American Builder

The Builder
Key to After-War Prosperity

Building Progress Up-To-Date
NEW CELO-SIDING
The Multiple-Function Building Material

IT’S AVAILABLE! Deliveries are prompt and in specified quantities. Celo-Siding is ideal for big or little buildings! Helps complete buildings days faster! Millions of square feet of this material have been successfully used in military and industrial projects.

IT’S PRACTICAL! Celo-Siding combines 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 comes in buff or green colors and in two thicknesses — 5/16" and 5/4". Sizes: 5/4"— 4' x 8’ with square edges; 5/4"— 2' x 8’ with T&G joints on long edges, 4' x 8’ and 4' x 10’ with square edges. Use 5/4" for greater strength and insulation value; 5/8" for lighter, lower cost construction.

YOUR CELOTEX DEALER is now ready to supply your needs for Celo-Siding. Talk with him about prices and the many uses of Celo-Siding—the building material that does three jobs. Or, if you prefer, mail the coupon, today.

Please send me complete information on Celo-Siding, the multiple-function building material.

Name
Address
City State

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Water-retaining capacity is the ability of a mortar to retain its moisture, and hence its plasticity, when spread out on porous brick.

High water-retaining capacity is of extreme importance in mortar. If the mortar does not have high water-retaining capacity, it is too quickly sucked dry by the brick; the mortar stiffens too soon, the brick cannot be properly bedded, and a good bond cannot be obtained.

Brixment mortar has extremely high water-retaining capacity. It strongly resists the sucking action of the brick. Brixment mortar therefore stays smooth and plastic longer, when spread out on the wall. This permits a more thorough bedding of the brick, and a more complete contact between the brick and the mortar. The result is a better bond, and hence a stronger and more water-tight wall.

Slap a small amount of Brixment mortar, and an equal amount of 50-50 lime and cement mortar, on a brick. Wait a minute, then feel each mortar. You will find that the Brixment mortar stays plastic far longer than the other mortar. This proves greater water-retaining capacity.

LOUISVILLE CEMENT COMPANY, Incorporated
General Offices: Louisville 2, Kentucky
Cement Manufacturers Since 1830
What Is the New Bruce Finish?

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

The Scratch Test Proves Bruce Superiority!

Half of the panel illustrated is surface finished the ordinary way and the other half deep-seal finished with Bruce. A coin scraped across both finishes with the same pressure, will chip, scratch and mar the brittle surface finish but leave the Bruce finish unharmed.
Ready when building starts again!

No one can be sure of the size or shape of tomorrow's structures, but one thing is certain—you will be able to build into them America's most beautiful, most durable floor... Bruce Streamline Flooring with the new Bruce Finish!

Long before the war stopped civilian building, Bruce had developed and proved Streamline Flooring through research, development and use. After the war Streamline will be available with the new Bruce Finish... an even better floor with a better finish.

Builders will prefer this flooring because it speeds up construction... Bruce Streamline Flooring is ready for use the moment it's laid... and its handsome, deep-seal Bruce finish is not easily harmed by workmen on the job. And, all costs considered, a Bruce Streamline Floor will be less expensive than an ordinary hardwood floor that must be finished after it is laid.

Owners will be amazed at the glowing beauty of Bruce finished Streamline and enthusiastic over its ease of maintenance and damage-resistant qualities. They will buy with confidence because they know that here is a floor that will maintain its beauty and wearability indefinitely with a minimum of cost and care.

E. L. BRUCE CO. Memphis, Tenn.
THE WORLD'S LARGEST MAKER OF HARDWOOD FLOORS

BRUCE FOR REFINISHING OLD FLOORS
The same handsome, damage-resistant finish used on Bruce Streamline Flooring will be available for application to old floors. With the complete line of Bruce Finishes and Waxes, home owners will be able to bring new beauty to old faded floors at a lower cost than by any other method. Watch for an announcement on the New Bruce Floor Finish line.
An overwhelming endorsement! Highly significant for home planners.

When queried by an independent research organization for their opinion of dry-built full-wall construction, 85% of actual wartime users named it the system for homes of tomorrow. Because Strong-Bilt Panel solve the old problems of brittle interior walls and panel joint troubles. Because they contribute added dollar value to the finished job.

Highly successful use in thousands of homes from coast to coast and endorsement by prominent builders attests the value of this improved method of construction. Have you investigated its advantages? We will gladly send booklets and detailed information. Phone, wire or write The Upson Company, Lockport, New York.
Add just one room

To the Editor: Of course we know lumber is very critical; but there are many items of building materials that are not critical, so why not take out the non-critical items from the $200 limit. That would help a lot.

As to this part of Texas, if just one room could be built on a house, it would take care of the crowded conditions, and there would be no need for war houses like they are now building and which will not be needed after the emergency.

As to the one room additions, lots of people would build the one room and it would be worthwhile after the emergency.

We have labor to take care of any small jobs, such as older men and men that have been laid off jobs when war contracts are made for lumber. In fact it now appears there will soon be a surplus of labor in this part of Texas.

So a relaxing of L-41 will soon be needed to keep men working.

We have learned to do a lot of substituting for lumber and can do considerably more, especially when lumber is not available as it now is, so I can't see that a relaxing of L-41 would hurt the war effort in the least.

LYNN BOYD, Pampa, Texas.

Lies both sides

To the Editor: I wish to take this opportunity to tell you how much good I have derived from American Builder. I like the way opinions are given on both sides of a question, also the interesting way one can keep well informed about the building industry. —WALTER F. MOREHOUSE, Indianapolis, Ind.

Unfair, untrue, unbecoming

To the Editor: The squib in your January number captioned "Prefab Flop" is certainly unfair, untrue, and above all, unbecoming to the World's Greatest Building Paper.

I do not intend to dignify it by making any defense of the wonderland idea made for prefabrication of war houses, barracks and other shelters, and mention it only now because a number of my friends that have seen it say that this unprovoked shotgun attack reduces their opinion, not of prefabrication, but of American Builder. You know as well as anyone that the unprecedented industrial progress that we have made in the mass production of ammunition and products that are enabling us to win this war will be turned to the production of American homes, and I hope the staff of your excellent magazine will keep a fair and open mind on these developments. —HARRY H. STEIDLÉ, Prefabricated Home Manufacturers’ Institute, Washington, D. C.

Wants more on Mexico

To the Editor: I was very much interested in the excellent article “Viva Mexico!” and was astounded at the amount of construction that you showed, both by your article and by your pictures, is going on in that country at the present time in the face of the fact that here in the United States we are so drastically restricted in even the most essential building.

We have been struggling along on our farms and in the oil fields, here in Texas under the $1,000 limitation, every pound of steel and every foot of lumber, every pound of steel and every foot of lumber going into this construction for the good of the war effort. And yet, we find just a few miles south of
ANOTHER STEP TO AID IN

“Serving Industry... which Serves Mankind”

MONSANTO CHEMICAL COMPANY announces the acquisition of I. F. Laucks, Inc., Seattle, world’s largest manufacturer of industrial glues. This union of two familiar names is in accord with the well-known Monsanto policy of providing the most complete service possible to industries in the many fields it serves.

Already widely known in the forest-products industry through its products for the wood preservative and paint fields, Monsanto now rounds out its service to the plywood, woodworking and allied industries through this joining of the Monsanto and Laucks interests.

This means a much broader service, both to Laucks and Monsanto customers. The full line of Laucks products will be maintained, of course, with the further advantage of Monsanto research and production resources on which to draw.

To the qualities of leadership in service to the forest-products industries that have marked the Laucks organization, the broad background of one of the world’s great chemical organizations has now been added—thereby providing a greatly expanded service fully in keeping with the splendid present and even more promising future of the plywood, woodworking and allied industries.

MONSANTO CHEMICALS
SERVING INDUSTRY...WHICH SERVES MANKIND
HOW TO PUT LUXURY HEATING and year 'round HOT WATER into LOW-COST HOMES explained in this booklet . . . send for your copy!

B&G TRIPLE DUTY HEATING OFFERS THE "PLUS VALUE" THAT SELLS HOMES QUICK

When you equip a home with a B & G Triple Duty System, you have built in an outstanding selling advantage. This Forced Hot Water Heating System is geared to the weather . . . meets zero days with ample warmth, yet doesn't overheat the house when the weather turns mild. Always a smoothly graduated flow of healthful warmth — positively controlled to prevent waste of fuel.

Not only does the B & G Triple Duty System provide better, more economical heating, but also an all-year 'round supply of hot water for kitchen, laundry and bath . . . heated at amazingly low cost by the same boiler that heats the house.

All this genuine comfort and economy is obtained with simple, inexpensive equipment which fits into the small home building budget. The B & G Triple Duty System requires only a single easily concealed pipe main—easy to install and requiring less material.

B & G FLO-CONTROL VALVE

This Valve helps keep home temperature uniform and permits use of Indirect Water Heater in summer.

B & G BOOSTER

This is the heart of the B&G Triple Duty System—an electrically operated pump which mechanically circulates hot water through the pipes and radiators. The Booster is controlled by the room thermostat: delivers heat instantly when needed and shuts off the supply when the need for heat is satisfied.

B & G INDIRECT WATER HEATER

A money saver! Provides a means of using the house heating boiler to heat the domestic water at very low cost—in summer as well as winter.

B&G TRIPLE DUTY SYSTEM

BELL & GOSSETT CO. • MORTON GROVE, ILLINOIS
WHERE DOES AMERICA GET MOST OF ITS ELECTRIC POWER?

Prepare yourself for a surprise.

Every time most people switch on a light, listen to the radio, or use a percolator or any other electrical appliance, they are burning bituminous coal.

For most electric power comes from coal—which means, of course, bituminous coal.

For one thing, a ton of water would have to drop a mile to generate the same amount of energy as there is in a pound of coal, properly burned.

For another, an electric power plant which uses coal ordinarily costs only about one-third as much to build as a hydroelectric plant having the same capacity. And in most parts of the country it is usually much more economical to carry coal from the mine to the place where it is needed to make electric power than it is to transmit the same amount of electric energy from a power dam.

These are only two of the many reasons why bituminous coal is "No. 1 Public Energy"—America's most important source of heat and power.

And, knowing this, the men who operate the bituminous coal mines have a keen sense of responsibility to the nation, to their customers, and to the men who work for them.

BUY MORE WAR BONDS

BITUMINOUS COAL INSTITUTE

60 East 42nd Street, New York 17, N.Y.
This modern, well-equipped laboratory, manned by a staff of specially trained technicians, is a permanent part of Mueller's facilities.

For extra heating satisfaction — in your post-war homes...

MUELLER'S Complete Heating Service

is backed up by continuous laboratory research and engineering development

The further development and refinement of Mueller heating products is going on at all times—now more than ever, in order that you may have outstanding heating equipment to enhance the attraction of your homes after the war. This is one of many reasons why it pays to deal with Mueller — and get, from one dependable source, a line that is complete from every angle... sizes, price range, designs for specific fuels. This good-looking, nationally-known, nationally-advertised heating equipment is an asset to any building — from a cottage to a factory. Write for bulletins giving complete information. L. J. Mueller Furnace Company, 2016 West Oklahoma Avenue, Milwaukee 7, Wisconsin. B-16

MUELLER Climatrol

HEATING AND WINTER AIR CONDITIONING
Through years of research and successful field experience, Wood Conversion Company has become a recognized source for latest findings on insulation design and application. Balsam-Wool, the original moisture-barrier insulation, is pioneering many important developments. Write us for latest information on Balsam-Wool—and mail the coupon for data sheets illustrating unusual applications of Balsam-Wool Sealed Insulation.
Are You Ready
FOR THE
HOME OF TOMORROW?

Your customers will demand automatic heat. They will insist on adequate cooling equipment. Year round air conditioning will be a must for a great big percentage of home builders after Victory. Viking has the kind of equipment you'll need after the war.

Make it a part of your plans to provide the advanced heating and cooling equipment which revitalized post-war building will demand. Viking offers a tested and proven source of supply for all of the wanted units. Thousands are in use by the armed forces all over the world.

A Practical Distribution and Installation Policy

The Viking contractor dealer can devote his efforts exclusively to your interests giving you workmanlike installations on schedule, because his wholesale distributor supplies all of the material for the job — to the job — on time. Final costs to the builder are lowered by this close teamwork between the Viking contractor dealer and wholesale distributor.

Let us send you the complete new Viking catalog for your study. It is just off the press and fully illustrates the equipment you will be most interested in. Write for your copy today.

Viking Mfg. Corporation, U. B. Bidg., Dayton 2, Ohio

Please send complete new catalogue of Viking Heating and Cooling equipment.

Name

Firm Name

Address
AND MAKE NEW FRIENDS for POSTWAR WORK!

SAVING fuel and material for the war effort is your first duty now. Fortunately, it is also your best way of getting acquainted with new families and making new friends who will build new homes when the Victory is won. By recommending and installing Thrush Water Circulators and Controls, you can reduce fuel consumption and increase home comfort. If you are not familiar with Thrush Summer-Winter Hot Water Heating Systems, see your wholesaler today or write Dept. G-4.

H. A. THRUSH & CO., PERU, INDIANA
on
industrial doors
that help speed
the flow of material
IN and product OUT!

An industrial door has first of all to be an efficient functional unit in a plant's operation. It has to be easy-acting and dependable in operation to expedite movement of materials and products. It has to be durable to withstand constant use and the onslaught of weather. It has to be tight to conserve heat and exclude wind, rain and snow. It has to be good looking to conform to advanced industrial architecture.

Crawford Industrial Doors are engineered to meet industrial application needs. Quality materials, careful workmanship, skillful design based on experience combine to make each Crawford Door an efficient functional unit. Standard Crawford doors in widths from 4 to 20 feet and in heights from 6 to 16 feet will meet the majority of needs. Crawford engineers will readily cooperate to work out any need for special doors. Your inquiry will be given prompt attention.

Modern wood products are making important contributions to better, more economical construction. Engineering in Lumber is progressively increasing the efficiency of wood as a structural material. Modern wood products are making important contributions to better, more economical construction. 

Teco Metal Timber connectors make it possible to join wood members, utilizing 85% or more of the working strength of wood.

Modern structural glues make possible Glued Laminated Wood roof trusses, arches, plybeams and other structural members.

Glued wood laminated framing members combine roof and side-wall in a unit, giving stronger, more wind-resistant buildings.

New processes for the treatment of wood extend its service, broaden its uses, and increase its value in many fields.
This swimming pool is serving the young men of the nation at a military training base. It is another example of the many better values in wood developed through advanced lumber engineering practice. Its framing members are made of lumber—fine, kiln-dried, carefully selected boards, laminated with modern structural glues to form great arches, continuous from foundation to roof ridge.

These glued laminated wood arches were engineered for snow loads, wind loads, concentrated loads. They were fabricated with precision, under modern factory controls. They were delivered to the job site, ready for erection.

In the not too distant tomorrow there will be many such structures serving the youth of America—as pools, gymnasiums, auditoriums, and play halls. They will come from boards of designers who are already creating buildings for the new age of progress.

Many of these new structures will be built with glued laminated wood arches and ply beams, not only because they are engineered to do the job, but their natural beauty makes them a major part of the decorative scheme.

These structures will be built by the contractors and builders who already have the skill and experience in building with wood.

Engineering in lumber which embraces product improvement, new methods of joining, and building design, is prepared to help you serve civilian needs better and more economically.

WEYERHAUSEN SALES COMPANY
FIRST NATIONAL BANK BUILDING - SAINT PAUL, MINNESOTA
Blurmites begin their destructive action on interior wall surfaces as soon as the walls are constructed. But when plastic-finished Marlite paneling is installed, Blurmites never get to "first base." Why? Because Marlite has an exclusive high-heat-bake finish that permanently seals surface against dirt and moisture.

Modern Marlite is a reputation-maker for those who install it. Marlite's charming and attractive surface wins immediate customer approval; is durable, versatile and moderate in cost; quickly and easily installed for new construction or remodeling; easy-to-clean and never needs repairing or refinishing; immediately available on suitable priorities.

Build post-war reputations by building with Marlite . . . be sure to keep your customers satisfied in the "days after Tomorrow." Write today for new sample folders—and remember Marsh Engineers are ready to help with plans and specifications!

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

Marlite normally is manufactured in plain-colors, tile-patterns, horizontal, genuine wood-veneers, marble-patterns plus a complete line of matching moldings . . . for all types of interiors in all types of buildings.
Structures scheduled to be built soon—hospitals, recuperation centers, housing projects and the like—will require fewer man-hours if Alcoa Aluminum window sills and coping are employed. The natural lightness of aluminum, coupled with their design, makes handling and erection easier. Installation methods and anchoring devices are simple. Maintenance costs are low, because construction is easy to keep weathertight and aluminum requires no protective painting.

There now exist procedures under WPB whereby you may be able to obtain approval for the use of aluminum on your projects. Alcoa Aluminum window sills and coping meet all the requirements for exacting performance replacing heavier, harder-to-handle building materials. The extrusion process places metal exactly where it’s needed functionally and for strength. Dies are available to produce standard shapes to suit most types of construction. Coping shapes, used in combination with formed aluminum sheet, provide an economical and permanently watertight cap.

Those who wish to use aluminum for these purposes should apply to Aluminum and Magnesium Division, WPB, Washington 25, D. C.

The booklet, "Window Sills & Coping of Alcoa Aluminum", shows many of these standard shapes, together with construction design details. For a copy, write ALUMINUM COMPANY OF AMERICA, 1914 Gulf Building, Pittsburgh, Pennsylvania.
Windowwalls
Advanced architectural thinking has transformed walls into windows and windows into walls. The role of WINDOWALLS is now a dual one: to frame the technicolored beauties of nature and to act as a transparent insulated barrier protecting the unvarying comfort of the inside against the changing outside weather.

Andersen's Lifetime Window Units meet the exacting requirements of WINDOWALLS. An example is this installation of Andersen Horizontal Gliding Window Units, used in a home designed by Wessel, Brunet and Kline, architects. For details, see Sweet's Catalog, or write

Andersen Corporation
BAYPORT • MINNESOTA
Douglas Fir Plywood will save time and money in post-war construction

Builders everywhere find that Douglas Fir Plywood builds a better house for the same money... and in less time!

Whether your post-war plans call for the construction of single or multiple units—the Douglas Fir Plywood Dri-Bilt method offers outstanding advantages. You'll build warmer, more rigid, more durable and more attractive homes; you'll build them faster and at smaller cost!

There is a grade of Douglas Fir Plywood ideally suited to every phase of construction—a grade especially made for each of the following: concrete forms, sub-flooring, wall and roof sheathing, interior walls and ceilings, built-ins and exterior finish. Write for detailed literature on the uses of durable, cost-saving Douglas Fir Plywood.

Douglas Fir Plywood is now available for essential war use. "After Victory, this Miracle Wood will serve you in countless new ways.

DOUGLAS FIR PLYWOOD ASSOCIATION  
Tacoma 2, Washington

Plywood sheathing covers large areas with maximum speed, affords greater wall strength.
You couldn't pick a tougher spot than the Far North to prove that SKILSAW is more rugged, more dependable ... even with all the odds against it. In any climate, under the toughest conditions, SKILSAW comes through with steady, round-the-clock performance, because SKILSAW is better built.

SKILSAW is doing a great job all over the world ... speeding the building of bridges and barracks, factories and homes. Everywhere, sawing with SKILSAW means faster building. SKILSAW goes right to the job, saves steps, material handling and manpower. It makes every cut in wood, metal, stone and compositions ... and does it at lower cost. Ask your distributor to demonstrate SKILSAW for you today!

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

SKILSAW TOOLS
MAKE AMERICA'S HANDS MORE PRODUCTIVE

Official U.S. Army Engineer Photograph
During these difficult times, almost every business man is thinking about the post-war period. It will bring many new problems. And lots of dealers and contractors are trying to figure out what they ought to be doing to get ready for it.

This story of a radio program and the philosophy behind it will give building material dealers and contractors food for thought in considering their merchandising and selling problems of the future.

I had an opportunity to discuss this recently with a Johns-Manville Vice President, who...
pointed out that this is an age of scientific merchandising. "We are living," he said, "in a highly competitive society—and this competitiveness will be accelerated by the war. The building material dealer and contractor will face many new factors when peace comes."

**A Good Name is an Invaluable Asset**

"For a company to survive," he added, "it must establish the invaluable asset of a good name for its products. It must win the confidence of the public. No one can predict what our post-war problems are going to be. But I am sure that they will be easier to solve if we start by having the friendship and good will of the people upon whom we are going to depend for business."

**Bill Henry and the News**

"Johns-Manville," he explained, "is using its radio program as one means of accomplishing this objective. The nightly messages you hear delivered on the J-M 'Bill Henry and the News Program' on your Columbia Broadcasting System station are not ordinary advertising commercials."

"Instead, each message is carefully thought out and planned to get people to know us better. In that way, we hope they will like us and will want to buy our products in preference to others when building restrictions are removed."

**Survey Shows Results**

I asked him if they had any evidence that the J-M messages were doing that kind of a job. "Yes, we have," he replied. "We made a survey some months ago. The results of this investigation were quite interesting. We learned, for example, that our radio program has improved the public's knowledge of Johns-Manville as a leader in the asbestos industry by 36%. It has improved their knowledge of Johns-Manville as a manufacturer of roofing materials by 35%—as a manufacturer of home insulation by 44%.

"But that's not all," he went on. "Our survey showed that, thanks to the radio program, the public's estimate as to the quality of our products has increased 18%; as to the progressiveness of our management 25%; as to our use of scientific research, the increase is 47%.

**Winning New Friends**

"All of this," he concluded, "is a pretty good indication that we are on the right track and through this program are making friends of an ever-increasing percentage of the population."

As I thought over what he had told me, I couldn't help but gain a new conception of the Johns-Manville radio program. It has been on the air now for over two years—reaching thirty million people every month.

**Tomorrow's Customers**

These millions of listeners, all over the Nation, are the customers of tomorrow. Today they are planning and dreaming of the new house they will build or the home they will modernize when peace comes. The friendly voice they hear five nights a week on the J-M radio program, "Bill Henry and the News," is a frequent reminder that Johns-Manville dealers and contractors are ready to help them with their building and repair problems. I think you will agree that such carefully planned advertising is giving you a head start on solving tomorrow's problems. It can do a lot toward shaping the future... not only of Johns-Manville but of the many dealers and contractors who handle Johns-Manville products.
How Coleman’s 7-Way Leadership Can Help You Be The Leading Heating Dealer

THESE 7 POINTS SHOW WHY COLEMAN IS TOPS IN HEATING

1. COLEMAN HEATS MORE HOMES. In 1941, Coleman was the largest producer of major heating units in America.

2. UNEQUALLED PRODUCT PERFORMANCE backed by an engineering and development program that gives you the newest, most advanced types of heating equipment to sell.

3. NATIONAL ADVERTISING AND SALES PROMOTION to “pre-sell” your customers and maintain Coleman leadership.

4. SALES AND SERVICE ENGINEERS. A nation-wide staff of experts to make your merchandising more effective.

5. THE BEST PROFIT LINE. Every Coleman unit is a “hot” item—no “duds” to pull down profits.

6. FINEST DISTRIBUTOR SUPPORT to aid sales, plus direct help from Coleman.

7. OVER 40 YEARS OF LEADERSHIP in engineering and product development backed by ample financial strength.

FREE BOOKLET! Big Coleman ads in national magazines are reaching millions of people, and thousands of your heating prospects are writing for Coleman’s new booklet—“The Inside Story of Tomorrow’s Home Heating.” Write for your copy today.

PROGRESSIVE DEALERS are invited to write for the name of the Coleman distributor in their area.

America’s biggest pre-war seller—the Coleman Oil Heater that heats a house like a furnace—will have added selling advantages for you tomorrow.

Automatic oil or gas heating at its best! New Coleman floor furnaces with advanced heating principles to bring new comfort to millions of homes.

A great heating advance! The powerful, compact, new Coleman central heating plant that occupies a space only two feet square. For either oil or gas.
New Business
FROM OLD ROOFS!

It's a major profit market at any time—and the biggest today. Get your share by selling a famous brand name millions know!

When there's little new building—look to the existing buildings for your business, because it's there! Today, re-roofing is your market and the major sales opportunity of the roofing business.

Get your share with the selling job made easier by offering Texaco Asphalt Shingles and Roofing. Millions know this famous name, Texaco, and so—home, farm and business-building owners right in your community know it and trust it.

Texaco Asphalt Shingles are ideal for every re-roofing job. You can offer a pleasing range of patterns, shapes and colors. You can promise quality, protection against weather and fire—and lasting satisfaction—backed by more than 35 years' experience of The Texas Company in making asphalt products.

The market is big and the profits are there—go after them. Insure your success by selling Texaco—the name that millions know!

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 St., New York 17, N. Y.
SAVE TIME with new, improved DOUGLAS FIR DOORS*

YES—you'll save time on every hanging job when you order Douglas Fir Interior Doors with FACTRI-FIT features. Builders everywhere applaud this new, improved Douglas Fir Door line.

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

FACTRI-FIT

Savings on the job more than offset the slight additional cost of FACTRI-FIT features!

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

Modern 3-panel layouts are now suggested as basic designs in the stock line of Douglas Fir interior doors. Unusually attractive and suitable for all types of building. Every door is GRADE-MARKED, too. Makes ordering easy, eliminates all guess-work and confusion.

FIR DOOR INSTITUTE
Tacoma Building, Tacoma 2, Wash.
All Penn Heating Units are PACKAGED for LOW COST!

PACKAGED by PENN describes our complete line of prefabricated oil or gas-fired heating units because they are completely factory assembled and delivered to you ready for immediate connection and use.

95% of the cellar work you usually do has been eliminated by unit design and construction. The proper gun type burner, hearth, controls, fittings, switches, wiring—everything is factory mounted and tested. This factory engineering and coordination results in greater heating efficiency, saves you time, labor and installation headaches . . . cuts your cost considerably.

Builders who use heating units Packaged by Penn will have available a full line of modern low cost units that will compete with both price and performance. Less installation work and negligible fittings or parts inventories will mean more profitable installations.

Get the complete story today so you will be ready with Penn when the present emergency is over and you start your post-war building program . . . and we again furnish the finest heating units Packaged by Penn for efficiency and low cost.

PACKAGED by PENN

- BOILER BURNER UNITS
- AIR CONDITIONER UNITS
- PENNGUN WATER HEATERS
- HYDRO-AIRE (SPLIT SYSTEMS)

BOILER and BURNER MANUFACTURING CORP.
LANCASTER, PENNSYLVANIA
NOW READY

For Homes of Tomorrow!

...“Unlimited” hot water from your house-heating boilers

A continuous flow of hot water, without the bother and expense of installing storage tanks! Freshly heated water from seamless copper tubing... without rust, without sediment, without waiting! That's the promise you can give clients when you specify the new GENERAL Tankless Heater!

Compact, self-contained... GENERAL Tankless Heaters hook up directly with any type of automatically-fired boiler. Complete installations offer substantial savings over storage-tank hot water systems. Require less space and piping too, yet they supply 3½ to 35 gallons of hot water per minute!

To give your "homes of tomorrow" the appeal of "hot water unlimited", order GENERAL Tankless Heaters. Write for Catalog No. 15, containing details of these and other efficient domestic and industrial hot water heaters by: American Builder, Dept. F, 123 Georgia Avenue, Providence 5, R. I.

GENERAL "100" TANKLESS WATER HEATER for one-family houses

GENERAL TANKLESS WATER HEATERS

Also Tank-Type Water Heaters • Thermostatic Mixing Valves
Water-hammer Silencers • Coil-heated Tanks
Live-Steam Heaters • Pipe Unions
One of the building industry's biggest wartime problems has been the adequate maintenance of property in the face of material and labor shortages.

A satisfactory answer has been found through use of available quality products that save critical materials and conserve manpower. The scarcity of labor has made the use of poor materials more wasteful, real value more important than ever.

One sure way to better building material values is through sale or use of "PRODUCTS"

They conserve labor, protect building investment—build that kind of customer satisfaction which permanently benefits both Dealer and Contractor.

The Philip Carey Mfg. Co.  Dependable Products Since 1873  LOCKLAND, CINCINNATI, OHIO

- CAREY ASPHALT SHINGLES are exceptionally long-wearing, weatherproof, and fire-resistant.
- CAREYSTONE SHINGLES AND SIDING reduce fire hazards, maintenance and repairs.
- CAREYCLAD ROOF COATING prolongs life of old roofing. Economical, long-lasting.
- COVERALL ASBESTOS-CEMENT BOARD is ideal for exterior and interior construction of farm buildings. Wear-proof, weatherproof, rat-proof, vermin-proof, and will not burn.
- CAREY ROCK WOOL INSULATION makes homes cooler in summer, warmer in winter, and saves up to 30% of fuel! Widely used also in brooder, and poultry houses, dairy barns, etc.
TO GIVE THEM MORE CLOSET AND

M ore closet and storage space! That’s a “must” for thousands of families now planning their postwar homes, surveys indicate. Cramped wartime housing conditions have emphasized an acute need for more “places to put things!”

Doors, frames and woodwork of durable, toxic-treated Ponderosa Pine will enable you to meet that need—easily and economically. In these products you will find the precision manufacture and the assurance of quality that postwar home builders will want. Here, too, is variety of architectural style to fit every need and preference. That is why Ponderosa Pine will help you make tomorrow’s interiors more useful and more convenient. And that, too, is why it’s worth your while to watch woodwork!

STORAGE SPACE!

WATCH WOODWORK!

CLOSET PLANNING SUGGESTIONS IN THIS FREE BOOK

You will find “The New Open House,” a helpful source of ideas in planning better closets for postwar homes . . . as well as windows, doors, frames and other woodwork. Write us today for your free copy of “The New Open House.”

Ponderosa Pine WOODWORK
Dept. ZAB-4, 111 West Washington Street
Chicago 2, Illinois

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

Name
Address
City   State

Ponderosa Pine WOODWORK
THE BEST IS YOURS . . . WITH PINE
It's on the way! A revolutionary development in glass for home construction. A new Libbey-Owens-Ford product, soon to be announced, will make it possible for you to design and build homes of the future with an entirely new kind of window... the kind of window that homeowners have long wanted.

Tomorrow's homes will have windows that flood the house with daylight, making possible better vision and less eyestrain and fatigue. They will have picture windows and corner windows that make rooms seem a part of the outdoors, bringing eye-thrilling views of gardens and lawn and shrubbery. Thanks to Libbey-Owens-Ford's new transparent insulation, with built-in double glazing, you can incorporate all of these benefits in the homes you will plan and build for the days of peace. Daylight Engineering, made possible by this newly perfected glass, truly will be the keynote of tomorrow's living.

There will be many new features about this new product that will interest you. But most important—builders of new homes will find it within their practical means to have this new type of insulation. Look for an important announcement next month. Libbey-Owens-Ford Glass Company, 1244 Nicholas Building, Toledo 3, Ohio.
Permanence... Not in a "House of Cards"

SHEETROCK

Fireproof WALL AND CEILING PANELS

This is a changing world—but sound principles of building construction always remain the same. People want permanence in their homes, lasting strength, beauty that endures. No one wants to live in a "House-of-Cards."

Sheetrock* precast walls and ceilings measure up to this universal desire for safe and sound homes. These strong, smooth panels are built to endure and to protect life and property. The mineral core of Sheetrock will not buckle or warp, nor support destructive vermin.

Sheetrock is made in a full range of sizes, thicknesses and types of finish to suit varying uses and cost-requirements. It lends itself to any decoration; or can be had already decorated in smooth, shades or in beautiful woodgrain finishes.

Sheetrock, the fireproof wallboard, provides a fire-armor to halt the spread of fire. Twenty years and more in the proving ground of building have tested its enduring qualities. Continual improvements place Sheetrock well at the head of the preferred list for the buildings of tomorrow.


United States Gypsum

300 West Adams Street, Chicago, Illinois

Gypsum Products • Steel • Insulation • Roofing • Paint

FIREPROOF GYPSUM

The World's most widely used

Mineral for making Fireproof

Wall and Ceiling Products

Check this yourself: More and more people who plan to build after the war want more windows in their homes-to-be. And that's your opportunity to design and build more charming, more livable homes, with right windows, rightly chosen.

For your postwar plans, Curtis offers more than three-fourths of a century of research and successful experience in window manufacture. That's why you can be sure of correct styling—easy operation—weather-tightness—and economical installation when you choose Curtis Silentite. Here are a few Silentite window applications.

Window groups can be used to advantage even in the smallest homes. This group of stock Curtis Silentite double hung units assures greater weather-tightness because the windows are accurately pre-fit and thoroughly weather-stripped.

A stationary Curtis "picture" window, such as this, expresses the trend toward more window area in postwar homes. Notice the attractive design of these windows—the narrow muntins. Curtis offers several different muntin styles.

Bay windows need not be costly—when they are made up of Silentite stock units. Bays, too, are a means of increasing effective living space in small homes—and of adding charm and distinction, as well. Curtis makes many different styles of bays.

Corner windows are modern and stylish—and they will prove increasingly popular in postwar building. Curtis Silentite double hung windows eliminate pulleys, cords, weights—are always easy to operate—treated to add longer life.

Curtis Research is a step ahead

Although the present Curtis Silentite window line goes beyond our belief, than any other in meeting modern window needs, Curtis research is constantly directed toward window improvement. That is why it is worth your while to keep in touch with Curtis for the latest news on windows and architectural woodwork. Mail coupon for free booklet.

Curtis Woodwork is sold by reliable dealers everywhere

Curtis Companies Service Bureau
1850 Curtis Building, Clinton, Iowa
Gentlemen: Please send me your free booklet on Silentite Windows for new homes and modernizing.
Name: ...........................................
Address: ...........................................
City: ...........................................
State: ...........................................

Silentite
Pre-fit
the Insulated Window
This newest hangar of the Pan American World Airways System, in Miami, has five acres of floor space. Covering two and one half acres of land, it contains three office sections of four floors each and is the largest hangar for land-based planes in the Pan American System.

And, of course, it was another job for Lehigh CEMENT.

This is only one of the many Pan American jobs where Lehigh products — Lehigh Normal and Lehigh Early Strength Cements — were used. When speed was needed, as it usually is, Lehigh Early Strength Cement saved time in construction as well as dollars in construction costs.

In 24 to 48 hours, Lehigh Early Strength Cement makes concrete as strong as week-old concrete made with normal cement. So whether your next job is building an airport, a runway or a new plant, you’ll save time, labor and form costs by using Lehigh Early Strength Cement.

And when you run across a special problem — just put it up to our Service Department.

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

In this great war, The Flintkote Company has added another two years of stimulating, special products experience to its four decades of service to America's building industry.

When the necessity for producing building materials for war construction no longer exists, the experience of the war years will show in the Flintkote Building Materials which are offered to you after Victory!

Then, to an even greater extent than in the past, you will find that it pays in profits, time, reputation and satisfaction to...

Figure on FLINTKOTE

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

Atlanta, Boston, Chicago Heights, Detroit, East Rutherford, Los Angeles, New Orleans, Waco
...but here's a practical approach

Instead of trying to guess what’s “in the cards” in the way of peaceful bathrooms, why not simply jot down the name “Case”?

Your own experience should provide sound, practical reasons for doing this.

Perhaps you remember, for example, how many problems ceased to be problems when we introduced the now famous Camel Water-Saving Closet. Its highly efficient performance met a definite need in many localities. Being free-standing, it permitted installation without damage to tile or paper. It offered powerful yet quiet action, the convenience of a shelf-type tank covering years ahead, and twice-fired vitreous china... at a really modest cost.

We've had long experience in helping to solve your problems. We're preparing to continue.

W. A. Case & Son Mfg. Co.
Buffalo 3, N. Y. Founded 1853.
KEEPING AHEAD of progress is a habit with Minneapolis-Honeywell. Announcement of the Moduflow Control System gives the automatic heating trade an additional opportunity to participate in the post-war market. The Moduflow Control System will revolutionize post-war home heating. It will be a powerful sales tool in the hands of automatic heating engineers and dealers and will lead to the sale of additional automatic heating equipment.

As stated before, the Moduflow System provides a continuous flow of modulated heat into each room. This is accomplished by maintaining boiler or furnace bonnet temperatures at a fixed level. By automatically mixing heat from this reservoir with return water or air to exactly the temperature called for, and continuously circulating this mixture through the heating system, the room thermostat is constantly kept satisfied without overheating. In the case of steam heat, only enough steam to satisfy the thermostat is circulated.

The cost of the Moduflow System for existing homes is surprisingly low—actually no more than that of a modern washing machine. In new homes, it is even less. It is easy to see why the Moduflow System will revolutionize post-war heating.

The post-war apartment will permit each tenant to maintain his temperature to his own liking—or even individual sections of it may be kept at various comfort or economy levels. This will require some change in the piping or duct work.

The Principles of the Moduflow Control System are simple, and, in fact, new. Actually, Minneapolis-Honeywell engineers have applied them to commercial buildings for 10 years or more. Only recently, however, has Moduflow been adapted to homes. Tests have proved both its economy and comfort.
Are you planning ahead for the greatly increased electrical loads that household appliances and equipment will bring in 194X?

To help you in your postwar planning, the Westinghouse Better Homes Department has prepared a new and unusual free book . . . that explains to prospective home owners the urgent need for better wiring in their future homes.

We are confident that you will find "Electrical Living in 194X" a valuable tool for selling the idea of better wiring for better living to present and future home owners. Send for your copy now!

Westinghouse Better Homes Department offers new "Six-Point Advisory Service"

The Better Homes Department welcomes the opportunity of giving authentic technical information on the proper applications of electricity, which will contribute so much to better living in 194X.

This Six-Point Advisory Service includes free advice on the following important subjects:

1. Selection of correct types of electrical equipment for various classes of postwar homes.
2. Location and arrangement of fixed equipment, for conserving space and attaining maximum efficiency in arrangement of kitchen and laundry work cycles.
3. Accurate dimensions and clearances of equipment to insure proper installation and efficient operation.
4. Access for servicing of equipment—so necessary for periodic inspection and repair.
5. Location of lighting outlets and controls, for greater enjoyment, comfort, and safety in the home.
6. Utility service connections—including location and size of electric wiring, water supply, and drainage lines.

If you have any problems relating to the selection, installation, and use of home electrical equipment, write: Better Homes Dept., Westinghouse Electric & Mfg. Company, Pittsburgh 30, Pa.
"Electrical Living in 194X" takes the prospect on a personally conducted tour through a completely electrified postwar home!

It pictures and describes the wiring circuits and electrical appliances in the home of the future...in kitchen, laundry, utility room, living and dining rooms, and bedrooms and bath.

This colorful, 64-page book tells all about electrical loads in the 194X home, lighting and lighting controls, circuit protecting devices, entrance equipment, and distribution panels.

"Electrical Living in 194X" also contains valuable technical information on the application and installation of fixed and portable electric home appliances.

"Electrical Living in 194X" will be ready for distribution soon. The supply is limited. Be sure to get your copy, by returning the coupon today!
When Uncle Sam says the word!

HERE is good news for you hardware and lumber dealers! When the war ends, you won’t have to wait for the Macklanburg-Duncan Co. to go through a long “reconversion” period.

We are geared to go the minute Uncle Sam releases the critical materials we need. That means every Macklanburg-Duncan dealer is assured of a quick postwar get-away! You’ll have a line of high quality products famous for quick turnover and sure profits.

In making your postwar plans, put Numetal Weatherstrip . . . Nu-Art Molding and Edging . . . Nu-Way Door Grilles . . . and other nationally known Macklanburg-Duncan products at the top of your list. This we promise—until there is plenty for all, each of our customers will receive his just share of the merchandise we are able to make.

These items still available...

- **Nu-Calk Calking & Glazing Compound**—will not dry out, run, crack, harden or pull away.
- **Nu-Glaze Glazing Compound**—Does not dry out, crack or peel. Not oily. Clean to handle. Applied like putty—but not putty.
- **VICTORY Wood & Felt Weathertrip**—An efficient, easy-to-install weatherstrip. Made of high grade felt and wood.

MACKLANBURG • DUNCAN CO.

Manufacturers of
- Numetal Weatherstrip
- Nu-Calk Calking Compound
- Nu-Art Molding and Edging
- Nu-Glaze Glazing Compound
- Nu-Way Weathertrip
- Nu-Art Letters and Numbers

OKLAHOMA CITY 1, OKLAHOMA
Many future homeowners are ready to discuss plans now—so they’ll have blueprints ready to start construction when materials again are available. Remember—plans started now mean quicker postwar profits.

Clinch Future Business by Offering Up-to-date Features

People may not expect revolutionary changes in their postwar homes. They may not want them. But you can be sure that they’ll be looking for up-to-date features. Take windows, for example. Why offer them the old kind that warps and binds? Show them that you can provide easy-opening windows (over the kitchen sink, for example), more daylight, and better controlled ventilation with Fenestra—the modern window that harmonizes with all types of homes.

And don’t forget the benefits to you in Fenestra’s Package Window. It’s easy to install in either frame or brick construction. It comes glazed, complete with hardware, mounted in a wood casing, with inside trim all cut to length, mitered, ready to nail in.

Help get Jobs Ready for Service Men

When the millions of service men come home—and when workers leave the war plants—a whale of a lot of jobs will be needed at once. That, in itself, is good enough reason to get those blueprints ready so the steam shovels, saws and hammers can start right in to work. The building industry can provide millions of jobs—immediately—if plans are started now.

DETROIT STEEL PRODUCTS COMPANY
Now Chiefly Engaged in War Goods Manufacture
Dept. AB-4 • 2260 East Grand Boulevard • Detroit 11, Mich.
Pacific Coast Plant at Oakland, California

Fenestra SUGGESTS
CHEVROLET CARS AND TRUCKS

... provide wartime transportation and haulage service for more workers and industries than do cars and trucks of any other make.

... carry one-fourth of all passenger car and truck traffic for a working nation at war.

... lead every other make of car and truck in number of car owners throughout the United States.

CHEVROLET DEALERS

... were first among all dealer organizations to provide wartime car and truck conservation service.

... provide wartime service for more cars and trucks than does any other automotive dealer organization.

... service cars and trucks of all makes to maintain America's wartime motor transportation system.

CHEVROLET MOTOR DIVISION, General Motors Corporation, DETROIT, MICHIGAN

"SAVE THE WHEELS THAT SERVE AMERICA"

Every Sunday Afternoon, GENERAL MOTORS SYMPHONY OF THE AIR, NBC Network
TO SPEED VICTORY ... BUY WAR BONDS
Good design, living comfort and sound construction, spurring economy in upkeep, have always been guiding factors in the building of America's typical homes. Wars have not changed the picture. In building new homes after the war, Mr. and Mrs. America will continue to be guided by these established factors. Whether their new homes are ultra modern or conservative, you can depend on it, too, that most of them will have oak floors. For, charming and enduring in their own right, floors of oak harmonize with every architectural design and decorative treatment... contribute much towards achieving those things dearest to a homemaker's heart.

You also can depend on Bradley Brand for meeting flooring specifications of the new building era. Widely accepted as standard of comparison, every shipment reflecting its manufacturer's rigid policy of making a better product, Bradley Brand Oak Floors will again be available with the lifting of war restrictions... and in full stride with manufacturing and home building progress.
DESTINY—Most public housing officials, such as NHA Administrator Blandford, now say that the extent of public housing in post-war depends on how effective private builders are in supplying the need. In other words, they say, if the private builder produces an ample supply of good low cost homes, there won't be much need for public works.

If this actually does become the nation's post-war housing policy, it means a big challenge and a big opportunity for private builders. They have definitely shown during the war that they can overcome the most terrific obstacles and still produce better, faster and cheaper than public agencies.

PROGRESSIVE BUILDER—To my mind the future of housing lies in the hands of the progressive builders of the country. To them this issue of American Builder is dedicated. They are the pacemakers who adopt new ideas, methods, and equipment, and have pushed home building progress forward. They are the ones who know what the public will buy. They have the land, the materials and the know how. In fact they are the ones who will put the X in the 194X house.

"SILENT SERVANTS"—Instead of talking about radically different houses of the future, I believe the industry should stress the convenience, comfort and ease of maintenance of the houses that will be built in the future. They will be full of "silent servants" that will make living pleasanter and easier. They will be cheaper to heat, cheaper to own, cheaper to operate. That is the keynote of building progress, rather than revolutionary changes in architectural styles or construction methods.

MIDDLE BRACKET HOME—American people are sick of the shack-like small houses that have been built in many war communities. They will want bigger, better, more roomy homes, surveys show. Curt Mack of FHA confirmed this the other day in a speech he said that the most substantial, immediate post-war production of houses will occur in the middle and upper-middle price brackets of well-equipped homes.

He added, however, that the long term trend will be for the minimum cost house which has the greatest continuing market.

IN-MIGRANTS OUT—The in-migrant war housing requirement was never very wise, and should now be abandoned entirely. Movement of workers into war areas has almost stopped. Crowding is now the problem, and builders should be permitted to sell or rent to those most in need, whether in-migrants or not.

NEXT MOVE—The next step in the war housing program is to build housing, not for in-migrants, but to reduce over-congestion in areas where it is most intolerable. This will require a different analysis of communities, and may mean building programs in cities that have up to now not been getting priority allotments.

CHICAGO BUILDERS—Another example of the strong recent growth of builders' associations is the Metropolitan Chicago Builders Association, of which Joseph E. Merrion is president. This outfit is live, on its toes and growing in size and power. It is a regular thing for three or four hundred to turn out for dinner meetings. The executive committee knows its way around politically, gets things done that need to be done. The association has just hired a smart new Executive Secretary, Milton Bowen— took him away from the WPB construction division. Watch for still more activity from this quarter.

LESS SCREWBALLISM—It looks as though the rash of miracle house screwballism that was sweeping the country is beginning to subside. Criticism of the fantastic airbrush designs and queer looking creations of architects and industrial designers has gotten so strong that the men who foot the bills have come to realize they are doing their firms more harm than good by this kind of publicity.

One of the most striking about-faces has been made by a firm that seemed to delight in picturing fantastic, modernistic houses by a well known New York industrial designer—the queerer the better. A big West Coast builder had a chance to tell these folks what he thought of their war house foolishness, and he made them strong. The result was a complete about-face in policy, and now this firm is showing pictures of attractive California Colonials, stressing livability and lovability.

LUMBER SCRAMBLE—The acute shortage of lumber has led to some unsavory, unpatriotic, if not downright illegal activities in the lumber scrap to buy. Commenting on the spokesman for a prominent group of manufacturers said that people who engage in such dealings or even handle traffic with the perpetrators are "staining the name of a great industry."

He went on to say that he prefers to have building men get along entirely without lumber rather than to employ questionable means to use the product for questionable purposes. There is much truth in this.

REBUILDING EUROPE—Experts say that the shortage of lumber in the United States will continue for a considerable time. Certainly there is a let up in sight now. Added to our own great post-war requirements will be a pressing demand from the rest of the world—particularly certain countries of Europe which have been so badly damaged that they have no claim on considerable stocks for extreme emergency uses.

WILL LEAVE EUROPE—One serious student of after-war building conditions tells me that there will be a great exodus of people from war torn Europe after the war—from Holland, Belgium, Poland, France and other countries that have been badly ravaged. They will still fear bombings. Only a few will be able to get into the United States, but the doors are open in Canada. Therefore, he expects a big influx of immigrants to that country and a corresponding opportunity for builders. It's an interesting thought, and probably true.

UNBRIDLED UNIONS—An Orange County, N.Y. grand jury recently issued a remarkable report on the activity of Local 17 of the Hod Carriers Union. After recounting a record of extravagance waste, and dictatorial mis-management, the grand jury listed these "rights":

"To join labor unions without discrimination as to race, color or creed to examine the books and records thereof at reasonable times to require that members may be disciplined or expelled only after the approval of a majority of members at meetings open to the full membership to make changes in dues or initiation fees only by referendum vote of all members, and to elect officers by secret ballot."
This girl and her sisters—millions of them—are now veterans of the war plants and factories, their efficiency equal to that of the men they replaced, and their output an increasingly important factor in the drive for victory. Enthusiastically and steadfastly they work at their appointed tasks, winning the plaudits and the gratitude of a nation still at war.

Here at Norge we, too, are working for victory, with our facilities devoted to the production of more than forty items for war. And Norge refrigerators and other appliances in millions of American homes are contributing their bit by conserving and preserving foods, lightening household labors and otherwise adding to the efficiency of war-busy people. But as we work for war today we look ahead and think and plan for peace tomorrow. The Norge postwar products—Rollator refrigerators, gas and electric ranges, washers and home heaters—will be better designed, better engineered and better built because of new lessons learned and new skills developed. They will be, even more so than formerly, products of experience—better products for the better world to come.

A BORG-WARNER INDUSTRY

NORGE is the trade-mark of Norge Division, Borg-Warner Corporation, Detroit, Michigan.

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

NATIONAL APPLIANCE CONSERVATION PROGRAM
"BETTER CARE—LESS REPAIR"
Learn something about your War Bonds
from this fellow!

The best thing a bulldog does is HANG ON! Once he gets hold of something, it's mighty hard to make him let go!

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

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

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

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

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

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

WAR BONDS to Have and to Hold

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

AMERICAN BUILDER AND BUILDING AGE
You can take on more jobs with this small, low-cost DeWalt doing your cutting!

This small, low-cost DeWalt is the perfect saw for jobbing carpenters and handy men to take from job to job. It cuts fast, accurately and safely.

It's more than a saw because various types of circular cutting tools — such as dado heads, shaper cutters, router bits, grinding wheels — can be quickly attached to the saw spindle.

Actually, you take a carpenter shop with you when you take this DeWalt on the job. You simply hook up the motor to the light socket and go to work. Available in two sizes — complete with motor — ½ HP one phase, AC, $125.00; ¾ HP three phase, AC, $135.00. Cut out coupon below and mail today for your free copy of DeWalt Custom Cut Idea Book.

DeWALT PRODUCTS CORPORATION
4800 Fountain Avenue, Lancaster, Penna.

Please send me free a copy of the DeWalt Custom Cut Idea Book.

Name
Address
City State

Makes Every Cut Possible With a Circular Saw
In the Post War home, ventilators are a necessary appliance. The Victor Standard is designed to harmonize with the modern kitchen . . . dependable always . . . economical to operate . . . speedily removes cooking fumes, dirt and stale, grease laden air . . . makes other rooms more comfortable, more livable, too . . . saves on cleaning bills.

A single beaded chain controls the automatic operation . . . a pull on the chain simultaneously opens the outside louver and starts the fan . . . another pull closes the weather-tight shutter and stops the fan.

These and many other outstanding features have made Victor In-Bilt the most widely accepted ventilator in modern American homes . . . planned added improvements destined Victor to unchallenged leadership and acceptance among architects, contractors and home owners.

Listed and approved by Underwriters’ Laboratories. Tested and approved by Good Housekeeping Institute.

VICTOR ELECTRIC PRODUCTS, INC.
DEPT. AB-444, 2950 ROBERTSON AVE., CINCINNATI 9, OHIO
NOTE HOW SAW ALWAYS ENTERS LUMBER AT SAME POINT

**MONARCH UNI-POINT RADIAL SAW**

**REMEMBER** are the savings in time and money which you can enjoy if you install a Monarch Uni-Point—the universal saw of permanent accuracy. Here are two of the reasons why:

1. Some adjustment motions are eliminated entirely.
2. Time on other adjustment motions is greatly reduced.

This is because the saw blade always enters the material at same point in table regardless of cross-cut angle.

**PROOF**

- Regardless of the change of cross-cut angle, it is never necessary to raise or lower the saw blade. This motion entirely eliminated.
- Because the saw is always in the proper relation to the table, regardless of angle of cut, it is not necessary to stop saw to make angle adjustments. This motion entirely eliminated with much time saved.
- Because saw blade always enters the cut at the same point, angle of cut can be changed without resetting the stops or gauges. Time Factor Greatly Reduced in Making Adjustment, and gauge adjustment often eliminated entirely.

**THESE THREE FACTS ALONE GUARANTEE GREATER PRODUCTION PER MANHOUR. THERE ARE MANY OTHERS!**

Send for illustrated Catalog 60
Windows...

that simplify
extraordinary
construction

ADLAKE ALUMINUM
WINDOW WITH STORM
SASH IN PLACE

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

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

THE ADAMS & WESTLAKE COMPANY

ESTABLISHED IN 1857
ELKHART, INDIANA
NEW YORK - CHICAGO

MANUFACTURERS OF ADLAKE NON-FERROUS METAL WINDOWS
Solving Problems of WALL CONSTRUCTION in TOMORROW'S HOMES

THE HOMES you build in the future will incorporate many new principles of construction. New improvements to make living more comfortable come to us almost every day.

Many of these improvements will make it necessary to revise heretofore accepted methods of construction. Air-conditioning, for instance, makes it imperative that walls be so constructed as to reduce moisture condensation within the walls to a minimum. If this is ignored—trouble is likely to arise.

If you build with the Approved Insulite Wall of Protection you guard against this danger from the outset. Study the pictures to the right and below, showing in detail the reasons you should always build with the Approved Insulite Wall of Protection.

OUTSIDE. Insulite Bildrite Sheathing. Large water-proofed boards build a wind-proofed, weather-tight wall. Bildrite Sheathing has a bracing strength four times that of wood sheathing, horizontally applied—and builds an outer wall of insulation.

INSIDE. Sealed Graylite Lok-Joint Lath supplies a second wall of insulation. The patented "Lok-Joint" gives a strong, rigid plastering base, prevents joints from opening under trowel pressure.

THE RESULT. Double insulation. Sealed Graylite Lok-Joint Lath, with asphalt barrier against the studs, effectively retards vapor travel into the wall. Bildrite Sheathing, being permeable to vapor, permits what little vapor that may escape to pass naturally towards the outside.

How to apply Sealed Graylite Lok-Joint Lath. Shiplap joints are butted together. Units are spaced 9/16" apart at end joints. Use box nails for nailing; 4d for 1/2" thick Lath, 6d for 3/4" and 1" thicknesses. Nails are spaced 4" apart.

Bildrite Sheathing is easy to fit and nail. Boards are spaced 3/4" apart at joints. Use either 8d common or 1½" galvanized roofing nails. Along outer edges, nails are spaced 3" apart; 6" apart on intermediate framing.
Two residents may look alike, yet be actually as far apart as the poles in accomplishing the main reason for which they were built. ONE IS A HOME, while the other is "just another house." One contains the essentials for livability—for the promotion of convenience, comfort and continued efficiency, while the other does not. The real home has a reliable plumbing or heating piping system—the other has not. A building may be the last word in modern design with beautiful and modern bathroom and kitchen fixtures, but they are utterly inefficient if the arteries which supply them with hot and cold water are defective and unreliable.

OF ALL THE SERVICE UNITS IN THE HOME NOTHING IS SO VITALLY IMPORTANT AS A RELIABLE PIPING SYSTEM—THese ARE ITS ARTERIES—yet they are sometimes given the least consideration.

Equip the post-war home with the piping that is as modern as tomorrow—a STREAMLINE copper piping system that will be just as good on all the succeeding tomorrows as long as the building stands.

A STREAMLINE piping system cannot rust; it doesn't leak; it conducts hot water faster and with less heat loss by radiation than iron or steel pipe and—it costs but little more than rustable pipe, even in first cost—and over a period of years it costs a great deal less.

While you build the house, build your own reputation. Standardize on STREAMLINE for your post-war homes. It will pay you big dividends—it will help you move property faster.
War has brought home the real value of Emerson-Electric Kitchen Ventilators

Unpleasant odors, excessive heat and greasy vapors are whisked right out of the kitchen by an Emerson-Electric Ventilator. It prevents their circulation to the living rooms and checks the formation of dirt-carrying film on windows, curtains, furniture and furnishings.

As a result, there is less cleaning and less dusting, scrubbing and washing to be done.

The woman lucky enough to own an Emerson-Electric Kitchen Ventilator appreciates it today, as never before—

because it reduces the wear on home furnishings and saves her so much valuable time for other important activities.

Emerson-Electric Kitchen Ventilators will again be available after Victory. So, the woman who doesn't own one is buying War Bonds today, and writing "Emerson-Electric Kitchen Ventilator" at the top of her postwar shopping list.

THE EMERSON ELECTRIC MANUFACTURING CO.
SAINT LOUIS 3, MO.

Branches: New York • Chicago • Detroit • Los Angeles • Des Moines

Send for catalog giving full information on Emerson-Electric Kitchen Ventilators and Home Cooler Fans.
SERVEL'S NEW
All-Year Gas
Air Conditioner

Hailed by users as "The next essential for the home of tomorrow"

Cooled, dehumidified air in summer. Warmed, humidified air in winter. Clean, filtered air all the time. All at the flip of a finger, from one simple unit. That's what Servel's New All-Year Air Conditioner offers your clients for their post-war homes.

The product of ten years' intensive development, this new unit offers for the first time all the advantages of indirect fired heating and absorption refrigeration in one easy-to-operate, gas-fired unit. Steam from a central generator operates both cycles... heats and humidifies in winter, cools and dehumidifies in summer. Clean, filtered air is supplied for both cycles, or may be circulated independently, at choice.

More than 300 test installations among homeowners and certain types of commercial buildings have evoked enthusiastic approval. One satisfied user wrote us, "We cannot conceive of any home in the future being built without this equipment."

Your clients will feel the same way when you tell them all the comfort features of this "Next Essential for the Home of Tomorrow." You'll be able to offer them this equipment just as soon as materials and productive capacity are released from war work.

So start to familiarize yourself with all the details about Servel's New All-Year Air Conditioner. Write at once for further information to Servel, Inc., Evansville 20, Indiana.

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

SERVEL Inc.

America's Leading Makers of Modern Gas Appliances
HERE'S WHAT TRU-SIZED DOORS FULLY MACHINED MEAN TO YOU!

A PERFECT installation in the shortest possible time is what counts on the job. That is why America's leading builders are depending on Tru-Sized Doors to add efficiency, greater satisfaction, and economy of time and money, to construction projects. Tru-Sized—the most modern development in fine doors can be ordered fully-machined for locks and hinges. A carpenter can hang a machined Tru-Sized Door in twenty minutes!

You have the following advantages with Tru-Sized Doors—

* Precision-manufacturing to exact book opening.
* Perfect fit for jambs plumb and square.
* Uniform quality—finest of modern designing.

Tru-Sized doors are a product of America's largest door manufacturer—designed by engineering wood-craftsmen to help carpenters and builders do a better job than ever before.

Be Wise—Use Tru-sized
America's Modern Door

Rush 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.

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City: State:

Rush Coupon Today!
"Today More Than Ever I'm Glad I Specified Frigidaire"

Typical of expressions from owners and managers of rental properties everywhere.

Many owners and managers of rental property tell us Frigidaire equipment has helped keep tenants better satisfied; reduce service problems and operating costs. These things were always important to a profitable operation, but they're even more vital today. Right now Victory is our business, but when the war is won there will be more and better Frigidaire products, and in their making, more jobs for more men.

If It's Frigidaire It's Dependable
are you doodling

..or planning for that building boom?

Today's new products and new ways of processing are making old plants as out of date as the Model T. So rosy visions of fat industrial building contracts to beguile architects and builders alike. "Boom ahead!" may assure themselves.

But booms don't grow out of dreams. They don't even grow out of need. Here's what John B. Blandford, Jr., Administrator of the National Housing Agency, says:—

"We must do more than toss off postwar resolutions like cocktails. We can't afford to rely on purely verbal protestations of big objectives, and then sit back, let the tide of discussion and public interest roll on, and expect automatically to reap the rewards of a broad and effective program after the war."

If you want an industrial building boom, you'll have to set it off. You'll have to show industrial executives that new plants can be produced so efficiently and economically that they simply can't afford not to build them!

One of the most economical and effective ways to point this out and drive it home is through the pages of Time—the first-choice magazine of business executives, plant owners and managers—the magazine they turn to for information to help them think ahead and plan ahead and see the shape of things to come—the magazine they believe in and vote their favorite over all others they read.*

What's more, advertising figures show that Time, the Weekly Newsmagazine, is the medium in which business and industry prefer to tell their own product stories!

*Among these people are executives and engineers, Government officials, mayors, bankers, architects, and 22 other groups of leaders—all of whom recently voted "Time is America's most important magazine."
NOW you can insulate and save weight—that's the modern way with Red Top—lightest of all types of mineral insulating wool materials—approximately 1 lb. per square foot for the thickest type. This light weight is all the more important when you consider that mineral insulation depends upon its light, fluffy construction for the millions upon millions of dead air cells that are responsible for its excellent insulating qualities.

Red Top is free from foreign material that adds weight but contributes nothing to insulating value. Saving in weight takes an unnecessary dead load off ceiling and structural members. Then, too, this light, "feathery" material has exceptional resistance to packing. All these outstanding features are due to the fact that Red Top is different—made of light, strong, resilient fibres of Fiberglas®, it offers advantages no other insulation gives.


ONLY RED TOP WOOL GIVES YOU

Insulation Plus!

FIRE RESISTANCE
LIFETIME SERVICE
RANGE OF THICKNESSES
LIFETIME STABILITY
TAILORED TO FIT
READILY AVAILABLE
ECONOMY ALL WAYS

Made in a complete line that covers every purpose and purpose. Three thicknesses in rolls and bats... One inch—medium (Approx. 2")—and thick (Approx. 3").

United States Gypsum Company—where for 40 years research has developed better, safer building materials.
The recovery of waste land by creating attractive, livable communities will undoubtedly become an important phase of postwar construction. Such rehabilitation will require ingenuity in planning, progressive design, and high efficiency in building methods and materials.

Stran-Steel light-gauge steel framing systems meet ideally these varied requirements. Strip steel provides a versatile medium for the expression of practical-yet-unorthodox design, and offers such important advantages as great strength, light weight, durability, and economies of time, labor, and materials.

Through current wartime assignments involving the design and fabrication of strip steel, the Stran-Steel engineering staff is acquiring specialized experience which will serve architects and builders well on their postwar projects.
Certainlyed’s big FARMER’S WARTIME HANDBOOK is the “Book-of-the-Year.” Here’s why. Its 20 pages are jam-packed with practical suggestions and ideas on farm building problems.

It shows how Certain-teed building products can take the place of scarcer materials. And most important—how several different Certain-teed products can be used for the same job!

That’s why this Farmer’s Handbook is also a big help to Certain-teed distributors, for it proves to farm customers that if one Certain-teed product is not immediately available, another may serve equally well! Certain-teed advertising, in five leading farm magazines, offers this Handbook to 5,000,000 farm families!
... in new Ordnance Plant

We can't tell you where it is, or what it makes. But we are pleased to say that Eljer plumbing fixtures were approved and installed there.

You, too, will find Eljer a wise choice. These carefully designed fixtures have proved their ability to stand up under long, hard use. The Eljer line offers the architect and builder a wide range of fixtures especially made for industrial plumbing jobs.

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

ELJER CO. FORD CITY PA.
In the Colonial days of our forefathers when the Indians were on the war path... the settlers followed the common practice of doing the best they could with the materials at hand. Using native oak for a bar to go across the door and engage in wooden catches fastened to the frame with wooden pegs.

Even I know it's easier to drill a round hole than to mortise a square one.

1944 War Housing Calls for DEXTER-TUBULARS

Today, tubular locks and latches, originated by DEXTER, are the word; are steadily gaining in use and popularity. Easily, quickly, accurately installed with brace and bit (made doubly fast with the help of the convenient DEXTER Bit Guide) they eliminate old-fashioned laborious mortising. For their great convenience and satisfaction, DEXTER-TUBULARS are being used by more and more progressive builders and contractors—are backed with a written Lifetime Warranty.

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

Manufactured by NATIONAL BRASS COMPANY
GRAND RAPIDS, MICHIGAN
Providing Decent Homes Is Primarily A Job For Private Enterprise—F.D.R.

Mrs. Dorothy Rosenman, wife of F.D.R.'s favorite, Judge Rosenman, who re-coordinated the housing agencies of the government into the present structure headed by NHFA, held a post-war housing conference of her National Committee on Housing in Chicago’s Drake Hotel last month.

Proposed methods of financing the acquisition of blighted land for redevelopment of American cities took the limelight.

"Let us begin by reading a paragraph by Hugh Potter, who is scheduled to speak to you this afternoon: Quote 'If you put black spots on the map of any large urban area to indicate the sites of recent construction, you will be drawing a circle around the city. You will have a diagram of an explosion that has literally ripped large communities at the seams, and cast large segments of the population to the outskirts. It is hardly accurate to describe the process as decentralization; rather it has been a process of disorganization and haphazard disintegration,' unquote," said Jerrold W. Loeb, President of Chicago Building Congress, first scheduled speaker on the subject.

Following this opening, the speaker pictured a planned growth for future city development with attractive homes located in areas where prevailing breezes and the sun’s rays will bring health and a new measure of contentment to American families.

"Only a city of green landscape and gardens—of sun-filled houses—clean air—safe streets—only a city for living can be immune from slums—how else can we redevelop the standard areas of our cities?" Loeb asked in his concluding remarks.

(See FHA land-planning story in this issue of American Builder.)

Calling for aid to their cities by the states, Ira S. Robbins, acting commissioner of Housing of New York State, presented among others these three points of assistance as the function of the state: 1. Educate municipalities on the need for adopting a master plan. 2. Educate cities on the importance of planned and orderly decentralization. Here he warned—"One of the dangers of large scale urban redevelopment is the possible social and economic stratification that may take place (Continued to page 118)

Excerpt From The President’s Message

Dear Mrs. Rosenman:

The goal to be sought here at home, when peace comes, is full employment. We must plan now to employ the men and women who will be released from war industry when victory is won—at a wage which provides decent standards of living. One of the most important of these standards of living is a decent home—whether it be owned or rented.

The home building industry will play its most important role in post-war America—furnishing dwellings accommodations for millions of families in the United States who will be seeking new homes after the war. In performing this task, it will be furnishing employment in all sections of the country.

This is primary a job for private enterprise. Government must continue, however, to lend appropriate assistance to private enterprise in this undertaking, and to assume direct responsibility for doing only that part of the total job which private enterprise is unable to do itself.

Wishing your conference success in its deliberations, I am

Very sincerely yours,

FRANKLIN D. ROOSEVELT.
GOLD BOND GYPSUM BOARDS
HELP SOLVE LUMBER PROBLEM!

1. GOLD BOND G-X BOARD—Sheathing and finish in one operation. Tough, weather-resistant facing in serviceable green color.

2. GOLD BOND A-X BOARD—Sheathing and finish in one operation. Supplied with asphalt roll roofing laminated to the weather side.

INDUSTRIAL USE. Speed counts these days in putting up plant additions and other emergency buildings. But they must be durable and as near fireproof as is possible to obtain with the materials available. Fireproof Gold Bond Gypsum Boards are "made-to-order" for these jobs...laminated gypsum planks for the roof decks and heavy-duty A-X or G-X Gypsum Boards for the exterior walls.

HOME REPAIRS. For today's essential remodeling jobs...converting large homes into rentable war-worker apartments; for partitions; for rejuvenating old walls and ceilings, sturdy Gold Bond Gypsum Wallboard is your best bet. It's inexpensive to install. Can be papered or painted. And it's fireproof.

SEE YOUR GOLD BOND DEALER

BUILD BETTER WITH GOLD BOND
Wallboard • Lath • Plaster • Lime • Metal Products • Wall Paint • Insulation • Sound Control

NATIONAL GYPSUM COMPANY • EXECUTIVE OFFICES • BUFFALO, N.Y.
Here’s progress you can count on

HAS home building in America been a failure? Is the building industry backward or behind the times?

The answer is wholeheartedly and unconditionally NO to all of these questions, as this entire issue of American Builder demonstrates.

Building progress before the war and during it has been steady, sure and safe. Building men on the whole are not backward, but sensible. They have learned through hard experience that it is sensible to move slowly, carefully in matters concerning public habits, customs and ideas such as housing, and in adoption of new materials or methods before thoroughly tested and tried out.

Thus progress in home building is inevitably evolutionary.

American Builder believes that improvements, methods, materials and many ideas are being speeded up by the war. The building industry is on the march. Here are at least five points of progress we believe can reasonably be counted on.

1. Better communities—Traffic-safe, livable, better-planned home communities are now expected. Before the war great progress had been made, thanks to FHA’s land planning division which set up striking new patterns. Even during the war community planning has been continued in a sound way. We can expect post-war communities to be laid out with curved streets and cul-de-sacs that slow fast traffic, attractive landscaping, sound controls to prevent deterioration. Groups of small builders may co-operate in developing large planned areas, including shops, parks, schools, and playgrounds.

2. More “paper work”—New building methods and techniques are forcing builders to hire a better quality of architectural and engineering service and to more completely detail every operation. This means more work in the office, but less waste and error at the site. The use of more and more factory built parts and package units will increase this office planning, decrease field labor, but produce perfect homes.

3. More power—Builders are using and will continue to use more power equipment of all kinds to speed up operations, cut costs. They will adapt and adopt many prefab ideas including considerable site fabrication of wall sections, gable ends, dormers, use of sub-assemblies.

4. Silent servants—Before the war American builders were producing houses that were famous the world over because they were so well equipped with plumbing, heating, and specialty items that builders in no other part of the world would dream of providing in low cost homes. Builders’ plans for post-victory homes are breathtaking in this respect. Building progress will make possible houses that are truly livable, lovable, easy to maintain and fully equipped. These things are possible and probable immediately after the war.

5. Progress during war—Those builders who have been engaged in war housing have learned a great deal from the big jobs they have had to do in a hurry. Many of these lessons will be carried over into post-war. In the field of building materials and equipment, great strides have been taken which will result in a host of improvements in the years ahead. These developments—already well along in some cases and merely in the initial research stage in others—will take the form of applying scientific progress in plastics, lightweight metals, plywood, composition materials and streamlined equipment to traditional forms of construction. Bit by bit, many amazing new products will be fitted into the pattern of the post-war home.

Furthermore, builders have learned during the war to make better use of modern materials and equipment that had come on the market just before the war. They will start fresh, using the latest pre-war products, which, on the whole, represented a high standard.

Building progress is steady, sure and sound. The finer better home of tomorrow is in the making today. Progressive builders are busy right now drawing plans for post-war projects, reviewing the best of their pre-war work and incorporating the recent tested progress during the war. The result will be the most livable, convenient, easy to maintain, and easy to own houses the world has ever seen. This progress you can count on.
Advanced Land Planning Shunts Life-Taking Traffic

Seward H. Mott, FHA Land Planning director, tells here the progress made by builders in providing planned neighborhoods before and during the war. He shows how proper planning not only maintains and increases land values but also insures continuing salability.

FREEDOM from the hazards of fast traffic is one thing every home-buying prospect demands and to which he is entitled. It's one very good reason that progressive home builders now stress the importance of correct neighborhood planning in their projected postwar operations. Almost no one buys a lot in an unimproved section and years later has a house built. That was yesterday. Tomorrow—people will buy not just a house but along with it a piece of a planned community.

Sensing this preference—even before the war—for a more complete, more finished product, progressive American builders have been producing finished and attractive neighborhoods to complement the better-planned homes they have been offering for sale. Progress in this direction has moved forward with new rapidity in the wartime mass-building job so ably discharged by the home builders of America.

Finding and planning the neighborhood which will insure steady marketability is the first problem builders of tomorrow's homes are now solving or striving to solve for their future home-building programs.

Continuing salability must pass the test of the eight following points:—(1) the stability of the area as it will be viewed by the prospective purchasers, (2) the protection of the area from adverse influences through zoning ordinances or protective covenants, (3) the adequacy of transportation, (4) the appeal of attractive appearance and surroundings, (5) the adequacy of schools, shopping, civic and social facilities, (6) the sufficiency of utilities and conveniences such as sanitary sewers and street improvements, (7) the freedom from special hazards such as flood conditions, and (8) a suitable level of taxes and assessments.

The absence of any one of these features usually will jeopardize successful completion of a building program. Good land planning does not necessarily call for the building of entirely new neighborhoods. Suitable existing neighborhoods already possess most, if not all, of the essential features listed above, where prospective home purchasers can actually see what the finished community is like.

If a building program of modest size is undertaken in an existing neighborhood, concentration on contiguous lots close to transportation, the school and other community facilities is recommended.

(Continued to page 128)
How 16 Co-operating BUILDERS CREATE A CITY FOR 6000

When one has met in such circles as those of the FHA Co-operative Home Building Program, for the first time one experiences the thrill of working for the creation of a new and well-planned community, wherein all the resources of the cooperating home builders are pooled to aid in the achievement of a common goal. Few projects are more broadly representative of the American humanistic potential than the Midwest City venture. It is a living tribute to FHA's leadership in the nation's community planning, and it is perhaps the most successful of the FHA sponsored cities of the war years. In this project is a complete and permanent residential community of several thousand inhabitants, which was planned, financed and built, not by public agencies, but by private builders, under the war housing program of FHA.

SKY-VIEW of Midwest City, Oklahoma, shows a vast land planning and home building job accomplished through the combined efforts and pooled resources of co-operating home builders.

Already a total of 1,466 family dwelling units are provided in buildings completed, financed with approximately $7,000,000 of FHA insured mortgages. Three hundred additional single-family houses are nearing completion.

Strictly a planned community, every detail was determined with the advice and counsel of FHA officials before ground was broken. The FHA guidance given them by FHA the builders attribute their success in this co-operative task of building a city from scratch. Future issues of American Builder will tell you more about this massive planning and building job.
PUTTING the post-war home building X in 194X will be done by private builders in co-operation with manufacturers of materials and equipment, in co-operation with private mortgage lenders and FHA insurance, and in co-operation with organized building labor.

The National Association of Home Builders has an active and well-directed program under way dedicated to the task of bringing about better housing by private enterprise through co-operation with other branches of the industry.

Land planning is of primary importance in establishing security for future home ownership in America. Buildings should occupy from 7½ to 15 per cent of the plot area, whether single or multiple family structures. Such planning will do much to insure long life for housing developments surrounding downtown areas, whether they are two miles or twenty miles from the center of town.

Revision of building codes is essential in almost all communities. Such revision can readily be accomplished by co-operative effort on the parts of U.S. and local chambers of commerce, national and local real estate boards, architects' chapters, the NAHB, and local building labor unions.

TRENDS—More glass in walls, but not in openings. That is, fewer windows will open and larger glass areas will be stationary.

Ventilating fans, air conditioning, filtered air, automatically controlled heat and humidity, package receivers, complete insulation, and up-to-the-minute kitchen and bathroom equipment and fixtures will become common to the average house.

Sound, honest construction with pre-cutting on or near the job, with some parts delivered to the job completely pre-fabricated, will be common practice. Much progress has been made along this line during the last few years.

Financing of small homes should be geared to longer amortization at lower interest rates. This will help make post-war home building part of the Nation's business set-up, which will be necessary if we are to maintain a progressive economy up in the hundred-and-more billion dollar bracket.

In short, if all of the free enterprise activities having to do with the building of America's homes fail to co-operate in putting the home-building X in 194X, our way of life surely rides for a fall.
How Gerholz Healy Co., of Flint, Michigan, put power tools and time-saving techniques to work producing better homes at lower costs. This is the first of two articles on power.

Progress during recent years in the art of home building has been outstanding in all of its branches. One in particular, however, stands out in front. That is economy of construction.

This economy lies in the use of power tools on every part of the job. The more horsepower used, the less it costs to build a house. This means more houses in the same length of time, and top wages for building tradesmen using the tools. If, as is anticipated, there will be a shortage of skilled labor when the building business again kicks into full swing, the use of power tools on the job will help solve this difficulty.

Bob Gerholz and Jerry Healy have learned by experience before and during the war the economy possible by use of horsepower on the job. The basements of their post-war houses are dug with power equipment. Sub-floors are laid immediately foundation walls are up to keep weather out of basements. A hand power saw cuts floor boards and trims the edges around the floor.

Plumbing stacks are installed before framing goes up, thus eliminating the cutting of framing members. Two complete stacks are in place in one day by one man, whereas it used to take two days for one stack. The house is framed around the stack.

Plumbing comes in for its share of on-the-job horsepower. A pipe threader can be set up in the basement or elsewhere on the job. Insulating sheathing board is cut to fit with a hand power saw. Studs and joists are laid on a jig table and cut to length with a power saw in a fraction of the time it would take with a hand saw. Cutters, likewise, are given the one-two with a power saw, and cut more accurately than was usual by hand.

SAWING insulating sheathing with a power tool is 5 times faster than when done with a hand saw, thus helping reduce building cost.

LOWERING erection costs of a job is a matter of reducing the time element in every way possible. At the right is a pipe threader run by electricity. It not only threads pipe faster, but it eliminates the energy spent by a plumber in doing the job by hand. Power tools lighten the task and do a better job faster, which certainly adds up to good common sense.

GERHOLZ HEALY CO.'s war and post-war house. Chas. Noble, Archt., Detroit.
I HAVE talked with successful, progressive, wartime builders from coast to coast. I have traveled by plane, by train, by car and foot through the mud to ask questions about wartime progress in building and what it means to the future.

The answer can best be summarized in a few words: "Through the trials and tribulations of our wartime experience we have learned a great deal. We have learned to overcome unheard of obstacles—to try new methods and materials—to get results from inexperienced help—to do more work in the office so that there will be less wasted effort on the site."

The progress builders have made during the war is a continuation of the steady progress they were making before. Post-war building will be duck soup for them. Its pattern is already emerging from present experience. Builders have learned to be ingenious, aggressive and adaptable. They will adapt new ideas and materials as fast as they prove successful, and fully expect to build the best houses the world has ever seen.

That summarizes, briefly, what builders have told me. But to get down to a specific, provable case, let me describe the project pictured with this article which nicely illustrates many of these points.

Columbia Village and Richland Park are two attractive home communities built by Alan E. Brockbank, vigorous, young president of Federal Homes, Inc., of Salt Lake City. He is also president of the local Home Builders Association.

I visited Brockbank's job in company with Gordon Weggeeland, state FHA director, and a visiting builder, Franklin Burns, of Denver.

**Built Best Homes Possible**

Brockbank definitely set out to build the best house he possibly could. He located them in American Fort, a small Mormon community near the new Geneva Steel Company at Provo. He developed a complete community with well laid out streets, and in less than one year built 147 houses, the bulk of which were completed by the end of 1943.

The result is a community of well built, well laid out homes which have charm, livability, colorful exteriors, big windows, modern lines, plenty of sales appeal. They are the kind of home Brockbank is sure he will build after the war.

The quality specifications of these houses would please any home owner in war or peace. They have fireplaces, thorough insulation, select clear oak floors, attractively equipped kitchens and baths, full basements which are clean and dry.

Brockbank employed Architect M. E. Harris, Jr., to prepare extensively detailed plans and also brought in a consulting architect, R. Lloyd Snedaker. He used power equipment to pre-cut his lumber, and adopted numerous clever ideas to save time and speed up work. Here is what he says about his war experience and building progress:

"We feel that we have learned some very definite things from having built during the war period. They are:

**First:** that much labor and material can be saved by building houses en masse, and laying the sections out on a jig table after all the parts are sawed out by electric saws.

**Second:** that much time and labor can be saved by filling in around shored-up basement as soon as it is built and capable of holding the back fill. In common connection with our back fill and foundation grading we developed a very helpful and labor-saving tool, using a Fordson Tractor with sufficient hydraulic lift on it. We made a frame out of an old Ford car and we build a few pieces of 2 by 8, so that we could drag the dirt behind our tractor or other smallish vehicle.

**Third:** that men will learn to do a specific job expertly if they are permitted to do the same job over and over again, no matter what their previous training. We have the same man cut 147 different window frames the entire time. Another group do all the framing, another group do all the roofing, another group build the floor subfloor, another group put on all the window casings, another group sets and cement the doors.

**Fourth:** as soon as the floor joists and sub-floor are placed we build the chimney up above the ceiling rafters. This saves a lot of time in the construction of the interior walls.

**Fifth:** insulation. We have learned during this war period the very great importance of insulation, and we feel confident that the community will have the very best insulation."

"We've learned a great deal—what will be the future."

---

**SMART DESIGN, sound construction are in these Utah war homes built by Alan E. Brockbank.**

*seen on job, left, Franklin Burns, Denver builder; center, Gordon Weggeeland, Utah FHA director; right, Alan Brockbank, Salt Lake City builder of this housing.*
LEARNED from war building"

—and better post-war homes will result from the trials and tribulations of war work, builders say. Another exclusive American Builder story based on first hand interviews with progressive American Builder readers.

By Joseph B. Mason
Editor

INGENUITY and skillful planning produced these attractive war homes.

How builders have progressed during war

1. Better design—complexities of war building have forced use of more fully detailed plans, employment of competent architects. Improved design in low cost houses has resulted, with bigger windows, better use of colors, expert space planning. This architectural progress will continue.

2. Planned Communities—through traffic is by-passed; subdivisions laid out by land planning experts with curved streets, cul-de-sacs, parking areas, landscaping. Progress toward more perfect home communities is definite.

3. Ingenuity—war shortages have taught builders to try new ideas, new methods, new materials such as tile tubs, plastic hardware, substitutes.

4. Lower cost—such ideas as back-to-back plumbing, simplified wiring, heating and plumbing installation and standardized kitchen and bath units have taught builders how to reduce costs.

5. Untrained men—lack of skilled workers has forced builders to simplify operations, use standardized methods, use more factory built parts.

6. Standardized plan—how to use a standard plan without monotony has been learned; interesting ways to create exterior variations with one basic plan.

7. Precutting—more houses have been fully detailed in advance, precut on power saws and more sections fabricated on site.

8. Power equipment—more builders have adopted improved techniques employing equipment that cuts cost, speeds job, does better work.

See next page for detailed plans of Utah war homes
WAITING LIST—the Columbia Village war home pictured below and fully detailed above is one of several popular models with a long waiting list. M. E. Harris, Jr., Architect. Well laid out community includes cul-de-sac streets.

“We set out to build the best war house possible.

BUILDER Alan E. Brockbank believes that his wartime homes, one of which is pictured above, represent true progress. The 39 x 24 ft. plan provides big windows and good ventilation for all rooms, excellent circulation between rooms, ample closets, economical heating and kitchen plumbing, a real fireplace, and a roomy basement. Specification and construction details are given with an article on preceding page.
To American Builder: NOW PLANNING WORLD'S FINEST HOMES—CONTINUING PROGRESS BEGAN BEFORE WAR AND CARRIED ON DURING WAR. POST-VICTORY HOMES WILL HAVE MORE BEAUTY AND LIVABILITY, MORE THOUGHT IN ARCHITECTURE, GREATER CONVENIENCES IN PLANNED LAYOUT. WE ARE PLANNING LARGER BUILDING SITES, MORE FLOOR AREA, MORE GLASS AREA, IN SOMEWHAT MODERNIZED TRADITIONAL LINES.

VIGOROUS PROGRESS IN SIGHT TO INCLUDE MORE AND BETTER MECHANICAL EQUIPMENT, BUILT-IN AND PLANNED WITH HOUSE FROM GROUND UP. INCLUDED WILL BE COLD STORAGE LOCKERS, REFRIGERATORS, BUILT-IN RANGES, MANY FANS AND VENTILATORS, BUILT-IN SHELVES, DRAWERS, DESKS.

SILENT SERVANTS WILL MAKE OUR HOUSES MORE EASY TO KEEP CLEAN, MAINTAIN AND COMFORTABLE TO LIVE IN. PLAN ON AUTOMATIC HEATING WITH TEMPERATURE CONTROL. WE EXPECT MORE OUTDOOR TERRACES, PICTURE WINDOWS, ENGINEERED LIGHTING, ELECTRIC DISHWASHERS, MORE INSULATION, BETTER AND EASIER TO CLEAN WALL MATERIALS.

EXPECT INTEGRATED KITCHEN EQUIPMENT, WITH ADJOINING BREAKFAST SPACE, MORE CHEERFUL ATMOSPHERE THROUGHOUT, EXTENSIVE USE OF MIRRORS, BATHROOMS WITH CABINETS, POWDER TABLES, STREAMLINE FIXTURES, SEPARATE SHOWER STALL.

TREND IS AWAY FROM SMALL, BOXY HOUSE TO MORE SIMPLE, BEAUTIFUL TRADITIONAL DESIGNS, SOME LOW-LINED RANCH HOUSE MODELS.

CONSTRUCTION PROGRESS WILL INCLUDE APPLYING TECHNIQUES OF MASS PRODUCTION TO SMALLER PROJECTS, GREATER USE OF POWER EQUIPMENT, SITE FABRICATION, USE OF SUB-ASSEMBLIES, GREATER USE OF INTEGRATED OR PACKAGED KITCHEN, BATHROOM AND HEATING UNITS. AS NEW MATERIALS SUCH AS PLASTICS, OR LIGHT WEIGHT METALS ARE PERFECTED THEY WILL BE RAPIDLY INCORPORATED IN TRADITIONAL CONSTRUCTION, HELPING TO PRODUCE A BETTER HOUSE AT LOWER COST.

BUILDING INDUSTRY ON THRESHOLD OF GREATEST TECHNICAL AND SCIENTIFIC ADVANCE IN HISTORY—YET THIS DOES NOT MEAN IMMEDIATE RADICAL DEPARTURE FROM TRADITIONAL STYLES OR METHODS. IT DOES MEAN MORE LIVABLE, COMFORTABLE, EASY TO OWN HOME—THE FINEST EVER BUILT.
A taking Mr. Progressive Builder, want sure-fire extra value for your Post-Victory Homes. You want to get your planning under way for a quick start. You want to know what can be depended on as available immediately after factory production resumes so that you can make good on the build-up publicity that has home buyers agog and now ready to be sold.

Women want, FIRST, their share of the household aids already developed, BEFORE they will yearn for still-to-come miracles. They look for freedom from tending fires, washing dishes, doing back-breaking laundry, endless scrubbing and dashing. Progressive builders can add to the list freedom from draughts, stuffiness, and dampness; freedom from drabness and blight.

But how to do it? Aren’t most of the promised post-war wonders still to be designed, produced and tested? NO—recent surveys reveal that the materials, products, equipment needed to satisfy practically all the basic features most desired by buyers were developed before the war and already proven. Mass markets can bring these within the range of standard equipment in even the modest middle cost bracket. And that is the only sound starting point for anyone planning homes for the after-war market.

Particularly from the woman’s viewpoint (what builder doesn’t bow to it?) the conveniences, the labor-saving devices, the time-savers most in demand have been on the market before the war. However, these were seldom planted into house and bought as a package under original financing. Like the myriad accessories of the soil-stripped house automobile days, somehow the extras were never all assembled to deliver the complete job. The day has arrived for homes to be sold with at least the basic mechanical devices and equipment, arranged to deliver better living in a servantsless home.
 Builders say homes will be easier to own, operate and maintain; full of "mechanical built-ins" for pleasanter, fuller living. Here are sales-tested ideas for your homes.

**CHECK LIST for Post-Victory Homes**

**EFFICIENCY KITCHENS**—Automatic stove, refrigerator, dishwasher, garbage disposal; adequate ventilation for odorless, even-temperature atmosphere; proper lighting at all points; ample work counters arranged in triple work-center layout, convenient storage space for all equipment and supplies, towel dryer, dining space for over half the meals; crack-free, long-wearing, easy-to-clean surfaces on floor, counters, walls; planning desk; electric clock.

**COMPLETE HANDBY LAUNDRY**—Automatic washer, automatic water heater and space for other equipment in well-lighted and ventilated area located for easy access.

**IMPROVED AUTOMATIC HEATING**—Automatic controls, year-round conditioning and electric air cleaning.

**CONVENIENT BATH**—Built-in cupboards and drawers, dressing table and lavatory, scales, wall heater, sun-lamp, well-lighted mirror, towel warmer and storage; fixtures arranged to avoid congestion; ventilator, easy-to-clean crackproof floor and walls; step-saving extra lavatory.

**LIVING QUARTERS**—Ample rooms with space-saving built-ins; large glass areas with windows placed for furniture grouping and views; glass block panels for additional light; windows easy to operate, clean and change screens, weather-stripped against dust and cold; proper insulation to reduce dirt on walls; plastic-coated wall and floor coverings that are quickly cleaned, wear-proof, space-saving, multi-use dining area; picture surfaces; living porches and terraces to save inside work.

**SLEEPING ROOMS**—Dust-tight, space-saving wardrobes; built-in drawers, seats, etc., for less on floor.

**GARAGE**—Attached, convenient to street; upward-acting door; storage for yard tools and equipment.

**MISCELLANEOUS**—Trouble-free, long-lasting metals for pipes, gutters, flashing. Adequate wiring for all purposes and future additions; simple, sturdy hardware; roofs outside finish materials for less upkeep, lower maintenance.
HERE is a practical contribution to effective post-war home planning progress. Architects Henry Otis Chapman and Randolph Evans show how to group six attractively designed homes about a traffic-safe livable court or cul-de-sac street. This is a typical example of the progress taking place in better community planning and is especially adaptable for use by small building firms.

One basic 36 x 25 ft. plan is featured in the blueprint at right along with three exterior variations A, B, and C. How these three types are placed around the court is interestingly shown in plot plan.

The carefully drawn blueprints portray numerous clever, attractive details such as the glass block baffles in the breeze way, smart kitchen alcove lay-out, good center hall arrangements, compact grouping of stairs, closets and fireplace. It is a big small house, the basic appeal of which was thoroughly sales tested just before the war.

With the different variations in exterior materials and the variation in placement on the lot as indicated, this little post-victory home community should have definite charm and buyer appeal. In addition, it is the kind of community where children are safe and property values protected. In short, this is the kind of building progress to be expected by progressive builders.

A Well Planned 6-House Post-War Community

SIX HOUSES are attractively grouped around a traffic-safe cul-de-sac street. One basic plan is used with three exterior variations: A, B, and C fully detailed in blueprint opposite. A bird's eye view of post-victory progress toward the "perfect home community."

No. 4 of Blueprint Series—American Builder blueprints are presented each month as an educational feature to promote and stimulate sound post-war planning. Previously covered subjects include a rambling Colonial—private garage with architectural charm—post-war home for suburbs. Next month: country club cabins.
RIGHT SIDE

LEFT SIDE

PLANS AND ELEVATIONS
Scale 1/4" = 1'-0"

See Variation - A" for Cellar & Attic Plans

VARIATION - "B"

DESIGN No. AB4

AMERICAN BUILDER WAR BLUEPRINT SERIES

CHAPMAN + RANDOLPH, ARCHITECTS, NEW YORK, N.Y.

Boardman Pub Co. 105 W. Adams, St., Chicago
Prefabrication IS Part of Progress

The process has evolved a mass production method covering many building items as explained here

By Harry H. Steidle

Believing that prefabrication will play an important part in the home building of the future as it has in the past, the editor has asked the Secretary of the Prefabricated Home Manufacturers Institute to review progress and predict possibilities ahead.

Prefabrication is unquestionably the greatest single modern contribution to residential building progress." This unrestrained expression may cause the arching of many eyebrows or perhaps the issuance of more explosive rejoinders, but let us look a little farther:

American homes without doubt have come a long way since the marble-front row jobs and the squat ugly bungalows of the turn of the century. The old fashioned wood enclosed copper bath tub has given way to its smart enameled iron counterpart; the "outhouse" is just a faint memory amid the comforts and conveniences of present day living; the old kitchen table with its vivid oilcloth cover has been replaced by a large smooth work surface with sink in the center, and a dozen convenient cabinets for the storage of food and equipment. The cumbersome, dusty furnace with its obnoxious odors has surrendered to a small, efficient, automatically controlled mechanism that warms the house to the will of the thermostat; and while speaking of conveniences, the old-fashioned, loose and rattly windows and frames have long since been outmoded by the superior factory-built combinations that are weatherstripped and equipped with screens and storm sash.

Much in Homes Now Prefabbed

Further progress is expressed in automatic refrigeration, beautiful pre-finished hardwood floors, and many other features that contribute toward greater livability.

All are prefabricated. Mass production, specialization, and standardization alone have made these improvements possible and companions, not for the wealthy alone, but for the masses.

If this is admitted—and it can hardly be denied—why then is there much mystery, skepticism, and fear about "prefabrication"? A thousand definitions have been written for the term, but prefabrication, as it applies to residential construction, simply means the manufacture of parts or products in a well-integrated mechanized plant where they can be more efficiently produced than under the uncontrollable conditions existing at the building site.

If the production of factory-built doors, window units and kitchen cabinets represent a logical and natural development, it takes no great flight of the imagination to see that this technique can and will be extended to floor, wall, ceiling and roof assemblies. This is especially evident if we are frank enough to admit that there has been little real progress in actual building methods as applied to residential structure in the past hundred years.

The piece by piece method is wasteful of time, labor, and materials. Actual working hours are limited by the vagaries of the weather. In rain, snow, or excessive cold, outside operations are suspended. Carpenters and other artisans standing on ladders or light scaffolds are working with greatly reduced efficiency, and, in addition, require someone constantly in attendance to hand them tools and materials. If a board or pipe is too big for a specific place, it is cut to the required size and the remaining piece is more than often thrown away, requiring additional labor to again dispose of the waste.

In brief contrast, the factory production of structural sections permits uninterrupted production flow regardless of weather. Mechanics work with utmost efficiency and safety because they have the benefit of optimum light and the best mechanical facilities with properly sized materials within easy reach. Waste is reduced to an absolute minimum because the raw materials are cut to the lengths required and every small end and block is utilized.

Certainly there is need for greater efficiency in residential construction, but full advantage of the recognized merits of mass production techniques and their application to home construction has been retarded by a number of factors, many of which are psychological and therefore difficult to isolate and moreover highly controversial.

One of the chief barriers in the past has been the physical problem of manufacturing a home in a factory. (Continued to page 154)
**Progress In Home Finance**

FIVE points of progress in home finance are visible. Three of these are specific accomplishments, already in practice. A fourth has just been thrown into the Congressional Legislative hopper. A fifth can be seen emerging from the caldron of conversation and housing conference speeches to a point of popularity which foretells public support and possible ultimate adoption.

Under the head of specific accomplishment the savings banks of Rochester, N.Y., recently announced in a newspaper advertisement “A New Mortgage Policy.” These banks agree that on all future mortgages placed on residential and farm properties they will absorb the costs on the following items: 1. Appraisal Fee, 2. United States Search, 3. Guaranteed Tax Searches, 4. Survey, 5. Mortgage Tax, 6. Recording of Mortgage in County Clerk’s Office, 7. Final Redate of Abstract of Title, 8. Attorney’s Fee.

The banks which took this step are the Mechanics Savings Bank, Monroe County Savings Bank and the Rochester Savings Bank.

This is the first time to our knowledge that a group of banks in any community have seen fit to render this service to the home buyer. It eliminates much of the extra costs which have, as builders well know, created a stumbling block to home ownership even when the prospective buyer possessed the 10 per cent down payment. American Builder compliments the savings banks of Rochester and sincerely hopes that the banks of many other cities will see fit to pattern after them.

The rate of interest on FHA insured mortgages has been reduced to 4 per cent by the savings banks in Metropolitan New York. This is indeed progress in home finance and the home builder in the country has been advocating a reduction in interest rate to help reduce the monthly cost of home ownership.

Here we wish to point out that we had already received word from the First Federal Savings and Loan Association of Shreveport, Louisiana, that it had already reduced its interest rate to 4 per cent while continuing to pay 3 per cent to its depositors.

Philip Lieber, president of this institution, and former president of the U. S. Savings & Loan League, has the following to say on the subject of bringing interest rates down:

“I enclose copy of advertisement showing our present financial statement to show you that home financing interest rates can be brought down in the United States, even without FHA assistance. This association has been making loans at 4 per cent since July 1, 1943, and charged only 4 3/4 per cent, without any FHA assistance, prior to that time.

“In view of the statement in the December number of American Builder that “The spread between the present low cost of money and the 4 3/4 per cent to 6 per cent charged by home lending institutions is too ... (Continued to page 132)

**New Mortgage Service For Home Owners**

Weyerhaeuser Announces Plan Which Cancels The Mortgage If The Borrower Dies Or Is Permanently And Totally Disabled. ...Keeps Up The Payments In The Event of Sickness Or Injury

**By Raymond Edwards**

MUCH has been said about the “home of the future”, what it will be like, how much it will cost ... here are the details in brief of a home mortgage of the future—a brand new plan which is designed to remove the hazards of health from the mortgage transaction.

“Everybody seems to agree that postwar home owners are going to get a great deal more house for their money,” said W. A. King, executive vice-president of Allied Building Credits, Inc., Weyerhaeuser subsidiary, through which the new plan is available. “We have been working for a long time to accomplish the same thing in home mortgages—to provide protection for the family which eliminates financial distress caused by unexpected death, permanent and total disability, accident or sickness of the borrower during the term of the mortgage. In this new Mortgage Cancellation Plan we are now able to provide this protection at a rate which is well within the means of every home owner.”

While the new plan will not reach its maximum importance until home building is resumed in the postwar period, it is now being made available to several thousand existing ABC home owners.

“It is a well known fact that many prospective home builders do not proceed with their plans because they are fearful that something will happen to the wage earner which will make it impossible to complete the terms of the mortgage,” continued Mr. King. “If they finally decide to go ahead, they often worry about the eventual outcome until the mortgage is paid off. This apprehension is removed by this new service since it provides home security in a very practical, economical form. If the husband should die before the mortgage is paid, the balance due is cancelled immediately and the same is true if he is totally and permanently disabled. If sickness or injury prevents gainful employment for not less than two ... (Continued to page 132)
Voted a POST-WAR MODEL Home

for the Northwest

In this House on the Crest of a Hill, a Seattle business woman put plenty of individuality into a conventional design when she built for herself on a view-site

ONE STORY in front and two stories at the rear, garage at the street level and bedrooms on the floor below, and all rooms with a ground eastern view down across the valley, were the objectives of Mr. and Mrs. L. C. Denker (she is known in local real estate and shipping circles as Honey Lou Hansen) when in 1941, after building and selling half a dozen characterful small homes for the market, they decided to plan and build one for their own use.

The result was followed with a great deal of interest by the Seattle home building fraternity; and its verdict was an unqualified approval. And so the Denker home on 39th Ave. W., Carleton Park, is illustrated here on the recommendation of several members of the Master Builders association who feel that it represents a style that carries many a suggestion for the graceful, yet functional, postwar home, especially those to be built on a hillside in suburban and country locations.

(Continued to page 87)
TESTED PLANS AND ELEVATIONS FOR A NORTHWEST MODEL POST-VICTORY HOME

This unusual design was created by Mr. L. C. Donahue (son of owner) and James Austin, built in Seattle, Wash. See preceding and following pages for illustrations.
A BEDROOM IN THE BASEMENT — On grade level, the master bedroom as pictured above has decorative alcove for bed, open fireplace and garden-view windows. Note the refinements in detailing which are characteristic of this attractive Seattle home.

(Continued from second page preceding)

As shown by the photographs and drawings here-with, this is a 7-room house plus double garage, utility room for laundry and heating plant, master bath room, powder room, dinette and entrance foyer. The design was created by Mrs. Denker and drafted by James Acteson, student at Boston M.I.T.

STORAGE SPACE IN BATH — Tile-covered surface around vanity provides broad top for dressing accessories; storage space in drawers and cupboards below is novel.

DAYLIGHT IN LIVING ROOM — Bow window floods this end of room with sunlight and frames a splendid view of valley. This is a trend foreseen by progressive builders in all sections.

INTERIORS OF NORTHWEST POST-WAR MODEL HOME
PICTURE WINDOWS are listed as a popular post-war means of getting better light, view and ventilation, as shown here.

PLANNED DAYLIGHT

ONE OF THE HIGHLIGHTS in post-victory homes now being planned for building as soon as construction resumes will be the intelligent use of more glass for better lighting, easier home maintenance, more advantageous planning to make the most of interesting landscape. From colonial days to the present time, technological improvements in heating, insulation, and windows have accelerated the natural trend toward more efficient, larger glass surfaces built into American homes by progressive builders.

FOR DORMERS larger window areas like the bank of metal casements illustrated to the left, will give plenty of light, air, and allow furniture under the sills to show off. BELOW: A trend toward organizing windows of a room into single units allowed better interior arrangement, more dramatic effects: here a fixed divided center sash is flanked with double-hung sash.
PROGRESSIVE BUILDERS say-

MORE GLASS: — AFTER WAR
NEW ALL-TIME HIGH DEMAND
FOR HOMES. GREATEST CHANGE
WILL BE MORE BEAUTY, MORE
THOUGHT IN ARCHITECTURE,
GREATER CONVENIENCE IN
PLANNED LAYOUT.

NEW HOMES WILL HAVE MORE
GLASS THAN EVER BEFORE. FEAT-
URES SUCH AS OUTDOOR TER-
RACES, PICTURE WINDOWS,
LARGE PLATE GLASS WINDOW,
DORMERS, DUTCH DOORS, RECRE-
ATION ROOMS WITH PLAY
EQUIPMENT WILL BE DEM-
ANTED.

MORE REFINEMENT IN POPU-
LAR GADGETS, MORE AND BET-
TER BUILT-INS, MORE AND
BETTER MECHANICAL EQUIP-
MENT PLANNED WITH HOUSE
FROM GROUND UP. INCLUDED
WILL BE COLD STORAGE LOCK-
ERS, REFRIGERATORS, ELECTRIC
RANGES, MANY FANS, VENTILA-
ATORS, FILTERS, DESKS, BUILT-IN
SHELVES, AND DRAWERS, WIN-
DOW CLOSING DEVICES. AUTOMA-
TIC TEMPERATURE CONTROL
INSTRUMENTS. MOST POPULAR
HOMES WILL BE MODERNIZED
COLONIAL.

(continued to page 124)

SUPERIOR HOMES:
OVERWHELMING SHORTAGE
DOES NOT MEAN THAT
BUILDERS CAN
SELL JUST
ANYTHING
THEY BUILD
FOR THE PUBLIC WILL EXPECT
THEM TO USE EVERY ADVAN-
CE IN MATERIALS AND DESIGNS
AND TO OFFER GOOD VALUES.
EQUALLY IMPORTANT, HOW-
EVER, IS FOR THE PUBLIC TO
REALIZE THAT THEY MUST PAY
A REASONABLE PRICE FOR
THOSE SUPERIOR HOMES. WILL
PROBABLY BE ONLY A VASTLY
IMPROVED PRE-WAR HOUSE.
MASS PRODUCTION AND PRE-
FABRICATION WILL EFFECT
ONLY A SMALL PART OF
CHEAPER HOUSES. INCREASED
USE OF PRE-ASSEMBLED FAC-
TORY ACCESSORIES WILL IN-
CREASE CONSTRUCTION EFFI-
CIENCY. — THOMAS MCLIVAIN, JR.
BUILDER, CINCINNATI, OHIO.
Post-War Milwaukee home plan, especially prepared for American Builder by Henny Mollgaard, successful woman builder who has made a thorough study of what the housewife wants in a new home. Note the large windows, open plan, attractive breakfast nook, ample closets, convenient center-hall arrangement. Mrs. Mollgaard says post-war homes will be easier to keep clean, better equipped with modern built-in laundry and kitchen equipment, better lighting. Women prefer traditional architecture, she says, but want all latest devices to make housekeeping easier, pleasanter.

In thinking about the Post-Victory Home, my judgment comes from three sources.

As a housewife, I have a home of my own, and naturally think about the problem of making a home that meets the needs of a family with children. For several years as a builder I have faced the problem of producing homes which would meet the demands of the public. For the last several months being a member of the Post-War Planning Committee of the National Association of Home Builders has forced me to consider what the trend may be.

We are going to have to look our dreams over in a scrutinizing way to come out with a plan that is both

(Continued to page 140)
A few outstanding successes in planned community business centers point the way. Noteworthy are Hugh Potter's community center at River Oakes, Houston, Texas; J. C. Nichols' Country Club Estates at Kansas City, and the Van Swerengen's metropolitan center at Quaker Heights, Cleveland. Quite as outstanding as these, though of a different type and probably more typical of the coming post-war expansion developments, is the Lakewood Community Center outside of Tacoma, Washington. This was built by the Lakewood Development Company and opened in 1937 to serve the high grade residential community growing up around the three nearby lakes, Steilacoom, Gravelly, and American. A prominent highway corner was selected within convenient driving distance of these growing communities which provided a large triangular site with plenty
of parking space. Silas E. Nelsen, Tacoma architect, was commissioned to prepare plans for a rather imposing building in colonial style to include a 550 seat theater, a community meeting hall (this being below the theater in the basement) a restaurant, a five retail store spaces, a barber shop, a beauty parlor, and offices for doctors and dentists.

At the time of building, the immediate neighborhood had not yet been extensively developed. In fact, there were then only about 25 houses within sight of the theater tower. But the project was on the favored line of community travel into South Tacoma and toward Fort Lewis, and now after seven years finds itself in the center of a well built-up area with churches and schools in its immediate vicinity.

The merchants going into this project were offered percentage leases rather than fixed fee rentals and even with this advantage it took brave planning to embark on such a merchandising adventure. However, in spite of the lack of close by development there was so much interest in the project throughout the entire region, and so much good will because of the high grade building, theater and shopping facilities provided that more than 5,000 people turned out for the "opening," and all of the concessionaires, including theater, restaurant, service shops and stores did a profitable business right from the start. The participating merchants, and their skeptical friends, were quickly satisfied and there is now so much demand for more space that an addition to this community center is under consideration.

BEAUTY PARLOR a strong attraction for neighborhood women. Left, a good drug store with fountain service also pulls a crowd. View is through 16-foot circle bay.
The management of the Lakewood Development Company, in discussing a business project of this kind, stressed the importance of distinctive architectural style to give the group outstanding character and attractiveness and the impression of quality—all for advertising purposes. The grocery and market are, of course, the center of such a community enterprise, with drug store and fountain service a close second in attracting trade. Barber shop, beauty parlor, gift shop, restaurant and professional offices are logical features also that draw the people to the center. The theater, too, is important; and in the post-war period, when motoring will doubtless be an even bigger factor in American life than before the war, a good theater, well conducted, will bring customers from a wide area.

Adequate parking space convenient to the shopping center is essential. The Lakewood Center, with its corner triangular location, is fortunate in this respect. A business center in an outlying location, such as the Lakewood management selected, has the advantage of lower-priced land and low taxes. These lowered costs can be reflected in the storekeepers' balance sheets to their permanent advantage.

COMMUNITY CLUBS are encouraged to hold meetings at center and have tea (below) on the terrace in pleasant weather.
GROUP HOUSES of this type, in units of two to nine, for rent or sale, are planned by this Baltimore builder.

"Our Progress Will Continue"

JOSEPH MEYERHOFF, prominent Baltimore builder, says, "We are now restudying our latest and most improved pre-war designs—will build single-family and group housing both for sale and rent along similar lines—will adopt new techniques of mass production, site fabrication and sub-assemblies from war experience."

POPULAR two-bath Colonial Myerhoff will resume building after war.
IN BALTIMORE, Md., Joseph Meyerhoff, President of Property Sales Co., has an enviable reputation for being a progressive builder who builds and sells quality homes ranging all the way from cottages to mansions.

Meyerhoff has also attained national prominence as Treasurer and Director of the National Association of Home Builders, where he has done a monumental job.

Pictured with this article is a five-family structure, typical of the many multiunit rental houses he has built. Also a low-cost Colonial, and a somewhat more expensive model—all of which are indicative of the type of house he expects to build post-war.

Here is what Meyerhoff says about his after-war plans:

"We are prepared to start building a large number of the best and most modern houses of the type that we were building when building was cut off. We are engaged in restudying our latest designs to adapt them to technical progress as fast as such come on the market and prove practical.

"We plan to build single-family, detached houses in both the low price and higher price brackets, and we also anticipate building group housing in units of from two to nine.

"The houses we were building before the war represented great progress over those a few years back. We expect similar progress—probably accelerated by the wartime developments in new materials, as well as by the experience of builders of war housing in the techniques of mass production, site fabrication, sub-assemblies and standard designs."
"A Freshening Up of the Good Old Things—Man, That's Post-war Progress"

We sense the presence of all three—the artist, the builder, and the business man—when we view Morningside—an integrated community of individually beautiful homes in Williamsville, a suburb of Buffalo, N.Y. And, yes, we expect to meet three men. Instead we meet only one man, John G. Percy, Jr. He planned it. He built it. He sold it.

"You and I have not changed very much and the living habits of a group of us, called the family, has not fundamentally changed in its quest for sheltered comfort," Percy says in his personal analysis of what post-war will be like.

"A war interrupts our complacent way of living and for a time gives us a quick fit of hysteria to change all things and all our habits. This hysteria vanishes in the light of what is practical and attainable.

"I can see, therefore, no reason for a radical reversal of long-range thinking that has been the chronological evolution of the thing we call home.

"I do, however, feel that a freshening-up or a warming over, as it were, of the good things that have been done could be a pleasant surprise to many. More individuality in the design of houses built in large groups is desirable. Most certainly these houses should be located on a site which has been carefully planned for the by-passing of fast traffic and with lots wide enough to provide plenty of space for sunshine and outdoor living in accordance with the progressive, forward-thinking land planning pioneered by the Federal Housing Administration. Thus far, you know, sunshine and pleasant breezes are tax free.

"In designing the house itself we should seek a plan which provides for simplicity of indoor living to afford more leisure for the luxury of outdoor living. This calls for functional planning to make double use of space which permits us to keep the overall house size down. The merging of the living room and the hour-a-day dining room is an example which is becoming increasingly popular. Providing a heated garage which can double for a basement in the daytime has been done successfully.

In Morningside we concentrated the working area from the kitchen range to the second floor stairs in a circle five feet in radius.
only ten housewife's steps from the kitchen range to any point on the first floor. The second floor is even simpler. It is not shown here because we vary the plan for every house to secure different exterior design for each house.

"When a housewife sees the steps this type of planning saves, she pictures herself with leisure time to enjoy the company of her children and her friends in the sunshine and breezes purchased along with her home.

"The basement is a bad hang-over of the old days when we had need for a root cellar. If you plan to sell prospects who still gather roots, keep on building basements. Otherwise have the courage to eliminate the damp, expensive, foul hole. Don't bear the heat problem. Where the temperatures are never tempting and the snow climbs high—in Buffalo's newest weather belt—we have successfully built and sold a hundred to a hundred families who had never lived without a basement.

The new architecture of the post-war period will, in my humble opinion, be most acceptable if it incorporates the old tried and true traditional but modernized for its new uses.

"More stress should be laid on the use of large glass areas to admit more sunlight. This provides additional heat and reduces the cost of heating and therefore the cost of home ownership. It must be borne in mind, however, that all houses cannot be oriented properly to the sun and consequently a repetition of design is not possible or even desirable in large subdivisions.

Use of expansive glass areas need not bring about an imitation of store fronts. Many small panes of glass can be used just as effectively and allow more flexibility of design and style.

"Too little attention has been given to the decoration of interiors. Use of color is an item that does not affect cost. Most home purchasers are responsive to a profuse use of good color but hesitate in its use themselves. Again, have courage to use color extensively. With it use large mirrors where possible. They double your space. Most space is only to look at anyway.

"If you would prevent the misuse of space you will succeed if you try to use it yourself. It offers you a

(Continued to page 123)
Seek Better Wiring

The concerted effort of the entire housing industry will be required to produce a better home to appeal to the consumer on a sufficiently strong basis to compete against the automobile, the delayed vacation, fur coats, jewelry, and a thousand other consumer items which will be strenuously fighting for a share of the surplus consumer dollars that will exist at the end of the war period.

This is the opinion expressed by Irving Clark, manager of the Westinghouse Better Homes Department, in recent housing meetings in Chicago. At the same time Mr. Clark displayed the accompanying sketches of rooms designed by home-planning experts showing adequate wiring for post-war homes.

It is estimated that the average housing unit of 194x will have an electrical consumption potential of 10,000 kilowatt hours. In the last twenty-odd years the use of electricity has grown from a few lamp bulbs, a fan, an iron and an occasional cooking utensil to approximately forty different items.

Builders are planning rooms and homes, as shown in the drawings on these pages, to take full advantage of electricity. This is true from the basement to the upstairs bathroom. Together, the rooms complete the ideal living unit for 194x.

Too little emphasis in the past has been placed upon the better location and greater... (Continued on page 136)
These striking sketches of post-war rooms show need for adequate wiring to handle time and labor saving equipment planned for future American homes.
Builder Ready with "Planned-for-Better Living"

Builder O. S. Haas, Architect Ralph Demmon, and Grand Rapids Industries, Inc., have co-operated on plans for building and furnishing the post-war "composite-house-to-be"; homes to be erected in Kalamazoo, Michigan.

According to many builders, the post-war home architecture will change very little. Sketch above was made from blueprints. Plan below shows placing of prize-winning furniture.
The slogan of many progressive builders these days is, "All set to go." Mr. O. S. Haas is by no means an exception. He has the property ready, architectural plans have been drawn and blueprinted, and he waits only for the green light.

One house plan was selected from the group, and it is sketched on these two pages, inside and out, from the original blueprints. The architecture is Georgian, although window areas have been greatly enlarged. It is an average three-bedroom house which doesn't call for a maid's room and extra bath.

While this type of architecture may not fit into building plans of progressive builders in other parts of the country, it is a typical trend in planning in that it does not deviate very much from the kind of house people used to admire before the war.

The reason for showing sketches of the rooms of this house, with furniture placed as it normally might be, is because the Grand Rapids Industries, Inc., had a contest for designers of furniture for post-war homes. The result of the contest showed preference for the types and styles of furniture required to fit into the "Composite" American-home-to-be, which is represented by this house Mr. Haas is going to build, along with similar ones, for his immediate post-war market.

This house is of frame construction with a veneer of cement block on the front, painted white. The rest of the exterior is 8-inch siding. There is a complete basement with forced warm air heat, complete laundry facilities and equipment including a water softener. A fruit cellar is built at the cold end of the basement where home-grown garden foods can be safely kept. A 13-foot by 20-foot recreation room occupies one side of the basement and has windows on three sides.

THE three sketches above and the one on the opposite page are of actual rooms in this house. The furniture used is that of prize-winning designs in a competition conducted by Grand Rapids Industries, Inc., and the exhibit of "Furniture Ideas for Post-War Homes." This general tendency toward the traditional in the furniture field backs up the general opinion of progressive home builders in regard to domestic architecture.
JOHN POLLAK, BUILDER. NEW YORK CITY.

WHEN the need came for rental war housing, private builders came to the fore and built the best rental garden apartments ever built. Knowing that the buildings would have to last for quite some time in order to be a paying proposition, excellent planning had to be done, from the selection of the site to the landscaping of the finished project.

Woods End, recently completed in New Jersey by Sheppard-Pollak, Inc., New York builders, is an example of the thoroughness of the planning. Instead of throwing buildings together in an effort to get rental space, these private builders did just the opposite.

Besides solid construction with brick veneer walls, the renter of an apartment enjoys a linoleum kitchen floor, baked enamel kitchen cabinets, table-top garage, 7-ft. electric refrigerator, kitchen dryer, sink and tub combination, tile bathrooms, built-in tub with shower, oak floors, overhead insulation, weatherstripping, screens, and electric door openers for upstairs apartments.

This garden apartment rental project has 120 units of 3, 3½, and 4½ rooms. The rents are $46.50, $49 and $58, including heat, hot water, lighting and janitor service. The project is self-supporting.
Because Woods End is privately owned, and the owner must look forward to the future and what the rental conditions may be at that time, the upkeep and maintenance are of prime importance, which not only keeps the property in good shape for present tenants but assures its condition for the years to come.

Located, as it is, next to a through highway, and within easy distance of a variety of manufacturing plants that will reconvert to peacetime outputs just as they converted to wartime work, there is little danger of a lack of rental prospects. Such buildings as these, with their surrounding of garden and open spaces, maintain an attraction for that per cent of families who will always rent rather than own.

Privately built rental housing, financed along the FHA Title VI plan, will take care of much of America's renting population. (See extra views, page 104)

IMMEDIATE success was met the day Woods End apartments were offered for rent. Past experience and careful planning of the three floor plans shown below was largely responsible. The rents are $46.50, $49 and $58 for the 3, 3½ and 4½-room apartments.

Private enterprise in the rental housing field makes such buildings available at about two-thirds the cost of Public Housing efforts.
THERE are 120 families living in this garden apartment project. A choice of apartments in three sizes is offered, which might make it difficult planning to create an atmosphere of individuality to the entrances which are located four abreast. The opposite is the case, however, as the pictures shown readily illustrate.

A GARAGE court with parking area is provided. Garages rent for $5 each.

WOODS END is an example of what private builders do with rental housing during the war. It is quicker and better built, less expensive, built than a Public Housing project but a few miles distant that cost one-half as much and is inferior by any angle. All front entranceways have own doors.
PRIVATE enterprise, cooperating with Section 608 of Title VI, FHA, during the war has created the best rental housing ever built in America, and private builders are ready to continue to build rental housing during post-war years.

"Nothing but Respect and Admiration for Builders," says FHA Head in N. J.

NEW Jersey, according to W. J. Lockwood, State Director of FHA, is the Garden Apartment State. The first commitment under Section 608 of Title VI was made in New Jersey, and up to the first of the year there were 32 commitments, to provide some 3000 living units. These 32 projects carry mortgage insurance in the amount of $11,258,000 under Section 608.

In cooperation with private builders, four major requirements were always considered. First, accessibility to manufacturing plants. Second, availability of civic and community facilities. Third, livability provided by apartment layouts. Fourth, attractiveness of the project as a whole.

Amid the ever-changing priority rules and regulations, an unavoidable condition in a wartime economy, the FHA office feels that the carrying through of such projects is a tribute to the determination and perseverance of the builders and institutions who have built and financed New Jersey's rental housing. The soundness of the projects underwrites their future.

THROUGH traffic is avoided and inside parking areas are provided by Rumsey Park (above) and Riverview Gardens (top of page).
Time of Year Now for Outside Activities

Thousands of homes and buildings are in need of maintenance and rejuvenation work this spring.

How To Apply Roll Brick Siding Over Old Exterior Walls

MANY an old house would be the better off for a covering of roll brick siding. The old siding or shingles should be well nailed down and then covered with a gypsum board to make the surface smooth and true. A soldier course of brick siding is applied first, as shown in the photo above. Nail through the joints of the bricks, staggering the nails 2" from the bottom and 2" from the top. At the ends of the strip, put two nails in the joint, one at the top and one at the bottom. Rolls of brick siding are split in the center. Cut strips the length of the wall to be covered and tack the strip in place with the selvedge edge at the top. Next nail at the center of each vertical joint, as shown in the photo above, except for the bottom course, where the nails should be about ½ inch from the bottom; ½-inch nails are the right size to use. Use the short lengths between windows, and cut the siding to fit snugly. Nail a glass bead to outer edge of frames and caulk the joint. Be sure to keep vertical joints in line. Do not fold roll brick siding over corners, but cut the siding to get flat edges.

Use corner strips that lap 2½", and match horizontal joints.

Photos through the courtesy of United States Gypsum Company.

How To Install a Built-in, Lined Gutter and a Hanging Wood Gutter

THE built-in gutter shown in the drawing at the left is a satisfactory type because the water does not have a tendency to back up under the shingles. And, too, this type of gutter is impossible to see from the ground, therefore it does not detract from the appearance of the roof.

To install, the rafters are notched at the angles shown in the sketch to receive the boards which make up the box. The box is lined and installed with a slope to the downspout. Wood gutters come in lengths up to 40 feet, and are fastened to the frieze board with zinc coated iron nails or brass screws. Be sure to seal the end cuts with a protective coating, and secure miters made in the gutter with brass plates firmly held in place with screws.

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How To Build a Concrete Driveway Y and Protecting Curbs

PROBABLY 90 per cent of the garage driveways in existence are inadequate for comfortable use. Where space permits, a Y turn between the garage and the portion of the driveway leading to the street is the best remedy. The building of a successful Y depends mostly upon laying it out with the right dimensions. As the drawing shows, the widths of the entrance to the garage and the pavement leading to the turn portion are wider than the driveway itself. This is because a car when it makes a turn takes up a wider track than when going straight. And, too, backing around a turn often consumes more space because of the inability of the driver to see as accurately as when making a forward turn. If an 18-foot radius is used for turns, the dimensions shown on the sketch of a 52-foot length from garage to the driveway and a 10-foot and a 13-foot width, are correct for easy turning.

A protecting curb on a driveway Y is advantageous, especially when backing, as it warns the driver he is getting off the concrete when perhaps otherwise he wouldn't realize it. Both curb and driveway should be built on well-drained soil, or on a bed of cinders or gravel to facilitate drainage. Expansion joints should be less than 30 feet apart and extend completely through the concrete.

How To Apply Insulating Ceiling Tile Over Old Ceilings

OLD plaster ceilings that are beginning to crack and get loose are dangerous as well as unsightly in appearance. It is always best to remove all loose plaster when a remodeling or maintenance job is underway. Before applying squares of ceiling tile, the surface of the ceiling must be flat and smooth. If some parts of the plaster are removed, the spaces will need to be brought down level with the balance of the surface. One-by-two inch nailing strips should be nailed to the ceiling joists over the entire area of the room. Where plaster has been removed, use shims under the nailing strips to hold them down flush with the portions of the strips that have plaster under them.

Ceiling tiles that measure 12 by 12 inches will call for the nailing strips to be applied on 12-inch centers. Measure the room and decide where best to have the row of tiles that may need cutting to fit along one or two walls, as the case may be.

How To Estimate Exterior Paint Needed

ESTIMATING the total area to be covered with paint is the first step in finding out how much paint will be required, and the cost of the material for the job. The first thing to do is to measure the distance around the house, and then multiply this figure by the height of the house at the corners of the building. This gives you the total side area, not including the gables, which are figured by multiplying the height of the gable by one-half its width. Referring to the sketch, the side area is 110 x 22 = 2420 square feet. The two gables are 2 x 8 x 12½ = 200 sq. ft. The porch floor and ceiling are 2 x 25 x 7 (width) = 350 sq. ft. The total area, therefore, adds up to 2970 square feet. With this figure, and the coverage of a gallon of paint, the cost of materials can readily be figured.
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 FIND LENGTHS OF ROOF VALLEYS

When flooring with a high moisture content is laid tight, it dries out with the building, and as it shrinks from drying, cracks appear. Why cracks appear when the flooring is dry and carefully put down is not so well understood, however. These diagrams show what happens.

A succession of damp days, high humidities from the drying of wet plaster, or other cause, will allow the dry flooring to absorb moisture. The swelling of the flooring often causes a perceptible bulging of some boards. A crushing of the wood fiber on the sloped female edge is bound to take place—and we are then face to face with the most common cause of all cracking, known as "compression set." The subsequent drying of the house to a state of moisture equilibrium simply causes each board to shrink away from its neighbor, and the width of the crack is roughly equal to the amount of crushing or set that has taken place. Foreign matter or particles in such cracks will still farther open them during subsequent damp and dry cycles of swelling and shrinking.

Cracking can be prevented if the following precautions are carefully observed: 1) Use dry flooring to begin with, 2) Edge-grain flooring, even in lower grades, is to be preferred to mixed or flat-grain, 3) Building must be dried out, 4) Apply painters finish to floors as soon as laid, and 5) Maintain a dry temperature until building is occupied.

HOW TO DEADEN BATHROOM NOISES

Recent tests at the U. S. Bureau of Standards indicate the effectiveness of staggered studs and floor joints in reducing the transmission of room noises. The location of the bathroom will determine which walls and/or the floor require this treatment. (A bath over the kitchen, e.g., would not require the floor treatment; but over the dining or living room, it would.) Soil stacks should be wrapped with hair felt, so that the dimension "P" for a partition with a 4" standard weight pipe would have to be at least 71/2". 
Yes—for these three Types of Construction Ro-Way OVERHEAD TYPE DOORS ARE AVAILABLE!

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

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

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

Write for complete new catalog of Ro-Way Overhead Type Doors. See our Catalog in Sweet's ROWE MANUFACTURING CO., 775 HOLTEN STREET GALESBURG, ILL., U.S.A.

There's a Ro-Way for every Door way!
President OK's Private Enterprise in Postwar Housing

In a message to Mrs. Dorothy Rosenman, Chairman of the Conference on Postwar Housing held in Chicago last month by the National Committee on Housing, the President stresses the important part that private enterprise must play in postwar construction. (See Washington News in this issue for excerpt from President's letter.)

Mrs. Rosenman Declared—
in her opening speech, that lack of planning during the last war was responsible for many of our housing headaches. And she urged also that careful study be made this time of all the problems involved, with emphasis on the need for complete cooperation between construction, finance, labor and community officials. "Housing is an accurate barometer of the times," she declared. "In prosperous days, hammers, saws, and assembly jigs supply a waiting market—in dull days they lie idle. In days of peace, we look for housing to be a mighty force to keep the nation pulled up in the bootstraps of prosperity. That task which is expected of housing is no light assignment, and cannot be accepted with thumbs crooked in suspension and fingers piano-ing in the air; heads cocked back and smiles of complacency. The task is mighty.

"Peace must find us prepared to produce the kind of homes that our families will desire in the locality they wish to live, for the price they can afford to pay."

Precutting Summed Up—

NABH past president, Dave Bohannan, draws an optimistic picture of economics in postwar construction. "Antiquated practices that have become habits have added materially to the cost of home building. Never before has this industry been so alert to the need of improving its techniques and meeting the challenge of supplying homes to a great segment of our population unable to pay the cost of a good home in the past. Simplification and standardization of materials and fittings will also reduce construction costs. Competition brings the cost factors to lower levels and insures that the benefits of improved methods will be accepted by progressive builders."

War Housing Demolition—

NHA established a policy for disposing of publicly-financed temporary war housing. Conforming to the requirements of relevant sections of the Lanham Act which makes its removal mandatory, machinery is being set up to dispose of war housing no longer needed for war purposes. The procedure to be followed parallels that used in supplying war housing needs. The NHA Regional Representative will de-program unneeded temporary accommodations and FPHA will perform the disposition chore. Trailers and portable units will be kept on inventory for contingency needs, finally being transferred or sold. Other types of accommodations, such as dormitories and temporary family dwelling units, if not required for any purpose, will be demolished and the materials sold unless further use for them is found in the war effort. Likewise, owned land no longer needed will be disposed of, all "as may be advantageous under the circumstances from the viewpoint of the public interest and the best financial interest of the Government."

"The Selling Job Begins"—

This is the startlingly realistic caption of an editorial appearing in the February issue of "Public Housing," the publication of the National Public Housing Conference. In part it says . . . public housing has not been sold on its merits. Some local housing authorities with a flare for public relations have done outstanding jobs, most have been too busy with construction and management programs to make even a start. On the national level education (the underlining is ours) has been inhibited by Congressional restrictions upon the Federal Public Housing Authority. Continuing, "Washington was chosen as an operating base because more public housers go there or work there more than anywhere else, and because it is also headquarters of the two strongest allies of public housing: the Amer-
The Janitrol Multi-Thermex heat exchanger utilizes a new principle in which each burner flame is directed into its individual tube of a battery of heat exchanger tubes. This eliminates the undesirable features of the old combustion chamber principle in which all the gas is burned in a large chamber before it is discharges through heat exchanger tubes. With Multi-Thermex, heat from the burned gases immediately comes in contact with the areas for heat transfer and is rapidly conducted through the tube walls to be wiped off by the circulated air stream.

The unique design of the Janitrol Amplifire burner permits the products of combustion to be directed into the Multi-Thermex heat exchanger tubes. These cast iron Amplifire burner heads have accurately milled slots into which are welded a series of alloy strips to form the burner ports. They are grouped together and welded in place in the milled slot of the burner head, thus forming a mass of tiny deep ports. The patented, alternate corrugated and flat sections of the alloy strips allow for uniform expansion and contraction. The result is a clear blue, ribbonlike flame having a long range of turn-down combined with quiet operation.
The Janitrol Gas-Fired Winter Air Conditioner for residential installation is offered in a complete range of sizes to handle requirements of modern bungalows to large homes. The larger units also have found wide acceptance in commercial usage. Features include "Thermo-Drip Humidifier," "Multi-Thermex" principle of heat exchange, "Amplifire Burners," large capacity blowers and replaceable filters.

Janitrol FCS-24 Series Gas-Fired Heating Units as now used in hundreds of War Housing installations are the ultimate in low cost—compact—heating units for this type of work. Built as they are to meet the most rigid of specifications they still use a minimum amount of vital materials and as a result more heat per pound of weight is obtained than with ordinary equipment. FCS-24 Series Units are fully assembled and shipped in one crate.

For basementless homes or where headroom is not sufficient, the Janitrol Thermo-Attic is ideally designed. Heat in winter—ventilation in summer, with a definite saving in floor space, chimney length and duct work are possible through this blower driven unit, installed compactly in the attic. This space saving unit is equally adaptable to certain industrial and commercial properties.

This type, the Janitrol Gravity Furnace, utilizes the gravity principle instead of forced circulation. Horizontal air flow principle assures maximum Btu. output. Equipped with complete automatic controls, this furnace meets the requirements and refinements of winter comfort. The compactness of the GAC makes it perfectly suited for basements with low ceilings yet allows for proper duct design.

The Janitrol units shown on these two pages are equipped with Multi-Thermex.
## UNIT HEATER • MODELS UAS and UAC

Suspended Unit Heaters are ideal for overhead, directing warm air to the space where heat is most useful. Thousands of industrial, commercial and military installations are testimony to the Janitrol Unit Heater’s popularity. The UAS and UAC series have direct connected propeller type fans.

### Overall Dimensions (inches)

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### UNIT HEATER • MODELS BAC and DUCT

Duct Heaters: These units are for duct installations on heating or air tempering jobs where air is circulated by a blower system. The DUCT-14 is less fan, motor, brackets, louvers, fan control, casing and fan guard but provided with wind tunnel or casing to which can be attached rectangular inlet and outlet ducts. Sizes comparable to UAS, UAC above.

### UNIT HEATER • MODEL FACF

FACF (Forward Mounted Unit Heaters) in construction and design is the FAC Series of Gas-Fired Suspended Unit Heaters. Units are in buildings demanding a high grade of heating that can be supplied only by a blower type heater. Efficient air distribution is accomplished by the Adjustable Air Diffuser. This insured duct work may be located to the top of unit and or grilles or registers in suitable locations.

### HEAVY DUTY UNIT HEATER • MODEL BBC

BBC Heavy Duty Floor Heaters is ideal for large, large-elevation buildings, shops and warehouses, shops and large-scope heating applications. These heavy-duty units are adaptable to all types of buildings effects of large and small capacities is the unit. BBC-24 utilizes and construction and dimensions of 1,000,000 Btu. in multiple sections. Each section is an assembly of 10,000 Btu. per section. Adaptable to different work and directional needs.

For Exchangers and Amplifier Burners as described on preceding page.
Janitrol Time-proven (GAS FIRED) FURNACES AND HEATING UNIT

JANITROL CONVERSION BURNERS

A wide range of capacities, sizes and shapes is offered in Janitrol Conversion Burners for every round or rectangular pot. Clean, completely automatic gas heat can thus be had in present boilers and furnaces. Push-button lighting, finger-tip control and Janitrol leaning-overlapping baffles are a few of the features that have made these units widely accepted in modern conversion to gas heat.

Kathabar System for HUMIDITY CONTROL

A simple accurate method of humidity control and air conditioning for hundreds of industrial and commercial applications has been made possible by Kathabar System. The Kathabar System is complete, compact and will dehumidify, or humidify, in accordance with the need to maintain the desired percentage of air moisture. Kathabar performs this dual function of balancing air moisture as a single automatic operation, independent of air temperature. Sizes from the new Package Units starting at 750 c.f.m. to large, specially designed central systems of 100,000 c.f.m. give the designer a complete selection from which to choose.

KATHABAR PACKAGE UNIT DATA

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JANITROL WAR PRODUCTS

While regular residential Janitrol Gas-Fired Winter Air Conditioning equipment has not been fully available during the war, the facilities and engineering skill of Surface Combustion have by no means been idle. Many products for war use have been manufactured in large quantities. With the years of experience in heat and heating problems it is natural that Surface Combustion's contributions to the war effort would be along this line. Surface Combustion has been producing:

The Janitrol Aircraft Heater for cabin heating; cockpit warming; foot warming; windshield and all glass surface anti-icing, defrosting and defogging; wing and empennage anti-icing; engine warming; gun breech heating; heating of cameras, bomb sights, automatic pilots and instruments; cargo and transport—sick and wounded space heating.

The Janitrol Portable Ground Heater for aircraft engine, cockpit and cabin warming on ground; heating field hospital tents, headquarters tents, assembly tents, etc.; preheating engines, cockpit and cabin of amphibian planes; ice removal from ships, docks, wharves, etc.; heating mobile truck repair units; to prevent freezing of perishable goods during loading and unloading or while in temporary storage; for temporary, localized heating in unheated warehouses; to supply heat for concrete mixing or to prevent concrete freezing during severe weather; thawing frozen rolling equipment treads, brake drums, radiators, etc.; emergency heating of barracks, etc., during heating plant outages; miscellaneous heating on tank and automatic equipment and repair depots; man heating on outdoor labor during sub-zero weather and localized heating in shipyards, factory yards, and other locations beyond the limits of regular heating systems.

Many developments have been made along this line by Surface Combustion with consideration of peace-time applications. As an example, the Janitrol Portable Heater should find much use on construction projects wherever heat is necessary or heating during construction, before the permanent heating system is installed, keeping material stock piles above freezing point, etc.

For further information on Janitrol equipment ask for specification sheets giving complete engineering data.
Monsanto Chemical Acquires I. F. Laucks, Glue Makers

PREPARING for a big increase in the manufacture of plywood in the post-war period, the Monsanto Chemical Company of St. Louis announces the acquisition of the I. F. Laucks, Inc., Seattle, by an exchange of stock of the two companies.

“We have long considered the Laucks company to be the leading producer of industrial glues and are happy to have the Laucks company become part of Monsanto’s growing operations,” Charles B. Enkaup, Monsanto’s president, said.

“We feel that through this transaction we will be in a position to become an integral part of the tremendously important plywood and wood-working industry.”

Citing the benefits of the merger in an announcement made by him, H. P. Kirk, Laucks vice-president, said, “We gain, and through us the industries we serve also gain, the extensive research facilities and the basic raw materials offered by Monsanto. And through us, the Monsanto research men gain a long-established and intimate contact with these industries with which the Laucks company has grown up.”

Koehring Dandie Mixers to Be Sold by Subsidiary

THE Kwik-Mix Concrete Mixer Company, Port Washington, Wisconsin, subsidiary of the Koehring Company, Minneapolis, 10, Wisconsin, has announced the Koehring Dandie Mixers for eight years, will now assume sole service, engineering and development of the 7-S, 10-S and 14-S Dandie Mixers.

Service will be directed from the Kwik-Mix Concrete Mixer Company, 2152 Commerce St., and inquiries are to be addressed to Kwik-Mix at Port Washington.

The Kwik-Mix Concrete Mixer Company also manufactures tilting and non-tilting 3½-S mixers, mortar mixers and bituminous mixers. This change in sales, service and engineering takes effect March 31st, 1944.

The present distributor organization will be considerably increased to provide adequate coverage for post-war sales, A. E. Kolbe, recently appointed sales manager, announced.

Ready to Go on Repairs, Remodeling, Public Says in U.S. Chamber Survey

AS soon as the war ends, or as soon as restrictions are lifted, 39 per cent of the home owners in America are planning home improvements, according to the current survey of the U.S. Chamber of Commerce.

The following breakdown shows the type of work they will undertake and the per cent of families for each classification:

18.4 to PAINT HOUSES OUTSIDE, 7.3 to PUT ON NEW ROOFING, 5.3 to DECORATE INTERIOR, 3.1 to MODERNIZE KITCHEN, 4.5 to ADD ROOMS, 3.3 to add NEW BATHROOMS, 27 to add NEW PORCHES, 3.1 to INSTALL NEW HEATING EQUIPMENT, 20 to RENOVATE PRESENT BATHROOMS, 3.5 to MAKE REPAIRS, 1.7 to INSTALL NEW PLUMBING, 27 to REFINISH FLOORS, 2.3 to REMODEL OUTSIDE, 9 to FINISH ATTIC OR BASEMENT, 3.2 to do MISCELLANEOUS JOBS.

Also thirty per cent of the families interviewed say they own property other than that in which they live. 15 per cent of this number say they would make improvements also in that property.

In addition to improving their homes, 67 per cent of farmers who own their own farms, say they would make farm improvements.

CORTRIGHT

(Continued from page 110)

CORTRIGHT

(Continued from page 110)
mortally $6,000,000,000, of which $4,000,000,000 has been provided by private sources, and $2,000,000,000 by government funds. The Committee believes that the need still to be met is mainly that due to various shifting conditions, such as the intensification of war production activities on the West Coast. For this reason, it feels that stop-gap housing—trailers and portable units—should be emphasized more than ever.

“A Bloodless Revolution—of the citizens against the autocratic attitude of the public housing authority here,” was the phrase used by Joseph H. Deckman before the Burton Committee. Speaking for the Federation of Citizens' Associations, composed of sixty citizens' groups in this area, Mr. Deckman demanded the liquidation of the National Capital Housing Authority. Charging inconsistent reports and apparent violations of the United States Housing Act and the Lanham Act, the indignant citizens' spokesman sailed into John Hildr's 'reign' with such fire as ammunition statistics compiled during more than a year of thorough investigation, the challenges made will be difficult to explain away.

The 20-Year Program—One hundred million dollars—slum reclamation program of the local authority would, according to Mr. Deckman, absorb most of the need for low-rent housing and completely close this market to private enterprise which is ready, willing and able to provide such housing.

He is convinced that even this program, if past methods are followed, would still leave the slum dwelling lowest income group homeless. Mr. Deckman reached this conclusion after learning that only 60 of the 4,000 families on relief here are enjoying the benefits of public housing.

Proves High Costs—To substantiate the high cost of public construction Mr. Deckman presented cost figures of a number of comparable private and pub-

(Continued to page 116)
Public construction was in excess of $1,000 while more attractive four-room FHA-insured homes built at the same time were sold at $3,770. This figure was for permanent construction full-basement housing with tile baths and all equipment. Price included a satisfactory builders' profit, brokers' commission and other costs. It was apparent that Senator Burton was impressed with the fact that the monthly carrying charges to purchasers was only $33 per month. The Federation disclosed the fact that although the NCHA has an architectural staff, extra fees paid were substantial. On one project of 313 units that were provided such homes, the cost was only $10,000.

**Liquidate NCHA—Expressing conviction that private enterprise can and will do the job, the Federation spokesman made the following constructive recommendations:**

- That NCHA be liquidated and a Slum Clearance Board substituted. This is to be composed of representatives of all affected groups; its major function to assist in clearing of blighted areas.
- That a program encouraging enterprise to construct low rent housing be instituted. This would include long-term financing, possibly 50 to 60 years. Tenants to be supplied through contracts, agreements, or rent certificates of the local public welfare agency to all private builders who agree to provide such housing under the minimum construction standards, and the maximum rent levels set up by the Board.
- That the present welfare services of the municipal government be utilized for tenant selection, and to determine the extent to which it is necessary to subsidize such tenants. The private builder would receive the full economic rent established by the Board, and the tenant would pay only the amount he can afford.
- That a positive prohibition against the use for human habitation of any insanitary or unsafe building should be enacted into the law, and enforced.

**Rent Certificates—for low-income families, to be handled by local welfare agencies, was advocated by Mr. Deckman. "The principal effects of such a program," Mr. Deckman said, "would be to eliminate inefficiency, waste and unnecessary expenditure of the taxpayers' money, and to cut Government ownership of increasingly large areas of land. It would also," he declared, "restore the self-respect of poor families which now live openly in publicly supported homes by limiting knowledge of their income to themselves and the local welfare agency.**

**Private War Housing 1944—will equal 1943. Although this year's construction will be highly concentrated, 65% in only 20 localities, it will total 175,000 units as compared with 158,000 started last year. As of January 1st, 115,000 units remained to be started under existing quotas, and quotas for 35,000 more will be established during the next few months.**

**Fritz Burns Honored— The "Realtor Achievement Trophy" was recently presented to him at the Forty-first Annual Banquet of the Los Angeles Realty Board. The home builders of this country will heartily approve of this richly deserved tribute.**

**President Gerhols—Speaking to packed auditoriums throughout California and the great Northwest, he returned by way of Salt Lake City and Denver, Kansas City, Tulsa and Oklahoma City. We have had wires and letters stating that his talks have been "the finest thing heard in many months." There is no question but that we again have a President of unusual stature and ability under whose direction this association will continue to gain in membership and power.**

**Builders Will Cooperate—in conservation of lumber. Recognizing the serious shortage of board lumber late last fall many builders voluntarily adopted lumber conservation techniques which now have been incorporated in the revised standards.**

**Lower FHA Interest Rate?—There is an ever-increasing pressure for a reduction of the maximum interest rate on Title II and Title VI loans from the present 4½ per cent to a flat 4 per cent rate. This pressure is coming from the field where it is clearly evident that institutions bulging with funds are fighting for these mortgages. FHA topside is inclined to dismiss a move in this direction on the grounds that competition will take care of the situation without the necessity for official action.**

**Revised Critical List—for War Housing contains many modifications. A comparative study reveals that the new War Housing Critical List and War Housing Construction Standards, now identified as Schedules I and II of WPB's recent Order F-55-c, incorporate more than 100 significant changes. The almost complete freedom in the use of metals and other materials as substitutes for lumber is in reality a dire warning that lumber will remain a critically scarce resource and precious material throughout the balance of this year, and possibly well into 1945. An item by item comparison of the old list with the revised list has been laboriously prepared and is now available to our members upon request.**

**FHA Can Cancel Priorities—on any project not begun within sixty days after application approval. It also makes possible the cancellation of any part of a project that has not been started by the last starting date authorized in the application. This gives FHA a club which will probably only be used in those exceptional instances where there are savings in the process. FHA should particularly note that wood wall sheathing is not permitted for exterior walls or flat roofs. Framing lumber is limited to the minimum size and maximum spacing permitted by the MCR's, and wood shingles may only be used for roofing where alternate types of shingles are not available, or where needed to repair existing wood shingle surfaces.**

**Bond Buying Clubs—As a promotional scheme to encourage the purchase of war bonds rapidly enough to accumulate a down-payment for a post-war home, some banks and building and loan associations have set up bond buying clubs. Usually a special service is offered including assistance in locating attractive building sites, home plans and other aids. Although this is primarily designed as a means of building good mortgage business, the net result will undoubtedly be of a constructive nature as it is to be expected that increased purchases of war bonds, and a most valuable backlog of early post-war construction will be built up. FHA has observed this activity with interest, but has been slow in giving it their approval.**

"**New Homes for Everyone.**—Bror Dahlberg, the dynamic head of Celotex, predicts twenty million new homes in five years after the war. For victory. The employment of ten million men and women will be possible, Mr. Dahlberg believes, now that "home construction has reached the same stage that the automobile industry was in when Henry Ford produced the Model T. As a result of mass production techniques, "modern four to five room home should be built for from $2,000 to $3,000" and will be built just as quickly and in the same way as automobiles. The problem of inflated land values, high real estate taxes, straight junctions imposed by antiquated building codes, and the high war demands of the shipbuilding industry may be overcome in the same fashion as were the lack of good roads, filling stations, mechanics, and the high levels at which cars were sold, according to Mr. Dahlberg.**

**NHA’s Postwar Policy—Choosing his appearance before the Lanham Committee this week as the time to announce his policy for post-war housing, Mr. Blandford’s statement is of the utmost significance. We interpret it as an initial bid for the continuance of NHA, probably as a permanent department of Government with Cabinet representation. Emphasis is placed on the rich experience of the various housing agencies which comprise NHA, one magnitude of the two million new homes war-built to date, and on the importance of constructing from "one million to two million five hundred thousand units a year during the ten to twenty years after the war.**

Stating that our future prospects.
bathrooms and kitchens
FOR THE HOMES YOU ARE PLANNING

Whatever type of homes you are planning for tomorrow's market, you will find, in the complete postwar line of Crane plumbing, equipment that will bring your clients a lifetime of comfort, convenience and satisfactory service—besides adding value and salability to the homes you build.

Already the Crane line of tomorrow is past the experimental stage. These new fixtures will suit the taste of America's prospective homeowners, as expressed in a recent nation-wide survey conducted by Crane Co. They will go into production as soon as war conditions permit.

What's more, Crane Co. is conducting an aggressive program to help stimulate the desire for new homes—to aid in translating that desire into action. Colorful advertisements in many of the nation's leading magazines are offering a portfolio of helpful ideas and suggestions that will be sent to thousands of prospects for tomorrow's homes.

Be sure to include modern Crane bathrooms and kitchens in the homes you are planning. It is your assurance of immediate consumer acceptance.

CRANE
CRANE CO., GENERAL OFFICES: 826 S. MICHIGAN AVE., CHICAGO 5
PLUMBING • HEATING • PIPE • PUMPS • FITTINGS • VALVES
NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS
It therefore seems to us to be plain common sense that every move which the Government makes, affecting our postwar economy, should focus upon creating those conditions under which private enterprise can expand and thrive and prosper.

**Post-war Housing**

(Continued from page 65)

as a result of undertaking housing projects, for any income group whatsoever, on too large a scale. There are examples of that dangerous tendency in housing by governmental agencies and also by private enterprise. It is important to make a distinction between the desirability of having the huge reservoirs of investment capital used for redevelopment purposes, and the desirability of having that capital used for projects of appropriate size and which tie in with a sound master plan.”

Robbins’ third point and comments follow: 3. To educate municipalities as to the need for modernizing and enforcing demolition ordinances, building codes, zoning ordinances; also measures for strict subdivision control and for the speedy and economical foreclosure of tax-delinquent property.

“I am advocating the measures mentioned above because they can do two important things. They can contribute to minimizing the cost of redevelopment programs to the public and they can impede the pace at which cities deteriorate. In some cases such measures might eliminate the need of the major operation of redevelopment which might otherwise become necessary.

“It’s all right to talk about doing big things in a big way—and it’s still better to actually do them. However, while the big things are still in the talking stage, let us take those comparatively small but nevertheless fundamental steps that can be started now. Furthermore, the least we can do is to try to prevent the spread of existing blighted areas or the creation of new ones—otherwise we’ll never catch up with the problem,” Robbins said.

“The urge to own a home is deep rooted in many people. The desire is strong to control title to the abode where one’s family dwells. Control of continuing right of occupancy, never possible in the case of a renter, is one of the strongest motivating factors in the case of the home buyer,” declared Morris Macht, President of Baltimore’s Welsh Construction Company, in striving through interruptions to swing attention away from proposals to facilitate only the financing and building of properties for rent. Highlights of his proposal follow:

“A substantial reduction in monthly fixed charges can be had by prolonging the period of amortization. A 40 to 45 year period spanning the most useful life of the property itself might be considered. Note that emphasis is on the property itself. It will be argued that the productive earning career of the buyer is likely to be less than the mortgage term. But, as has been said, the emphasis is not on the borrower’s capacity to save. The very purpose of the plan is to reduce the monthly payments to the amount of a moderate rent. It is to be noted that we are speaking now of homes built to sell in the lowest price range. We shall need to take advantage, too, of the lowest possible interest rate and—of an FHA mortgage guarantee. If in addition it were possible to reduce the down payment to 5 per cent, another of the big hurdles to ownership would be overcome.

“Such a mortgage might conceivably contain provision to the effect that the mortgagor and FHA, the insurer, could look for recourse only to the property and that no right to deficiency judgment would be involved.”

(Continued to page 120)
Available
FOR BUILDING JOBS NOW

Armstrong's TEMLOK Standard Insulating Board

HERE'S NEWS of importance to every lumber dealer and builder—and to thousands of home owners, farmers, and businessmen. Many of the small buildings they've needed so badly, and many of the improvements that make living and working more comfortable, don't have to be put off any longer.

Temlok Standard Insulating Board* is available for private jobs without priority. It is an excellent material for constructing new partitions, walls, and shelters. Also, it provides an ideal means of finishing off rough-framed interiors. Whatever its application, Temlok not only builds strongly but also provides efficient insulation that saves fuel in winter—protects against summer heat.

TEMLOK JOBS ARE GOOD BUSINESS

Small building and remodeling jobs, such as those sketched on this page, are always attractive to the builder because he doesn't have to quote competitive bids. And because it allows him to go after this type of work again, Armstrong's Temlok offers him an increased volume of business at a satisfactory profit.

COMPLETE FACTS, samples, and literature are yours on request. Just send a note to Armstrong Cork Company, 1604 Ross Street, Lancaster, Pa.

*Temlok Standard Insulating Board is Armstrong's Temlok Insulation in board form with natural screen surface. Sizes up to 4' x 12', 3/4" thick. Temlok is naturally resistant to moisture, which means its uniformly high efficiency is permanent. Easy to cut and nail in place, Temlok provides extra strength and rigidity to frame structures.
would inure to the creditor. The owner of the equity, under such circumstances, would be safeguarded against much of the financial hazard of ownership, and resales of such equities should be easily negotiable. The occupant of such a home would be enabled to reside therein without, as in the case of a tenant, being dependent on the whims and moods of another, or the need to rely, as at present, on federal rent and occupancy control to keep him from being turned out on short notice.

"It is recognized that mortgages of the type just described may be repugnant to some lending institutions. Indeed, it had been said by Dr. Fisher (Dr. Ernest M. Fisher, American Bankers Association) that it is an error closely akin to crime to minimize the difficulty of attaining debt-free home ownership. However, the extension of the amortization period of mortgages, first generally adopted in this country in 1934, did minimize the difficulty of attaining home ownership. The price involved, postponing the period of debt-freedom, was considered not too high a price to pay for the social good attained. By-products of this crime—if crime it be—were the very purposes of the original FHA legislation—increased industrial activity throughout the land, the widening of the base of home ownership and—let it be added—the unfreezing of a badly frozen mortgage market. By the end of 1940 the majority of FHA insured mortgages were held by the savings banks, the state banks and the national banks of the country.

"Let me, at this point, point out the possibility that families of the lower-income group are as much interested in having decent shelter to occupy as they are in being totally mortgage-debt free. Some organized groups of mortgagees have been vehement in their opposition to public housing for low-income groups with particular reference to new public housing on vacant land. There has, however, been a paucity of offers of specific alternatives to meet the need. Here, then, is a possible alternative which is wholly within the now accepted mores of the private enterprise system," Macht declared.

A galaxy of distinguished speakers strutted the stage, some for private enterprise, others for public housing, some difficult to classify. Among the headliners whose view are widely known were shipbuilder Henry J. Kaiser, tax expert Beardsley Ruml, and NHA administrator John N. Blanford, Jr.

**Surplus Materials**

(Continued from page 65)

The U.S. Chamber of Commerce Board, consisting of officials of the Reconstruction Finance Corporation, War and Navy Departments, Maritime Commission, War Production Board, Bureau of the Budget, War Food Administrator, the Attorney General, Federal Works Agency, State Department, and the Foreign Economic Administration will advise the SWPA Administrator.

The U.S. Chamber of Commerce makes the following strong recommendations: "Quantities of surplus supplies and materials released for sale should be in lots which will permit participation by small as well as large manufacturers, wholesalers, and retailers; and any price differentials between large and small lots should be limited to actual differences in cost of handling and distribution. So far as practicable, surplus supplies and materials should be redistributed by the industry that produced and distributed them."

Representative Patman's proposed bill (H.R. 3873) calls for disposal of surpluses by the Reconstruction Finance Corporation with an industry advisory committee for each class of property. They would advise on price, time, method and manner of the disposal of each class of property. The RFC would be governed by these considerations: (1) Distribution of such property should be through established trade channels. (2) The acquisition of large quantities of such property for speculative purposes should not be permitted. (3) The prices at which any particular property or class of property is sold or leased should be uniform. (4) Such property should be sold or leased at prices high enough to enable the government to secure a fair return. (5) The sale or lease of such property should be at a rate which will not unduly disrupt trade and commerce. (6) The welfare of small business enterprises should be considered whenever possible.
The Fibre Conduit Co. (AB-4-44)
Orangeburg, N.Y.

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Name

Address

City
SAVINGS can be made on your hot water bills by installing this completely automatic oil burning GILCO Water Heater.

Home owners acclaim GILCO’S low operating cost. They testify that by changing from an electric heater to a GILCO Water Heater, they saved up to $1.84 per month. It pays you dividends every month. You will have no more water heater worries and you can forget about your high gas or electric bills. Yes, it will pay you to install a GILCO Water Heater. For a complete description write us for literature.

ABESTO COLD APPLICATION spreads a tough, tight seal that is highly resistant to oxidation over the old roof. It cures retaining its elasticity so that the natural expansion and contraction of the roof will not check or crack the surface.

When it’s Wise to "MAKE IT DO"—

There comes a time in the life of any roof when a comparatively small amount of repair, well-spent, can add years of satisfactory service.

ABESTO COLD APPLICATION spreads a tough, tight seal that is highly resistant to oxidation over the old roof. It cures retaining its elasticity so that the natural expansion and contraction of the roof will not check or crack the surface.

 ABESTO MANUFACTURING COMPANY
131 Wabash Street
Michigan City, Indiana

LETTERS—

(Continued from page 7) us in this bordering country—skyscrapers, commercial buildings of all kinds, homes and apartments are literally going up on every corner, and that apparently a great percentage of what we call critical items going into these buildings are coming from the United States.

This applies not only to the framework, but to the plumbing, heating and electrical supplies which we have been told were so desperately short in this country. It strikes me that something is wrong somewhere, and I'd certainly like to see further light thrown on this subject, if you are in a position to do so.

If we are to continue to be restricted and curtailed in building activities, then let’s see that the same restrictions are placed on our neighbors insofar as the materials we supply them are concerned. On the other hand if there is enough to give them the unlimited supplies they apparently are getting, then let’s insist that some of these supplies be released for the necessary construction and building needed in this country. I hope you will give us another article along this same line in the near future—GENE EBERSOE, Executive Vice President, Lumbermen’s Association of Texas, Houston 2, Texas.

Going to ruin

To the Editor: Your suggestion to property owners on keeping their properties well painted was a boost to us who are in the business. Everywhere you look you can see property going to ruin.

Let me point out the reason as well as the remedy.

First of all, when we contractors estimate a job—all there is in the mind of the majority is PRICE. They seem to think they ought to have about a thousand dollars worth of work for about five hundred. Well, good work does not come that way. People want two dollar paint instead of four.

People must be taught that it is absolutely necessary to employ an honorable contractor. He should be given a good foundation, and also that right kind of a job from year to year. People want two dollars per gal. paint instead of four.

We may have to wait a few years before we can't paint. "What the contractor doesn't know won't hurt him too much," the newspapers say.

On the other hand if there is enough to supply our neighbors in the same or over the border, something is wrong somewhere, and I'd certainly like to see further light thrown on this subject, if you are in a position to do so.

If we are to continue to be restricted and curtailed in building activities, then let’s see that the same restrictions are placed on our neighbors insofar as the materials we supply them are concerned. On the other hand if there is enough to give them the unlimited supplies they apparently are getting, then let’s insist that some of these supplies be released for the necessary construction and building needed in this country. I hope you will give us another article along this same line in the near future—GENE EBERSOE, Executive Vice President, Lumbermen’s Association of Texas, Houston 2, Texas.

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LONGER HANDLES!
PERFECTLY BALANCED
Shaped to Fit the Hand
Instantly Replaceable
DOUBLE-EDGE SUPER-KEEN BLADES
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PORTABLE PLASTICS DISPENSER PATENT
Device delivers uniformly, continuously. Investigate
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Freshening Up
(Continued from page 97)

Great opportunity to build in well-designed china cabinets, book cases, and simple built-in furniture. Of the plans for progress which are on the drafting boards of our American industries, we can look forward to each thing as more efficient cooking ranges, refrigerators equipped with quick-freeze compartments, improved dishwashers, dish dryers and garbage disposal units. More efficient washing machines, clothes drying equipment and compact mangles are in the early offing. We may not get these things as quickly as we hope, but let us not forget that we can't build all of the homes in the first year after the war.

"What will the postwar house cost? I don't know. You don't know. Nobody knows. But let us not worry that it will cost too much. Recall, if you will, the low building costs in the early 1930s. If low building costs forecast a repetition of this, then I for one favor the periods of higher building costs.

"On this subject too much has already been said about giving more for less and too little about doing a much better job for a little more. Why should we cheapen the prospect into less than it should have so that he can spend more on something that he needs less?

"The home building industry can provide better housing when we alter our thinking completely on the financing of homes. The ultimate indebtedness is meaningless. The shelter rent is the thing on which to focus our attention. Let us strive to reduce the shelter rent and build for tenure."

"FHA financing has taken us a long way in this direction, let us hope that it can go much further. A little less interest, a slight reduction in mortgage insurance and a longer period of amortization will broaden the opportunity for home ownership to include millions of Americans who have been banished by public housers to lives of tenancy.

"Along with this it is to be hoped that the future mortgage will include the necessary items that go into the purchase of a new home. It will permit him to buy a better home in the beginning. It will reduce his shelter rent."

"There is no panacea, no gimcracks of technicolor. The solution for postwar is a simple one of logic. Keep the housewife happy, keep the kids playful, keep the weather out, keep the old man.

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Philip N. Fleck, head of the Five Star Home Bureau of the Buffalo Niagara Electric Corporation, pointed out that Carter Power Planes are the kind of planer going on the market. "Hogs it off," at a stroke, or planes a paper-thin shaving to a clean-cutting, it speeds up all kinds of fitting jobs—doors, drawers, window sash, screens, and inside trim. By substituting Carter Shaper Cutters, it becomes a miniature planing mill for beading, rabbeting, chamfering, and other moulding cuts. Just right for weatherstrip work.

Hard-work hand planing is often to blame when "hurry-up" contracts are held up. To keep them on schedule, put Carter Power Planes on the job. With any of the three convenient sizes, the average workman can finish 3 to 5 times more work per day.

THE CARTER J4 — 3/4 H.P. — 18,000 R.P.M. Light, fast, clean-cutting, it speeds up all kinds of fitting jobs—doors, drawers, window sash, screens, and inside trim. By substituting Carter Shaper Cutters, it becomes a miniature planing mill for beading, rabbeting, chamfering, and other moulding cuts. Just right for weatherstrip work.

THE CARTER "WASP" — 3/4 H.P. — 18,000 R.P.M. Light, fast, clean-cutting, it speeds up all kinds of fitting jobs—doors, drawers, window sash, screens, and inside trim. By substituting Carter Shaper Cutters, it becomes a miniature planing mill for beading, rabbeting, chamfering, and other moulding cuts.
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FLUSH DOORS
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In your plans for post war building, be sure to include these famous doors. For building being done now, New Londoners are available.

For many of America's finest public buildings and outstanding homes, New Londoner Hollow-Core Flush Doors have been the choice of Architects, Builders and Contractors . . . a choice based on performance records established in all climates under the most unusual conditions . . . Small homes, too, may have the quality of New Londoner Doors . . . for they are priced to budgetary limitations . . . Complete information about New Londoner Hollow-Core Flush Doors is yours for the asking.

AMERICAN PLYWOOD Corporation
NEW LONDON, WISCONSIN

BUILDERS SAY—
(Continued from page 89)

People moving out of public housing in Seattle to private housing, public housing and prefabrication has laid egg with monotonous, hideous con- juctions. Prefabrication no comp- tition whatsoever. Manufacturers must meet the builders problem by volume sales at lower costs. Public wants improvement in heating equip- ment and is willing to pay more for heating. Larger areas, more and larger closets with more gadgets wanted.

Builders should work closely with manufacturers because builders can sell more items included in house on lower terms than others. Home build- ing in same stage now as automobile without bumpers, horn years ago.—Albert Balch, vice president NAREB, director NAHB.

OUR POST-WAR home de- signs will be substantially our pre-war home plus the equip- ment improvement that tech- nology has progressed to; styles: Colonial, Early American, and Cape Cod, with an occasional modern adaptation. To help the build- er save money, manufacturers should employ sales engineers to promote their products to fit the use of those materials into site prefabrication. These engineers should have the facts on site prefabrication methods and the general use of power equipment; more efficient methods will offset labor cost increases.—G. J. Goudreau, Cleveland, Ohio.

WE BELIEVE the following must be included in after-war homes: A compact all-electric kitchen with adjoining breakfast space; separate dining room of medium size; a more cheerful atmosphere to be attained by floor to ceiling windows and extensive use of mirrors; bathrooms to include more cabinet space, powder table, streamlined fixtures, separate shower. Here a full basement and cleat automatic heating must be provided. I believe use of more power equip- ment, precutting of lumber and wise purchase of materials and accessories will make the above features available in the medium price bracket.—James H. March, Tacoma.

BETTER VALUE—In the Balti- more area there has been two decades of consistent improvement in archi- tectural style and in quality of resi- dential construction. Keen competi- tion has given buyers increasingly better values. This trend will con- tinue in post-war.

Majority of homes here is of group or row house style. This is a masonry area and most buyers prefer a ma- sonry dwelling.—Morris Macht.
Kinnear has specialized for nearly half a century in building the maximum advantages of upward action into doors for every type of building. The three Kinnear Doors shown here feature proved performance and durability. They give you the right answer to any job — now or postwar!

**KINNEAR ROLLING DOORS.** Open easily and smoothly upward; coil compactly out of way above lintel. Protect against weather, intrusion, damage. Save time and effort; reduce installation, operation and maintenance costs. Kinnear Rolling Doors are made to fit any opening. Motor or manual operation.

**KINNEAR BIFOLD DOORS.** Rugged, quick-acting doors of two horizontally hinged sections. Provision for any number of glass panels. Torsion-spring counterbalance assures easy operation. Any size. (Heavier-duty "telescoping" Bifold Doors also available.)

**KINNEAR RoL-TOP DOORS**
All-purpose doors; ideal for residence garages. Sections fitted with ball bearing rollers operate in rugged steel tracks, spring counterbalanced. Features tight-closing "keystone" construction and rugged cylinder lock. Any number of light sections. Motor control available.

These Kinnear Doors are made in wood or all-steel. Write today for complete details. The KINNEAR Mfg. Co., 1560-80 Fields Ave., Columbus 16, Ohio.
KWIK-MIX MIXERS

Kwik-Mix convertible 10-S Dandie... side or end discharge... change can be made in the field to suit pouring conditions. Special features are: easily accessible drum drive shaft... flow-line discharge chute... simplified skip-flow shaker... enclosed reduction gear assembly in oil... multiple "V" belt drive. Other sizes are 7-S and 14-S Kwik-Mix Dandies.

KWIK-MIX 10-S DANDIE

Kwik-Mix 3½-S Concrete Mixers... side or end discharge... tilting or non-tilting... anti-friction bearings... spring mounting... high speed trailing... welded construction.

KWIK-MIX 3½-S END DISCHARGE TILTER

KWIK-MIX PLASTER—MORTAR MIXERS

Kwik-Mix Non-Tilting 6-P Plaster or Mortar Mixer... fast discharge, 7 seconds... light weight, only 850 pounds... air cooled engine... V-belt and worm drive... low shoveling height. Also 4 wheel 10-P tilting model.

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

Catalogs and How-to-do-it Information

17—MODULAR MASONRY TO THE FORE—An informative booklet on the objective, purpose, history and development of the modular idea in design and construction is now available. The booklet gives, in graphic form, the use of brick and tile masonry as it is tied in with the sizes and shapes of windows and doors, for instance. Questions and answers are the back of the booklet explain the whys and wherefores of the modular method of tying in with the units of a masonry wall. Structural Clay Products Institute, 1756 K St., N.W., Washington 6, D.C.

18—TWO INTERESTING PAMPHLETS—are available from the Producers' Council, Inc. One is the Construction in the Post-war Economy, by the Council's president Mr. Douglas Whitlock, and the other is Dimension Coordination, by M. W. Adams. These two pamphlets will help in crystallizing your thoughts in the field of post-war building. The Producers' Council, Inc. 815 15th St., N.W., Washington, D.C.

19—RICHMOND CATALOG FULL OF INFORMATION—Good news comes to our attention for the use of concrete form workers in the shape of an attractive 32-page book all about all kinds, shapes and sizes of ties, as well as reinforcing accessories and clamping devices. The book is a gold mine of information. Richmond Screw Anchor Co., Brooklyn, New York.

20—POST-WAR CABINETRY—is the theme behind a new booklet by the Kitchen Maid Corporation of Andrews, Ind. Besides a small booklet telling about composite construction, is a large folded sheet giving detail drawings of construction methods and drawings of the complete line of kinds, shapes and sizes of cabinets, so that you can figure them right into your post-war building.

SUPERIOR FIREPLACES—is the name of the 1944 edition of a 34-page catalog put out by the Superior Fireplace Co., 1046 South Olive Street, Los Angeles 15, Calif. The book sells for $5.00 but readers of American Builder are invited to send $2.50 to above address only for a copy. Book is full of usable information and drawings, as well as many photographs of fireplace installations.

21—ORANGEBURG FIBRE PIPE—Many builders will be interested in this product because of its many assets and attributes. It is non-metallic, non-corrosive, light, and economical. This catalog of information on its uses for builders, as put out by The Fibre Conduit Company, of New York City and Orangeburg, N.Y., is descriptive with photographs, drawings and charts. This catalog, No. 302, also contains directions for using fibre pipe.

22—A COLD WATER PAINT—that both damproots and waterproofs masonry surfaces, such as concrete, concrete block, cinder and fibre concrete block, common brick, and the like is a mineral paint called, "Aquella." It is made by the Modern Waterproofing Paint Co., New York City. A folder is available which tells all about the product and how to mix and use it.

SERVICE COUPON—CLIP and MAIL to CHICAGO

Readers Service Department
American Builder, 105 W. Adams St., Chicago 3, Ill.

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

Numbers

Name

Street

City

State

Occupation*

*Please note that occupation must be stated if full service is to be given.
MONTICELLO, ILLINOIS
MANUFACTURERS OF ENDURING MODERN WALL COVERING

Universal recognition of Tylac beauty, permanence and economy as the standard in the wall covering field is no accident. From planning to production, the emphasis at Tylac is on quality—quality that has proved itself in enduring wall installations of every type.

Because this quality is the result of the greatest all-around combination of advantages in the wall covering field, we are going to discuss these advantages, individually, in a series of vital messages for contractors and dealers. Watch for them!

No dealer in the wall products field will have a shorter lapse of time between "V" Day and "SEE" Day than the Tylac dealer.

 welcoming prod...
Bow End Upside Down

By assembling this LST bow upside down, International Steel Company reduced handling and welding time in ship construction. Although now common practice, this upside down method of fabricating ships was a sensational departure from tradition. Also it serves as another example of how emergency war demands upset old orthodox methods to bring basic improvements in structural steel fabrication. Similar improvements have been made in steel fabrication for structural steel, steel buildings, and building products.

The time and cost savings of these war-fostered improvements will be increasingly evident as we convert to peacetime operation. They assuredly will result in better and lower cost steel products for the building industry. For instance, our engineers now have ready plans for improved, welded steel fabrication, which will result in better trusses, joists, windows, doors, prefabricated steel buildings, and many other steel building products.

May we tell you about these new building products and other improvements in structural steel fabrication developed at International? A request on your firm letterhead will bring the information. It may be the answer to one of your post-war planning problems.

Advanced Land Planning—
(Continued from page 68)

Installation of good street paving, curbing, sidewalks and street planting is essential to complete the merchandising package of a finished home in a finished neighborhood. Attractive variation of house design and location, together with the judicious planting of trees, shrubs and lawns will further enhance the sales-appeal of the builder's product.

Sometimes existing neighborhoods are so fully completed that it is necessary to embark on the construction of new neighborhood units. The problems involved in a new neighborhood program are of a magnitude which requires much greater expenditure of time, effort and funds to secure substantial success.

Site selection for building a new neighborhood is similar to site selection for building into an existing neighborhood in that careful consideration must be given to all of the essential neighborhood features previously listed. The site for a new neighborhood, however, usually involves arrangement, by the builder, for more of the essential neighborhood services. The size of a new neighborhood program frequently requires the participation of a number of building organizations if satisfactory progress in construction is to be achieved in a reasonable period of years.

In accordance with up-to-date planning practice large new communities are being built with the elementary school building and playgrounds at or near the geographical center of the neighborhood unit and with stores and other community buildings either near the center adjoining the school, or more frequently at strategic entrance points on the outside edges of the neighborhood. Neighborhood boundaries are usually marked by major streets and highways; the internal street system in the modern neighborhood is designed to provide easy circulation within the neighborhood and to discourage use of residential streets by high-speed through traffic, insuring safety from the hazards of fast moving vehicles.

A plan for distribution of dwellings according to dwelling type, size and price range is established to assure harmonious use and appearance of each section of the neighborhood and resultant satisfactory social conditions. The various kinds of development which are included in the community. The size of a planned neighborhood unit may vary from 500 to several thousand dwelling units depending upon the population locally required to support a school, a shopping center and the other essential neighborhood facilities.

Specific building operations should be fitted into the general neighborhood plan. With a large market and favorable conditions a dozen or more separate local building operations can be active within the area of a single planned location. Coordination of separate building operations is secured on the basis of the general plan through unified control of the land area, or by agreement between individual builders and administration of the neighborhood plan by local officials, such as a local planning board.

Operating in a properly planned neighborhood area, builders have found a favorable response from prospective home-buyers. They are attracted and fascinated by the large scale of the building operations. They readily acquire confidence in the future of a new area if it has been properly planned as a complete neighborhood and if construction of houses and community facilities proceeds rapidly and in full accordance with the established neighborhood plan.

Builders in new planned neighborhoods, as well as those who have properly fitted their operations into existing neighborhoods have concluded that good neighborhood planning and building is of equal importance with good house planning and building in the attainment of sales volume and business success. America's most successful house builders are now building neighborhoods as well as houses; they are offering America the complete product—good houses in good neighborhoods.
American Builder, April 1944.

... Make it a Useful Cellar SAFE and ACCESSIBLE

with BILCO COPPER STEEL

BULKHEAD DOORS

Permanently Trouble-free Attractive, Sturdy

Can be installed quickly on all types of construction new or old. Works smoothly through a lifetime of service and protection. Provided with strong bolt and simple automatic safety catch. Cannot be blown or knocked shut. Always neat and clean. Cannot leak, shrink or swell. Specify BILCO Bulkhead Doors for real cellar utility.

Automatic Safety Catch

Pella "AWNING" WINDOWS

For Standard 2 x 4 Frame...Thin Wall...Masonry Construction

Made by Makers of Famous Pella Casement Windows

No Frames

White Pine Sash...Toxic Treated

Sash Weights

These extremely ingenious windows set right in the studs! They do not require any frames, sash weights or balances. Units come completely assembled so no fitting is necessary on the job. ... Flush type lock handle is an exclusive feature. Units can be glazed with standard size lights. ... Available with screen and storm sash —inside screen and storm sash are interchangeable; top hinged or channel guided. Pella "Awnings" Windows comply with Federal Housing Authority Specifications. ... WRITE FOR FREE DETAILS! Mail a post card TODAY! Ask for your FREE set of full-size details on Pella "Awnings" Windows. Address Dept. 344.

Ideal AND EASY TO ADAPT FOR SPECIAL JOBS LIKE THESE

Pella Bulkhead Doors insure an attractive outside entrance. Three stock sizes. Shipped knocked down and packaged. Deliveries as materials are released. Write for folder.

BILCO MANUFACTURING CO.
164-A Hallock Ave., New Haven, Conn.

SIDWALK DOORS • BULKHEAD DOORS • STEEL ROOF SCUTTLES

MULTIPLE UNITS of Pella "AWNING" WINDOWS made to your specifications are available when quantities warrant. Wide range of combinations possible. For schools, office buildings, etc. upper sash can be made to ventilate.

"4-CYLINDER" HOUSE designed by Arthur T. Brown, A.I.A. of Tucson, Ariz. incorporates Pella "AWNING" WINDOWS. Pella's broad, horizontal lines give house the appearance of greater size.

ROLSCREEN COMPANY, PELLA, IOWA
Pella Rolscreens • Pella Venetian Blinds • Pella Casements
Concrete Men! You can help farmers save labor and increase war food production with concrete improvements. The materials required are not critical and are easily available.

The old dairy barn, illustrated above, is an example of the effectiveness of concrete repairs. This structure was restored with concrete for many more years of usefulness.

Timely concrete replacements can add to the life and utility of thousands of other farm buildings.

Phone your farmer friends. Call on them personally—write them letters. Suggest concrete improvements which will save feed and labor. Advertise your services to farmers in local newspapers. Ask us for advertising suggestions for use with farmers. Send for your copy of “Restoring Old Farm Buildings With Concrete.” Free in U.S. and Canada.

PORTLAND CEMENT ASSOCIATION
Dept. 4-3, 33 W. Grand Ave., Chicago 10, Illinois
A national organization to improve and extend the uses of concrete... through scientific research and engineering field work

BUY MORE WAR BONDS

Build CONCRETE Improvements Now!
Help save feed and labor

A sanitary concrete floor and new concrete masonry walls converted this old farm structure into a modern dairy barn. New concrete milk house (at left) was built at the same time.

Builders Create a City—
(Continued from page 69)

Actual originator of the idea was the sponsor who believed a residential community built in the field would go far toward relieving the war housing shortage, would help the war production effort, by reducing turnover at the air depot and in the plant, and might also prove a profitable investment.

This proposal was taken to the FHA office in Oklahoma City, which started an inquiry to determine the need for such a community in that locality, its eligibility as a war housing project, the need for such a community after the war, the adequacy of the site, and similar factors which must be weighed carefully by the FHA before making any commitments.

Douglas Aircraft officials indicated their expectation that the manufacture of cargo planes would be continued in the plant after the war.

The sponsor then approached several financial institutions which were approved as mortgagees by the FHA and secured the promise of their support. His next step was to call in 16 other builders and to propose to them that they undertake to construct separate subdivisions in keeping with the master plan, buying the land from him. They agreed. He himself undertook the financing of those parts of the project which would not be aided in FHA-insured mortgage financing, the streets, water system, and business center. The utility companies agreed to extend their facilities to the community when they became convinced that it would be permanent.

Mr. Atkinson then turned to the FHA office with the statement that he was ready to go ahead with the project. The general plot plan was evolved in consultation with the FHA land planning consultants. Then began the consultations with engineers, architects, land planning consultants, landscape architects, soil specialists, construction men, and others to decide upon the wide range of details involved in the project—from the water and sewer systems to location of shrubbery.

State health and sanitation officials approved the site and the plans for the water and sewer systems. The general plan conformed to county regulations and was approved by county officials. Detailed plans and specifications for each bit of construction were prepared and approved. The contractors assembled their materials and construction crews, and work actually started.

This accompanying air view of the “air industry city” illustrated several principles of land planning as practiced by the Land Planning Division of the FHA and its land planning consultants stationed in strategic offices throughout the country.

The community is on a main highway and just across the road from the two places of employment from its inhabitants. Yet no homes face the highway, the plant or the depot. Even the business center does not face it. The street plan was designed to help make the community an integral and self-contained unit, with access to the highway but with no through traffic. Thus the dangers and nuisances of through traffic were reduced to a minimum. Most of the streets were made to curve gently to provide a pleasing general pattern and to lend variety to the individual home sites. Also they gave easy access to all parts of the community with a minimum of cross traffic.

The Administration Building is about in the center, a generous school site and play area are conveniently located to all homes, and there is a park at each side. Incidentally, the street names bear out the idea of “air industry city” by bearing the names of leading aircraft manufacturers, together with Rickenbacker Boulevard, Abold Drive and Marshall Drive.

In continuing the story of Midwest City in future issues, the American Builder will give details and illustrations of the houses and the business center.
In many building uses—such as roofs and roof-drainage systems, exposed air ducts, metal awnings, shower cabinets, furnace casings—ARMCO Galvanized Paintgrip Sheets offer you decided advantages.

This original Bonderized galvanized metal requires no acid-etching or weathering. It takes and preserves paint because it has a neutral surface film that insulates the paint from the zinc. This retards drying out of the paint oils and prevents early peeling. Tests show that good paint lasts several times longer on Paintgrip than on ordinary galvanized metal.

Your post-war buyers will thank you for using ARMCO Paintgrip for all sheet metal work to be painted. It will save them money and help you keep their good-will and future business. The American Rolling Mill Company, 881 Curtis Street, Middletown, Ohio.

Export: The ARMCO International Corporation

Made of ARMCO

Help Finish the Fight—With War Bonds

FOR A ± 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 ± 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:

Sanitary Ware Division
Metuchen, New Jersey

American Builder, April 1944.
New Mortgage Service
(Continued from page 84)

weeks, the monthly payments are kept up without restitution for as long as one year. At the end of that time if it is determined that the illness or injury is permanent and that the wage earner can no longer be gainfully employed the mortgage is cancelled.

"Is this the first time that such a service has been offered to home buyers?" Mr. King was asked.

"It is," he replied. "In some states mortgage protection covering death is available at a higher rate. However, the important thing to be noted about our Mortgage Cancellation Plan is not the fact that the rate is lower for this type of protection but that it also covers total and permanent disability as well as sickness and injury. Furthermore, the plan should not be confused with the borrower's personal life insurance program or with ordinary term insurance. It is a special type of protection made available to our large group of ABC home owners. This, of course, accounts for the very low cost which is added to the monthly payments."

The Mortgage Cancellation Plan is optional with ABC mortgagees, according to Mr. King. No medical examination is required. No red tape is involved. It covers home mortgages up to $10,000 and extends that amount if the principal sum is larger. Maximum coverage on monthly payments is $150.00. If the installments are larger, they are protected up to that amount.

Allied Building Credits, Inc., widely known as "ABC" in the construction industry provides a variety of services covering not only home mortgages but repairs, maintenance, alterations, remodeling, and additions in connection with homes, farm structures, commercial, industrial, and institutional buildings. It recently introduced a service covering new farm buildings and portable farm structures. Naturally it operates under the wartime restrictions imposed by L-41 and Regulation W, but, at the same time, it is developing services which will be adapted particularly to the needs of the postwar period. The Mortgage Cancellation Plan is the newest addition to its mortgage service.

D. A. Eitsert, who is in charge of the new department, is well versed in the home mortgage field and has been interested particularly in the development of the Mortgage Cancellation Plan.

"The principles involved in this new mortgage service are extremely sound," he said. "It is good business for the borrower to protect his home investment against the one factor he cannot control—his health. It eliminates the fear that unexpected accident, illness or death will make it impossible to meet the terms of the mortgage and so jeopardize an investment accumulated over a lifetime. The buying of a home is often the family's largest single purchase. Protecting the investment against the uncertainties of health is certainly a sound precaution."

Mr. Eitsert stated that the cost of the Mortgage Cancellation Plan is well within reach of any one eligible to purchase a home. It is made possible by two major factors: (1) by uniting the coverage of thousands of ABC home owners all over the country in order to obtain the lowest wholesale group rate, (2) by adjustment of the coverage at periodic intervals so that it applies only to the balance due.

Progress in Finance
(Continued from page 84)

great. I thought I should show you that it does not apply in our case. What this association does many other institutions throughout the country could do if they would once and for all get down to earth and realize that interest rates have gone down to remain down for many years to come. The trouble with most heads of financial institutions is that they are permitting their old ideas of economics to die hard and not easily. The still await the day of higher interest rates. In my humble opinion, the debt of the United States Government will be
STANLEY Electric HAMMERS

provide effective “Fire-power” for the Construction Front

Whether you are “building them up” or “tearing them down,” the job moves faster when you provide your “soldiers of construction” with Stanley Electric Hammers.

Use them to drill, chip, and channel in concrete; to chisel mortises in wood timbers; to vibrate concrete forms; to scale rust; to tamp concrete . . . any of the hundreds of jobs that require hammer action.

Stanley Electric Hammers combine exceptional power and work capacity with light weight, and are properly balanced for easy handling. They can be operated from the regular power circuit or from a portable generator set.


STANLEY Electric TOOOLS

MORE and BETTER Products . . . Redesigned for Greater Sales

Watch for
New Foolproof Control for Bennett Expanslip Damper
High Quality & Standard Cast Iron Dampers
Fresh Air Unit
Recirculating Unit

THE BENNETT COMPANY
of NORWICH, N.Y.
Fireplace Division

Bennett Guaranteed

Fireplaces
FLEXSCREENS

THE MARSCHKE CO.
551 University Ave.
St. Paul, Minn.

EXTRA LIVING

space

AVAILABLE NOW!

Space in Post War homes will be an important item. Waste attic space must be utilized.

MARSCHKE FOLDING STAIRWAY makes attic space usable. No rafter clearance needed—no obstruction to attic floor—no cables or pulleys—self balancing construction makes MARSCHKE FOLDING STAIRWAYS raise or lower so easily that a child can operate them. Easy to install in new or old houses and will increase their value $500.

Build in attic rooms today for war workers. Plan Post War homes with this convenient—attractive—space saving feature.

Write us for free literature.
Treated wood moves up front
with the U. S. Signal Corps

WOLMANIZED\textsuperscript{\textregistered} POLES and crossarms, used by the Signal Corps for "light-loading tactical" lines, are making an important contribution to this fight. The smooth-sawn 4x4's and 2x4's stow more compactly than round poles, take up less shipping space. Their salt treatment weighs much less than that usually used for poles—cuts shipping weight—and this treatment greatly reduces fire hazards.

IN THE FIELD, this wood can be stored without fear of its being destroyed by termites and decay. Impregnation with Wolman Salts\textsuperscript{*} preservative makes certain the wood is sound when it's needed. And, because Wolmanized wood is clean, these poles and crossarms are easy to handle, erect and climb.

WOLMANIZED LUMBER is seeing service in many places around the world. Manufacturing plants in our own country are able to devote more attention to wartime production because their Wolmanized Lumber construction requires less attention. The same is true of the railroads' bridges, platforms and shipping docks. In far-flung combat zones, barracks, warehouses and other buildings have this same certain protection against termites and decay.

THERE'S A LESSON here for designers of all kinds of structures. Wolmanized Lumber, at little additional first cost, gives long life to wood construction, reducing upkeep costs. All of the usual advantages of building with wood are retained.

\begin{flushleft}
\end{flushleft}

\textsuperscript{*}Registered Trade Mark

\textit{American Builder, April 1914, (Continued from page 132)}

control interest rates in all of the financial transactions of the country for generations to come," Mr. Lieber said on the same page with this one. American Builder wishes Weyerhaeuser well in this very worthy undertaking.

Depreciation and maintenance charges on an owner-occupied home may soon be allowed as a deduction from income tax payments. Congressman Fred A. Hartley Jr., Republican Representative from New Jersey, has introduced a bill to make this a part of the law. Depreciation is now allowed owners on business property, but this would be the first time the principle would be applied to residences.

The bill would amend section 23 of the Code, subsection 1 (dealing with deductions from gross income by listing as deductible the depreciation on "property occupied by the owner as his residence." Congressman Hartley says he intends to push the bill, which will be supported in the Senate by a companion measure.

Sentiment for a lower interest rate (3 to 3½ per cent) and a longer amortization period (35 to 50 years) for mortgages on single-family homes is mounting throughout the home building industry. The outstanding exception to this statement is the banking fraternity which never has been known to advocate a reduction in interest rates. After all there are few men in any business who have openly advanced plans predicated on cutting the profits of their own business. Have there?

Yet, in the face of the injustices and inefficiency of public housing, there are many staunch supporters of private enterprise who believe government should provide money at such low rates if private banking is unable to do it at a profit. They believe it is more important that all Americans enjoy better homes under private ownership than that the bureaucrats continue to build costly apartment houses for them.

Private bankers might well think this over: Do they want to put their money in the bonds of housing authorities at 2 per cent or would they prefer to try to make money at as low as 3 per cent on mortgages insured against loss by the U. S. Government?

If and when this plan becomes a reality, other factors must accompany it, according to the most reliable advocates. Less emphasis will be placed on the personal responsibility of the mortgagor and more emphasis on the structural and neighborhood value of the property.

Likewise, greater precautions will have to be taken for the continuous repair and maintenance of the property. Perhaps the owner will have to pay along with his regular monthly payments a fee which will be used to keep the property in good condition.

In a future edition of American Builder the various features of this plan conceived to broaden the base of private homes ownership will be presented in greater completeness.

\textbf{Prefabrication— (Continued from page 83)}

transporting it in sections, and erecting it on the chosen site. This may explain the reason why so many people accept without question the blessings of mass production as they cover factory finished kitchen cabinets and factory built heating and air-conditioning equipment, yet stirred at the thought of factory built walls, roofs or ceilings merely because they are thought somewhat unconventional.

Home building by its very nature is deeply rooted in the soil and has always been a highly localized undertaking generally by an enterprising carpenter-mason. This highly localized situation was no less true with the old carriage maker of fifty years ago—a highly respected and influential citizen of every community. No one ever questioned the integrity of his wares, but with modern engineering, new materials and the economies of mass production were applied to the field of tran
LOOKING TO THE FUTURE

Timber—fine timber—as far as the eye can see. Yet on this vast Tree Farm, managed for the past 16 years on the basis of permanent timber production, the foreground slopes already have been selectively logged and the remaining trees are growing new wood faster for the next harvest. In the Western Pine region, these forest lands in private ownership are growing timber for the next generation and the next—year in and year out—to provide an ever-flowing lumber supply of the versatile Western Pines.*

WESTERN PINE ASSOCIATION
YEON BUILDING, PORTLAND 4, OREGON

*THESE ARE THE WESTERN PINES—IDaho WHITE PINE • PONDEROSA PINE • SUGAR PINE
American Builder, April 1944

(Continued from page 134)

portation, there unfolded new vistas of opportunity that were beyond the comprehension of the most optimistic. The progressive carriage maker became the “sales and service man,” and the automobile became an indispen-
sable part of the average American’s life.

Inertia and even outright opposition to similar de-
velopment in the realm of housing is having its slackening
effect. The human mind is loathe to embrace changes.

The keen and enterprising builder will not sit idly by,
effects in blind condemnation of home prefabrication;
he will examine its merits in the light of our phenomenal
industrial progress in other lines and come away with
the conclusion that the next logical step following the
prefabrication of parts of houses is the prefabrication of
complete houses into floor, wall, ceiling and roof sections
—a progressive step that will enable him to erect and sell
six homes for every one he was able to produce before.
By eventually reducing costs through increased efficiency,
he will discover an ever widening field of home pur-
chasers. Two other outstanding factors will hasten the coming
of this day; namely, the application of construction
principles that will utilize the full structural value of
every part of the wall, floor and roof sections to the
maximum extent instead of merely hanging surface ma-
terials on a heavy framework, and, secondly, by the in-
geniouus use of many new materials such as plywood,
plastic impregnated fibre boards, laminated wood, light
metals and structural metal shapes, which will cut down
weight and thus further reduce the problem of handling.

When finally the world is blessed with a cessation of
hostilities, we will still be confronted with the gigantic
 task of fulfilling the greatest housing requirements of all
history—1,000,000 or more units a year—and the in-
genuity, skill and mass production technique that has
produced the material and weapons that will have carried
us on through a victorious war will carry us still further
during a victorious peace.

Seek Better Wiring—

(Continued from page 98)

use of the toaster, coffee maker, toaster, electric mixer,
waffle maker, kitchen ventilating fan, and the radio.
Adequate and convenient storage places should be built
into the kitchen cabinets for these items.

Often the laundry is thought of in terms of a washing
machine and an ironing board. The modern laundry
in the home of tomorrow will consist of an automatic
washer, a drier, an ironer, and a water heater, for a
total average consumption of 3800 kilowatt hours an-
ually. The value of a complete laundry is important
from the viewpoint of maximum satisfaction to owners.

Again, the advent of the precipitron, as a practical home
device that assures an air supply free from dust and with
low bacteria count—and the home freeze locker—when
added to the heating and cooling system, will bring to
the utility room a total load of 2700 kilowatt hours.

A careful study has revealed a major bottleneck to
future building programs. House wiring has not kept
pace with increased appliance use, nor with the increased
wattages as applied to an individual appliance. For in-
stance: A toaster originally used 500 watts or less, but
in 1942 it consumed 1000 watts. A hand iron drew 50
watts, now it draws 1000 watts. Likewise a roaster
went up from 1000 watts to 1400 watts, and lamp bulbs
increased from 40—75 watts to 60—300 watts.

Wiring in better than 95 per cent of America’s homes
is inadequate to carry efficiently the present lighting and
appliance loads. Corrective action is necessary in new
homes for post-war buyers.
The basic premises for a post-war home are:
1. Install enough outlets for present and anticipated
appliance and lighting needs.
2. Supply enough circuits to distribute the electrical
load properly.
3. Insist on modern protection for all electrical cir-
cuits, and, 4, use wiring and wiring devices of high quality.
SAVE HAND LABOR
ON "PREFAB" JOBS
WITH THE

WALKER-TURNER
RADIAL SAW

A single operator with this versatile machine can crosscut, rip, dado, shape, rout and tenon — on wood, metals, plastics, ceramics and other materials. He not only turns out greater volume than several men doing hand-work, but the work is more accurate.


Open the way
to greater
opportunities for the
contractor-builder

There are many opportunities for profit that Paine Rezo doors push your way. For example, patented air cell construction — an exclusive Paine Rezo feature — provides a stronger, more rigid door, prevents shrinking, sagging or warping. You'll find a lifetime of satisfactory service, free from alignment troubles, built into these proven hardwood doors, that cost less to install than an ordinary door. What's more, Paine Rezo doors add more charm to your interiors, make rooms appear larger, lighter, more attractive.

With so many advantages for you and the home owner that are all to the good, it's no wonder that the Paine Rezo is America's largest selling flush type door. More than a million have been successfully installed from coast to coast, sold by leading dealers everywhere. Write today for illustrated bulletins.

SUPERIOR FIREPLACES — with their 22 years of proven efficiency will again be manufactured after the war.

PREPARE NOW — to tie-in with our continued National Advertising by including them in your POSTWAR inventory and plans.

Write for full information
SUPERIOR FIREPLACE CO.
1046 S. Olive St., Los Angeles (15), Calif.
More Hot Water per gallon of Fuel Oil from AQUALUX WATER HEATERS

Figures are more satisfactory than adjectives. That's why we want you to see this typical performance rating of a standard Aqualux model working under average conditions:

Stack Temp. at full Rating . . . 405° F.

11% Stack Loss . . . 15%

EFFICIENCY RATING . . . 82%

Any Heating Engineer can tell you this is an exceptionally high efficiency... that it is proof of fine engineering... and that it will inevitably produce great fuel economy. Aqualux Water Heaters are fully automatic, quiet, dependable. They have self-storage capacities ranging from 37 and 45 gallons in the smaller models, clear up to 500 gallons in the industrial and military types. They are powered with the famous Johnson "Bankheat" Burner... a burner which has proved its enduring quality in thousands of homes, hotels, apartment houses, factories and office buildings.

Possibly YOU can buy Oil Burners now... even without a priority under the new regulations. We will gladly give you information and help with the selling of all necessary applications. S. T. Johnson Co., 940 Arlington Ave., Oakland 8, Calif. and 401 No. Broad St., Philadelphia 8, Pa.

S. T. JOHNSON CO.
41 years of engineering and building fine Oil Burning Equipment

We've Learned from War Building
(Continued from page 73)

to far less damage from fire or shrinkage than lath and plaster walls used in the past, and we feel that we shall continue to build houses this way.

Eighth: we have learned that the public has been definitely sold on ample light for all interior spaces, whether it is upstairs or down. We feel that future windows designed without storm shutters being easily fitted to them, will be entirely out of date.

Ninth: we have learned that a standard plan built over and over again can be built rapidly, and yet the exterior can be changed sufficiently to avoid monotony.

Tenth: we have learned that to change the colors of the exteriors presents the subdivision and the house itself in a far more pleasing way. We feel sure that any new development we shall, undoubtedly, mix in more brick houses with frame ones.

Eleventh: we have found that in the design of a subdivision, people with children prefer a site off of any street that has through traffic. We have, therefore, built cul-de-sac and curved streets to slow up traffic.

Twelfth: we have learned that people like to be near a park where the children may play away from traffic. You will note that Richland Park has a City park right behind it. This park is to be fully developed for children to play in.

"We feel that builders everywhere should spend some of their time each week in post-war planning, in order that a complete program may be available in every community to rebuild blighted areas and properly plan new subdivisions on sufficiently large scales to prevent the rapid disintegration of the subdivisions due to poor zoning, poor planning and the lack of proper commercial and recreational facilities."

Following is a contractor's outline of Brockbank's war homes:

Foundation: 8 inch concrete block foundation laid up with Monolith plastic cement mortar, with 1/8 inch Monolith plastic cement coat on the outside.

Chimney: 3 flues, Vitreous tile lining.


Exterior Walls: On frame dwellings, cedar, 8 inch siding on Armstrong Temseal exterior walls are clear red 2 by 4 studs, with one inch Kimsul nailed between and one-half inch U.S.G. Sheetrock applied to the interior and finished with perfatape, etc. Painting, Sherwin-Williams.

(Continued to page 140)
B & T Metal Trims

CHROMEDGE


No matter what angles you consider in selecting interior trims, you get a better choice in the "B & T line"—the line trade marked CHROMEDGE! They give you the utmost in lustrous, permanent beauty... make installation easier... permit the widest range of color harmonies... offer beautifully matched groups of trims... will not split, crack, chip, warp, or deteriorate with age. All these advantages will be ready for post-war building needs—in a new and improved line of Metal Trims trade marked Chromedge.

The B & T Metals Company

COLUMBUS 16, OHIO

More than three-fourths of a century devoted to the building industry has given Bilt-Well the "know how" that only experience and stick-to-it-iveness can provide. Every Bilt-Well product incorporates the knowledge and craftsmanship acquired during 78 years of service to the American builder.

CARR, ADAMS & COLLIER CO.

Dubuque, Iowa
HANDIEST TO STOCK
EASIEST TO SELL...
SIMPLEST TO INSTALL

Frantz No. 111 "Glide" Track for doors up to 1000 pounds. Requires no brackets or splices. No. 1 Glide Hanger has the flexible, swing-out feature.

Easy to stock, sell and install—those are the principal points to consider in selecting Track for essential construction. "Glide"—the original one-piece, water-shed Track has long storm apron to keep out birds and weather. Hangers are hung inside door which eliminates necessity of blocking track away from building. Patented telescoping joints provide smooth, continuous tread and 3 inch roller-bearing hanger wheels assure easy-rolling action. Write for illustrated folder.

FRANTZ
Guaranteed BUILDWARE
FRANTZ MANUFACTURING CO., STERLING, ILLINOIS

SAVE MAN-HOURS and
INVEST LESS IN TOOLS

Wappat Saws Convert
For Variety Of Cuts...

Multi-purpose Fred W. Wappat Portable Electric Hand Saws will save time for you, as well as perform work otherwise done by more expensive equipment. Production cuts are made easily on the job. Adjusted in simple rigs, Wappat Saws perform such operations as making multiple jack rafter cuts, and production ripping...they run smoothly in any position.

Learn how Fred W. Wappat Portable Electric Hand Saws can give you these and other shortcuts to lower costs. Write today to our Builder Service Department for a free copy of Bulletin S-6.

Accessories and Service for all Wappat and Alta Tools

FRED W. WAPPAT, 135 VALLEY STREET, MAYVILLE, N. Y.

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You mean more HEATILATOR Fireplaces!

- That's right, gentlemen! Your homes of tomorrow should have a Heatilator Fireplace for two reasons: 1—because your prospects want them; 2—because they'll help you to close sales fast.

Postwar home and camp owners generally will heed the experience of today's Heatilator owners—more than 125,000 of them who have used their Heatilator Fireplaces to stretch scarce wartime fuels.

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813 E. Brighton Ave., Syracuse, N. Y.

Try TILLET for a good clay tile. The tractor firm best depends, so ask for a catalog that will help you.

MIRRORLESS in all makes of tractor.
Also painted coats detail; Hope finished Morris blanket sets.

4 by 8 one inch neung practical its and Lome.

Try 3-M ACOUSTICAL TILE CEMENT....
for a quick easy way to apply acoustical tile. This cement is favored by contractors because of its fast setting and firm bonding qualities as well as its dependability under varying construction conditions. Write Dept. AB444 for full information.

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

Why Builders Prefer Milwaukee "NU JAMB" *
SPRING HINGES

- Builders and architects, too, like the "NO HANGING STRIP REQUIRED" feature of the NU JAMB. More easily and quickly applied — offers more solid support — avoids the "give" of the old hanging strip (which often tore loose). Makes a more modern, attractive, longer-lasting installation that satisfies the builder, architect and owner.
- The NU JAMB is typical of the quality features in the COMPLETE MILWAUKEE BUILDERS HARDWARE LINE. Recommend MILWAUKEE for all building needs today!

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814-B South 72nd Street
MILWAUKEE 14, WISCONSIN

JUST MIX ZONOLITE CONCRETE AGGREGATE WITH CEMENT FOR....

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Warm floors mean fewer farrowing losses, healthier sows and litters—fewer chick losses, healthier pullets, bigger egg production — more milk with less feed — greater production and profit for the farmer in many ways. It's easy to sell jobs that put money into your customer's pocket—and that's why just a little effort on your part, featuring Zonolite Insulating Concrete installations in various types of farm buildings, will PAY you so well.

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You are not limited to concrete floor jobs. Zonolite Granular Fill Insulation also affords you many other opportunities for insulating farm buildings and homes—without the need for special equipment or skilled help. Anyone who can pour popcorn from a sack can pour Zonolite Granular Fill between sidewalls and between joists and thus insulate homes and farm buildings against summer heat and winter cold. Contractors say that their customers report up to 40% saving in fuel—poultry raisers say "egg production good all winter."

ZONOLITE Plaster Aggregate offers you a third opportunity for money-making jobs. Use it instead of sand to get a fireproof, sound-deadening plaster with 3 times the insulating value of ordinary plaster. Cuts mortar weight in half. Resists cracking. Ideal for patching. Mail coupon for details.

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135 S. La Salle St., Chicago 3, Ill.

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Dept. AB-4, 135 S. La Salle St., Chicago 3, Illinois

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Why don't you lay it down?
The pleasing appearance of this Service Equipment is noteworthy. It combines Type AC Thermaq D, P, 35 Amp. Circuit Breaker for range circuit, and 4 S.P. Type AC Thermaq Circuit Breakers for light and appliance branch circuits. (Cat. No. SE41-317F—list price $11.00.)

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Many will include the improved materials and equipment which will be available in the future. But they will be planned for "livability" above all else.

The electrical distribution systems, as heretofore, will be a vital factor in this livability. Greater protection against the hazards from short circuits and harmful overloads will have the careful attention of builders and home owners.

Write for Bulletin 63 and 67 which describe these products in detail— with wiring diagrams, suggested specifications, etc. Then, for complete satisfaction, specify them for the buildings you will erect...Frank Adam Electric Co., Box 357, St. Louis (3), Mo.

EQUIPMENT

supplies both the convenience desired and the protection needed. It will be installed in many of these new homes— because Equipment is favored by so many builders, contractors and architects.

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DANDY REVERSIBLE No. 847! FOR SWINGING DOORS—POPULAR PRICED.

Center screw covered by latch bar at all times.

Convenient padlock eye for security.

Furnished with back latch to protect door from damage, from wind, etc.

WAGNER MANUFACTURING COMPANY
Dept. AB-444
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Where POWER, SPEED and ACCURACY are required

MASTER
is the machine you need

**5 Models**

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  - Mitering
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  - Beveling
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**No job too SMALL, too LARGE, too DIFFICULT for the MASTER**

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Brush and Fort Sts. Since 1917

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For Greater Accuracy, Dependability and Precision

Especially designed for running levels and taking vertical angles on all survey and check-up operations... Patented Ball Bearing Race assures perfect adjustment under severe conditions... 2½ power telescopes... light, easy to operate... features of higher priced models. Write today for full information, prices and FREE booklet, "How to Lay Out Building Lots."

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Fast Courteous Service by Truck and Train

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And Saves the Fingers
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CAPACITY 2½"

MALLSAWS "pay off" on all types of concrete form construction in faster, accurate cuts...square board ends that eliminate fins and projections...salvaging waste lumber for stoppers, spreaders, and bracers...and doing away with awkward hand sawing in close quarters. In addition, like members can be ganged and squared to size at one time.

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