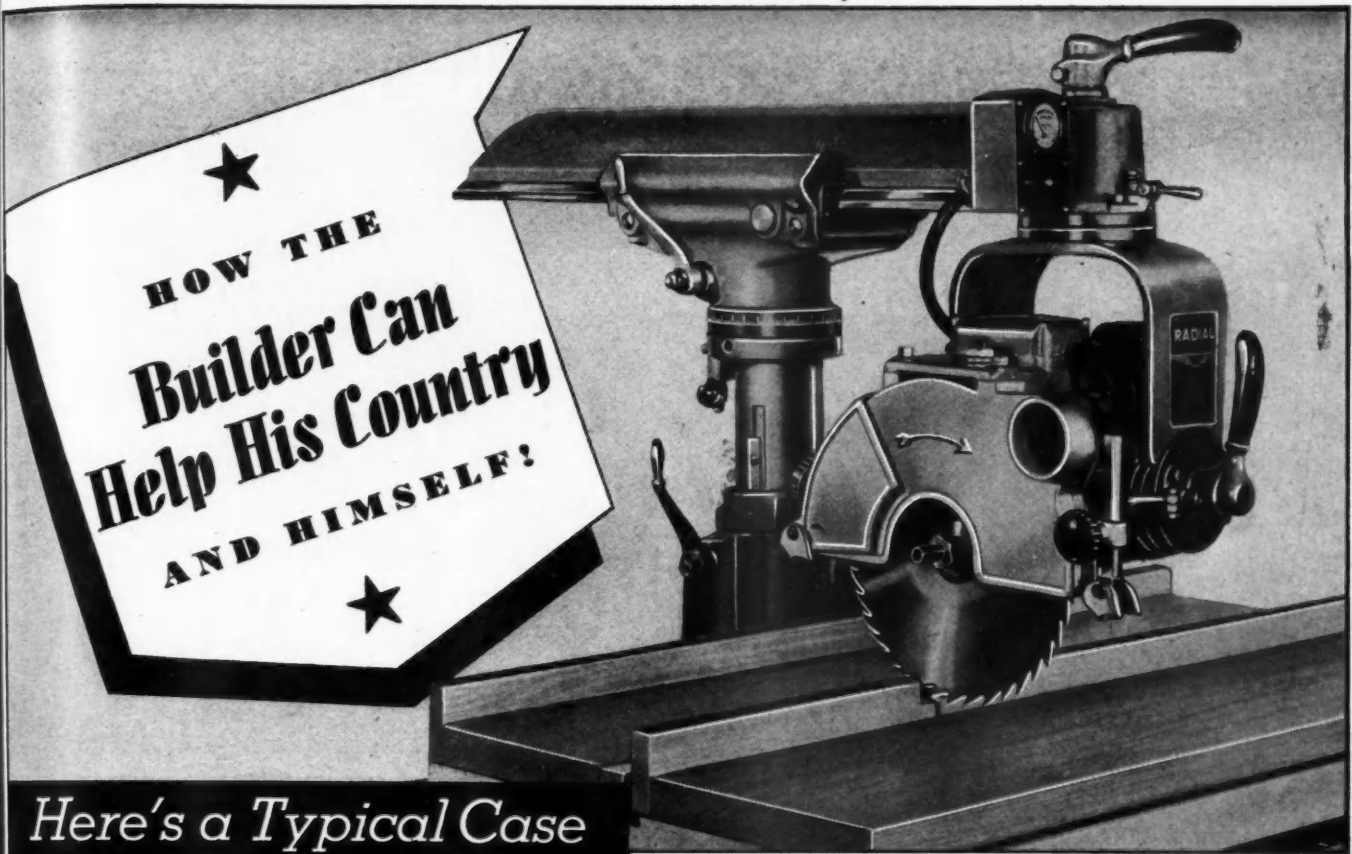
How much prefabrication will play a part in new housing is open to question. My own feeling is that savings will be effected through production line tactics where one crew of workmen travel from one house to the next and where there is simplification of materials and refinements in structural practices rather than from factory prefabricated sections.

I suppose every manufacturer has visions of the new era of housing specializing in the use of his particular product, and probably most of us will be disappointed. However, I do feel that the manufacturers of paint and glass have a sounder basis for optimism than most.

There is a definite trend toward opening up a house to the outdoors. No one who has ever lived in a house supplied with ample windows would ever willingly go back to the old conception of a house which was a man's "castle" where the windows were as small as possible. Furthermore, the practical applications of glass are being better understood and it is reasonable to assume that in future housing, glass, in its many forms, will play an important part in construction and decoration.

E. L. PATTON,
Advertising Manager, Glass Division,
Pittsburgh Plate Glass Co.

MORE next month—what are YOUR ideas about the post-war home? Write us.



Here's a Typical Case



● War restrictions on building activity, found Winston K. Ogden, of Chatham, N. J., with a well-equipped mill-work shop, 20 years' experience and a determination to keep going. He went after and landed a war contract to make boxes for bombs sufficient to keep his shop busy, night and day, for the next nine months. His Walker-Turner Radial Saw is the key tool in meeting the production demands, uniform cuts and exact fitting required. To further speed the order Mr. Ogden is building a sizeable addition to the plant below.



War Contracts are highly competitive, on such points as time . . . quality . . . and price.

● The WALKER-TURNER RADIAL SAW keeps many progressive builders on the "inside track" on all three of these important factors. The Patented Geared Motor that enables this machine to make deeper cuts with smaller blades, the ball bearing gliding ram that moves in and out at a finger touch and permits clear view of the work, the low price of **\$354.50**, and the unusually prompt delivery on priority orders, offer you your best chance to join Democracy's battle on the industrial front.

Send now for descriptive literature

Walker-Turner Co., Inc.
1092 Berckman St., Plainfield, N. J.

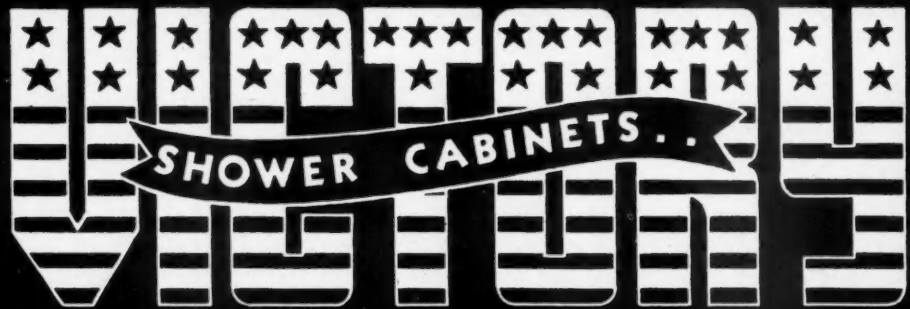


WALKER-TURNER RADIAL SAW

5 MACHINES **1** } CROSSCUTS AND RIPS • DADOS
IN SHAPES • ROUTS • TENONS

Here's the shower cabinet that will fit ALL your needs for low cost bathing facilities in War Housing . . .

Bathe-Rite



The BATHE-RITE VICTORY SHOWER CABINET gives you—low first cost, low assembly cost, fast installation, attractive modern styling — sturdy, leakproof construction that meets the most rigid quality standards. Using the absolute minimum of critical materials, it easily complies with U. S. War Department Specifications and Federal Public Housing Authority Specifications.

SAVES INSTALLATION TIME and COST . . .

Typical BATHE-RITE Features save 25% and more in installation time and cost . . . Features like the Separate Mounting Frame which permits installation of Receptor when floors are laid. Prevents damage to mounting frame and aids in quicker cabinet erection.

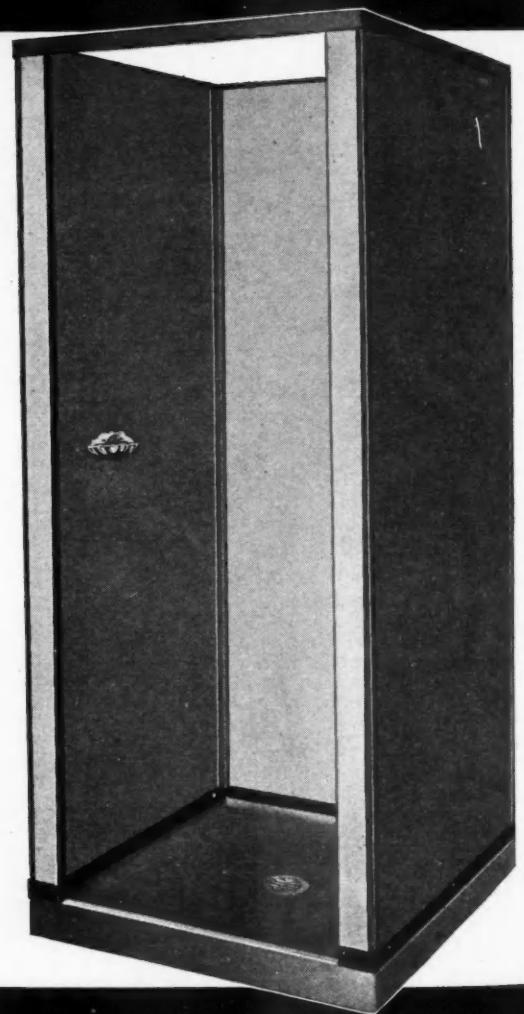
TIMED DELIVERY

Our mass production facilities, careful engineering and stand-

ardized models provide Timed Delivery of any quantity WHEN AND WHERE YOU NEED Shower Cabinets. Cabinets are conveniently packaged for easy handling and quick erection.

BATHE-RITE VICTORY Shower Cabinet

Made in THREE standard sizes — 30 x 30 x 75, 32 x 32 x 75, 32 x 32 x 80 — for installation in War Housings, Factories, Camps, Air Bases and other Government Projects.



RETURN THIS COUPON TODAY . . . FOR PRICES AND DETAILS

BATHE RITE DIVISION — Milwaukee Stamping Co.
828-S South 72nd Street, Milwaukee, Wisconsin

Please RUSH complete specifications and prices on the new BATHE-RITE "VICTORY" Shower Cabinets. We are interested in . . . Cabinets.

Project

Name

Address

City State

Individual

"Congratulations on a Good **START** ...let's make it a Strong **FINISH**"



Let's give Defense Homes strong Home Defense with White Lead

Today builders must "do the impossible"... give America defense homes *fast* ...at restricted prices...yet provide the charm and quality that make houses *homes*. And they've made a real start.

It's a man-size job... takes ingenuity and skill aplenty—not only in design and construction, but particularly in the selection of materials. For, despite shortages and the price limitation, these homes must be built to stand up.

We don't have to tell you that good paint is the best life insurance a house can have—or that good paint's other

name is Dutch Boy White Lead. You know from personal experience that it hangs on with real Dutch tenacity... never cracks and scales.

But, because of the price ceiling on defense homes, we do want to remind you that, in spite of its well-established, well-founded reputation for high quality, paint made from Dutch Boy Paste Lead is actually in the *low price bracket*. In fact it's not only low priced per mixed gallon of paint but downright *thrifty* per year of protection.

And since we're talking about economy remember, too, that Dutch Boy can be used for practically any painting purpose. It's suitable for either two- or three-coat painting—and gives

topnotch results on any surface: wood, brick, stucco, concrete or plaster.

Now that we've made such a good start on this defense housing job—let's make it a strong *finish*—with Dutch Boy!

New Dutch Boy Paint Unsurpassed for Two-Coat Sealing and Hiding

Where ready-to-use paint is wanted, we suggest you give professional consideration to the new Dutch Boy Pure White Lead Paint. It combines the stubborn Dutch sturdiness of White Lead with sealing, hiding and whiteness unexcelled by any two-coat combination on the market. Comes in two special forms—Exterior Primer and Outside White—both pure white lead, all ready to spread. Used together they give results you'll be proud of, on new or old wood.



NATIONAL LEAD COMPANY
New York, Buffalo, Chicago, Cincinnati, Cleveland, St. Louis, San Francisco, Boston (National-Boston Lead Co.), Pittsburgh (National Lead & Oil Co. of Penna.), Philadelphia (John T. Lewis & Bros. Co.).

SPECIFY DUTCH BOY PURE WHITE LEAD

Letters from Readers

Facts, Opinion and Advice
Welcomed for This Department...Write the Editor

A Subscriber for 64 Years!

Coatesville, Ind.

To the Editor:

I am enclosing check for \$3.00 to renew my subscription to *American Builder* for two years more.

These two years will total about sixty-five that I have taken your paper, and I do not think I have missed a single number since I subscribed for "Carpentry and Building" away back when it was first started in 1879.

It might be interesting to know if there are any others who have taken the paper longer. (Pretty hard to beat a record that began with Vol. 1, No. 1!—Editor.) It has been a good journal and has

I am now living in a home I have built since I was seventy (that was ten years ago), doing most of the inside finishing myself; as I love that work and wanted it just so.

I bought a ninety year old house that had to be moved on account of road building. This house was built when hand work was the rule, and poplar lumber was plenty. Studs 2" x 5", window and door studs 5" x 5", plate 5" x 8", corner posts 8" x 8", rabbeted. Everything poplar except sills, beach, and stair treads, oak.

We have a modern kitchen, cabinets made of the cornice lumber hand smoothed and sandpapered; tongued and grooved flooring 1" x 4" to 1" x 8" hand made. I had it milled to even thickness. Not having electricity to sand it, getting it ready for waxing was hard work.

Doors and window casing 1 1/2" x 7 1/2" moulded. How they moulded it by hand I do not know. This is in Central Indiana.

JOEL E. MOORMAN.

Note: The Staff of this publication wishes to congratulate Mr. Moorman on his long and successful building career. He has been a student always.

His is an astounding record of long-time loyalty to a publication! The original title, "Carpentry & Building," was changed in 1910 to "Building Age." And then in 1930 to *American Builder and Building Age*.—EDITOR.

Foresees New Era in Farm Building

Chicago.

To the Editor:

Nobody can be specific about what new homes will be like when peace comes again. So far as farm homes are concerned, I feel pretty sure that more of them are going to be better built, with more and better equipment, than ever before.

I am constantly calling attention to the importance of the farm field as a building field. There is not only a home on practically every one of the more than six million farms of our country, but there are also several other buildings, some of them often costlier than the home itself. Many farms have two or more residences and several sets of buildings.

The amount of new construction, rehabilitation and repairing that will be immediately undertaken with the advent of peace, is enormous. In value it will run into billions of dollars.

Farmers are making money. They are putting their profits into savings bonds. They will have the wherewithal to pay for the building they will be doing after the war.

Farmers and farmers' wives are learning more about building materials and equipment than they ever knew before. When the time comes for them to build, they will insist on the last word in modernness of design and arrangement, as well as in efficiency of equipment.

On many farms today needed and wanted building improvements are being held back by war restrictions; a "back log" is piling up.

Steel, copper, insulation, glass, aluminum—these are the types of material that farmers are adding to the old lists of wood, stone, brick, and slate. Farmers will insist upon durability, and comfort, and convenience, and efficiency, perhaps even more strongly than their city cousins do.

Several of our largest steel companies are taking definite steps in preparing to enter the farm field with an aggressiveness heretofore unknown. New forms of insulation especially suited to farm building needs are being prepared. New combinations of materials are ap-

(Continued to page 30)



ORIGINAL title page (reduced in size) of "American Builder" as launched in January, 1879, under the title "Carpentry & Building."

ALL WAY\$ A PROFIT MAKER ...



...Flintkote COLD Process Roofing

New system of cold-applied roofing proves value at low cost for all types of "flat" roof work, new or old

One line on which you can make money today and all the time is Flintkote Cold Process Roofing. A tested, practical system for *cold* application of bonded, built-up roofs, it has proved its worth in the busiest construction year in history.

SAVES TIME, LABOR, EQUIPMENT

With Flintkote Cold Process Roofing no jobs are held up waiting for equipment. Applied cold, Flintkote Cold Process products require no heating equipment, enable contractors to handle several jobs simultaneously...



cover a bigger territory in less time.

UNIFORM RESULTS ASSURED

Because Flintkote Cold Process Roofing products are all uniformly factory packed, uniform results are assured. Furthermore, eight detailed Flintkote Cold Process specifications are now available for guidance. Two cover roof maintenance, and six give procedure for new work and re-roofing over wood, concrete, gypsum and steel decks, with or without insulation.

Write today for *free* copies of these

Flintkote Cold Process Roofing is ideal for new or old roofs, on industrial, commercial, residential or military construction.



specifications. Ask also about profit making franchise and sales promotion materials. Address: The Flintkote Company, 30 Rockefeller Plaza, New York, N. Y.

FLINTKOTE BLACKOUT MATERIALS

Alert dealers and builders everywhere (particularly along the Coast and in defense areas) are fully prepared to answer all questions about Flintkote Blackout Materials and Fire-Retardant Roofs. These products, proved in England, are available in America today. Write for complete specifications.

FLINTKOTE Building Materials



NEW YORK • ATLANTA • BOSTON • CHICAGO HEIGHTS • DETROIT
EAST RUTHERFORD • LOS ANGELES • NEW ORLEANS • WACO • LONDON

Your Patriotic OPPORTUNITY!

TODAY, every loyal American is making every effort to win the war decisively, quickly.

Here is an opportunity for builders to contribute to the war effort—and keep busy besides!

Needless building is banned for the duration.

But there is a great amount of building that is not only permitted, but is actually encouraged by Uncle Sam.

There is a drastic shortage of housing for war workers. The efficiency and health of defense workers demand that they be housed in liveable, sanitary quarters, rather than in makeshift dwellings.

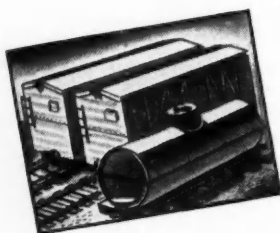
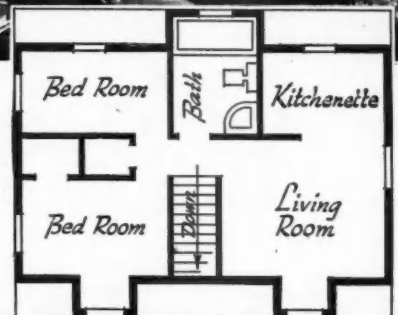
In the past four years more than 150,000 new homes in defense areas have been built with stairways accessible to unfinished attics.

If these attics were finished into small apartments, *the equivalent of 150,000 new small homes would be made available without building a single new one!*

For such work, the Federal Reserve Board has granted an exemption from Regulation W and loans are readily obtainable under FHA Title I.

And for such work, Insulite Insulation Board is the ideal material. Insulite is easily, quickly applied to studding of existing walls. A few hours will convert such attic space into charming, healthful living quarters.

Insulite further aids the war effort in two ways. First, it requires a minimum of critical materials. Second, Insulite insulates as it builds—an important factor in the current fuel shortage. Insulite, Minneapolis, Minnesota.



Saves Transportation

Insulite relieves the transportation shortage in two ways. First, Insulite occupies a minimum of space in freight cars. Second, every two cars of Insulite used in construction will save, during a heating season, one car of fuel oil for war needs.



Saves Time

Insulite Insulation Board is quickly applied. The panels fit easily into place, and provide serviceable, attractive interiors, without plastering, papering or painting. That's a big saving in time, in these days when every minute is precious.

INSULATE WITH INSULITE

THE ORIGINAL WOOD FIBRE STRUCTURAL INSULATING BOARD

INSULITE
Minneapolis,
Minnesota



Division of
Minnesota and Ontario
Paper Company

REG. TRADEMARK



Mantel C-6055. One of the prettiest and lowest priced mantels in Curtis line.

THIS IS LOW-COST WOODWORK

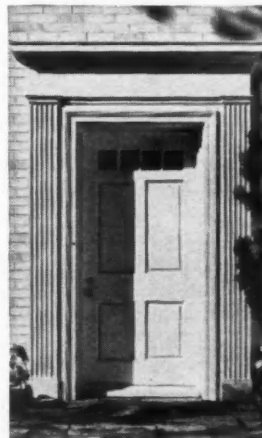
"In Tune" with the Needs of Today

● Defense housing—private repair and modernization. Those are today's big needs in home construction—needs which call for economical *stock* woodwork of good design. And that means CURTIS WOODWORK—fit for the finest home, priced for the lowest building and modernizing budget!

Curtis Stock Woodwork Quickly Available!

Curtis architectural stock woodwork is "in tune with the times." It is quickly available, both for defense housing and for repair work. It offers the *extra* quality which provides more value for the money. You can obtain it in a great variety of styles, to fit any type or size of home. And remember, the Curtis line of architectural woodwork is *complete*—for Curtis makes everything in builders' woodwork—all *stock* designs.

Ask us for proof! Let us show you how and why Curtis stock architectural woodwork can aid you today and tomorrow. Mail the coupon for facts about Curtis woodwork. Write us if you have some special woodwork job connected with war work. We are equipped to produce anything in woodwork quickly, economically.



Entrance C-1728, door C-1021. A beautiful and inexpensive doorway for the low priced house.



China Case C-6521. Ideal for small home. One of several Curtis stock cabinet designs.

CURTIS MAKES A COMPLETE LINE OF STOCK ARCHITECTURAL WOODWORK

1866 CURTIS WOODWORK

CURTIS WOODWORK IS SOLD BY
RELIABLE DEALERS EVERYWHERE

CURTIS COMPANIES SERVICE BUREAU
Dept. AB9W, Curtis Bldg., Clinton, Iowa
I want to know more about low-cost Curtis woodwork designs for defense housing, modernization and repair. Please send me complete information.

Name.....

Address.....

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

LETTERS from Readers

(Continued from page 26)

pearing. Even the old stand-by, wood, is dressing itself up in the form of plywood for many farm applications.

Smart builders will watch the farm market; but don't think for a minute that it will be simple and easy to grab off a chunk of it. Farmers, as a class, are smart, too, and are as keen and discriminating a group of buyers as can be found anywhere. However, they are also fair and square in their dealings, which make them a satisfactory group to deal with.

K. J. T. EKBLAW, Agricultural Engineer,
American Zinc Institute.

WPB Asks Reduction of Inventories

Washington, D. C.

To the Editor:

You raised the question of how it may be possible to dispose of existing stocks of plumbing and heating equipment by directing their flow to essential construction, such as military housing, defense housing, defense plant, etc.

You will note that Order L-79 places no restriction on the movement of plumbing and heating equipment above the consumer level. The purpose of drawing the Order in this fashion was to make it possible for a free movement of goods within the Industry to accomplish precisely the objective you have in mind.

We admit that we are considerably handicapped in that we do not have a reliable inventory of existing supplies of plumbing and heating equipment. The Plumbing and Heating Branch proposes to send out an inventory report form in order to obtain this information. This form was prepared some little time ago, but because of the floor of paper work to which Industry and business have been subjected by various Governmental Agencies, the sending out of this form has been held up. If the decision is finally against sending the form out, we shall attempt to obtain an idea of the inventory through the cooperation of Trade Associations, Builders Associations, etc. Admittedly, this method will not be nearly so reliable, but it may serve the purpose to a reasonable degree.

In the meantime, I shall very much appreciate the assistance of your magazine in bringing to the attention of the Building Industry the desire of the War Production Board that existing stocks of plumbing and heating equipment shall be used before new products are manufactured, even though, in some cases, the existing equipment does not exactly fit the specifications or the requirements, and even though it may be necessary to pay a somewhat higher price.

W. WALTER TIMMIS, Chief,
Plumbing and Heating Branch,
War Production Board.

Wants to Distribute "101 Helps"

Kansas City, Mo.

To the Editor:

I have read pages 26, 27, 28, July issue: "How To Stay In Business During the War."

Have you a ready prepared circular or brochure featuring these "101 Helps"?

Possibly you could dispose of them to advantage. It would be cheaper and more satisfactory for many of your readers to buy them from you than to spend time negotiating with a printer and preparing copy. I would like to mail such material to a chosen group of people.

WM. B. HENDERSON,
Wm. B. Henderson & Company.

ANSWER: We are sorry that we do not have a circular featuring "101 Helps." Your idea is, however, a good one and perhaps it can be worked out.

EDITOR.

Dislikes the Word "Armistice"

Des Moines, Iowa.

To the Editor:

In the August 6th issue of the "Central Constructor," published here in Des Moines, appears a quotation from your magazine (page 25, July. "Private Construction Can be Resumed Long before End of War").

I take no issue whatsoever with that quotation except the last sentence. "A construction revival need not wait for the armistice." Why do you use the word "armistice"? We had an armistice on November 11, 1918, and it should be evident to anyone that Webster, who wrote what is considered a standard dictionary, knew what he was talking about when he defined the word "armistice" as being a temporary cessation of hostilities, and it is that very psychology which permitted such a thing to exist for the last twenty-three years that is practically the cause of our present war. If this Nation persists in the "armistice psychology," we are certainly going to have another World War within twenty-five years of the date this one is settled.

Personally, I think it is bad psychology for any editor, or in fact for anyone, even to suggest that this war will ever end with an armistice. It must either end with a complete victory for us and with us dictating the peace terms or there must be none of us left alive to whom terms can be dictated.

CARL A. STEWART,
Surety Bonds and Casualty Insurance.

Finds None Better

New Castle, Pa.

To the Editor:

For several months the July 1941 issue of the *American Builder* has been in my possession, and I've failed to find any current publication better suited to my needs. Enclosed you will find a check for \$3.00 covering a two-year subscription, and if you have any plan books available, such as "Security Homes," I would appreciate a copy.

JAMES R. BEAM, Technical Director
Universal Sanitary Mfg. Company

Insulation Moves Houses South

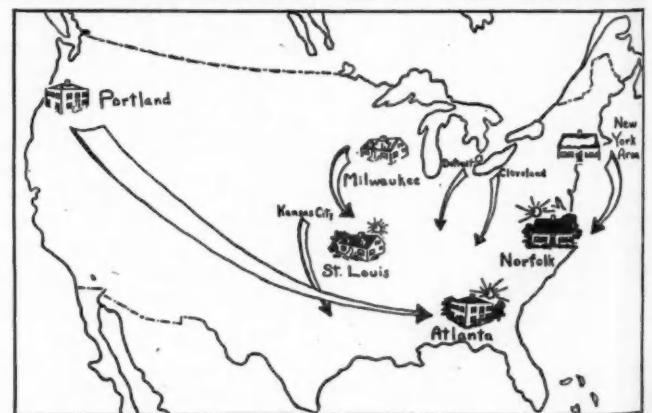
New York, N. Y.

To the Editor:

We think you will find this illustration of interest in connection with the fuel conservation campaign.

NATIONAL MINERAL WOOL ASSOCIATION,
Louis J. Robinson,
Director of Information Service.

If You Can't Go South Next Winter—Send Your House!



IF YOUR winter vacation is out for the duration, you can still, in effect, winter in a warmer climate; that is, your furnace can take the vacation. Assuming a conservative 33 1/3% reduction in heating load with full-thick Mineral Wool Insulation, the seasonal savings will have the effect of transferring a house from Milwaukee to St. Louis, from Portland, Ore. to Atlanta, Ga., from New York to Norfolk, Va. To use this analogy for any given location, look up the number of Degree Days, reduce by one-third, and find a town farther South whose climate corresponds to the reduced figure.

SAVE METAL...TIME...SPACE...MONEY

with new prefabricated Carrara Shower Enclosures

HERE'S a development of prime importance to all builders engaged on low-cost housing work. The new prefabricated shower enclosure of Tempered Carrara Structural Glass is designed to accomplish four purposes:

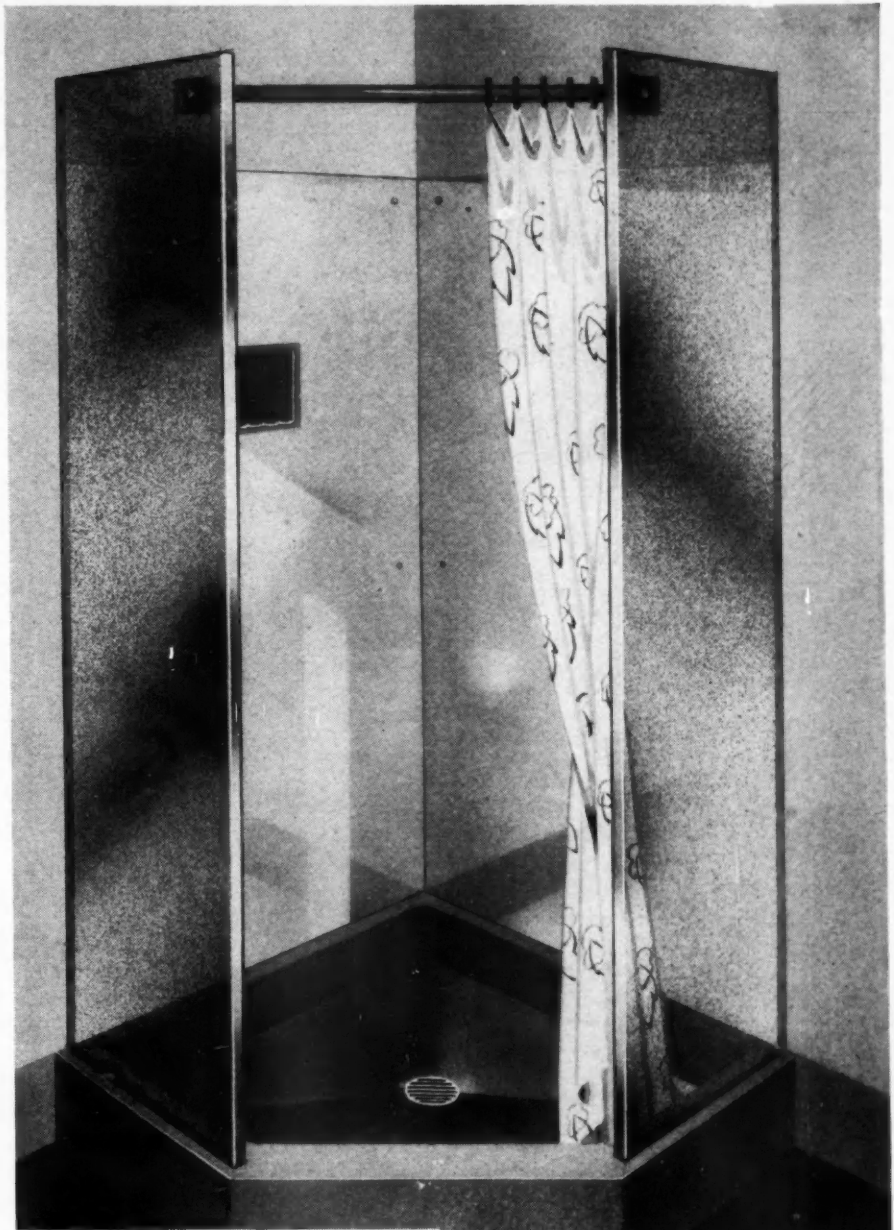
TO CONSERVE METAL: Absolutely no metal is involved in installation except metal screws which we furnish.

TO SAVE TIME: Prefabricated at the factory, with all holes drilled ready for installation, shipped as a unit in one package to the job, a Carrara Shower Enclosure can be installed in record time, even by an inexperienced workman. The Carrara panels slip easily into accurately prepared grooves in the receptor, so that completion of the installation involves nothing more than securing the tops of the panels to the studding with a few simple fastenings.

TO SAVE SPACE: The new Carrara Shower Enclosure is so compact that it allows more space for closets and other desirable items. Several types of Carrara Enclosures are available to suit various plumbing layouts.

TO SAVE MONEY: Even the lowest-cost house budget will find the cost of a Carrara Shower Enclosure fits it comfortably.

The panels of Carrara Glass are Tempered . . . making them four times stronger and tougher than ordinary glass of equal thickness. And remember this: the *quality* of Carrara Glass—the gleaming beauty, the sanitation and permanence for which Carrara is world-famous—is exactly the same in these low-cost shower enclosures as in the most princely of American bathrooms. Send the coupon today for complete information and installation details on this sensational building development.



COMBINING BEAUTY WITH UTILITY, prefabricated Carrara Showers are specially designed for low-cost homes. Note that the stiles in this type are of rough, Heavy Plate Glass . . . admitting lots of light into the shower, even when the curtain is drawn. This unit includes: 2 Tempered Carrara panels, 2 stiles of Rough Plate Glass, 1 wood curtain rod, China recessed soap and grab, necessary caulking and pointing compounds and screws for installation. The cast reinforced concrete receptor can be made locally from blueprints we furnish . . . or can be included in unit.

CARRARA

The modern Structural Glass

PITTSBURGH PLATE GLASS COMPANY

Pittsburgh Plate Glass Co.
2115-2 Grant Building, Pittsburgh, Pa.
Please send me, without obligation, your free literature and installation details on the new Prefabricated Carrara Shower Enclosures.

Name.....

Address.....

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

"PITTSBURGH" stands for Quality Glass and Print

25 DAYS SAVED

for the U.S. Government

**THIS SPACE WAS FOR
A PICTURE OF THE JOB**

... But we can't show a picture.
We can't tell where the job is.
We can say that—

- ▶ It's a disposal plant at an Army Air Base.
- ▶ It's a 100% Atlas High-Early cement job.
- ▶ It's another example of fast wartime building under pressure of time—with Atlas High-Early cement.

THE contractor on this particular disposal plant job turned it over to Uncle Sam nearly a month ahead of time, thanks to Atlas High-Early cement.

He saved time because he could remove his forms sooner than with normal portland cement. He speeded up his concreting all along the line. And he was able on first pours to get footings in before

water in lower part of the grade stopped concrete work.

Costs were lower, too, on this job, as they often are when Atlas High-Early cement is used. There was approximately a 15% saving in form costs.

Atlas High-Early cement is one answer for SPEED with economy—in new building, converting, or repairing—in summer or winter.

On your next "Rush" contract, big or little, use Atlas High-Early cement. Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, N. Y. C.

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

AB-N-47

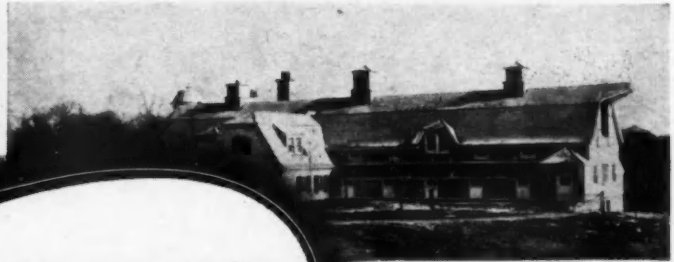
ATLAS HIGH-EARLY CEMENT

A UNIVERSAL ATLAS PRODUCT





Careystone Asbestos-Cement Shingles—Permanent roofing for the home. Fireproof, weatherproof.

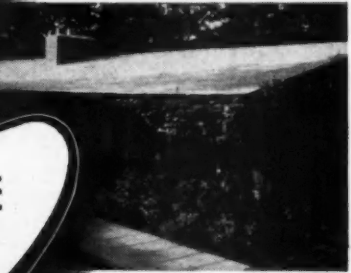


Careystone Asbestos-Cement Shingles—Protect farm buildings against fire and weather.

HELP YOUR CUSTOMERS—
Safeguard
HOMES AND CROPS WITH THESE FIREPROOF, WEARPROOF MATERIALS. . . .



Carey Rock Wool Insulation—Cuts fuel bills up to 30%. Eliminates cold, drafty floors; lessens danger of colds.



Carey Mineral Surface Roofing—Colorful; low-cost.



Careystone Asbestos-Cement Siding—for multiple housing, storage bins and re-siding. Fireproof, weatherproof. No upkeep. Speedy erection.

LIFETIME PROTECTION FROM FIRE, WEATHER AND RODENTS

Countless homes need new roofs and new siding. They need insulation for conserving the nation's fuel. Granaries everywhere are filled to near capacity and farmers need new storage bins and outbuildings repaired—to protect their huge 1942 crops, livestock and equipment. With such a condition, the dealer has an opportunity to be of real service to his community in supplying these lifetime

Carey PRODUCTS

Careystone products are developments of scientific research and experience. Made of asbestos and cement, they offer the home owner and farmer effective fire protection without the use of critical materials; provide permanent service practically without upkeep expense. Carey Rock Wool Insulation increases home comfort, adds to fire safety—an improvement every home should have, since it pays for itself in savings.

Help your own business—and help your community—by using these time-tested Carey Products. Write today for full details of Carey Dealer proposition. Address Dept. 10.

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BUILDING OUTLOOK

Timely Information About Building Markets and Probable Developments

THE BUILDING industry's conversion from peace to war-time construction goes forward at a steadily increasing pace. Total construction volume is rising, despite continued declines in private building. Losses in private work are more than offset by public war construction, which, in the second quarter of 1942, was one and one-half times as large as in the previous quarter, and almost three times as large as in the same period a year ago, according to Department of Commerce estimates. War construction projects employed nearly 1,000,000 persons, or practically half of construction industry employment in June, says the U. S. Department of Labor. The present trend probably will continue until the closing months of the year when both private and public war construction are expected to taper off.

THE LUMBER situation has not improved, due to problems of labor supply in forests and mills, and because so much lumber has been used in place of more critical materials. Recent extension of the lumber "freeze" is expected to be followed by a permanent order establishing a system of rigid control, says the War Production Board. It is estimated that over-all lumber requirements this year for military war housing and essential civilian needs will be in the neighborhood of 38 billion board feet, or 6 billion board feet more than estimated production.

THE DEPARTMENT of Commerce has prepared the accompanying table showing volume of all types of construction for the first and second quarters and the second half of 1941 and 1942. Estimates for the second half of 1942 provide some opportunities for comparison, and reveal the extent to which the building industry has converted to war. The table shows total construction, private and public, and includes residential, commercial, industrial and farm building. Military and naval projects, residential, industrial, highway, sewage disposal and water supply, and others are included under public construction.

NEW CONSTRUCTION in the second quarter of 1942 totalled \$3,297 million, a 25 per cent gain over the preceding

quarter, and 28 per cent above the same period last year. The estimated total for the second half of 1942 is \$5,792 million, of which \$1,037 million is expected to be private, and \$4,755 million public construction. New construction for the first six months of 1942 totalled \$5,934 million. The largest single item of the balance of the year is military and naval construction, estimated at \$2,800 million. The next largest item is public non-residential work, estimated at \$1,150 million, of which \$1,100 million is industrial.

TOTAL PRIVATE, non-farm residential building for the second half of 1942 is estimated at \$470 million, or about half the total for the first six months and less than one-third that of the second half of 1941. Public residential building for the second half of 1942 is estimated at \$415 million, as compared with \$235 million in the preceding half-year, and \$286 million in the last six months of 1941; but even this substantial increase will not offset the decline in private residential building that is taking place simultaneously.

FARM CONSTRUCTION for the second six months of the year is estimated at \$162 million, of which \$90 million will be for dwellings and \$72 million for service buildings. The foregoing estimate represents a gain over the first six months, when farm construction first fell under the restraint of wartime limitations. Reports from *American Builder* field men indicate that applications for permission to build farm structures costing more than \$1,000 now are coming through. As a result, farm building should continue to show a normal seasonal increase. It is expected that due to material and labor shortages the level in the last half of 1942 may be 10 per cent below the same period in 1941.

MILITARY AND NAVAL construction totalled \$1,137 million in the second quarter of 1942, twice the 1941 quarterly average. Estimates of \$2,800 million for the second half indicate a construction rate well over that of the second quarter. In contrast to further expansion of military construction, public industrial work increased nearly 20 per cent in the second quarter but is expected to decline during the closing six months of the year. In these projects attempts are being made to substitute less critical materials and to build cheaper structures. This means that additions to industrial plant capacity will show a smaller decline than the dollar volume of industrial construction.

THE TIME is rapidly approaching when construction of new industrial plants can be undertaken only at expense of current arms production. The present policy of the War Production Board is to discourage the building of new industrial plants and to make better use of existing plant and machine capacity. Arms production is being decentralized by subcontracting contracts to manufacturers who have critical machines that have not been working 24 hours a day. As a result, we can expect a considerable increase in small industrial remodeling jobs.

NEW CONSTRUCTION ACTIVITY
in millions of dollars)

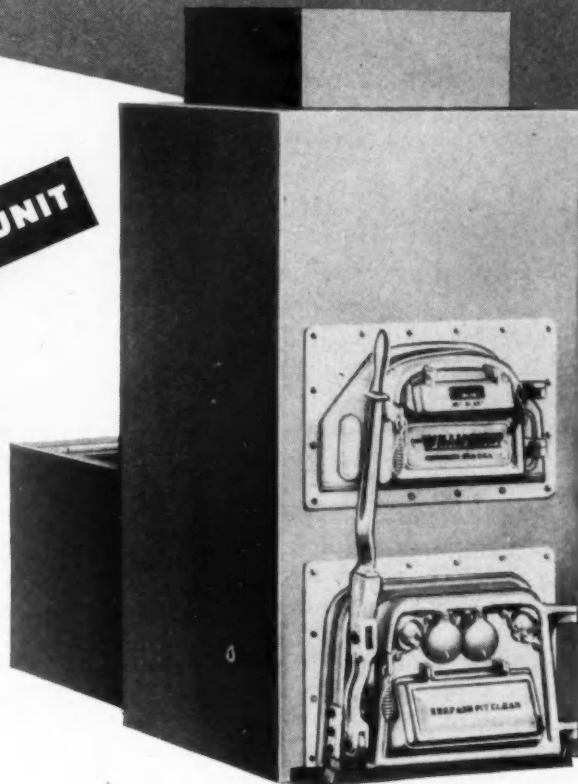
| | 1941 | | | 1942 | | |
|--|---------------|----------------|-----------------|---------------|----------------|---------------------------|
| | First Quarter | Second Quarter | Last Six Months | First Quarter | Second Quarter | Estimated Balance of Year |
| Total New Construction | 2,278 | 2,573 | 8,294 | 2,837 | 3,297 | 5,792 |
| Total Private | 1,016 | 1,323 | 2,922 | 969 | 848 | 1,037 |
| Residential Building ¹ (non-farm) | 508 | 740 | 1,633 | 470 | 480 | 470 |
| Non-residential Building | 327 | 318 | 681 | 190 | 121 | 145 |
| Commercial | 85 | 105 | 190 | 54 | 28 | 25 |
| Industrial | 188 | 159 | 334 | 95 | 63 | 95 |
| All Other | 54 | 57 | 129 | 41 | 30 | 25 |
| Farm Construction | 30 | 90 | 180 | 27 | 81 | 162 |
| Dwellings | 18 | 53 | 105 | 15 | 45 | 90 |
| Service | 12 | 37 | 75 | 12 | 36 | 72 |
| Public Utility | 151 | 175 | 448 | 182 | 166 | 260 |
| Total Public Construction | 1,262 | 1,250 | 3,372 | 1,768 | 2,449 | 4,755 |
| Military and Naval | 580 | 318 | 1,161 | 575 | 1,137 | 2,800 |
| Non-residential Building | 237 | 400 | 1,034 | 732 | 857 | 1,150 |
| Industrial | 165 | 336 | 899 | 678 | 801 | 1,100 |
| All Other | 72 | 64 | 135 | 56 | 56 | 50 |
| Highway | 220 | 255 | 638 | 293 | 194 | 200 |
| Sewage Disposal and Water Supply | 29 | 30 | 56 | 28 | 30 | 40 |
| Residential | 75 | 118 | 286 | 105 | 130 | 415 |
| All Other Federal | 96 | 97 | 232 | 103 | 95 | 130 |
| Misc. Public Sew. Entr's | 25 | 32 | 65 | 22 | 16 | 20 |

¹Figures from 1939 through the first quarter of 1942, were prepared by the Bureau of Labor Statistics; the figure for the second quarter of 1942 is a preliminary estimate of the Department of Commerce.

U. S. DEPARTMENT OF COMMERCE

SPOTLIGHTED FOR DEFENSE HOUSING

... CRANE NO. D-18 DEFENSE HOUSING UNIT



Crane series 3, square-type sectional boiler
— for coal firing.

Here is a heating system designed for the defense houses you are building. The D-18 Defense Housing unit is low in original cost and economical in fuel consumption. The heating unit is constructed of cast iron not only to insure durability but—what is also important—to conserve heavy steel plate so vital to our Victory effort.

The powerful centrifugal blower delivers clean, abundant heat to every part of the house, operates quietly and efficiently. The large doors make firing and ash removal easy and the heavily ribbed cast iron fire pot and dome provide large heating surfaces for efficient operation.

The Crane D-18 is handsome in appearance and constructed to assure years of satisfactory service. Its low fuel consumption makes it ideal for defense houses.

CRANE HEATING FOR ALL TYPES OF WAR CONSTRUCTION. In the complete Crane line, you'll find boiler-radiator heating equipment for any type of War construction—not only for multi-family dwellings, barracks, factory buildings but for residences, stores, schools, hospitals, etc. And each unit offers the special heating advantages which Crane research has developed.

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

Engineered Timber Construction

Progressively Does Bigger Jobs

Better . . . Faster . . . Economically!

War-time construction has re-emphasized the many superior values of lumber as a structural material. Progressive development in timber construction makes possible the use of structural members that are lighter, stronger and easier and faster to erect. Early timber construction was limited to the use of heavy, solid timbers, joined with steel bolts, gusset plates and rods, which utilized only 40% to 60% of the working strength of the timber.

Teco Timber Connectors were then developed, which make more efficient joints between wood members. One pound of Teco Connectors replaces 11½ to 12 pounds of steel of the old style gusset plates, bolts and rods, and effects the utilization of 80% and more of the working strength of lumber. Factory-made Teco-connected trusses can be purchased as complete units, or knocked-down and delivered to the job site for easy assembly and ready erection.

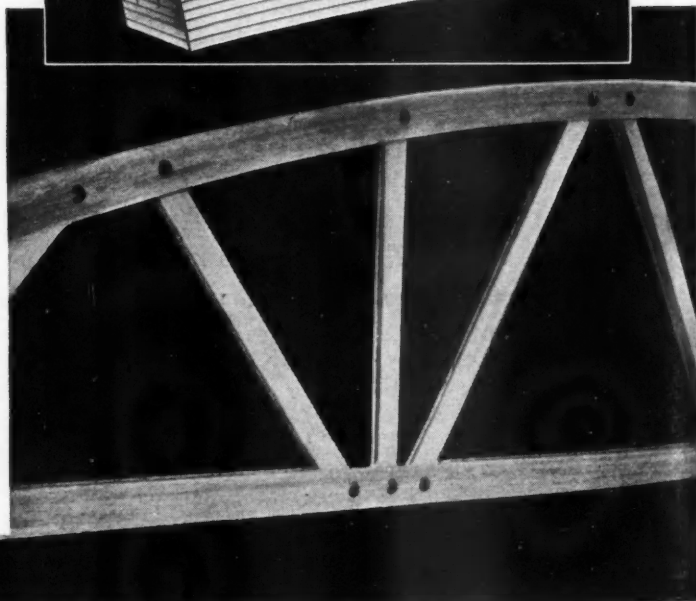
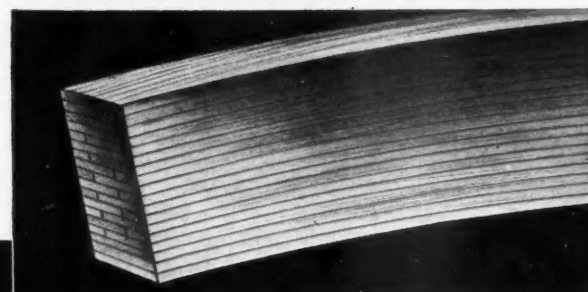
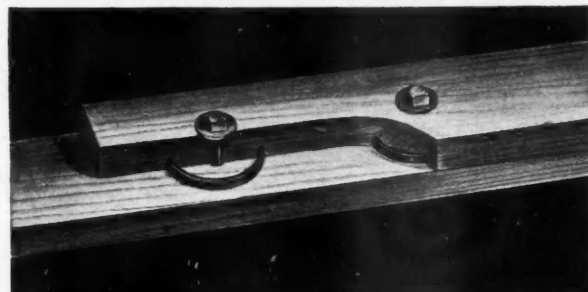
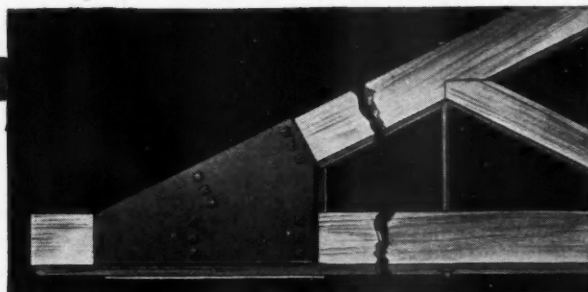
Glued Laminated Structural Members further extend the scope and usefulness of lumber. Factory-fabricated, glued laminated roof arches, trusses and beams are designed, engineered and manufactured to meet the most rigid specifications of U. S. Army, Navy and Defense projects and building codes.

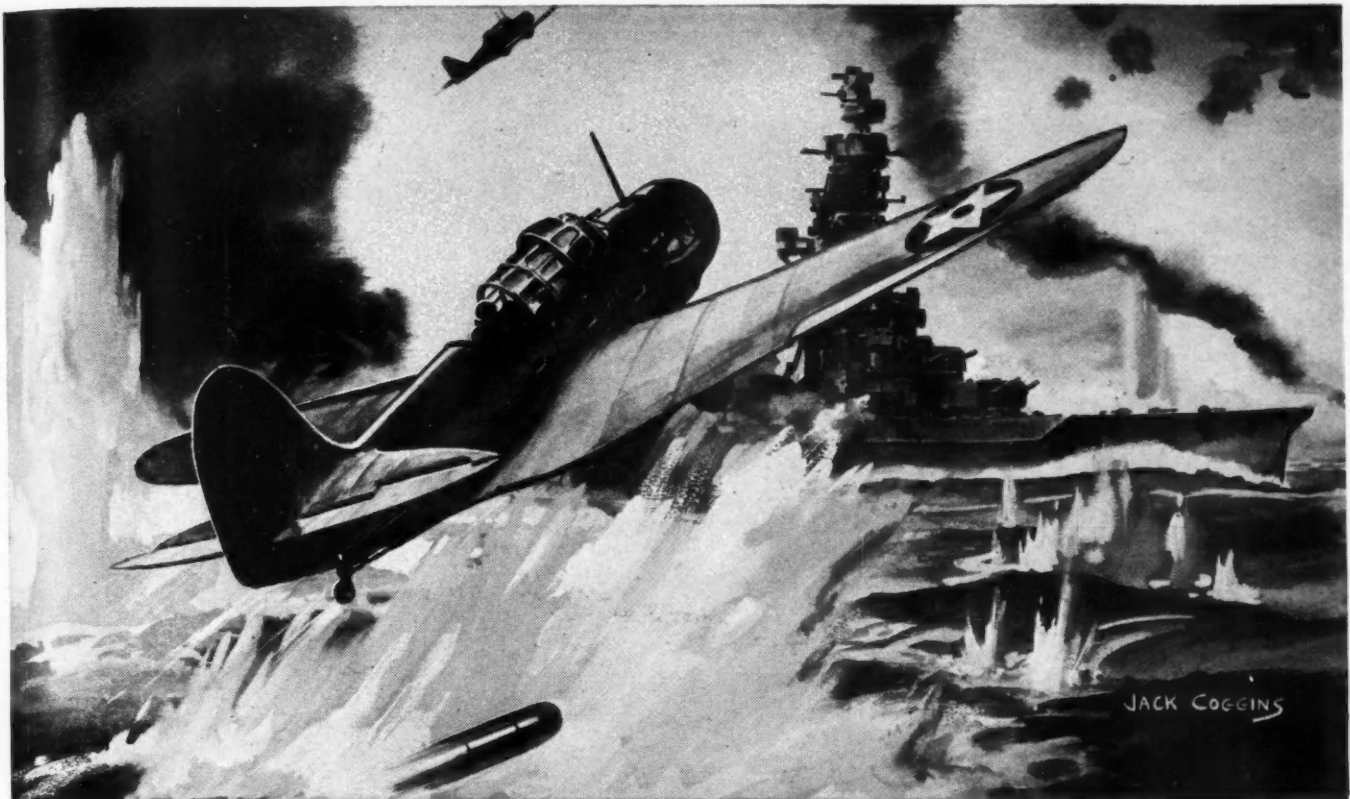
Teco Timber Connectors and Glued Laminated Members effect additional important savings in footage of lumber and tonnage of steel connectors. For fast, economical construction figure your jobs for wood structural members. Complete data on Glued Laminated roof arches, trusses and beams and Teco timber connected trusses is available.

WEYERHAEUSER SALES CO.

First National Bank Building • Saint Paul, Minn.

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Bombers from the Bottom of the Deep Blue Sea

THERE'S a fabulous amount of magnesium in every cubic mile of sea water.

Enough magnesium for more than *four million* Flying Fortresses. Enough to lay a continuous ceiling of bombers . . . a hundred miles wide and stretching all the way from London to Berlin!

Now magnesium can't be dredged out of the ocean . . . for every ounce of this rare metal must be produced by electrolysis. This necessitates the conversion of vast amounts of alternating current to direct current, at the very water's edge.

The best means of converting power is the mercury arc rectifier. As long as ten years ago, Westinghouse Research Engineers began experimental work on a *new type* of mercury arc rectifier which would be more efficient . . . more economical . . . less costly to install and maintain than existing types.

These Westinghouse scientists realized that new untapped fields in metallurgy would be opened by

the perfection of an improved mercury arc rectifier. In 1937, they brought forth the *Westinghouse Ignitron*.

The Ignitron operates on the radically new principle of *starting* and *stopping* the mercury arc with each cycle. This means that electrodes can be placed much closer together . . . grids and shields reduced . . . arc drop voltage decreased . . . voltage control simplified . . . arc-back practically eliminated. And all of this assures higher efficiency and greater reliability.

More than 1,000,000 kw of Ignitrons are now at work in magnesium, aluminum and chlorine plants, in electric railway systems, in mines, in many war industries.

And so, the germ of an idea . . . born ten years ago in the Westinghouse Electronics Laboratories . . . is now contributing its important share in winning the war today.



Westinghouse

WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, PITTSBURGH, PENNSYLVANIA



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THE beautiful room above shows what can be done at small cost for any progressive business firm. It is part of a well-known Chicago company's reception space—*inexpensively remodeled with Mengelbord.*

What about the growing, expanding companies in your community? Some of them have of course already remodeled their offices, for their own and their employes' greater efficiency and comfort. But dozens of others haven't yet taken the step. It's a real opportunity for *somebody*. You?

When it comes to either low-cost *remodeling* or low-cost *Housing*, Mengelbord is the answer to a prayer. Big 4'x8' sheets, 1/4" thick, *with the grain running the long way*. Genuine hard-

wood—more beautiful, more satisfactory and economical to finish. Resin-bonded in hot-plate presses. Available with faces of Gum, Mahogany, Walnut, Birch or Oak. . . .

If you haven't already used Mengelbord, you've *missed* something. Let us send you all the facts. The coupon below is for your convenience.

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

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Foundations Are Built on Firm Ground

IN THIS ISSUE of *American Builder* the Editors present a group of articles on homes for war workers—stories which they have secured from the field—features which highlight current war housing practice. One of these is a presentation on Detroit duplex units. After a thorough survey of this important industrial front by staff members, these homes seem to offer more value for the money in as well built, well planned accommodations as present conditions allow.

Last month this paper carried another Detroit story entitled "Action—Not Words—Will Break the Bottleneck of Detroit War Housing." As a leading feature it reviewed the housing situation there and stated that private home builders—builders who are typical *American Builder* readers—were ready and anxious to produce their part of the needed housing. They did not require any conversion, retooling, or organizing; their product was essentially the same as during peacetime. All that was needed was assurance on delivery of a few materials, and protection against constantly changing bureaucratic rulings after construction was started. They were ready to build wherever the houses were needed, and the need was throughout that metropolitan area, not all centered near some one spectacular war plant.

* * *

THE HOUSING CONDITIONS in Detroit became more critical as government agencies crowded into the picture, each staking out its claim as the most qualified for the job. Meanwhile, a stalemate developed and building practically ceased.

When the War Production Board finally had to act as umpire to consider the facts in the latter part of July, it found that the only immediate action which was in line with the then current situation was the approval of 4500 units to be started by private builders. This was a course of action following the recommendation made in the above mentioned article, at that time on the press. Other proposals made by government representatives were turned down by WPB.

American Builder has only one purpose in bringing this matter to light, namely, to further the war effort on the part of the building industry. It is wholeheartedly behind the job of winning a complete victory, and will seek to do what it can through coverage of the facts as they pertain to the part building can contribute—a part which, by official announcement, was set at about a quarter of the entire dollar cost of war for the fiscal year.

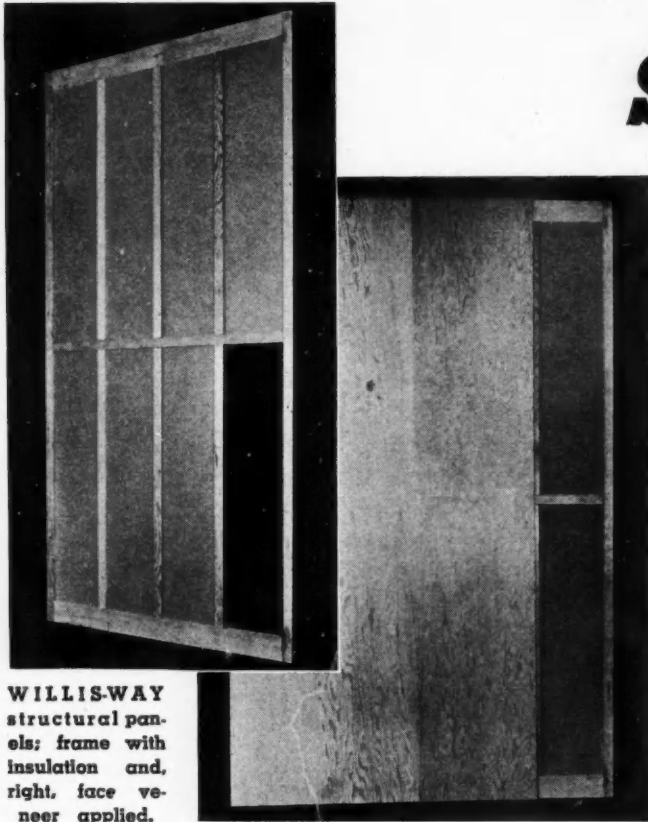
Only by a long-range view, stripped of current sensationalism and bias, can the building industry be em-

ployed best to do the job. After all, it matters little to the war worker whether the roof over his head has the blessing of any particular government agency as sponsor. What does matter to him is that living quarters be provided promptly, of as good quality as possible, and planned to add the least to his working burdens, assuring better morale. Equally true, it matters little to the rank and file of the building industry because, after all, the same men on the job will do the actual building, whether private or public. This premise, coupled with the necessity for instant action, has been the editorial policy of *American Builder*.

On the other hand, we do not believe that the muck-raking, finger-pointing type of publicity appearing about war housing in the Detroit or other areas furthers general public morale, or the effort of the industry. As one example, interesting only because of its sudden prominence, a national weekly recently devoted two pages of a ten-page Detroit war story to housing. This leading feature attained overnight notoriety because the War Department Censor banned it from export, the question being whether or not it would give aid and comfort to the enemy. *American Builder* will express no opinion as to the comfort the two pages on housing might give, but seriously questions their aid to anyone—a possible exception being to the public housers, who are eulogized to the point of being nominated as saviours of the Detroit housing situation. This is the group which, in spite of months of planning, has produced practically nothing in quarters for war worker occupancy. The article pictures shacks, tents and trailers as war worker homes, the type of thing which can be found around any busy industrial city, even in peacetime. Also pictured is so-called government sponsored "model housing." No mention whatsoever is made of the fact that about 5,000 houses in Detroit were built by private builders in the first six months of '42 in spite of tremendous handicaps placed on them by government bureaus; further that these private builders were geared to produce up to 30,000 homes this year.

* * *

CONTINUING its 64 years of constructive leadership covering both periods of peace and war, *American Builder* will bring to its readers material which will help them do their share in winning the war. This includes providing within the shortest time and at smallest cost to the taxpayer the best housing possible for war workers. Other papers can cover the spectacular; even the right war foundations are still built on firm ground.



WILLIS-WAY
structural panels; frame with insulation and, right, face veneer applied.

FEAR GROWS that "too little and too late" will be the verdict of history on our war housing efforts unless something is done, and that right promptly, to simplify the government's program, cut out the bickering, supply the needed building materials and forge ahead with actual construction.

As this publication stated last month in reviewing the current Detroit housing fiasco, "Action, not words, will break the bottleneck of war housing."

All agree that a big job must be done—both by private home builders and by the government agencies—to supply suitable shelter for war industry workers. This shelter, whether in the form of individual small homes offered for sale or for rent, or of rows, apartments, barracks or dormitories, must be fairly close to the work and fairly satisfactory to the workers. Otherwise, labor turnover grows, steady employment is not maintained, and production will suffer.

This war industry housing job has been made more critical by the growing threat of rubber tire shortage, depriving whole communities of their former means of access to war industry plants, a threat that is already removing thousands of desirable homes from the *available* list, and at the same time is increasing the urgent need for temporary housing closer to, or by steel-track transportation more accessible to, these plants.

The stepping up of the entire war program has also made this war industry housing job more critical—and more difficult. It is calling for a greater number of war industry workers to be housed, to turn out the increased

A Program offered for Government war housing and for privately financed defense-area homes.

STRUCTURAL

Answer Seen to Present Shortage Problem

"Frameless House" requires less of critical materials—saves cost—saves time—is demountable.

By Bernard L. Johnson

quantities of ships, tanks and guns (and the 50,000 other items on the war supply schedules); and it is using up such tremendous quantities of materials of every sort that the problem of obtaining the customary building supplies for these war housing needs is steadily becoming more acute.

Copper, steel and now even lumber are short. The War Production Board has been struggling with priorities and allocations, attempting to increase supplies and turn them to the most urgent needs. The building industry has co-operated by revising its practices so as to get along with very much less of all "critical" materials. But still more can and must be done to devise further economies in home building, for the assistance both of private enterprise contractors and also of the Federal Public Housing Authority, which is charged with the huge task of providing temporary housing for war workers in those localities where direct government action is necessary.

The Structural Panel House

Into this tense and urgent situation comes a proposal which the writer believes merits the serious consideration of government housing officials and of private building industry leaders alike. It provides for the use of a simple, standardized wall-building unit, composed of materials still in good supply and made up on factory equipment that is now idle and looking for war work.

It is a construction unit adaptable to many designs and types of homes and shelter housing. It is easily shipped, is quickly and cheaply utilized on the job, is strong and rugged in use, and is 100 per cent demountable and salvageable at any time.

It is a standard building unit, of which the Federal Public Housing Authority might well maintain a large stock pile for quick service to its housing contractors. Likewise it is a building material item *suitable for stocking* by retail lumber dealers and wholesalers for the service of private-enterprise builders. It is a unit of building material acceptable to union labor for regular building procedure—not prefabrication.

The author of this simple yet far-reaching building proposal is Jacques Willis of Chicago, well known pioneer in the field of plywood manufacture, distribution and use. His many years of experience and research have culminated in this new standardized building unit, the "Willis-Way Structural Panel." It is an insulated structural panel, or "flush door" as he call it, from 36 of which

PANELS Build Quick Homes

For War Workers

he assembles a *frameless* house, 20 by 24 feet, story and a half, four rooms, for less than \$2,000! See photos and plans herewith.

Mr. Willis has been working closely with the Washington housing authorities and construction experts, and has secured from them an acceptance of the worth and practicability of this type of material and method of construction. The Technical Division of the Federal Housing Administration has it under consideration and has assured him that under proper authorization and control his houses would qualify for mortgage insurance. Also, the Technical Division of the Federal Public Housing Authority has given its acceptance for this construction for its demountable war housing program. An initial order for 400 units has already been placed.

The Willis-Way plan is to be made available to manufacturers, without royalty during the war period, by operating under a protective license that assures control of quality.

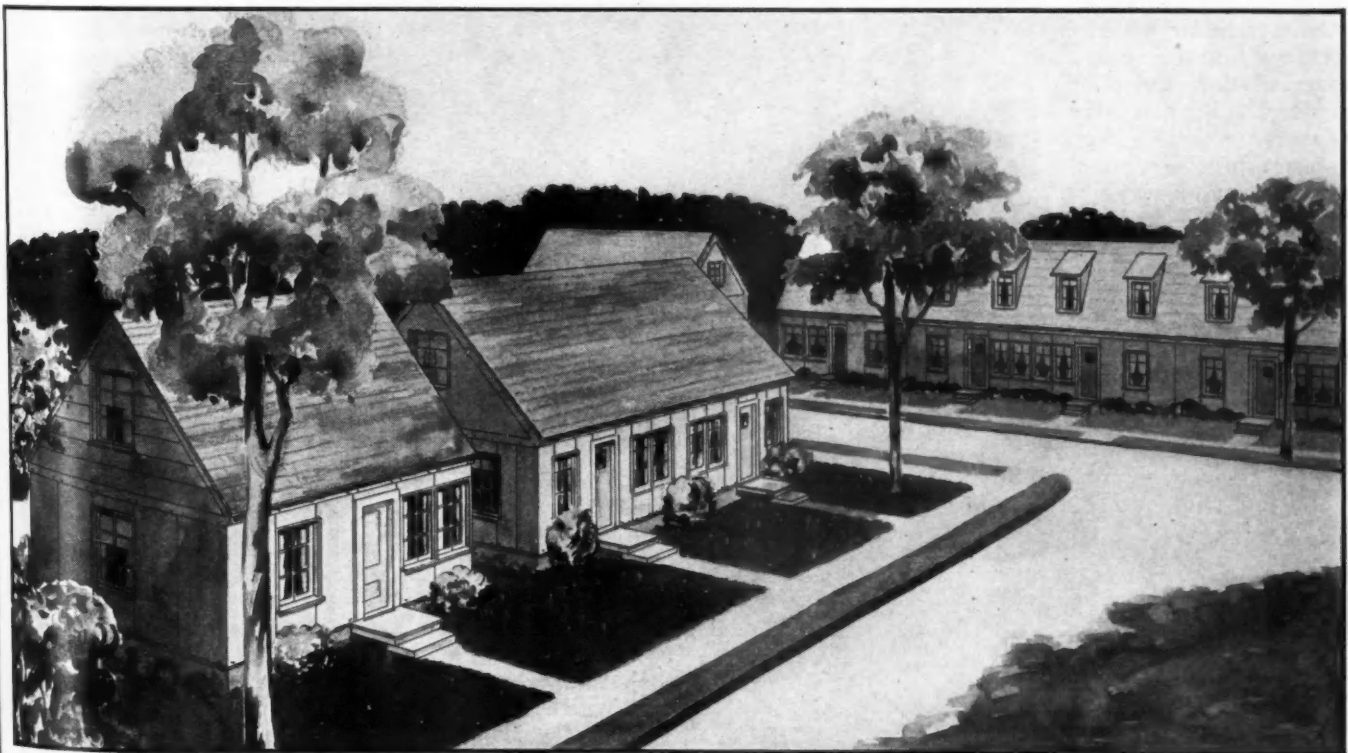
Shop Lumber versus Studs

The worth of Willis' proposal, especially in the present lumber shortage situation, lies in the fact that 2 by 4's for house wall studs are so scarce that government inspectors are now passing low grade and green stock in 2 x 4's for house walls. In contrast there is plenty of shop lumber. Shop lumber cannot well be used on orthodox construc-

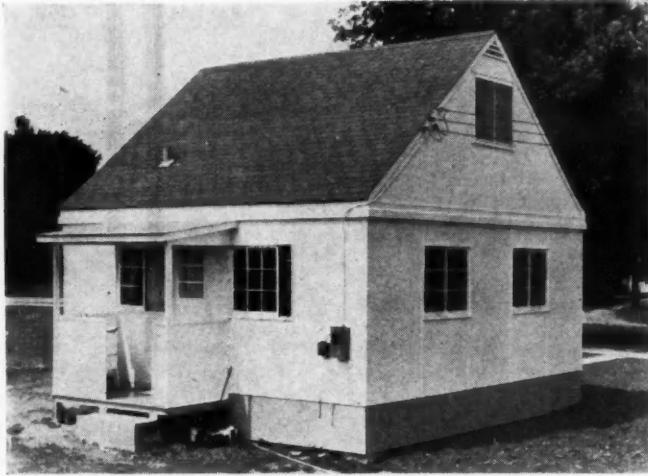
tion because of the large defects. However, by cutting shop lumber into door stock, as the big door factories are accustomed to do, these structural panel frames are produced in almost limitless quantities. Also, these door plants have large dry kiln facilities and their shop lumber "doors" are kiln-dried to not to exceed 8 per cent moisture content. A current survey of the big sash and door factories also shows much idle equipment or equipment used only part of the time. The falling off of ordinary home building, which of course was the big market for stock doors, has left the tremendous production capacity of the stock door industry largely unused, up to this time, in the war effort.

It is estimated that it would be an easy matter to get 30 cars of "doors" or structural panels per day from the Pacific Coast alone, and as much more from the River mills and Wisconsin, which would mean enough walls and partitions to make some 1,500 houses per day.

Obviously the desirable thing in this war emergency is to utilize fully those materials and production facilities that are not directly needed for armaments and munitions. Here is a major item for defense home building; made of shop lumber, which is plentiful and is not frozen; of highly water resistant glue, which is plentiful; assembled by door manufacturing equipment now available and to be operated by women war workers who have patriotically stepped forward for this important work. These newcomers are successfully replacing fathers, brothers, sons



SINGLE houses, double houses, and quads, all of about the same floor plan, are suggested for this Structural Panel war housing group.



PANEL house as built for demonstration at Walnut, Ill.

at machines and in the union labor ranks as well.

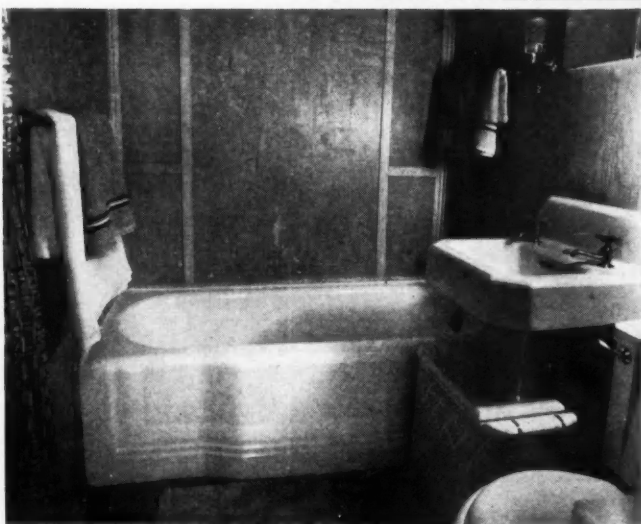
The structural panel faces are of plywood sound one side, a grade of plywood most readily available especially when manufactured with glue that is now available and in good supply, which makes a satisfactory panel for outdoor use when properly painted. The flush door walls and partitions save nails, and the cost of a panel delivered to the job and built into the wall is less than for the equivalent square footage of regular stud wall construction.

The Structural Panel—How Made

The structural panel which is the key to the quick and economical construction of the Willis-Way frameless house is $2\frac{1}{4}$ inches thick and comes in three widths—4 feet, 3 feet and 2 feet—which is sufficient to provide for any dimension in multiples of one foot. Panels for outside walls are 8 feet long; inside partition panels, 7 feet, 10 inches long. Short panels are provided for fillers below window openings and for fillers above window and door openings. All panels carry insulation, either rigid or blanket type. Every panel carries a conduit for wiring along the right hand edge to facilitate the



INSIDE views of plywood panel demonstration home show remarkable spaciousness.



running of wiring without advance planning. The panel frame is from shop lumber sized $1\frac{3}{4}$ by $2\frac{5}{8}$, and $1\frac{3}{4}$ by $1\frac{3}{4}$, with insulation inserted, and covered both sides with $\frac{1}{4}$ -inch plywood sound one side, sound face turned out; all set up and glued with highly water resistant glue in hydraulic presses. The side members of all panels are grooved $\frac{1}{2}$ inch wide by $\frac{1}{2}$ inch deep to take plywood splines glued in when the panels are assembled in the wall. Where demountable construction is desired these splines are put in with mastic.

The accompanying details (on the next page), show exact construction for these simple standardized structural panels, together with their application on a small model home approximately 20 by 24 feet, recently built as a demonstration at Walnut, Ill.

Please bear in mind that these structural panels provide a complete self-finished wall, both inside and outside, without additional material or labor, after they are assembled into the building. Although only $2\frac{1}{4}$ inches thick, these panels carry ample insulation to create a warm weather-tight wall. The heat loss efficiency of these panels is 0.17, whereas that of ordinary stud wall construction, insulated is 0.26. The largest of the panels, 4 by 8 feet, weighs 105 pounds and is easily handled on the job.

The cross-section drawing shows how these panels are fastened to the sill construction. Every 2 feet, holes are bored through the base of the panel as it sits on the 2 by 8 inch outside sill girder, the hole passing through the panel and on through the 2 by 12 sill girder. Into these holes are placed $\frac{1}{2}$ -inch bolts or, in order to save this steel, $\frac{3}{4}$ -inch hardwood pegs glued in. Since these pegs or bolts pass through the $2\frac{5}{8}$ -inch-wide bottom frame member of the panels and then on through the 2 by 12 foundation piece, it is evident that a good, strong connection and a strong wall are formed.

The panels are set up along the wall, each bolted to the sill and each panel connected to the next panel by $\frac{1}{4}$ -inch by 1-inch plywood splines glued in or set in mastic. After

all panels in the outside wall are in place, the heavy fascia or plate, 2 by 12 inches, is put up and is fastened to the tops of the structural panels by half-inch bolts or $\frac{3}{4}$ -inch hardwood pegs glued in, placed on 2-foot centers similar to the sill construction.

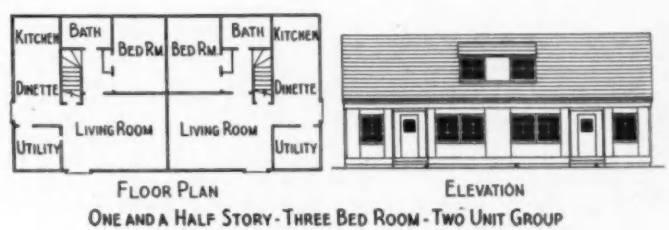
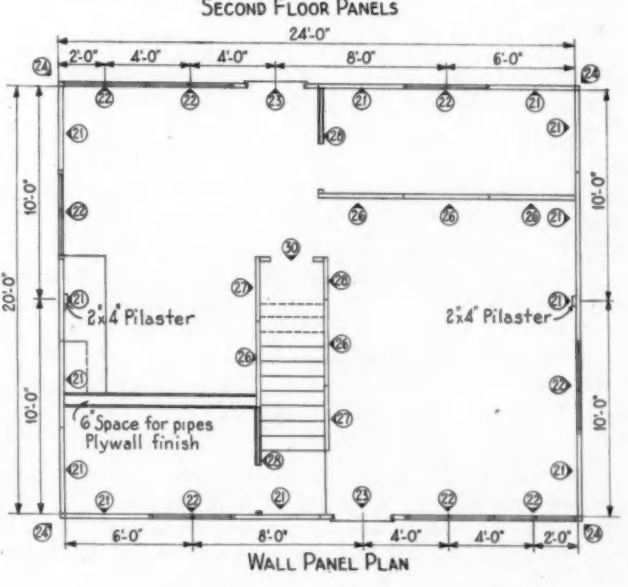
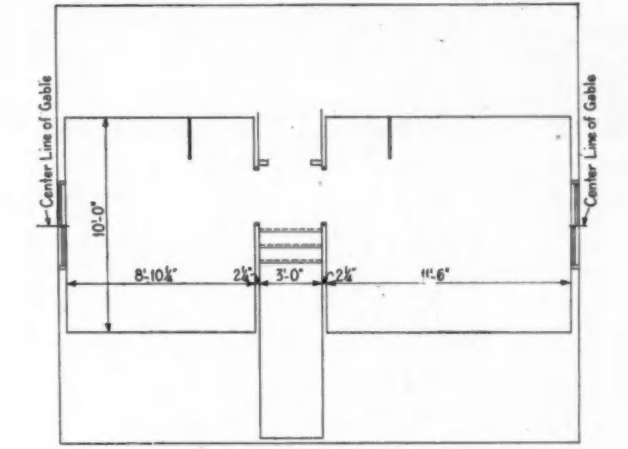
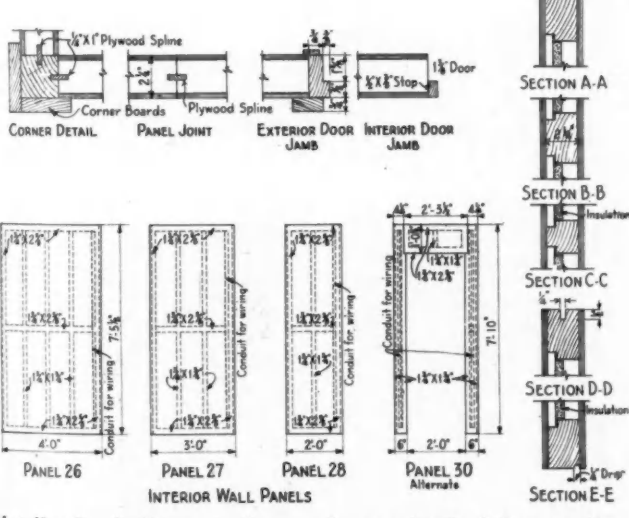
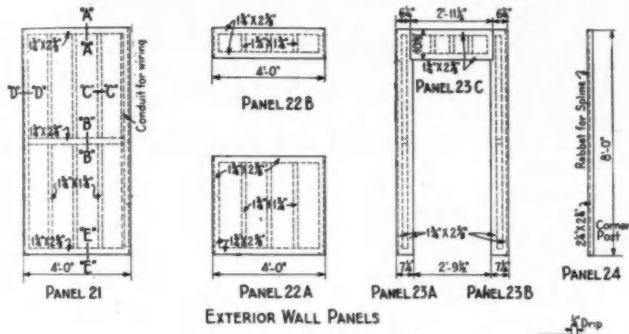
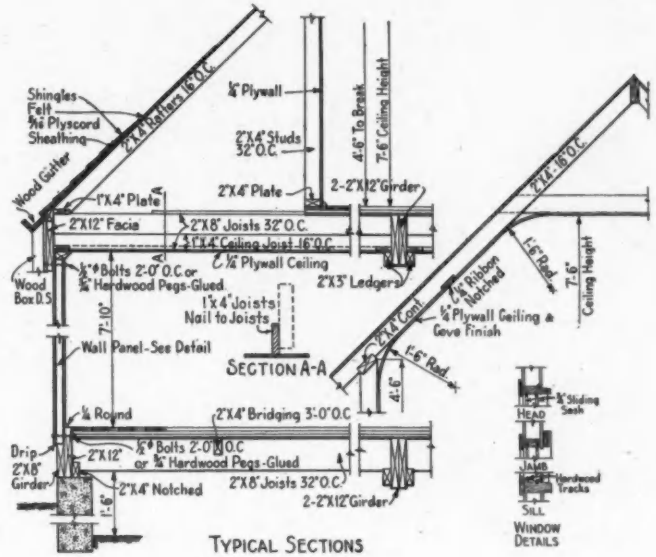
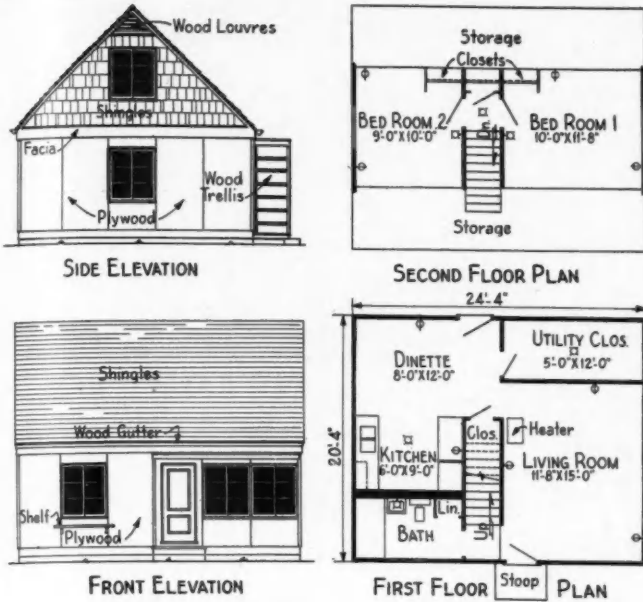
On the floor plan drawing marked "Wall Panel Plan," each wall panel is marked. For this 20' x 24' house the panel-list is as follows:

For outside walls:
 12 panels—No. 21 (4' x 8')
 8 " —No. 22 (4' windows)
 2 " —No. 23 (4' doors)
 4 " —No. 24 (corner)

For inside partitions:
 5 panels—No. 26 (4' x 7' 10")
 2 " —No. 27 (3' x 7' 10")
 2 " —No. 28 (2' x 7' 10")
 1 " —No. 30 (3' door)

This provides for everything except the 9-foot partition between the bathroom and kitchen. Here a 6-inch space is desirable in which to run the plumbing pipes, where these are to be concealed; and such a partition is easily built with 2 x 6 studs and $\frac{1}{4}$ -inch thick plywood, or with $\frac{1}{2}$ -inch plywood unsupported.

In addition to these structural panels which make up a very large part of the structure of a small house, the



details also indicate an interesting method of floor, ceiling and roof construction. By using a central girder, the joist length is cut to 10 feet, and experience shows that 2 by 8's spaced 32 inches on centers make a satisfactory floor support. However there is available another form of Willis-Way panels for floors and ceilings, which may be used as a desirable substitute for joist construction.

The little house illustrated in the photographs was put up this summer in Central Illinois following these plans and details. The local carpenters found it extremely easy to erect, and were well satisfied with the job. Those who have inspected this house say it is attractive, remarkably commodious, has a sturdy, well-built feel, is well insulated, and is in every way satisfactory. Such a house obviously would serve well as war industry housing, either privately built or government built, in any defense housing area.

(Continued to page 86)

FLOOR PLAN ELEVATION ONE AND A HALF STORY - THREE BED ROOM - TWO UNIT GROUP

Paul Roche Looks Ahead to V + 1

Successful young war-home builder praises 30-month rental-purchase plan. Sees extended FHA Title VI as answer to post-war home program



PAUL ROCHE tells of glowing post-war future for enterprising builders. Plot plan of Stephen Manor on wall; picture of young Stephen stands on corner of desk.

I HAVE TALKED with many people about what is going to happen to the home building business after the war but the best and most practical answer to date has come from Paul Roche, a young and enterprising builder who is one of the few on Long Island to be still actively constructing war homes.

"FHA Title VI is the answer to post-war home building," he said, as he knocked off work to walk with me through his Stephen Manor community.

"We're building war homes now under Title VI and find that the 30-month rental-option plan works. When this war is over I hope we'll have a post-war Title VI plan to meet conditions then.

"Most people can't save money ahead. Yet they never miss time payments. Under the Title VI plan we can sell them a house with practically no down payment. They build their equity up over a 30-month period. This plan WORKS, and a post-war FHA program along these lines would create one of the greatest low-cost home building programs in history."

As I walked through the well laid out streets of Roche's Stephen Manor and looked at the attractive little war houses he has been building, I felt that I saw an indication of what may be possible in the future. Roche is a relatively small operator—a conservative builder who has made his own way. Yet he has foresight and imagination.

"American industry is going to provide us builders with a host of new and improved products after the war.

"We are going to get whole combinations of kitchen and bathroom equipment in plastics or improved lighter, easier-to-install materials. We will be able to buy more and more products that are easy to install because they are fabricated more completely at the factory.

"And competition among wood, steel, copper, aluminum, plastics, plywood and other materials will force

prices down so that we will be able to give much better houses at still lower prices."

Roche does not believe that complete prefabrication will work, but he does think that there will be an increase in the factory fabrication of parts. His judgment is upheld in this respect by many experts in the field who see a rapid trend towards partial prefabrication.



BETTER-PLANNED COMMUNITIES with curved streets, traffic



STEPHEN MANOR war homes being rushed to completion. Roche says FHA should be working now on post-war Title VI plan.

By Joseph B. Mason

Paul Roche has been an exponent of the low-cost house ever since the New York World's Fair when he erected the \$2650 house there which attracted nationwide interest. He subsequently built a number of these houses in his Stephen Manor development. This project—named after his son Stephen, who was born when the job started, now has 99 houses. Prior to 1939 Roche was construction foreman for a number of large contracting firms. He had been in this work since graduation from engineering college.

Under Title VI Roche has been selling war homes on the rental-purchase plan with no down payment. The



"MOST PEOPLE can't save," says Paul Roche. He believes post-war Title VI plan with no down payment will create a vast home market throughout the country.



... streets, traffic layouts have proved their value, says Roche. This is a view of part of Stephen Manor, war-home job at Bellmore, L. I.

Building war homes NOW—preparing for post war boom later



STREAMLINED modern kitchen equipment featured.



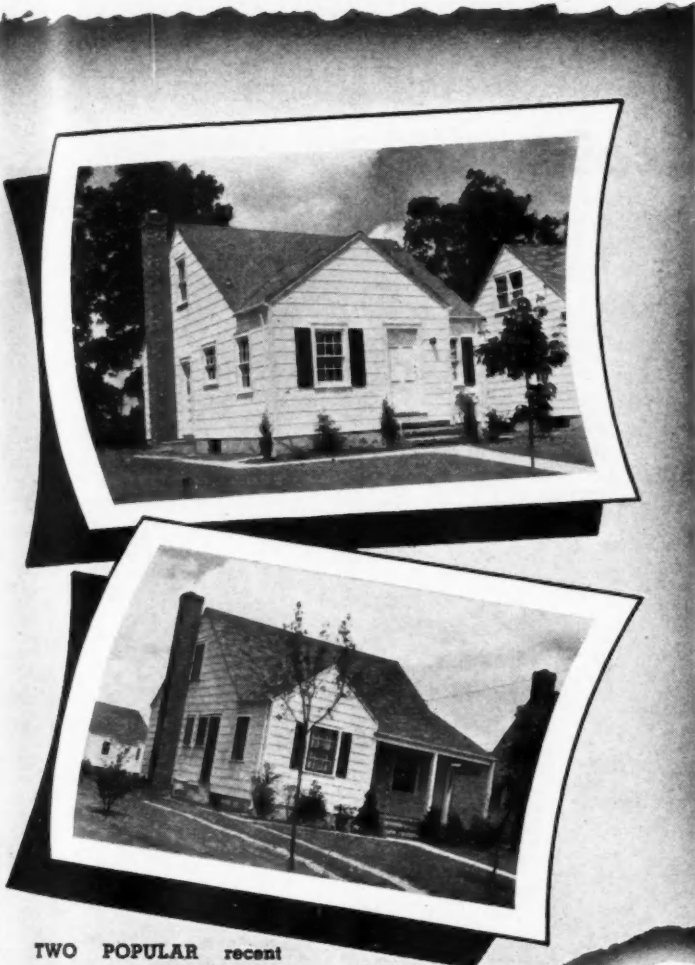
TWO VARIATIONS in Stephen Manor designs, which Roche sells to war workers on 30-month lease plan.



WELL-ENGINEERED coal burning furnace installed may be converted later to oil. Pipes well insulated.



FHA Title VI points the way to huge post-war building market. Makes it possible for builders to erect houses for rent or for sale. Rental-option plan spreading down payment over 30 months has proved successful and would act as great stimulant to post-war building



TWO POPULAR recent war homes built by Paul Roche. Buyers pay \$150 to guarantee 30-month lease.

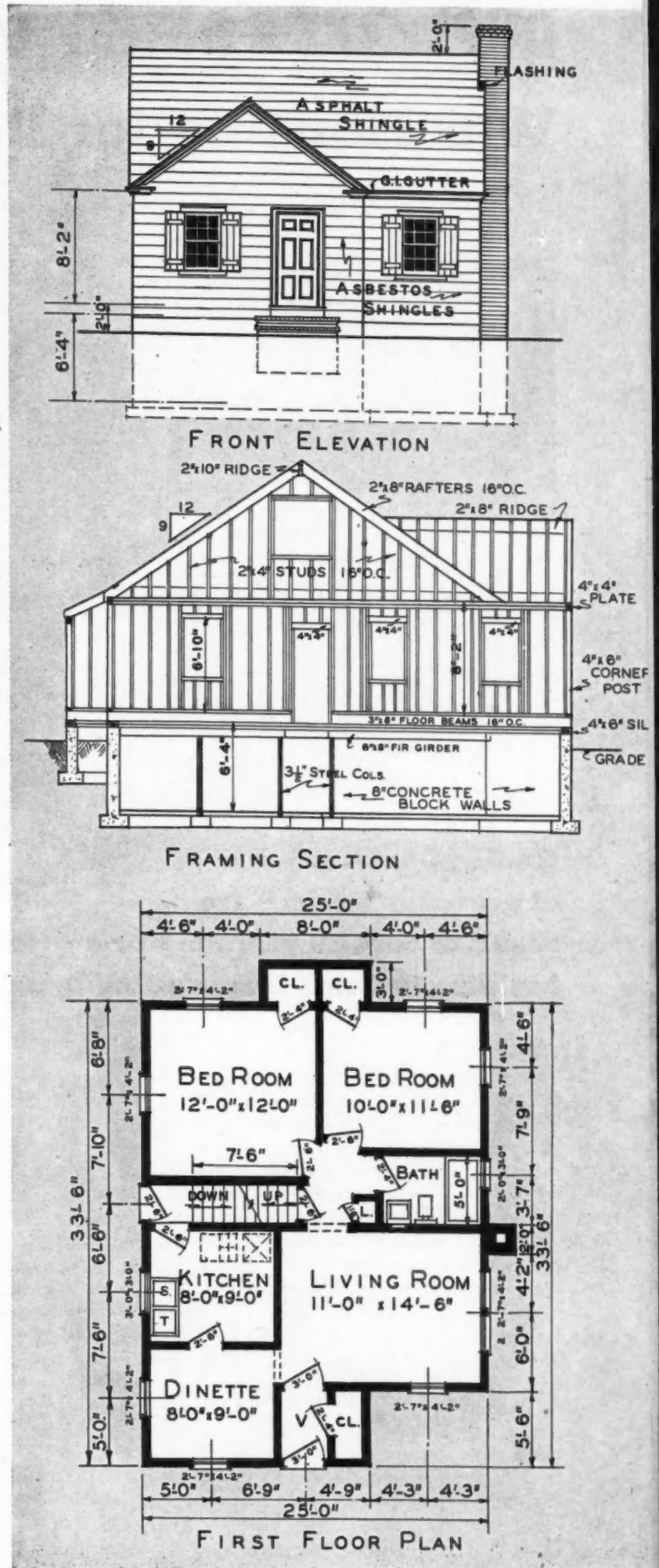
Protection on the "Home Front"

house is leased to the buyer for 30 months. A deposit of \$150 is required to guarantee the lease and insure against damage. During the first 30-month period, the buyer pays \$45 a month, of which \$10 a month is credited to his down payment. Thus in 30 months he has accumulated \$300 in addition to the \$150 deposit. At the end of the period he is required to pay just \$50 more and then obtains title and assumes the 25-year Title VI FHA mortgage. His monthly payments then drop to \$32 a month, including interest, taxes, insurance and payment on principal.

Under this system the purchase of a home is made extremely easy, and yet there is a considerable incentive at all times for the buyer to settle down and become a well-established property owner. However, if at the end of 30 months he does not wish to buy, he is refunded the \$150 deposit, less any deductions for damage.

The first houses in Stephen Manor, built in 1939, sold for \$2650 under FHA Title I. These buyers have become satisfied home owners and taxpayers. Roche believes that home ownership is a great stabilizer and makes good citizens. Five purchasers of homes in his community were communists at one time, but that home ownership has con-

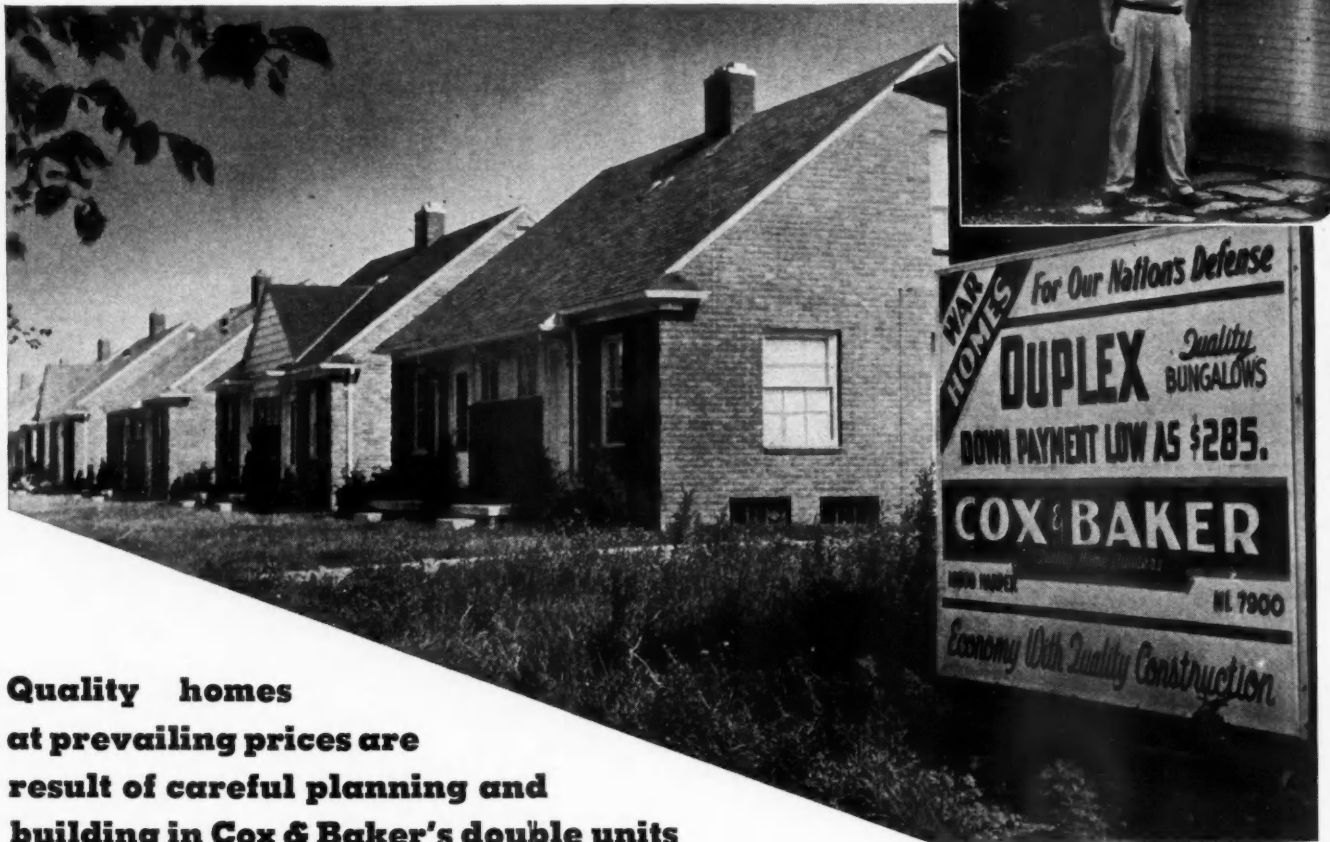
(Continued to page 90)



PLANS AND ELEVATIONS of typical small war-home sold by Roche on Title VI rental-purchase plan. See great future expansion. Additional plans for these houses on page 90.

DUPLEXES—Better Value War Housing for Detroit

BELOW: Inset, John W. Baker leaving office for a much needed week-end vacation after daily battle to deliver the quality war housing illustrated here.



**Quality homes
at prevailing prices are
result of careful planning and
building in Cox & Baker's double units**

PERMANENT war housing built by private builders should offer the best in long-term value and livability that the industry can erect under today's trying conditions. That should be the yardstick in the construction of the newly programmed 270,000 units to be completed by private builders within the next year.

In the rush to provide the needed war housing in defense areas, the general formula has been to limit permanent dwellings to those centers which might logically absorb such units in the post-war market; the temporary buildings such as demountable houses, dormitories, trailer accommodations, etc., are to provide quarters around newly developed war plants in isolated areas and to add to present housing in the smaller towns and cities where conversion has temporarily expanded payrolls. All things considered, this plan has been accepted as the best solution to war housing—best for the particular defense area, for the post-war situation, for the national economy.

After it is decided that permanent houses are to be built in any location under Title VI, it is then up to the private home building industry to continue to demonstrate that it can give "more house for the money." In the tremendous, expected post-war market the private home builders who continue to demonstrate that they can deliver good value will be in the top spot when houses must again be sold. Similarly, the manufacturers who

provide the materials and equipment used in privately built projects in wartime have an opportunity to put themselves in a favorable spot for huge post-war markets.

The doghouse builder of today may be haunted by rows of ghosts tomorrow. But not Cox & Baker, Detroit builders. This firm, which has in recent years delivered beautiful custom-built jobs ranging up to \$30,000, is now putting the same relative quality of planning, building and equipping into small war homes—duplexes—as was this company's unvarying policy before priorities, shortages and headaches. *American Builder* presents here these high-value war homes as found in one of the country's most hectic housing areas.

It was decided that a duplex would offer basic economies in lot size and construction and in turn allow the various extras that increase value. Comparative price is the best indication of value since descriptive text and pictures cannot tell the whole story of how good planning is still an essential to good building. The duplex shown on the next page sells for \$4,575 per side, or \$9,150 for the complete double unit, built by conventional methods. Typical Detroit single-family detached units of about the same size, or smaller, in frame, range from \$4,000 to \$4,500; these are one-story with basement designs following the general pattern of such defense houses, private and public, throughout the country. By building double-

Homes for war workers don't have to be 4-room boxes all following a standard pattern, whether private or public, temporary or permanent.

Duplexes planned with imagination for better appearance, economy and livability can deliver "more house for the money."

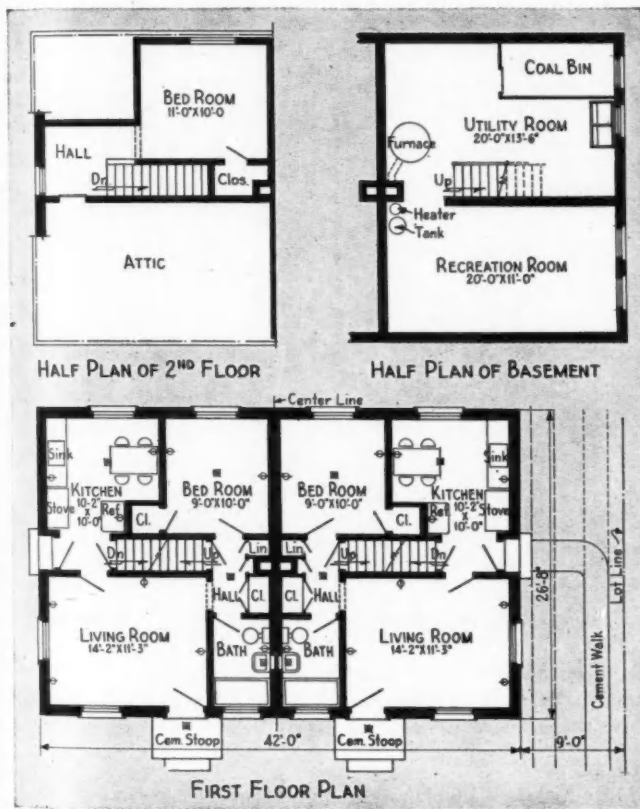
size units, Cox & Baker have eliminated the impression of row upon row of tiny dwellings, each like its neighbor except for a different colored roof or different entrance treatment.

The first 33 duplexes, 66 units, make a fine showing as seen along the street. Two front elevations are used alternately; one has a gable over one of the entrances, the other has an eaves projection. Each duplex is placed on 60-foot frontage, giving 9 feet to the side lot line, or 18 feet between buildings; this spacing lends a feeling of openness, and will accommodate two private drives if the adjoining owners or tenants do not wish to use the walks as the ribbons of a common drive. (See plan.) This minor point eliminates an objection sometimes found to common driveways and is typical of the careful consideration which has gone into these houses.

The first floor of each unit consists of living room, kitchen with dining space, bedroom and bath. Adequate storage space is provided in the hall wardrobes, bedroom closet, and kitchen cupboards. Stairs lead down into a basement which has been divided into two rooms by a cement block partition. (This, by the way, replaces a steel beam.) One side of this basement makes a well lighted recreation room and certainly would be appreciated by housewives who must find a place to send the youngsters on a rainy day. The other half of the basement houses heating plant, fuel storage bin and laundry trays.

On the second floor, the finished space encloses the second bedroom and closet. The balance is unfinished attic for storage, although part of this could easily be converted into a nursery so that young children could sleep on the same floor with the parents. As a matter of fact, the first floor bedroom, being separate, could even be rented out to another war worker or couple. What an opportunity for a further display of patriotism!

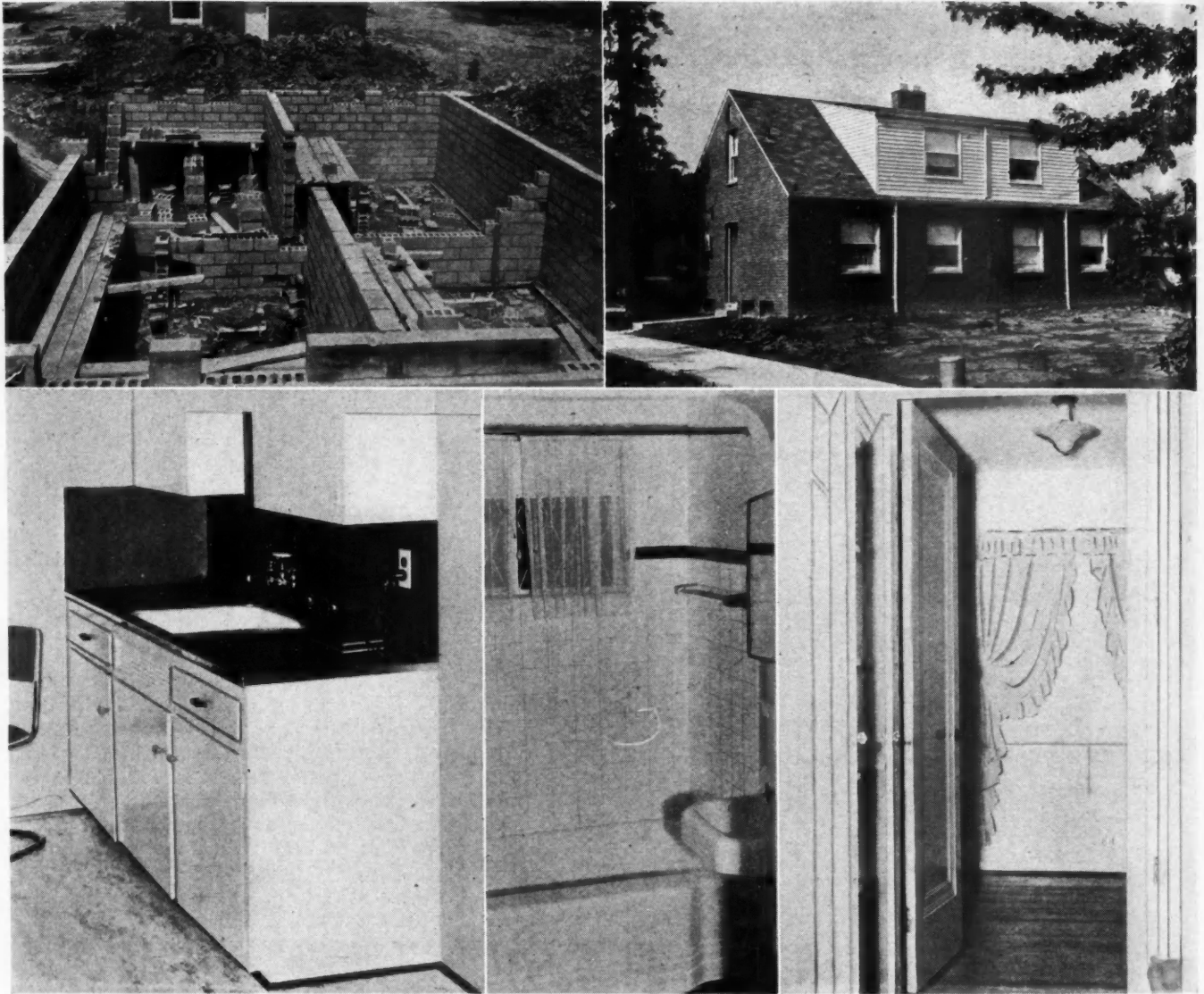
The second group of 66 family units has been started by Cox & Baker, the first houses having proved most successful. These can be rented for \$50 a month on a Title VI 24-month contract lease-option basis. The down payment, as shown on the sign on preceding page, is \$285. To handle such deals, Cox & Baker have set up a limited dividend corporation as a holding organization.



DUPLEX plan above, compared with most current one-family war units, shows greater flexibility, more space for living and storage and offers such items as recreation rooms, first floor bedroom, accessible attic.

GOOD DESIGN, brick veneer exterior, larger size of double unit give street of duplexes more attractive appearance as compared to smaller detached homes.





ABOVE, top view: Basements of Cox & Baker duplexes have block walls to replace beams and partition off recreation rooms; rear view shows good design. Bottom: Interiors indicate quality stressed throughout by such nationally known items as Standard Sanitary fixtures, Miami bathroom cabinets, National Brass builders hardware, Bruce Streamline factory-finished floors, and Pratt & Lambert paints.

The above gives some indication of the need for new ways of doing business in today's market. John W. Baker of the firm pointed out that in the short time in which they changed from large custom-built homes to the present type of job, sales methods have been completely upset. As a matter of fact, a sign in front of the firm's offices reads: "Will Lease Professional Offices." You don't need elaborate consultation rooms and design studios to market defense homes; as with other Detroit builders, a small shanty or model home on the site is sufficient as office headquarters.

"Specs" Tell Quality Story

But, as stated early in this article, Cox & Baker have not abandoned quality standards regardless of other changes which have been necessary. Final proof is contained in the specifications for their defense duplexes. Except for certain substitutions because of temporarily depleted local stocks or basic limitation orders, the original specification still holds; in brief form, it is as follows:

EXCAVATING: Basement to be excavated, to extend as shown on plans, allowing one foot for plastering outside of walls. Bottom of excavating to be left level and firm. After walls are built and inspected, the earth to

be filled back. Twelve (12") inches of cinders over drain tile against the wall. All earth removed from excavation to be given a finished level, as to plans. All crock drains to be laid according to Code requirements.

FOUNDATION: The footings of basement walls to be of concrete. One to five (1 to 5) consisting of one part cement, and five parts of 60/40 gravel, 8" x 20" in size. Footings for columns to be as shown on drawings. In no case are footings to be carried to hard firm ground, on low spots of excavation. Footings are to be poured after side boards are gun leveled.

The basement walls are to be of cement block, laid plumb and true, leveled to gun. Block to be laid in a full bed of mortar, and joints to be well buttered, so as to leave no open spaces. The joints on the inside of basement to be tooled smooth, and flush with blocks.

The entire outside of basement walls below grade to be plastered with cement mortar, composed of one part cement, and two parts sand, to be trowelled smooth, and carried out to outer edge of concrete footing. Approved water-proofing pitch to be applied over cement plaster. Basement sash to be Vento steel sash.

BRICK VENEER: Brick work above grade to be Ohio Sandusky Smooth Brick. Only skilled masons are

(Continued to page 88)

NEW FLOORING

Peps Up an Old Building

How to repair and restyle with oak, maple, linoleum

IT IS PART of our new wisdom to recognize that the home must be preserved, tended and kept going; and practical remodeling jobs which do not require materials on the critical list stimulate morale and actually aid the war effort. The USG Remodel Research House at Park Ridge, Illinois, demonstrates these facts and points out the endless things we can do to protect our houses against depreciation and obsolescence. Previous articles, with plans of the original and of the remodeled house, appeared in this publication in April, July and August, 1942.

The Park Ridge house was chosen for this project because it definitely needed repair and change. The family who had lived in it for years had moved out and new renters or prospective buyers would demand more than it offered. By wise and carefully planned renewal such a house could literally become a new home and revised floor plans could increase the interior living capacity of the structure. Both of these possibilities were vitally important in the light of the urgent need for additional housing throughout our country.

An "extra" room was provided by a change in the first floor layout. Now, instead of a living room, dining room and kitchen, and a typical old-time pantry, there is a combination living room-dining room, kitchen, powder room and study. This "study" which can be used as well for a bedroom or game room can be completely closed from the rest of the house and so can be rented out or



OLD OAK FLOOR in the living-dining room is being sanded. This room is covered with carpet, not nailed down, and this necessitated sanding and refinishing about one foot of the floor space around the walls. A power sander did this work effectively.

occupied by some older family member or some "paying guest."

The treatment given to the floors throughout the house is one of the most important features of the project. These floors were repaired, replaced, refinished and renewed, according to the individual needs of each room. A minimum of critical materials was used and the work reveals in a host of ways how countless thousands of aging floors can be made young again. It shows quick, easy, inexpensive methods by which sanitary floors can take the place of those with yawning, dust-catching cracks. Fine ready-finished hardwood floors, colorful inlaid linoleum and carpets are installed over the same old floor in connecting rooms without changing the finished floor levels.

Floor Treatment Important

The floors in this house are more than half a hundred years old but there is no suggestion of the long decades of wear that they have known, as you step into the sparkling little entrance hall which keynotes the house with its touches of simple charm and decoration. Knotty pine Sheetrock has been used for the walls and the finished floor is a marbled blue inlaid linoleum, medium grade, with a white strip and a six inch black border.

Here, ingenious use was made of the old oak floor. It was taken up for repair work elsewhere. Patches were necessary around the old furnace registers, and the problem of matching the original flooring was quickly solved. And, in place of the old entrance hall floor, a 5/8" plywood was used to bring the level to the height of the original flooring, and linoleum was selected which would tone in with the carpeting in the living-dining room. The stairs to the second floor, at the right of this hall, are carpeted in the same shade as the living-dining room rug. Knotty



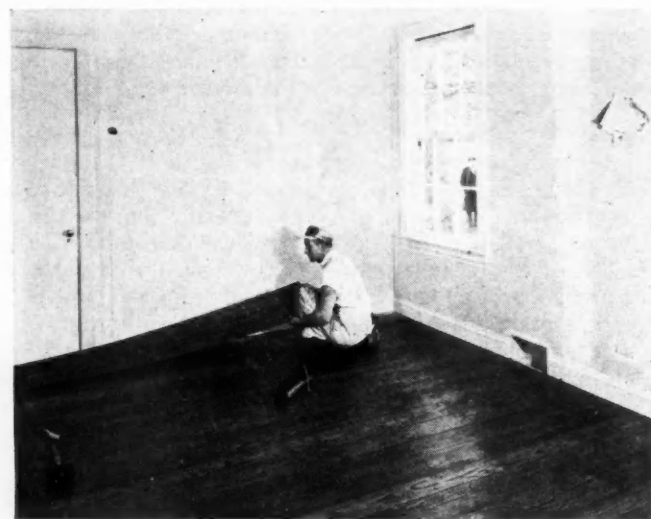
NEW MAPLE FLOORING in the hall; old flooring removed was used to patch other floors where registers occurred.



SUCCESSFUL PATCHING of the old floors throughout the house was accomplished speedily and easily. On the first floor the holes left from former hot air registers were patched with similar old flooring taken from the front hallway.



Here we see $\frac{1}{8}$ " Hardboard being laid on the soft pine sub-floor of the bathroom, as a smooth base for the medium grade, marbled inlaid linoleum floor. Hardboard is also used as a base for the linoleum in the kitchen and powder room.



WORKMEN laying Parkay Colonial Plug Plank flooring. Mastic has been applied to the back of the plank and the last piece is being fitted into place. In this room, originally the dining room, the new floor is being laid over the old oak.

pine was used on the stairwell, so that floors and walls blend perfectly. Plain Sheetrock is used on the ceiling and upper walls of stairwell, with nail heads spackled with USG Spackling Compound, exposed joints and painted with Texolite paint.

The living-dining room is covered with carpet not cut or nailed down, and this necessitated sanding and refinishing about 1 foot of the floor space around the walls and a strip about 18 inches wide under the middle drape track. Other floor openings were also repaired with wood taken from the front hall, and then the floors were sanded and finished with Minwax.

Linoleum Laid Over Hardboard

In the kitchen, powder room and connecting hall, $\frac{1}{8}$ " USG hardboard was laid over the old pine floor as a base for the new, medium grade black and white marbled linoleum floor. This Hardboard in 4" width and in lengths of 8', 10' and 12', forms a perfectly flush base for the linoleum. A careful allowance for differences of level of these various floor coverings was made during construction so that the finished floor levels are all the same.

Attune to the times is the treatment given floors and walls in the "extra" room. This was originally the dining room, and the old opening between the dining room and living room was closed so that this can become an isolated room if family needs demand its complete privacy. The old floor in this room, though structurally sound, was badly scuffed and worn. In less than one day, a new Parkay Colonial plug plank floor—pre-finished before leaving the factory—was permanently cemented in place—no nails, no noise, no muss. If the old floor had been too uneven, $\frac{1}{8}$ " hardboard would have been used as a base, just as was done under the linoleum in other rooms.

In the nearby powder room the same linoleum was used as in the kitchen. This powder room or lavatory was converted into its present status by remodeling the old pantry, which luckily had a window and was directly under the second floor bath. The old entrance to the living room was closed and in the powder room plain gypsum board was used on upper walls and ceilings and Sheetrock Tile Board for wainscot and in the shower stall.

The doors throughout the house have been converted into modern flush panel type by covering with $\frac{1}{8}$ " hardboard. This treatment of doors is in harmony with the beauty of the new, or newly finished floors throughout the house, and maintains harmony between the floors, walls, woodwork and furnishings.

Maple Flooring Renewed

On the second floor, which includes three bedrooms, a large bathroom and a generous number of closets, the original maple floor in the hallway was patched to render it uniformly even, and carpeted from wall to wall.

In the master bedroom, the girl's room and the boy's room the original maple flooring was patched with new maple when the removal of floor registers left gaping holes. Some patching was also done in the closets, and here the skill of the work and the effectiveness of modern floor refinishing are vividly demonstrated, as well as the enduring worth and beauty of our age-old hardwoods. At reasonable cost the old wood was sanded and refinished with Minwax, and it takes a keen eye to discover where the old stops and the new begins. The bright, cheery surface of the refinished maple is generously exposed under scatter rugs.

The floor in the second floor bathroom was of soft wood and in poor condition so here again, as a base for the green marbled inlaid linoleum, hardboard was utilized. Sheetrock Tile Board is on the walls and at the tub, and Gyplap is used as backing and furring for the Tile Board around the tub. The old bathroom wandered

walls
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painted

over the entire area of the kitchen underneath it and was badly cut up with sloping ceilings. The new bathroom bears small resemblance to its predecessor, and the splashing green and white paper on the west wall and ceiling accent the green on the new linoleum floor.

Concrete Floors—Painted

In the basement the floors were given as thoughtful attention as in any other room of the house. There was no problem from cellar dampness in this house, one of the commonest ills from which basements suffer.

A new recreation room, 12' x 28', was built and the concrete flooring in this area was given a coat of red paint. From the laundry room at the bottom of the basement stairs to the game room was also painted red, to create the impression of a "passageway" between the rooms. Then the interesting swinging doors between laundry and game room are also painted red.

Between the pre-treated and finished Blendtex Weatherwood plank walls of the recreation room and the floor, the regular stock base moulding of wood, 1½ inches high, is red; so is the shelf treatment on each side of a drop bar table. On the ceiling is ¼" plain Sheetrock, painted with Texolite. Gypsum board has also been used for cold air ducts and ⅛" hardboard for the built-in seat back.

No "dusting" is possible now on the same room's concrete floor. An additional room has been given the house through the excellent finishing of walls and floors in this cellar space.

The addition of the new game room was made possible by moving the new furnace to the southeast part of the old basement. The floor under the old coal room and furnace was in such bad condition that it had to be replaced. In removing the concrete a curb about 6" wide was made around the edge of the room. At the same time the floor was lowered to gain another 4 inches and the room was given extra height. This was a simple and inexpensive piece of work. The new concrete was not painted but left natural.

In the laundry room the pipes are furred in and two courses of glass block in the east wall lend a bright light to the cheerful red of the concrete floor.

Countless thousands of homes need repairs much like the ones made in this house and all structural repairs that fall in the non-critical list are worth while improvements. They are outlets for those whose services they demand and a stimulant to the morale of owners, who perforce, will spend much more time in their own homes—this "Stay-at-Home" period in our country's history.

* * *

Hobby Carpentry on Increase

ONCE father and the boys have acquired a few carpenter's tools and a work bench, they will have an irresistible urge to build useful things from wood, Western Homes Foundation declares, in pointing out the values of a woodworking hobby for the family during the war emergency. Most families must spend their free hours in play or work at home. Family carpentry will combine work and play. "Many do not realize the opportunities at hand for woodworking at home," says W. C. Bell, Foundation chairman. "For one thing, there is a general impression that an array of power tools is necessary, and that considerable skill is required. For another, people do not ordinarily think of the retail lumber dealer as a merchant of small amounts of lumber—he is commonly consulted only on important building propositions.

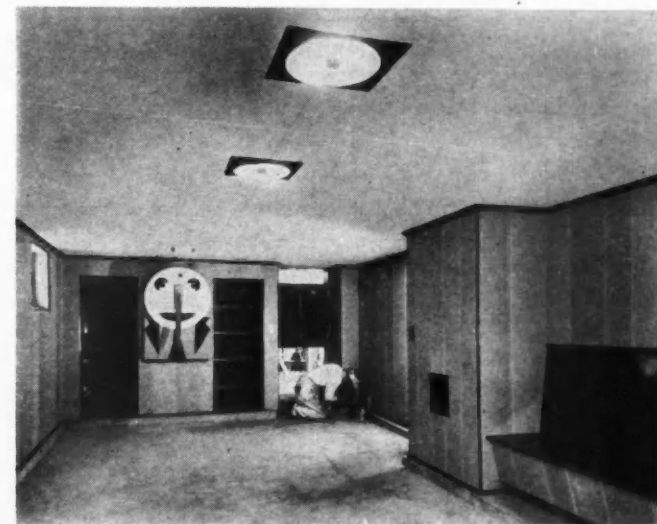
"Simple tools, however, are sufficient for the building of tables, chairs, bookcases, garden furniture, and simple designs or patterns are available—there is even a pattern for a streamlined doghouse. Many retail lumber dealers carry such patterns and merchandise the short length of lumber required, in small amounts.



CAREFUL preparation was made for the new marbled linoleum in the kitchen. Here a workman is spreading Lay Rite linoleum cement over the USG Hardboard, which had already been applied to insure a flush base.



HERE, a workman is completing a skillful and ingenious flooring job. The floor level was corrected to provide for the new linoleum finish, which is a blue marbled pattern with a 6" black border strip, separated from the field by a band of white.



MANY PROBLEMS were solved in this basement recreation room, which is shown here nearing completion. The distinctive concrete floor was painted red. Between the Weatherwood plank walls and floor there is a stock moulding of wood, 1½" high, also painted red.

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NEW TOOLS, MATERIALS AND EQUIPMENT OFFERED

AB924 The Corporation Trust Company, through its Business Development Dept., 120 Broadway, New York City, has issued a very helpful booklet of 24 pages entitled, "Contracts You Can't Enforce." It cites numerous contract arrangements between contractors and sub-contractors, between contractors and suppliers, and between contractors and owners, which have proved costly because unenforceable. There is a "lesson" on every page.

AB925 Gold Bond Exterior Board, a new product of National Gypsum Co., Buffalo, N. Y., is presented in a new four-page data sheet. This exterior board is a fireproof gypsum board with asphalt roofing surface. It has been approved by Government engineers for exterior finish for barracks, dormitories, plants, temporary hospitals and other emergency buildings. It is offered in two thicknesses— $\frac{1}{2}$ " and 1"—and in sizes 2' x 8', 2' x 9' and 2' x 10'. It can be applied either vertically or horizontally. Clearly drawn details of application are included in this data sheet.

AB926 A new and up-to-date edition of "Open House" has been issued by Ponderosa Pine Woodwork, 111 W. Washington St., Chicago. It is a beautifully illustrated portfolio of 32 pages, and contains very timely suggestions for remodeling and restyling every room in the house.

AB927 "New Career Opportunities in the Building Industry" is a 24-page brochure for high school graduates planning to enter college. It should ap-

peal to building industry fathers and mothers who would like to have their children of college age receive adequate training for building industry careers. This brochure is by Arthur A. Hood, Director of Dealer Relations, Johns-Manville, New York City. A dozen colleges and universities now offer courses for students who seek a building industry career.

AB928 "How to Finish 16 Kinds of Floors" is a new 16-page handbook from O'Brien Varnish Co., South Bend, Ind. It is a handy reference book for the floor finisher, painter and maintenance man, a catalog containing complete floor finishing specifications. A companion piece features O'Brien O'Lite interior wall paint, a new resin-emulsion paint which comes in paste form to be thinned with water, and available in 8 attractive colors and white.

AB929 Breuer portable blowers and portable cleaners are illustrated and described in a new 4-page data sheet from Breuer Electric Mfg. Co., 5100 N. Ravenswood Ave., Chicago. The Breuer "Tornado" blower is used for blowing dust out of motors and the portable industrial vacuum cleaner is used for cleaning floors, assembly tables, walls, ceilings, etc.

AB930 "Specifications for Mineral Wool in Low Temperature Installations" has been prepared by the Industrial Mineral Wool Institute, 441 Lexington Ave., New York City. It is a well printed and well illustrated pamphlet of eight pages and covers. It presents general specifications, material specifications, ap-

plication specifications, and specifications for applying mineral wool felt on cold pipe lines. This work was formulated by the Technical Committee of the Institute, and has been approved by the engineering staffs of the principal mineral wool insulation manufacturers.

AB931 "Make Your Attic Livable" and "Nautical Bunks and Walls of Knotty Pine" are two timely, well illustrated envelope-size pieces prepared by the Western Pine Assn., Yeon Bldg., Portland, Ore. They should prove helpful to dealers, builders and contractors as a means of stimulating interest in remodeling and improvements while wartime restrictions are hampering more extensive residential construction. These leaflets are attractively illustrated and present some really useful ideas.

AB932 Information on waterproof resin wood glues presented in a very usable form is offered by the Casein Co. of America, 350 Madison Ave., New York City. First is a chart, "Wood Glues for Aircraft Manufacture," which describes a complete line of glues for waterproofed plywood, assembly and joint gluing, and vacuum bag gluing. Then there is Technical Bulletin 103 which describes cold-setting urea resin glues to comply with the new Army-Navy Aeronautical Specification AN-G-8. These glues are suitable for aircraft assembly, skis, wood cargo (truck) bodies, life floats, etc.

AB933 Folding Walls and Wardrobes—a new folder on the Fairhurst patent "Unitfold" folding wall and disappearing door wardrobe, outlines their features and how to use them for schools, colleges, apartments, hotels, churches, etc.—American Bowling and Billiard Corp., 50 W. 17th St., New York City.

AB934 "The American Post-War Home—What Will It Be Like?" is the title of a very timely and readable booklet by A. T. Hardtner, president, Urania Lumber Co., Urania, La. Mr. Hardtner draws on his extensive experience and wide observations to present this brief study of things which affect home design.

AB935 "Installation Manual and Data Book on Porcelain Protected Wiring Systems" is a new pocket-sized 32-page handbook prepared by Porcelain Products, Inc., Findlay, Ohio. It gives complete installation data on porcelain protected knob and tube wiring, and is of particular interest at this time to builders, dealers and others interested in building construction, since this type of wiring is specified by the latest List of Prohibited Items for construction work, issued by the Army and Navy Munitions Board.

AB936 Modine Unit Heaters of steel construction for horizontal delivery and vertical delivery of heat are presented in two new data sheets, Bulletins 142 and 142-B, from Modine Mfg. Co., Racine, Wis. These new units conserve critical materials as they substitute steel condensers for the former copper and copper alloy condensers which are now restricted to shipboard use.

SERVICE COUPON—CLIP and MAIL to CHICAGO

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

(September, 1942)

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

Numbers

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OCCUPATION*

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



State Armories, Framingham, Mass. Equipped with 54 Ro-Way Doors. L. Santucci, Arlington, Mass. Contractors.

MODERN AS TODAY'S WEAPONS OF WARFARE!

That's why **Rō-Ways Guard** so Many Doorways

FOR THE ARMED SERVICES AND ESSENTIAL WAR INDUSTRIES

Everything about the Ro-Way Overhead Type Door dates it "1942." In streamline design, in ease and smoothness of action, and in patented improvements that give extra security and extra service, you will find Ro-Way Doors as modern as the latest weapons of war. You will better understand the widespread choice of Ro-Way Overhead Type Doors when you examine these exclusive improvements:

"Crow's Foot" Outer Bearing Support—Rigidly holds the chain sheave wheel in permanent alignment. No twist . . . no sag to cause friction.

"Zip-Lock" Adjustment—Used on Ro-Way Doors having Twin Torsion Spring Power. Permits instant easy adjustment of spring tension.

"Tailor Made" Springs—Each spring is individually made for the Ro-Way Door on which it is used. Each is power-metered to the weight of the door.

Track Rollers—Made on our own specially-designed machines. All Rollers have "double thick" wearing tread, and full ball bearing (7 to each roller.)

New Friction-Reducing Track—Track is formed so rollers ride well away from the track side wall, giving extra clearance and easier operation. This track design also gives extra strength and rigidity. No counter-sunk holes in track—no flat head stove bolts used.

Rust-proof Hardware—All Parkerized and Painted after fabrication.

Thus Ro-Way engineering is never satisfied. Just as today's weapons of war are built to outstrike those of yesterday, so Ro-Way Doors are built to outserve all that have gone before.

Write for detailed information and prices on Ro-Way Doors for Industrial and Commercial use.

ROWE MANUFACTURING CO. 752 Holton Street Galesburg, Ill., U.S.A.

Today Ro-Way Doors are Serving America in

- Naval Depots
- Air Bases
- Navy Proving Grounds
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- Bomber Plants
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- Marine Bases
- Army Proving Grounds

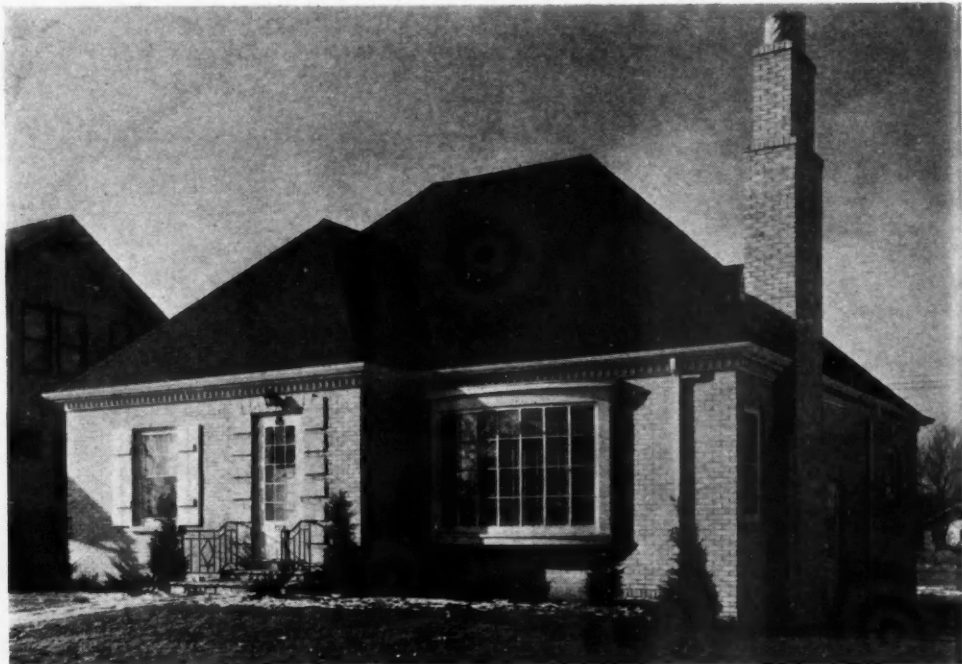
Rō-Way

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

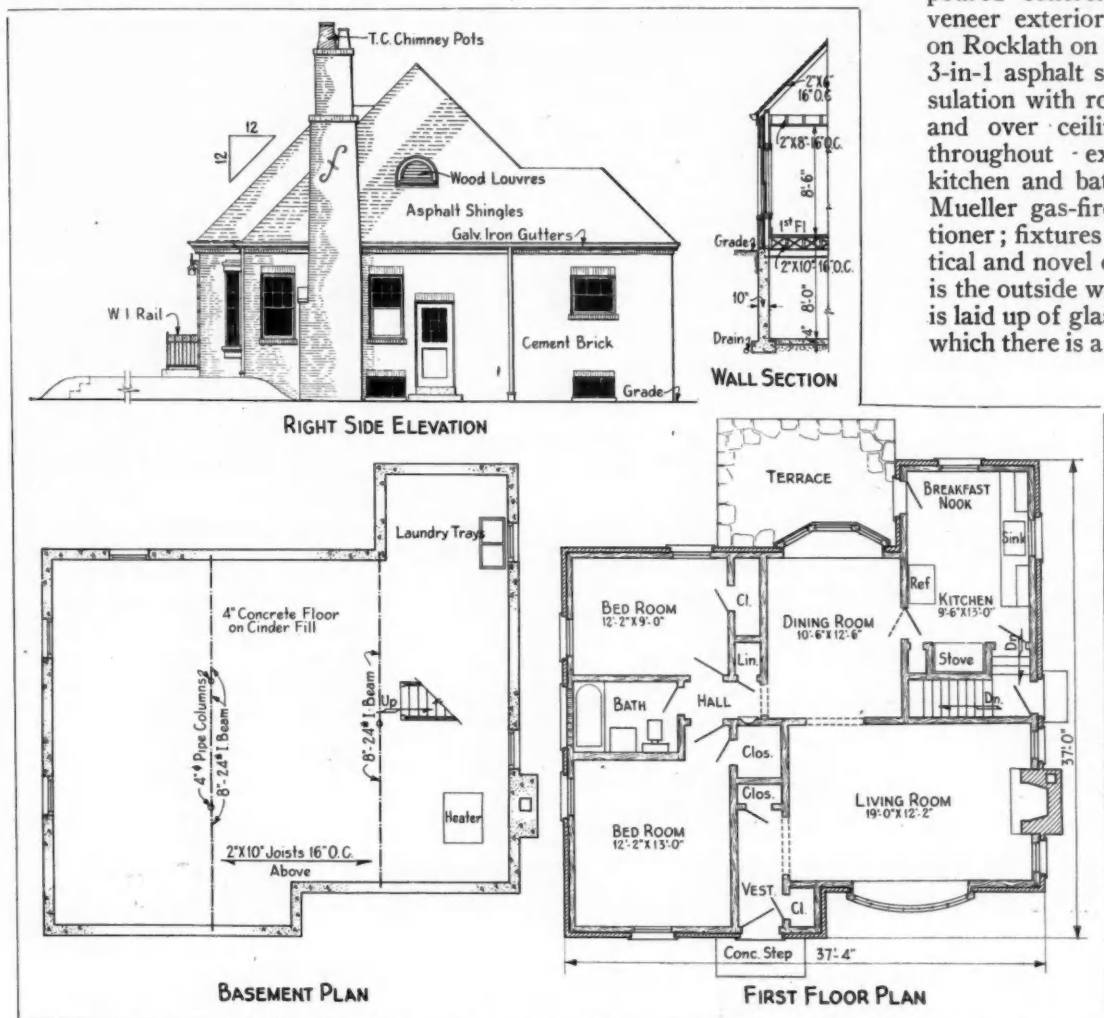
THIS five-room French style design is the work of Ryan Bros. & Sather, builders, Elmhurst, Ill.

Pre-war Charm; Post-war Pattern

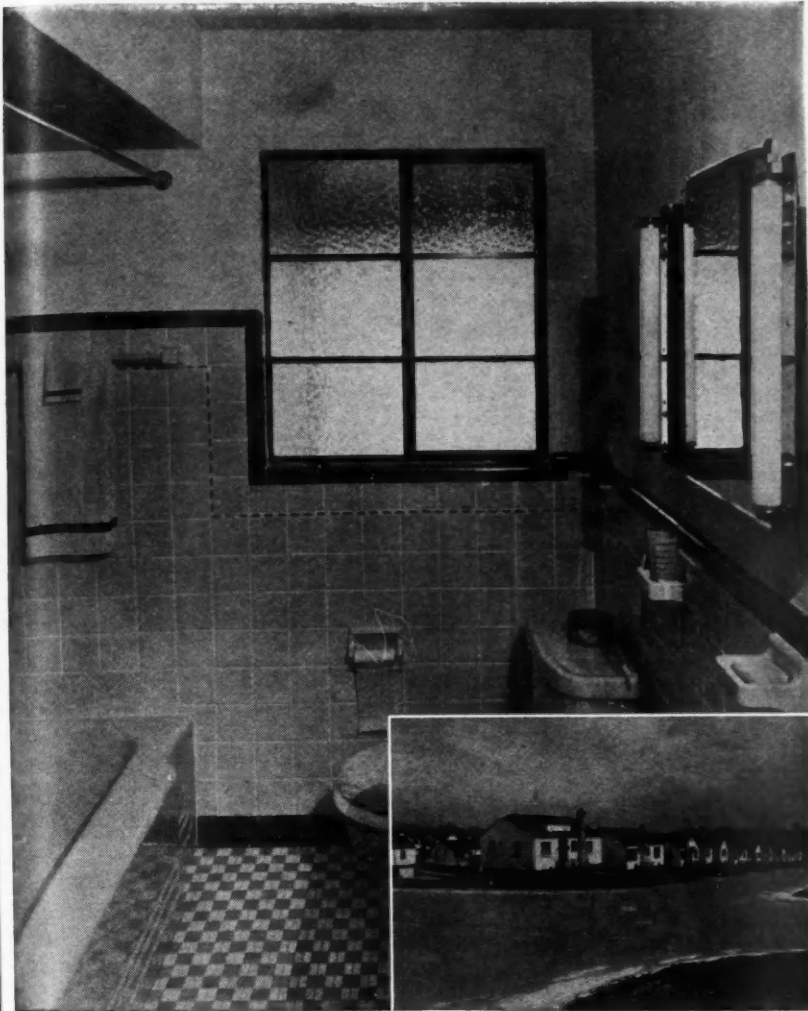
THE home shown on this page was the final step in the evolution of a basic plan which was built more than thirty times before arriving at the design illustrated. Ryan Bros. & Sather, builders in Elmhurst, Ill., Chicago suburb, started out several years ago to develop a small home of reasonable cost which would be compact and, at the same time, have ample room sizes for modern livability. This original design proved so popular that customers continued to ask for additional features which could be incorporated, but still retain the basic ideas of the original.



As shown here, the house has the following features not commonly found in small homes: Vestibule with guest closet, fireplace out of line of traffic, breakfast nook, and dining room off rear terrace, six closets, attractive bow window, and full basement with large area available for those interested in hobbies and recreation. Materials and equipment include 10-inch poured concrete foundation, brick veneer exterior with 3-coat plaster on Rocklath on interior, Bird 240 lb. 3-in-1 asphalt shingles, complete insulation with rock wool in sidewalls and over ceiling, and oak floors throughout - except linoleum in kitchen and bath. Heating plant is Mueller gas-fired winter air conditioner; fixtures are Kohler. A practical and novel detail of construction is the outside wall of the bath, which is laid up of glass block, at the top of which there is a ventilating casement.



THE five rooms in this plan are arranged so that there is a minimum floor area and no waste space. The end of the dining room serves as a traffic artery (in variations of this plan, the stairway to the second floor also is from dining room.) This type of practical planning will be the starting point for post-war progress.



**"CERAMIC
TILE
IS OUR
BEST SELLING POINT"**

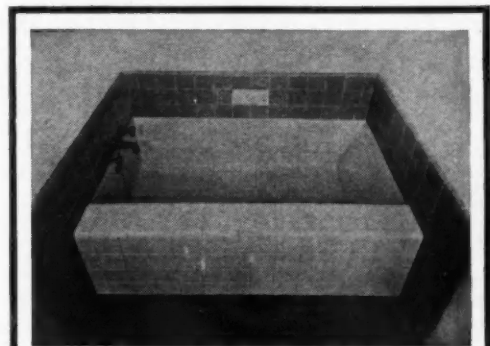
**Says Builder
of 3,000 Small Bungalows**

Typical tile bath in Schuermann Homes, and view of a section of one of their developments where small bungalows predominate.

"We have built approximately 3,000 small bungalows, and have always used ceramic tile in the kitchens and baths. We have even used this tile in our *lowest* priced bungalow, which sold for \$2,900.00. We have found tile kitchens and baths to be the best selling point in the sale of a house. We heartily endorse the use of ceramic tile." That statement, by the prominent St. Louis builder, Mr. N. R. Schuermann, Pres. of Schuermann Bldg. & Realty Co., expresses what alert builders everywhere have learned about tile. The general public is *sold* on tile, because of its appearance, beauty, its ease-of-cleaning, and its durability.

Tile is a non-critical material. It is easily and readily available. It is more important than ever that builders of small homes feature tile baths and kitchens, because shortages and priorities will mean the use of substitute products or materials in other parts of the house. The use of tile indicates that the builder is using first-line and first-choice products where possible.

Write for "Facts about Tile"... 24 pages of information... new designs... rooms in full color... full of ideas for the use of non-critical tile.



Tile bathtub set up in Washington, D. C., by TMA, for the inspection and approval of Federal architects and housing authorities.

The latest thing...the all-TILE Tub!

The TILE bathtub... developed by TMA... is built on the job... has a convenient wide seat at the front... interior is unglazed ceramic tile, easy-to-clean, practically non-slip. Ask your Local Tile Contractor for details about this inexpensive tub, or write us.

THE TILE MANUFACTURERS' ASSOCIATION, INC.

50 East 42nd Street



New York, N. Y.

Milk Houses Needed

How to plan and build these important farm structures

FROM Wisconsin, "America's Dairyland," comes an interesting and profitable program for the building of needed milk houses to assure top production. These buildings, of course, can be used in any other part of the country where dairying is done; lumber dealers in such sections can tie into this program, which has been encouraged by the Department of Agriculture during the last five years.

While the plans shown here were designed by the Extension Service of the College of Agriculture of the University of Wisconsin, the work of M. J. LaRock and S. A. Witzel, to fit Wisconsin requirements, they also meet the standards set up in the milk ordinance of the United States Public Health Service. Their application, either directly or with slight change, can be nation-wide. The market for these milk houses is ready-made because years of education have convinced farmers of their need, and they now have the money.

Three milk house plans are presented on these pages. The single room, 10 x 12 house (Figure 1) shown in masonry construction, the details of which could also be applied to the other two milk houses, is the smallest size milk house providing for milk cooling and washing and storing of utensils in one room. This house could be well adapted for use on farms where cream is being marketed. (See Figure 1.) Although not shown in the plan, the room can be kept clean more

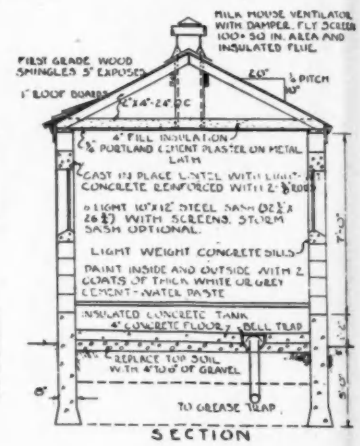
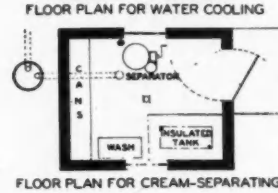
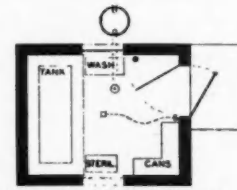
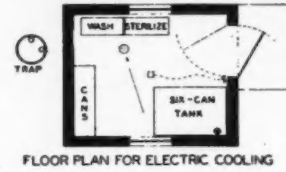
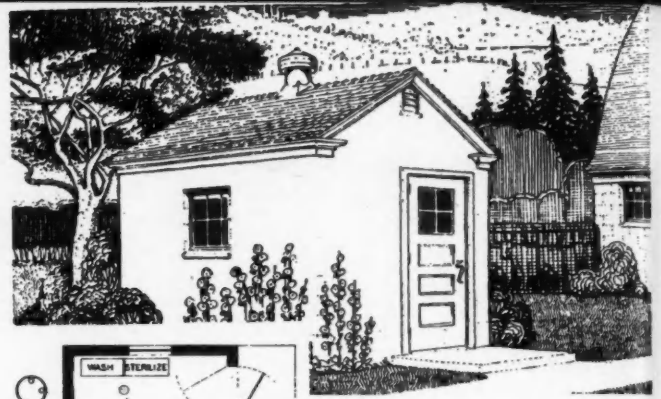


FIG. 1—A 10 by 12 foot masonry milk house that will take care of a daily production of 20 to 40 gallons of milk or cream.

easily if the separator is mounted on a concrete platform three or four inches in height.

The two-room milk house, as shown in Figure 2, will meet the most rigid inspection for the fluid milk market. The convenience of this milk house is a feature that will make it well worth while.

Where low cost is essential and minimum require-
(Continued to page 60)

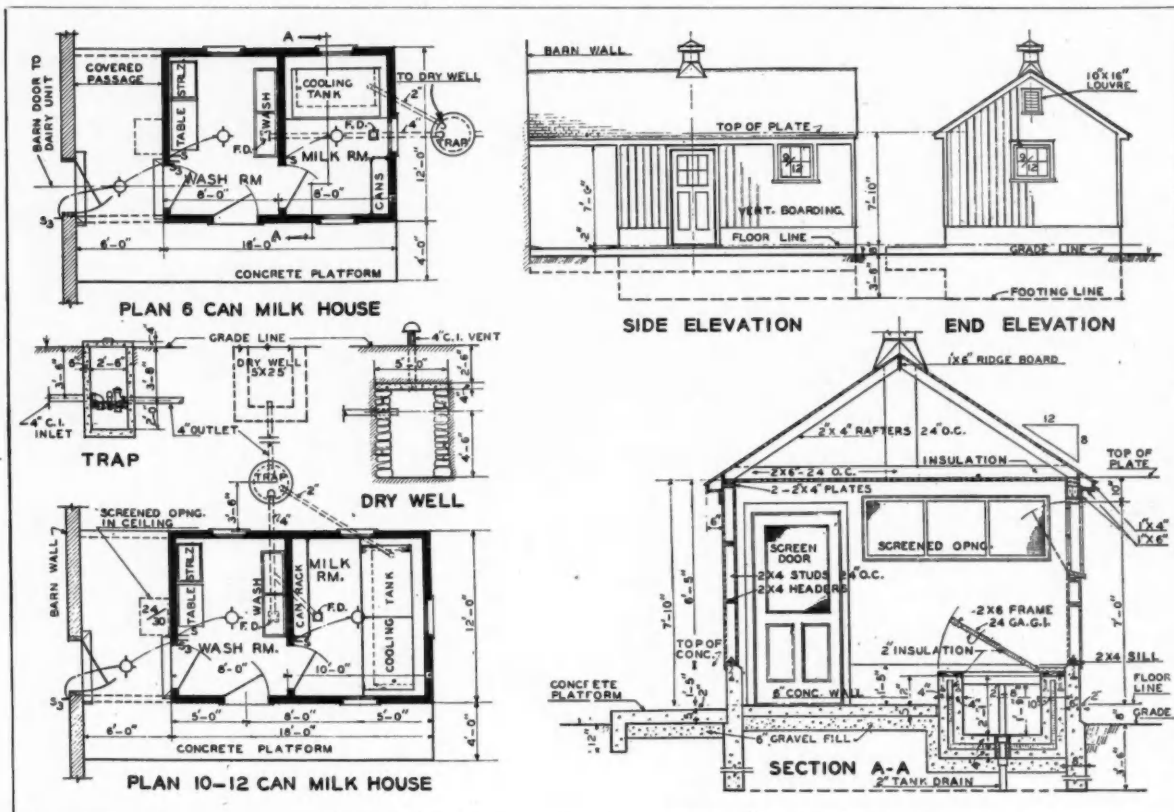
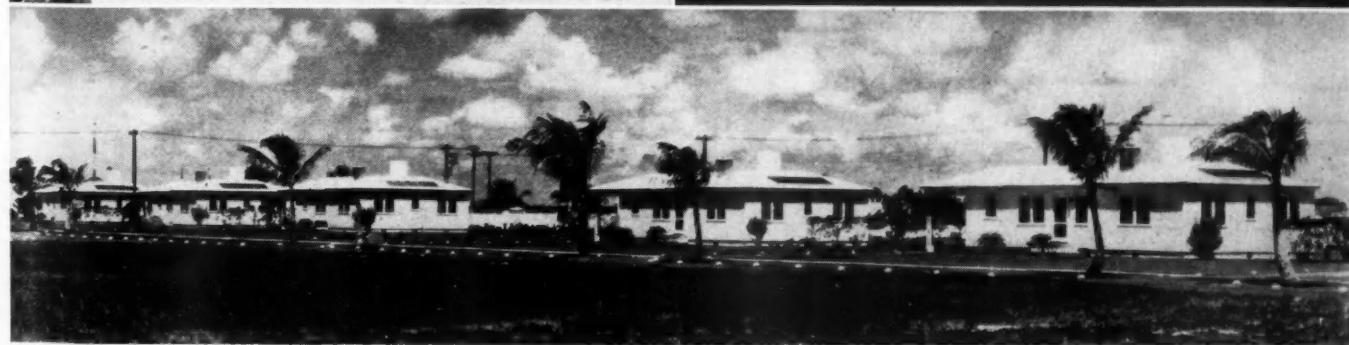


FIG. 2 — Plans and details for a two-room milk house which can be attached to a barn by a covered passage; the house itself can, of course, also be built as a detached unit.

BUILDINGS *to build a Navy*



A large part of Uncle Sam's two-ocean navy will never go to sea. For its shore establishments - naval and air bases, training stations, medical centers - it needs buildings, thousands of them. Much of the hardware for this vast construction program is supplied by Stanley.

This, and other war demands, restricts the amount of hardware available for use on buildings which do not qualify under government restrictions. When ordering Stanley Hardware from your dealer, be

sure to give all the data necessary for him to properly classify your order. The Stanley Works, New Britain, Connecticut.



STANLEY HARDWARE

(Continued from page 58)

ments will meet the present local market standards, the plans shown in Figures 3 and 4 may be followed. These plans show the first unit as a milk room for the handling and cooling of milk.

Several types of cooling tanks adaptable include the insulated steel tanks for water cooling, the insulated cooling tanks for mechanical cooling units, and in some areas wood tanks have been quite effectively used. The selection of tanks for any particular farm will depend upon the local prices for the various types of tanks, the ability of the farm owner to make his own insulated concrete tank, and if a mechanical cooling system is to be used it will probably be considered good business to buy a complete unit.

Tanks of materials other than concrete will deteriorate rapidly if installed in a recess or opening in the floor; so they are set on a raised platform one or two

The solid concrete cooling tank with full insulation, shown in Figures 3 and 4, is constructed with a space of from five to eight inches between the tank and the walls of the milk house. This space between the tank and the milk house walls, as well as a six-inch fill under the tank itself and extending to the under side of the milk house floor on the front side of the tank, may be filled with a solid granular insulation material such as exploded limestone slag, burned shale, or washed clean hard-burned cinders.

The design shows an eight-inch wall along the front side of the cooling tank. A one-inch waterproof rigid insulation board is placed in the center of the wall to improve the insulation value of this part of the tank. An alternate for this fill insulation might consist of the application of one or two inches of waterproof insulation around the ends, back, and bottom of the tank, the insulation being applied to the inside of the milk house

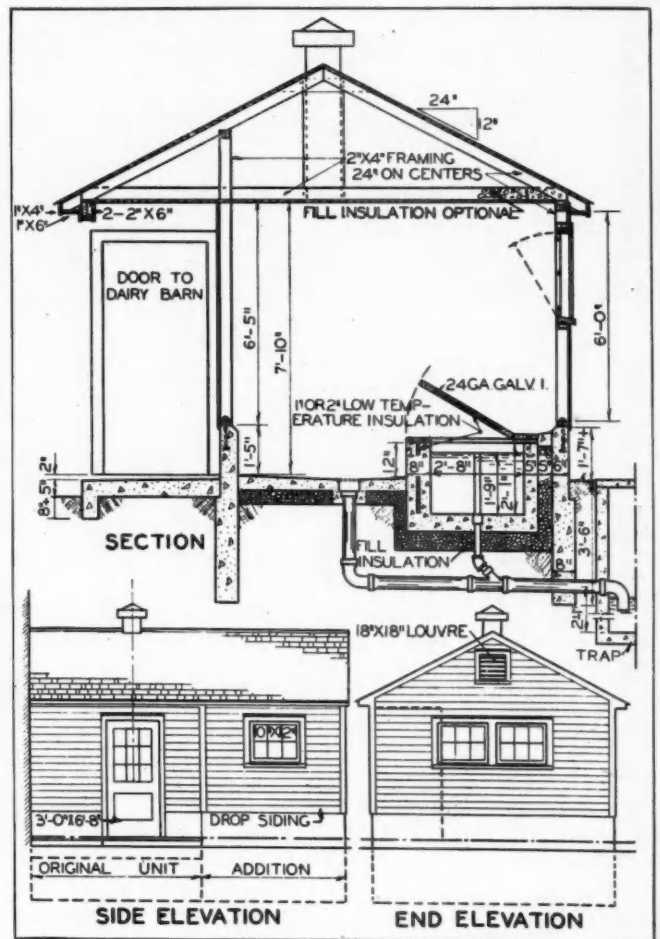
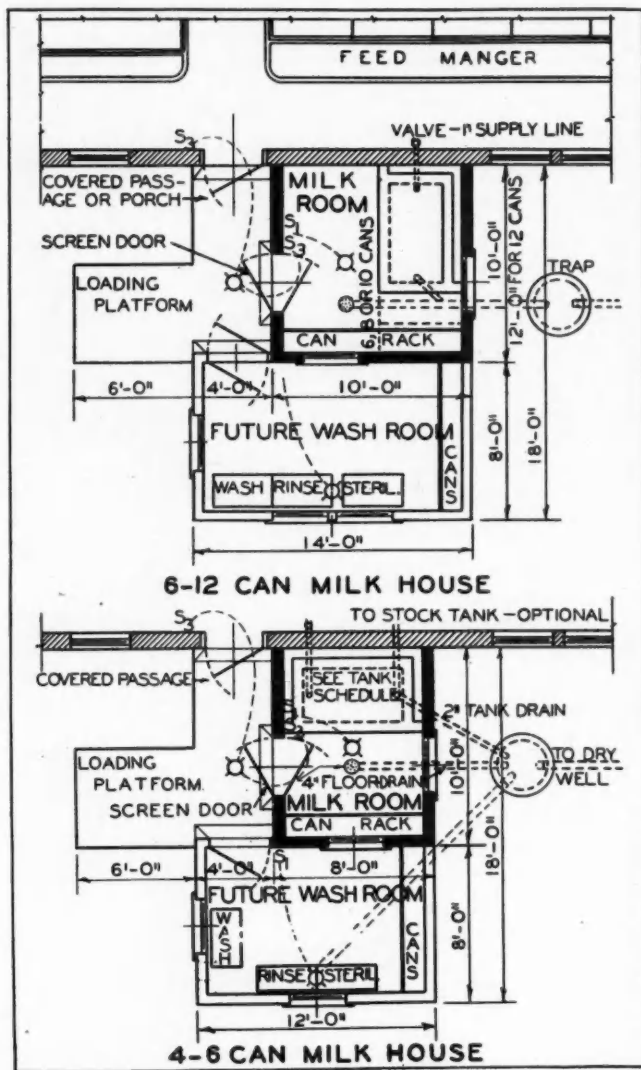


FIG. 3—At left, plans for two single-room minimum milk houses showing possible future additions; the upper plan is of a 6-12 can capacity, the lower one for 4-6 can size. FIG. 4—Above are cross section and elevation details for the milk house in Fig. 3.

inches above the floor level of the milk house, in which case some equipment would have to be provided for placing the filled cans into the tank and taking them out. This equipment may consist of a section of rolling door track attached to the ceiling and a door hanger with an ordinary wire stretcher for tackle.

Two types of insulated concrete cooling tanks are shown in the plans. These tanks are permanent, easily cleaned, low in cost, effectively insulated, easily constructed, and may be lowered into the floor so that the top of the tank is twelve inches above the floor level.

walls before the concrete tank is poured.

The other type of insulated concrete tank, shown in Figure 2, consists of two concrete walls three and one-half to four inches in thickness with two or three inches of waterproof insulation in the floor and side walls. Because of the thin walls of this tank, three-eighths inch reinforcing rods should be placed around the tank. Two of these rods will be located in the outside tank wall and two on the inside. The lower rods will be located six inches above the floor level, and the top rods will be located two inches below the top.

ARMSTRONG'S TEMLOK

double purpose Insulation



TEMSEAL SHEATHING

Lasting insulation efficiency plus adequate bracing strength.



TEMLOK LATH

Combines dependable insulation with an excellent plaster base.



TEMLOK DE LUXE

Insulation plus interior finish, in panels, planks, and boards.

See Sweet's for Complete Details

Armstrong is Insulation Headquarters

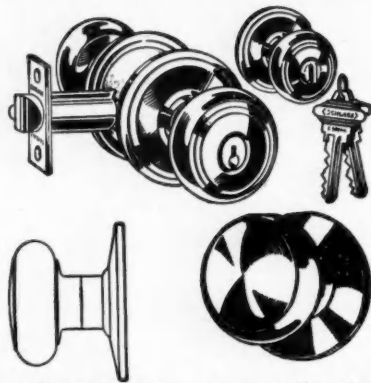
Armstrong Cork Company has been a pioneer in the field of insulation for forty years. This experience, combined with continuous research, is your assurance that the quality of Armstrong's Temlok will always be high. Write for free samples. Armstrong Cork Company, Building Materials Division, 979 Concord Street, Lancaster, Pa.



Getting Along with Less of Critical Materials

Wartime Schlage Locks Offered

DOING its "bit" to conserve needed war making materials, the Schlage Lock Co., San Francisco, has developed two new models, a standard all-steel lockset equipped with new ivory plastic knobs and roses and an all-steel lockset with steel knobs and roses. The exposed parts of the steel trimmed locksets have been finished



STANDARD Schlage entrance door lock in Novo steel design. Knob and rose of Schlage Plasco design.

with the US 18A dead black finish which is generally being specified for war housing and all other types of construction work. It is generally known throughout the hardware trade that all Schlage Locks have heretofore been supplied only with brass or bronze trim. Just recently plastic and steel trims were made available. To further conserve strategic materials, the Schlage production schedule does not include locksets with steel trim, plated with dull bronze or brass finishes. The company points out that the same standard of high quality has been engineered into these new wartime locksets as was formerly incorporated into the pre-war line.

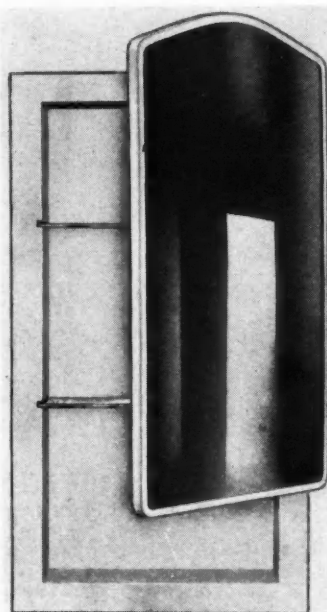
Miami Offers Wartime Wood Bathroom Cabinets

WAR is bringing many changes to home builders. Soon they will be getting acquainted with a new type of bathroom cabinet—a cabinet made of wood to conserve steel.

The Miami Cabinet Division of The Philip Carey Manufacturing Company, Middletown, Ohio, nationally known for its steel bathroom cabinets, announces a line of wood cabinets which conform to the program for conservation of metals.

These new wood cabinets do not revert to the wood models of a quarter century ago. The Miami Wood Models are said to be attractive in appearance, to incorporate structural features that resist warping, shrinking and swelling, and to offer the modern cabinet conveniences that the public expects today.

The Miami Line consists of two distinctive wood cabinet models and wood-framed wall mirrors in six sizes. It is stated that the



NEW bathroom cabinet of wood.

cabinet body of the new models is made of kiln dried hardwood, with joints double locked, glued and tenoned; door back of moisture-proof composition board; mirrors of double-strength quality; finish, three coats baked on white enamel. A feature of the cabinet, especially emphasized, is the neat mirror frame of steel (by permission of WPB), finished to match the cabinet. Equipment consists of two glass shelves; bar-type door stop; stainless steel door strike and bullet door catch. The Miami Wall Mirrors are of No. 1 plate glass with

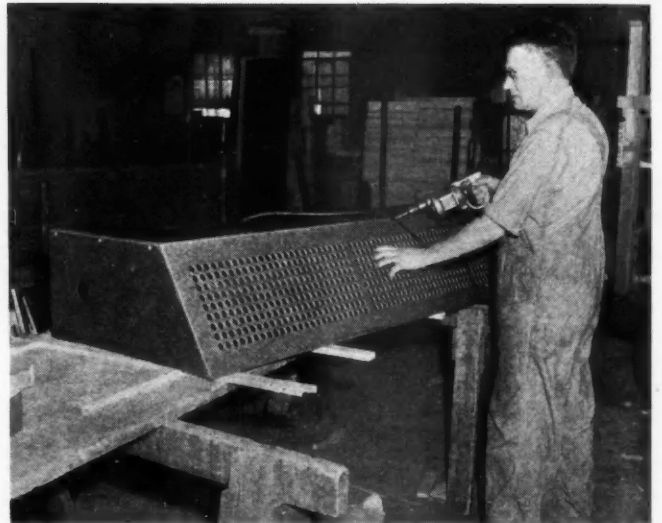
hardwood frame; mirror back of Carey Utilizit Board; finish in three coats baked on white enamel.

In addition to this line of wood cabinets and wood-framed mirrors now being produced, Miami reports its steel cabinets available while present stocks last.

Convectors with Non-Metallic Cabinets

IN ORDER to conserve critical material as suggested by the War Production Board, The Trane Company, La Crosse, Wisconsin, has perfected a new non-metallic cabinet convector to be used in place of all-metallic convectors and radiators. Except for the screws, the cabinets are constructed entirely of non-metallic materials. Side and top panels are fabricated from rigid fibre board. Supporting members provided at the corners are of hard wood.

The element of the non-metallic cabinet convector's is constructed



ONLY metal parts in the cabinets of the new Trane Non-Metallic Cabinet Convector are the screws which are being inserted by the workman in this picture.

of steel fins and tubes. The small amount of metal used in these new convectors is equivalent to 1/5 of that used in the ordinary radiator. Thus, for every five non-metallic cabinet convectors used in place of conventional radiation enough metal is conserved to manufacture four aerial bombs or sixty-eight .30 caliber rifles.

Two cabinet types are available. One type is provided for wall suspension and the other is of the free standing floor type. Circular designed grilles are punched in the sloping tops of both cabinets.

New Sink-Cabinet Saves 95 Per Cent of Critical Metal

INDICATIVE of the extent to which the plumbing industry is cooperating in the war effort is a new sink and cabinet combination which saves more than 95 per cent of critical metal, according to the Plumbing and Heating Industries Bureau.

The sink is the flat-rim type made of non-critical ceramic materials. The cabinet is made of wood instead of steel. The swinging spout faucet has brass working parts but the body is made of

(Continued to page 64)



THE BIGGEST ROOFING MARKET IN AMERICA TODAY...

The biggest roofing market in America today lies in the more than 25,000,000 existing dwellings.

A great majority of their owners have money to spend—but they can't build, and the automobiles, radios, refrigerators and other equipment on which they usually spread their income, have just about vanished.

That's why the man who owns a home today is in the mood to use his surplus cash on modernization . . . on re-roofing . . . on any needed home improvements that will boost the long term value of his investment. *Not in years have you had such an opportunity to sell re-roofing.*

To make the most of this fast-moving situation, join up with Barrett.

Feature the Barrett line of roofing and building products—a line backed by "the greatest name in roofing."

Investigate Barrett's promotion material. It covers everything—direct mail campaigns, selling aids for personal presentations, and a host of suggestions for getting action.

It's a program keyed to fit this timely opportunity. *Send for details today!*



THE BARRETT DIVISION

ALLIED CHEMICAL & DYE CORPORATION
40 RECTOR STREET, NEW YORK

2800 So. Sacramento Ave., Chicago

Birmingham, Ala.

SHINGLES AND SIDINGS...ROLL ROOFINGS...ROCK WOOL INSULATION...PAINTS AND CEMENTS

Getting Along with Less of Critical Materials

(Continued from page 62)

cast iron. With brass at the head of the list of critical metals, the Bureau points out that cast iron faucets require only about six ounces of brass for the working parts as compared with four pounds for the prewar models. Faucets are available with a galvanized finish or with a black, non-metallic finish.

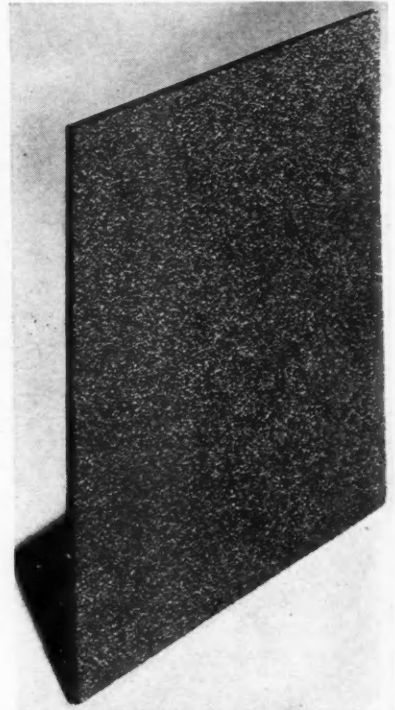
Purchasers may choose between drains made of cast iron or welded steel tubing. The inside surfaces of the cast iron and steel tubing are plastic coated or galvanized to give smooth and clean water passageways. A choice is also offered in strainers and clean-out plugs which are available in plastic and in galvanized cast iron.

The new ceramic sinks as well as flat-rim laundry tubs are designed to fit in special prefabricated wood counter tops. A complete line of prefabricated wooden cabinets and cabinet accessories is available. Counter tops are offered with coverings of linoleum or Masonite. Even the moulding strip is plastic.

Celotex Offer New Backer Board

A NEW, low cost siding material with a colorful and weather-proof mineral granule surface that eliminates painting has just been put on the market by The Celotex Corporation, of Chicago, according to an announcement by Marvin Greenwood, general sales manager.

The new product, called Celotex Mineral Surfaced Backer Board, can be used over any kind of sheathing. For temporary construction, it may be applied directly to framing, provided the studs are on 16-inch centers.



NEW Celotex Backer Board

The product consists of two sheets of heavy roofing felt, saturated with an asphaltic compound and bound together with a high melting-point asphalt adhesive. The outer surface of the sheets then receives an extra coating of asphalt, into which are embedded mineral granules.

The granule surface is currently available in two colors, buff and brown. On projects requiring large quantities, the board can be manufactured in other colors, including those on the list of standard camouflage roofing colors.

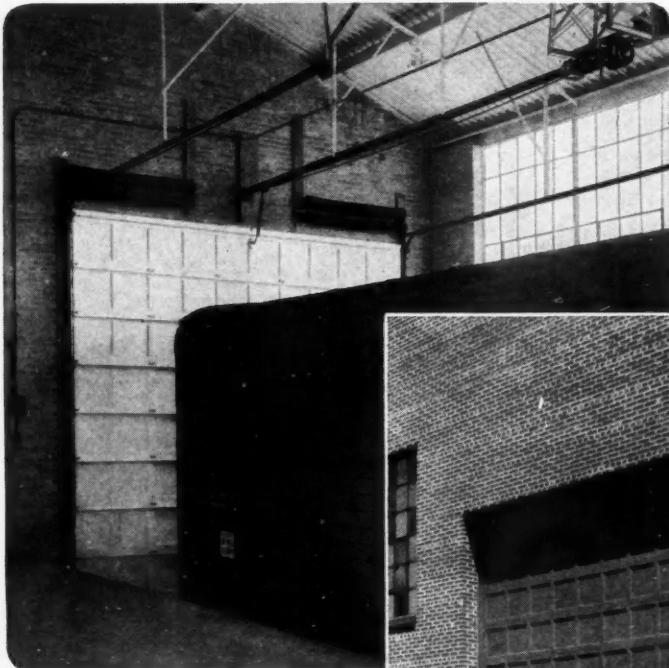
Celotex Mineral Surfaced Backer Board is economical in cost and can be applied rapidly because the units are large in size and light in weight. It is suitable for siding army barracks and other military buildings, factory structures, low cost housing and temporary structures of many kinds.

The new product is 3/16" thick and is available in two widths: 3' and 4'. Five lengths are available in each width: 6', 7', 8', 9' and 10'.

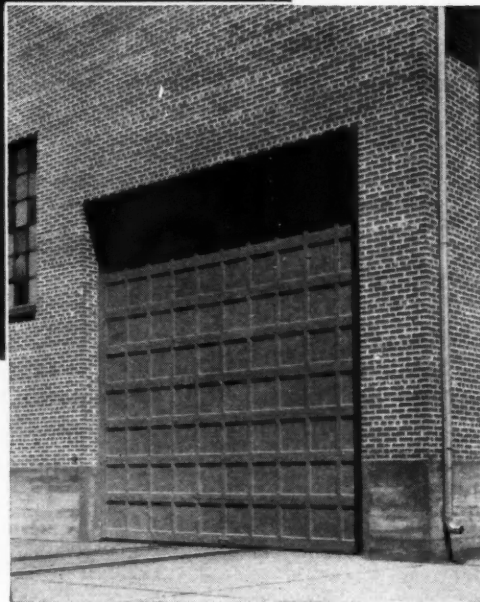
Keystonite Board Offered

A THIN ASPHALT mastic board designed for use as an underlay with linoleum and other composition flooring has been announced by Keystone Asphalt Products Co., 43 E. Ohio St., Chicago. Available in several thicknesses ranging from six one-hundredths to three-sixteenths of an inch, the product provides a resilient underlay that is impervious to moisture.

Designated "Keystonite board," it is composed of a high melting point asphalt in combination with fine mineral aggregate, sealed between dry non-bleeding liners to provide a waterproof, rigid non-warping board. It is available in widths up to 48 inches, and in any length desired.



**WOOD-SECTION
OVERHEAD DOORS
FOR LARGE
OPENINGS...**



BARCOL OVERDOORS

These pictures show a 17 x 18-foot Barcol OVERdoor at the freight track entrance to a machine tool plant shipping department. This is typical of the uses where Barcol OVERdoors are finding favor, especially during war time conditions. Note the Electric Door Operator with open-close-stop push-button control which makes handling of this big door a quick and easy matter.

SAVE STEEL...

Wood-section Barcol OVERdoors require a minimum of critical materials and are built to exacting standards which assure long life and trouble-free operation. Thousands of successful installations of large Barcol OVERdoors are to be found in all parts of the country. For engineering details and specifications to suit your needs, consult your Barcol representative.



BARBER-COLMAN COMPANY

104 MILL STREET • ROCKFORD, ILLINOIS

SALES, INSTALLATION, AND SERVICE REPRESENTATIVES IN PRINCIPAL CITIES



SHELDEN LAND CO.
 25121 PLYMOUTH ROAD
 REFORD 4710
PLYMOUTH, MICHIGAN

February 20, 1942

DETROIT OFFICE
 1212 BURL BUILDING

Curtis Companies Incorporated
 Clinton, Iowa
 Gentlemen:

We are sending you under separate cover a number of photos showing exterior and interior shots of our Rosedale Gardens project also a project recently completed in which we built a group of houses of the defense home type.

The building of defense homes in groups has become a highly skilled and reputable enterprise. We are endeavoring to build into these defense homes, sound construction, good design and as far as possible the same workmanship and material that go into the more expensive homes. In other words, we are attempting to give the small home buyer a top-notch home at a price he can well afford to pay.

As you know, the homes mentioned above have been equipped with Curtis Silentite windows and Curtis Mitertite casings and these quality products have proven to be a great help in our disposing of these houses so quickly. I know you will be glad to hear that we have found it possible to use Curtis Silentite windows and Curtis Mitertite trim even in our smaller homes and consequently we are specifying your materials in a project of some 200 homes in the defense classification, selling complete with lot from \$4500.00 to \$4650.00.

Our organization feels it can be very helpful during this period by doing our part in building a small house of architectural distinction, soundly constructed on a well located lot, economical to operate and a readily saleable investment.

We would like to take this opportunity to thank your Company and particularly its representatives in the field for the cooperation they have given us.

Yours very truly,
 SHELDEN LAND COMPANY

By *Ch. Nelson*

CCW/w



Another view of the Rosedale Gardens Project

OTHER CURTIS-EQUIPPED PROJECTS

Here are other large housing projects in which Curtis Silentite Windows and Curtis Stock Architectural Woodwork are guarding quality and speeding the job:

- Baltimore, Md.
- Wheeling, W. Va.
- Tulsa, Okla.
- Williamsport, Penn.
- Amarillo, Texas
- Boise, Idaho
- Yakima, Wash.
- Atlanta, Ga.
- Canfield, Ohio
- Salt Lake City, Utah
- Cuyahoga Falls, Ohio
- Spokane, Wash.
- Columbia, S. C.
- Indianapolis, Ind.
- Arlington, Va.
- Wichita, Kans.
- Burlington, Iowa



WHY SO MANY DEFENSE HOUSING PROJECTS

Choose **CURTIS**

THIS letter speaks for itself. It shows why Curtis Woodwork and Curtis Silentite Windows are being chosen for defense housing projects throughout the country by builders who want to put *top-notch* value into low-cost homes. Let us give you full details about Curtis Woodwork and Curtis "on time" service. Mail the coupon.



CURTIS COMPANIES SERVICE BUREAU
 Dept. AB9W, Curtis Bldg., Clinton, Iowa
 I want to know more about how Curtis Woodwork and Curtis Silentite Windows can serve me in defense housing.

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

War Housing Not A Step-child

But In Materials "We Get the Real Impact of the War," Says Housing Chief

THE GOVERNMENT'S program for production of war housing still calls for the building of 270,000 dwelling units in the twelve months immediately ahead by private enterprise and private financing. John B. Blandford, Jr., administrator of the National Housing Agency, makes this clear in his first major public address, given at the recent annual meeting of the Metropolitan Chicago Home Builders Association.

Expressing appreciation of the work home builders through their national organization are doing in constant conference with government officials to find ways for meeting war-period difficulties, Administrator Blandford, and Earle S. Draper, now deputy commissioner of FHA, who also addressed the dinner meeting of 1,400 operative builders, emphasized the necessity of

limiting all new housing construction at this time to the needs of in-migrant war workers, and the necessity that approximately 50 per cent be rental housing. They underlined as No. 1 problem the problem of materials, saying, "We are doing and shall do everything we can to get materials to the builder."

Mr. Blandford said in part: "Our task is to meet war need and only that need. Best estimate of the War Manpower Commission is that we shall have 1,600,000 in-migrant war workers to house within the next 12 months. We estimate that nationally we can absorb approximately one-half of the in-migrants in existing housing. Our program contemplates four general types of housing: dormitories for single workers; family dormitory apartments; temporary family dwelling units; family homes permanent in character wherever such units can be absorbed into the community. There we ask that private enterprise and private financing take over and do as much of the job as they possibly can.

"The materials situation is all-absorbing and most important. Here we face reality in all its darkness, get the real impact of the war.

"A few months ago housing was a step-child. On thousands of units of partially-completed housing work had to be delayed, suspended. Today the situation is a bit better. Housing is getting a hearing. WPB and NHA policy states in so many words that war housing is essential and that the materials for it must be made available. With this co-operation we are getting speedier processing of products, we are getting higher priorities and new procedures. We have gotten relief from the lumber order and gradually there is evolving smoother and, we hope, more effective procedures.

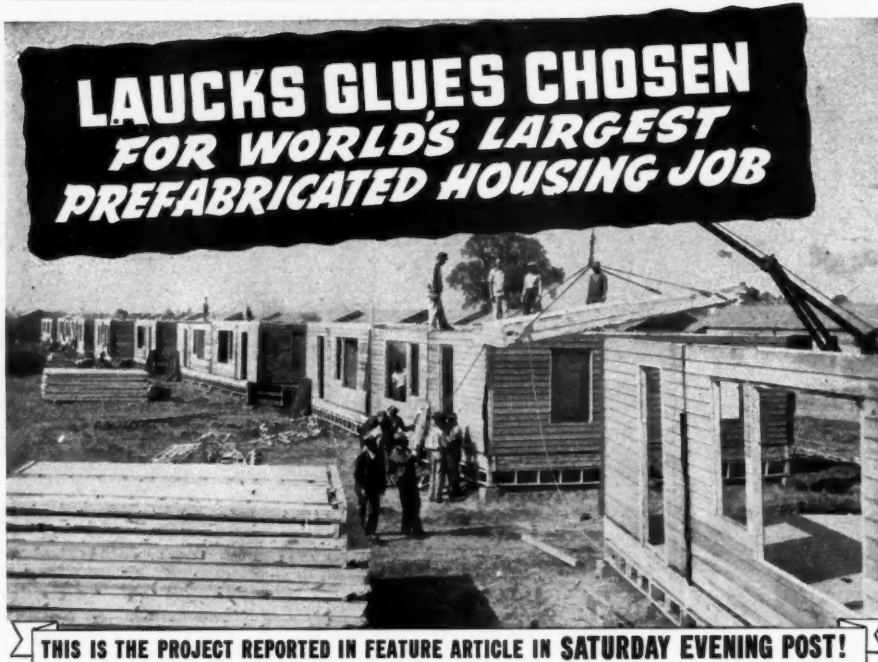
Family Units Needed

"We have fought the battle of the barracks. There have been those who urged that all workers could be housed in dormitories or barracks. That theory is not supported by our previous war experience. And it is not supported by Army and Navy men in the field who have to meet production problems, or by plant managers. There are workers who for reasons good to them bring their families with them to the new job. Those workers must be provided with at least adequate family accommodations. As we draw off the younger workers and the men without families into war service, as we look forward to a possibly long pull, it may be that the proportionate need of family accommodations will increase. The policy of providing some reasonable proportion of family accommodations is one that we should adhere to unless we get down to the very bottom of the barrel.

"It is our present policy and practice to feel that where there is a permanent community need and where there are the materials for the job we should not waste those materials but should build the dwelling units.

"Presently family dwelling units built out of public funds are using only about twenty-five hundred pounds of critical materials per house, a figure which I am told is about one-fourth of the amount used in pre-war housing.

"Some day this war will be won. Surely one of the principal tasks of post-war America will be the re-building of our cities. Housing will play a major part in that effort—physical and economic. We shall face that task a bit wiser because of technological advantages born of pressure of compulsion working upon our national store of ingenuity. We shall face it with sights raised and a new concept of a total, all-out approach to housing."



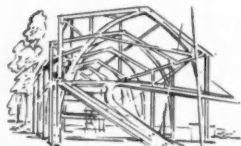
THIS IS THE PROJECT REPORTED IN FEATURE ARTICLE IN SATURDAY EVENING POST!



100 LAUCKS GLUE GUNS WERE USED ON THE PORTSMOUTH PROJECT



WOOD AND LAUCKS GLUE LAMINATED ARCHES FOR ARMY HANGAR



LAUCKS GLUE LAMINATED ARCHES FOR U. S. ARMY CHAPEL

BUILDING MODERN WARTIME houses calls for shortcuts in construction. Laucks Glues provided one of those time-saving, money-saving shortcuts at the mammoth Portsmouth, Virginia, Housing Project.

Barrett and Hilp, contractors, used 199,000 pounds of Laucks Construction Glue on the 5000 homes. This glue was used to affix the Homasote panels and plywood wallboard to the framing members—speedily and economically.

Investigate how Laucks Construction Glues can save time, money and critical materials on your jobs—in laminated arches or beams, in prefabricated and all types of dri-built construction with plywood and wallboard, in farm structures, etc.

For information, write Laucks, where 20 years' laboratory research and practical experience guarantee the right use of the right glue.

I. F. LAUCKS, Inc.

*Seattle—911 Western Ave. Chicago—6 No. Michigan Ave.

*Los Angeles—859 E. 60th Street

*Portsmouth, Va.—Commerce and Broad Sts.

*I. F. Laucks, Ltd.—Granville Island, Vancouver, B. C.

*FACTORY LOCATIONS. ALSO AT LOCKPORT, N. Y.

Don't forget, LAUX REZ, the pioneer resin sealer and primer, protects wood as rust-proofing protects metal.



LAUCKS CONSTRUCTION GLUES

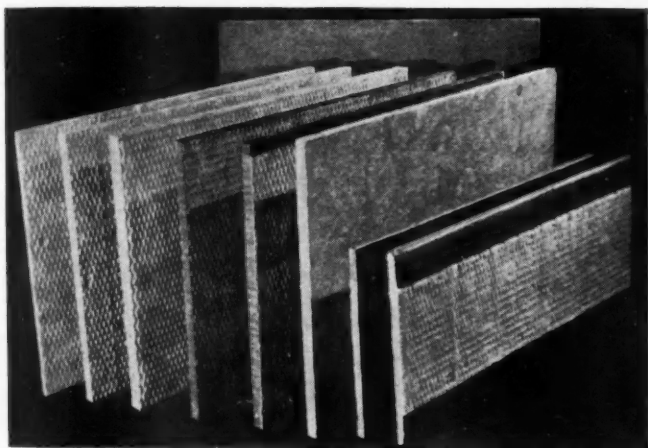
Consult LAUCKS—America's Glue Headquarters

TRENDS in Equipment and Building Materials

Fiberglas OC-9 Board Is Versatile Product

WITH A DENSITY of nine pounds per cubic foot and considerable rigidity, Fiberglas OC-9 Board, a new product of Owens-Corning Fiberglas Corporation, Toledo, Ohio, is suitable for use as an economically-priced acoustical material without further treatment. It can be painted on the job or before application.

When various surfaces are applied to Fiberglas OC-9 Board many new possibilities are offered. Because of the fireproof and inorganic qualities of the material, it has already found its way into uses which enable it to conserve metal.



TYPES of OC-9 Board; l. to r., three-quarter inch, one inch, one-and-a-quarter inch, asphalt one side, reverse of same board, sanded one surface, paper-wrapped roof deck insulation. Board in background is painted with non-bridging casein base paint.

Sandwiched between layers of plywood, hard board, asbestos cement board, and other stiff materials, OC-9 Board offers possibilities for both exterior and interior partition work in construction. The quality of fire protection has not previously been combined with an inorganic, moisture-resisting material in a similar manner.

New Product for Fighting Magnesium Fires

THE Philip Carey Mfg. Company, Lockland, Cincinnati, Ohio announces the timely development of a product for reducing the losses incident to magnesium fires. The new product is called Carey MX Granules.

Due to the vastly increased use of magnesium, especially in plants producing military material, magnesium fires and explosions have become relatively frequent. Owing to the high temperature at which magnesium burns, around 3,000° F., such fires are extremely hazardous, as well as entailing serious losses of the metal itself.

Extinguishing magnesium fires presents an unusual problem, since they cannot be dealt with as ordinary fires. Quoting a recent U. S. Bureau of Mines Bulletin, "Application of water, carbon tetrachloride, carbon dioxide, foam and other common extinguishing agents on magnesium fires generally speeds up the rate of burning rather than stopping the fire; in fact, in some cases use of these agents may result in violent explosions or in the emission of hazardous gases."

It is claimed by the manufacturer that control of magnesium fires with MX Granules is simple and effective. Tests are said to show that, when spread over the fire, these granules soften, and seal the burning magnesium with an air-tight blanket, cutting off the oxygen supply and quickly extinguishing the fire. The same principle and methods apply also, and with equal effectiveness, to extinguishing magnesium incendiary bombs.



Weldwood Utility Paneling makes strong, rigid walls. With nailed and glued invisible butt joint it forms an ideal base for paper or paint.

SMOOTH, RIGID WALLS ... quickly built with WELDWOOD*

Big, easily handled panels save precious time and labor, assure strong, enduring construction.

Flat, smooth walls with invisible butt joints are quickly erected with Weldwood Utility Panel and provide a surface that does not grain-raise or check. It forms an ideal base for paint and paper . . . or can be finished natural, with or without staining.

For rich natural wood finishes in Oak, Mahogany or Walnut, offer the owner Weldwood De Luxe Paneling.

Weldwood Utility and De Luxe Paneling are strong, durable, and split-proof . . . guaranteed for the life of the building when properly installed. Made in stock size panels up to 4 x 8 ft., and carried in conveniently located branch warehouses, they are available at short notice.

Get quotations on Weldwood from your lumber dealer. For large illustrated catalog write to the nearest branch warehouse listed, or write to Main Office, New York.

NEW PLASTIC GLUE

Weldwood Plastic Resin Waterproof Glue . . . makes strong, permanent joints. Readily mixed with cold water. Available in convenient sizes, 1 1/8 oz. cans up to 100 lb. drums. Literature, FREE sample on request.

WELDWOOD UTILITY AND DE LUXE PANELING

**Name formerly applied to Waterproof Weldwood only, now family name of all plywood products made by United States Plywood Corporation.*

UNITED STATES PLYWOOD CORPORATION, 616 West 46th Street, New York, N.Y.
World's Largest Producer of Plywood

Branch Offices and Warehouses in Baltimore, Boston, Brooklyn, Chicago, Cincinnati, Cleveland, Detroit, High Point, Los Angeles, Newark, New York, Philadelphia, Rochester, San Francisco, Seattle.



conserving steel,
saving transportation,
expediting war jobs



On many types of war construction, concrete is helping meet three pressing requirements:

STEEL IS CONSERVED. Concrete provides rigid, durable, fire resistant construction with minimum use of steel. Many structures, such as floors on ground, need none. Portland cement water paints save lead and zinc.

TRANSPORTATION SAVED. Concrete imposes a minimum burden on transportation facilities, since the bulk of the material is usually found locally.

TIME SAVED. Simple methods, widely available concrete workers and local materials are helping to expedite jobs.

Our technical staff is available to assist designers and builders of large-scale housing or other major war construction jobs. Do not hesitate to call on us for concrete data that will help expedite work, reduce reinforcing steel or solve other war concrete problems.

PORTLAND CEMENT ASSOCIATION
Dept. 9-3, 33 W. Grand Ave., Chicago, Ill.

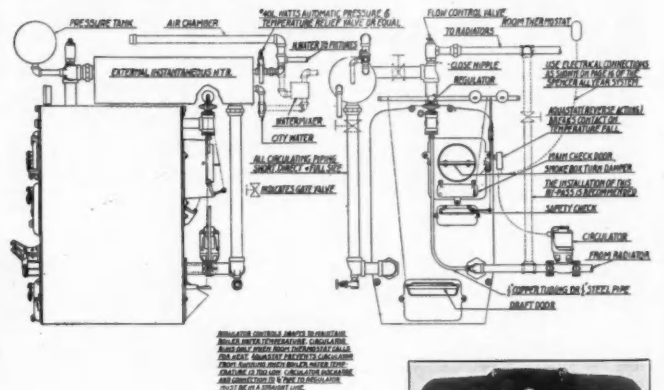
Trends in Equipment and Building Materials

(Continued from page 67)

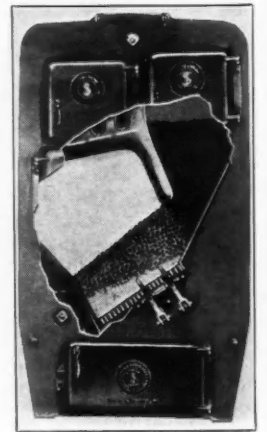
Spencer Offers "All-Year System"

WARTIME conservation of materials and restrictions upon several forms of automatic heat have focused attention upon developments such as the "all-year system" recently perfected by the Spencer Heater Division of The Aviation Corporation.

The basic principle of the Spencer magazine feed heater remains the same, but an important step has now been taken in broadening the usefulness of these installations in dwellings, apartment houses and commercial and public buildings. As a result of exhaustive laboratory research and actual field tests, all-year domestic hot water service is now available with Spencer magazine feed heaters on forced circulation hot water installations as well as on steam or vapor systems. In the past, this all-year hot water service has been supplied satisfactorily only with the more expensive forms of automatic heating, such as oil, gas or stoker-fired plant, all of which are now under War Production Board limitation orders.



RIGHT, small residential size of Spencer Magazine Feed Heater; above, diagram of Spencer all year system for hot water.



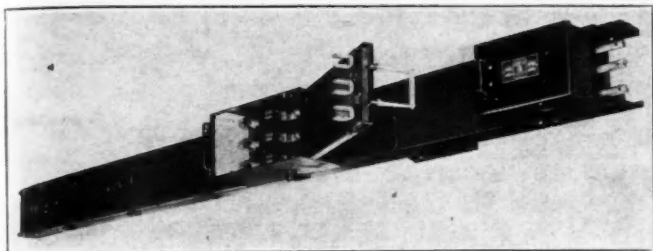
Spencer engineers point out that the "all-year system" can be installed at low cost and also that it burns low cost fuels, such as No. 1 Buckwheat or Pea Anthracite, of which there are ample and unrestricted supplies, or small size by-product coke. Savings are substantial by comparison with operating costs for oil, gas or electric water heating systems.

Saflex Plug-in Duct Offered

SQUARE D Saflex Plug-in Duct has just been released by the Square D Company, Switch & Panel Division, Detroit, Michigan. It is an up-to-date method of supplying current or electrical energy to the many outlets demanded in modern industry.

This demand for electrical energy in today's industrial plant grows increasingly greater. Power to run the industrial machine must be had at a multiple of locations and must be had quickly. Original installations of electrical outlets sometimes will not provide sufficient, prompt accessibility for this ever-changing and increasing demand.

Square D Saflex Plug-in Duct provides this accessibility of electrical energy in a most convenient and economical manner.



NEW Square D Saflex Plug-in Duct.

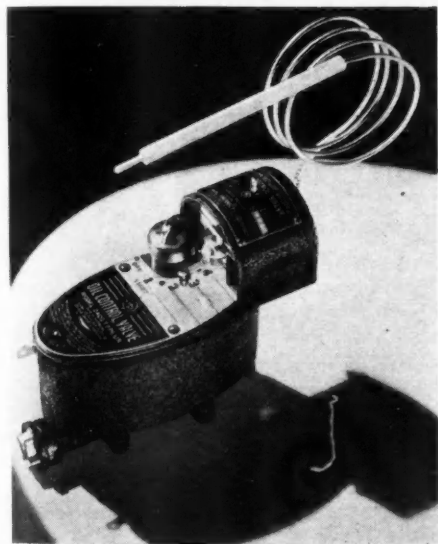
Its original installation is not prohibitive in cost, and its flexibility will provide for easy additions in the case of unforeseen requirements.

This new Duct is available in capacities of 250, 375, 500, 750 and 1000 amperes, in 2 and 3-wire single phase, 3-phase, and 4-wire service.

Square D Plug-in Duct utilizes round, tubular buses for 250, 375 and 750 capacities, and solid, round bus bars for 500 and 1000 amperes. These round bus bars are contained in a steel housing which is produced in standard 10' lengths. Six openings are provided on each side of a 10' length of Saflex duct and will accommodate 12 plug-in units.

New Control for Oil Burners

DESCRIBED as an important aid to fuel conservation in wartime heating, a new temperature limit control has been announced by the Automatic Products Company, 2450 North Thirty-second



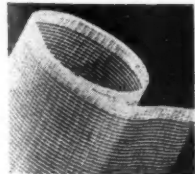
TEMPERATURE Limit Control.

Street, Milwaukee, Wis., for use with floor furnaces, central heating units and heaters using the vaporizing type of oil burner. It assures controlled heat at a minimum of fuel, an important factor in meeting wartime heating needs on new housing projects and military installations.

This new A-P Limit Control consists of a charged thermo element, capillary tube, throttle and shut-off mechanism, and safety constant level oil control valves. The thermo element is placed either in furnace bonnet, or under floor grill, on floor type furnaces. Here the temperature in the bonnet or grill, acting through the thermo element, accurately controls high or low oil flow to the burner, or in case of abnormally high temperature, shuts off the flow of oil by positive spring force.

Protects Against Flying Glass

CECO Safety Cloth, a new product of Colloid Equipment Co., Inc., 50 Church St., New York City, is a strong 10 mesh cotton cloth with a tough, transparent, plastic film. It is available in 100 yard rolls 28" wide, totalling 702 sq. ft.



CECO safety cloth.

This new cloth was developed especially for two uses—

1. To provide either a permanent or emergency "flexible" window for buildings of any kind, without the use of priority metals and materials.

2. To be used as a protection upon the inside of glass windows, to reduce the danger to persons or property, should the window be shattered, by bombing, for instance.



Suggest pine storm sash to slash fuel consumption

Heating homes will be a major problem in many parts of the country this year. Pine storm sash will help to reduce fuel consumption in these areas. All over the country, wherever winter winds blow, pine storm sash and storm doors will mean greater comfort and economy for home owners. Western Pines are splendid for this purpose—light in weight, easy to mill and work, strong and tough fibred.

THE WESTERN PINES WILL DO YOUR NEXT JOB BETTER

WESTERN PINE ASSOCIATION

YEON BUILDING, PORTLAND, OREGON



*Idaho White Pine *Ponderosa Pine *Sugar Pine

*THESE ARE THE WESTERN PINES

Don't Wait For FREEZING Weather
PROTECT CONCRETE
 AT **50° F.**
OR LOWER!

Do you realize how much a drop in temperature to 50° F. or below, slows the development of strength of portland cement concrete? The reduction in strength is so great that special provisions should be made when concrete is to be placed at temperatures of 50° F. or lower!

Many Federal, State and private specifications call for the addition of calcium chloride whenever temperature drops to 50° F. or lower. This offsets the effects of lowering temperature, provides greater ultimate strength, quicker finishing, increased workability, denser, more waterproof concrete—all resulting in savings of time, labor and money.

Solvay Calcium Chloride does not alter in any way the normal action of portland cement. All facts regarding advantages have been substantiated by field work and research reports by the National Bureau of Standards, Portland Cement Association, American Road Builders Association, Highway Research Board.

Fill in the coupon today for the FREE BOOK which gives facts regarding tests, as well as other important construction data. USE THIS COUPON!

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

SOLVAY SALES CORPORATION
 40 Rector Street, New York, N. Y.
 Gentlemen: Kindly send me a free copy of your booklet "Calcium Chloride and Portland Cement."

Name

Affiliated with.....

Address

City State..... 34-942

Trends in Equipment and Building Materials

(Continued from page 69)

Corrugated Asphalt Siding Offered

CERTAIN-TEED Products Corp., Chicago, has developed corrugated asphalt siding, a non-critical, emergency material, to take care of numerous building needs where corrugated steel sheets normally would be used. This new corrugated siding consists of two sheets of heavy felt, each soaked in a recently developed resino-bituminous saturant, bound together with a high melting-point asphalt adhesive and corrugated. Corrugated Asphalt Siding is moisture-proof, and the corrugations will not flatten out during summer weather, either in storage or after application due to the high melting-point heat-resistant resin used in the saturating process.



CORRUGATED asphalt siding.

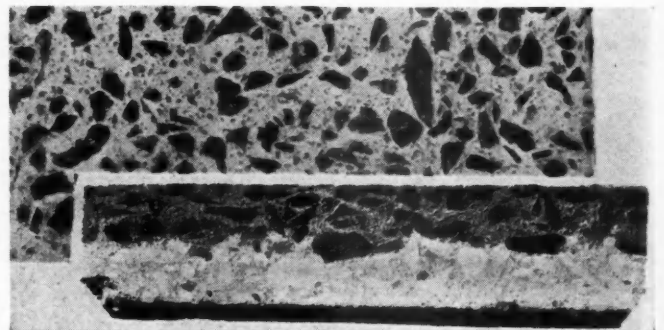
Corrugated Asphalt Siding has many wartime applications in industry, in commercial buildings and on farms. Suggested use is for covering outside walls of temporary structures of all kinds, for factory buildings, warehouses, storage sheds, machine sheds, for dairy barns, poultry or livestock buildings, drying sheds, machine sheds, or temporary grain storage. The life of corrugated asphalt siding can be indefinitely prolonged by coating with asbestos roof coating immediately after application, and every few years thereafter, depending on climatic conditions.

New Non-Slip Flooring

DESIGNED to produce non-skid floors, either wet or dry, Walter Maguire Company, Inc., New York City, is offering Cortland Emery Aggregate, a mixture of graded large and small, sharp, hard particles of mineral emery.

For application, the Cortland Emery Aggregate is mixed with portland cement and water for the floor topping. Even when an emery aggregate floor is wet, it provides a firm non-slip gripping surface. This quality improves with wear, the floors actually becoming safer with use, because, as the rough emery particles are exposed by wearing away of the cement, their gripping action improves. Where loads are moved by hand-trucking operations, much greater pushing traction is obtainable.

In addition, this flooring greatly increases the load-bearing qualities. A Cortland Emery Aggregate floor mixture specimen will support a load of more than 14,000 pounds, while tests indicate that a standard test specimen of ordinary concrete floor mixture will break under a load of 6,200 pounds. Heavy, loaded trucks will not destroy the Cortland Emery Aggregate surface and the hardness of the emery particles resists wear.



VIEWS showing surface and cross section of emery aggregate floor.

NEWS of the MONTH

Hoo-Hoo Convention, Milwaukee, Sept. 9-11

SECRETARY B. F. Springer announces that the 51st Annual Meeting of the International Concatenated Order of Hoo-Hoo, famous good fellowship society of lumbermen and their friends, will be held at Hotel Schroeder, Milwaukee, Sept. 9, 10 and 11. Members and prospective members are invited, and a big turnout is expected.

Registration will start Wednesday morning, Sept. 9, and the program will get under way at 10 o'clock with opening address by D. S. Montgomery, Supreme Snark of the Universe. Reports of the officers and standing committees, noonday luncheon, and an afternoon business and speaking session round out the serious work of the first day.

A big Concat (initiation of new members) will be staged at 4:09 in the Green Room, 5th floor, Schroeder Hotel, to be followed at 6:39 by a buffet supper and entertainment for members only.

The Thursday program gets under way at 10 o'clock with a report of the Ritual Committee, and addresses by Arthur A. Hood of Johns-Manville, chairman of the Educational Committee of Hoo-Hoo, and by C. P. Winslow, director of Forest Products Laboratory, Madison, Wis.

A buffet luncheon will be served at the Schlitz "Brown Bottle," with transportation provided for out-of-town members. The closing business session will also be held at the "Brown Bottle."

Dinner dance and entertainment will fill up the evening at the Schroeder Hotel, and Friday will be given over to directors' meeting, luncheon and golf at Tuckaway Country Club, Milwaukee.

Steinbauer Heads Door Manufacturers

THE APPOINTMENT of Wilton M. ("Ty") Steinbauer as Secretary-Manager of the National Door Manufacturers Association has been announced by its directors in Chicago.

Mr. Steinbauer, who has won recognition for his work in the lumber and millwork fields, is also an attorney and was at one time associated with the Lumber Code Authority in Washington. He is a member of the District of Columbia bar and has appeared before various Federal bureaus and commissions. He served for the past six years as Secretary-Manager of the National Association of Woodwork Jobbers. A native of Minnesota, Mr. Steinbauer now lives in Evanston, Illinois.



TY. STEINBAUER

The new executive will take an active part in NDMA's campaign on National projected wood sash and in the handling of the new water repellency and toxic preservative treatment.

"This is a period of great opportunity in the millwork industry, not only to serve the war effort, but also to prepare for the post-war market," said Mr. Steinbauer. "The constructive policies of the NDMA will be continued, and expanded to the benefit of manufacturers, jobbers, dealers and trade factors."

Devlin Heads Bonafide Sales

FRANK E. DEVLIN has been appointed Director of Sales-Building Products, Bonafide Mills, Inc., 295 Fifth Avenue, New York, N.Y. He is widely known in the roofing industry, having been associated with the Barrett Division of the Allied Chemical & Dye Corporation for many years.

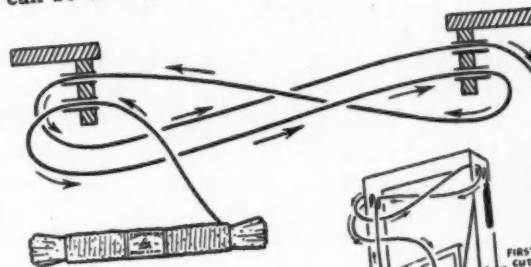
Bonafide recently purchased the roofing plant of the Barber Asphalt Corporation at Perth Amboy, New Jersey, and Mr. Devlin will be in complete charge of merchandising all products of this plant, which will continue the full line of Barber Roofing Products, merchandising them under the well known Barber patents and trade marks.



FRANK E. DEVLIN

Note

Here is another suggestion from one of our builder friends. Perhaps it is old to you, but we pass it along thinking it may be helpful — saves time because hank is handled only once — saves cord because it can be exactly cut to required length.



The diagram shows method of running cord to all four pulleys in one operation direct from the hank. Tie weight to end of cord. Hold sash in place and note where, on pulley stile, knot will be when sash is lowered. Raise weight to top, allow enough cord for knot, then cut cord and knot it. The other end of cut cord then becomes weight end at other side of sash. From there on, the same procedure is followed.

FOR hanging double hung sash the principle of balanced weight — through cord, weight and pulley — is so mechanically simple, positive and permanent, that even the non-mechanical minded person can understand why it is so trouble-free and so permanent in adjustment. There is nothing to get out of order. With good sash cord years of trouble-free service is assured. Samson Spot Sash Cord is the standard of quality — identified by the Colored Spots (Reg. U. S. Pat. Off.)

SAMSON CORDAGE WORKS BOSTON, MASS.



SAMSON SPOT

SASH CORD

NEWS OF THE MONTH*(Continued from page 71)***Northlich to Washington**

W. R. NORTHLICH, formerly an account executive with The Buchen Company, Chicago, has been transferred from the Toledo general office of Owens-Corning Fiberglas Corporation to the company's Washington, D. C., office. Mr. Northlich joined Owens-Corning in January, 1942.

Possessing a broad background of sales, advertising and industrial experience, Mr. Northlich has also served as advertising and sales promotion manager of the Wood Conversion Company, St. Paul, and as assistant advertising manager of the Celotex Corporation, Chicago.

M-H Equips New War Department Building

THE new War Department Building at Arlington, Virginia, completely air conditioned, is controlled by Minneapolis-Honeywell pneumatic equipment. It is the largest single temperature control contract in history. The new War Department Building is another architectural and scientific "monument" in which M-H products and engineering have played an important role. This Pentagon will be one of the largest buildings

in Washington. Its periphery of one mile is made up of five sides, each 1/5 of a mile in length. Each section is built separately and is being occupied as soon as finished. (See below.)

The air conditioning systems cool, circulate and filter the air in the summer; circulate and filter in the heating months. Heat is supplied by window radiators circulating hot water. The temperature of the hot water is determined by the intensity of the sun, which is measured by equipment furnished by Minneapolis-Honeywell.

Charles S. Leopold, Philadelphia, is the consulting engineer; Mehring and Hanson, Chicago, and Baker Smith & Co. Inc., New York, are the heating and ventilating contractors.

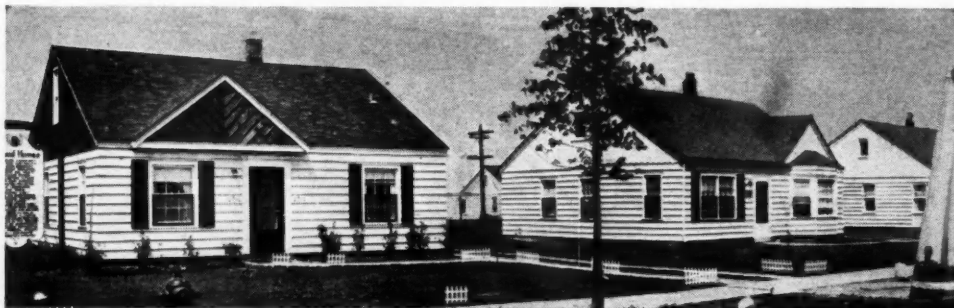
Iverson Joins Vermiculite Institute

APPPOINTMENT of Dan J. Iverson as engineering consultant has been announced by T. H. Coulter, Secretary of the Vermiculite Research Institute, Chicago. He brings to the Institute a background of wide and varied practical experience in engineering design and construction, in addition to his trade association activities.

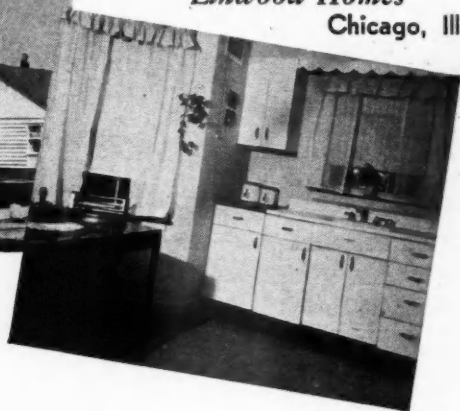
Until July 1 he was chief engineer for the Metal Lath Manufacturers Association.



ONE of the five faces, each 1/5 mile long, of the War Department office building at Arlington, Va.



HALVORSEN'S
Linwood Homes
Chicago, Ill.



*"Tile-Text floors help sell
Defense Homes"*

Says F. H. HALVORSEN
Successful Chicago Real Estate Builder

This experienced builder of defense homes found Tile-Text the answer to the flooring problem in these attractive, low-priced homes. Tile-Text was installed there in attractive colors directly over the concrete slab in contact with the ground. All areas except the heating and storage room were floored with this economical, moisture-resistant, durable flooring.

Tile-Text contains no critical materials. It is available promptly, and is installed by thoroughly experienced, approved contractors located in all principal cities and towns throughout the country. Specify Tile-Text for the defense homes you are building; it meets every requirement. Write today for the name of your Tile-Text contractor.

THE Tile-Text Company CHICAGO HEIGHTS
ILLINOIS

Carl Dahlberg Dies

CARL FREDRICH DAHLBERG, 63, prominent New Orleans business and civic leader and brother of Bror Dahlberg of the Celotex Corporation, died suddenly in Atlanta on July 26 while en route from New Orleans to New York on a business trip.

Mr. Dahlberg was president of the South Coast Corporation, one of the largest Louisiana sugar producing companies; vice-president and director of the South Shore Oil and Development Company; director of the Louisiana State Agricultural Credit Corporation, and a member of the Cane and Beet Sugar Packaging Advisory Committee of the Sugar Industry.

Carl Dahlberg, with his brother, Bror, was among the founders of the Celotex Corporation 21 years ago. At that time he moved from St. Paul to New Orleans. As first vice-president of Celotex, he was in charge of the plant there during the early years of the company's growth. For the past ten years he has devoted his time to Louisiana sugar interests.

Death of Frank S. Dunham

IT WILL COME as a shock to many in the water softening industry to learn of the death in Chicago on July 23, of Frank S. Dunham, Permutit Sales Engineer since 1915. Mr. Dunham had been associated with the Permutit Company for approximately 25 years. During this time his helpfulness and fine character endeared him to those with whom he had contact.

Born in Baltimore, Md., on March 8, 1876, he began his engineering studies at the Armour Institute of Technology and completed his work in chemical engineering at the University of Chicago. His early career in engineering began with the Hydrox Corporation of Chicago, which he joined following his graduation from the University. Subsequently, he was a chemical engineer with the Kennicott Company, manufacturers of water softening equipment, until he became associated with the Permutit Company. He remained with the Permutit Company until his retirement in 1940.

"Victory Through Work" Says Bassett

"VICTORY will come through intensive work in both battle and industry," declares G. A. Bassett, President of Gar Wood Industries, Inc., Detroit. "It is imperative that all forces of the United Nations must be fully armed and adequately equipped to fight. A continuous flow of supplies and equipment must keep up to the requirements of the armed forces. It is evident that war and industry are inseparable. War consumes tremendous quantities of materials far beyond the comprehension of the human mind. Part of the gigantic task of winning the war lies with industry—for industry must supply these vital materials and equipment. Victory in battle and Victory in industry call for a far greater effort than ever before. Industry can assure Victory through work—and fighting men need working men."



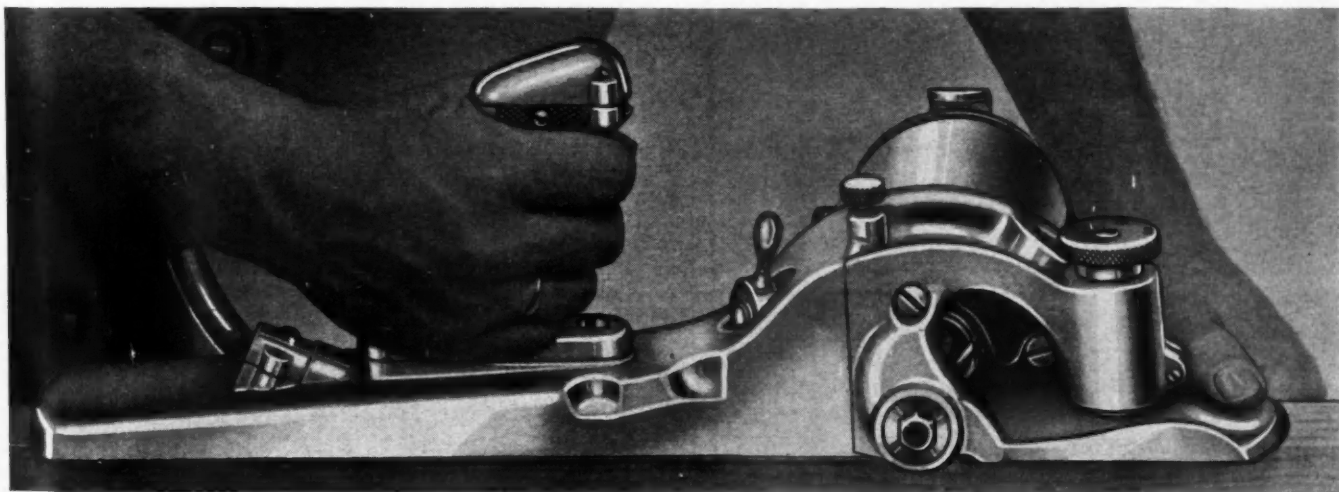
G. A. BASSETT

"Gar Wood Industries, Inc., was among the first group of manufacturers to convert its various plants into war production. Today, the manufacture of Gar Wood war equipment is in 'full swing' and keeping steady pace with the Government's demand."

Barnes Now District Engineer

HUGH D. BARNES, Regional Highway Engineer of the Portland Cement Association in Pacific states for four years and Acting District Engineer in charge of the Los Angeles Office since September, 1941, has been appointed District Engineer. He will direct the work of the Association in southern California, Arizona and southeastern Nevada with headquarters in Los Angeles.

For 15 years before joining the staff of the Portland Cement Association Barnes was employed by the Kansas State Highway Commission in various engineering capacities beginning in 1922.



Fit 3 to 5 times as many doors per day

Yes, you can do it with a Carter J-5 Electric Plane. Doors, Sash, Screens, Storm Windows, Transoms—any job of planing quickly and smoothly to size is a "natural" for this biggest of all Portable Electric Planes, and here's why . . .

- ★ Planes surfaces up to 2-1/2 inches wide
- ★ Quickly set for any depth to 3/16 inches

- ★ Spiral cutter turns 18,000 R.P.M.
- ★ Leaves smooth, true surface
- ★ Makes straight or bevel cuts to 45°

Get this money-maker. You can save enough on one big job to pay for it. Write now for literature and demonstration.

R. L. Carter Division, The Stanley Works, 133 Elm Street, New Britain, Connecticut.

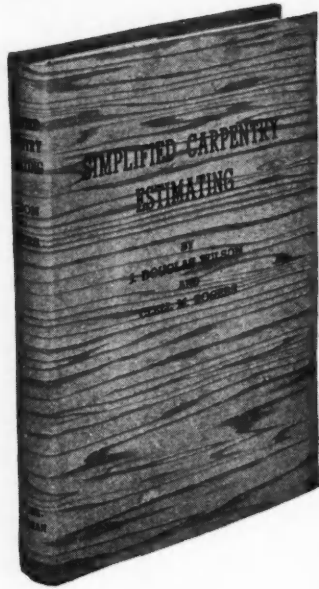
A HIGH SPEED JOINTER, TOO!

Set up the J-5 with the Bench Bracket furnished, and you have a handy jointer, for inside trim, and other light shaping jobs.



CARTER MONEY-MAKING TOOLS

Just
off
the
Press



SIMPLIFIED CARPENTRY ESTIMATING

By J. Douglas Wilson
Head, Building Trades Department,
Frank Wiggins Trade School,
Los Angeles, California

and Clell M. Rogers
Mathematics Instructor, Venice
High School, Venice, California

Based upon the series of articles entitled *How to Estimate Accurately*, which appeared in *American Builder and Building Age* last year, this new book explains the "taking off" of a bill of material for the construction of a frame house. Simple arithmetical methods of accurately estimating all costs are explained step by step.

Chapter Headings

Estimating Fundamentals. Foundation Material. Framing. Exterior Finish. Interior Finish. Hardware. Building Information and Tables. Index.
208 pages, 71 illus., 5 x 7, cloth, \$2.50

Book Department

AMERICAN BUILDER and BUILDING AGE
30 Church Street, New York, N. Y.

NEWS OF THE MONTH

(Continued from page 73)

Added to Shingle Bureau Staff

THE APPOINTMENT of two men to augment the well-known staff of traveling field representatives of the Red Cedar Shingle Bureau has been announced by W. W. Woodbridge, secretary-manager of the shingle association.

Both of the men, C. W. Millard and R. B. Cosper, are natives of Milwaukee and enter the field of red cedar shingle promotion with backgrounds which will prove invaluable to them in their new duties. Their Bureau work will bring them in close contact with many retail lumber dealers.



C. W. MILLARD



R. B. COSPER

Millard has a well rounded background of experience in the real estate, mortgage and general insurance fields. Cosper has a similar background, including insurance, plumbing materials, and sand and gravel association experience.

Pacific-Airmax Corporation Formed

HELEN A. HARTFIELD, president of Pacific Gas Radiator Company, and R. C. Gross, president of Airmax Corporation, announce the merger of Airmax Corporation, San Diego, California, manufacturers of aircraft heating equipment, with Pacific Gas Radiator Company, Huntington Park, California, under the new firm name of Pacific-Airmax Corporation.

"The merger was effected primarily to facilitate and extend the participation of both of the merging organizations in the way of war effort," said Mrs. Hartfield, who continues as chairman and president of the corporation.

"All Airmax products will now be manufactured in the long established, fully equipped metal working plant and foundry of the Pacific Gas Radiator Company at Huntington Park, California. General offices of Pacific-Airmax Corporation will be located at the Huntington Park plant. The arrangement makes it possible to enlarge and speed the production of the essential airplane heating and comfortizing equipment developed by the Airmax Corporation and will, at the same time, speed the war work already under contract at the Pacific Gas Radiator Company."

Builders Offered Kentile Service

TYPICAL of how American ingenuity and enterprise quickly adapts itself to changing circumstances and how manufacturers are offering builders new business opportunities under current conditions is the "cooperation-with-builders" program announced by David E. Kennedy, Inc., 70 Second Avenue, Brooklyn, N.Y.

This 44 year old firm, originators of resilient tile flooring in America, has for the past 15 years devoted the major part of its production to "Kentile," an asphalt tile. Seven years ago its public acceptance reached such a wide field, including its use in thousands of small installations, that the Kennedy Company altered its sales policy by retiring completely from the installation business, devoting itself exclusively to manufacturing, and proceeding to set up a nation-wide organization of independent applying-contractors.

There are now over 1,000 such firms in America and Kentile has become one of the most widely used semi-permanent floor coverings sold. And, since the advent of war, Kentile has enjoyed a greater boom than ever before, not only because of its widespread rise in war plants and government buildings but, also, because it is available, exceptionally cheap, yet colorful and definitely practical, being thereby a primary choice for almost every kind of interior.



KENTILE asphalt tile floor as used in basement recreation room.

Now, recognizing this and realizing that remodeling will be a major interest for almost all builders and that Kentile will thereby be of interest to builders, Kennedy again enlarges its scope of operations by a new "cooperation-with-builders" program.

Now, enterprising builders everywhere, seeking business available under L-41 and possible without the use of critical materials, are eagerly going after floor work and are seeking every new angle that will help them get it.

To help builders do this yet retain the advantages of their applicating-contractor set up, Kennedy suggests that builders and the Kennedy contractors get together. They say "our contractors will be at your service . . . They will work for or with you—any way you want. They will lend you samples to show or will go with you to see your customer, will quote directly to you or your prospect. They will bill you, confidentially, or will bill direct."

Thus the builder acquires a new material to "sell" and a new tool for selling. At the same time he acquires another ally to help him sell. The Kennedy contractors will work with him in going after jobs and Kennedy will supply the builder with colorful advertising material to show which "suggests" new possibilities in interiors. At the same time the builder does not have to worry about the handling of a new material. The floor will be installed by the trained, experienced, reliable, and authorized contractors of the Kennedy company and both efficiency and satisfaction are thereby assured.

Survey Points to Post-War Building

A VAST post-war public demand for better homes is seen by the Chamber of Commerce of the United States in the results of a preliminary survey of consumer markets just completed. The sample canvass is being followed by a nation-wide survey, already under way, as a part of the Chamber's war effort, which is directed primarily to aiding industry in its war production efforts.

"We hope," said Eric A. Johnston, Chamber president, "to ascertain facts that will make easier the huge re-employment task that will follow the ending of the war."

People, as shown in the canvass, want new homes, new automobiles, home improvements and conveniences, electric irons, washing machines, refrigerators and other home conveniences.

Twelve per cent of the families interviewed said they would buy automobiles; 11 per cent want washing machines and 10 per cent mechanical refrigerators. About one in thirty said they would build or buy a new house.

Three out of ten home owners said that they would make repairs and improvements in their homes as soon after the war as possible. Of these, 15 per cent would paint the outside of their houses; 10 per cent want interior decoration; 9 per cent would remodel one or more bathrooms; 7 per cent would modernize their kitchens; 7 per cent mentioned furnaces, oil burners or other heating installations; and 5 per cent asserted they would add rooms, either by remodeling or expansion.

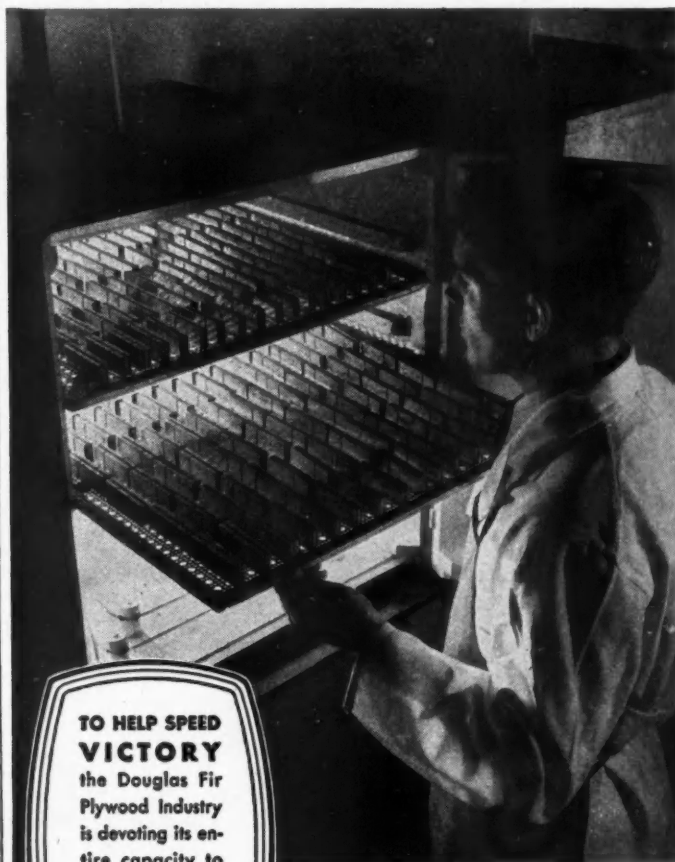
Why you have a personal interest in these tests on Douglas Fir Plywood!

• In the laboratory of the Douglas Fir Plywood Association, hundreds of thousands of tests are on record. A far greater number are still to be made.

The Douglas Fir Plywood produced in every mill is constantly inspected in many ways to make sure that it fully measures up to the high industry standards established in cooperation with the National Bureau of Standards.

At the same time, other research is determining if Douglas Fir Plywood's already high performance can't be increased, even more. Still additional research is being done on glues and similar technological problems, on finishing, on potential uses. Scientific engineering data is being compiled.

Should you be interested in all this? Yes . . . vitally interested! Because the single aim of our extensive research program is to make the Douglas Fir Plywood you buy for post-war housing and other purposes *more useful to you than it has ever been before!* Douglas Fir Plywood Association, Tacoma, Wash.



TO HELP SPEED VICTORY
the Douglas Fir Plywood Industry is devoting its entire capacity to war production. We know this program has your approval.

REMEMBER—there's a grade or type of Douglas Fir Plywood for every purpose. A genuine panel bears one of these "grade trade-marks":

PLYWALL—wallboard grade
EXT-DFFA—waterproof type
PLYSCORD—sheathing grade
PLYPANEL—cabinet grade
PLYFORM—concrete form grade

DOUGLAS FIR PLYWOOD
Real Lumber
**MADE LARGER, LIGHTER
SPLIT-PROOF
STRONGER**

"A PRODUCT OF AMERICA'S ETERNALLY REPLENISHING FORESTS"

NEWS OF THE MONTH

(Continued from page 75)

Building Costs Continue Upward

COSTS of building a standard 6-room house continued to rise during the month of June, showing an increase of 0.6 per cent over May, Federal Home Loan Bank Administration economists reported on August 1.

This sent the cost index—based on the average month of 1935-1939 as 100—to a new high of 123.5, nearly 10 per cent above June, 1941. The materials cost increase was 11 per cent during the twelve months while labor costs rose 7.8 per cent.

"The labor used in the construction of this house showed the greater increase for the month—1.1 per cent over May—and now stands 28 per cent above the 1935-1939 average month," said the report. "Material prices advanced fractionally and the index for June was 21 per cent higher than in the base period."

Wallace Forecasts Progress

THE role of the Masonite Corporation in civilian and war industries was told recently by R. G. Wallace, vice-president and general manager of the company.

Masonite is operating at full capacity, according to Mr. Wallace, because of the strong national demand for alternates for steel, aluminum, rubber, cork, asbestos, and other scarce materials. At the same time the company is exerting every effort to supply essential civilian needs.

"Whenever the supply of a commodity grows short, manufacturers turn to a more available replacement," Mr. Wallace said. "Our products are made of Southern pine and hardwoods. We do not depend on imports. We have increased production at the Laurel, Miss., plant by more than 30



R. G. WALLACE

per cent and are operating on a 24-hour day basis seven days a week."

Presdwood, the basic Masonite hardboard product, is made by exploding wood chips under heavy steam pressure in an industrial gun. The fibre-mass that results is pressed into grainless hardboards that are smooth, dense, and highly moisture-resistant.

"The Government is using Masonite boards for Army Signal Corps trailer exteriors, tank linings, ambulance interiors, airplane die-stock, mess tables, barracks, field headquarters, and arsenal shell holders," Mr. Wallace said. "In civilian production the boards are replacing tons of steel in the manufacture of war-style refrigerators, filing cabinets, office equipment, furniture, and many other new articles. They are also widely used in numerous types of military and essential private housing projects."

"Manufacturing under wartime conditions stimulates permanent industrial progress. For example, prior to World War I, 95 per cent of America's dyes were imported. Now we produce 90 per cent of our dye requirements."

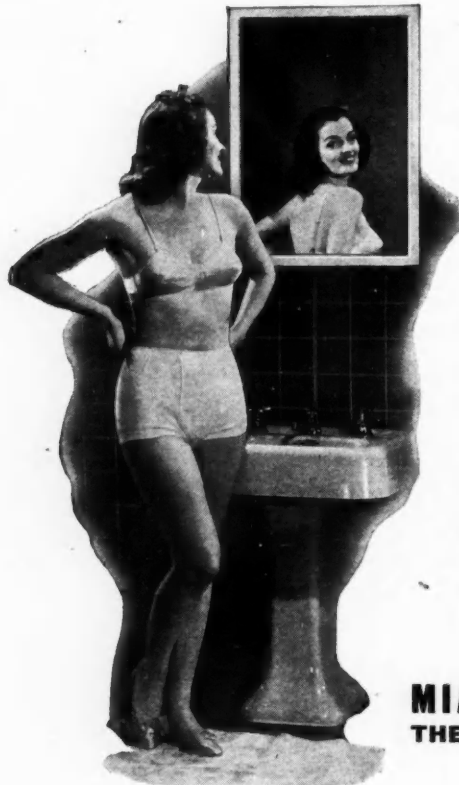
"Times like these open new fields for our most abundant natural resources. With imports restricted, designers are making greater use of the versatile materials close at hand. Industry's solutions to problems of the present day are helping win the war, and at the same time moving the nation nearer to economic self-sufficiency for the years that lie ahead."

"Armored Texture" Shingle Announced

DEVELOPMENT of an "armored texture," designed to enhance the appearance and increase the weather resistance of its line of medium priced "Tite-On" asphalt shingles, has been announced by The Ruberoid Co., New York City.

One important effect claimed for the new "armoring" process is that it accentuates the wood-grain appearance of the shingle by making the grain lines more pronounced. Another is that the grain lines, instead of being black, are "armored" with colored mineral granules selected to provide a pleasing color contrast with the body of the shingle. These results have been obtained through the development by Ruberoid engineers of an improved manufacturing process.

"What! WOOD BATHROOM CABINETS MADE BY MIAMI-CAREY?"



That's right—Miami Wood Cabinets are here! And they're the finest, most complete wood cabinets ever produced.

True to the Miami-Carey tradition, these cabinets are complete in every detail—no doors to hang and fit; no hardware to buy and fit; no mirrors to hang; no painting to do; no shelves to make—even the four installing screws are furnished. Frame around mirrors is STEEL (by permission of War Production Board), finished to match the cabinet—construction that guarantees a door that will FIT and not warp, shrink or swell.

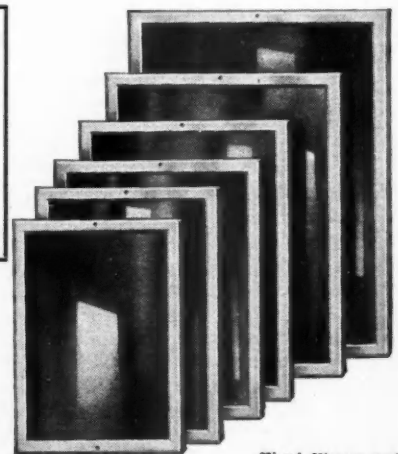
Whatever your cabinet requirements, you may continue to specify MIAMI with every assurance that these cabinets will prove worthy of the name. Address Dept. AB for details.



No. 103W

MIAMI Metal
Bathroom Cabinets
Available for
IMMEDIATE
SHIPMENT

Kiln dried hardwood; joints double locked, glued and tenoned; door back, moisture proof composition board; steel mirror frame; finished in three coats of baked-on white enamel.



Miami Mirrors available in six sizes. No. 1 plate glass; backs of Carey Utilizit board; hardwood frames finished in three coats of baked-on white enamel.

MIAMI CABINET DIVISION
THE PHILIP CAREY MFG. COMPANY
Dependable Products Since 1873
MIDDLETOWN, OHIO

Start War on Fuel Waste

A MEETING sponsored by the War Service Committee of the American Society of Heating and Ventilating Engineers, held in New York City on July 21, considered the following facts and factors:

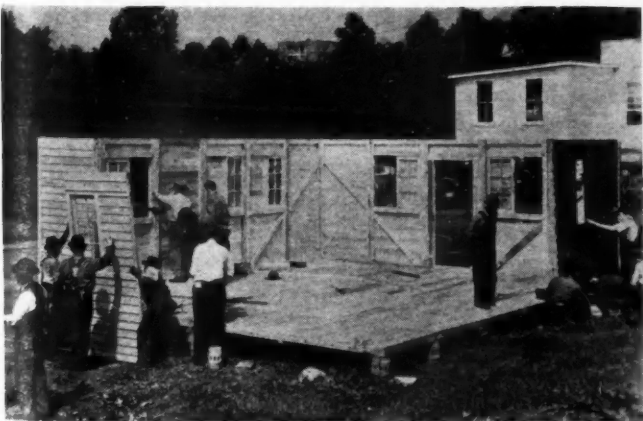
1. There were (at that time) only 90 days until the heating season starts in the areas that are considered critical.
2. Shifts of population and expanded building construction due to war industry employment will require delivery of more fuel for the coming season than previously in many areas.
3. Many existing plants now burning oil formerly burned coal and can be converted.
4. The greatest reduction in oil consumption can be effected by conversion of large plants burning in excess of 5,000 gallons annually.
5. Some conversions of residential units are feasible but will take more time, material and labor.
6. Correct operation of heating systems and better inspection and maintenance will increase efficiency of existing plants.
 - (a) Changes of operation include:
 - (1) Lower maximum temperatures and accurate temperature control to avoid overheating.
 - (2) Shorter operating hours and partial night shut-off.
 - (3) Splitting of systems to permit different operating schedules for different portions of the building.
 - (4) Cutting off rooms or upper floors of buildings.
 - (b) Increase in efficiency to be obtained by:
 - (1) Immediate adjustment and cleaning of equipment and periodic inspection of boilers, furnaces and controls.
 - (2) Use of thermostats and other controls.
 - (3) Reducing heat loss by application of insulation, storm sash, weatherstrips and closing of other openings.
 - (4) Recirculation of air.
 - (5) Proper firing methods for grade of fuel used.
 - (6) Reduction of ventilation of bedrooms.
7. Use of idle storage tanks at service stations would provide fuel oil reserve for winter and reduce strain on transportation facilities.
8. Campaigns to provide fuel stock pile for industrial and domestic users must be speeded up.

Demountable Buildings Use Panels of Lumber

THE TRAVELODGE Corporation, Lynchburg, Virginia, is now producing a demountable barracks building in 4-foot panels, which, including the setting-up cost, provides a building 20 ft. x 100 ft. for less than \$2,000.

Engineered by experts in housing, using knowledge gained through several years of experience in emergency housing projects, the Travelodge demountable barracks building is easily erected, yet provides substantial space, light, ventilation and shelter, which can remain as a permanent facility wherever this feature is desirable.

Their greatly enlarged manufacturing facilities enable The Travelodge Corporation to turn these buildings out at high speed production, and they are being supplied to industrial and military projects in many parts of the United States.



ERECTING a Lynchburg "Travelodge."



GIVE ME A
STANLEY
"BAILEY" PLANE!



No. 5 Stanley "Bailey" Plane. The world's leading Jack Plane. 14" long, 2" cutter.

Stanley "Bailey" Planes were the *first* iron planes, developed over seventy years ago. Today they are still *first* by a big margin. Constant refinements and improvements have given them a balance and "feel" never duplicated . . . made them the easiest to use.



Add to this the easy adjustment, comfortable handle and knob, special steel cutters, and you have good sound reasons why nine out of ten craftsmen select Stanley "Bailey" Planes. Your hardware dealer has them.

Write for Stanley Tool Catalog No. 35—it's the handiest guide to good tools.

STANLEY TOOLS

Division of The Stanley Works, 133 Elm St., New Britain, Conn.

THE TOOL BOX OF THE WORLD

PRACTICAL JOB POINTERS AND BUILDING DATA

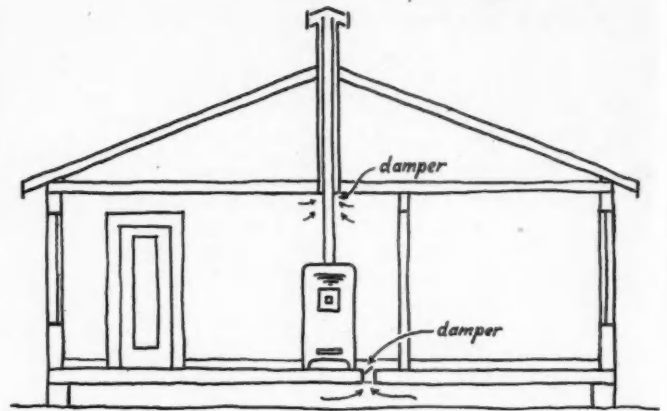
How to Prevent Condensation in Houses

By L. V. TEESDALE, Senior Engineer
Forest Products Laboratory, Forest Service
U. S. Department of Agriculture

CONDENSATION, a particular hazard in small, compact 3- and 4-room defense houses during the winter months, can be to a large extent prevented by a simple system of roof and floor vents permitting circulation of outside air through the home near the heater. The scheme, now being put to practical tests in such houses, also assists the burning of fuel in heaters by providing a fresh supply of air to replace that leaving through the chimney.

The system allows such circulation without uncomfortable drafts or serious fuel waste. A dampered opening to permit entry of outside air is provided in or near the floor close to the heater. As air enters through this opening it is quickly warmed and rises. Humid room air is vented from the house through an oversized collar set in the roof and surrounding the heater smoke pipe. This collar can also be dampered and the warmth from the heater flue will assist air movement in the exhaust pipe and should prevent condensation within the exhaust pipe.

Such a circulatory system, if judiciously used, should not cause excessive heat loss. Greater fuel economy can be effected by increasing insulation in walls and by the use of storm windows and storm doors. By these means, the temperature of inside wall surfaces would be higher and condensation lessened. While it is to be doubted that complete elimination of the condensation problem by insulation of walls, doors, and windows would be practical or healthful, the combination of the vent system with adequate insulation offers a compromise adjustment by providing just enough



SCHEME of controlled ventilation for the small house to avoid condensation on inside surfaces and improve performance of heater.

ventilation to prevent excessive condensation on the comparatively warm interior walls and window surfaces.

The ventilation system has a secondary, but nonetheless important, advantage in that it supplies air needed for combustion in the heater. Some trouble with heaters has been experienced in these small houses due to the fact that the air infiltration is insufficient to maintain a steady draft; in fact, one oil burner was reported as functioning poorly when the house was shut up for any length of time. Fresh air supplied through the floor vent should remedy such trouble by replacing air lost through the chimney.

Small Tube Radiators Are Preferred

THE use of small tube radiators instead of large tube units is resulting in a saving in cast iron which at the present time is running at the rate of about 25,000,000 pounds a year, says the Plumbing and Heating Industries Bureau.

The small tube radiators not only save critical metal needed for the war but they are more attractive in design and occupy 40 per cent less space because of their compact design. The small

1920
1942
STAMPINGS · SINKS
YPS
KITCHENS

● The Youngstown Pressed Steel plant—both personnel and equipment—has always devoted its facilities to the increasingly better way of American life. Now it is devoting those same facilities to protecting that way of life.

YPS Cabinet Sinks are still available for War Workers' homes.

It is still too early to present the details of the Youngstown Pressed Steel post-war kitchens—but they will be "worth waiting for."

YOUNGSTOWN PRESSED STEEL DIVISION

Mullins Manufacturing Corp.
WARREN, OHIO

1942
the duration
YPS KITCHENS FOR
DEFENSE WORKERS'
HOMES · SHELLS FOR
THE AXIS

tube units also heat more quickly than the older models.

At the present time the army, navy, and the maritime commission are large buyers of radiation for army camps, for air bases, naval and coast guard training stations, and for ships.

A recent WPB ruling permits the use of radiator heating plants in single-family dwellings for defense workers if the boilers and radiators are in stock locally. An earlier ruling permitted the use of boilers and radiators in multiple-family dwellings and in the modernization of old houses to provide additional dwelling space.

The slender, graceful lines of the small tube radiators and their minimum space requirements make them particularly adaptable to recessing under windows, with or without grilled fronts. The radiators are no deeper than the length of a forefinger. They can be recessed between the studs in a wall without extending beyond the baseboard. When recessed under windows the effect is to conserve floor space while at the same time preventing drafts from windows, cold floors, and wide temperature differences between the floor and ceiling.

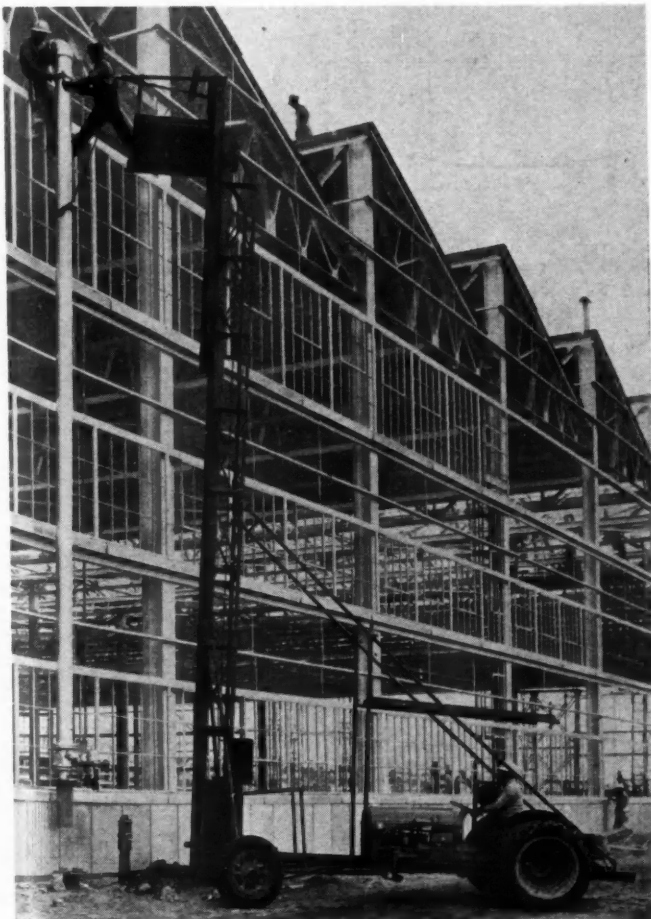
40-ft. Telescopic Stacker Speeds Work

LEWIS-SHEPARD Sales Corporation, Watertown, Mass., has released literature on a forty-foot telescopic portable elevator for use on maintenance and construction work. It gives the user the advantages of standard Lewis-Shepard portable elevators, plus the effect of a rapidly moved staging for inside or outdoor use. It not only raises materials for installation or lowers them for removal; but it also gives generous platform footing as well.

Among some of the more general uses for this stacker are the installation of sprinklers, wiring, lighting fixtures, etc. Many other practical uses will suggest themselves to the maintenance superintendent.

Specifications include: Capacity, 1,500 lbs. Overall Height, 40' 4". Platform, 36" long by 72" wide. Hoisting Unit, 3 HP 110 V. DC Current. Lifting Speed, approximately 30' per minute. Push Button Control. Slack Cable Platform Locking.

This Lewis-Shepard portable elevator, christened the "Victory" stacker, can be built to other capacities.

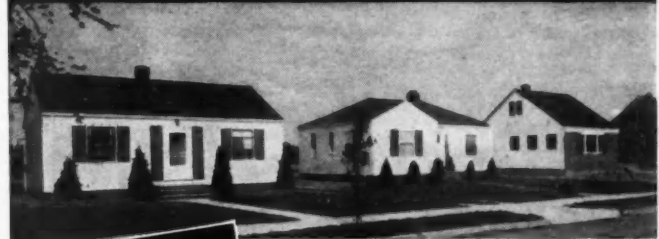


LEWIS-SHEPARD 40 foot telescopic stacker in action.

★ DOORS ★

FOR WAR HOUSING AND REMODELING

by the World's Largest Door Manufacturer



PROMPT SHIPMENT-ANY QUANTITY



Famous Wheeler Osgood doors are available in any quantity for War Housing projects and for private remodeling. Many home owners who had planned to build are now remodeling instead . . . When you do business with Wheeler Osgood you are dealing with a concern which can completely supply your every need for doors. For exterior or interior use, these fir doors are made from one of the World's finest woods for door manufacture. Uniform, super-strong and beautiful, fir is rot-proofed by nature.

Don't forget—no matter how big or how varied your order for doors is—Wheeler Osgood can fill the entire order immediately.

COLOR GRADED—Wheeler Osgood's sensational new "Color-Grading" system for doors shows you at a glance the grade, style, size and surface of every door in stock.

COLOR GRADED



DE LUXE GRADE A—Bright blue label bearing grade, size, style, surface, *guarantee!* Helps customers recognize quality.



MASTER GRADE B—Bright red label, bearing grade, size, style and surface.

• WHEELER OSGOOD "COLOR-GRADED" Grade A and B Douglas Fir doors are built in strict accordance with Department of Commerce Standards CS73-38, CS91-41.

WHEELER OSGOOD DOORS



A COMPLETE LINE OF INTERIOR AND EXTERIOR DOORS

FREE Wheeler Osgood Sales Corp. Dept. 13, Tacoma, Wash.

Gentlemen: Please send me free literature on Wheeler Osgood "Color-Graded" Doors.

Name.....

Address.....

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



Here's a Preview of YOUR PROFITS TOMORROW

To the Portsmouth, Virginia, Navy Yard—
—and to you
—the 5,000 Homasote Precision-Built Homes now being
erected at Portsmouth are vitally important.

They are important to the Navy Yard because they will provide much-needed housing for the expanded Navy Yard civilian personnel.

The Portsmouth houses are important to you—

(1) Because they are further proof of the *efficiency* of Homasote Precision-Built Construction. In a project as vast as Portsmouth, there must be complete coordination between the site and the prefabricating plant set up nearby. And no guesswork on estimates—no guesswork on *what* is needed *when* or *where* . . .

(2) Because the *speed* made possible by Homasote Precision-Built Construction is breaking all known records for residential construction. The 5,000 homes are being completed in *less than five months* . . .

(3) Because the *economy* of Homasote Precision-Built Construction—no waste of materials, no waste of time, high productivity per individual worker—is producing homes for shipbuilders at a cost of less than \$3,000 apiece.

Homasote Precision-Built Construction—based on the use of big sheets (up to 8' x 14') of Homasote weatherproof insulating and building board—is mass production of housing with *local* labor and standard materials. Before the present emergency enlisted Homasote Company in the job of housing war workers, \$6,000,000 of Homasote Precision-Built Homes for private owners were sold by franchised dealers and built by local contractors. Homasote Homes may be of any size, any design.

Tomorrow—the efficiency, speed and economy of Homasote Precision-Built Construction—perfected at such projects as Portsmouth—will mean *new low costs* for quality homes, tapping markets for builders that have hitherto been untouched. Write us for full details.

HOMASOTE COMPANY . . . TRENTON, N. J.

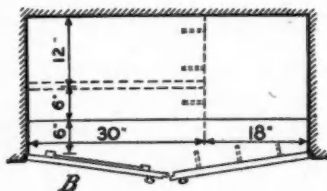
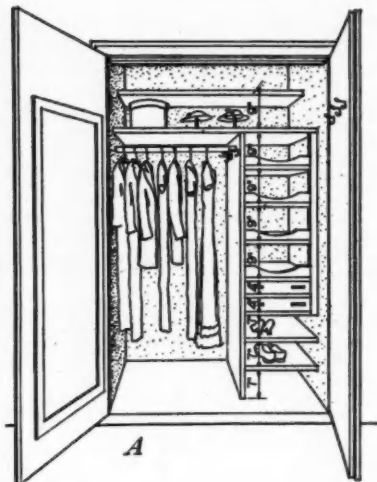
How to Modernize for Improved Storage Space in the Home

Suggestions on building more efficient closets and cupboards for farm or city use.

THE following pointers on household storage space were originally prepared to apply to the farm home.* However, most of the information which has been carefully prepared after thorough study of the subject is equally usable for any dwelling. Current emphasis on modernization to use present accommodations to better advantage or add rentable living space to existing buildings makes it all the more timely.

At least one closet in every bedroom is the rule for modern houses. Ideally, there is a separate closet for each person; or if two must share one closet, a separate rod for each.

Of the basic closet arrangements, the shallow reach-in type is the most economical of space and the most convenient for removing articles. At the left is a version of this type of closet designed for the wardrobe of one adult. It may also be used as a child's closet if hooks and rods are placed low.



BEDROOM closet designed for one person: A, perspective; B, plan.

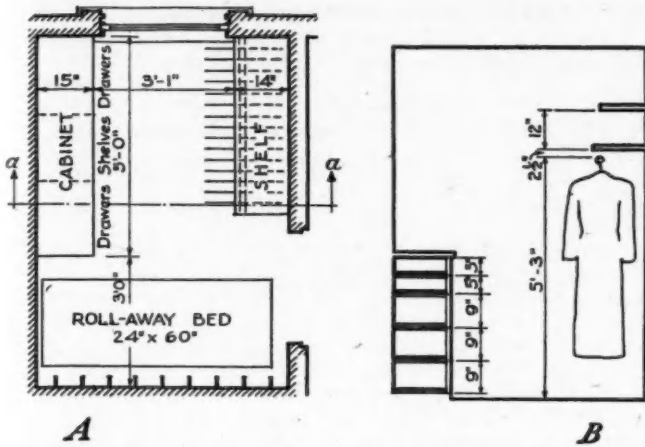
shelves and drawers, 18 inches wide. The two lowest shelves for shoes are spaced 7 inches apart. The two drawers for ties, handkerchiefs, and toilet articles are 4 inches deep. Four movable shelves for folded articles are spaced 9 inches apart and have guards on the front to keep articles from falling off.

One of the closet doors is a handy place to put a full-length mirror. Which door is the better one for the mirror depends upon the way the room is arranged and the lighting conditions. The top of a full-length mirror for the use of adults should be no less than 5 feet 11 inches from the floor. To accommodate children as well as grown-ups, the bottom of the mirror must be no more than 14 inches from the floor.

Bedroom closets for adjoining rooms are sometimes built "back to back," or "end to end." When this is done, ventilation can often be improved by leaving an opening both at the bottom and at the top of the common partition.

One way to keep down the size of a house is to plan a room that serves as a bedroom by night but is something else during the day—a living room, sun parlor, dining room, sewing room, office, or study. A nearby closet that provides a place to store the bed during the daytime makes this arrangement most convenient. The best location for a bed closet is off the room where the bed is used most often or off a hall so that the bed may be rolled into any of several rooms.

*Farmer's Bulletin No. 1865, U. S. Department of Agriculture.



A **B**
BED closet with space for two persons: A, plan; B, section.

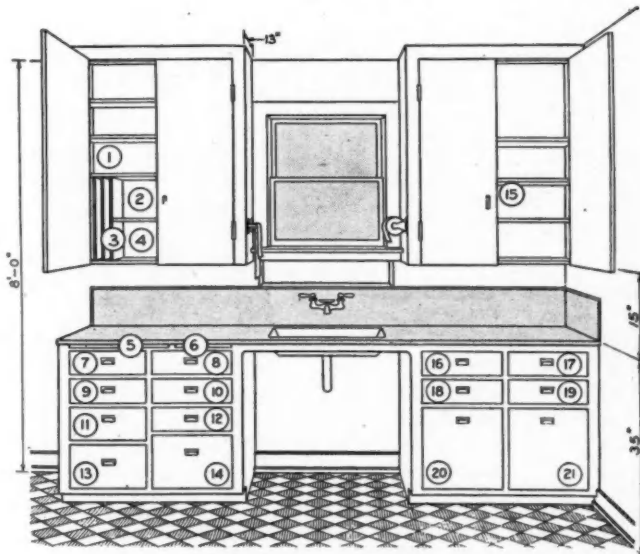
Above are a plan and a section of a dressing room with storage space for the clothing of two persons. When the bed is rolled out, there is ample dressing space for two. A rod 48 inches long provides space for clothing on hangers. Above that there is a shelf of the same length, 14 inches deep. Nine hooks behind the rollaway bed provide more room for clothing. A cabinet with shelves and drawers provides storage space for toilet articles, shoes, and additional clothing. Above cabinet a mirror is hung.

In B is shown a cross-section of the closet as it would look taken at points a to a in the plan. The cabinet contains two sets of the drawers shown in the section with shelves in between for shoes and other articles of clothing that need little protection.

One of the goals of kitchen planning is to reduce the number of steps necessary in performing routine tasks. To accomplish this, modern kitchens are divided into work centers.

Therefore, in planning storage space for kitchens, the first thing to decide is the amount and location of the space needed for each main task. There should be a table or counter surface on both sides of the sink and counter space near the stove and near the refrigerator. To keep these working areas at a minimum, arrange them so that each area serves more than one function if possible.

(Continued to page 82)



- | | |
|--------------------------------|--------------------------------------|
| 1 • GLASSES, SUGAR AND CREAMER | 12 • DISH TOWELS |
| 2 • CEREAL AND SAUCE | 13 • BREAD |
| DISHES, CUPS AND SAUCERS | 14 • COOKIE AND MUFFIN TINS |
| 3 • PLATTERS | 15 • STAPLES |
| 4 • DISHES AND PLATES | 16 • UTENSILS |
| 5 • BREAD-CUTTING BOARD | 17 • RECIPES |
| 6 • CUTTING BOARD | 18 • UTENSILS |
| 7 • SILVER | 19 • BULK CEREALS (TWO COMPARTMENTS) |
| 8 • SERVING UTENSILS | 20 • FLOUR |
| 9 • MISCELLANEOUS | 21 • SUGAR |
| 10 • HAND TOWELS | 22 • ALTERNATE RIGHT-HAND BASE UNIT |
| 11 • CAKE | |

SINK unit for good use of storage space around work surface.

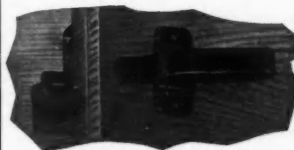
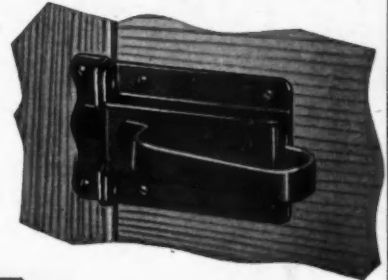
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Convenient padlock eye for security.



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Just Off the Press

SHOPCRAFTER'S MANUAL

By Nelson L. Burbank

Author of *House Construction Details*

and E. M. Mitchell



This new book contains the projects that have appeared in the Shopcrafter's Corner of *American Builder* and *Building Age* within recent years. It also contains projects from *Popular Homecraft* and selected power woodworking booklets. There are some 150 projects ranging from bird houses to garden and indoor furniture of latest design.

All furniture projects have clean lines and balanced proportions and will take the modern light finishes. The variety is large enough to provide a choice for every room in the house. Commercial woods and veneers obtainable in wartime can be used. Large working drawings show construction details, photographs picture the finished articles and bills of materials are accompanied by step-by-step instructions.

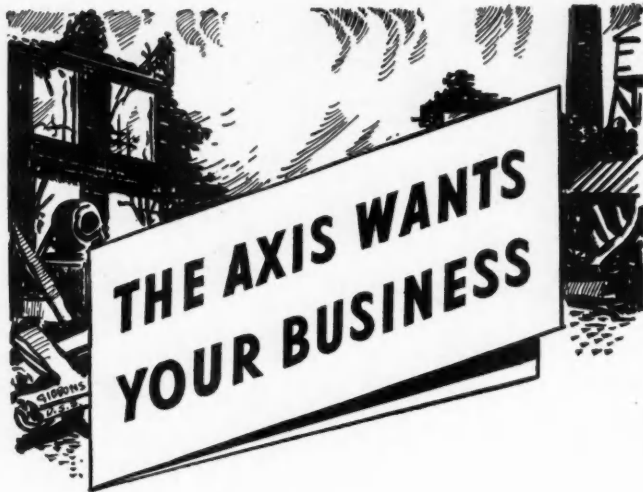
142 pages, 150 projects, 8 1/2 x 11, cloth, \$2.00

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This space is a contribution to Victory by

AMERICAN BUILDER AND BUILDING AGE

How to Modernize Storage Space

(Continued from page 81)

Above and below each of these table surfaces may be located storage space for supplies that are used most often at each place. Cabinets, built-in or ready-made, are satisfactory for this purpose.

Illustrated is a sink unit that combines a dishwashing, a food-preparation, and a serving center, all in one compact arrangement.

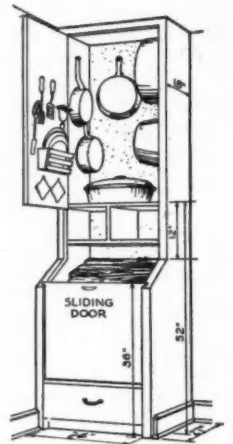
The natural way for a right-handed person to wash dishes is from right to left. So the surface at the right of the sink is for stacking dishes before they are washed. The surface at the left of the sink is for draining dishes. Directly above at the left is cupboard space for storing china, glasses, and other dishes after they are dried. The vertical compartments here provide a space-saving and convenient way to store platters, large plates, or small trays. Storage space for towels is below the left drainboard.

The surface at the right of the sink doubles as a food-preparation center—with water, a drawer for small utensils and cutlery, staples, and sauce-pans within easy reach. The surface at the left of the sink may double as a serving center if the range is placed close by. Here at the serving center, foods may be made ready to put on the table. Storage space in drawers below at the left provides amply for silver, napkins, and miscellaneous articles used in serving.

If desired, the cabinets below the working surface may be made with shelves instead of drawers. This will make them less convenient for the purposes indicated in the illustration, but it will also make them less expensive to build. For instance, if the alternate arrangement (22) is used instead of drawers as shown in the larger drawing, storage space for large quantities of flour and sugar must be provided somewhere else in the kitchen. Some women may prefer this arrangement since it allows more space for storing utensils used in preparing meals.

If possible, shelves both above and below the work surface should be adjustable. Much space is often wasted by having shelves too far apart. The narrow apron in front of the sink may be made deeper to conceal the bottom of the sink. But it should never be so low that a woman cannot sit comfortably at the sink. A food grinder may be attached to the cutting board if the board is made of hardwood.

Also shown is an extra storage cupboard for a kitchen with a coal or wood range. There is space in the top section for storing utensils used only at the stove. Below is a section for fuel. The drawer at the very bottom is for work gloves and tools.



FOR utensils and fuel.

Loans Down for New, Up for Old, Houses

WHILE there was some increase in loans for the purchase of existing homes, the curtailment of new construction was chiefly responsible for a decrease of nearly 19 per cent in the total home-financing activities of savings and loan associations in the first six months of 1942, as compared with the first half of 1941, the Federal Home Loan Bank Administration reported on August 1. Home financing by these institutions amounted to \$531,807,000 in the first half of this year, a decrease of \$121,349,000 from the previous January-June figure, it was announced.

"For 10 months now the trend in new loans has been downward, with the greatest drop noted during the first quarter of this year," the summary said. "Although continuing to decline through June, the reduction of 8 per cent in the index of lending activity during the past 3-month period represented a leveling off from the 21 per cent curtailment in the preceding quarter, after allowance for normal seasonal variations.

"The dearth of construction loans continued as the primary cause for decreases in total lending. The new building boom, which was in full swing as late as July, 1941, was soon checked

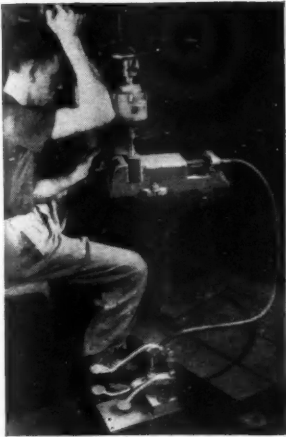
as the demands of war production made materials for new home construction increasingly scarce."

With new dwellings not often available, home seekers turned to existing houses. Loans granted for home purchases rose to \$266,229,000, or 50 per cent of all loans made by the thrift and home-financing institutions, the report showed. In the first six months of 1941 such loans amounted to \$258,961,000, or only 39 per cent of total lending.

Loans for new construction amounted to \$119,393,000, or 22 per cent of the half year's total. This compared with \$210,263,000 for the first six months of 1941, or 32 per cent of the home financing total for that period.

New Drilvise Offered

ANNOUNCED by the Studebaker Machine Company, 9 S. Clinton Street, Chicago, Illinois, is a new Drilvise for use by tool and die makers, machinists and machine operators; and designed for holding work on the table of all types of drill presses, planers, shapers, milling machines, surface grinders, lathes, cut-off saws and other machines.



WISE with foot control.

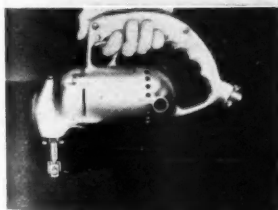
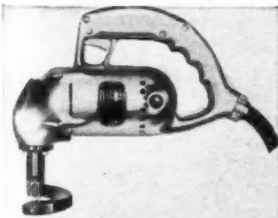
Entirely foot controlled and hydraulically operated, this new tool permits the use of both hands in the operation, set-up and removal of work from the machine on which it is mounted. Exceedingly powerful, exerting in excess of 10,000 lbs. per sq. in. pressure between the jaws, this unit is ideally adapted for hundreds of machine shop uses. Though of sufficient weight (74 lbs.), yet not cumbersome, many jobs can be handled without bolting

or clamping to the machine table.

Self-sufficient, requiring no outside power or air supply, the unit consists of a conventionally-shaped drill press vise (but without the usual screw or handle), and connected to it by a 6-foot length of flexible rubber tubing is a hydraulic foot control base. Parts are readily portable and can be easily moved from machine to machine.

Improved Models of B. & D. Lectro-Shears

BOTH the 16 gauge and 18 gauge Lectro-Shear have been redesigned by the Black & Decker Manufacturing Company, Towson, Maryland, to improve their ease of handling and operating characteristics.



No. 16 Lectro-shear.

The No. 18 Lectro-Shear has been reduced in outer dimensions, so that the motor housing forms a comfortable operating handle. This greatly reduces the length and weight of this tool, and vastly improves the operating balance and control. The power and capacity of the tool are the same as in previous models, cutting up to No. 18 gauge sheet steel.

The larger No. 16 Lectro-Shear has been equipped with an improved operating handle which gives this tool better balance and easy control on curved and irregular lines. It is equipped with an instant release trigger switch, with locking pin for continuous operation. The handle is so shaped that it can be used over the tool or at the rear end. The power and capacity of this tool are the same as in previous models, cutting up to No. 16 gauge sheet steel.

Builders

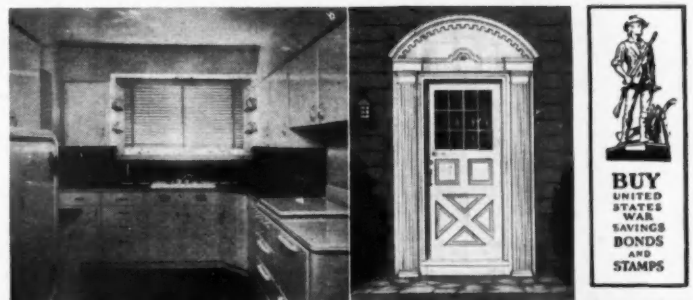


Bill Twell says: "Bilt-Well Woodwork is superior quality, properly constructed."

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SATISFIED CUSTOMERS ARE YOUR GREATEST ASSET

Satisfied customers are your greatest asset! With Bilt-Well products you are assured that your customers will be well pleased. Now, as never before, the wise homeowner is ready to modernize and maintain his home—a vast market for Bilt-Well Woodwork. New construction in Defense areas, and remodeling elsewhere is quickly completed with these superior products. Standardized, stock designs of Bilt-Well Woodwork—improved and produced through 76 years of Peace and War—meet every demand of today's building needs.



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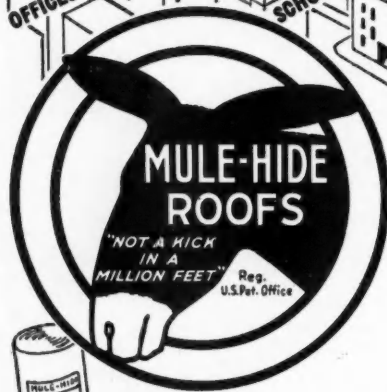
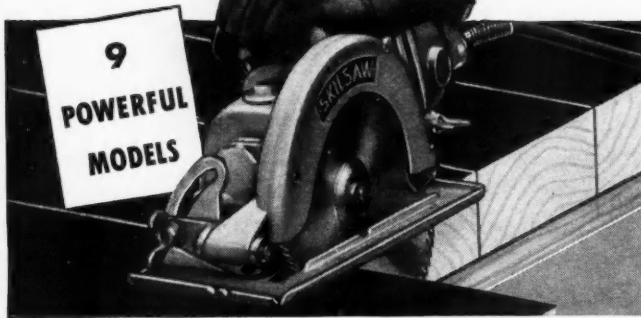
SAW and SAVE TIME WITH SKILSAW

on every job... big or small!

• Whether you're doing remodeling, building small Defense Homes or constructing biggest War Plants, you'll finish jobs faster with SKILSAW to speed up all sawing! SKILSAW saws wood, metals, stone, tile and compositions... saves real time on every cut... makes every man count for more.

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Plans Offered for Emergency Truck



COMPLETE plans and a descriptive listing of the 50-odd articles of equipment on the Emergency Fire Truck—designed by Du Pont technicians—are available on request to Office Buildings Division, E. I. du Pont de Nemours & Company, Wilmington, Del. Inset left shows opposite side of "fire buggy" which is easily maneuvered by one man along corridors, through doors and into elevators. It will be manned by a trained emergency crew of seven.

A SPECIALLY designed hand truck or "fire buggy" compactly laden with 50-odd tools has been developed by Du Pont technicians for use in its Wilmington office buildings in the event of emergency.

Combining the best features of various types of mobile emergency trucks with a number of original improvements, the four-foot long red "buggy" in the opinion of its designers is the most completely equipped vehicle of its kind.

Mounted on wheels and easily moved by one man, the truck will roll into service under a crew of seven men trained by the building's fire marshal. It carries an assortment of tools ranging from five types of fire extinguishers to a jack capable of lifting three tons.

Among details of design it is noted that all corners of the truck are rounded and most of the equipment may be instantaneously removed by pulling forward from clips rather than having to be lifted up and out of slots.

Included in the paraphernalia on both ends of the truck and along the sides of a central panel are: crow bar, sledge, goggles, shovel, electric lanterns, asbestos gloves, safety helmets, first aid kit, rope, bolt cutters, tarpaulin, as well as 40 other pieces of emergency equipment.

Plans to enable industrial firms, institutions, office buildings and other interested organizations to construct and equip an identical emergency truck will be supplied on request to the Office Buildings Division, E. I. du Pont de Nemours & Company, Wilmington, Del.

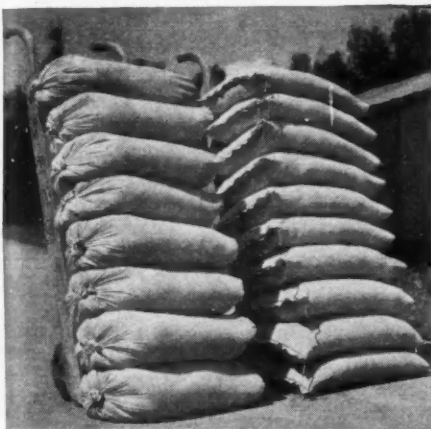
Steel Cabinet Plants Making Bombers

BOMBER wing sections, automotive truck and trailer bodies, and a wide variety of articles essential to the war effort, are now being produced by the manufacturers of steel kitchen cabinets, according to a statement just released by L. S. Hamaker of Cleveland, president of the Steel Kitchen Cabinet Institute. All of the members of the institute are concentrating 100 per cent, he reports, on the production and assembling of many items needed by America and her allies to help win the war.

"It is a tribute to American ingenuity and enterprise," said Mr. Hamaker, "that this group of manufacturers could turn so quickly and effectively to the manufacture of so many diversified products required by our country at war. But while the productive capacity of each plant is being turned over to war work, other men in each organization are studying ways and means of turning out an even better product in the post-war era."

New Bemis Rip-Cord Closure

THE BEMIS Rip-Cord Closure is a new method of closing cotton and burlap bags developed by Bemis Bro. Bag Co., St. Louis, Mo., which provides a simple, quick means of opening them without injury. The Rip-Cord is sewn into the closure of the bag with a regular two thread bag closing machine. Only minor inexpensive adjustments are necessary to adapt the machine to sewing the Rip-Cord. A quick jerk of the Rip-Cord opens the bag instantly. The bag is not torn or damaged and valuable time has been saved. The Rip-Cord Closure is so simple and effective



TEN bags closed by the new Bemis Rip-Cord method (right) can be placed on the same size truck as eight bags closed by the wire tie method.

that when seen for the first time the usual remark is, "Why didn't someone think of this before?"

Ten Rip-Cord closed bags can be piled on a hand truck, whereas only eight tied-top bags can be loaded on the same size truck; thus 20 per cent fewer trips from warehouse to freight car, or visa versa, are required. This time saving is important in these days of labor scarcity. Furthermore, the bags are more compact and economize warehouse storage space which is at a premium right now.

Where a bag user has been closing his bags with wire ties, the Rip-Cord Closure permits him to use bags two inches smaller, thus providing an economy in bag costs.

By pulling the Rip-Cord part way across the bag, the Bemis Rip-Cord Closure provides a useful pouring spout where only a part of the contents of the bag is to be removed at a time.

The Office of Agricultural Defense Relations is urging all bag users to conserve their bags carefully. The Rip-Cord Closure ties in with this conservation program because through its use bags can be opened and closed many times without injury.

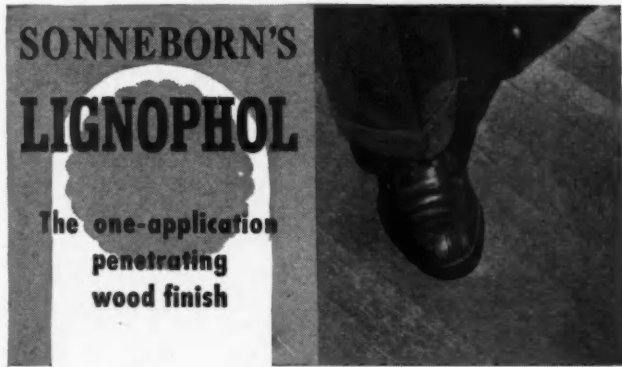
Airtemp Offers New Coal-fired Furnace

THE NATION-WIDE dealer organization of the Airtemp Division of Chrysler Corporation, Dayton, O., has been offered the new Viking Self-Stoker coal-fired furnace through the Chrysler Airtemp Sales Corporation, according to Paul B. Zimmerman, Vice President and General Sales Manager.

"The arrangement made with Viking Manufacturing Corporation to permit Airtemp dealers to sell the new Viking Self-Stoker furnace will give dealers an added opportunity to be of service to their communities," said Zimmerman. "No civilian sales and service organization is more important, both directly and indirectly to the war effort, than the heating and air conditioning dealers of the nation, for these dealers not only play an important part in the installation and servicing of heating equipment in Army Camps, Naval Bases and other Government buildings and war-production plants, but also must take care of the heating installations required in new home construction and repair and service the existing heating equipment in older homes."

Zimmerman pointed out that Airtemp felt the manufacturer of heating equipment had an obligation to the public which did not end with the production of the Government's war requirements.

Recently Airtemp announced its new product Formdux, developed to replace sheet steel ductwork in distributing warm air throughout the home. Formdux saves 4 out of 5 lbs. of the critical metal previously required—uses sheet steel only for connectors, ells and stacks. Approved by WPB and FHA, Formdux permits the installation of heating equipment in five homes while using only the amount of metal previously required in one.



FOR GOOD LOOKING, LONG WEARING FLOORS USE LIGNOPHOL

Lignophol is no ordinary surface finish, but a beautifying and preservative treatment that penetrates into the wood, assuring exceptionally long wear. Yet Lignophol requires only one application instead of the two or three coats needed with ordinary finishes.

Save time, cut costs—and assure more lasting satisfaction by using Lignophol for floors, trim, etc.

Write today for free folder giving full information and performance data covering 25 years of successful use.

Where Results Count—Count on Sonneborn

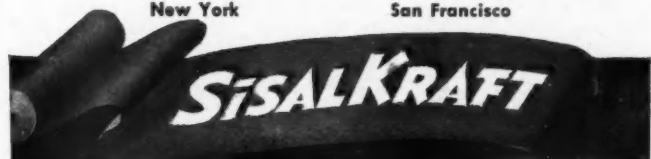
L. SONNEBORN SONS, Inc.
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BE READY WITH THIS EFFECTIVE, LOW-COST PROTECTION

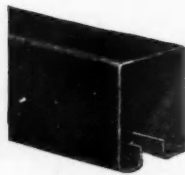
Safeguard valuable materials and equipment that can't be replaced. Use tough, waterproof SISALKRAFT. This reinforced paper is amazingly strong, pliable—can be used over and over. Keep some handy on every job. It's a great saver of time and money. Available through lumber dealers everywhere, in rolls, covers and blankets of many sizes.

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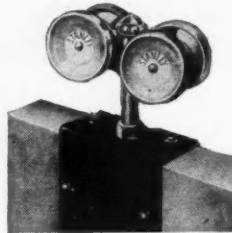
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FIT ALL DOORS

ROLLER BEARING
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BRACKET
X2650-C

The X2650-C Bracket is attached to the building with a lag screw. As the screw is tightened, the sides of the bracket are drawn tightly around the track, providing rigid support and holding joints

in perfect alignment; with the use of a Clamp Bracket every two feet, track is held as in a vise—it can't rattle or work loose. A flat, straight surface of any required length is assured for the hanger, which rolls smoothly along the track without hitching or binding. The Stanley Works, New Britain, Connecticut.

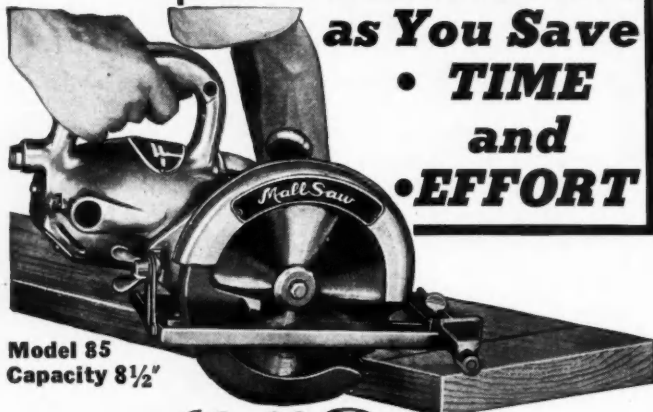
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Save Lumber as You Save

- TIME
- and
- EFFORT



Model 85
Capacity 8½"

with A MallSaw

You can eliminate waste by getting accurate-fitting members the first cut, salvage short pieces for cross-bridging, draft stops and braces, and do more work faster and easier with a powerful, light-weight MallSaw. You can also cut metal, cut and score concrete, stone and tile with an abrasive wheel.

There are 7 powerful MallSaw models to handle every simple and complicated cut in Defense Housing, War Plant Construction and remodeling. Mail coupon below at ONCE for full details.

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Please send free folder on MALLSAWS, MALL RADIAL SAW ARM, MALL DOOR MORTISERS, DOOR PLANES and DRILLS. A942

Name
Street
City State

Structural Panels Build Quick Homes

(Continued from page 43)

In addition to small homes of the type illustrated, a great many other types of one-story structures could be easily formed of these structural panels. Plans are ready for double houses and quads of approximately this same room layout. Dormitories, huts, shelters and community buildings, both for erection here in the United States and for overseas shipment, could be built of these structural panels bolted onto foundation members and extending out to practically any length on a 1-foot module or unit of measure. The window and door filler panels permit the insertion of any amount of window space desired, or any number of doors. The panels are in fact an economical, self-contained and self-finishing unit for enclosing space in a practical, satisfactory way.

Government Stock Pile and Construction Program

After proper investigation and tests of this Willis-Way Structural Panel, the Federal Public Housing Authority would be justified, it seems, to requisition the idle production capacity of the door plants to turn out these insulated structural panels in quantities to build up a national stock pile from which the contractors working on government housing could draw for their supplies and so solve a large part of the present problem of shortages of dimension lumber and other supplies for the urgently needed war housing. One or more standardized small house designs could be created for government housing adapted to this method of construction, and much of the time-consuming paper work and planning which has stymied production in this field would be eliminated.

Also, if this method is sound and attractive for government housing, it certainly offers equal attractiveness to private enterprise home builders; and their requirements could be taken care of in a very practical and satisfactory manner through retail lumber dealers and jobbers. Consider the fortunate position of the jobber, dealer and contractor who, with this method, would be able to go ahead and build homes under FHA approval in spite of the shortage of customary building materials.

While this is strictly a war emergency matter offered by *American Builder* in the interests of prompt action to overcome the war housing shortage, it seems reasonable to expect that this system of building and this experience in its use will make a real and lasting contribution to home building efficiency that will materially cut building costs, increase building trades employment, and provide home seekers in every locality with better home values.

Jacques Willis points out that with this structural panel, any additional types of exterior finish materials can be put on as desired. While the casein-glued plywood will be perfectly satisfactory for outside finish, some would probably want to add further individuality and character by applying shingles, siding or masonry veneer. This would transform the demountable house into a truly fixed and permanent structure such as will certainly be popular in the post-war market.

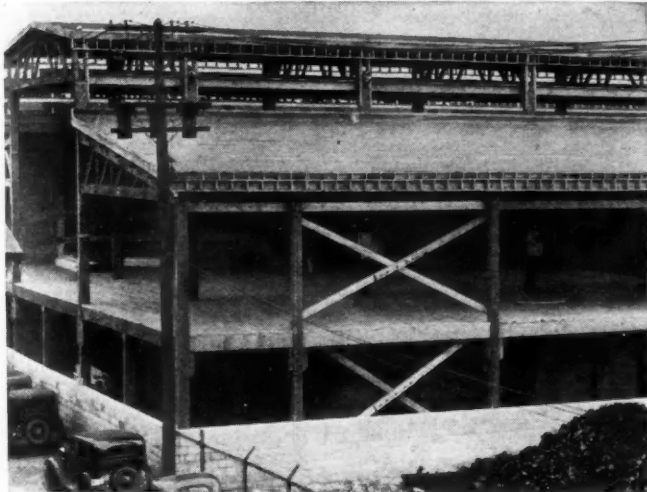
* * *

HERE, HERE, C. D. V. O.'S!—As if men of the building industry are not having enough trouble making a living, along comes the feminine Civilian Defense Volunteers of New York with a plan to teach housewives to do all of their own painting, plumbing, repairing and tinkering. One of the "projects" taught the C. D. V. O.'s by WPA teachers was how to fix a leaky faucet. If it's true, as we believe, that a little learning is a dangerous thing, these feminine volunteers are going to cause a lot of trouble in their own homes.

Westinghouse Uses Wood for Plant Additions

SIX THOUSAND tons of steel will be conserved by using wood in the construction of five new Westinghouse war production plants, according to figures by G. H. A. Parkman of the Westinghouse Electric & Manufacturing Company. These plants are now being built in Maryland, Ohio, West Virginia and Western Pennsylvania. The job is being done with some 3,600,000 feet of Douglas fir wood.

This war has produced a boom in the use of wood for building purposes just as did the first World War, but better construction methods today enable engineers to provide comparable strength although less wood is used. By joining wood beams with steel joint-connectors, the joints have about three times as much holding power as did the connections 20 years ago.



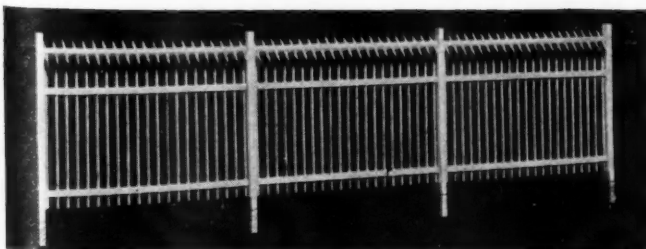
DOUGLAS fir provided the framework for this new Westinghouse war production plant in Ohio.

In addition to the framework of the new Westinghouse plants, wood is being used to replace metal in window sash, drainage gutters and similar applications. At one plant in West Virginia, a 100,000 gallon water tank for fire protection is constructed of wood instead of steel.

Improved Wood Fencing for Industry

IMPROVED wood fence for the protection of industrial properties has been designed and engineered by General Timber Service, Inc., for Weyerhaeuser Sales Company. This new development in lumber gives fence erectors an opportunity to serve ordnance plants, air fields, ship yards, naval bases and industrial properties with minimum use of critical materials.

The fence is shipped ready for assembly on the job into 10-foot sections. Each piece is accurately milled and fits easily into position for nailing. Rails are mortised to receive the 1½" x 1½" pickets diagonally before rails are nailed together through each picket. Two mortise strips are nailed to the wide sides of each post to receive the ends of the rails which are toe-nailed into the post. Posts are 3⅝" x 5⅝" — 12'. The two pieces which form the three rails in each section are 1⅝" x 3⅝". Pickets are 6' long and are pointed at the top. The pickets on the guard rail at the top are 1½" x 1½" — 1'8" long and are pointed at both ends. No special skill is required for the assembly of the prefabricated members or the erection of the fence.



ALL-WOOD industrial fence.

TWO WAYS TO BUILD FOR THE FUTURE

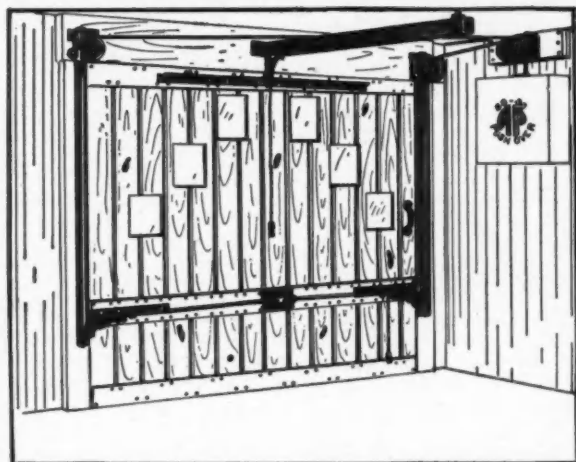


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Duplexes—Better Value War Housing

(Continued from page 50)

to be employed. Brick to be laid in regular bond, in a full bed of mortar, with the vertical joints filled solid. Mortar to be Brixment. At completion of work, all brick to be neatly pointed up and cleaned with wire brush.

ROUGH LUMBER: All bill stuff to be Number Two (2) Southern Pine. Joist and stud sizes as shown and indicated on drawings. Sub floor to be 1" x 6" Y.P. boards, laid diagonally with 1" x 3" bridging, between the joist of first and second floor. Outside finish to be White Pine. All first floor joists to be No. 2 Yellow Pine.

FRAMING: All studs and joists to be spaced 16" on centers. Outside corners to be built solid providing for lath nailing in corners. Joists to be doubled under partitions. All headers and trimmers to be double. Joists framing into headers to be supported with steel angle brackets; one angle to each joist. Headers over window and door openings to be double 2 x 6" Y.P. for openings up to 3'0"; openings 3'0" to 6'0", to be double 2 x 8's; size of headers over 7'0" will be indicated on plans. Sub floor to be laid diagonal with two 8 penny nails to each joist. Exterior sheathing Celotex Vaporseal.

ROOF: Roof to be 210 lb. asphalt, thick butt shingles, as manufactured by the Certain-teed Company.

EXTERIOR WOODWORK: All exterior woodwork, and millwork, to be well seasoned, selected No. 2 White Pine, executed according to details on plans.

Exterior door frames to be 1 3/4" thick, rebated for door and screen door.

All windows except bath and basement sash to be "Sibley-All-Weather" sash of sizes as indicated on plans; to be of clear white pine; sash to be metal weatherstripped, and mechanically balanced.

INTERIOR WOODWORK: All interior woodwork and trim to be kiln-dried, and said finished. All work to be done in the best possible manner. Exterior doors to be clean white pine, 1 3/4" thick, and of design as shown.

FLOORS: Throughout house to be of 3 1/4" Bruce, Standard, "Streamline" floors, factory finished; except, bathroom floor to be of tile, kitchen floor to be 5/8" No. 2 Yellow Pine flooring.

Finish floors to be laid over saturated tar-felt, in opposite direction of floor joists, and nailed to each joist through the sub floor.

All closets to have stock base and shoe. One shelf, and one pole hanger.

HARDWARE: Contractor to supply rough and finish hardware. Locksets and latchsets to be Dexter-Tubular.

ELECTRICAL WIRING: Complete wiring equipment from outside of building including mains, cutouts



inside building at entrance of Detroit Edison Company's wires. Manner of wiring shall be commonly known as "concealed" work, and shall consist of wires carried in flexible conduits known as "Romex."

LATHING AND PLASTERING: Fireproof rock-lath to be used, securely nailed to each studding. Metal strips to be used in all vertical corners, and cornerite throughout. Metal corner beads will be used wherever a corner projects into a room, and metal lath to be used for all coves and arches. Two-coat plastering; fibre Gold Bond plaster.

PLUMBING: Contractor shall furnish and provide all necessary labor and material and perform all work whatsoever is necessary. Fixtures to be Standard Sanitary, of first quality, and plumber shall assume full responsibility for protection on and after installation.

PAINTING & DECORATING: All work to be painted, shall be examined for rough spots or defects. All rough spots shall be sanded smooth and all defects, and nail holes, shall be puttied. All knots shall be shellacked before priming. All work shall be allowed to dry thoroughly before applying the next coat, and shall be sanded between coats (except plaster walls).

Material to be the very best of its respective kind, Pratt and Lambert, or equal. Exterior trim of house to receive three (3) coats of lead and oil paint.

LINOLEUM: To be laid on kitchen floor; same to be inlaid Standard Gauge Armstrong or Nairn linoleum. Also drain boards and apron of kitchen sink, to be covered with Linoleum.

INSULATION: Two (2") inches of bulk rock wool to be laid in between the joist of ceiling exposed to attic. Said two (2") inches of bulk rock wool to be laid on asphalt coated, corrugated boarding, creating an air space between the rock wool, and the rock lath. Knee walls of bedroom on second floor to be insulated with asphalt coated, corrugated boarding. Window and door frames to be packed around with rock wool.

BATHROOM TILE: Bathroom walls over tub to be tiled four (4') feet high, with 4" x 4" glazed tile. Floor of bathroom to be of glazed or unglazed tile, as directed.

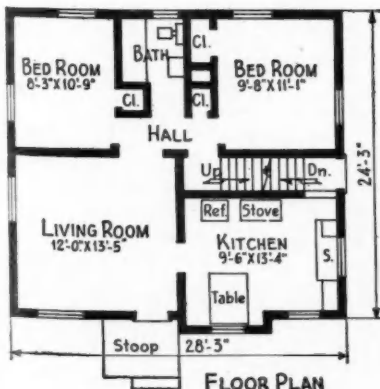
MEDICINE CABINET: A Venetian Medicine Cabinet, to be installed in the bathroom; same to be a No. 304 Miami Cabinet.

BATHROOM SASH: Ceco steel casement sash with leaded ornamental glazing.

CAULKING: Exterior woodwork to be caulked with Universal Caulking Compound.

HEATING EQUIPMENT: Lennox gravity steel furnace shall be installed by the heating contractor.

Same is to have a rated capacity of 56,300 B.T.U., using coal as the fuel. Domestic hot water to be supplied by a Cleveland Heater Co. side arm gas heater.



THIS view of current home building for war workers, with typical plan shown, indicates approximate Detroit values in the range of \$4,000 to \$4,500 for single-family units; compare these houses, which represent good value in their class, with the street view of duplexes shown on the first page of this article.

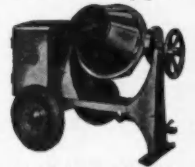
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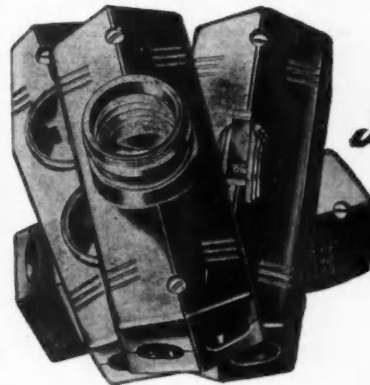
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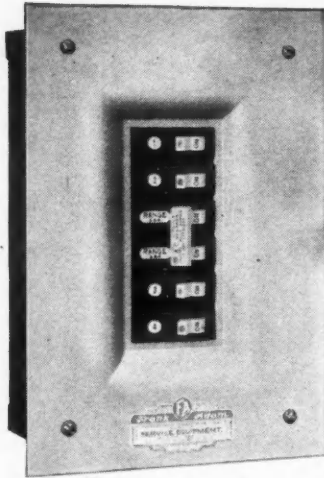
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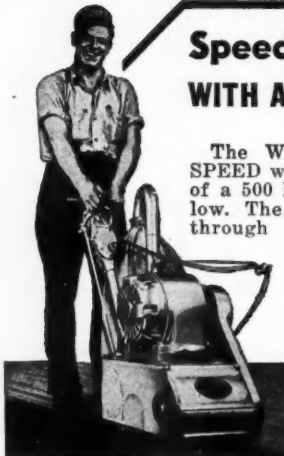
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Paul Roche Talks of V+1

(Continued from page 47)

verted them to the American enterprise system and made them satisfied citizens.

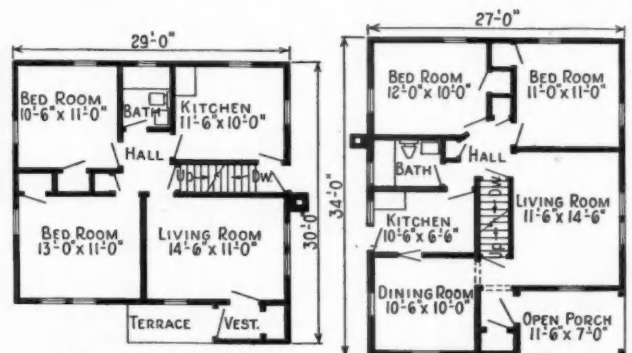
This is one more reason why he believes that a great post-war home building program for people of low income should be made possible, and he strongly urges that the men of the building industry and officials of the Federal Housing Administration start working out plans now for a post-war FHA Title VI.

Recent war homes being built in Stephen Manor have basic floor plans of 25' x 33'-6", 27' x 34', and 29' x 26'. A typical plan, as detailed herewith, has an 11' x 14'-6" living room, two good-sized bedrooms and a kitchen-dinette combination. There is space upstairs for two additional bedrooms.

Roche was foresighted in his buying of building materials and was still able to keep his construction crew working at midsummer of this year. He was building an unusually substantial and well-equipped small home in the price range possible under Title VI.

Another feature of Stephen Manor which Roche is justly proud of is the street layout. He made full use of the Land Planning Division of FHA, and the result has been a strikingly attractive community of curved streets and pleasant vistas. It is scientifically laid out to discourage fast traffic and make it safe for children.

Roche believes that this is one aspect of home building that will be still further developed in the post-war period.



FIRST FLOOR PLAN

FIRST FLOOR PLAN

POPULAR alternate plans used by Paul Roche in war houses. See photos, pages 44-47.

He believes that the experience that builders are getting now under Title VI in building war homes will prove of great value in the post-war era, and since he is young and optimistic he sees an era of great activity for enterprising builders.

Specifications of the Stephen Manor houses as currently used by Roche include the following:

HEATING—National wet base coal-burning boilers, with International convectors.

ROOF SHINGLES—Bird & Son 210-lb. thick-butt asphalt shingles in colors.

EXTERIOR SIDEWALLS—Johns-Manville asbestos shingles.

INSULATION—2 in. Lone Star blanket-type mineral wool insulation.

BATHROOM CABINETS—Miami by Philip Carey.

PLUMBING FIXTURES—Standard Sanitary.

HARDWARE—Lockwood.

HARDWOOD FLOORING—Harris.

CEMENT—Penn-Dixie and Lone Star.

KITCHEN RANGE—Slattery insulated range.

LINOLEUM—Armstrong.

LIGHTING FIXTURES—Lightolier.

PLASTER BASE—U. S. G. and Kelley gypsum board.



WASHINGTON REVIEW



(Continued from page 14)

through its Realtors' Washington Committee brought this inequity to the attention of the rent control administrators and at the Association's request OPA has issued the new interpretation, which has just been placed in the hands of area rent directors.

This general standard has been set up: A change will be regarded as a major capital improvement if it "has resulted in a substantial change in the housing accommodations such as would materially increase the rent value in a normal market where free bargaining prevailed unaffected by a shortage in housing accommodations." Grounds for rent adjustment will be recognized where in the aggregate there is substantial change in the character of the accommodations even though the individual items of change, considered separately, would rate only as normal repair, replacement or maintenance.

A major capital improvement for which increased rent may be allowed may fall into any of these categories: (1) A structural addition; (2) a structural betterment; (3) a complete rehabilitation.

Structural betterment is defined by OPA as "a qualitative improvement, even though such an improvement is in part a replacement." Within this definition would be modernization of an existing bathroom, installation of a modern heating plant to replace an antiquated system, a change in interior partitions such as would improve the layout, and all changes of similar character. OPA considers a general rehabilitation to be complete modernization and reconstruction such as would make the property attractive in a different rental range.

The OPA interpretation states: "The difference between a rehabilitation which is a major capital improvement and ordinary repairs is primarily a question of degree and extent. Only where the rehabilitation is so comprehensive that it could be expected to result in a comparatively high percentage adjustment in rental would it constitute a major capital improvement."

Draper Made Deputy

EARLE S. DRAPER has been appointed by Federal Housing Commissioner Abner H. Ferguson to the new position of Deputy Commissioner of the Federal Housing Administration.

In this office, Mr. Draper will have supervision and direction over FHA war housing operations as well as post-war housing activities arising out of the problems and adjustments necessitated by the war. He will also be responsible for FHA contacts and relations with other agencies dealing with war housing and with post-war activities.

Mr. Draper has been an Assistant Commissioner of the Federal Housing Administration since the summer of 1940.

Ben Alexander to Co-ordinate Lumber

RECOGNIZING the existence of a critical shortage of lumber supplies, WPB has appointed Ben Alexander Special Assistant for Lumber. The appointee will co-ordinate the activities of the War Production Board Lumber and Lumber Products Branch, the Labor Production Division, the Office of Civilian Supply, and the Conservation Division insofar as they relate to lumber. Mr. Alexander was a resident of Lake Forest, Ill., and President of the Masonite Corp., Chicago, before joining the staff of WPB in February of this year.

The lumber situation has recently grown more serious due to problems of labor supply, and as a result of the large needs for lumber as a substitute material for critical metals. A temporary "freeze" order on construction lumber has been in effect for some weeks, and is scheduled to be replaced shortly by a permanent order establishing a system of rigid control.

It is estimated that over-all lumber requirements this year for military, war housing, and essential civilian needs will be in the neighborhood of 38,000,000,000 board feet, or 6,000,000,000 board feet more than estimated production. The shortages in some grades and species, as for instance, airplane lumbars, are considered especially severe.

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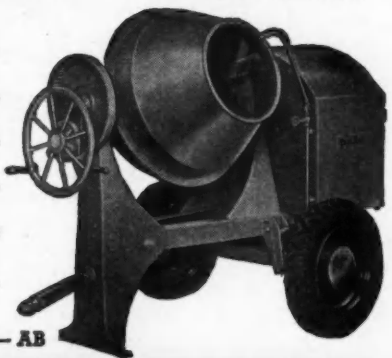


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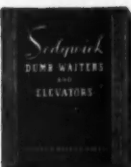
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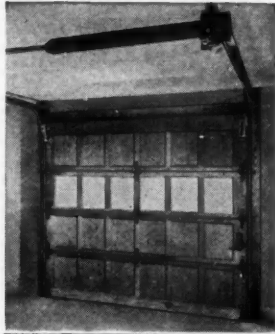
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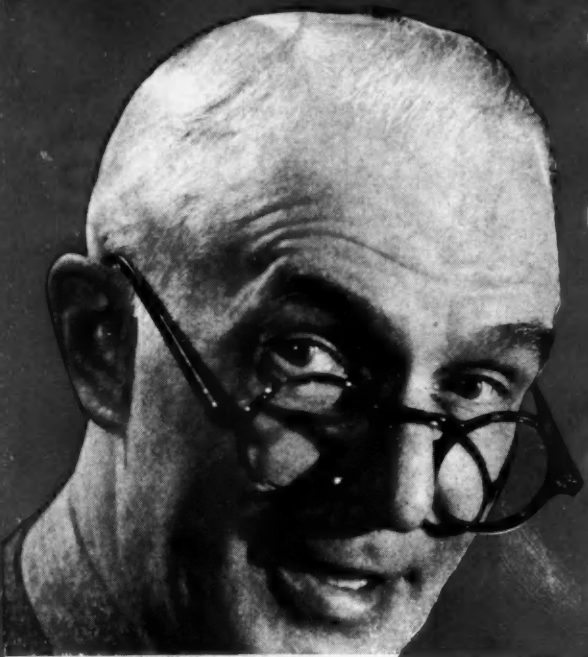
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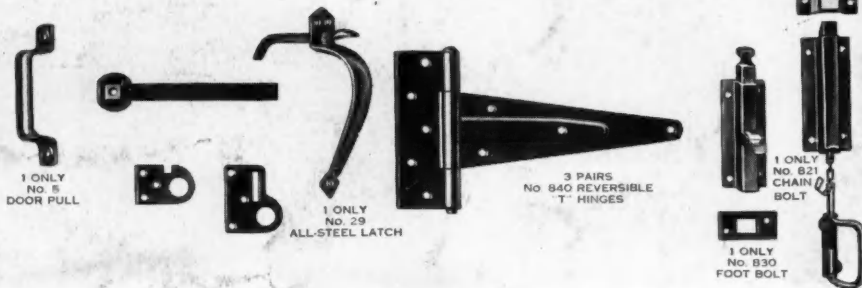
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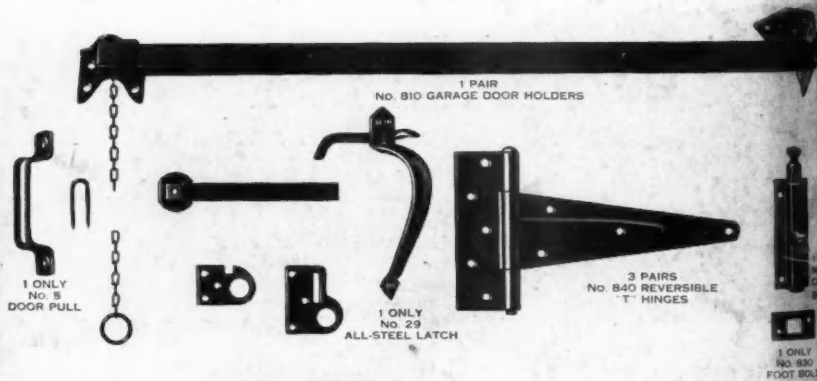
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