AMERICAN BUILDER

WORLD'S GREATEST BUILDING PAPER

AND BUILDING AGE

MARCH, 1944

PRICE 25 CENTS

PLAN NOW

Blueprints for Tomorrow's Home
Interestingly designed building is part of FPFA housing project at Brunswick, Georgia. Exteriors of Celo-Siding.

Buildings Completed Days Faster

Because CELO-SIDING Does 3 Jobs!

IT'S AVAILABLE! And Celo-Siding is ideal for big or little buildings! Adaptable for houses, factories, machine shops, warehouses and general buildings of every type. Millions of square feet of this multiple-function material have been used in military and industrial projects!

USED IN EVERY CLIMATE! Celo-Siding has been tested and proved under every climate condition in scores of types of buildings. Its strength, resistance to the elements, and its insulating qualities make it a perfect building material for today's needs.

WHAT CELO-SIDING IS. It is a multiple-function material ... siding, sheathing and insulation in one quickly applied material. The board is composed of Celotex cane fibre, coated on all sides with an asphalt compound. An extra coating is applied to the weather surface and crushed mineral granules are pressed in to provide a durable, attractive exterior finish. Applied direct to studding, Celo-Siding saves critical lumber, time and labor.

SPECIFICATIONS. Celo-Siding is available in buff or green colors and in two thicknesses—5/8" and 7/8". Sizes: 5/8"—4' x 8' with square edges; 7/8"—2' x 8' with T&G joints on long edges, 4' x 8' and 4' x 10' with square edges. Use 7/8" for greater strength and insulation value; 5/8" for lighter, lower cost construction.

YOUR CELOTEX DEALER is ready now to fill your needs for Celo-Siding. Talk with him today about prices and the many applications of Celo-Siding ... the building material that does 3 jobs.
Afraid of sudden freezes?

USE LEHIGH EARLY STRENGTH CEMENT!

Warm today—freezing tonight. That's the kind of weather that comes with the tag end of winter—and threatens concrete with damage by freezing.

That's why so many contractors use Lehigh Early Strength Cement for late winter and early spring construction. It saves time, money and expense. Concrete cures beyond the danger of frost damage 3 to 5 times faster than when made with normal Portland cement. And reaches service strength in 1/2 to 1/3 the time taken by normal Portland cement!

So you are not only safer, but you save days and dollars through quicker removal and re-use of forms, lower form costs, less expense for heat protection, faster construction and earlier completion.

Lehigh's Service Department offers you, free, complete information on cold weather concrete. Write today and get the facts on the savings and safety of Lehigh Early Strength Cement!

LEHIGH EARLY STRENGTH CEMENT
for service-strength concrete in a hurry

LEHIGH PORTLAND CEMENT COMPANY • ALLENTOWN, PA. • CHICAGO, ILL. • SPOKANE, WASH.
The answer is bituminous coal.

America's war program wouldn't get very far without it.

Bituminous coal is used in making practically 100% of all steel.

It supplies 65% of the mechanical energy required to run the machines that make the guns, tanks, planes and other arms and war equipment.

It supplies the power for 94% of the nation's locomotives.

It provides in whole, or in part, the basic materials for all high explosives, and the four most important war chemicals.

85% of all war plastics require processed bituminous coal as a base.

And in addition to all this — and more — 41% of the homes in the United States depend on bituminous coal for heat.

No wonder the annual value of the bituminous coal mined in this country exceeds the value of all metallic minerals combined.

Bituminous coal is a great fuel. We're proud to belong to the industry which mines it. We aim to live up to our responsibilities to our country, to our customers and the men who work in our mines.

— — —

BUY MORE WAR BONDS

BITUMINOUS COAL

Institute

60 East 42nd Street  New York 17, N.Y.
This 85-HOME Project is Going up FAST

Because Sawing Goes Faster with SKILSAW!

85 Homes for War Workers
Built on a 15-acre tract for Park Ridge War Workers by GEORGE C. YOST, well-known Chicago builder

Take the word of the big operators in the war-housing field, men like Geo. C. Yost, of Chicago . . . when you cut with SKILSAW you BUILD FASTER! On every cut, on every project . . . whether it's a single home or 600 . . . SKILSAW saves steps, saves man-power, saves building time and dollars!

SKILSAW goes right to the job, reduces material handling. It makes every cut in wood, metal, stone and compositions. It is fast, easy to handle. No wonder SKILSAW is the first choice of progressive builders everywhere!

The SKILSAW model you need is available right now from your distributor. Ask him for a demonstration and you will be convinced, just as Geo. C. Yost was years ago, that SKILSAW is the finest labor saving tool you can buy!

SKILSAW, INC.
5031 Elston Avenue, Chicago 30, Illinois
Sales and Service Branches in All Principal Cities

SKILSAW PORTABLE ELECTRIC TOOLS
MAKE AMERICA'S HANDS MORE PRODUCTIVE

GANG CUTTING JOISTS

SKILSAW cuts stair stringers and wells fast! Cutting sheathing and sub-flooring demonstrates SKILSAW'S power, compactness and easy-handling.

CUTTING STAIR WELLS

85 Homes for War Workers
Built on a 15-acre tract for Park Ridge War Workers by GEORGE C. YOST, well-known Chicago builder
NOW...it's been done in 50,000 homes!

Yes—by hundreds of builders operating from coast to coast, under every conceivable condition.

Dry-Built, Full-Wall Construction is fast fulfilling the predictions made by its adherents four years ago.

Leading builders praise full-wall size Strong-Bilt Panels as the solution to the old problems of brittle interior walls and panel joint troubles. They're enthusiastic, too, about the added dollar value Strong-Bilt Panels contribute to the job. Fully 85% of wartime users say Dry-Built, Full-Wall Construction is the system for homes of tomorrow. Are you ready to benefit from its advantages?

For details and booklets, phone, wire or write The Upson Co., Lockport, N. Y.

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

CUTS DOWN CONSTRUCTION TIME! One panel covers entire wall of average size room. Applied with Upson Floating Fasteners with anchor panels securely from the back to compensate for structural settling. No nailing. No joints. No time-consuming system of filling and taping. No nails to countersink. No nail holes to fill.

MOISTURE TROUBLES LICKED! Entirely dry-built. No waiting for plaster to dry. Eliminates 1000 pounds of water which may be used in plastering a 6-room house.

EFFICIENT INSULATING VALUE! Up to 35 times that of plaster.

CRACKPROOF! Positively will not crack, splinter nor chip. Does away with annoying and costly plaster repairs.

TOUGH AND STRONG! Laminated construction. Withstands impact up to 6 times heavier than needed to shatter boards with a brittle content.

FINEST PAINTING SURFACE ON ANY WALL MATERIAL! Beautifully pebbled and presized at the factory. No fuzziness. Can be painted immediately after application.
LETTERS
To the Editor:

The time is now

To the Editor: Isn't it about time someone answered me of this foolish stuff (newspaper clipping on public housing). Where did the government ever build any houses or apartments cheaper than private builders? The Whittoch homes in Toledo are a sample: $4000 per unit, which in a few years, a negro will not live in. Nothing but bare walls, four small rooms.—CHAS. E. NOTT, Toledo, Ohio.

Something to brood about

To the Editor: We try to save every issue of American Builder but it seems that if we leave them on the counter they always disappear with our customers. We are particularly interested in a brooder house plan in November. I might add that each American Builder is practically required reading in our office and we find it not difficult to enforce.—S. W. MITCHELL, JR., Korn Lumber Company, Flint, Michigan.

Just an insuring agency

To the Editor: Your January editorial stated, "FHA is a going concern; is ready to begin financing post-war homes under Title II at any time." This would seem to indicate that FHA has money available to lend on homes. This, of course, is not so, as it is just an insuring agency.

The more correct message should have read "FHA is a going concern. It has the authorization to insure under Title II many millions of dollars worth of loans made by private lenders to finance home construction. There are some lending institutions on the other hand that are modifying their own lending terms which will enable them to offer terms to borrowers as favorable if not more favorable than those which are permissible under the FHA plan.

There is no way in which private lending institutions can compete with FHA. Private lending institutions either use FHA or not as they choose. If they choose FHA they have to make loans under a specific loan plan and procedure. If they make their loans without FHA insurance, their lending plans can be more flexible and the procedure less cumbersome.—F. HARDINGE, JR., U.S. Savings and Loan League, Chicago 1, Illinois.

Soldier buys bonds now, home later

To the Editor: All of my life, I have wanted to build a home of my own. Not until I read your January issue did I have much hope since I am only nineteen and have served in the army for a year. I am buying a war bond every month, hoping some day to be financially able to begin on my home. It pleases me to know that loan companies will be able to help finance building after the war.

I hope that American Builder is found in all Service Clubs in all camps. Continue your work, and you will enable other soldiers to plan, as I am, on a post-war home.

What most interested me was the picture and plan of the home on page fifty-one (51) in the January issue. Would you be so kind as to send me an estimate of (Continued to page 92)
Thousands Plan Homes with Electric Kitchens

proved by Hotpoint’s “Bond Wagon” drive

Wide interest, both in home building and electric kitchens is shown by results of Hotpoint’s “Bond Wagon” campaign, which for two years has featured “Buy War Bonds Today—Electric Kitchens Tomorrow!”

Thousands Write for Home Planning Files

The “Home Planning File,” offered for 25¢ in Hotpoint National magazine advertisements brought thousands of letters. Nearly all the writers plan to build new homes after the war—and they want Hotpoint Electric Kitchens. Many thousands more of these Home Planning Files were distributed to home planners through retailers, utilities, and building trades.

It’s Your Bond Wagon too—Climb On

Naturally, with such results, Hotpoint’s advertising for 1944 will continue to promote the many benefits of the electric kitchen. And remember this campaign is doing an important job for the entire building industry too…and specifically for you. Take full advantage of it by cashing in on the ever-mounting trend for modern Hotpoint All-Electric Kitchens.

Write for New Kitchen Planning Book

“Your New Kitchen by Hotpoint,” now on the press, will soon be offered to the public in Hotpoint National advertising. You will find it both interesting and helpful. Get an advance copy by writing for it now.

Edison General Electric Appliance Company, Inc.
5641 West Taylor Street, Chicago 44, Illinois
DAYLIGHT ENGINEERING makes a home so much more livable

In the New England home pictured here, architect Samuel Glaser of Boston has incorporated many Daylight Engineering principles. One complete wall of the living room has been designed as an attractive window so that the beauty of the out-of-doors becomes the dominating feature of the room. The appearance of the room is given added spaciousness, and its natural daylighting keeps it bright and cheery throughout the day.

These are features that add materially to the livability of a home. And Libbey- Owens-Ford will make an announcement soon that will revolutionize window design... make it practical for even the most modest home to enjoy all of the advantages of Daylight Engineering. The use of this new Libbey- Owens-Ford product will become one of the distinguishing marks of tomorrow’s modern homes. Look for the announcement. Libbey- Owens-Ford Glass Company, 1234 Nicholas Building, Toledo 3, Ohio.

LIBBEY · OWENS · FORD
A GREAT NAME IN Glass
HOW TO FIREPROOF FRAME
STRUCTURES AT NO EXTRA COST
WITH GOLD BOND GYPSUM SHEATHING!

GOLD BOND Gypsum Sheathing is absolutely fireproof. Applied
to frame structures, it adds greatly to the fire protection—and, of
equal importance, it adds not a penny to the cost! Here are some of the
major advantages of this immediately available material:

1. CONVENIENT SIZES—NO WASTE! Panels 2' wide and full 1/2”
   thick; 6'-8” and 8' long. No random lengths, no matching or lap loss.
   One thousand feet of sheathing covers one thousand feet! Tongue
   and Groove edges on long sides for quick, snug fit. Ends square.

2. ADDS STRUCTURAL STRENGTH. Actual racking tests by inde-
   pendent testing laboratories prove that Gold Bond Gypsum Sheathing,
   applied according to specifications, adds more to the structural strength
   of a building than do ordinary sheathing materials.

3. MOISTURE RESISTANT. Gold Bond’s processed gypsum core is
   highly resistant to moisture and it is further protected with tough
   building paper on both sides.

4. WON'T WARP, SHRINK OR SWELL. Gold Bond Gypsum Sheath-
   ing is proof against wind infiltration since there are no knot holes,
   cracks or other imperfections in the flawless panels. The large panel
   size means fewer joints and those remain tight because the panels do
   not shrink, swell or warp out of place.

5. HELPS INSULATE. Because Gold Bond Gypsum Sheathing with
   its snug T & G joints effectively stops the passage of hot and cold air,
   homes sheathed with this material are cooler in summer and more
   easily heated in winter at a decided saving in fuel.

6. FIREPROOF. The core of Gold Bond Gypsum Sheathing is com-
   posed of incombustible processed gypsum. It can’t burn and so pro-
   vides effective fire protection for wood framing at no additional cost.

AVAILABLE NOW AT
YOUR GOLD BOND DEALER

BUILD BETTER WITH GOLD BOND

NATIONAL GYPSUM COMPANY • EXECUTIVE OFFICES • BUFFALO, N.Y.
BUSINESS leaders, bureaucrats and economists agree that we must largely depend on construction for post-war employment. But most business leaders and economists agree that private construction, supplemented by really needed public construction, will provide sufficient employment on construction. For never were our people and private enterprise prepared to go forward with as large a program of private construction as now. Bureaucrats contend, on the other hand, that the federal, state and local governments must rush in immediately after the war with a huge program of public works, regardless of any need for them excepting to provide employment.

Gen. Philip B. Fleming, administrator of the Federal Public Works Agency, was an army officer until enlisted a decade ago by the New Deal in its spending campaign. He said in a recent address: "Families now accumulating war bonds may be in need of new homes, but there is no assurance that they will cash them in immediately after the war in home building *** I would rather put my money on a sure thing. That sure thing is that good, sound plans for desirable and useful public works will be needed, regardless of whether full-scale employment materializes immediately after the war or not." In a newspaper report he was quoted as also saying: "We are a nation in the face of an impending crisis. Let us act like one *** We prepared for this war as a nation, not as a hundred thousand separate communities each going its own way doing what it chose according to its own lights; we prepared with no monkey business."

POLICIES DESTROY FREEDOM

The appropriation of four billion by the National Recovery Act in 1933 was the first ever made by government in this country especially to remedy unemployment. What, then, has caused many to accept Gen. Fleming's view that we can never again in time of peace have adequate employment without government regimentation of everybody as if for war, and huge government spending? What sense does it make to contend that, to prosper in future, we must abandon the means by which we so long prospered in the past?

That a people free to follow any business leadership they choose, to manage their affairs and earn and spend their money as they please, cannot progress, prosper and provide themselves enough employment, has become familiar doctrine abroad. For it is the doctrine preached and practiced by Stalin, Hitler and Mussolini. And they actually provided employment—but in the same ways that full employment is being provided in this country during the war. And their policies destroyed free enterprise and every form of freedom before the war, as they would destroy them in this country after the war.

The decline of production and employment in this country during the depression is cited. But why cite only this brief recent experience, and disregard the century and a half of previous experience, when adequate and increasing employment almost always was provided by our private enterprise?

The depression was caused and protracted more by unsound government policies than by unsound business policies. Private enterprise can and will do the job after the war if not prevented by excessive government spending and taxation, government regimentation and government competition. And this is just what the bureaucrats fear. For if private enterprise is given a chance and does the job, our bureaucrats' chance of keeping their jobs and using them to substitute Stalin's or Hitler's state socialism for our freedom and private enterprise will be destroyed.
A tree's strength is limited by its grain and rate of growth and porous structure... yet hardboards many times stronger, and easily workable, are made from its basic materials alone! The extraordinary Masonite hardboard process "remakes" wood by first reducing it to its cellulose fiber and cement-like lignin.

The ingenious Masonite "gun" produces these basic materials by literally exploding wood. Then, under different heats and pressures, fibers of varying degrees of plasticity are recombined and bonded with the lignin to form Masonite Presdwoods.* Grainless and smooth-surfaced, Presdwoods will not split, chip, crack or warp when properly used.

- You can secure Masonite Presdwoods for war-essential construction today. Government Departments and Services are familiar with their possibilities.

Masonite Presdwoods resist fire, take many finishes, do not conduct electricity. They are doing the work of metals, rubber and other materials in more than 500 war jobs. After Victory, you will use them for interior and exterior wall surfaces, ceilings, panels, cabinets, counters, furniture and other work. Masonite Corporation, 111 W. Washington St., Chicago 2, Ill.
If you are figuring on a building boom after the war because there is a big need for new housing—maybe you're just doodling.

There was a crying need for new dwellings before the war—but no boom. The fact is, need alone does not necessarily mean demand.

And dreaming about big markets-to-be doesn't get anybody anywhere either. Building leaders must plan—and plan specifically.

For example, Mr. James Twohy, Governor of the Federal Home Loan Bank System, said recently:

"The postwar period will bring a market for 1,000,000 homes a year, built and marketed on modern 'packaged plans'..."

But after your plans are made, they must be sold to the kind of people who can buy them and get others to follow their lead—that is why so many producers of building materials are planning to tell their stories in the pages of Time.

Because in Time—

You reach the kind of Americans who set the pace for the rest of the country—the million most influential U. S. families*—people like Federal, State, and City Planning Commission members, who vote Time their first-choice magazine (evidence on request).

And in Time you back up your trade-paper advertising with extra impressions on thousands and thousands of the top men in construction and finance.

*Among the heads of these households, are executives and engineers, Government officials, mayors, bankers, architects, and 22 other groups of leaders who recently voted "Time is our favorite"—or "Time is America's most important magazine."
The Questions before

The war—as we at General Electric very well know—is not over by a long sight.

But it’s perfectly right and natural that the people concerned with postwar home building should already be starting to think about the houses of the future.

For before the house of the future is designed, built, and financed there’ll be some questions to be answered and some problems to be solved.

Now, we’re one of the interested parties, since we shall be making so much of the equipment that turns a house into a liveable home.

We don’t mean just wiring, heating, and air-conditioning equipment, but also ranges, refrigerators, electric dishwashers, electric garbage disposal units, kitchen cabinets, water heaters, et cetera, et cetera.

Here’s what we’d like to ask

Shouldn’t this kind of equipment—some, or all of these appliances—be designed right into the house by architects... built right into the house by builders... financed with the house by mortgagees?

Shouldn’t this be done, not just with the fancy $10,000-and-up jobs, but with homes that sell for as low as, say, $4000 or $5000?

We think this is a proposition worth some serious thought.

Of course, it’s no brand-new idea. Up to Pearl Harbor, a substantial number of homes had been built and financed that way—with some or all of the major electrical appliances included.

FHA regulations permitted the inclusion of such items in mortgages in many cases and thereby helped establish the precedent for banks, mortgage companies, building and loan associations.

There was, definitely, the beginning of a trend.

Now the war comes in

War being what it is, the trend had no chance to develop further.

For the duration, Mr. & Mrs. John Q. Public can’t buy a new home, can’t let loose their natural urge to own the “latest thing.”

This creates a great, pent-up buying impulse.

At the same time, there’s being built up a great buying power. It’s estimated by the U.S. Dept. of...
the House

Commerce that, if the war lasts through 1944, consumers will have received approximately 100 billions of dollars more than they have been able to spend since the start of the war.

And also at the same time, our friends Mr. & Mrs. J. Q. are being told of the wonders they can expect in new things after the war. Their appetites are being whetted for something different, something finer, than they knew before the war.

Witness, for example, the advertising General Electric is running right now in a number of leading national magazines.

New days... new expectations... new habits

We think these factors can give an impetus to the building, financing, and selling of houses complete with electrical operating equipment.

We think they’ll increase the public’s desire toward buying that kind of house. People won’t expect houses to be offered as they were before the war. They’ll be ripe for changes and improvements. And they won’t be clinging to old buying habits, old buying resistances.

All of which, we believe, is food for thought for architects... builders... financial people.

Have you any questions?

We at General Electric have gone very deeply into the ways and means of building and financing the kind of home we’re talking about.

We’ve had considerable experience. We’ve collected a lot of data, both engineering and financial.

Have you any questions? We’d like to have them, as well as your opinions. Won’t you drop us a line?

Everything Electrical for After-Victory Homes

GENERAL ELECTRIC

Home Bureau • Bridgeport, Conn.

Ideas are budding at Gerity...for new freshness and beauty in the styling of tomorrow's Chrome Accessories for Bathrooms and Kitchens.

You'll see Gerity Chrome towel bars, soap dishes, tumbler holders, cabinets and similar items designed to blend with smart postwar schemes of decoration...combining the mirror-luster of this better Chrome with lifetime durability.

You'll see "beauty that does not fade"...that will not crack, peel, check, break off, or tarnish.

You'll see Leadership all the way...in Design, Manufacturing, Promotion, Performance!


Tomorrow's Dream Home Will Have Gerity Chrome
Prominent among forward-looking plans for the post-war era is the decentralization of manufacturing areas. Residences and industrial plants will be segregated, with resulting efficiency in manufacturing and pleasanter living conditions for working people.

Stran-Steel framing systems adapt themselves especially well to the construction of residential and industrial buildings. A durable, economical building material, strip steel by Stran-Steel affords exceptional flexibility in design and construction, and permits speedy erection.

The wide experience gained by Stran-Steel engineers in applications of this versatile material on wartime assignments is at the service of architects and contractors for post-war planning.
BRIEFLY TOLD:
The Timken-Detroit Axle Company has won for the second time the Army-Navy Production Award for meritorious services on the production front. The award was accompanied by congratulations from Under Secretary of War Robert P. Patterson who said, "You may well be proud of your achievement." All three Timken plants received the citation and star. Timken is the nation's largest supplier of Axles, Brakes and Transfer Cases for the Armed Forces. Although Timken military shipments were at high levels early in 1940, they have been constantly increased until today they are more than 800% in excess of 1940 shipments.

* TSA has more dealers today than at any other time in its history. Another sure sign of the profit value of the Timken franchise.

* More than 3 million helpful pieces of literature have been mailed to Timken users during 1943 (we'll mail you sample copies on request). Timken's recent 16-page booklet on how to keep equipment in good condition and reduce the need for service, mailed free to all Timken users, has brought a flood of letters of appreciation.

* Samples of a new correspondence sticker are in the mails to all Timken Dealers. The sticker contains the welcome message, "After Victory—plenty of all fuels for heating homes automatically at reasonable costs." Encouraging news on postwar fuel oil supplies, backed up by expert opinion, will be released shortly.

* TSA factory executives are burning the midnight oil on 1944 advertising plans. The new program will be bigger and better than ever. All the details will be announced in a forthcoming issue of Timken Heat* (Timken's magazine for dealers and their employees).

* We'd like to send you sample copies. Please write on your letterhead and mention this ad.

For better business—

A BETTER PRODUCT

We're proud of the profit records made by Timken Silent Automatic Dealers. Timken Dealers, as a group, make more money year after year than any other group of dealers in the oil heating industry.

We've helped dealers achieve this goal with strong magazine, newspaper and direct mail advertising, close personal cooperation, and a wide range of carefully prepared dealer sales helps, but underlying it all is the firm foundation of a better product.

A better product insures greater user satisfaction, more user good will, which in turn guarantees more sales and greater profits to Timken dealers.

We're working now with only one thought in mind—building still better products to give still greater user satisfaction in the postwar era.

After Victory we'll be ready, not only with improved heating and air conditioning equipment, but also with other new products for the home. It can't afford to miss this opportunity for a tie-up with Timken. Write us now for details of the new Timken Dealer Franchise.

TIMKEN Silent Automatic

Quality Home Appliances—for Comfort, Convenience and Economy

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

Designed to help carpenters do a better job—
Tru-Sized Doors are precision machined to exact book opening. When ordered mortised for locks and gained for hinges, pre-fitted Tru-Sized Doors can be hung in as short a time as 20 minutes.

Tru-Sized Doors offer the best in modern design, uniform quality, and master craftsmanship. Made of select Douglas Fir, they are super-strong, naturally rot-proof and highly mar-resistant.

MAIL COUPON TODAY!

Wheeler Osgood Sales Corp. Dept. 7
Tacoma 1, Washington
Please send me free literature and detailed guide sheet for ordering Tru-Sized Doors.

Name
Firm
Address
City      State
THOUSANDS of families today are planning for the home they are going to build after the war. They are starting idea files—clipping magazines—seeking information for their dream house of tomorrow.

These plans are shining symbols of a market for new homes when the war is won, and it is important that steps be taken today to aid these home builders of tomorrow.

Colored advertising in national magazines—specially prepared step-planning portfolios—a free bathroom and kitchen advisory service are Crane's contributions to aid Mr. and Mrs. America in crystallizing their dreams into action.

This service to tomorrow's home owners will help build markets for your Crane equipped homes when you are able to build them.

You will find new ideas—the most modern improvements in Crane plumbing and heating equipment for postwar homes.

And, the Crane line will continue to emphasize the beauty in design, the soundness in construction, that have always characterized plumbing and heating carrying the name Crane.
When you buy

AMERICAN SAW MILL MACHINERY CO.

60 MAIN ST. HACKETTSTOWN, N. J.

Established 1903

Radial Saws Saw Cutoffs Band Saws Jointers Planers
Saw Benches Sanders Mortisers Shapers Lathes
Saw Mill Machinery

You Buy The Most Modern Designed, Quality
Built, Time Saving, Precision Cutting, Wood-
working Machine Available Today! Here’s Why!

1. The amazing Engineering Principle of “one point cutting” — saw cuts material at same point whatever the cross cut angle. Faster. Convenient. Simple. Safe.

2. Quality of Workmanship. For instance, hardened steel telescoping ram, 32 hardened steel roller bearings, hardened steel bearing ways— all steel in all vital wearing parts. Nothing to wear out. Built to last a lifetime.

3. A Precision Built Tool for precision cutting with permanent accuracy and a finger touch, smooth operation that lightens the burden of the toughest production job.

4. Unusual Capacity provided by such Uni-Point features as the telescoping ram, universal knee, adjustable guide fence, streamline column—a capacity more than ample for general production.

5. Greater Production guaranteed by an unusual mechanical operating simplicity which eliminates some adjustments, saves time on others, and generally increases operating efficiency.

6. Versatility. Accessories enable you to use this one machine for all common and many complicated woodworking production cuts—even scarfing, notch cutting and dapping.

7. Safe with all locking and adjustment features in front of the machine above or below the table.

8. Satisfaction assured by the accumulated experience of half a century designing and building modern designed woodworking machinery in use throughout the world.

Make Your Next Order A Monarch Uni-Point. Write for Catalog 60
Incident... or Disaster?

First a tiny spark—then a small blaze "hat's soon snuffed out—that's just an incident. But when flame ignites "tinderbox" walls and ceilings—sweeps on unhindered and leaves a trail of smoking ruins behind—

that's a disaster.

The time to control fire is before it gets a "head-start"—with walls and ceilings of Sheetrock*, the fireproof wallboard. Made from gypsum, Sheetrock opposes fire with a fire-fighting mineral that cannot burn—and acts as a fire-armor to shield the structure over which it is applied.

Thanks to Sheetrock, you can have fire protection and more. There's no waiting before decorating—no delay in applying trim—no lost motion, time or material.

Sheetrock lends itself to any form of decoration—provides sweeping, unbroken surfaces—reinforced and "welded" into a unit with joint-concealing Perf-A-Tapé joints or joints may be featured as part of the decorative plan with "Panel-Wall" method. Pre-decorated Sheetrock comes in pastel shades or woodgrain effects. Walls are finished and done as the board goes on.

No wonder Sheetrock—after 20 years and more of use and proof—has become the best known and most widely used gypsum wallboard in the world.

Only the products are different!

25 YEARS! That's how long the Macklanburg-Duncan Co. has been manufacturing quality products for America's leading hardware and lumber dealers.

And while most of our manpower and material is now being used to make vital parts for Uncle Sam's planes, the quality remains unchanged. Only the products are different.

In America, there are thousands of homes that are thankful for the quality we have always put into every Macklanburg-Duncan product. For these peacetime products have stood the test of time, just as our wartime products are standing the test of battle today.

Most of our line has been absent since the start of the war, but we have been able to supply limited amounts of a few non-critical products, and you may rest assured that while the quantities are limited, the quality is not. Yesterday, today and tomorrow... the name Macklanburg-Duncan will be synonymous with quality.
Catch Noise on the “First Bounce”...

WITH SABINITE “M”

Disturbing noise bouncing around—is on the way out—it’s old-fashioned and unnecessary. For today, with Sabinite* “M”, walls and ceilings are not only beautiful and fire-protecting but “catch noise on the first bounce” and absorb a large percentage of it.

A “plus” has been added to plaster with Sabinite “M”... and this without change in standard building practice, men or methods. For Sabinite “M” is a plaster finish applied by any good plasterer over standard plaster bases. It has high light-reflectivity; is available in several colors. This results in buildings that are designed with “sound-conditioning” as a part of the original conception—that blends with the decoration and harmonizes with the design instead of adding a distracting note—“patched on” like a P. S.

So today—the modern-designed office buildings, restaurants, homes, auditoriums, hospitals, schools and churches make “sound-conditioning” a part of the original conception. Otherwise they are old-fashioned before they are built. This is possible because Sabinite “M” decorates, protects from fire, and quiets sound in one operation—a three-way service at a cost extremely low.

Here's the Woodwork to Fit That Post-War Plan!

When those post-war home plans start coming off your boards again ... here's the woodwork to fit them! It's Curtis stock architectural woodwork—in tune with today's trends. Authentic in design—yet low or moderate in cost! Here are just a few of the many styles in the complete Curtis Woodwork line, and there will be many new ones from outstanding architects.

Curtis stairways are made of stock parts. You are assured of correct architectural designing and sturdy Curtis craftsmanship throughout. Several style selections.

Curtis offers a complete line of beautifully styled built-in china cabinets for the small house where space is at a premium—or for larger, more pretentious homes as well.

The warmth and friendliness of Ponderosa Pine is given perfect expression in this Curtis stock mantel—one of many Curtis designs for post-war housing.

Designed by a famous architect, this Curtis entrance presents stock woodwork at its best. Yet this is only one of the many authentically styled entrances by Curtis for homes of all sizes and types.

Curtis Companies Service Bureau
Clinton, Iowa
Gentlemen:
Please send me literature on Curtis Stock Architectural Woodwork and Silentite Windows.

Name: ________________________________
Address: ______________________________
City: __________________ State: ___________
Tomorrow's World

... Tomorrow's Homes

AT THE PLATE
- Provide headers over plates as nailing base for top edge of sheathing. Bildrite sheathing extended into cornice to cover plates and headers. Bildrite sheathing notched for rafters to assure full insulation coverage.

AT THE SILL
- Sill and stringer set in 25/32" from foundation face. Bildrite sheathing carried down to butt flush with foundation. Bevel siding, with starting strip, extended below top of foundation to prevent infiltration.

LOK-JOINT LATH FOR CEILINGS
- 18" by 48" Lok-Joint Lath units are applied snugly over ceiling rafters. Shiplap joint is further reinforced by three heavy galvanized "Loks" on each unit. Units are staggered—centered on framing members. Units spaced 3/16" apart.

INSERTING BOTTOM UNIT
- Fasten next to last Lok-Joint unit along top edge only. Insert bottom unit under "Loks" and slide into place. Nail securely after bottom unit is in place.

1. Insulite Bildrite Sheathing forms the outer wall of the Insulite Approved Wall of Protection. The large boards provide a windproofed, weathertight wall.
2. Inner Walls—Insulite Sealed Lok-Joint Lath provides a second wall of insulation. The patented "Lok-Joint" provides a rigid plastering surface.
3. Moisture condensation eliminated—Sealed Lok-Joint Lath, with superior barrier against the studs effectively retards vapor travel. Bildrite sheathing being permeable to vapor, permits what little vapor escapes the barrier to pass naturally toward the outside.

Soon you will again be building many homes.

Homes for men returning from the war. Homes for workers and men who have accumulated bonds against the day they could build a home of their own.

In tomorrow's homes, modern improvements such as air-conditioning will put new demands upon the walls. Moisture condensation within the walls presents a grave danger unless avoided when the house is built.

When you build with the Insulite Approved Wall of Protection, you meet tomorrow's demands. With this wall you build: a wall of double insulation... A wall of superior bracing strength... A wall protected against internal moisture condensation.

Let us tell you about the Insulite Approved Wall of Protection in detail. Write for complete technical information. Insulite Division, Minnesota and Ontario Paper Company, Minneapolis, Minnesota.
To help you plan ahead for 194X

WHEREVER groups interested in housing get together these days, they discuss the many problems confronting them regarding postwar construction. Because of the inevitability of increased use of electrical appliances and equipment, they recognize that a radically new approach must be taken in planning electrically for new homes as well as for the modernization of present homes.

Questions which are raised in planning this important phase of construction are:

What electrical appliances and equipment will be available for homes? Will there be radical changes in prewar models? What will innovations be like?

How should this equipment be arranged in the kitchen, laundry, utility room, living room, bedrooms, and bath—for greatest efficiency?

How about access for servicing? Utility connections? Lighting outlets and controls?

The Westinghouse Better Homes Department is prepared to give you information on these and any other questions relating to the electrical phase of home planning. This Department welcomes the opportunity of giving authentic technical advice on the proper selection and planning of home electrical appliances and equipment.


NEW FREE BOOK!
We are preparing a new and unusual book which will help you explain to prospective home owners the vital importance of "better wiring for better living" in 194X homes.

Watch for special announcement and free offer of this big 64-page book in the April issue of this Magazine!

Tune in John Charles Thomas, NBC, Sundays, 2:30 p.m., E.W.T.

Westinghouse
Plants in 25 Cities Offices Everywhere
Yes, this big opportunity will be yours... with Weldwood.

Beautiful panels of Weldwood Plywood in genuine walnut... lovely African mahogany... Idaho knotty pine... oak... figured gum... and other fine hardwoods!

And any one of them at little more overall cost than ordinary plastering!

These gorgeously-grained, 4' x 8' x ¼" panels (factory-finished if you like) will give your customers supremely beautiful, structurally sound walls that are crack-proof... and guaranteed for the life of the building.

They provide the definite advantages of "What? Wood-paneled walls for Low Cost Homes?"

Yes, this big opportunity will be yours... with Weldwood.

Beautiful panels of Weldwood Plywood in genuine walnut... lovely African mahogany... Idaho knotty pine... oak... figured gum... and other fine hardwoods!

And any one of them at little more overall cost than ordinary plastering!

These gorgeously-grained, 4' x 8' x ¼" panels (factory-finished if you like) will give your customers supremely beautiful, structurally sound walls that are crack-proof... and guaranteed for the life of the building.

They provide the definite advantages of

dri-wall construction:

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

No plaster damp to cause cracks and warping...

No 3 to 6 weeks' delay while tons of "plaster-water" dry from the walls...

No waste of materials.

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

Forever smooth, they do not develop rough grain-lines to show through costly wall paper or paint. A quarter-inch in thickness, they will be available in convenient 6' x 4', 7' x 4', and 8' x 4' six panels. (Grain runs short way.)

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

The Mengel Hollow-Grid Flush Door...

...fingertip control yet warp-proof, crack-proof!

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

After days of patrolling a stretch of desert or guarding an oasis miles from anywhere, even a Sand Bath feels good to an American soldier. But it’s a poor substitute for the real thing.

Clean, hot water... in a gleaming, spotless modern bathtub... with soap, plenty of soap—that’s what Americans want in a bath and are sorely missing in many parts of the world today.

This yen for modern plumbing and bathroom equipment will be reflected in the homes these young people build when they return. They’ll have modern fixtures—you can bet on that! The finest their money can buy.

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

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

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

TODAY’S Porcelain Enamel

Greater opacity and better bonding qualities, the result of intensive research in recent years, make today’s porcelain enamels even lighter in weight and the finest in history. They’re more rugged... more resilient... more shock-proof and free from chipping.

FERRO ENAMEL CORPORATION - CLEVELAND 5, OHIO
Thousands of women were switching from coal-oil lamps to new-fangled electric carbons—and the age of Electricity was here! New home buyers insisted on wiring for electric lights!

Electricity got another big boost in the twenties, with Electric Refrigerators leading the way for an overwhelming demand for additional outlets.

BEFORE THE WAR—the switch was to speed, safety and cleanliness of electric cooking! 450,000 electric ranges were sold in 1940... 780,000 in 1941... with over 3 million now in use!

AFTER THE WAR—cash in on this great swing, plan NOW to wire the homes you’re going to build, for Electric Ranges. Built-in, such wiring is negligible in cost—powerful in sales appeal.

Wire your houses now for easier sales.

A-B STOVES • ESTATE • GENERAL ELECTRIC • GIBSON • HOTPOINT • KELVINATOR • MONARCH • NORGE • QUALITY • UNIVERSAL • WESTINGHOUSE

For details on wiring costs and advantages, write for the booklet “WIRING AHEAD”. Address:

ELECTRIC RANGE SECTION,
NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
155 East 44th Street, New York 17, New York

THE SWITCH IS TO ELECTRIC COOKING—clean, safe, economical. After Victory, new homes will, of necessity, be wired for Electric Ranges!
WATER HEATER!

**MEETINGS AGAIN**

Steel, copper, aluminum and other metals are once more available if WPB will release them for civilian uses and for construction. Production has greatly exceeded use in war products, and stock piles are growing. Although WPB officials are being very conservative, they are expected to shortly authorize small, experimental beginnings in manufacture of home equipment and materials. One of the first of these is steel windows, to alleviate the shortage in wood.

**DRAW PLANS NOW**

When restrictions on building are lifted there will be a sudden and concentrated demand for the services of architects, engineers and for up-to-date house plans. The demand will be greater than the supply; those who have put off planning will suffer delay. The moral is: prepare your plans now. Not only have plans but subdivision layouts; and get them approved and processed as far as possible by FHA and lenders.

**BLUEPRINT SERIES**

That builders are interested in post-war planning now is shown in the tremendous interest in American Builder's Blueprint series, started in January.

**FALLACIES**

I cannot agree with certain long haired theorists that Americans are no longer home minded because they have become "mobile": that is, they can't settle down in one place. The American people are more anxious to build and own homes than ever in history. And they want a substantial, permanent place in country surroundings. In a recent big city survey 80 per cent of those questioned said they wanted to live in a home of their own in the country.

**BUILT-INS**

More and more home equipment will be permanently built into future homes. Steps are underway to remove obstacles to including the range, refrigerator, dishwasher and much other equipment in the mortgage. Even built-in television sets, which experts say will soon be widely used, may be financed under the over-all mortgage.

**LADY BUILDER**

Recent meetings of the National Association of Home Builders have been enlivened by the presence of an honest-to-goodness, bona fide lady home builder. Her name: Henny Mollgaard, of Milwaukee. She is also secretary of the Milwaukee Chapter of NAHB. Her ideas on what a woman wants in her home are definitely worth hearing.
Information on insulation design and application—often unavailable elsewhere—is placed at your command by the Wood Conversion Company. Research on Balsam-Wool—the original blanket-type insulation—has been continuous—and, of late, important new tests have been made. Mail the coupon for portfolio sheets illustrating unusual applications of Balsam-Wool Sealed Insulation.

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**The problem of heating a room or wing addition is greatly minimized when insulated with Balsam-Wool Sealed Insulation.** The balanced insulation efficiency of a wall treated with Standard Balsam-Wool and floor and ceiling with Double-Thick Balsam-Wool means larger fuel savings and greater comfort both winter and summer. In this construction the combined transmission of heat through the walls, -0.04 for the floor, -0.11 for the ceiling construction only, or 0.02 for the combined ceiling and roof construction. These "U" factors are calculated as prescribed in the Guide of the A. S. H. A. E.

To assure superior performance Balsam-Wool insulation should be carefully applied at the edges and ends of the blanket sealed to the framing member. It is important to ventilate the attic space and the unoccupied space under the floor. The free open area of the screened gable wall louver should have a ratio of approximately 1/4 square inch for each square foot of attic floor area. The area of the screened openings under each eave should equal the open area of the wall louver.

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Wood Conversion Company
Dept. 119-3, First National Bank Bldgs.
St. Paul, Minn.

Please send me Balsam-Wool application data sheets. I understand there is no charge or obligation.

Name
Address
City
State

Balsam-Wool
Sealed Insulation

1. Windproof 4. Lasting
3. Fire Resistant 6. Highly Efficient
Here is a standard Crawford Door—full width for two-car garage. Fits pleasantly, unobtrusively into many architectural styles. Its basically good design is supplemented by durability and ease of operation. Engineered by Crawford specifically for two-car opening. Glass area may be wood panels if desired.

What will the new postwar home look like? We've seen many conjectures, some far-fetched and fanciful, but, being realistic about such matters, our slant is that there will be no startling revolutions. The pleasant and familiar styles—-American Colonial and Farmhouse, French Provincial and the English Countryhouse—are too well liked to disappear overnight.

And, so, as we project our engineering plans for new postwar Crawford Doors, we remember that many of them will be required to fit into the graceful styles that wear so well.

Naturally, we are exploring new materials and new techniques and in this we are inspired by our success in converting our entire production to the making of important, high-precision aviation parts. When we re-convert, we will take advantage of every new idea that proves its merit on the basis of improving the quality, appearance and performance of our product.

As always, our first objective is to produce superlatively fine, good-looking, easy-operating doors. It is not too early, now, for you to correspond with us concerning your postwar door needs. Your inquiry will be given our immediate attention.

MODERN Insulation Must Do MORE than Stop Heat

RED TOP* INSULATING WOOL does it!

SHIRT sleeve comfort the year 'round is a leading feature of the so-called "miracle house."

What does "shirt sleeve comfort" mean? Temperature and humidity control—every day—regardless of outside weather.

Economical and efficient control of temperature and humidity requires insulation... modern insulation... insulation that does many things—in addition to stopping heat.

Red Top Wool, made of Fiberglas®, is that kind of product. It is especially designed for quick, easy, economical installation—and for continuous, efficient results. It is ready to serve today... working "miracles" wherever it is used.

When you specify, sell, or install Red Top Wool you can do it with full confidence that it is a modern insulation that does far more than stop heat—it's one of the ways to help put the "miracle" into any house—old or new.


ONLY RED TOP WOOL GIVES YOU Insulation Plus!

- FIRE RESISTANCE
- RANGE OF THICKNESSES
- TAILORED TO FIT
- LIGHT WEIGHT
- LIFETIME SERVICE
- LIFETIME STABILITY
- ECONOMY ALL WAYS

Made in a complete line that covers every purpose and purpose. Three thicknesses in rolls and batts... 1", medium (Approx. 2"), and thick (Approx. 3").

This famous trademark identifies products of the United States Gypsum Company—where for 40 years research has developed better, safer building materials.
People aren’t waiting for the end of the war to think about new homes. They’re dreaming about them now—and they’ll want them quickly when the war is over. And so the cream of the business will go to the man who helps them get plans worked out—with blueprints on the shelf—ready for the day restrictions are lifted.

Offer more daylight, more comfort, with Fenestra Windows

You can’t go wrong in suggesting cheerier, better ventilated rooms to your prospects. Fenestra Windows can give them just that. And with Fenestra’s easier operation, safer cleaning, better screens and low-cost storm sash thrown in for good measure. Fenestra’s Package Window offers all these popular advantages at a price suited to any class of home. And it is easy to install—comes all ready to insert in the wall—framed in wood casing, glazed, complete with hardware and even with inside wood trim cut to length and mitered.

*Make jobs for the boys to come home to*

Millions of fighting men will want jobs right away when they come back. The homes you will build can help provide them on the site and in making the materials and getting them to the site. The important thing is to have the plans all made so these jobs will be ready for the boys when they get home—not months later. And don’t forget, the building industry will be called on to provide employment for millions of workers who leave the war plants.

*THAT’S WHY:*

Fenestra SUGGESTS
... for more effective use of wood

Wood has been assigned an important role in American construction. The infinite variety of jobs it is being called upon to do has revealed its increasing value as a building material—for wood is versatile, easily workable, widely adaptable.

Engineering in lumber has not only developed a better utilization of the log, but better ways of joining, bonding, shaping and applying lumber to make it serve new and traditional needs more economically, more effectively.

The Teco Connector System of construction has made possible the use of 80% and more of the working strength of wood as compared to 40 to 60% under the old steel bolt and gusset plate method of joining timbers. Because of the Teco system, greater strength can be obtained from smaller timbers, resulting in more effective use at lower cost.

Glued laminated wood structural members of various sizes and shapes are engineered and fabricated for a wide range of structures. Continuous wood arches running from foundation to roof ridge are used in the erection of wide post-free buildings such as hangars, drill halls, chapels. Glued laminated wood trusses and ply-beams are designed for one and two story structures.

New fields of service are opening for wood. When civilian construction gets under way, wood will be ready to serve with greater efficiency, marked economy.

SEE YOUR 4-SQUARE DEALER ABOUT ENGINEERED 4-SQUARE BUILDING SERVICES

Contractors and Builders may be working on "post-war" jobs sooner than they expect. In the meantime, it will pay you to familiarize yourself with the 4-Square Home Building Service and the 4-Square Farm Building Service, as well as the ABC budget payment plan. Ask your 4-Square Dealer about them.

WEYERHAEUSER SALES COMPANY
FIRST NATIONAL BANK BUILDING • SAINT PAUL, MINNESOTA

4-SQUARE LUMBER
Douglas Fir Doors save time and labor on every installation

Yes — for today's war needs and tomorrow's vast building upswing — Douglas Fir Interior Doors are time and money savers in every type of home. The several NEW features available have been proved on hundreds of war housing jobs.

First: The new FACTRI-FIT line offers Douglas Fir Doors pre-fit at the mill, trimmed and ready to hang.

Second: These new FACTRI-FIT doors may be ordered completely machined, too—gained and mortised by high-speed precision tools. Savings on the job more than offset the slight additional cost of FACTRI-FIT features.

Third: To the Stock line of famous Douglas Fir Interior Doors we've added new, attractive 3-panel designs—basic all-purpose designs—adaptable to all types of building.

Write for catalog showing complete series of Douglas Fir Interior Doors, TRU-FIT Entrance Doors, and new specialty items.

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

FACTRI-FIT Advantages

1. Every door is grade-marked, easy to order and specify. You select the exact door for the job—and you GET that door. No guess-work or confusion.

2. FACTRI-FIT doors are pre-fit, trimmed to standard size. With FACTRI-FIT, the hanging job is simple. Slow, laborious trimming and fitting are eliminated.

3. FACTRI-FIT doors are scuff-striped for protection in handling and shipping—added assurance that these fine doors will reach the job READY TO HANG.
Working for today

Women have volunteered by the tens of thousands to perform the essential duties of the WAC—but thousands more are still needed. By their patriotism, their sacrifice and their willingness to serve their country, these volunteers are making possible the release of more soldiers for combat work...thus winning the admiration and the gratitude of a nation.

Planning for tomorrow

Norge, too, is working desperately hard in all its factories, turning out scores of war products that will hasten the end of strife. Norge refrigerators and other home appliances are also doing their part by conserving and preserving food, lightening household duties and otherwise adding to efficiency in war-busy homes. And Norge is planning for tomorrow...planning new Rollator refrigerators, new ranges, both gas and electric, new washers and new home heaters.

As a result of the new skills and techniques acquired while in war production, these new Norge household appliances will be better designed, better engineered, better built. Women in their postwar homes will welcome these products of experience—these better products for a better world. Norge Division, Borg-Warner Corp., Detroit 26, Mich.

A BORG-WARNER INDUSTRY

When it's over—see Norge before you buy...meanwhile BUY MORE WAR BONDS

NATIONAL APPLIANCE CONSERVATION PROGRAM
"Better Care—Less Repair"
What the past tells you about the future...

The best attempts to picture the "Post-War" home are, basically, logical outgrowths of experience, ideas and products that time has shown to be good. In a previous post-war period the "revolutionary" idea of a one-piece, non-overflow and quiet water closet became a reality when Case introduced the famous "T/N"—the outcome of experience and good ideas.

Winning immediate acceptance by the architect, engineer, builder and merchant plumber—and the homeowner—the "T/N" has become a mark of excellence in America's finest homes and public buildings, and at an average price of only $50 to $60. At present the "T/N" is available only for essential replacements. But our experience, and your own too, makes this a reasonable promise—that after the war the "T/N" will be better than ever. W. A. Case & Son Mfg. Co., Buffalo 3. Founded 1853.

CASE HISTORIES: 1 — Serving on the Pacific Front...

Oregon's famous Vanport City—second largest and newest community in the State—has Case Vitreous China Fixtures in its homes and public buildings.

More than two thousand of the popular Case Avon Lavatories are being installed in one large housing project serving the war workers of California's busy Richmond and Berkeley areas.

Housewives and war workers from Seattle to San Diego are having kitchen chores made easy—even pleasant—by the Case Adair Laundry Trays and Aberdeen Kitchen Sinks that have been selected for their homes.

If you live on the coast, your Case Distributor is ready to serve you, and well-equipped for the job. Look for "Case" under "Plumbing supplies" in the Classified Directories of Los Angeles, San Francisco, Oakland, Portland, Seattle, Spokane, Tacoma. For other locations, write us.

American Builder, March 1944.
Again keeping ahead of the latest trends in home building techniques, this portable, low-cost DeWalt has been especially engineered and built for builders. Light in weight, this machine can be conveniently carried around from job to job. It provides the facilities of a complete woodworking shop, from the cutting of framing to the finished interior trim. Using this machine, builders can custom-cut houses faster, more accurately and for less cost. Write for complete information on this builders' saw.
In the "B.C." days of ancient Egypt, temple doors were locked with a bolt in which headed pins, within the staple, dropped into matching holes in the bolt. The key, a wooden block with pins corresponding in position to the holes in the bolt, was inserted through a slot in the bolt and raised to release the locking pins to permit the sliding of the bolt.

The latest in lock and latches is the Tubular — originated by Dexter about twenty years ago. There must be something to the Tubular idea to stand the test of time and steadily gain in popularity. There must be something worthwhile in the time-saving simplicity of installation that is done with Brace and Bit, eliminating laborious deep mortising... and to Dexter rugged dependability guaranteed with a Lifetime Warranty.

Write for your copy of the Commander Line Catalog, showing hardware that conforms to WPB revised Order L-236. Available in limited quantities for we are taking care of our own regular dealers first.
Opposition to Public Housing A Mystery to John Ihlder, D.C.

"Why the private builders are so eager to destroy public housing is somewhat of a mystery," John Ihlder, Executive officer of the National Capital Housing Authority, said in his appearance before Senator Burton's special committee, holding hearings last month on the NCHA's request for $100,000,000 for slum clearance for the District of Columbia.

Spearheading the defensive for public housing, Ihlder claims the three following points for his side: I. Slums can be reclaimed without ultimate cost to the taxpayer. II. Low-income families can be properly housed by public housing at less cost to taxpayers than by subsidized private housing. III. Public housing encourages and promotes the economic and social progress of its tenants as private housing for the same income group does not.

Lumber News Bad Now, Getting Worse—WPB

"The more successful we are on the fighting front, the greater will be the demand for lumber," Roy W. Johnson, Director of the Facilities Bureau, War Production Board, declared in a late release which, he says precludes any possibility of relaxing present restrictions on construction for civilian purposes.

Pres. Gerholz Sees Home Builders Grasping Post-War Responsibility

"Private industry, through the thousands of home builders in America, can provide proper housing for the lowest income group," Robert P. Gerholz, president of the National Association of Home Builders, told the Senate District of Columbia Committee at a hearing last month.

Gerholz charged that public housing, with all their lofty talk of social uplift, have failed to provide decent housing for the lowest income group, but indeed that a sincere attempt has been made to do so.

"The record discloses that here in Washington only 60 (sixty) of the 4,000 families on relief are enjoying the benefits of low-rent public housing," he said.

After citing the fear that socialization of housing would spread to all other business and professions and convert us into a socialistic state on the request of John Ihlder, executive officer of the National Capital Housing Authority, he defined this as "a theory of civil policy that aims at the public collective ownership of land..."
A nest egg for future business

Too many of us have seen and heard of our country's service to be interested in either buying or manufacturing pacific defense comforts until a just Victory brings us a lasting peace.

Today, our interest centers in buying War Bonds and in making the materials of war to hasten that Victory. And, this must continue to be our first interest until the war ends.

But, while we fight for our Free American way of life, let us consider what this Free American way of life can mean in our own homes.

Hundreds of thousands of American housewives can have for greater comfort and convenience than they have ever known by installing “bulldoze-free” YOUNGSTOWN pressed steel kitchens in their homes. These kitchens will be available very soon after the war is over— and they will be worth waiting for.

Plan for your future kitchen NOW. It will be a real service to all of us and on such constructive planning will depend the jobs that maintain the Free American way of life.

YOUNGSTOWN PRESSSED STEEL DIVISION • MULLINS MANUFACTURING CORPORATION • Warren, Ohio

YOUNGSTOWN PRESSSED STEEL issues YPS dealers “a nest egg for future business” by continuously keeping Youngstown Kitchens before 16,000,000 National magazine readers. The advertisement shown above will appear in full color in April.

Send for details about YPS dealerships NOW and share this YPS nest egg of prospective Youngstown Kitchen purchasers in your own territory.

YOUNGSTOWN PRESSSED STEEL DIVISION • MULLINS MANUFACTURING CORPORATION • Warren, Ohio
B EFORE the building industry will again be able to run, it will have to learn to creep, toddle and walk. That means that soon some preliminary steps must be taken to release materials for certain highly important items that will otherwise become the bottle-necks of this multi-billion dollar industry.

We are told that orders governing the relaxation of building restrictions have already been drafted. At the present time they lie tucked away in the desks of Washington waiting only for a go ahead signal from top Army, Navy and WPB officials.

We are told that very little relaxation of building restrictions will come until a definite turn has been taken in the winning of the war.

**Non-critical materials available**

When the time comes for relaxation of building restrictions, much will depend on the intelligence and knowledge that lies behind the way in which they are effected. *American Builder*'s recent survey of dealer inventories shows a deplorable condition regarding many of the basic products of construction. At the same time this survey shows that for a considerable number of other important building materials, matters are much better right now.

Three recommendations come out of *American Builder*'s study of present conditions in the building industry. These are:

1. Small and experimental beginnings should soon be made in the production of electrical, mechanical and metal equipment upon which any home-building program must depend. Such metals as steel, copper and aluminum are once more available in sufficient quantities for such a purpose.

2. WPB should carefully analyze the dealer stock situation and lay plans to rebuild essential inventories as soon as possible.

3. In regards to the considerable number of non-critical materials which are easily available, steps should shortly be taken to make their use possible without some of the hampering restrictions of L-41. A frequently suggested proposal to this end is to exempt such non-critical materials from the order entirely.

Latest reports from the lumber division of WPB show conclusively that the situation in regard to this most important material is more critical than ever, and will probably get worse during the year. Requirements for war and essential civilian use for 1944 are estimated at 34 billion feet. This is four billion feet more than the estimated 1944 production. The shortage will be so acute that even such essential activities as farm building and defense housing will suffer.

**Builders will do their part**

But because the lumber shortage is serious does not necessarily mean that all building should be similarly restricted. The ingenuity and resourcefulness of builders will find a way despite the lack of lumber. Builders must face the fact that this basic product will be scarce for a long time to come.

If home building is to get off to a quick start and perform a valuable service in creating post-war jobs, builders too must do their part. This means preparing plans for future jobs now. There is much talk about public agencies preparing a "shelf" of public construction for post-war. Such a "shelf" will not be needed if private builders have their plans drawn, the financial details arranged and other preliminaries cleared away for quick action.

**Ready for the starting gun**

There may be a severe shortage of architects, engineers and draftsman later on. Today there is both the time and the manpower in many places to permit private builders to review their best pre-war work, bring it up-to-date in the light of recent development, and blueprint their ideas for the future.

Better planned communities and more skillful design and placing of houses are part of the answer to the public housing threat. By doing as much advance planning now as possible private builders will continue their reputation for speed and efficiency as compared with public agencies. This reputation can best be expressed by saying that the private builder will usually have broken ground and gotten the concrete mixers running while a government agency is still struggling through the red tape necessary to the letting of a contract.
The Government's Landscape Blight

PNEUMONIA FLATS is label locally given this public job. Glued-on duct work dropped off. Wet gales gush into via cold air returns. Compare private duplex opposite pc.

BLIGHTING beautiful Sheridan Parkside, coal bin, garbage and ash cans at front door demoralize war workers, drive them house hunting endlessly. Fire hazard protested by firemen unable to attach hose to hydrant off grade. GOVERNMENT planned to keep war workers contented are the projects pictured above.

Thank You, Mr. Dewey

AMERICAN BUILDER is indebted to the founder and first president of Niagara Frontier Builders Association, R. C. Dewey, for much of the factual data presented here. Dewey has made a thorough study of public housing in Western New York and is being urged to request a Congressional investigation.

BUREAUCRACY has built—and Buffalo is blighted—are its surrounding suburbs scarred. In twenty-mile away Niagara Falls newly-built slums have been wormed into the fringe of Power City's finest residential areas.

Private industry too has built—although delay after delay was thrown in its path—changing plans nightly to fit the day by day revisions of WPB regulations; waiting for days that grew into weeks that grew into months for anticipated, promised, and withheld allocations of material quotas.

Yet private industry did produce—soundly built groups of single-family homes of pleasing exterior variety located in land-planned settings. It produced rental housing at less cost, of more attractive design and with more wholesome livability than did government housers. Read the under-picture details of both carefully. Then tell us which you want for your money—in peace or in war, public or private housing?

The in-migrant war workers for whom these public units were reserved have answered this question. They don't want them for their money even at subsidized rent.

VARIETY in other private homes by builder Walter S. Johnson. Note grade entry. Six rooms and half basement, rent $50.
They are letting thousands stand vacant while they seek out the houses of private builders and plead for a place on the waiting list for incompleted singles and duplexes. They seek out temporary shelter in furnished rooms at double the rent. Or if they are among the lucky few, they find a forty-year old flat in an old neighborhood, gladly pay $40 to $50 a month, though the government units rent more cheaply and with utilities provided in varying degree.

Four reasons are given by war workers for shunning these newly built slums:

1. Shoddy construction in which livability takes a nose dive. In one project cold air rushes in where glued-on bases of old air return ducts gave loose from the dampness of flooded excavations. Families were reported who moved from the same house after being splashed with pneumonia by the cold, wet air of these ductless cold air returns. Their doctor bills and absentee pay deductions (Continued to page 96)
Builder Turns Stores into Profitable Homes

PROFITS BLESSED this Milwaukee HOLC war conversion. A $12,000 investment boosted the annual income of a small-type man from the old building from $1,200 to $3,700 in five Norge months.

Rents for the new apartments ranged from $49 to $59 a month, including heat, gas, electricity, and water. From two run-down stores and ten gravity almost unrentable flats, remodeling created a project for the old building.

Contractor Ted Simons built six modern apartments. Plans were drawn by Architect Walter G. Memmiller. Externally, changes consisted of replacing glass shick on the house with clapboard siding, remodelling the stairway, and painting the plastering.

(Even left-handed carpenter finds application of insulating board an easy job. At right, old store, inside and out, before remodeling. Below: Families of six war workers now housed in converted building. Project sponsored by HOLC and Insulation Board Institute.)
Most of the apartments have fullman-type kitchenettes. All have Norge electric refrigerators and AB victory gas ranges. Heat is from a new L. J. Mueller forced-air furnace and from an old gravity job of the same manufacturer.

Some of the old bath tubs were retained and appear built-in because of an ingenious application of hardboard and plaster. A few shower stalls were installed. The plastered walls in the baths,

(Continued to page 106)

INDIVIDUALITY was attained by using insulating boards of different colors and textures. UPPER shows rectangular tiles horizontally above and vertically below white wainscotting. LEFT has variegated cream-colored planks running horizontally. No two rooms are alike. Each room is finished with an insulating board made by a different manufacturer.

TOP PRIORITY secured new equipment for this remodeled kitchen.

ANY wonder it was vacant?
No. 3 of Blueprint Series: "Livable Colonial"

Big small house features low roof line, spacious rooms and Colonial charm.

This friendly, livable, Colonial is the kind of home American boys are dreaming about on the far flung battle lines of the world. It is the kind of house Architects Henry Otis Chapman and Randolph Evans believe home buyers will want after the war because of its familiar charm and homey appeal.

The accurately detailed blueprint opposite shows many attractive features for builders now planning projects. It is essentially a small house, but big in livability. The attached garage with porch in front gives breadth to the design. It has a spacious living room as well as two ample downstairs bedrooms, with bath conveniently located. There is space above for another large bedroom.

 Builders know that they will have to put plenty of charm and buyer appeal into houses. For that reason the picket fence, shutters, low sweeping roof line, broad porch and Colonial details are important. The dining alcove is made attractive by a large picture window.

This is the third blueprint of a series started with the January issue. Next month's issue will feature a compact post-war model with a variety of exteriors for one basic plan.

Here's help for your post-war planning

AMERICAN BUILDER blueprints are presented each month as a helpful, educational feature in the interest of better post-war planning. Previously covered subjects are: January, a rambling Colonial home; February, private garages with architectural charm. Future blueprints will feature small and moderately priced homes with post-war appeal, country club cabins, wayside stands and sheds, small shops and stores. American Builder is not in the plan service business and recommends use of carefully drawn plans that conform to local ordinances, codes, building practices.
ELEVATIONS
Scale: 1/8 = 1'-0"

DESIGN No. AB-3
AMERICAN BUILDER
5T-WAV BLUEPRINT SERIES
PREPARED
BY OTIS CHAPMAN - RANDOLPH EVANS
ARCHITECTS NEW YORK, N.Y.

Boardsman Pub Corp - 105 W Adams St. Chicago
WHILE THE BOYS ARE AWAY

The old saw filer is on the job.
Rusty nails, he says, play hob.
He's trying to save a board or two,
So Army and Navy can have the new.
He hits a nail or a rusty screw,
While fixing a house for me or you.
He fastens his saw in a big ol' vise,
Whistles for a drink that's cooled with ice;
And with sure steady stroke, works the file.

While he sits unsteady, on a shingle pile.
When we have smashed the Axis might.
We'll buy some boards he likes all right,
And not try saving a board or two.
So Army and Navy can have the new.
Private Enterprise Creates Practical Rental Duplexes

GOOD planning is essential to any home-building development if it starts out and continues to be successful. This is as true of the land development as it is of the actual house plans themselves. Garden Oaks Village, Houston, Texas, is an outstanding example of all-round, careful planning both as to plot plan and floor layout of one-story duplex houses.

So successful has this FHA Title VI duplex rental project been that Builder E. L. Crain is planning several more of similar type as soon as the war ends.

The plot is laid out with park areas between the fronts of houses, and cul-de-sac roads or alleys between the rear elevations of the houses. This eliminates all through traffic from in front of the house and creates a pleasant outlook for both apartments of each duplex. The garages open onto the cul-de-sac driveways so that all traffic, both private and service, uses the rear drives.

The garages for each duplex have entranceways directly into the apartments so there is no need to walk partly around either apartment to gain entrance. The lots average 60 feet wide and the rear elevations of the duplexes measure 40 feet, so there are 20 feet between buildings with an additional 40 feet between the front entrance areas, which thoroughly eliminates any feeling of being cramped. While there is a common sidewalk from the duplex to the walk bordering the park area, each apartment has its own entrance platform in front of its door.

CUL-DE-SAC drives or alleys are a feature of the layout.
Each apartment enjoys complete exposure on three of its sides, and an exit through the garage on its fourth side. Careful planning made it possible to give these features and at the same time eliminate all but a few feet of party wall between the living portions of the apartments. The placing of the garages in parallel is mainly responsible for this satisfactory arrangement. The square feet occupied by each apartment is approximately 540, yet a complete unit for living is provided.

Satisfactorily large window areas are part of the attractiveness of these duplexes, yet both living rooms and bedrooms have ample blank walls for adequate placement of furniture. The exteriors are varied with

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**TYPICAL wall sections,** as shown above, give the details of construction as used in the Garden Oaks duplexes outside of Houston, Texas. Concrete footings and slab are one piece, reinforced both ways with $\frac{1}{4}$" and $\frac{3}{8}$" rods.

---

**THE LAND-PLANNING** feature of this rental development is outstanding in its method of creating wide lawns and parks in front yet having complete service via cul-de-sac alleys or drives along the rear ends of all of the lots.
DETAIL of the cabinets between dining room and kitchen, as shown at the right, shows how simple the construction and dimensioning are for these attractive and useful pieces of built-in equipment. The distance between shelves depends upon over-all height to the ceiling.

CEILING-HIGH shelves with quarter-round corners form the partition between dining room and kitchen, and provide both utility and decorative places for storage.

different roof treatments as well as decorative handling of trim details. The buildings rest on concrete slabs, as shown by the wall section details. A portion of the roof overhang is screened and left open, for ventilation under the roof. Footings are reinforced with 5/8" rods and the floor slabs with 3/4" rods. The wall plates are bolted to the concrete foundation.

The layout of the rooms is well handled in that the plan is divided into two portions, one containing the bedroom, hall and bath room, and the other portion containing the living room, dining room, and kitchen. The hall for each apartment has a cloak closet, each bath room a closet for towels, and each bedroom a large closet for clothes.

The dining room-kitchen units are particularly attractive and add much to the livability of the apartments. The kitchens are completely equipped and nicely decorated. The tall shelves which flank the entranceway from dining room to kitchen eliminate any partition and at the same time provide both practical and decorative spaces for dishes and utensils.

The units are architecturally pleasing, and the display of colorful pieces adds a note of decoration to the dining space which, too often, is a colorless and dull part of the small apartment, whether the apartment is in a multiple building or under its own roof, as at Garden Oaks in Texas.

Rental housing will be important after the war. This is why these duplex structures at Garden Oaks are particularly interesting, because they anticipate future developments and will have no trouble in holding their own in competition. For their part of the country, and for the family wanting a rental home of the size offered, there seemingly is nothing present which might detract from their popularity in competition with post-war offerings.

In many parts of the country there is need for basements and different architectural lines, but the same degree of good planning will always be necessary.

TYPICAL BATH room in one of the Garden Oaks duplex apartments. The floor is terrazzo on concrete.
You Can Sell Log Cabin Jobs

YES, there is a lucrative field for both war and after-war business in log cabin, summer resort and rural building jobs.

Many people are thinking about the cozy cabin they hope to build as soon as the war is over. You can turn such prospects into more immediate jobs by working with them now on plans and perhaps some of the preliminary clearing, excavating and foundation work.

More important, perhaps, for those looking for immediate income is the work that can be obtained in fixing up, repairing and maintaining old cabins, country homes and rural structures.

Where local logs are available, the problem is simplified, and the photo-
These clever cabin details will help you get more business.

graphs, drawings and details accompanying this article present some especially helpful and clever suggestions for their use. The cabin was built for Professor Carey Croneis in the Okanogan Colony Club on Elk Lake in Northern Michigan, from plans drawn by Architect J. E. Petersen of Chicago.

A study of the construction details will show much of the success of the job is due to the skillful way in which logs were handled. While the interior is largely executed in random wide V-joint white cedar, the attractive rustic effect is achieved by use of natural logs. These were cut the winter before, peeled and given a coat of clear varnish.

In laying out the Croneis cabin Architect Petersen provided a big open main room with a fine fireplace alcove flanked by built-in beds. A bank of windows opening from the dining area provides an unobstructed view of the lake. A wide balcony runs around three sides of the main room providing extra sleeping space. The balcony is reached by a rustic stair of half logs notched into 10 inch log stringer. Throughout the cabin are many clever built-in items as detailed opposite.
OPEN plan gives the 39 x 27 foot cabin spaciousness. Bank of windows at dining room overlooks lake.

Second Floor Plan

First Floor Plan

Section Looking North

Section Looking South

HOW TO LAY OUT and build a modern log cabin to retain rustic charm but provide modern living accommodations is shown in these details by Architect J. E. Petersen of Chicago. Fireplace, stairs, built-in bunk, and built-in bedroom cabinets show unusual craft, skill,
A Home with Future 'Sales Appeal' - Plus

The front cover home selected this month and presented here has most of the "musts" listed in surveys of what will be wanted by post-war buyers. Starting with an attractive entrance, this design is packed with extras.
Architect James Renwick Thomson, of Chappaqua, New York, did an outstanding job in the design of this 7-room and attached double garage home. It is built of frame with stone veneer carefully used around the entrance as shown opposite. Features of the plan include living room bay, book alcove, baths on both floors, good closet space, efficient kitchen arrangement. Overall dimensions, 28’ x 67’; contents, 29487 cubic feet.

This design built in Chappaqua, New York, by Carl Jacobson brings together in one home the definitely desired post-war qualities of very attractive appearance, efficient floor plan, good construction, and equipment for modern living. With the desire for homes by war brides and grooms still to be fulfilled, it will appeal to the younger couple. Particularly appreciated will be the ability to finish the second floor at a later date; as the family grows two extra bedrooms, bath and plenty of additional storage space can be added.
THE REAR of this home in West Hartford, Conn., offers a very well-detailed elevation.

Behind the Front -- Good Design Throughout

Homes of the future will be thoroughly studied for attractive styling on all elevations and in all rooms. This design by Walter Crabtree, Jr., is forward-looking.

FRONT VIEW, while screened by plantings, is equally as interesting as the other portions of this design: note wide fascia and inserted decorative grilles.

BUILD UP YOUR SALES PORTFOLIO OF POST-WAR DESIGNS
LIVING ROOM features handsome built-in bookcases flanking front window. Richard Averill Smith photos.

SINCE the days of shirt-front bungalows much progress has been made to turn out homes that are entirely presentable from all directions. The trend towards outdoor living areas in the rear has had much to do with this and will continue when operations are again normal. Architect Walter Crabtree, Jr., in this West Hartford, Conn., design has given careful study to this consideration; as illustrated here, it presents many ideas with post-war sales appeal. Notice the cornice and dormer detailing shown on the opposite page, the attractive built-in bookcases and cupboards above, as well as other trim. The plan shows the same thoroughness; arrangement has particular appeal for modern livability. First floor guest quarters with adjacent bath can serve also as a sick room or den, entrance hall is large enough to relieve any cramped feeling, corner cupboards balance dining room.

IN PLAN this 6-room home has all portions well segregated and arranged for proper circulation. Bedroom and bath on first floor are isolated from living.

BE READY FOR THE HOME BUILDING WAVE OF THE FUTURE
Quarter Turn Does the Trick—Variation in Appearance

STREET of war homes built by Franklin Homes, Inc., presents an attractive variety of appearance with a single standard floor plan shown below; this can be turned for use as illustrated here.

Basic plan is shifted to put kitchen either to front or rear and exterior appearance is completely changed

AMONG the clever schemes that operative builders are using to avoid monotony and give an interesting diversity of outward appearance to their streets of rather standardized homes is that employed by L. C. Simms of Portland, Ore. In his current development, “Woodland,” on S.E. 59th Ave., he is using a very carefully planned 4½-room house with attached garage, the house proper being almost square, 31 by 29 feet. A quarter turn of this plan shifts the kitchen from the back exposure to the front—a feature much recommended by the women’s magazines and which many housewives like also shifts the two bedrooms from their side position to the more quiet rear. With this switch the living room fireplace is also moved on the plan so as to remain on the side wall of the house, and the garage is moved to the opposite side.

With these simple changes in the basic or standardized floor plan two completely different series of exterior and roof treatments are worked out to further add to the variety of appearance, up and down the street. Hubert A. Williams, architect, was responsible for the details of this planning.

Mr. Simms, president of Franklin Homes Inc., owner and builder of this highly successful private-enterprise home development in the $5,500 class, is also president of the Portland Home Builders’ Assn., Inc., a strong and active group of Portland builders.

BASIC PLAN for L. C. Simms project has good circulation, storage; note connecting hall.
In going over these houses with an *American Builder* editor last year, Simms pointed out the economies effected through the use of a standardized floor plan. "It permits us to pre-cut all our framing materials with a radial power saw," he said.

Commenting on the present attitude of prospective home buyers, more living space and a chance for expansion seem to be wanted, the Franklin Homes salesmen report. Accordingly, some of the houses are given a fairly high Cape Cod type of roof, which permits the finishing of two good rooms in the attic by adding a roof dormer over the stair well. This works best on the plan with kitchen and service entrance at the rear.

"We have found the Cape Cod style, with attic left in an unfinished condition, to be quite a favorite with the people in this region. As it provides many options for finishing, it is much favored. Dad finishes up on his free nights and Sundays.

"Another thing we have learned," Mr. Simms reported, "is to keep away from the basementless type of house. We have now adopted, as standard, full basements; as the market in this community evidently prefers basements. We have experimented with the one-half, three quarters and full basement and found that sales resistance decreases as the size of basement increases."

SAME PLAN with slight changes can be turned so both bedrooms are to rear. Allows interest as in street view above.
The 15-House Job

A second article on advanced methods suitable to the operation of small builders; this one covers precutting and assembly.

By L. E. Trembley

As stated in last month's article, one of the first steps in a precutting operation is the preparation of foundations, which should be prepared to receive floor joists as soon as possible before starting mass assembly. A great saving of time may be realized on a small fifteen-house project if the following procedure is maintained.

While the excavation for footings and foundation walls is being completed, cutting benches are set up at the rear of the site and precutting operation begins. Therefore, by the time the forms are ready to pull, the sawyers have sufficient material precut and ready to assemble, so that assembly crews can be starting; the houses Numbers 1, 2, and 3 are being assembled while foundations on houses Numbers 4, 5, and 6 are being poured.

The cutting shed and outdoor cutting benches which are used on a small project are built on skids, so that the cutting operation can be moved down the line as building proceeds. Every lumber item of the house is presawn and cut. The lumber moves on conveyor rolls from the sawyer's bench to the house and there it is stacked by handlers at convenient locations within easy reach of assembly men.

All cuts are made from accurate templates, which are coded and numbered for the type of plan and elevation. On the cutting benches, lumber is handed to the sawyer, who makes the eave cut and rafter seat and jack cuts for hips and valleys. It then moves to cutting table No. 2 for the final cut in seat of rafter. All cuts for one length or type of rafter for the entire house are made before being changed for another length, the entire operation being dependent upon a predetermined cutting schedule. By operating in this manner, we do not have a large investment in a warehouse or cutting mill; and, with the cooperation of the lumber companies in their daily deliveries of material, we are in a position to move our cutting tables along the line with very little moving of material, because the material is used up at each site.

One saving feature on a precutting operation is the use of unskilled labor. Since each man is trained to do one specific operation, it is not necessary for him to be skilled in all phases of a construction job. Thus, much valuable time is saved by eliminating the necessity for a carpenter to select a piece of material, measure, cut and return to nail it in place.

It has been brought to our attention that houses built in this manner are referred to as being "thrown together," because of the rapid assembly. It might be well to spike these rumors with the fact that, since rafter studs, headers, etc. are cut from templates which are square and true, they give a better fit throughout the house. A portion of our cutting schedule is shown below.

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<td>Studs</td>
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<td>6&quot;-10&quot;</td>
</tr>
<tr>
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<td>2x4</td>
<td>2-5/8&quot;</td>
<td>Ins Headers</td>
<td>2x4</td>
<td>2-5/8&quot;</td>
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<td>Front Dr</td>
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PRECURTING either with radial saws or power hand saws (as shown above) will save time and produce better work even on small operations; part of a sample cutting schedule is reproduced at the right.
What About Building Materials?

Building materials survey reveals wartime inventories and postwar buying needs. Findings presented in Washington with recommendations for releasing civilian production of materials.

SOME of the speakers at 1944 trade conventions paint a rather alarming and gloomy picture of the outlook for building materials. American Builder has completed a survey of wartime inventories which shows that there are some problems to be met, but that conditions are neither alarming nor gloomy. Dealer inventories of lumber and lumber products, metal and metal products are depleted and, if possible, should be restored before the end of the war. There are, however, reasonable inventories of non-strategic items that can and should be used to launch a substantial volume of urgently needed repair and maintenance work.

This survey provides the first quantitative picture of wartime inventories and post-war buying needs of lumber and building material dealers. By presenting a realistic report of conditions it enabled American Builder, in cooperation with leading trade associations in the lumber and materials field, to make specific recommendations in Washington for the release of civilian production of building materials as soon as decreasing war needs permit.

Information was obtained from 3,156 lumber and materials yards of all types in all parts of the country. Reports show the quantities of 43 different materials that dealers need to restore their inventories to 1941 levels. This working basis was used in order to get an accurate picture of post-war buying needs, for 1941 inventories involve quantities of materials that dealers actually had on hand in their yards. They also involve levels to which dealers will restore their stocks at the earliest opportunity, and information regarding 1941 inventories is readily available.

Reports on individual materials show three different situations. The first involves scarce materials that are needed in large quantities by a high percentage of the dealers, including items such as lumber, garage doors, wood shingles, fir plywood, hard board, wood and metal lath, flooring, builders hardware, tools, steel sheets, woven wire fencing and copper flashings.

(Continued to page 100)
What Answer to Large-Scale Low-Cost Housing?

Frank M. Roberts, President, Houston Ready-Cut House Co., believes private housing investment corporations can do this post-war job. Do you agree?

That more than one-third of our population either cannot or will not purchase homes, is a widely held opinion among the public and some members of the building industry. Whether true or not, we face the likelihood of a choice between tremendous government housing projects after the war or large scale private operations to attempt to fill this market. As with war housing, mass production methods would be used. Included would be the use of complete prefabrication, precutting and site fabrication.

Frank M. Roberts has given considerable study to this matter; he has made concrete proposals. Part of these are as follows:

"Most discussions of post-war planning rely on housing construction as one of the principal cushions against unemployment. And rightly so, for there is a tremendous unfilled need. But if private enterprise is not organized to translate that need into employment and housing, it seems reasonable that the government will step into the breach with a large public housing program. As organized to build individual houses for individual families, the building industry is not now able to provide low-rent housing, but there is no reason why private industry, properly organized, cannot do the housing job.

"It has been widely demonstrated that large scale building of well planned communities effect very substantial economies and at the same time provide much more desirable communities. But, with a few exceptions, the home building industry is not organized to produce such communities. The principal reason that it is not so organized has been the mortgage concept. Nearly all housing is predicated on large mortgages and small equities. A small equity can easily be wiped out by an adverse condition. The (Continued to page 92)

Prefabrication

Brooder house technique points toward possible larger projects

During the past few years there has been a wide demand for small farm buildings. Consequently the various manufacturers of building materials have created construction plans for such buildings using their available products in the building of them. This trend has recently led to increased yard prefabrication of such structures.

The 10' by 12' insulated brooder house illustrated above and at the right is a product of the farm engineering department of the Flintkote Company. It is prefabricated to the extent that both front and back framing members are built up; the floor is made separately; and the Rilco laminated arched rafters are set in place and fastened with cast iron clips and lag screws to the wall sills.

Mineral-surfaced, asphalt insulation panels are put on the outside of the frame, and on the front and rear ends. Large panels, approximately 14" by 43", are used on the sides, while smaller panels cut from stock sizes are fitted over the end frames.

Roll roofing is applied vertically over the panels of building board. Plastic cement is used for calking, and lap cement for joints in the roll roofing. Dimensions given in the plans must be accurately followed so that a minimum of waste of materials will result. This is one of the virtues of prefabrication, whether it is a brooder house or a dwelling. The elimination of labor and material waste is prefabrication's most important point.

Insulation, of course, is an important part of a successful brooder house. The prefabricated floor is made of 2" by 4" joists laid across two 4" by 6" skids, toe-nailed on 24" centers. After the floor is squared and braced on the underside, a wood sub-floor is laid on top of the joists. Asphalt sealed sheathing is then laid on top of the sub-floor and nailed.
Makes Headway

down with large-headed nails 1\(\frac{1}{2}\)" long.

Edge and end joints are caulked with plastic or joint cement. Next is laid a finish floor of Flintkote utility board set in cement spread over the asphalt sealed sheathing. Large-headed roofing nails are used along the edges of the 3' by 4' units, and through the center each way on 8" or 10" centers. With this triple floor, insulation is assured for chicks.

Humidity is controlled by ventilation, as shown in one of the illustrations. The special arrangement for ventilation is another example of how prefabrication, well planned ahead of time, can save materials and time. The windows slide down into the recess built into the end of the brooder house and need no special box or hardware for their operation. When a window is let down into the ventilating slot, which of course obstructs ventilation, there is no need for the air circulation because the window is wide open.

CROSS SECTION drawing of prefabricated brooder house gives key dimensions for this unit as pictured directly above to right. Other important details of construction showing basic engineering appear at top of page.
American Builder
JOB HELPS

Prepared by
Don Graf

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

**HOW TO CONSTRUCT DRIVEWAY CURBS**

**QUANTITIES REQUIRED FOR 100 FT.**
- 7.8 barrels of cement (use white for night visibility)
- 2.6 cubic yards of sand
- 3.5 cubic yards of stone (1¼” max.)

**PROCEDURE**—If soil requires a sub-base, gravel or cinders to a thickness of 6” should be used. If the nature of either the soil or the slopes makes it necessary, provide open 4” clay drain tile, as shown. On curves, the distance to the center line (CL) of the roadway should be increased to 3-9”. Provide expansion joints of asphaltic felt at least every 50 linear feet, which separate the sections from top to bottom. A good finish can be obtained by removing the forms as soon as possible and troweling and rubbing the surface.

**HOW TO DETERMINE JOIST SIZES**

**SPANS FOR NO. 1 DIMENSION, NO PLASTER**

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<td>10’-9”</td>
<td>12’-9”</td>
<td>14’-9”</td>
</tr>
<tr>
<td>Chestnut, Western Red</td>
<td>9’-3”</td>
<td>11’-3”</td>
<td>13’-3”</td>
<td>15’-3”</td>
</tr>
<tr>
<td>Cedar, Balsam Fir, Eastern</td>
<td>9’-8”</td>
<td>11’-8”</td>
<td>13’-8”</td>
<td>15’-8”</td>
</tr>
<tr>
<td>White Pine, Western White</td>
<td>9’-9”</td>
<td>10’-9”</td>
<td>12’-9”</td>
<td>14’-9”</td>
</tr>
<tr>
<td>Pine, Western Yellow Pine</td>
<td>9’-11”</td>
<td>11’-11”</td>
<td>13’-11”</td>
<td>15’-11”</td>
</tr>
<tr>
<td>Western Hemlock</td>
<td>10’-7”</td>
<td>12’-7”</td>
<td>14’-7”</td>
<td>16’-7”</td>
</tr>
<tr>
<td>Tamarack, Western Larch</td>
<td>10’-1’</td>
<td>12’-1’</td>
<td>14’-1’</td>
<td>16’-1’</td>
</tr>
<tr>
<td>Cypress, Western Hemlock</td>
<td>10’-7”</td>
<td>12’-7”</td>
<td>14’-7”</td>
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</tbody>
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**SPANS FOR NO. 1 DIMENSION, PLASTERED BESIDE**

<table>
<thead>
<tr>
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<td>Northern White Cedar</td>
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<td>Englemann Spruce</td>
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<td>17’-9”</td>
</tr>
<tr>
<td>Cedar, Balsam Fir, Eastern</td>
<td>8’-11”</td>
<td>11’-11”</td>
<td>14’-11”</td>
<td>17’-11”</td>
</tr>
<tr>
<td>White Pine, Western White</td>
<td>9’-0”</td>
<td>11’-0”</td>
<td>13’-0”</td>
<td>15’-0”</td>
</tr>
<tr>
<td>Pine, Western Yellow Pine</td>
<td>9’-3”</td>
<td>11’-3”</td>
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</tr>
<tr>
<td>Eastern Hemlock</td>
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<td>11’-12”</td>
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<td>15’-12”</td>
</tr>
<tr>
<td>Spruce, Norway Pine</td>
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<td>15’-3”</td>
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<tr>
<td>Tamarack, Western Larch</td>
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<td>15’-6”</td>
</tr>
<tr>
<td>Cypress, Western Hemlock</td>
<td>9’-9”</td>
<td>11’-9”</td>
<td>13’-9”</td>
<td>15’-9”</td>
</tr>
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**HOW TO ESTIMATE ELECTRIC WIRING**

Figures given in this chart are based on the minimum number of outlets. For more adequate wiring more outlets would be required and the cost per outlet would be somewhat lower. Armored cable or BX is approximately the same price as knob and tube. It must be remembered that the figures given here are only approximations based on averages. Before using the chart for any locality, and during periods of fluctuating costs especially, these figures should be checked against local conditions.
Can You Cut Costs with Factory-Fitted Doors?

Once again an operation is taken off the site and done in the factory; this is a logical step in the constant trend toward shop fabrication. Reports on its success are encouraging; costs given for fitting.

The essence of prefabrication, that magic method of the coming building era, is to do in the shop or factory every operation that can be better or more economically done there than at the building site. Students of job management have been quick to pick up this popular trend and are pushing it into many of the smaller details of the building process—details that are small individually but when added together make a sizeable total. The on-the-job procedure of fitting and hanging a door is a series of such small operations—time consuming and costly. Where a number of doors are to be fitted and hung, as in a housing development of street of homes, a substantial item of labor cost has to be charged against the doors.

Recent advances in the technique of stock door production in some of the big door factories of the Pacific Northwest promise substantial cost savings for builders. Along with the development of the pre-fitting of stock fir doors, as announced by the Fir Door Institute in its “Trufit” campaign early in 1939, some of these door manufacturers have now gone a long step further to do also the machining for lock sets, dapping for hinges, letter slot cutting, and other special operations, right at the factory, before delivery to the project site.

You carpenter contractors and estimators, of course, know your customary costs for trimming off a door and fitting it to its opening, and for mortising and applying the hardware. Now compare your records with the experience of some of the housing project contractors, as recently reported to Wheeler Osgood:

E. J. Gottschalk of the Scott Graff Company, Duluth, Minnesota, writes, “We had very good success in hanging the doors on the Burlington, Iowa, project, which you pre-fitted and also bored and gained for locks and hinges, and believe that we saved a considerable amount of money by having this operation done at your plant.”

And this from a very prominent Cleveland Construction Company which had the contract for a large war housing project at Wayne, Michigan. Under date of August 31, 1943, the Vice-President wrote, “The pre-fitting of doors in the mill for this project which included the fitting for hardware, proved to be very satisfactory and saved thousands of hours of field labor. With the scarcity of carpenters existent in this area, especially qualified finishers, the completion date of this project was considerably hastened by the above procedure. We found the workmanship and tolerances excellent, and the reworking of doors was an unusual exception. This was a permanent project and the requirements of the contract specifications were normal for a permanent home.”

The costs for machining for hardware and other special items naturally vary somewhat according to the number of doors in an order and the general requirements of the specifications. However, after checking a number of actual job records and discussing the overall situation with both mill and jobber men, American Builder offers here a few cost figures as fairly accurate and fairly typical of this new and developing technique in prefabrication.

How do these compare with your own cost experience in fitting and hanging doors “the old way” on a typical housing or home project? Prefitting

For manufacturing doors to opening size (Tru-sized) add net per door. Machining for Door Locks and Latches

Machining for standard type tubular lock and recessing for face plate. 17 to 27c For mortising for standard type recess lock and recessing for face plate. 19 to 29c

Dapping for Hinge Butts

Round corner (per hinge).. 5 to 10c Square corner (per hinge). 10 to 15c

Approximate cost of other "extras" often wanted are as follows: bevelling stiles to detail, 7 to 12c per stile; for furnishing drip-mould, 20 to 30c and grooving face of bottom rail for same, 15 to 20c, applying one coat resin sealer, entire door, 40 to 50c.

Mr. Norman Cruger, general manager of Wheeler Osgood, Tacoma, is (Continued to page 92)
Spring Upkeep and Repair Suggestions

How to make buildings last. Ideas for needed maintenance and repair jobs for both home and farm construction.

How To Calk Frames

SPRING upkeep includes calking of window and door frames to avoid infiltration of moisture which, sooner or later, will cause deterioration by rot. In old buildings, where practicable, the staff bead should be removed and the space between frame proper and wall calked. This will ensure the most satisfactory results. For masonry walls, rake out the mortar \( \frac{3}{4} \)" deep from outside face of frames, on the jamb tops and under sills. For carpenter work and millwork, take off staff beads and back band moldings, apply the calking, then replace the moldings. If the space between masonry and frames is more than \( \frac{3}{4} \)" the space should be packed with oakum up to about \( \frac{1}{2} " \) of the frame surface, and then calked. For light-colored stonework, or any other surface that might be stained by the oil in oakum, it would be better to use calking cotton rather than oakum.

How To Splice Broken Timbers

A well-spliced timber is as good as a new one, and in repair and upkeep jobs saves material that probably could be used to better advantage elsewhere. Rotted or termite-damaged joists or sills, or structural timbers in farm buildings, can be removed and spliced to save replacement lumber. Practically any timber can be taken out of a structure by shoring up supporting beams.

How To Lay a Water-tight Valley with Asphalt Roll Roofing

ROLL ROOFING should be unrolled and let flat on a floor in a warm room for 24 hours before it is used on a roof. Lap joints well and use plenty of lap cement. Nail closely and don't let nails go all the way through the roof-deck boards. Cover nail heads with lap cement.
How To Build Wood-Burning Furnace Unit

THE United States Department of Agriculture at its Forest Service Laboratory in Madison, Wisconsin, has devised a special unit for burning scrap wood and sawdust economically, using a standard domestic furnace to distribute the heat. The hopper unit is built of non-critical materials. The main body of fire brick is cased in with asbestos cement board and the space between is filled with asbestos fiber. The construction and operation of the unit is fully explained in a pamphlet entitled, "War-Time Model Hopper Unit for Burning Various Forms of Wood in Standard Domestic Furnaces." The number of the publication is 1440, and can be had by writing to the Forest Products Laboratory, Madison, Wisconsin. The particular unit, as shown in the illustration at the left, is suitable for an average six-room house with a furnace having a fire pot from 18 to 22 inches. The size of the furnace and the size of the ashpit door opening will have a bearing on the dimensions of the unit when it is built in front of the existing home-heating furnace.

How To Prepare Paint Surfaces

SPRINGTIME is paint time, as every home owner knows, but to do a good job it is necessary to prepare the surface for the kind of paint the job calls for. A sharp putty knife, a block of wood wrapped with coarse, sharp sandpaper, and a dusting brush are all the preliminary tools needed. The condition of the surface under the existing paint, if moisture has caused rot or decay, may call for replacing siding where necessary. Re-setting nails, and even additional nailing is often wise. Whether you mix your paint, or buy ready-mixed paint, it is wise to be sure that the surface to be painted will take the kind you will use. Reputation as a painter can be hurt by using inferior materials. In other words, make the surface right and use good stuff.

How To Replace Broken Window Panes

REPLACING broken window panes, or re-glazing old sash is a profitable and easy spring-time job if a few simple precautions are observed. First of all, scrape the sash clean, down to the bare wood. Be sure it is dry, and give it a coating of linseed oil. Cut the glass about 1/16" less than the size of the opening. Put a bed of putty, or calking compound if you are using it instead of putty, on the sash under the glass. Then drive in points, three to five per edge depending upon the size of the opening, and apply the outside putty with a putty knife as shown in the sketch at the left.

How To Use Anchor Shields

LEAD wood-screw shields for quick anchorage in any type of wall, from wall board to solid masonry, are most useful in any and all kinds of rehabilitation work. First drill a hole and insert shield; second, drive it in flush with the surface; and third, place work in position and drive the screw, which cuts its own thread in the lead.

How To Reckon Finishing Nails

<table>
<thead>
<tr>
<th>SIZE</th>
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<th>NO. TO LB.</th>
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<td>2D</td>
<td>1 in.</td>
<td>16½</td>
<td>1351</td>
</tr>
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<td>3D</td>
<td>1 ¼</td>
<td>15½</td>
<td>807</td>
</tr>
<tr>
<td>4D</td>
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<td>15</td>
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<td>15</td>
<td>500</td>
</tr>
<tr>
<td>6D</td>
<td>2</td>
<td>13</td>
<td>399</td>
</tr>
<tr>
<td>7D</td>
<td>2 ¼</td>
<td>13</td>
<td>238</td>
</tr>
<tr>
<td>8D</td>
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<tr>
<td>12D</td>
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<td>11</td>
<td>113</td>
</tr>
<tr>
<td>16D</td>
<td>4</td>
<td>11</td>
<td>90</td>
</tr>
</tbody>
</table>
How To Build Bookshelves in 4-Inch Walls

AN INTERESTING treatment for bookshelves is to make a box to fit into an average 2" by 4" wall, having the sides of the box set at a 45-degree angle. A 6" book will fit into the box slant-wise and have its back flush with the surface of the wall. Cut the plaster about 10% wide from the edge of one stud. The bottom shelf of the box should extend enough to allow for a trim molding to be nailed around the edge of the box and butt on top of the shelf.

When cutting the plaster along the bottom of the opening, care must be exercised to keep the edge smooth. This can be done by making an opening higher up and inserting a 2" by 4" behind the plaster where the final cut is to be made. The molding will cover the other three edges of the plaster opening.—Hi Sibley.

How To Apply Wood Panelling

MUCH of the method of applying wood panelling is explained by the detail drawings below. If the panelling is to be put over existing plaster walls, there will be a need to set in horizontal strips for nailing, which means the knocking out of plaster to accommodate the strips. Decorative mouldings to cover joints are part of the technique, and should be nailed either between the joints of the panels or to one panel only, never to both.

How Built-Ins Conserve Space

THERE are millions of old houses with extra rooms that can be converted into living quarters for one or two people with a minimum of alteration; often taking only an addition of a built-in bed, desk or a combination of them. Shown below are two suggestions which may fit into a number of remodeling jobs for extra work this spring. A bunk and desk combination includes three large storage drawers and a bookshelf. The other combination of units gives both storage and eating space.
How to Build Septic Tanks and Lay Out Sewage Disposal System

This article completes the information on this important subject; first article appeared in February issue.

HERE complete plumbing and sanitary fixtures are installed in a home the wastes should never be discharged on the surface of the ground or into a small stream. The most satisfactory solution of this problem of waste disposal of most farm and village homes is by means of a properly designed septic tank. A septic tank is a water-tight receptacle. It may be made of concrete, brick laid in cement mortar, or of metal. Best results will be secured if sufficient capacity is provided to hold the sewage for at least forty-eight hours. The minimum should be sufficient to take care of at least five people.

The discharge, or effluent, from a septic tank is still dangerous if care is taken to dispose of it properly. This is usually done by means of an underground line of 4-inch drain tile which carries the discharge from the tank to seep into the soil.

Locate the disposal plant at least 50 feet away from any spring or well and in such a position that there will be no drainage toward any spring or well. As far as possible, lay drainage lines where there will be the least danger of clogging from roots of trees or shrubs. Lay all pipe lines deep enough to protect them from freezing.

Excavate for the septic tank, making sure the dimensions of the bottom of the hole are at least those specified. The depth of the hole is governed by the depth of the inlet pipe leading from the house. In all cases it is recommended that at least 1 inch of earth cover tanks and pipe lines. (In more severe climates this depth should be increased.) Pile dirt from excavation so that it will not obstruct delivery of tanks.

Close all connections to tanks with mortar; set the cover on top of open joints with tar paper before backfilling. Use care to avoid humps or hollows in the line. See drawings for suggestions on layout of line and construction of trench.

The length of the filter bed varies from 20 to 50 feet per person using tank, depending on the absorption power of the soil. Do not connect downspouts or roof drains to disposal plant. Do not allow excessive amounts of lye or strong disinfectants to enter the septic tank and retard bacterial action.

Above: Details on how to build an 800-gallon rectangular septic tank using regular concrete blocks. Left: 500-gallon round tank.
NAHB Policy — The association policy was presented to the Lanham Committee by the Executive Vice President as follows:

"First, during the balance of the war years, and consistent with the war demands for manpower and materials, governmental restrictions must be relaxed and removed as quickly as possible. Only in this way can sufficient momentum be acquired.

"Second, a large volume construction is dependent upon satisfactory financing. To some extent mortgage insurance will be necessary. Therefore, it is essential that the existing Titles of the Federal Housing Administration be implemented to meet this need.

"Third, a united front within the entire industry itself must be consolidated to insure the smooth functioning and close co-operation of finance, production, distribution, and construction.

"Fourth, it is absolutely essential that there be individual and community planning, with special attention given to revising outdated building codes.

"Fifth, the clause in the Lanham Act requiring the removal of temporary war housing within two years after the termination of the emergency must be further strengthened.

"Sixth, assurance must be given to private enterprise that there will be no competition by government in the housing field."

NHA Offices Out — Early elimination of NHA regional offices has been urged by the House Appropriations Committee. Approval was expressed of the savings already accomplished by the NHA in reducing the number of its regional offices from ten to eight. The report went on to state that the extended continuance of these offices is to be questioned.

A Focal Point for reflecting public housing sentiment is being established in Washington by the National Public Housing Conference. To head this new office, the services of Lee F. Johnson, former Assistant Commissioner of the FPFA, have been obtained. That this new office represents a serious attempt to bring the public housing viewpoint to bear on national legislation and policies, is indicated by press statements that Mr. Johnson is to have generously adequate funds for financing his office.

NHA Seeks $30,000,000 — It is apparent that NHA is proceeding with great conservatism in estimating its financial requirements. On previous occasions when Administrator Blandford has gone before the Appropriations Committee, he was told that it would be better for him to come more often requesting only sums to meet the immediate need. Undoubtedly the program is well over the hump, and the temporary war housing job is almost completed.

On The Senate Side — Senator Taft's Sub-Committee on Housing has started to function. Home builders should take note of the men who make up this committee. Each has a rich background in housing or in the financing of housing. In addition to Mr. Taft, the committee is composed of the following men: Ball, Minnesota; Wagner, New York; LaFollette, Wisconsin; Radcliffe, Maryland; Ellender, Louisiana, and Chavez, New Mexico.

New House Committee — Set up to plan for post-war, an eighteen man Post-War Economic, Policy and Planning Committee comparable to the George Committee in the Senate has just been created. Representative Colmer, Mississippi Democrat, who will act as Chairman, has assured the House that paramount aims of the committee for the post-war era would be a cessation of "wartime regimentation of the people" and a guarantee for "the continuation of free enterprise."

Offered For Sale — Commissioner Emmerich of FPFA has announced that 25 defense home projects representing a total investment of $71,000,000 will be put on the market, but does not disclose details as to prices or financing terms. A list of all projects offered is available upon request.

New NAHB Directors — We take pleasure in listing eleven new Directors, formally approved for the year 1944: M. J. Brock, Los Angeles, Calif.; Cedric Roberts, Burbank, Calif.; Grover King, Whittier, Calif.; Ed Krist, Long Beach, Calif.; Frank M. Babbitt, Columbus, Ohio; Alvin F. Groom, Oakland, Calif.; Alex Treuhaft, Cleveland, Ohio; Ben C. Wilemen, Oklahoma City, Okla.; L. C. Simms, Portland, Oregon; Edward G. Wobig, Warren, Pa., and Hugh Bremerman, Indianapolis, Ind.

Builders Meet — The five-day conference of the directors and committee members was an event of major importance. More than 10 men participated in seeking answers to problems of post-war construction, relaxations to be expected in relation to public housing, and procedures to meet the post-war need. One statistically minded builder estimated that the total contribution was at least 5,000 man-hours.

Blandford Spoke — With 80,000 units under construction, 60,000 with preference ratings, and 30,000 in the programming stage, the Administrator cautioned home builders against letting down during the next eight months. Sudden shifts of producers from one plant to another would be one community to another might create severe programming problems. "As I sense the situation, it is in psychology to discuss relaxation a little at this time," Mr. Blandford stated. "We must have patience with present problems and difficulties even though we know there is a brighter day ahead when the military picture is more clear. With that qualification, we may expect the co-operation of WPB in:

1. The government relaxing the regulatory aspect of housing at the earliest possible moment consistent with the war effort, and
2. The government channeling materials into non-war construction in order that considerable momentum may be secured for the post-war effort."

FHA Post War — Abner Ferguson urged quality in post-war housing and asked home builders who are currently engaged in war housing to plan now for their post-war operations. "Secure and subdivide your land, now; have your plans drawn and be ready to do the greatest home building job in history," he said.

"Our offices are at your service in the matter of planning to the extent that manpower will permit."

The Miracle House of the future is actually the FHA house, according to Mr. Ferguson. "The public should be informed that the house of tomorrow will be merely a house of yesterday with more features, conveniences and economies."

The current trend of advertising continued, with the heading that the sale of housing in the early post-war period will be "Furthermore," continued the Commissioner, "the public should be told about the FHA system of financing with its long term mortgage, no second mortgage, no renewal premiums, no bonuses."

(Continued to page 86)
War Workers are Planning Real Homes!

War-workers living in trailer or temporary-housing "projects" are planning to make their dreams of an after-victory home a reality. Many of these war-workers swear that they'll spend weeks in bed, once peace is declared. This promises a good crop of future customers for bedroom hardware.

And that's where you can helpfully and profitably do your share with Stanley Hardware. You may depend on it — there will be a wealth of Stanley items which will cater pleasantly to appearance, efficiency, neatness and comfort in the 194X bedroom.

No, we won't neglect those time-proved standard items that always sell and sell. After the war, Stanley will be out in front as usual with smart, smooth-functioning types and styles that will meet every requirement of architecture and interior design. With Stanley Hardware, you can take a prominent part in that coming brighter era when post-war homes will rise again in your community. The Stanley Works, New Britain, Conn.
Products Progress Keeps Rolling On

Introducing the Mighty Midget

SURFACE COMBUSTION, makers of "Janitrol", a new aircraft heater, the whirling flame of which a 700-mile blast of air fails to extinguish, suggests possibilities of house-heating by a similar gadget occupying merely a niche in one or another corner of some otherwise unused space.

SPACE-HEATING experience adds up.

Several sizes of heaters are used for various aircraft, yet one size, for instance, burns a little more than a gallon of gasoline per hour and heats the equivalent of a room containing 20,000 cubic feet. Larger sizes are being developed, and it doesn't tax one's imagination to mentally visualize the future improvements in house-heating.

Eastman Plastic Shows Its Value

TENITE plastic, an invention of the Tennessee Eastman Products, ably demonstrates its wide usage by forming the housing on rotary pneumatic drills used by women to perform man-size drilling jobs in war plants of various kinds. The grip has a natural fit, and the housing is light in weight.

Because of the resiliency and high impact strength of Tenite plastic, the housing of this drill will not chip or dent, and it withstands hard blows that might cause damage to the operating parts within the drill. Such improvements indicate the increasing use of hand power tools on outside as well as inside jobs.

New Radial Saw with Angulator

J. D. WALLACE CO. has announced a patented "Angulator" which incorporates two adjustable stops. The machine is positioned by these stops to alternately make any two angle cuts on a piece of material before removing it from the table. This saw is leading the way to new money-making economies in the shop, on the construction job, and in the lumber yard. The saw is easily portable and can be moved to any place where work is desired.

HOME BUILDERS RESEARCH INSTITUTE CREATED

The National Association of Home Builders has incorporated its Research Institute. The primary function of the institute is the duty of educational and research activities in matters related to the home building industry. It shall be concerned with building materials and equipment; shall encourage and sponsor educational courses; and shall cooperate with all other interested groups in matters of engineering design, production, distribution and finance in the home building field. Among its duties shall be the promotion of improved techniques of home construction, a study of consumer acceptance, and the dissemination of scientific, educational and informative material to members of the National Association and to the public.

This new institute is a division of the N. A. H. B., made up of its officers, directors and executive committee. The Managing Director will be a man of national reputation and broad experience in research and liberal knowledge of the construction industry problems.

Cement Industry Loses Prominent Leader

BENJAMIN FRANKLIN AFFLECK, former president and director of the Universal Atlas Cement Company, died on February 13th, at the age of 74. Mr. Affleck retired from the presidency in 1936. Much of the development of good roads was due to his faith, energy, and leadership in the cement industry.
Chemically treated wood will enable you to put *extra value* into construction at a cost amazingly low. In fact, this unseen value will give you a sales point that will make property easier to sell and you can make a profit on the extra cost of using treated wood.

For a reasonable sum, the house can be protected not only against termite attack, but against the ravages of other insects and wood-degrading organisms as well. The postwar home buyer will be willing to pay more for such protection.

Such wood treatment, with Monsanto Chemicals, does not impair the natural beauty of wood nor injure its workability.

Lumber, treated with Monsanto Chemicals, will be available after the war.

We suggest that you look into the possibilities of treating wood with chemicals now while you are looking forward to after-the-war building. We shall be glad to send you technical information upon request. Monsanto Chemical Company, Organic Chemicals Division, 1700 South Second St., St. Louis 4, Missouri.

### Monsanto Wood-Treating Chemicals

**Permasan.** A toxic formulation that protects against termites, powder-post beetles, stain and decay organisms.

**Permasan 116.** A water-repellent toxic formulation that not only protects against insect and organism attack but also retards moisture absorption, thereby helping control swelling, shrinking and warping.

**Santophen 20.** Pentachlorophenol, the toxic used in Permasan and Permasan 116 as well as in other similar formulations.

**Santobrite.** Sodium pentachlorophenate, used for sap-stain control for green lumber and as a water-soluble toxic used in the process of manufacturing insect-resistant, wood-fibre building materials.
JOBS

Weatherwood* provides you with a time and labor-saving way to build beauty, comfort and economy into any attic or other conversion project.

JOBS

The two suggestions shown here are part of a series of designs to help you get beautiful results with a minimum of labor.

JOBS ALL AROUND, AND... HERE'S A WAY TO GET THEM DONE NOW!

You can do jobs more quickly—with less manpower, by finishing rooms in homes, stores, offices, theatres—all kinds of buildings—with Weatherwood Insulating Tile, Paneltile and Plank, non-critical, available materials.

These products are made to exact dimensions, with fitted joints that go together quickly and easily. You put them on, and the job is done.

No difficult, time-consuming cutting and fitting. No highly skilled mechanic required. No painting and decorating.

Put them on right over old plaster. Or nail to studs or furring strips of new walls and ceilings. The result is beautiful, fresh, insulated, fuel-saving interiors... all in one low-cost operation.

The scuff-resisting surface is cleanable and beautiful. Set your dealer for helpful ideas on how to get more attractive interiors with a minimum of fuss and muss.


WEATHERWOOD
BUILDS, INSULATES, DECORATES, QUIETS SOUND

UNITED STATES GYPSUM
300 W. ADAMS STREET, CHICAGO 6, ILLINOIS

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

Twice as much asphalt roofing goes into repair and maintenance as all other types of roofing combined.

...and it's easier to get your share when you sell a brand name that millions know

Right now with little new building it's the existing buildings that must be kept up. And right in your community you can boost your profits with this major sales opportunity of the roofing business, because most of the repair and maintenance jobs are necessarily complete re-roofing jobs.

You can sell this big market and can sell it a lot easier with Texaco Asphalt Shingles and Roofing. For one thing — millions of home owners (and the folks right in your community) know this famous name. Furthermore — Texaco asphalt shingles are available in a variety of patterns, colors and shapes ideal for re-roofing. They're applied right over the old roof. They give real protection against weather and fire. They've got lots of eye-appeal. They're sound value and make satisfied customers.

So — sell Texaco, the brand name that millions know and trust. It's a good name to push for better profits.

* * *

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

(Continued from page 43)

should be frankly earmarked as relief and welfare expenditure. This expenditure should be used solely for providing shelter requirements and should be spread so as to benefit all persons needing such assistance. The housing of persons with incomes above the relief level, but under the levels for which private new construction can be built on an economic basis, should be accomplished as at present by using the vast reservoir of older properties. Families with higher income can be attracted from such properties by expediting the production of new homes by ordinary private means. In other words, the housing of families with low levels of income should be accomplished by the filtering-up process.

2. The basis of action should be local. The funds should be provided from local sources, Federal funds to be used only under severe depression conditions where dire suffering will result from the absence of Federal assistance. Even under such conditions, the form of relief and the management of the operations should be left under local control.

3. In no instances should public housing be constructed merely for such purposes as providing employment, slum clearance, restoration of realty values, and other extraneous purposes.

Whitlock then urged that surplus building products held by the government or resulting from the demobilization of temporary war construction be disposed of through the established trade channels for orderly absorption in postwar construction, stating that such construction could be greatly speeded by the well-planned release of these surpluses.

He pressed the point that unemployment can be kept at a minimum in the period of reconversion of industry to civilian production only by giving the green light to the construction industry "at the earliest date compatible with the successful prosecution of the war."

"Civilian construction should be resumed as soon as possible before the end of the war in order to permit contractors and others to reorganize their enterprises and to build up momentum for expanded operations in the immediate postwar period. To that end, we recommend that, as fast as war requirements for critical materials as manpower decrease, restrictions on the manufacture and use of building materials should be removed and inventories replenished."

The Ten Point program of the Producers' Council, filed with the committee for study by Congress, follows: 1. Revise the tax laws to permit deduction of funds spent for advance construction planning as current expense, to provide an incentive for immediate advance planning of all needed private construction. 2. To encourage community work plans.

2. Appropriate funds adequate to immediate planning of all essential Federal public works projects.

3. Confine Federal Public Works to projects which serve a Federal purpose, with less urgent projects to stabilize construction industry and to replace non-productive work-relief projects in times of depression, carrying out the policy declared by Congress and to encourage community work plans.

4. Return, by suitable declaration of policy, the responsibility for financing local public works to the levels of government which will own them, that local officials will stop waiting for Federal assistance and proceed with plans needed local improvements advance.

5. Help to provide adequate financing for private residential construction, through revamping of the National Housing Act and by continuing the Federal Housing Administration until adequate private mortgage insuring facilities are available.

6. Discontinue the use of Federal funds for the erection of new public housing, and rely for housing of needy families on existing structures through local welfare expenditures.

7. Provide for the disposal of...
INSTALLING MONOWALL IS A ONE-MAN JOB

LABOR SHORTAGES won’t hamper you if you use Armstrong’s De Luxe Monowall. That’s because walls and ceilings can be finished (or refinished) rapidly, with available labor. There’s no special preparation work, and no finishing to do. The large sheets are quickly and easily cemented in place—over almost any surface that’s flat and firm. Best of all, any competent mechanic can do satisfactory work just by following the instructions sent along with each shipment. No unusual skill is needed, nor special tools.

De Luxe Monowall comes in a range of popular plain colors and scored tile-designs, in sizes from 4’ x 4’ to 4’ x 12’—5/32” thick. It is installed with special Armstrong’s CM-50 Cement, applied with a notched trowel. To finish the job, Armstrong offers a complete line of moldings and channels.

From the customer’s point of view, also, De Luxe Monowall is an ideal choice for bathrooms, kitchens, and other rooms in homes, public buildings, and commercial interiors. Installation is fast and neat . . . there’s no muss or litter to be cleaned up . . . rooms are ready for use immediately. Aside from normal care and freedom from abuse, Armstrong’s De Luxe Monowall needs only an occasional wiping with a damp cloth to keep its glossy, durable surface looking spick-and-span. Its quality today is maintained at high peace-time standards.


ARMSTRONG’S MONOWALL

MADE BY THE MAKERS OF TEMLOK INSULATION—SHEATHING, LATH, DE LUXE INTERIOR FINISH
ernment-owned surpluses of building products left over from the war program in an orderly way through established trade channels and in a way to expedite needed civilian construction.

8. Appropriate sufficient funds to aid in the postwar training of returning service men and other construction workers.

9. Through a declaration of Congressional policy, encourage the removal of restrictions on civilian construction as fast as war requirements for critical materials and manpower permit.

10. Through a declaration of Congressional policy, encourage the resumption of farm construction at the earliest possible date.

The Barcol OVERdoor has what the farmer wants

He wants a door that will operate easily, that will close tightly to keep out drafts, and that he doesn’t have to be fixing all the time. The Barcol OVERdoor will give him an easy-handling, out-of-the-way, tight-closing overhead door with many years of dependable service and minimum maintenance.

FOR REMODELING or NEW CONSTRUCTION

The stock entrance door shown above is a new door on an old barn on a successful dairy farm, and the owner is mighty well pleased with it. Maybe you never thought of putting a “garage door” on a barn, but it works! What’s good for protecting cars is even better for cattle. Try it the next time you have a chance!

American Builder, March 1944
enforced, rehoused, and the simple facts of war have all been done. The city must be made over for peace. Social housing and a four-color press must be effective tools of this process. The picture must be made effective.

Barrett Roofing

Barrett Roofings—Built-up Roofs—Rock Wool Insulation—Roof Coatings and Protective Products.

If you are one of the millions who have been postponing needed home repairs until after the war, it will be good news to you to know that Barrett Roofings are available right now—to meet your every requirement and to match every style of architecture. Barrett Roofings are the result of 95 years of roofing experience "between the World and the Weather". They are long-lasting—made of the finest materials thoroughly impregnated with life-giving waterproofing material. They are attractive and fire-safe—surfaced with colorful, fingerprint-resistant granules. And they are low in first cost as well as cost per year of service.

Your guide to Top Protection for your Home Investment

Barrett Roofings are designed to help you sell roofs now! Not tomorrow, not next year, not after the war... but today.

For Barrett recognizes that roofing dealers and applicators are faced with unusual and perplexing problems this year. Out of the wealth of experience gained in other war years, Barrett has prepared 1944 consumer advertising that will help its dealers through the current trying situation—just one more reason why—especially today—it’s good common sense to join forces with a great and successful business.

THE BARRETT DIVISION
ALLIED CHEMICAL & DYE CORPORATION

40 Rector Street, New York 6, N.Y.

Barrett Shingles and Sidings... Roll Roofings... Built-up Roofs... Rock Wool Insulation... Roof Coatings and Protective Products.

Note how quickly and unmistakably the above advertisement establishes Barrett Roofing quality—always the strongest sales argument for any Barrett product. And note more particularly how this advertisement is designed to help you sell roofs now! Not tomorrow, not next year, not after the war... but today.
Strong CIO Support—In their recently issued booklet "Homes for Workers in Planned Communities Through Collective Action" the following statements are made:

"Workers by collective action can, through mass purchasing, obtain better quality equipment instead of the minimum quality that has become standard."

The net result of all of this real estate boom has been to victimize, if the public and to leave the housing situation to continue to deteriorate.

"The first thing to do in connection with the clearing of slums is to stop building what, in a few years, will be more slums. Most of the speculative house building done today—with the approval of governmental agencies—will be the blighted areas of tomorrow."

"It is to the everlasting discredit of private enterprise that housing, an essential factor in human existence, has been made the object of such conscienceless exploitation."

More on Bathtubs—Although the initial order permitting 50,000 tubs to be produced in the first quarter implied that similar action would be taken in the second quarter, no definite assurance of further production can be given at this time. The progress of our European campaign and the overall manpower situation in the first quarter makes the realization of the large order impossible.

GEORGE COMMITTEE—This post-war committee has started with the realization that Congressional procedure is too slow and cumbersome to set up the detailed machinery for steering industry back to normal production. Their chief proposal will be the creation of an all-agency to supervise the programs in the strength of the armed services, approximately 1,400,000 men will have to be inducted, many of these from essential war production who will have to be replaced.

CAFETERIA QUICKIE

With Sturdy LAUCKS-GLUED Arches

ATTRACTIVE lunch rooms... where workers can relax while they eat hot, energy-giving meals... are springing up fast these days in important war plants.

The above photo shows the start of an attractive industrial cafeteria erected in Everett, Washington. The 9 laminated arched (40' span) are built up of 22 laminations at the elbow, decreasing to 17 at the base and 11 at the top and use Laucks Construction Glue, as have thousands of others, manufactured by Timber Structures, Inc., Portland, Oregon. These wood and Laucks-Glue arched not only create an eye-pleasing spacious interior, but also contribute to fast construction and conservation of critical materials.

Specially formulated Construction Glues by Laucks, world's largest manufacturer of water-resistant and waterproof glues, are daily helping create new building techniques to meet fast changing needs. Let them help you! For complete information, write, phone, or wire:

I. F. LAUCKS, Inc.
Lauxite Resins — Lauxein Glues
CHICAGO, 2—6 North Michigan Avenue
LOS ANGELES, 1—333 S. 6th Street
SEATTLE, 4—911 Western Avenue

Factories: Seattle, Los Angeles, Portsmouth, Va., Lockport, N. Y., In Canada:
I. F. LAUCKS, Ltd., Granville Island, Vancouver, B. C. HERCULES-LAUX-MERRITT, Ltd., Stanbridge, Quebec

* 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

Specified essentiality of war housing, such conscienceless exploitation.
One simple unit does the whole job
—Servel’s New all-year Gas Air Conditioner

It’s the Next Essential for the Home of Tomorrow

It’s so simple and easy to operate! That’s one of the big reasons for the enthusiastic approval accorded Servel’s New All-Year Gas Air Conditioner in more than 340 test installations.

One compact, gas-fired unit does the whole job... provides cooled, dehumidified air in summer; moistened, warmed air in winter; and filtered, clean air the year round. This unit combines all the advantages of indirect fired heating and absorption refrigeration.

A thermostatic control permits selection of the desired room temperature, a flip of the switch for the specific function required, and the rest is automatic.

No wonder one happy user writes in, “We believe all modern houses in the future will be equipped with it.”

You’ll be able to offer the Servel All-Year Gas Air Conditioner to your clients just as soon as the coming of peace permits resumption of production. So start now to familiarize yourself—and those of your clients—who are already planning postwar building—with all the details of this “Next essential for the home of tomorrow.”

Write today for complete information about Servel’s New All-Year Gas Air Conditioner. Address Servel, Inc., Evansville 20, Ind.

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

SERVEL Inc.
America’s Leading Makers of Modern Gas Appliances
Order P-55-c Revised—The war housing critical list revisions have finally been approved. After March 1st, it will not be necessary to file a detailed list of materials. Blanket allotments approved by FHA will be made. Another sensible feature is the ability to use additional materials wherever conservation of lumber and fuel may be effected. Until the new forms are available, builders may discontinue filing the bill of materials with their application, and may start previously authorized projects under the terms of the new order.

Significant Revisions—Due to the easing up of steel, former restrictions on its use for reinforcing concrete, masonry, and structural framing have been removed. Metal gutters and downspouts for all types of dwellings are now permitted. A substantial number of additional electrical outlets, the use of larger domestic hot water storage tanks, and metal conduits as required by the 1940 National Electrical Code, are now allowed. No change has been made in either floor areas or the size of framing lumber per square foot of floor area.

New Starts—New construction started under FHA recovered from the alarmingly low level of December. Readers will recall that from 2,328 starts during the week of December 4th, new construction fell to a low of 1,130 units for the last week in the year. By January 15th new starts had crept up to 1,700, and during the last three weeks had averaged better than 2,200. With the coming of better weather a further increase is hoped for.

Housing for Veterans—A program is proposed by a measure introduced by Senator McFarland of Arizona. In his bill, Senator McFarland calls for a lending program to be handled by the Administrator of Veterans' Affairs. This aid would be extended not only for the purpose of aiding veterans of the present war to purchase homes, but also for helping them to obtain farms or to set themselves up in small businesses. However, the maximum loan that could be obtained would be $1,000.

FHA to Supervise—FHA would be required to pass upon the applications approved by the Administrator of Veterans' Affairs. It would be the function of FHA to see to it that the loan would actually be used to purchase a home and that the property met location and construction requirements imposed by the mortgage insurance program. Furthermore, the FHA would be charged with the responsibility of keeping the veterans from purchasing homes at prices believed to be in excess of sound appraisal values. The interest rate would be fixed at 3%. All that a veteran would have to do to be eligible for a loan would be to submit proof that he had seen active military or naval service for more than 90 days any time after August 27, 1940, and prior to the termination of the present war.

Public Housing Urged—To Senator Burton's Special Committee, John Ihlder, Executive Officer of the National Capital Housing Authority, presented testimony preparatory to the introduction of a bill calling for a large appropriation possibly $100,000,000. As the first of a number of NCHA witnesses, Mr. Ihlder devoted his preliminary statement to a detailed description of the attack upon his agency. He expressed disappointment in the unwillingness of builders, and those representing private real estate interests, to co-operate with the NCHA. He said:

"The Key Group in this attack is that of the speculative builders through their organization, the National Association of Home Builders, led by their local branch."

“HOME” is Such a Solid Word

... and Home-Builders Prefer Solid Time-Tested Red Cedar Shingles

COUPLED with the hope for a better post-war home, we retain a deep respect for those tried and true products which for generations have contributed to good American building.

Now, the use of Red Cedar Shingles is largely dictated by war expediency. After the war, these shingles will again play an important part in the construction and maintenance of average American homes.

Lumber Dealers Know ... that over the long pull, Certigrade Cedar Shingles are the most satisfactory roofing material they can sell.

RED CEDAR SHINGLE BUREAU
White Building, Seattle 1, Wash.
Canadian Office, Vancouver B. C.
THE TIME:  
**After Victory**  

THE PLACE:  

---

**THE CHARACTERS:**  
You!...  
Your Customer!

---

**THE FLINTKOTE COMPANY**  
30 Rockefeller Plaza, New York 20, N.Y.

---

**CUSTOMER:** How soon can we move in?  

**YOU:** (mumbling to yourself because it's been such a long time since you've had to answer that one) I wish I knew!  

**CUSTOMER:** What did you say?  

**YOU:** (hurriedly) I said 'It's up to you.' The house ought to be ready by Saturday.  

**CUSTOMER:** (always the salesman) The roof looks beautiful, doesn't it?  

**YOU:** (shyly) Oh, yes. The shingle butts make it look particularly good with the afternoon sun shining on them.  

**CUSTOMER:** And in about 10 years you'll see I knew what I was talking about when I told you Flintkote Tapered Strips were tops in roofing quality. The tapering makes them fit snugger, and the greatest amount of protective asphalt is right where it should be... where the wear is greatest.

**CUSTOMER:** Then why would anybody ever want any other kind of shingle?  

**YOU:** They wouldn't! But during the war they couldn't get them. WPB restrictions didn't permit Flintkote to make them.  

**CUSTOMER:** Sort of a war casualty?  

**YOU:** Yes indeed! Tapered strips "went to war."  

---

"Yes, Tapered Strips have "gone to war."  
But after Victory, they will be back!

---

Figure on FLINTKOTE for 'Forty-Four!
Cuts A Clean Mortise for Locks
In Less Than 30 Seconds

Factory-Fitted Doors
(Continued from page 73)
keenly interested in having representative builders try out this new idea in modern construction efficiency. He offers some helpful suggestions for specifying "tru-sized" doors, factory machined for the door hardware. He advises first to specify actual net project size, second to specify dimension of stile bevel, third to submit actual lock and hinge samples with sketch showing measurement from bottom of door to center of knob, location of hinges, desired finish floor clearance, and the swing of the door whether right hand (swings to the right or clockwise) or left hand.

Commenting on this development as a millwork jobber, J. W. Stagg of the Cole Manufacturing Co., Memphis, has written the Wheeler Osgood Co., "On special projects requiring large quantities of doors it has been customary with us for a long time to try to have contractors have us furnish doors prefitted and in many cases we have been successful in doing so. It is rare, however, that we have occasion to cut for locks and hinges, though we quite frequently have to cut for mail slots. This general practice has been common, more particularly in the East for many years. These operations can be performed in the factory at much less expense than they can at job sites. "We believe that we are going to see more of this sort of thing after the war is over. The advantages of having as much work as possible performed in the factory is taking hold.

"Our most recent experience was on the Bruce contract where all the doors were prefitted and cut for locks and hinges. Absolutely no trouble was experienced by our having this work done in the factory. You can easily imagine that the time saved by having this work done in the factory as compared with having all of the many thousands of doors on this project cut for hardware at the job was considerable."

LETTERS—
(Continued from page 7)
what you think this home would cost to build, approximately one year after peace is declared.—PVT. ROBERT W. McDANIEL, A.S.T.U. No. 4013 Commerce, Texas.

Viva Mexico!
To the Editor: Your January article "Viva Mexico" certainly hit the spot. We hope that you will write another article on this same subject, in hopes that it will contribute materially in bringing about some relaxation of the present L-41 regulations.—FLOYD O. SHAW, Manager, The H. E. Leonhardt Lumber Company, Oklahoma City, Oklahoma.

L-41 and Mexico
To the Editor: You have a masterpiece in "Viva Mexico". It is so interestingly written that it holds the reader's attention from beginning to end.

I would like to have the opportunity to read a second story on the subject. Your efforts to secure relaxation of L-41 are laudable.—R. RHODES, Manager, J. J. Rhodes Lumber Co., Council Grove, Kansas.

Low-Cost Housing
(Continued from page 70)
average investor is unwilling to put money into such equities unless the return is quick enough and large enough to justify such speculation.

"I propose that private enterprise should now organize a number of large housing investment corporations founded upon the hypothesis that residential housing is a proper and secure investment. The corporations would own the whole property rather than an equity in it. There would be no mortgagee waiting to take over the property and cause the corporation to forfeit its entire investment. Properties would be developed with an eye to long time return rather than immediate salability. In addition to the security offered by careful planning and prudent development, the properties could be insured with FHA against major capital losses. The corporations would diversify the locale of their properties to insure greatest safety. Then the economic adversity of one community or industry could not cripple a corporation. "The time to organize such corporations is now."
An Important Feature FOR BUILDERS, MANUFACTURERS OF TABLETOPS AND KITCHEN CABINETS

FOR A $\pm\frac{3}{8}"$ Tolerance IN KITCHEN SINKS SPECIFY PERMA-GLOSS

When kitchen sinks must be built in table tops and kitchen cabinets, uniform dimensions are important. Uncertain tolerances in the sink's outside rim dimension can cause reductions or losses in profits — not overlooking delivery delays and the endangering of consumer good will. Close tolerances assure neat looking jobs with a minimum of time and labor.

For this reason, every PERMA-GLOSS kitchen sink is checked and inspected with precision gauges to assure adherence to a $\pm\frac{3}{8}"$ tolerance of outside rim dimension. Thus sink tops and kitchen cabinets can be pre-fabricated with the certainty of accurate and easy installations — when the sinks are PERMA-GLOSS.

Four sizes of PERMA-GLOSS Flat Rim Sinks are available.

Style B 551 — 20" x 18", 24" x 18", 30" x 18"
Style B 534 — (with two compartments) 32" x 18"

PERMA-GLOSS Sanitary Ware is made from carefully selected clays — fired at a high temperature with a layer of vitreous china glaze. It is an homogeneous, durable body of uniform strength covered with a brilliant, lustrous surface that is acid and stain proof — not merely resistant. There's no paint to peel off — no iron to rust. Uniform wall thickness throughout assures a craze and dent proof product which will withstand thermal shocks.

MEETS ALL GOVERNMENT SPECIFICATIONS

PERMA-GLOSS is serving war sanitary needs in kitchens of war housing units, Army and Navy camps and bases, industrial war plants and vital public buildings.

The PERMA-GLOSS line of kitchen sinks are not "war-babies" in the usual sense of the term. They are designed for permanent homes. Mounted in kitchen cabinets they will grace the most streamlined post-war kitchen.

For complete information on PERMA-GLOSS, consult our distributor or write direct to:

General Ceramics Co.
SANITARY WARE DIVISION
METUCHEN, NEW JERSEY
built to take the IRK out of heavy work

Of course, Porter-Cable SPEEDMATICS, used in place of handsaws can do the usual run of jobs faster, more efficiently. But to realize the full possibilities of a SPEEDMATIC, plan the work so it will be kept cutting every minute of the day. You'll see the construction rate per man hit new highs when cutting is kept ahead of the time each piece is needed. You'll see, too, that SPEEDMATIC was designed to perform that kind of work—day-long cutting of 8 x 10's looks a lot easier with SPEEDMATIC.

SPEEDMATIC's inbuilt ruggedness comes from its oversize motor, and from the reliable helical gear drive that delivers 11% more usable power to the blade. The broad shoe sets it securely and safely, even when tilted to cut at an angle. Balanced grip makes it the only truly-one-hand saw. Available in 7 1/2", 8", 10" and 12" sizes.

FREE DEMONSTRATION

Ask to see the SPEEDMATIC at work—then judge for yourself. There's no charge or obligation. Just phone your dealer or the local Porter-Cable representative (his name is in the classified phone book) or drop a post-card to us for full details.

PORTER - CABLE MACHINE CO.
1721-3 N. Salina St.,
Syracuse 8, N.Y.
Throughout the war, Building Supply Dealers and Contractors have been doing a highly important job...keeping America's homes, farm buildings, factories and commercial structures in sound condition through efficient repairs and maintenance.

This job is going to pay dividends—big dividends—when peace returns and the enormous backlog demand for new homes and other building is suddenly unleashed.

Dealers and Contractors who maintain their businesses now, through earnest, efficient service to property owners in their communities, are going to have many of those property owners, plus young couples of the post war era, knocking at their doors seeking new construction.

Those in the industry who handle and specify

CAREY
LONG-LIFE PRODUCTS
are in a favored position to benefit to the utmost from this huge building demand of the future. For CAREY Products give the dependable service and extra long wear that create lasting customer satisfaction.

AND SATISFIED CUSTOMERS DON'T FORGET!

THE PHILIP CAREY MANUFACTURING COMPANY
Dependable Products Since 1873
Lockland, Cincinnati 15, Ohio
In Canada: The Philip Carey Co., Ltd. Office and Factory: Lennoxville, P. Q.
Government Landscape Blight
(Continued from page 47)
skyrocketed their living costs beyond endurance.
2. No shops, schools, theaters, or churches within miles of the locations chosen by public housers to make them happy war-workers.
3. The depressing effect of the drab sameness of buildings after building.
4. An aversion to revealing their address to friends and watching for the eye-brow flutter which said—"Oh, you live in that place?" with aspersive emphasis on "that."

**WAR HOUSING**
**PEACE PLANNING**

Viewed with a practical eye, this Kitchen Maid Cabinetry meets today's double requirements: standard unit kitchens—(1) available now for war housing; (2) available immediately after V-Day for all residential purposes.

By concentrating its recent efforts on defense and war housing (more than 50,000 kitchen installations), Kitchen Maid has been able to maintain 100% cabinetry production. As a result, reconversion is not a serious problem, and you can feel perfectly safe in specifying Kitchen Maid for your early post-war kitchens—now!

Built now of hardwood, plywood, and other compositions, this fine cabinetry combines all the advantages of the best materials available. But it will never be "good enough". When improvements can be made for the "kitchens of tomorrow", Kitchen Maid will make them. For further facts, see your local Kitchen Maid man, or—

**WRITE FOR THIS NEW FOLDER**


Please send new folder on "Kitchen Maid War and Post-War Cabinetry".

Name.
Address.

[Architect] [Builder] [Dealer] [Owner]

**KITCHEN MAID**
**FOUNDER OF MODERN KITCHEN UNITS**

The established home owners—those who are extolled as the "backbone of our American democracy"—are up in arms. They have organized a task force in Niagara Falls under the name of Devaux Neighborhood Association to fight for the demolition of the slum, prettily named Hyde Park Village.

(Continued to page 98)
Today, the Crawford Door Company (maker of Craw-Fir-Dor hardware) is producing precision airplane parts... gaining valuable precision manufacturing experience. Craw-Fir-Dor mechanical hardware is also being improved through constant research, assuring you an even better post-war Craw-Fir-Dor.

*Every feature making for easy installation, long life and trouble free operation is being rigidly tested in the Crawford Door Company's engineering research department.

FIR DOOR INSTITUTE
Tacoma 2, Washington
which has crawled to within a half mile of the residential
area surrounding the campus beauty of Devaux College.
Proponents of this movement feel they would be more ef-
teive if they were joined by similar groups in other areas
throughout the country.

Although nearly 2000 vacant government units overhang
the market in Western New York, the private builders con-
tinue to persevere in their effort to supply the public with
private war housing, the type overwhelmingly preferred
by those producing war materials.

The houses built by Walter S. Johnson, floor plans of one of
which is shown herewith, were originally planned to be
a deluxe home for war workers in the Bell Aircraft plant at
Niagara Falls. They were located on 50 to 60 foot lots with
set-backs varying from 25 to 35 feet. Houses of different
heights were located in the same groups. Existing trees were
saved where possible in the plot planning.

This care in advance planning produced the feeling of a
group of individually planned homes spotted to utilize the
natural advantages in the topography of the subdivision. The
effort to attain this goal was followed until building restric-
tion forced the builder to line up all houses on the minimum
set-back line of the local building code.

As building costs advanced, the garage was discon-
tinued in order to hold to the $6,000 ceiling. Despite all handicap
however, Johnson recently started and is completing the last
twenty in the project. He can no longer sell them for $6,000
will instead rent them now and offer them for sale in the
post-war market in which he has great confidence. He built
his last group two feet deeper, the dimensions being 24 by 33
feet. This because the public is showing a tendency to desire
larger rooms and greater closet space.

Planned at the time the Designed for Happiness campaign
was being promoted by Libbey Owens Ford Glass Company,
large window areas were incorporated, using Andersen cas-
ements on fronts and sides.

(Continued to page 100)

STANLEY TOOLS

Stanley Tools are a familiar feature of every picture of America at work. The
biggest job in history - building the trem-
endous war machine that won't be
finished till the enemy is crushed - takes
most of the Stanley Tools produced to-
day. Though these tools have the well-
known Stanley endurance and effi-
ciency, the finish is a serviceable "battle
dress" that permits greater speed in pro-
duction, and economy of scarce metals.

When America's coming job of "re-
conversion" is started, there'll be more
work for Stanley Tools. Then again
you'll have your favorite tools for the
big building job that is sure to come.
NO WALLFLOWER IN THE WAR EFFORT IS... BARCLAY

THE PLASTIC-COATED WALL BOARD FOR WALLS AND FOR CEILINGS

Barclay is on active duty, serving in Barracks, Camps, Hospitals (even in the Medical Corps tables), Housing, Factories, Planes and Airports.

What Barclay's engineers have learned in meeting war's demands will be at your service some happy day—Barclay with an even better plastic surface and a complete gamut of colors.

For lasting wall beauty, economy and ease of erection, build and re-build with Barclay.

Write now for the Barclay Catalog for your post-war planning.

BARCLAY
MANUFACTURING COMPANY, INC.
385 Gerard Ave., Bronx 51, N. Y., Dept. E

To be ready to meet the unprecedented demand for your counsel and service is problem No. 1. The U.S. Chamber of Commerce, Consumer and Industry Survey has defined your future. The survey shows that 1,540,000 families intend to build or buy new homes within six months after the war ends.

Here at Bilt-Well, we are preparing for that day with improved designs and new products.

CARR, ADAMS & COLLIER CO., Dubuque, Iowa

THE BILT-WELL LINE: Bilt-Well Superior Unit Windows • Bilt-Well Colonial Front Entrances • Bilt-Well Class-tite Windows • Bilt-Well Basement Windows • Bilt-Well Call-Door Garage Doors • Bilt-Well Lok-tite Trim • Bilt-Well Stair Parts • Bilt-Well Telephone Cabinets • Bilt-Well Nu-Style Kitchen Cabinets • Bilt-Well Colonial Mantels • BiltWell Combination Doors • Bilt-Well Ironing Board Cabinets • Bilt-Well
WHAT DO PEOPLE WANT MOST IN THEIR POST-WAR HOMES?

92% want the latest clothes closet fixtures according to a recent survey. K-Veniences are the answer with over 40 metal fixtures (for all apparel) that double the hanging capacity of any closet. Also roller tracks for sliding doors, adjustable shelf supports and extension drawer slides. At Hardware and Building Supply Dealers right after the war. In the meantime, include K-Veniences in your plans and—Buy More War Bonds!

KNAPE & VOGT MFG. CO.
GRAND RAPIDS, MICH.

HOUSES will be built...to live in after the war. Churches will be erected in which to worship—stores in which to sell—factories in which to manufacture varied products. They will be constructed to appeal to the tastes and needs of their future occupants—by builders who understand those tastes and needs...In all of these, the electrical distribution systems—whether simple or complex—will be important.

LOAD CENTERS . . . . SERVICE EQUIPMENT and PANELBOARDS

Light enough to handle... heavy enough to last. Backed by over 30 years of "know how" in Mixer building.

FAMOUS WONDER "CUB"...
a husky "wheelbarrow-full-per-batch" Mixer. Available on steel wheels or skids. Hand or power drive.

Get FREE Wonder Small Mixer Catalog.

American Builder, March 1944.

Other products used included Lennox furnaces, W. A. Case plumbing fixtures, Gold Bond bat insulation in walls and ceilings, Lockwood hardware, Certainteed asphalt shingles, Kettle mastic flooring in kitchen, bath, and entry room in grade-entry houses. V-joint Insultile wall-boards were used for sheathing. The kitchen cabinets were Hoosiers.

Of the many duplexes built by private builders in this area, most of them are built on about the same plan. They are in great demand, most builders having a waiting list of applicants while government houses stand vacant. The duplexes rent from $45 to $50 a month. One architect, Walter G. Lamphear, handled the planning for most of the builders and provided exterior variations to eliminate monotony.

Building Materials Survey
(Continued from page 69)

The second group involves non-strategic materials that are available to dealers, or temporarily are scarce due to extensive use in military and naval construction, or due to their use as substitutes for other more critical items. This group includes millwork, medicine and kitchen cabinets, asphalt products, building paper, insulating materials, wall board, gypsum board, insulation, plaster and cement, paint, white lead, window glass and sash cord.

Separate reports were prepared for each material, showing the inventory needs of dealers in nine geographic regions, beginning with New England, Middle Atlantic states, South Atlantic and so on across the country to the Pacific region. Reports show the number and percentage of dealers in each region who need each material, with the quantity that they need to restore their inventories. National projections, based on these regional findings, show total quantities of each material needed to restore inventories to 1941 levels. Manufacturers find these reports on individual materials very interesting.

(Continued to page 102)
WRIGHT RUBBER TILE
Flooring of Distinction

3M ACOUSTICAL CEMENT

Favored by acoustical tile contractors because it has proved most dependable under widely varying conditions, 3-M Acoustical Cement is manufactured under rigid limits. Every lot is checked for adhesion and wet strength. You take no chances when you select 3-M Acoustical Cement for adhering acoustical tile, wallboard and as a sealer under mouldings.

If an adhesive problem has you stumped why not let us help you lick it? 3-M Adhesive engineers know the answers.

MINNESOTA MINING & MFG. CO.
SAINT PAUL 6, MINNESOTA
ADHESIVE DIVISION DETROIT 2, MICHIGAN

ENSIGN TYPE

SHOWER CABINET

A Better Shower—Standard Size 36"x36"x78" now available for immediate delivery under low priority. Conforms to government regulations restricting the use of critical materials.

The No. 85 fills the need for a good quality shower cabinet for homes, clubs, hospitals and public buildings. Designed along the lines of our Ensign model, using the regular Ensign deep type receptor, the No. 85 compares very favorably with our standard Ensign cabinet and is the best shower we have been able to build under government material restrictions. Extra heavy treated fibre board wall panels are joined on all four corners with the Fiat tension locking joint which provides a rigid, permanent, waterproof structure that can be quickly erected on the job, as no additional fastenings are required for the corner joints.

The No. 85 was originally designed for use in military hospitals where a permanent type of construction is required. Many of these showers have been installed and have proved their value in practical use. Now we are able to offer this high grade shower cabinet for civilian use through the plumbing trade.

SPECIFICATIONS—WALLS: Heavy duty 1/4" S-2-S masonite hard board, coated inside and out with waterproof baked-on enamel. Metal frame pieces 20 gauge steel. Head rail 16 gauge steel. All parts formed to eliminate rough edges within the interior of the cabinet. Furnished in white only.

RECEPTOR: Regular Ensign type, precast, reinforced terrazzo. Height 6" with cast-in wall flange and drain. Leakproof and sanitary.

SIZE: Over-all dimensions 36" x 36" x 78". One size only.

FIAT METAL MANUFACTURING CO.
1205 Roscoe St., Chicago 13, Ill.
21-45 Borden Ave., Long Island City 1, N. Y.
32 S. San Gabriel Blvd., Pasadena 8, Cal.
MIAMI Wood Bathroom Cabinets are doing an essential job in wartime housing and wherever replacements are necessary. These modernized Wood Cabinets are attractively streamlined, with mirrors framed in STEEL (by permission of WPB). Write today for new illustrated folder giving full information. Address Dept. AB.

3 Distinctive CABINET MODELS

The MIAMI Line consists of three attractively-designed, fully equipped wood cabinet models; also wood-frame wall mirrors in six sizes. Bodies of cabinets are made of kiln-dried hard-wood with joints double-locked, glued and tenoned; door back of moisture-proof composition board.

MIAMI CABINET DIVISION
The Philip Carey Mfg. Company
MIDDLETOWN, OHIO

(Continued from page 100)

because they can compare the competitive position of various materials that have been displaced during the war. They also can compare performance of their sales department with the survey figures.

American Builder has made these survey findings available to the entire industry so that specific recommendations can be made for release of civilian production of building materials. Late in January, copies of the survey were presented to representatives of the War Production Board, National Housing Administration, Federal Housing Administration and executives of trade associations representing all branches of the building industry. At this time, it was learned that applications for release of civilian production of building materials have been prepared and will be presented as soon as conditions warrant. Representatives of government agencies welcomed American Builder survey figures because they provided definite information that could not otherwise be obtained, except through long and costly census enumeration.

The survey findings suggest two courses of procedure. They show that inventories of essential structural materials, involving lumber and lumber products, metal and metal products should be partially restored before the end of the war so that the building industry will not be forced into inflationary competition for scarce materials, and that the industry will be in a position to provide a maximum of post-war employment. The fact that dealers have or can get adequate stocks of various non-strategic materials suggests an entirely different procedure, in keeping with policies proposed by the National Retail Lumber Dealers Association and others in Washington. It suggests that urgently needed repair and maintenance work will be permitted to go ahead in non-defense areas, where labor is available and where the work can be done with available supplies of non-critical materials. It is believed that this procedure will be followed when civilian building and production of building materials are permitted to go ahead.

The Name
1818
HOPE’S
1944

Guarantees

Such a house as this one will fulfill for thousands their idea of a "post-war" home. HOPE’S Metal Casement Windows contribute greatly to the owner’s satisfaction and they may be included inexpensively, conveniently and profitably to the builder. Until current stocks are exhausted, HOPE’S Steel Windows are available now without priority certificates.

Residence, Virginia Forest, Falls Church, Va. Route 102, Woodbridge, Va.

HOPE’S WINDOWS INC., Jamestown, N.Y.

BACK THE ATTACK • • • BUY WAR BONDS
America's MAIN STREET will "dress up" after the war

When building materials again become available, many merchants in your locality will want to modernize their store fronts. You'll find porcelain enamel ideal for these construction jobs. It creates a smart, colorful appearance that stimulates trade. And this attractive light-weight facing material is quickly and easily installed.

Since porcelain enamel does not fade, rust or wear off, and is easy to clean, its upkeep cost is low. A wide range of colors permits practically any color scheme desired. Remember, too, that porcelain enamel is not fragile. It can withstand all but the severest of abuse.

For lasting satisfaction to your customers specify that the porcelain enamel be fused on ARMCO Ingot Iron—the original enameling iron and the most widely used base metal for this exacting purpose. The American Rolling Mill Company, 951 Curtis Street, Middletown, Ohio.

Export: The ARMCO International Corporation

YES, there are Tree Farms in the Western Pine region. The number of company-owned "farms" certified by the Western Pine Association and dedicated to growing commercial forest crops is steadily increasing.

This region has large reserves of old-growth standing timber. And the accelerated growth on harvested lands, improved manufacture and laboratory research assure far beyond our time an adequate lumber supply of the soft-textured Western Pines.*

*Idaho White Pine  *Ponderosa Pine  *Sugar Pine

The American Rolling Mill Company, Portland (4) Oregon

"These are the Western Pines"
MORE—a Complete Line
BETTER—Ready to Produce as Released

The Bennett Staff is Re-engineering the Entire Line of Fireplace Products and You Will Benefit.

THERE'S NO PRIORITY ON INGENUITY!
Why Not Build What You Can't Buy Today?

LET THIS NEW BOOK HELP YOU
Shopcrafter's Manual
By Nelson L. Burbank and E. M. Mitchell

One hundred and forty projects—furniture for the home, garden, nursery, lamps, cabinets, chairs, tables, useful articles, novelties and toys made from commercial woods and veneers that you can get today. Large working drawings show construction details. Photographs show the finished article. Material lists and step-by-step instructions.

Here is a manual that will delight the home craftsman, the beginner or the experienced woodworker with power tools. Projects range from simple toys to useful furniture in modern designs and light finishes. Look over the accompanying list of projects, then send the coupon below for your copy of the new SHOPCRAFTER'S Manual.

142 pages—140 projects—8½" x 11"—$2.00
Furniture for the Home—56 Projects— Including benches, bookcases, cabinets, counter tops, desks, lamps, seats, stools, tables.

Garden Furniture—16 projects— Including gates, lattices, pergolas, garden seats, chairs and tables, boat, bird houses.

Children's Furniture—12 projects— Including a child's bed, chairs, plaques, humidifier.

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These books are the most up-to-date and complete we have ever published on these many subjects.

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Architectural design and drawing, estimating, steel square, roof framing, construction, painting and decorating, heating, air-conditioning, concrete forms and many other subjects are included.

BETTER JOBS—BETTER PAY
Keep busy now at good pay, and be prepared for after-war building boom. Big opportunities are always for MEN WHO KNOW HOW. These books supply quick, easily understood training and handy, permanent reference information that helps solve building problems.

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Vocational Publishers since 1899
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You may ship me the Up-to-Date edition of your nine big books, "Building, Estimating, and Contracting" without any obligation to buy. I will send you $2.00, and after that only 25¢ a month, until the total price of only $29.80 is paid. I am not obligated in any way unless I keep the books.

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Name
Address
City and State

Please attach a letter stating your age, occupation, employer's name and address, and that of at least one business man as a reference. Men in service must give home address.

FILL OUT THIS GUARANTEED ORDER FORM

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

Enclosed find $2.00, for which send me a copy of Shopcrafter's Manual, and a copy of the American Builder Book Guide FREE. If I do not find the book entirely satisfactory I will return it within 5 days of receipt and you will refund my $2.00.

Name
Address
City and State

Please attach a letter stating your age, occupation, employer's name and address, and that of at least one business man as a reference. Men in service must give home address.
Mall-Saws

SET
THE PACE

For VICTORY
Construction

MODEL 80—Cutting Capacity 2½"

* Squaring form boards to size.
* Making multiple cuts of like framing members.
* Fitting interior trim.
* Cutting openings for windows, doors, registers and ventilators.
* Cutting metal, cutting and scoring stone, concrete and tile with an abrasive wheel.

These powerful, high speed saws assure accurate cuts, better fitting and a better building. Available for VICTORY Construction with 8", and 12" blades. Cutting capacities 2½" and 4½".

Literature and prices mailed upon request.

MALL TOOL COMPANY
7737 South Chicago Ave., Chicago 19, Illinois

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SURE OF RESULTS

...You need methods and material you can trust! You have to make roofs weathertight and waterproof. You need a roof coating that will keep your new installation in weather defying condition long past its expected life. You have to be SURE. That's the time for SONNEBORN'S STORMTIGHT. Write for details—Dept. A-11.

BUILDING PRODUCTS DIVISION
L. SONNEBORN SONS, Inc.
88 Lexington Avenue, New York 16, N. Y.

DEALERS TELL US

THIS BOOK GIVES THE ANSWERS
TO TODAY'S
MOST PUZZLING
QUESTIONS

How will tomorrow's homes be built? Who will build them? Who will sell them? How much more will the homeowner get for his money?

This new book deals with conventional construction, speculative building, prefabrication—and Precision-Building. Tells of the progress made under the impetus of War needs. Explains the aims of mass production when applied to house construction.

The homeowner learns how to plan and buy a home of any size, any type, anywhere—and to be sure of receiving sounder values for his money. The architect learns how he can maintain complete flexibility of design—while employing the advantages of engineering technique and mass production—and how he can handle even small homes at a profit. The builder learns how to eliminate "guess-timating" and make sure of his normal profit on every house—large or small. Real estate developers and brokers, building material dealers, department and furniture stores, chambers of commerce, banks and lending institutions—all find, in this book, suggestions as to how they can play a part in post-war housing—on a larger scale than ever before.

"Not houses, but Homes" was written largely to the prospective home-owner. Its primary aim is to clarify the differences between Homasote Precision-Built Construction and all other mass production methods of house-building. But its scope and interest are wide. We will welcome the opportunity to send you a copy.

To date, $8,000,000 of private homes and $30,000,000 of Government housing have been built by Homasote Precision-Built Construction—always with local labor and the cooperation of local suppliers and contractors.

HOMASOTE COMPANY, Trenton, N. J.
You can do a lot with Tile-Tex

Today’s restrictions on construction still make it possible to use Tile-Tex asphalt tile in recreation rooms, kitchens and hallways where the cost of the installation does not exceed $200.

Here’s an opportunity for you to keep busy with Tile-Tex on work of this type. Home-owners everywhere are interested in modernizing within today’s limitations. Write today for “Floors that Endure” and the name of the nearest Tile-Tex Contractor.

The Tile-Tex Company

CHICAGO HEIGHTS
ILLINOIS

3½-S TILTING KWIK-MIX

End discharge
Air-cooled engine
Light weight
Welded construction

Anti-friction bearings
Spring mounting
High speed trailing

Write for Bulletin AB

KWIK-MIX CONCRETE MIXER CO.
PORT WASHINGTON . . . WISCONSIN

Old Stores into Housing
(Continued from page 49)

as in the kitchens, were covered with enamel.

Tile-Tex covers the first floor. The stairway, kitchen, baths and common halls of second floor are laid with Armstrong linoleum.

Whereas in the old building the front stairs served only one flat, all apartments now are served by a common front entrance. Walls and ceilings of the entrance and stairway are finished in hardboard in a natural brown finish.

All bedrooms and living rooms were finished in insulating board—serving to build walls and ceilings, insulate, decorate and quiet sound—all in one operation. Eight different manufacturers provided the material. Different types of board and treatment were used in each room as a demonstration of versatility.

As an example of the unusual decorative results achieved, the walls of one living room were finished in planks of cream colored insulating board, applied horizontally. Planks of the same material, in green, topped by a wood molding, provided a wainscoting. Smaller squares of the cream colored board, with an inset border of green rectangles, made a matching ceiling.

In several of the rooms, large panels of building board decorative finishes were used for walls or ceilings, or to supplement planks and tileboards in varied patterns. Here wood moldings covered the joints and seams. Moldings were used throughout to protect exposed corners.

Paul D. Close, technical secretary of the Insulation Board Institute, supervised the installation of the insulating board on the job. He reports Milwaukee owners of remodeled buildings finding a ready sales market, several sold recently at good prices. While the Milwaukee project was financed as a war housing project by the NHA, under the supervision of the HOLC, it is considered typical of reconditioning opportunities which will be open on a wide scale after the war. Arrangements for the conversion were handled by Prosper Gottschalk, HOLC reconditioning supervisor in Milwaukee.
LOCAL SUBSCRIPTION AGENTS WANTED

American Builder is looking for a limited number of building men to serve as local subscription sales representatives in their hometowns and nearby areas. Applicants selected will be authorized to accept new and renewal subscriptions for American Builder on a liberal commission basis. If interested, please write to American Builder, Circulation Department, 30 Church Street, New York, N. Y., informing us of your interest, the amount of time you have available to represent American Builder as a local subscription agent, and the cities or towns to which you would like to be assigned.

AMERICAN BUILDER, CIRCULATION DEPT., 30 CHURCH STREET, NEW YORK, N. Y.
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30% to 40% MORE CONCRETE with this MIXER!


"UNIVERSAL" LEVEL TRANSIT

For Greater Accuracy, Dependability and Precision

Especially designed for running levels and taking vertical angles in all surveys and check-up operations. Patented Ball Bearing Race assures perfect adjustment under severe conditions . . . 25 power brakes and scope . . . lights easy to operate. Features of higher priced models. Write today for full information and Free Booklet, "How to Lay Out Building Lots."

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Write today for details and prices.

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... delivered sooner in Plywood cases

- Mail from home—greatest morale-builder for our fighting men—now reaches them SOONER because of Douglas Fir Plywood. Developed by Seattle Port of Embarkation officers, a portable, sea-going mail-box cuts hours—sometimes days—from the delivery time of mail for our Aleutian outposts. Built of inch-thick Exterior grade Douglas Fir Plywood, this new locker carries the mail "top side"... is the last thing aboard and the first thing ashore. It's water-tight, resists the harshest weather, can't sink even when loaded with 135,000 letters. The mail gets through—quickly, safely—because it's Plywood-protected. Write for information to Douglas Fir Plywood Association, Tacoma 1, Washington.

Douglas Fir Plywood is specified for many other uses by our armed forces. When peace comes, this strong, rigid, durable "miracle wood" will be your most versatile construction material.

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

STRONGER PER POUND THAN STEEL

The letter "S" stamped on the back of this wheelbarrow tells me it's a STERLING wheelbarrow. That's my assurance of getting a really high-grade barrow, the kind that can take the punishment of hard everyday wheeling and come back for more. No wonder buyers have stuck to Sterling for nearly 40 years.

STERLING Wheelbarrow Co., Milwaukee 14, Wis.
You can always make friends...

That's what Certain-teed is doing for you with 5,000,000 Farm Families!

It's tough to be "short of this" and "out of that..." to have to ask old customers to wait for what they need—and new customers to come back! We know what you're up against! But when you can't make sales, you can at least make friends! That's why Certain-teed continues in 1944 its advertising campaign to the 5,000,000 prosperous farm families who read Country Gentleman, Progressive Farmer, Successful Farming, Hoard's Dairyman, and Poultry Tribune! In these magazines, and in Certain-teed's popular Farmer's Handbook, we're making and holding friends for Certain-teed dealers... developing a preference for Certain-teed products!


CERTAIN-TEED BUILDING PRODUCTS

CERTAIN-TEED PRODUCTS CORPORATION, 120 S. LaSalle Street, Chicago 3, Illinois
Architects and engineers have specified
The "OVERHEAD DOOR" in thousands of
war plants and peacetime buildings because
of the long life of this quality door and its
extreme ease and speed of operation.

The "OVERHEAD DOOR" with the Miracle
Wedge is built as a complete unit to fit any
opening and is used in all types of structures.

TRACKS AND HARDWARE OF
SALT SPRAY STEEL

Any "OVERHEAD DOOR" may
be manually or electrically operated. Sold and installed by Nation-
Wide Sales — Installation —
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BUY WAR BONDS

OVERHEAD DOOR CORPORATION • Hartford City, Indiana, U.S.A.
Successful builders demonstrated the wisdom of including screen and storm doors in their bids in pre-war jobs. Often it was a deciding factor in “letting the contract.” In today’s jobs, as in the past, National Screen and Storm Door Sets are contributing to builders’ success with customer satisfaction. Normally the National Screen and Storm Door Set line comprises sets No. 90 (illustrated above), Nos. 91, 92, 93, and 94. See your dealer for those available.