Prefabrication Today
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There aren't enough of these famous Celotex products to go around now—but rest assured as soon as building products generally become available, you'll be able to get all the Celotex you need.

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<thead>
<tr>
<th>Building Board</th>
<th>Celo-Rok Sheathing and Wallboard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interior Finish Boards</td>
<td>Celo-Rok Lath and Plaster</td>
</tr>
<tr>
<td>Cemesto Rock Wool Insulation</td>
<td>Triple Sealed Shingles</td>
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Tireless laboratory research perfects materials and methods still more... helps to maintain Celotex leadership year after year.

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They make a big difference in performance... in long life and service-free maintenance. A difference that has proved its value on hundreds of thousands of building jobs of every kind.

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3. Quick screening . . . for
4. Better ventilation . . . casements

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Future repairs and replacements costing millions of dollars can be prevented now, if wood used in building is protected with Santophen 20*—Monsanto’s pentachlorophenol, technical.

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Publisher's Page .................................. 11
Our Readers Say .................................. 14
On & Off the Record ............................... 23
Monthly Review of NAHB ......................... 35
Editorial ........................................... 75
Prefabrication Today ............................... 76
Woodwork Company Redesigns Complete Line ... 86
Comfort and Utility Packed with Appeal .......... 90
Modern in Expression, Modest in Size .......... 95
Early Virginia Farmhouse ......................... 98
Accent on Tradition ................................ 100
Chicago Builder Plans Compact Suburban Homes .... 101
House with Modern Accent ......................... 101
Portable Power for Speed .......................... 102
For Bounteous Living ............................. 103
Builder Plans Home Merchandising Service ....... 104
California Motel Offers Comfort to Travelers .... 106
Burlingame Points Way to Business Remodeling .... 108
How-to-Do-It Department .......................... 110
Better Detail Plate .................................. 113
New Products Offered by Manufacturers .......... 114
Catalogs ............................................ 118
Advertisers' Index .................................. 156

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Advertisements
In This Service.

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HOUSING is desperately needed. Necessary materials—
including Douglas Fir Doors—must be channeled
to meet this need.

As a result—even though Pre-fit and Factri-Fit Douglas
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there may be further delays in filling orders for
non-housing uses or for housing that does not come under
the Reconversion Housing Program.

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exact design or type of door you want.

As production steps up, however, there will be plenty
of these fine, precision-made doors to meet the huge
demand. We suggest that you keep in touch with your
regular source of supply.

When Douglas fir stock doors are
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needs, you can be assured that they
will be the finest doors which can be
produced by modern precision meth-
ods. These sturdy, attractive, durable
doors—made of all-heartwood Dou-
glas fir—feature refinements which
save time and labor on the job and
assure better installations every time.

Pre-fit
Douglas fir doors will be available pre-
fit to exact cook size... ready to
hang without on-the-job fitting.

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Douglas fir doors will be available pre-
pared... a feature which improves
dimensional stability, reduces mois-
ture absorption, and eliminates the
need for one prime coat.

The National Association of Fir Door Manufacturers
MAKE THAT

RECREATION ROOM

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USE STAINLESS STEEL
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329 East 45th Street, New York 17, N. Y.
Economic Ills Curable by Work

The proponents of higher wages and lower selling prices blame the current production stalemate and wave of strikes on "greedy industrialists," and claim that there are large enough profit margins to permit pay increases without price increases. They claim that in effect many industries are on a production strike for higher profits. Such a strike is not possible in a free economy, and at a time when credit for new enterprises is easy. If there were a producers strike for disproportionately higher profits, new producers would be springing up, eager to compete against the "strikers" with lower but satisfactory profits.

The fact that nothing like that is happening clearly indicates that the government policy of higher wages and "hold the line" prices does not leave enough margin for profit to provide an incentive for new capital and enterprise to enter the competitive arena.

What, then, is the trouble? During the closing months of 1945, industry waited for a realistic adjustment of OPA ceiling prices. The wait was in vain, and plants gearing up for high civilian production are still geared up, but unable to produce. Then, the whole production picture was disrupted by a continuing and increasing wave of labor strikes.

The fault can be said to lie with OPA, and its allegiance to the wage-price policy. That, of course, is the immediate difficulty. Behind that, however, is President Truman's green light to organized labor to come and get it after V-J Day. Certainly the President's encouragement to labor to demand higher wages, while government held the price line, was a major cause of the strikes that have held back the reconversion program thus far in 1946.

But the real root of the evil is the false New Deal theory that every man is entitled to certain minimum living standards regardless of whether he works to earn those standards. The result has been union slow-down policies and strikes, and apathy toward their jobs by many unorganized employees. All know that under present conditions a minimum effort is enough to hold a job. Many others know that if they do not choose to work at all they will be kept by the federal unemployment fund maintained by taxes on those who do work.

The New Deal asked for and now has widespread disregard of individual responsibility. Until the individual again is made to understand that the major responsibility for his own welfare lies with him, there will be no return of prosperous times. There is no economic ill in the country today that cannot be cured by a lot of people realizing that they can improve their own well being by a lot of hard work.

Because of illness, Mr. Samuel O. Dunn was unable to write the Publisher's Page for this issue. It is expected that he will be able to resume this popular feature next month. The above article is presented in place of Mr. Dunn's usual signed editorial.—The Editors
Here is beauty that builds more business...

K&M "Century" ASBESTOS-CEMENT SIDING

• Homes sheathed with K&M "Century" Siding Shingles have a beauty that withstands the worst that time and the elements can bring. For "Century" Siding is made of asbestos-cement—which means it is practically indestructible, never needs painting, won’t crack or curl, and is proof against fire, rot, rodents and termites.

K&M "Century" Siding’s permanent beauty means satisfied customers... and the resulting goodwill and prestige that pave the way to increased business. You’ll find "Century" Siding Shingles easy to apply, and economical too.

K&M "Century" Siding comes in two colors: shell white and graytone; and two styles: straight or wavy buttlines. Supplied in 24" lengths for easy application. When paired with K&M "Century" Roofing Shingles they form an unbeatable combination. See your K&M Dealer about them.

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American Builder, June 1940.

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**Our Readers Say:**

**House designs**

To the Editor: The American Builder magazine has enjoyed a welcome space in our magazine files for several years, and has been called upon for reference with the same popularity as the strictly professional architectural magazines in our office. There is one point that I should like to make and it evolves itself into the form of a question. Why don't most of the designs which you have been presenting lately get down to earth as to the question of cost and practicality of building in lieu of this period of extremely high building costs? I would appreciate seeing some period and contemporary house designs which are not rambled out over an acre or more of property, and which are outside the means of the average wage-earner or homecoming G. I.

The New York City building code and the Chicago building code have been used as model codes for most of the developed sections of the country. I'm sure that many of your readers would agree with my desire to see contemporary housing designs based on either of these codes. —Harold J. Levinson, Jamaica, N. Y.

**Co-operation with Wyatt**

To the Editor: Your editorial in the April issue is good. In my opinion Mr. Wyatt doesn't want co-operation at all. He wants followers. He and the members of the OPA outfit want to hold on their jobs and their authority more than anything else in the world. —W. E. Menoher, W. E. Menoher & Company, Lake Worth, Fla.

**Houses without cellarways**

To the Editor: Why has there been a tendency to eliminate the outside cellarway in modern home construction? This utility and safety exit is really just coming into its own as a necessity rather than something to be eliminated. It doesn't seem logical that a cellar should be planned for usefulness and then walled in on four sides. Basements thus planned are truly rooms without doors. It has been noticed that the tendency to eliminate the direct way to the yard is increasing with no apparent reason except that the builder is cutting expenses. To be sure, some building inspectors were quick to clamp down on the builders of these unsafe basements and force them to provide an outside exit, but many more inspectors and other authorities have been overlooking the situation.

With practically every postwar home being planned with a basement recreation room and laundry, or provisions for these facilities, there should be some deep thought given the matter of safety and convenience in planning the cellar.

There have been numerous cases of fire blocking the only stairway to safety in poorly planned houses, forcing the occupants of the recreation room to use the standard cellar window as a means of egress.

Convenience is an important point to be considered, too, when planning a home basement. The storing of garden tools and equipment in the basement is made possible by the direct way to and from the yard. The housewife appreciates the short cut from her laundry instead of climbing the stairs to the first floor and then going through the rear door of the yard. Then there is the matter of furnishing the recreation room. One narrow door and stairway is a big handicap in moving the larger furniture in and out.

The modern basement is an integral part of the home—an additional room— and should be given careful consideration. Talk to those who live in homes with inaccessible cellars. Ask your building inspector what he thinks about a playroom without a safety exit. Let's have better, safer basements! —The Bilco Co., New Haven, Conn.

**Authentic article**

To the Editor: I just read an interesting article in the Lumber Merchant for April in which you state that Wyatt has been "duped."

This is, beyond a doubt, one of the finest, most sincere, and authentic articles that I have read for a long time.

Congratulations on enlightening the public to a situation which looks more like a "stymie" of home construction and a political football than anything we have yet faced. —G. F. Hoppe, Advertising Manager, Insulite, Minneapolis, Minn.

**Vets, public misled**

To the Editor: I have your reprint of the American Builder article in the May issue, and have also seen the March of Time.

I just want to add one more word of congratulations and grateful thanks for giving such effective and factual voice for the building industry as you have done here.

The public, and particularly the veterans, are being shamefully misled as to what they can expect in the way of building, and as to where the responsibility for that failure should logically fall. —Lloyd S. Cochran, Sales Manager, Lockport Cotton Batting Company, Lockport, N.Y.

**Mail receptacles**

To the Editor: Too long has the mail receptacle been the last thing considered in the plans of the building when, ninety-nine times out of one hundred, someone will always be receiving mail until the building is torn down or otherwise destroyed. For even if the building is moved, mail will still be one of the main items received. So, the mail receptacle should be given some attention, whether building, buying or renting. And to facilitate the delivery of mail and make the postal employees glad, make the receptacle large enough to take a small package or a magazine folded once. Too many mail boxes were made to just slip a post card into without folding. Twenty-five feet from sidewalk is as far back as it is necessary to place it and the nearer to the sidewalk the better. Please don't place it up the steps and far at rear of porch and by all means have it in sight as the front door is approached.

Postal regulations require that it be not less than thirty inches from floor, whether slot or box. There is nothing anywhere near the cost or size of the mail receptacle that will add more to or detract more from the appearance of the building, depending on the condition and looks of the receptacle. A suitable mail slot can be placed so that the mail can be delivered into the house, safe from the weather or pilfering.

Children often find lots of fun taking the mail from one box and placing it in another, so the box should be large enough and locked if it is not a slot in the wall. And some of these slots are improperly made because they dip downward just inside the slot and a magazine or stiff piece of mail larger than a letter cannot be inserted without injury.

A mail box that is too small, jagged, rusty, loosely hung or otherwise unsafe for mail or the letter carrier's hands, should be replaced with a suitable receptacle. And the one hidden behind shrubbery is included.

In the case of an apartment building, there are printed regulations of the requirements pertaining to mail receptacles, which must be observed and which can be secured at the Post Office. Every building should secure a copy before building an apartment house. —H. H. Hewitt, San Mateo, Calif.
Truscon Residential Double-Hung Windows offer rich opportunities for inspired architectural designs, in every type of home from conventional to most advanced modern. The new Truscon residential double-hung steel window incorporates many special features not found in other windows of similar type or function. Of major importance is the fact that the sash members are of tubular construction. This adds greatly to the efficiency, strength, durability and finished appearance of the window. Weights and cords are absent. Operation is controlled by motor type spring balances. Completely bronze weather-stripped at the factory; quiet, positive action and long trouble-free life are assured.

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WHAT IS KoolSHADE
In effect it is a miniature outside venetian blind. Paper-thin bronze "slats" are permanently set at a 17° slant... blocking sun's heat rays outside the window. It frames and installs as simply and neatly as ordinary insect screen.

Outdoors, the sun "sees" the flat of the slats like this picture. Indoors, only the paper-thin edges are seen... you can see out clearly.

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Sun heat rays pouring through glass windows cause up to 75% of room heat. Objects in the room get hot... radiate heat. There is a continuous rise in temperature because glass resists the passage of radiated heat. The room gets hotter and hotter.

WHAT KoolSHADE DOES
KoolShade keeps sun-exposed rooms as much as 15° cooler by blocking, reflecting, absorbing and radiating up to 90% of the sun's heat rays OUTSIDE THE WINDOW. Lets in lots of cool light and air.

NOTE THESE VALUABLE FEATURES
- Permanently adjusted for greatest shading efficiency.
- Prevents fading of valuable drapes and furnishings.
- Completes insulation—reduces cost of air conditioning.
- Easy and inexpensive to install—will not rust, rot or rattle.
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MIRROR CHROME PLATED
PRECISION MACHINED
SOLID BRASS
BALL JOINT
EASILY CLEANED
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SEALCO Shower Heads and accessories have won immediate acceptance across the nation. Precision machined from solid brass to close tolerances, they are nickel- and chromium plated for lifetime service.

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Reconversion Housing requires Douglas Fir Plywood

--that's why this “miracle wood” is again being allocated!

SPEED in construction is a prime requirement of the Reconversion Housing Program. Because Douglas fir plywood helps to build good houses fast, a substantial proportion of the industry's production has been allocated to housing contractors, stock cabinet manufacturers, prefabricators and distributors.

As a result, the present supply situation for all other industrial and construction users will be temporarily aggravated. Anticipate your needs as far in advance as possible—and discuss your requirements with your regular source of supply.

Although Douglas fir plywood is critically short today, it is almost indispensable for many projects—for concrete form work, for signs and displays, for boat building, for railroad car construction, and for scores of other industrial and commercial uses. In such cases it is well worth waiting for. It saves time and labor—does a better job.
To make a good bond with the brick, mortar must be plastic, and stay plastic until the brick is bedded. The two photographs above show a good comparative test for plasticity—hence for bond. Try this with Brixment mortar!

—AND A GOOD BOND

IS REQUIRED FOR STRONG, WATER-TIGHT MASONRY

The first function of a mortar is to form a strong, permanent bond with the entire surface of the brick. When such a bond is secured, the result is a strong, watertight wall.

Brixment mortar makes it possible to secure this kind of bond because:

1) Its great plasticity and its high water-retaining capacity allow a more thorough bedding of the brick, and a more complete contact between the brick and mortar.

2) It hardens slowly enough to permit deeper penetration and more thorough keying into the pores of the brick.

3) Once formed, a bond between brick and Brixment mortar is permanent, because Brixment mortar does not undergo volume changes sufficient to weaken the bond.

Because of these characteristics, Brixment mortar makes a better, stronger bond.

LOUISVILLE CEMENT CO., Incorporated, LOUISVILLE 2, KENTUCKY

CEMENT MANUFACTURERS SINCE 1830
These Magazines know what Women want

Woman's Home Companion survey shows that more women plan to buy an Electric Range than any other type!

McCall's Magazine readers have made the Modern Electric Range their 2-to-1 "must have" choice in a recent contest.

Successful Farming survey shows that nearly twice as many REA customers will own an Electric Range after the first two postwar years as now have one.

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

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

Their Surveys show the swing is to Electric Ranges

Leave it to the magazines to find out what their readers want. Survey after survey shows that women prefer the convenience, cleanliness, dependability and economy of modern electric cooking!

Pre-war sales figures add further proof to this trend. Between 1933 and 1941, sales of Electric Ranges increased over 900%!

There are no two ways about it—to cash in on this growing demand, you must wire the new homes you build for Electric Ranges. Built-in, the cost of such wiring is negligible, but the selling power is tremendous!

FOR EASIER SALES
Wire your houses FOR ELECTRIC RANGES
WHAT BOWLES TERMS “vicious lobbies” actually are only examples of democracy at work. They are the groups through which informed public opinion speaks to Congress. They are the collective voice of local, home town trade, labor and professional groups talking to the nation’s legislative bodies. The real vicious lobby is the horde of paid federal employees who are in Congress every day seeking to influence legislation that will perpetuate the bureaus.

DIVIDE AND RULE—One of the fundamentals of New Deal rule was and is to create class consciousness. It was done expertly in the case of owners, managers and employees, and the result today is an imbalance in bargaining attempts. Latest application of the principle of divide and rule has to do with veterans. Every attempt is being made to make veterans who want to buy or rent dwelling units believe that they have been let down by selfish private industry groups. Generally, the attempt is getting no place, because veterans are even less likely to be fooled, once they get the picture, than many citizens with smaller personal stakes in the nation’s welfare.

HENRY KAISER—As of March 12, Kaiser Co., Inc., Kaiser Cargoes, Inc., and Permanente Metals Co. (Kaiser property) had an outstanding RFC balance of $103,268,200 compared with total RFC outstanding balances, all sources, of $286,683,000, almost 35 per cent.

THE ISSUE IS CLEAR—Francis Smith, well known Connecticut lumberman, stated it recently when he said, “I believe that Mr. Bowles is dissatisfied with the wage-price relationship which would develop in a free economy with wages set by bargaining between management and representatives of employees, and that he has decided to create a new pattern for American economy.”

VETS BUILD THEIR OWN—Four of the six Chicago Hagerup boys who were in service want homes. They abandoned their prewar jobs, went to work for a home builder, took three of their vet friends with them—all pushing concrete buggies. They will have their homes soon, they have good paying jobs, they have found their life work. One has become materials expediter, one the material clerk, one has hooked up to sell all appliances on the new houses. The others will learn trades and become building mechanics.

VETS BECOME REMODELERS—Both of the Chicago Olin boys were in service. The older had a small insulation applicator business prewar. The younger joined the older. They added attic remodeling to the applicator business. Are planning to branch out as builders sometime this year. In the meantime they have produced desirable apartments for nearly a score of young married vets since the first of the year. The Olin remodeling is for vets only, hire vets only.

FREE PRIVATE ENTERPRISE—There are probably thousands of Olins and Hagerups all over the country. They fought for the right to carve out their own futures without government aid or direction. They are doing what they fought for the right to do, and in doing it they demonstrate the value of free private enterprise in American economy.

MATERIAL SUPPLY SURVEY—National survey by building material manufacturers shows totally inadequate supplies of 15 items still hold up completion of hundreds of thousands of dwelling units started since V-J Day. These include asphalt shingles, insulation board, clay sewer pipe, soil pipe, gypsum wallboard and lath, hardwood flooring, warm air furnaces, pipe and fittings, bath tubs, pine and fir doors, millwork, softwood lumber and plywood. Not one of the suppliers asks for or wants subsidies. Practically all prove the need for ceiling price adjustments. Further proof that OPA is sabotaging every effort to provide homes for vets.

RESIDENTIAL CONSTRUCTION—Privately financed residential construction for April, 1946, was valued at $250,000,000, a gain of 25 per cent over March, and a gain of 635 per cent over April, 1945. It is probable that no other industry can approach that record of reconstruction activity. And the housing expediter had nothing to do with it.

ACCOMPlice OR VICTIM—Wyatt is either a party to or a victim of the Bowles plot. That became apparent when he sidetracked the obvious way to get veterans’ housing started in a big way, and lined up with the move to convert the manufacture of building materials into a government-controlled and government-subsidized activity.
Here are typical examples from thousands of jobs where the many ways of using Zonolite are simplifying contractors' building problems all over the country. Figure using light weight easy-to-handle Zonolite products on your next job . . . customers better satisfied . . . time and money saved.

**Zonolite Fill Insulation**

Easy to install between joists in attics and between studs in sidewalls. Weighs about 6 pounds per cubic foot. 100% fireproof—rotproof—verminproof. Won't irritate workers' hands! No masks required!

**Insulating Concrete**

Ideal for insulating fill and structural roof decks. Fireproof—rotproof—permanent. To make Zonolite Insulating Concrete simply mix with ordinary cement instead of sand. Weighs as little as 16 pounds per cubic foot when mixed. Used for floors in homes, commercial buildings and farm structures.

**Insulating Plaster**

Zonolite Plaster Aggregate is used in place of sand. It's easier to mix. Reduces mortar weight one half. Can mix inside building to save handling time. Works easy. Won't freeze. Crack resistant. Insulates against heat, cold and sound and makes better satisfied customers.

Universal Zonolite Insulation Co.
Dept. AB-66, 135 S. LaSalle St.
Chicago 3, Illinois

FOR DETAILS
MAIL COUPON
NOW!

SEE YOUR LOCAL LUMBER and BUILDING MATERIAL DEALER
You can depend on Climatrol to deliver True Indoor Comfort . . . because it is based on the sound principle of "Climate Control" . . .

"Climate Control" means, basically, conditioning and handling of air. That's what you are providing, when you specify the appropriate unit from the Mueller Climatrol line — with the assurance of delivering true indoor comfort and winning the good will of satisfied home owners.

When your client starts right with Climatrol, he is not only getting a modern system, but he is also in a position to take advantage of future air conditioning developments which can be added to the original Climatrol installation.

While it stands for the latest in home comfort, the Mueller Climatrol name also stands for one of the oldest performance records in the industry—89 years of specialization in home heating. It is an old, dependable name, a well-known name — constantly promoted to the public through color advertising in American Home, Better Homes and Gardens, and other magazines.

The Climatrol line is complete, enabling you to select the right equipment for the job. Each Climatrol unit is specifically designed for efficiency with a particular fuel — gas, oil, or coal, whichever is preferred. Let Climatrol make friends for you — it pays!

Write for bulletins.

L. J. MUELLER FURNACE CO., 2016 W. Oklahoma Ave., Milwaukee 7, Wis.
Ford Trucks Last Longer

"BEST OF THE FLEET" THE VERDICT
AFTER A QUARTER-MILLION MILES!

"The Ford tractor and 28-foot semi-trailer pictured has been in constant use since 1941," wrote Mr. J. C. Williamson, distributor of lumber products, Dexter, Mo., recently. "This tractor has traveled approximately 250,000 miles, hauling about 30,000 pounds, from points in Arkansas, Mississippi and Alabama to the trade in southeast Missouri and southern Illinois.

"Basing my judgment upon this experience," Mr. Williamson continued, "the Ford Truck has given better and more economical service than any other tractor in my fleet."

Service such as this is not uncommon with Ford Truck operators. They know how well Ford Trucks stand up! And, through the years ahead, you can confidently expect even better performance—more economy, more reliability, more endurance. More than thirty new engineering advancements in the 1946 line of Ford Trucks are designed to make them the best in Ford history. Seventy-eight different engine, chassis and body combinations are available, including a standard unit of two-ton rating. See your Ford Dealer!

Ford Advanced Engineering!

THE FAMOUS V-8 ENGINE, for toughest service, new 100 HP, with NEW steel-cored Silvaloy rod bearings for trebled endurance • NEW Flightlight aluminum alloy 4-ring pistons for added oil economy • Tougher, rust-proofed valve springs • NEW moisture-sealed distributor • NEW coolant-saving radiator closure • Auto-balanced carburetion for still more thrifty power • Servicing simplified still further. And the rugged, thrifty 90 HP Ford six-cylinder engine, for stop-and-go jobs, with many important advancements available in all except C.O.E. chassis.

Ford Truck rear axles—world-famous for load-lugging—provide generous reserve capacity • Light duty chassis have sturdy 3½-floating axles with triple-roller-bearing, straddle-mounted pinion; full-floating axles in all other chassis • 2-speed axle and vacuum power braking for 2-ton rating • Improved 4-speed transmission at extra cost in light duty chassis, standard in all others.

FORD TRUCKS

MORE FORD TRUCKS IN USE TODAY THAN ANY OTHER MAKE
This nation-wide SKILSAW service organization is manned by expert personnel . . . stocks only genuine factory repair parts. It stands always ready to put your SKILSAW in like-new operating condition in the shortest possible time . . . so that your SKILSAW will be on the job more hours . . . making more money for you every hour. If your SKILSAW needs overhauling, contact your distributor for the address of the nearest authorized service station.

SKILSAW, INC., 5033-43 Elston Ave., Chicago 30, Ill.
Factory Branches in All Principal Cities
Why do Savings, Building and Loan Associations and Co-operative Banks rank first in making sound maximum loans?

Since their origin, these institutions have specialized in making home loans—backed by the highest type of security, a home made to the best type of risk, the homeowner. Recognizing the specialized ability of Savings and Loan Associations, and the superior character of their amortized loans, laws have traditionally permitted them to loan a larger percentage of appraised value on homes than any other financial institution.

Because Savings and Loan Associations make maximum loans and specialize in fitting loans to the buyer’s needs, builders and realtors know that, if a loan can be safely made, these institutions can make it. This means more business for you.

For home loans, go FIRST to your Savings, Building and Loan Association or Co-operative Bank.
A Simplified Framework of Uniform Quality...

Cut to accurate lengths and supplied with all structural and joining members necessary for each building or development, Stran-Steel framing simplifies construction and provides greater permanence for homes.

Studs, joists and channel plates are easy to handle, and make possible speedy construction. A patented nailing groove in framing members permits nailing wall or other collateral materials directly to the steel framework. Stran-Steel accessories to connect framing members are supplied in correct quantities, and make construction easy and practical with ordinary hand tools.

For simplicity and reliability—for the strength and uniformity of steel, made practical for varied framing requirements—build with Stran-Steel. For further details, see Sweet's File, Architectural, Sweet's File for Builders, or the January issue of Building Supply News.

GREAT LAKES STEEL CORPORATION
Stran-Steel Division · Penobscot Building · Detroit 26, Michigan
UNIT OF NATIONAL STEEL CORPORATION
You read about this asphalt tile in all sorts of newspapers and magazines. You see Kentile ads in the magazines (see the above picture in full color in House Beautiful, for instance). You hear decorators and architects specify it. You see it on exhibit in model rooms. No wonder Mrs. America looks at your houses with expectant eyes, and asks: "Are your floors that new Kentile?"

Kentile is a natural for modern houses. In kitchens, for instance—easy to lay, easy on the feet—stain, liquid and dirt resistant. And the smartest, most economical flooring you can install.

See for yourself what a world of handsome patterns—in plain and marbleized effects, in unusual borders and design treatments—you can create with Kentile. And how, foot for foot, it's the lowest cost flooring known.

Give the women folks Kentile as a plus feature in the homes you build. It's all to your advantage—your prestige.

Handsome Kentile booklet—full of facts, patterns and interesting color suggestions, free for the asking.
More House, More Heat for Less Money

thanks to Anthracite Simpli-Fire Room!

Here is No. 2 of a series of homes with convenience features which will appeal to a sizable segment of today's market. Furthermore, construction costs can be held to a minimum.

Alarmed at the soaring cost of home ownership, Anthracite Institute tackled the problem on the basis that heat is a necessity only part of the year; that money could be saved on a scientifically engineered heating arrangement and used to buy more house.

The result is the Answer Home with the Simpli-Fire Room, designed by Chapman and Evans, nationally known small homes specialists.

1. Conveniently located, a few steps down from the kitchen, the Simpli-Fire Room eliminates all need for the costly, old-fashioned cellar, saves construction time, reduces over-all cost of the house.

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

3. Anthracite is made easy to use. The storage bin is within convenient shovel reach of the heater. Ashes fall into a light metal basket, which is removed outside the house. Thus, ash shoveling becomes a thing of the past—along with dust and dirt!

4. Type of heating is optional...steam, hot water, or warm air. Plenty of heat is assured with warm, healthful floors.

Answer Home No. 2 featured above, is a modern cottage designed especially for prospective home owners in the low income brackets.

Builders are invited to write for definitive drawings of this house, together with plan of co-operation.

For FREE Plans of this Answer Home—and others—mail coupon today.

Anthracite Institute
Department 611
101 Park Avenue, New York 17, N. Y.

Please send me free of charge handsome 16-page color brochure showing Answer Homes 1, 2 and 3 with floor plans; also details of Simpli-Fire Rooms.

Name:
Firm:
Street:
City_________Zone_________State_________

ANTHRACITE INSTITUTE
101 PARK AVENUE, NEW YORK 17, N. Y.
THE GROUND FLOOR

You've got to get in on the planning if you want to cash in on the building. And the next best thing to being there yourself is to have your advertising in front of your prospects while they're planning.

That's exactly what happens when you advertise in The American Home. 2,350,000 families buy this magazine for one reason—and only one reason: To find ways to have a better home. They go at this magazine with scissors and paste-pot. It's their textbook on building materials and equipment.

GET IN Before

THE GROUND FLOOR

Today—right now—more than 600,000 American Home families are planning new homes . . . and 250,000 of them have already bought the real estate.

That's one reason The American Home carries more building materials advertising than any other magazine.

FIRST IN THE BUILDING FIELD
The Commodore

A Ledge Type Swing-Spout
Faucet of Distinction

Also available without Spray Attachment.
Delivered in quantity now being made.

GENERAL TIRE & RUBBER COMPANY
OF CALIFORNIA

Plumbing Division Sales Office: 608 South Fair Oaks Avenue, Pasadena 2, California, U.S.A.
HERE IS GOOD NEWS!

Ford City, Pa.—Eljer Co., producers of fine vitreous china and enameled cast-iron plumbing fixtures, today announced that production has begun on the Martha Washington lavatory.

This Martha Washington 20" x 18" with raised shelf back, anti-splash rim, concealed overflow, combination supply fitting, snap action pop-up waste and modern styling, is engineered to Eljer's high-quality standards in vitreous china plumbing ware. It will find immediate acceptance in all types of home and commercial building and remodeling operations. Eljer Co. expects to achieve constant increases in deliveries of the Martha Washington during the coming months.

Eljer Co. General Offices are at Ford City, Pa.

KEEP YOUR WAR BONDS!
Builders Demand Action by Government

In Breaking Material Bottlenecks

FIFTEEN items of building materials are in such critically short supply as to threaten the success of the so-called Wyatt Veterans' Emergency Housing Program, according to a national survey of building material manufacturers presented to Housing Expediter and National Housing Administrator Wilson W. Wyatt, by the National Association of Home Builders. The survey indicated that more vigorous action is needed to break OPA bottlenecks and other barriers obstructing the flow of materials. It is certainly time they said so publicly.

The Association Directors pointed out that home builders want to get as many houses built for veterans as quickly as possible, as well as possible, and at the most reasonable price possible. But, they said, the following facts summarize the critical situation that has developed in the Wyatt veterans' emergency housing program:

1. Since the start of the veterans emergency housing program, home builders have taken out priorities for more than 404,000 dwelling units. During April alone builders took out 180,000 priorities. In the first two months of the year 171,000 units were started. This is at a rate exceeding the so-called Wyatt program goals and indicates the eagerness of the builders to start building homes for veterans.

2. Approximately two-thirds of all houses under construction cannot be finished now because some essential material or equipment cannot be obtained. Many thousands of new homes are ready for occupancy by veterans except for such essentials as gas pipe, utility equipment, plumbing fixtures, doors and hardwood flooring.

3. Although the veterans' emergency housing program has been operating since January not enough effective action has been taken by those in charge to stimulate volume production of materials. Such price increases as have been granted producers have been late and in many cases entirely inadequate. Building materials have been allowed to drain off into non-essential construction. Insistence by the OPA on utterly unrealistic and rigid price adjustment procedures has delayed production of materials for the housing program.
Builders constructing some 200,000 housing units for veterans found themselves in increasingly desperate straits. During the war years the construction of housing for in-migrant war workers required great ingenuity. Nearly all building materials or items of equipment had to be substituted for others in short supply. Projects were often delayed for months through inability to secure building materials or items of equipment. Substitutes had to be found and the cost of construction was often double the normal time of operation. Workmen with an eye on the rapidly disappearing pile of materials reduce their production accordingly. Construction crews are maintained week after week in the hope of an improved material supply.

Projects ranging from a few units to as many as 3,000 are presently being abandoned and land options relinquished.

Deep "at the heart" of this condition is the utter failure of OPA to make realistic and proper price adjustments in all building materials immediately with V-E Day—more than 12 months ago. Prewar price freezes permitting certain materials to be produced at a large profit and others at a loss were not revised. In a blind effort to "hold the line" the urging of most industry groups was unheeded and the inadequate adjustments made during the last year have afforded little relief.

### FHA Commissioner Foley Addresses Chicago Builders

Before a record crowd of members and guests, Raymond M. Foley of Washington, Commissioner of the Federal Housing Administration, told the Chicago Metropolitan Home Builders Association about the various aspects of the renewed Title VI legislation at a recent regular meeting held in the Stevens Hotel, Chicago. Title VI of the National Housing Act was revived when Congress finally passed the controversial Patman bill late last month.

Other speakers on the program were Arthur E. Fossier, president of the Chicago Home Builders; W. Fred Stevens, Chicago district manager of the Civilian Production Administration; and William E. Dunn, regional attorney, Wage Stabilization Board. The latter two government spokesmen discussed the functions of their agencies in relation to home building operations under the Wyatt property.

"What we seek in housing as a nation is an improved opportunity for all to have a decent home place, at a price the homeseeker can afford," Mr. Foley said. "In some directions that means improving his income —his means to buy or rent. In the main it means developing our conception and production of housing to a point where its cost bears a reasonable relationship to the income the homeseeker can reasonably expect to maintain."

Referring to the controversy over public housing, the Commissioner stated, "It means, too, recognition of the fact that there are definite areas of housing need in which we of private enterprise have not made large enough contribution in the past. The Federal Housing Administration has remained out of the controversy in the past and intends to do so now, so far as becoming vocal controversialists is concerned. But no one interested in housing can remain out of it in the sense of denying the problems or refusing to consider means for their solution. It is our conviction that the bulk of these public housing needs are not to be produced at a large profit and ought to be met by private enterprise."

In his comment on the Patman bill, Mr. Foley asserted, "We recommended it for ten years because of the conditions of the time. As a permanent philosophy we would oppose it, but the postwar conditions threatened the same damage to Title II (of the National Housing Act), the tested peacetime insuring device, that was threatened in wartime."

President Fossier pointed to the problems confronting the home builders and said, "We are now faced with a crisis, an emergency or a delaying shortage every twenty-four hours, and the general situation is so bad that it has reached almost overwhelming proportions."

### Indianapolis Home Show Huge Success

Called "Victory Exposition," the 1946 Indianapolis Home Show was successfully staged last month in the Manufacturers Building on the Indiana State Fair Grounds. Feature attraction, around which was built a complete and varied exposition of building materials, products and equipment, was the Model Home, designed by Indianapolis architects Ayres, Kingsbury and Ward, and built by Bridges and Graves Co., prominent Indianapolis home builders. Both Messrs. Bridges and Graves are well-known members of their local home builders association.

The 1946 Model Home, called the "House of Ideas," is of contemporary design in that it is functionally planned. Its double walls are of masonry construction, with painted brick exterior. Designed for a 60-foot lot, it allows for an attached garage at one end which also contains the utility room. The cupola on the roof serves as an outlet for an automatic electric ventilating fan. Roof caves are wide and overhang the exterior walls. This allows for the use of a novel engineering device—played walls at the front and rear in which are contained large window areas 10' wide and extending from ceiling to floor. These are designed for hermetically-sealed double glass panes to eliminate the need for storm sash and to prevent heat loss. The wood stanchions or vertical fins of the windows in the splayed walls also act as supports for the roof.
past-combined. main problems.

Mr. Baer.

Mr. Baer said that the use of the glass meant a greater saving of the material used. The result is a saving in problems.

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FLINTKOTE—
depth rooted...

The diversified products of Flintkote...their high quality and wide application have firmly established the Flintkote name and reputation for better products for American homes and industry.

For more than 45 years, the progress and development of Flintkote building materials—used from roof to basement in all types of structures—have been paced by exhaustive and diligent research.

...and still growing

The construction of a new Flintkote research laboratory at Morristown, N. J. is part of a 10 million dollar modernization and expansion program which will (1) develop still further improved Flintkote methods and materials... (2) speed up Flintkote's production... (3) provide increased facilities to assure new products and continuous improvement of present products.
**TYPICAL HOTPOINT KITCHEN FOR AN $8,500 HOME**

**PLAY IT SMART... build for '66 in '46!**

**Electric Kitchen Trend Well Established!** Attention has been focused on the electric kitchen as the No. 1 room in the modern home by over a million and a half dollars of national advertising by Hotpoint during the war years—by scores of articles in leading magazines and newspapers—and by distribution of over two million booklets "Your Next Kitchen" by Hotpoint to home makers who will build or remodel.

Hotpoint ranges carry a Class "O" rating from Fire Underwriters which means zero clearance on all sides. They may be installed tight against the rear wall with inflammable cabinets tight against each end.

**RECOMMENDED EQUIPMENT**

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<td>BASE CABINET 24&quot;</td>
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<td>COR. BASE CABINET 42&quot; WIDE</td>
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<td>COVER CABINET</td>
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<td>WALL CABINET</td>
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<td>COR. WALL CABINET</td>
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<td>FILLER BMP 30&quot;</td>
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**Hotpoint** KITCHEN PLANNING SERVICE

COMMERCIAL ENGINEERING DIVISION

DRAWN: Ann T. Sattler
APPROVED: G. G. Tietz

Dwg no. AKL-36-05

EDISON GENERAL ELECTRIC APPLIANCE CO., INC.

6000 WEST TAYLOR STREET

CHICAGO, ILLINOIS

**DESPITE skyrocketing prices... inflation threats... housing shortages... clients want to invest in long-term comfort, security and convenience. They can afford homes today with tomorrow’s advantages. With electricity recognized as the fuel of the future, a planned, all-electric kitchen belongs in every home. The difference in cost is negligible, as our kitchen specialists will demonstrate. A Hotpoint electric kitchen, complete to the smallest matching cabinet, gives your client pride of ownership now and years after the building boom has passed.**

Learn the details of cost and planning from Hotpoint kitchen specialists. Send for the Portfolio of Personalized Kitchen Plans for homes in all income brackets. Attach the coupon below to your letterhead and mail to us today for your copy of this useful Portfolio.

**The Hotpoint Institute**

5641 West Taylor Street, Chicago 44, Illinois

Without obligation, please send me your Portfolio of Hotpoint Personalized Kitchen Plans. This offer available in United States, Territory of Hawaii and Alaska.

Name
Firm Name
Address
City State

Cop. 1946 Edison General Electric Appliance Co., Inc., Chicago

**Electric Kitchens**

DEPENDABILITY ASSURED BY 40 YEARS EXPERIENCE

![Hotpoint Electric Kitchens](image-url)
THE TRUTH ABOUT

UNTIL now, you've heard about Aquella from everybody but us. First...there was Kurt Steel's absorbing article ("Dry Cellars") in the December 15, 1945 issue of Forbes Magazine.

Second...there was the condensation of this same article which appeared under the caption "Water Stay Away from My Wall" in the January issue of the Reader's Digest.

Third...there was a flood of anonymous letters containing garbled references to a Federal Trade Commission complaint, as well as a copy of a letter dated December 29th, 1945, which purported to have come from the Director of the United States Bureau of Standards.

Why you've not heard from us until now...

In the first place, we were far too busy getting out production to meet the nationwide demand for Aquella. Thousands wanted to be Aquella distributors. Thousands wanted to be Aquella dealers and contractors. And many, many thousands more wanted to buy Aquella for homes, institutions, and factories. Aquella had captured the public's imagination overnight.

Furthermore, at first we thought that this anonymous attack was just the work of some small, misguided competitor. Then, when the vast extent of the campaign became apparent, we conducted an investigation into the source and motives behind the attack.

The complete details and documentary evidence are to be found in our brochure "The Truth About Aquella."

The Bureau of Standards never intended to discredit Aquella

On December 29, 1945, an unsigned letter came from the office of the United States Bureau of Standards written to Forbes Magazine and the Reader's Digest, protesting the publication of Mr. Steel's article.

After the Director of the Bureau was informed this letter was being reproduced and circulated by the hundreds of thousands for the purpose of disparaging Aquella, the Bureau refused to permit further public distribution of copies.

What the Bureau then did was to write other letters stating that the communication of December 29, 1945 was not intended to discredit Aquella.

Nevertheless, thousands of copies of that early letter still continued to be circulated through "mysterious sources."

The complete details and documentary evidence are to be found in our brochure "The Truth About Aquella."
The Controversy over "Waterproofing"

before the Federal Trade Commission

For sometime back there has been a controversy between the Federal Trade Commission and the waterproofing industry-at-large concerning the use of the word "waterproof" in advertising. What it boils down to is a definition of the word "waterproof" and not any misstatement of fact. Members of the Commission have their definitions; those in the waterproofing industry have theirs. The maker of Aquella was only one of many firms that were cited on the issue.

This issue was raised almost a year ago and a complete answer was promptly filed. No further action was taken.

In the meantime, however, there emanated from the same "mysterious sources," thousands of notices of the Commission's citation—with the dateline conspicuously omitted.

The complete details and documentary evidence are to be found in our brochure "The Truth About Aquella."

Now about AQUELLA itself!

From the time it proved itself on the French Maginot Line, Aquella has demonstrated its effectiveness against moisture and seepage in thousands of instances, in various types of masonry construction. There is no single instance where Aquella has ever failed when properly applied!

Further, we are continuing permeability tests under hydrostatic pressures which far exceed any that were ever used on Aquella by the Bureau of Standards.

Complete Documentary Evidence for you!

We have prepared a fully documented brochure which contains the complete story of Aquella.

If you are in the waterproofing industry...if you sell waterproofing...if you are counseling customers or clients on waterproofing...or if you are a buyer of waterproofing materials, you owe it to yourself to know the truth!

A copy of this brochure is yours for the asking. Simply write us on your letterhead.

PRIMA PRODUCTS, INC.
NATIONAL DISTRIBUTORS
Dept. C, 10 East 40th Street, New York 16, New York
Both tenants and owners win when you specify Gas Refrigeration in the apartment houses you design or build. For, as more than 2,000,000 users have proved, Servel provides noise-free, wear-free refrigeration throughout its long life. Gas Refrigerators, installed 10, 12 or 15 years ago, are still giving the same silent, dependable refrigeration they did when new.

This unmatched performance, year in and year out, is the result of Servel’s simplicity of operation. There is not a single moving part in its freezing system. No machinery to cause noise or wear. A tiny gas flame does all the work . . . circulates the refrigerant that produces constant cold and sparkling cubes of ice.

So plan now to provide outlets for silent, long-lasting Servel Gas Refrigerators in your current designs and construction work. For complete information on this famous refrigerator, consult Sweet’s Catalog. Or write today to Servel, Inc., Evansville 20, Indiana.
Builders are particularly interested in these two low-cost, warm air furnaces because they are ideal for the new G. I. home building program. One is gas, the other oil—both are automatic and of compact, modern styling. They are engineered by Chrysler Airtemp to bring all the advantages of automatic central heating to the homes of veterans. Mass production brings them within the means of veterans’ budgets.

Both furnaces are fully approved by Underwriters Laboratories, Inc., and have passed performance tests of Commercial Standard CD 75-39 for automatic mechanical draft burners—plus proof by users!

The oil furnace is of the famous Chrysler Airtemp vaporizing pot type with positive draft produced by a small centrifugal blower. The gas model has the Chrysler Airtemp Silent Flame burner—adaptable to natural, manufactured or mixed gas. Both are of modern streamlined design, take up little floor space and can be installed any place.

In addition, Chrysler Airtemp offers a complete line of gravity gas, oil or coal-fired furnaces for veterans’ homes.

For full details write Airtemp Division of Chrysler Corporation, Dayton 1, Ohio. In Canada: Therm-O-Rite Products, Ltd., Toronto, Ont.
Decorative Glass

Remodeled New York office "borrows" light through Satinol Louvrex glass.

Whether remodeling a loft building or glazing an office hallway, Blue Ridge Decorative Glass achieves new, sparkling beauty—and "borrows" light for added brightness.

The floor-to-ceiling office partitions shown above utilize Satinol Louvrex glass, while the hallway partitions feature Satinol Flutex. Many other attractive patterns are manufactured by the Blue Ridge Glass Corporation of Kingsport, Tenn., and sold through leading glass distributors by Libbey-Owens-Ford. Architects, designers and contractors may specify plain or Satinol finish, semitransparency or complete obscurity. And these glasses may be Securitized (heat tempered) for greater resistance to thermal and physical shock. Most patterns are also available in modified bends. For further information, write the Blue Ridge Sales Division, Libbey-Owens-Ford Glass Company, 8866 Nicholas Building, Toledo 3, Ohio.

"Design it with one of the 5 EX's"


Blue Ridge Decorative Glass

FOR SOFT, DIFFUSED LIGHT • SMART DECORATION • COMPLETE PRIVACY
This streamline design makes
MONOWALL IDEAL FOR MODERN INTERIORS

For both new construction and remodelling, Monowall is a practical wall surface you can promote profitably. Horizontal lines, on 8" centers, give a smart modern effect to Streamline Monowall. It is made in four different colors: apricot with light ivory lines, nile green with light ivory lines, ivory with warm gray lines, white with black lines. Monowall is a wallboard with a mirror-smooth finish. Monowall is light in weight, low in cost, and quickly erected. Its tough surface is moisture resistant and can be kept spotless with ordinary soap and water. It is ideal for kitchens, bathrooms, or other areas where a brilliant, easy-to-clean surface is desired.

It's good business to handle Monowall in all three styles—streamline, tile-designs, and plain colors. For free samples and literature, write today to Armstrong Cork Company, Building Materials Div., 1606 Lincoln St., Lancaster, Penna.

Monowall goes up fast, needs no finishing. The room can be used at once—no waiting for anything to dry.

ARMSTRONG'S BUILDING MATERIALS
TEMLOK - INSULATING WOOL - MONOWALL
Multi-Million-Dollar “Test Tube” for actual experimental factory production, as well as fundamental research, now under construction near Bound Brook, N. J. The Johns-Manville Center ultimately will include six large buildings. Innovations in the first unit include ten experimental factories under one roof; a movable rear wall to permit temporary or permanent additions, or to accommodate extra-large machinery; a special system of interior construction to provide flexibility to meet changing needs for laboratory facilities.

Dr. C. F. Rassweiler, Vice-Pres. of Johns-Manville Corporation in charge of research and development, states: “We are living in an era of scientific improvement unparalleled in man's history. One single development stemming from social and economic needs can bring revolutionary changes throughout an industry. Today, we stand on the threshold of a new era, which has unlimited horizons for the development and improvement of new products for home and industry.

If this goal is to be achieved, some individual or group of individuals must have the imagination, courage and facilities to meet the challenge. Johns-Manville has accepted this challenge and is now in the process of constructing the world’s largest research laboratory devoted to service through science for better homes and greater industrial efficiency.”
Expansion Program

to include World's Largest Research Center for Building Materials and Asbestos Products

GROUND IS BROKEN, construction is under way, and the first unit of Johns-Manville's great post-war Research Center will be completed this fall. It will be the world's largest Research Center devoted to developing, testing and improving building materials, insulations, packings, and asbestos products.

Planned before the war, but postponed till Victory, this Research Center will bring together in one giant unit the newest and most complete research and testing facilities yet devised for these fields. It is the first project in a $50,000,000 expansion program which J-M hopes will assure 25% greater employment than in its highest peacetime year.

The Research Center will do a double job. It will study, test and improve today's products . . . it will develop new products to meet the new needs of industry tomorrow.

It is your laboratory . . . devoted to your problems . . . designed to produce more efficient Johns-Manville materials for you!
how to relieve that cramped feeling

A house may be small—but it needn’t be “cramped.” Even when floor area is limited, there’s a way to create an illusion of greater space—of more freedom—within the house.

The answer, of course, is windows. Bay windows. Corner windows. Groups of windows. Cost? Quite moderate—if you specify stock window designs of Ponderosa Pine!

“Today’s Idea House”—Ponderosa Pine’s 32-page idea book—is filled with suggestions on reaching happy solutions with stock doors and windows of Ponderosa Pine. You’ll want a copy of this book for ready reference—and the coupon will bring it to you without cost or obligation.

As shown in this charming room, stock design windows of Ponderosa Pine are truly modern, with streamlined styling which gives them lightness and grace. Remember, too, that Ponderosa Pine windows hold paint well...are not subject to rust or corrosion.

The Best is Yours with...

Ponderosa Pine
WOODWORK

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

Ponderosa Pine Woodwork
Dept.OAB-6,111 West Washington St.
Chicago 8, Illinois
Please send me a free copy of “Today’s Idea House.”

Name ..................................................

Address ..................................................

City .................................................. Zone.. State...
Retail merchants in your locality are anxious to sell more goods—to make more profit—as long-scarce items come back to their shelves. They know that trim, modern store fronts, bright, smart interiors, help them to make more sales, more money.

Many builders are finding these store front remodeling jobs a profitable source of additional work. You, too, can cash in on this trend, can help these people to build more attractive sales personality into their store fronts and interiors with Pittsburgh Glass and Pittco Store Front Metal.

In 21 leading retail publications our advertisements are urging merchants to modernize their stores. We offer the cooperation of our experts to these merchants. We offer convenient terms of payment, which can be arranged, if desired, through the Pittsburgh Time Payment Plan.

Our unique facilities and long experience have made “Pittsburgh” Products preeminent in this field. Add to this thousands of store remodeling jobs—with which many of your prospects are familiar—and you can readily understand why store owners prefer Pittsburgh Glass and Pittco Store Front Metal.

Plan to get your share of store modernizing business now. You will find much to interest you in our new booklet, which contains data and photographs of actual installations of Pittsburgh Glass and Pittco Store Front Metal. Just send in the convenient coupon today, and we shall be glad to send you your free copy.
Better Homes & Gardens Magazine:

Partner to Operative Builders

With the biggest boom in history ahead, we know how tough the job ahead of the operative builder is.

That's why Better Homes & Gardens, devoted entirely to better homes, has made ready for you a mass of material that it would take each of you separately years to accumulate. Here's what you can have:

1. Solid meat in editorial matter that keeps BH&G's 2,650,000 readers intelligently up to date on everything you can do for them. We'll send you reprints of these often.

2. Surveys—one in progress now by F. W. Dodge will tell you what prospective homeowners want. Short cut to tailoring your homes to a quick-selling market! There are more surveys to come.

3. BH&G 5-star plans—complete with working drawings, specifications, cost lists—the whole business for only $5. Every plan the work of a highly competent architect; every one ready to build just as it comes to you.

4. Books—packed with ideas, and ideas that work because they've been tried. New Ideas for Remodeling Your Home ($1) sells as fast as we can print it. New Ideas for Building Your Home ($1) is on the press. BH&G 5-Star Plan Books, 25 three-bedroom houses (15c); 23 two-bedroom houses (15c).

5. Promotions—like the Home Planning Centers in department stores which are busy telling customers about home buying from financing to landscaping. Get in touch with the Center if there's one in your area—it will work right with you. (The list of stores appears each month in BH&G.)


Get on our list in a hurry—there's no time to lose in working this thing out together. A note on your letterhead will bring you the newsletters FREE and give you more information about the other things we're doing for you.

AVERAGE CIRCULATION 2,650,000
Announcing: new scope for your home planning with this NEW Curtis Woodwork!

- To give you greater scope in planning homes of distinction—to help you fill America's demand for beauty, utility at moderate cost—Curtis announces its new line of stock architectural woodwork.

Here is a wide variety of design to fit every taste and to meet every building budget. Here is authentic styling created by well-known architects, adding distinguished beauty without "made-to-order" cost. And here is Curtis quality to make such beauty lasting!

Let this new Curtis Woodwork help put extra value, extra utility into the homes you plan and build—in modernization work, too. Mail the coupon for complete, illustrated literature.

- Beauty at economical cost for moderately priced homes in Curtis Entrance C-1730. Cameron Clark, Architect.
- Curtis Mantel Design C-6056, an adaptation of the Pennsylvania farm home type mantels often seen near Valley Forge. Willis Irvin, Architect.
- Curtis Entrance C-1735 is a modern adaptation of an entrance found in early Colonial homes. Willis Irvin, Architect.
- This stairway, made up of stock parts, illustrates the delicacy and beauty which can be obtained from Curtis stairwork of various styles. H. Roy Kelley, Architect.
- Curtis Entrance C-1730 recalls many fine doorways found in Connecticut and Massachusetts. Note the entablature with its bowed face, dentil course and pilaster beading. H. Roy Kelley, Architect.
- Modernized Georgian in design—modern in feeling—this new Curtis mantel has simple ornaments applied on a bowed fascia. Design C-6056 is one of fifteen mantels in the Curtis line. George W. Stoddard, Architect.
We're telling all America about BRIGGS Beautyware

Consistent advertising in leading national magazines is building a public preference for Briggs Beautyware on which you can capitalize. Specify Briggs and you give your clients and customers what they want.

Watch for the advertisement reproduced at the right. It will appear in full color in:

- BETTER HOMES AND GARDENS . . . June
- THE SATURDAY EVENING POST . June 15
- AMERICAN HOME . . . . July

BRIGGS MANUFACTURING COMPANY
3001 MILLER AVE.
DETROIT 1, MICHIGAN

Dream Bath...5x8 size

Here's eloquent proof that there's no limit to bathroom smartness— even in a limited space. Particularly now that Briggs Beautyware is back! For those lovely decorator colors in Briggs fixtures lend a look of luxury to any size bath. And the smart, streamlined formed metal designs—that Briggs is so famous for—naturally save oodles of room...room you can use so well for charming "extras." Save you plenty of hard cleaning, too...thanks to the super-smoothness of Briggs acid resistant porcelain enamel. Start planning your own long-dreamed-of Briggs Beautyware bathroom, today!

BRIGGS Beautyware
Briggs Manufacturing Company • 3001 F Miller Avenue, Detroit 11, Mich.
in floors, too...

**IT'S THE Finish THAT COUNTS!**

That's Why Bruce Factory-Finished Flooring Will Be America's Favorite

---

**8 WAYS BETTER THAN ON-THE-JOB FINISHES**

1. **Smooth Sanding**—Each strip sanded to perfect smoothness on multiple drum, precision sanders. No sander marks.

2. **Prime Condition**—Finishing starts immediately after sanding, so no "raised grain." Moisture content of flooring is right.

3. **Perfect Filling**—Highest quality silex filler is rubbed into wood as flooring moves down the finishing line.

4. **Thorough Sealing**—Bruce Finish penetrates into wood pores . . . seals them against dirt and wear. Beautifies wood grain.

5. **Infra-red Drying**—applies heat uniformly . . . welds finish into a tough, even seal. No "unfavorable drying weather."

6. **Extra Buffing**—with high-speed brushes burnishes finish . . . provides a harder, smoother surface for waxing.

7. **Superior Waxing**—Special wear-resistant wax is applied evenly, then polished over and over with brushes and buffers.

8. **Ready-to-use**—No waiting on the job for finishes to dry . . . no hazard of finish being walked on too soon. Ready-to-use immediately.

---

**E. L. BRUCE CO.**
**MEMPHIS, TENN.**
*World's Largest Maker of Hardwood Floors*

---

When Will Bruce Finished Flooring Be Available?

Sorry, but we still don't know when it will be possible to start production on the new Bruce Finished Flooring. As soon as conditions permit, it will be ready for you . . . the finest hardwood flooring ever.

Latest manufacturing methods will make this flooring more beautiful, longer wearing and easier to keep clean and beautiful. In days to come, new Bruce Finished Flooring will be known everywhere as "America's finest floors."
Architect Allen was all agog...

BUT NOT FOR LONG

He knew what he needed... he went to Ceco. Together they worked out the problem.

Things were humming on the housing project of Architect Allen. Building schedules were being met and then it happened—certain materials which were available when the houses were designed suddenly could not be had.

Architect Allen was all agog. A less resourceful man might have been stopped. But Architect Allen knew what to do. He called on Ceco and with the builder worked out new designs which could employ available Ceco products. So the job went ahead on schedule within the original cost. Ceco had helped Architect Allen to come through.

In construction products CECO ENGINEERING...
HERE ARE THE CECO PRODUCTS THAT HELPED SOLVE MR. ALLEN'S PROBLEMS...

CECO ENGINEERING PLUS CONSTRUCTION KNOW-HOW...MAY HELP YOU WITH YOUR PROBLEMS

Ceco Engineers do more than design fine construction products. Besides their wealth of technical engineering knowledge, here is constantly available to you construction know-how gained by many years of experience on the job, in the field. In 23 offices strategically located from coast to coast, Ceco stands ready to help solve your problem without delay and with technical skill.

In these days of shortages, Ceco often can show you how to adapt available products so the job can go ahead. In the matter of hard-to-get materials, Ceco is doing all it can to rush production for you.

CECO STEEL PRODUCTS CORPORATION
GENERAL OFFICES—5701 W. 26th Street, Chicago 50, Illinois
Offices, warehouses and fabricating plants in principal cities.
OUTSIDE WALLS

Insulite sheathing builds a strong, weathertight, wind-proofed wall...a wall with effective insulation.

INSIDE WALLS

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

Double Insulation—PLUS VAPOR CONTROL

Insulite Lok-Joint Lath, with asphalt barrier against the studs, retards vapor travel. And Insulite sheathing, being permeable to vapor, permits what little vapor that escapes the barrier to pass toward the outside.

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

INSULITE

Insulates as you build
1. COMPARE COMFORT: There's no "cold 70°" with Modine Convectors. All rooms are heated quickly and evenly even in the coldest weather. Warm enclosure front panels provide mild radiant heating under windows where heat loss is greatest, prevent cold drafts near windows or doors.

2. COMPARE EASE OF INSTALLATION: Only 25% as heavy as conventional radiators, Modine Convectors cut labor costs to a minimum. Delivered complete, no special floor or wall construction is needed. There are no ducts to honey-comb walls or clutter up basements.

3. COMPARE TEMPERATURE CONTROL: Modine Convectors take fullest advantage of modern temperature control achievements. With all-copper heating units, convectors respond almost instantly to the demands of sensitive automatic controls. No motors, blowers or other moving parts required.

4. COMPARE APPEARANCE: Modine Convectors are attractively styled for modern interiors . . . give added charm to any room. Recessed under windows and decorated to match adjoining wall surfaces, they eliminate the "intrusion" of the conventional radiator, increase living space.

No Wonder More Builders are Turning to The Modern "proved-by-use" Heating Method

All the benefits of today's technically-advanced hot water and steam heating systems . . . without the old familiar radiator — that's what Modine Convectors offer builders. The dependable heating comfort, distinctive charm, space-saving, cleanliness and long service life which made convector radiation the number-one choice for expensive residences, is now available for moderate cost homes and apartments. Before you select your heating system, investigate Modine. Learn how you can build-in greater livability, lasting owner satisfaction with exclusive convector features. See why this truly modern heating method has won the acclaim of thousands of owners and tenants. Look for Modine's representative in the "Where to Buy it" section of your phone book. Write for free descriptive literature. MODINE MANUFACTURING CO., 1701 RACINE ST., RACINE, WIS.
They're no "amateurs" when it

If there's any room in the house in which women have a professional interest... it's the kitchen! Today, they average 1600 hours a year working in the kitchen... and countless other hours planning how it can be improved! For instance, note their expert comments on the 5 most important features of this time-saving "New Freedom Gas Kitchen" design tested in a recent survey:

"It's such a handy, compact kitchen! Everything within reach... and plenty of cabinet and counter space. So cheerful, I'd really enjoy working there!"

"I've had a Gas refrigerator for years and never had a day's trouble! It's absolutely noiseless. And these new Gas refrigerators are so conveniently arranged you don't have to waste time looking for things!"

"What I wouldn't give for a dishwasher sink like that—particularly if I had one of those automatic Gas water-heaters—so I'd never have to worry about getting enough hot water."

"An adjoining laundry is a mighty smart idea! Particularly if it has one of those wonderful automatic Gas laundry dryers I've heard so much about."

"That streamlined, automatic Gas range is just what I want! Flame-cookery is so much better and faster—and Gas equipment costs less to run, too!"

OVER AND OVER AGAIN—women state their preference for Gas as the modern, most practical kitchen fuel! More than 20,000,000 urban and suburban women use Gas ranges now... say they offer greatest convenience, maximum savings in time, food and money! Assure your clients complete satisfaction by specifying Gas throughout the house. It's the cleanest, most dependable and ultra-modern fuel for cooking, refrigeration, water heating, house heating and summer-winter air conditioning. Your local Gas Company will be glad to supply you with complete technical details.

AMERICAN GAS ASSOCIATION

Now READY For further information on this invaluable builders' and architects' manual, write: American Gas Association, 420 Lexington Ave., New York 17, N.Y.
comes to kitchen planning!

ONE IN A SERIES OF
"NEW GAS KITCHEN" DESIGNS

SHOWN CURRENTLY IN A LIST OF
IMPORTANT WOMEN'S MAGAZINES
In new construction or remodeling work, Bestwall serves as a background for beautiful furnishings in the most modest or most lavish home. In addition to the strength of its gypsum core, Bestwall has the charm of a beautiful surface, the greater usefulness of nail marking, plus recessed and beveled edge advantages. When you use Bestwall, you are assured of smoother, stronger, better looking walls. Fireproof, too!
NoW—the World's Largest Producer of Residential GARAGE DOORS!

OVER 55,000 BERRY ALUMINUM OVERHEAD TYPE GARAGE DOORS actually produced and delivered to dealers and distributors since V-J day...

HUGE...
KAISER CARGO CORP. FLEETWING DIVISION PLANT located at Bristol, Pennsylvania, now manufacturing BERRY GARAGE DOORS.

This means that...

PRODUCTION IS NOW RUNNING OVER 1,000 DOORS A DAY!

BERRY—America's No. 1 Garage Door

BERRY DOOR CORPORATION WAYNE, MICHIGAN
NOW YOU CAN TELL CUSTOMERS:

"Yes, your new home

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

Servel All-Year Gas Air Conditioning
retards obsolescence rate

"No matter what other new developments in homebuilding are perfected in the next ten or twenty years, the home with Servel All-Year Gas Air Conditioning will remain up-to-date and have a higher re-sale value." This is the opinion of leading mortgage loan officers all over the country.

In addition to this very definite "dollars and cents" advantage, you can point out to customers that they also get 100% "use value" from Servel All-Year Gas Air Conditioning. Many features considered essential in the modern home—guest room, laundry, extra bathroom—are used only intermittently. But the Servel unit provides extra living comfort for every member of the family, every day in the year.

In sultry summer weather it cools and dehumidifies the air, provides a cool, fresh climate for every room in the house. In winter it supplies clean, draft-free, properly humidified heat. The homeowner can select just the climate he wants indoors—the year round . . . with the simple Selectrol control.

For full details of the business-building advantages of Servel All-Year Gas Air Conditioning, get in touch with your local Gas Company, or write direct to Servel, Inc., 1606 Morton Ave., Evansville 20, Indiana.
Built For Your Future...
with hands skilled
by the past

Defoe's "Working Walls"* are distinctly a modern innovation. They put between-room wall space to work for the housewife and provide more storage while actually saving room space.

It takes a lot of time and work to transform thought into reality. Things like the new Defoe Homes don't just happen. Back of them are the skill and experience born of more than forty years of painstaking craftsmanship under the exacting traditions of the shipbuilder's art.

- For more than four decades everything Defoe has produced has been built to perform perfectly—and built to last! What the Defoe organization has learned in all those years has now been translated into the comfort, the convenience, and the economies of the new Defoe Homes. They will be a definite contribution to the better things for better living in the good times which lie just ahead.

Please send me the descriptive brochure on the new Defoe Homes.

Name:

Street:

City and State:

*TRADE NAME REGISTERED

Defoe HOMES

Housing Division
Defoe Shipbuilding Company
Bay City, Michigan

Dept. AB6

Yours sincerely,

[Address]
Here’s another interesting exterior by Architect Perry Duncan. Cape Cod in style but with a few modern treatments so skillfully handled that they don’t disturb the traditional lines... This ad is another in the new series for Gold Bond Building Products now appearing in full color in the Saturday Evening Post... Whatever the job—new construction or remodeling—the Gold Bond trade-mark assures your customers you are giving them the best. National Gypsum Company, Buffalo 2, N. Y.

You’ll build or remodel better with Gold Bond

Ask your Gold Bond lumber and building material dealer how to have a home like this. He is headquarters for new building products and ideas.

So nice to come home to!

When you swing off the bus at the corner after a hard day’s work, think how nice it would be to come home to a new house like this—all your own! That’s what a lot of us have been looking forward to for years. Of course, it doesn’t have to be this Cape Cod cottage—nice as it is. You might want a “modern” or a colonial type. Or some other traditional style. Whatever the design, it will be your dream home—and you’ll love every inch of it!

Few people build more than one home in a lifetime—so it’s important to know before you start what to insist on to make your investment a sound one. Take walls and ceilings for instance. It’s easy—for a few months or years—to hide cheap, second-rate quality in walls and ceilings. But today, thanks to Gold Bond’s years of research, it’s just as easy to build walls that will last virtually forever. Firesafe. Ever so much stronger structurally at no extra cost. Walls that turn away summer heat and keep you warmer in winter. That can be decorated in the most charming colors you've ever laid eyes on with a marvelous new paint that dries in one hour. You can get these advantages and many more by demanding the six Gold Bond features shown below. They are part of the famous Gold Bond family of 152 building products, produced in 23 modern plants and sold through 10,000 leading lumber and building material dealers.

There’s a Gold Bond Dealer in your locality. See him first when you start thinking about new building or modernizing. He can bring you the latest in building products and ideas. He can really make that new home “so nice to come home to” in beauty and value at no more than the cost of ordinary construction. National Gypsum Company, Buffalo 2, N. Y.

Demands these six Gold Bond features in your new house:

- Gold Bond Fireproof Gypsum Sheathing
- Gold Bond Floating Wall System
- Gold Bond Fireproof Gypsum Lath
- Gold Bond Fireproof Rock Wool Insulation
- Gold Bond Lumber

Dries in one hour. Paintable right after applying. Designed to prevent condensation, the seams are pressure-locked. Gold Bond Service protects the walls and ceilings from water vapor for permanent, moisture-proof protection. Can be applied right over existing walls and ceilings.
Holding down the cost of materials and equipment is important in the building of G. I. Homes, because of rigid government limitations on this type of construction. And in order to keep within the required cost range without sacrificing quality, those who are a part of the gigantic Veterans' Housing Program are looking to new materials and new equipment.

Now coming off production lines in ever-increasing quantities is the new Bryant steel gravity warm-air furnace. Here is a completely automatic furnace with a reasonable price which enables it to be installed in any G. I. Home with satisfaction and economy. It has many of the features incorporated in higher-priced Bryant equipment, and is the most quiet, compact and sturdy gas-fired furnace ever offered in the popular-priced field.

And back of it is the famous Bryant name—the name which has signified quality gas heating equipment for more than thirty-five years. Ask the nearest Bryant representative to tell you the complete story on the new Bryant steel gravity warm-air furnace. You'll agree that it's the furnace for those G. I. Homes!

BRYANT HEATER COMPANY
17825 St. Clair Ave., Cleveland 10, Ohio
One of the Dresser Industries

NEW STEEL GRAVITY WARM-AIR FURNACE OFFERS THESE FEATURES:

1. Drum-tube Heat Exchanger—flue gas travels all upward, no condensation pockets, quiet operation.
2. Inner Radiation Shield—completely surrounds heating element to insure low casing temperature.
3. Axial Burner—cast iron with raised drilled ports; easily accessible, adjusted or removed.
4. Easy-Reach Controls—handily located for inspection and adjustment.
5. Compact Draft Hood—easily removed to provide access to heat exchanger tubes.
6. Attractive Casing—gray finished steel; compact, sturdy design.

Let the Pup Be Furnace Man

The most complete line of gas heating equipment in the nation!
HIGHLIGHT ON QUALITY. In a glance, the home buyer reads "quality" when this label is on the windows. It's a sure indication to him that the house is glazed with a good product. L·O·F Window Glass is better, clearer—and produced by a longer annealing process which makes it less brittle. Libbey-Owens-Ford Glass Company, 5166 Nicholas Bldg., Toledo 3, Ohio.

Libbey·Owens·Ford also makes plate glass, safety glass, Thermopane*, Vitrolite*, Tuf-flex*, Glastone* and other flat glasses.

*REG. U.S. PAT. OFF.
Experience of users shows that Atlas Mortar Cement has the following characteristics:

**Makes Buttery Mortar**—smooth and highly plastic—a treat for the trowel.

**Provides Satisfactory Yield**—the measure of the amount of mortar produced by a bag of cement and the number of brick, block, tile and other units that can be laid up with the resultant mortar.

**Backed by years of research**, field studies, investigation of raw materials, laboratory tests, and control of manufacturing methods.

**Complies with Federal and ASTM specifications** for masonry cement. Rates high not only in some single essential but in all desirable characteristics—in plasticity, yield, durability, color and strength.

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**ATLAS MORTAR CEMENT**

TRade Mark Reg. U. S. C. oO.

Send for detailed information. Write to Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York 17, N.Y.

U. S. STEEL RADIO SHOW — Sunday Evenings — Consult local newspaper for time and station.
HERE IS home heating at its best! Thrush Flow Control System of Warm Water Heating, whether used with direct heating units or with concealed piping, provides continuous radiant heat and a feeling of bodily comfort. The feeler tube, an integral part of the Thrush Radiant Heat Control, senses the slightest change in temperature and acts automatically to restore it before it can drop more than a fraction of a degree. Operating cost is low because continuous circulation is not required. The Thrush Circulator normally operates only a few minutes out of each hour and firing unit operating periods are shorter. For more information write Dept. G-6 or ask your Wholesaler.

H. A. THRUSH & COMPANY • PERU, IND.
The illustrations on this page show a few of the ingenious and attractive corner treatments featured in the new Weldwood Plywood installation booklet.

With Weldwood, architects and builders can achieve charming and unusual architectural effects. They can save plaster costs and headaches, too.

Made in the finest domestic and imported woods, Weldwood provides an infinite variety of exquisite grains and subtle tones.

And remember, Weldwood Plywood is guaranteed to outlast any building in which it is used.

Send for free booklet

The new Weldwood Installation Booklet gives a fund of useful information concerning Weldwood's place in today's building picture. Send for your free copy today.

Plastics and Wood Welded for Good

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

WELDWOOD Plywood

Weldwood Plywood and Mengel Flush Doors are products of UNITED STATES PLYWOOD CORPORATION, New York 18, N. Y., incorporated Louisville 1, Ky.

When the days of easy sales are over, the sales story of these "twins" will be worth remembering. Both houses look exactly alike. But one sold promptly... the other didn't. The G-E automatic heating equipment made the difference.

G. E. boosted pre-war sales
That's a lesson many leading builders learned in the pre-war days. That's why Levitt and Sons, famous Long Island Builders, included G-E Automatic Heating as standard equipment in developments at Manhasset and Strathmore.

Says Mr. Levitt, "We were alive to the reputation of G. E. as a drawing card and we believe your product materially enhanced our sales."

Put G. E. to work for you
Install G-E gas or oil heating equipment in your houses... for steam, hot water or conditioned warm air systems. Then feature the G-E reputation for reliability and performance... and watch how your sales pull ahead... even when competition gets tough. General Electric Company, Air Conditioning Dept., Section 6116, Bloomfield, N. J.
To help you build
new homes and to modernize
old homes

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Complete Instalment Note and Mortgage Services
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Allied Building Credits, Inc. financial services cover every phase of residential construction, from one structure to 1000 or more, from land purchase to the final Package Mortgage. We believe the services rendered by ABC are the most complete, comprehensive and economical available to the home builder today.

Subdivision
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(LAND PURCHASE)

Among Them Are

Construction Loans

Material Financing

Package Mortgage on
Complete Structure

Mortgage
Cancellation Plan

The Mortgage Cancellation Plan

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For complete information on Simplified Procedure, Modern Rates, Terms and Services, write to Allied Building Credits, Inc., 2501 First National Bank Building, St. Paul 1, Minn. Offices in principal cities.

Allied Building Credits, Inc.
Make kitchens more efficient with these

Frigidaire Appliances

Frigidaire Refrigerator. Cold-Wall model shown has 16-way adjustable interior; rust-proof aluminum shelves; Super-Freezer Chest for freezing, storing foods. High-humidity storage guards against drying, shrinking; protects vitamins; foods need not be covered. Meter-Miser is simplest cold-making mechanism ever built. Variety of sizes, other models.


Choice of Water Heaters. Table-top type (30 gal.) to go with Frigidaire Range. Round tank models, 32-80 gal. capacity. Sickle-shaped Radiantube Unit flexes off scale formation; special baffles prevent diluting of hot water with cold.

SEND TODAY FOR FULL INFORMATION on these Frigidaire appliances. For pictures, dimensions, full descriptions — write Frigidaire, 857 Amelia Street, Dayton 1, Ohio. In Canada, 584 Commercial Road, Leaside 12, Ontario.

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THREE HINGES ON EVERY DOOR

A Visible Mark of Good Construction

You can put a third hinge on every door of an average home at a total hinge cost of only $2.00 or $2.50 ... much less than it would cost you to repair a single warped door later on. This small additional cost is a smart investment, because today, more than ever before, good construction demands three hinges to a door ... and it is tangible evidence of quality that your prospective buyer can see and appreciate.

Build all your homes with three hinges to a door and capitalize on this tangible evidence of good construction. The Stanley Works, New Britain, Connecticut.

STANLEY

REMEMBER ..... THREE HINGES TO A DOOR
OPA Still Blocks Progress

EARLY this year Washington bureaucrats claimed that there was a housing emergency demanding emergency measures on the part of government. American Builder branded the claim as false, and stated that the true condition was one of real and acute local housing shortages which home builders could and would alleviate and perhaps resolve by the end of 1946, provided, first, that OPA would take a realistic approach to price ceilings for building materials, and second, that the industry be unhampered by time-consuming controls and restrictive legislation.

What was the situation then? There were two million unoccupied dwelling units, at least three-fourths of which could have been made into desirable sale and rental properties with relatively little repair and modernization. In addition, home builders in the less than five months that had elapsed since the fall of Japan had geared their operations to a rate of 750,000 new dwelling units a year. On January 1, however, very few of either the new or old units were completed. The failure is not chargeable to the building industry. The proof of this is the speed with which the industry went into action, and the great volume of new units and remodeling operations that were started. The failure lay entirely with OPA and its policy of profit control which consistently denied price increases to enable manufacturers to meet production cost increases. There was no housing emergency at the beginning of 1946. There was only a building material production emergency which was created by OPA, and which could have been relieved by OPA without fear of dangerous inflation.

What was the situation on May 1? Builders had stepped up their operation plans from a rate of 750,000 new units a year at the end of 1945 to 1,200,000 new units a year by April 26, 1946. That is an increase of 60 per cent. The month-to-month increase was 4 per cent from December 1945 to January 1946; 14 per cent, January to February; 17 per cent, February to March; 25 per cent, March to April. In addition, remodeling operations had been stepped up by May 1 to a rate of 200,000 new units a year, and repair and alteration of old units to condition them for occupancy was going ahead at the rate of 150,000 units a year.

The rate at which dwelling units were being started on May 1 was in excess of what Wyatt, claiming an emergency, had set as a goal for the end of the year. The starts were made without the expediting of an expediter or the government stimulus the bureaucrats said was needed. The starts were made while Wyatt was fighting for legislation to accomplish what was being accomplished by builders without legislation.

There is a difference, however, between starts and finishes, and the rate of finishes is just about where it was last fall, and for the same reason—OPA. Wyatt has failed to start anything. The industry did all the starting without him. Wyatt now has $400,000,000 to be used as subsidy payments. It can be used for only one purpose—a cover-up for the OPA sabotage of the building industry program for veterans' housing that the building industry, unaided, has under way. It should be clear to Wyatt now that he has been duped, that there never was a housing emergency. It should be clear to him that the only way out is not through use of the hidden inflation device of subsidies, but through forcing OPA into a realistic attitude toward building material prices.
Prefabrication

GUNNISON HOMES, Inc., uses conveyors to speed production. This picture shows wall frames and finished walls in process.

As defined by Webster, prefabrication means: To fabricate all the parts of (as a house) at the factory, so that construction consists merely of assembling and uniting standardized parts.

“A prefabricated home,” as defined in Commercial Standard CS125-45, the National Bureau of Standards measure of quality for prefabricated houses, “is one having floors, walls, ceilings, or roof composed of sections, or panels of varying sizes which have been fabricated prior to erection on the building foundation. This is in contrast to the conventionally built home which is constructed piece by piece on the site.”

Somewhere in between these definitions is an industry—a new industry which came of age in 1941 and grew to sizable stature during the war years, and now holds unlimited promise of becoming a most important factor in the field of new home construction.

This industry, Prefabricated Housing, which promises no radical “machines for living,” embraces a rapidly increasing number of factories or shops in which house walls and partitions, ceilings and roof panels, and floor panels can be prefabricated in completed units, shipped to the job, and erected in only a few hours.

Before the war, only about a dozen firms were regularly producing and marketing prefabricated homes, and at most their output accounted for something less than 2 per cent of the entire production of residential construction. Consequently, it can be understood that prewar prefabricated housing was not considered an important factor in the home building industry.

It was during the decade before the war, however, that the necessary research and product development work was taking place. Several factors had contributed to the development and acceptance of this new method of building houses. One was a national interest in better housing, even prior to President Hoover’s 1929 National Housing Conference.

Probably the greatest motivating force during this period was the successful experience of engineers of the U. S. Forest Products Laboratory at Madison, Wis., who, in 1935, built a practical prefabricated house, erecting it in a few hours. That demonstration was the spark that fired the imagination of scores of architects, engineers and builders and started them on the road to prefabrication.

Many organizations entered the prefabricated home field but, although several developed good products, only a handful were able to carry on through to successful commercial operation. Those who failed did so at various stages of the development process.
Home prefabricators have emerged from the war as a most important entity in new home construction. With extensive plans for the further expansion of their facilities, they will take fullest advantage of the existing shortage to become firmly established as a significant factor in the field of residential construction. Attractive, permanent and efficient homes will be provided through use of proved production methods and techniques.

War housing and other war construction presented the first real opportunity to prefabricators to put their systems to a real test—only about 10,000 units having been built before the war; the current situation in housing presents an opportunity of an entirely different character under conditions that should prove singularly favorable to reputable and well-organized concerns.

Definite figures on the number of prefabricated houses built during the war are not available. It has been estimated, however, that about 200,000 units, or approximately 10 per cent of the war housing produced, were built during those years. Because virtually the entire output was purchased by the government very little of it reached civilian channels.

Looking back for a moment—even at this early date it is apparent that the exigencies of war forced vast changes upon the entire residential building industry, and more particularly upon the prefabricated home manufacturing industry — changes...
are altering its course now and will have an even more profound effect in the months and years ahead. For example, local building codes, zoning ordinances, "make work" trade union rules and other deterrents were swept aside by the urgent and powerful demands for war housing.

Actually these changes were only temporary expedients — unplanned measures necessitated by the requirements of a total war. But, like many other aspects of a total war, they are showing signs of having permanent, long-range effects. Under the guise of another "emergency" the Wyatt program with its quota of 250,000 prefabricated houses this year and 600,000 in 1947, with its priorities, restrictions, guaranteed market, subsidies and other controversial features, will eliminate considerable competitive activity which would ordinarily obtain in a free and open building market. Thus the prefabricated home manufacturers will not have to compete with conventional building on a normal basis. They do, however, have to compete among themselves, and they face other obstacles that may not be solved too readily.

Primarily there is the matter of public acceptance. The prefabricators are optimistic, as is evidenced by a recent statement of the Prefabricated Home Manufacturer's Institute's Harry Steidle, who said, "The past year has been an eventful one. It has seen factory-built homes suddenly emerge from the haze of doubt and public cynicism to full stature as a new and promising industry." But it cannot be denied that large sections of the public have been misled badly by both the proponents and the antagonists of prefabricated housing.

Some of the advocates have continually made claims of a wildly exaggerated nature as to the flexibil-
The "anti-prefabbers" argue that all prefabrication is glorified "chicken coop" construction and refuse to acknowledge that it can produce attractive, permanent, efficient homes that may well be brought within the ownership range of a vast number of prospective home owners through industrialization of production. The qualified prefabricators have a major problem, therefore, of overcoming both their irrational friends and illogical foes at one and the same time.

Distribution Major Problem

Aside from the matter of public acceptance, the big hurdle confronting the prefabricators is the development of a sound and economical method of merchandising and distribution. This involves not only transportation to the site, but also erection at the site. Commenting on this particular obstacle pioneer prefabricator Foster Gunnison, president of Gunnison Homes, Inc., New Albany, Ind., some time ago said, "The prefabricated home industry's success or failure, in the post-war period, will depend upon the soundness of the method of distribution it decides to follow. Before the war the industry was in the research and product development phase—with the government as its sole customer. After the war the industry will enter its distribution phase. If it chooses the right method of distribution it will succeed—if it chooses the wrong method it will fail. Unfortunately the industry was not old enough to have solved it before the war."

With unimportant exceptions distribution up to this time has been limited to "economical trucking distance", from the manufacturer's plant. This has varied, with different firms, from less than 100 miles to as many as 350 miles in isolated instances. A definite pattern is being established, however, in the expansion programs of several of the larger established prefabricators. It is to "regionalize" production by building plants at strategic points across the nation in order to serve all areas where the potential market is sufficient to justify full time manufacture. The alternative solution to the distribution problem is to fabricate sections in panel form so that they can be readily shipped by any available means—truck, rail, or water.

Site erection, the last step in the distribution process, will be handled, in most cases, either by the prefabricator using his own specially trained crews, or by the "authorized dealer" using his own erection force. This latter method would make the entire merchandising and erection opera-
The actual productive capacity of the established prefabricated home manufacturers is an unknown quantity. Estimates vary with the degree of experience or optimism of the estimator. Established concerns with a producing record to guide them have a fairly accurate idea of what their plants can do—given the materials and labor to do with. But there remains the unknown quantity of houses that will be turned out by newcomers to the field in addition to those whose only experience was limited to the production of war housing. This group grew up on prefabricating standardized units and has yet to meet head-on public reaction to its method of construction and architectural styles.

Interesting is the fact that by far the majority of the prefabbers plan to produce houses of traditional design, leaving the experimentation with "modern" types to the more venturesome of their contemporaries.

Prospective buyers will have a wide range of floor plans and exterior elevations from which to make selections. Most of the older and larger manufacturers expect to produce more than one model. Several will have four or five, a few will reach as high as twenty, and at least two have announced that as many as fifty models will be available.

Prefabricators boast of certain outstanding advantages of prefabrication over conventional house building. They are:

1. Shop work can be systematized, and is much faster than field work, there being no delays from inclement weather.
2. Greater speed minimizes overhead.
3. Greater accuracy and control are obtained.
4. Glued construction, far superior to nailing, is made possible.
5. Foundation work can be carried on simultaneously with shop assembly.
6. Feld erection is accomplished in hours and days as contrasted with weeks and months.
7. The result is generally an overall economy in favor of the prefabricated house.

An examination of the methods of prefabrication used by the greater number of manufacturers reveals that, in general, three types of prefabricated wall units are used: (a) Full wall-size units containing door and window openings; (b) 4' x 8' units, which include stock units for
plain wall, door, and window panels, and also filler panel to fit the particular dimensions required; and (c) Plain wall units extending between openings, and from edge of opening to house corner. Window and door frames are inserted between these solid wall units.

Usually, such prefabricated panels consist of lumber frame with panels of plywood or other material fastened to each side, with either nails or glue.

Outside wall panels may have the outer face of ½ or 1½ exterior plywood, or other material, applied directly to the studs, or else have 5/16 plywood sheathing on the studs, and be covered later with exterior plywood, siding, asbestos shingles, or other material. In cold climates, suitable insulation and vapor barrier must of necessity be inserted. The inside face of the panel is generally covered with plywood or composition board, to be finished as desired.

**Interiors and Roof Panels**

Interior partitions are similarly constructed except that both faces are lined with plywood or composition board. Partition units are fabricated by assembling pre-cut studs, plates and headers in table jigs. Then the covering is glued or nailed to one side and the unif is turned over to receive the covering on the opposite face.

Roof panels for hipped roofs may consist of plywood sheathing, or other material, nailed to top of roof rafters. In some instances, roof shingles have been applied to panels in the shop. Joints between the panels are then made weathertight by inserting shingles over the joint. Flat nailing strips are likely to be of stress-covered or composition panels on top and plywood or composition board on the bottom to serve as the ceiling.

Ceiling panels are prefabricated by nailing or gluing the material being used for interior wall or partition units to parallel 1" x 2" ribs, 16" on centers. Panels are built up in full room size so that the joint between two such panels will occur at the center line of the partition.

Prefabricated floor panels are also used to a considerable extent. One method of the panel is the application of plywood, or other material, to conventionally laid joists. This is covered with a layer of two-ply waterproof building paper over which is laid pre-finished hardwood flooring. Another process is the prefabrication of floor-stress panel, either with or without self-contained insulation, vapor sealed and covered with prefinished hardwood flooring or plywood.

A greater variety of methods is found to exist for framing, different prefabricators using different sizes of studs for walls and partitions, depending upon panel construction. If the plywood, or composition board is nailed to the framing, studs are customarily 2" x 4", spaced 16" on centers. When panels are glued on, smaller studs are often used, down to 1" x 3", spaced 12" on centers. This size reduction is a natural sequel to the adoption of stressed-covered construction, since the plywood helps to carry any load and acts as a compensating factor for the use of lesser dimensions. Another quite common practice is to use headers or horizontal "nailing" strips between studs. Frequently two or even three rows are inserted in the 8' panel height.

When prefabricated wall units are built to full room length, several methods are employed to join the several 4' x 8' panels required. Some use panels that have been scarf jointed along the sides to produce any desired width or length up to 20' or more. Others use a long strip of plywood or other material, nailed lightly to the stud under the joint, and glue the abutting panels to the strip. This also produces an excellent joint especially when formed with a hot-plate press. Simple butted joints are also effective, it being rather common practice to machine the panel edges to produce a perfect fit. This type of joint is employed by many prefabricators using standard 4' x 8' unit construction, with panels tongue and grooved or with a splined joint.

**Homes Are to Be Completely Equipped**

While the extent of actual factory fabrication will vary with each manufacturer, the aim of the industry is definitely toward the supplying of complete homes—that is, homes with all equipment including efficient heating systems, modern facilities for food preparation and storage, Laundering, lighting. And in the words of PHMI's manager, Harry H. Steidle, "... a home which can be covered in one overall loan to be paid in small monthly installments—a home a working man can afford."

Time, and time alone, will prove the rightness or the wrongness of methods of construction, distribution and merchandising of the established house prefabricators and those who will engage in prefabrication in the days to come. About one thing, however, there can be no question—prefabrication now holds promise of becoming a most important factor in the field of new home construction.

A brief resume of the operations
of several typical prefabricated home manufacturers appears in the following list. Although not complete, it is believed to be representative of the industry and is based on the most reliable information available.

**Allied Housing Associates, Inc.**
**Langhorne, Penna.**

**AREA SERVED:** Eastern seaboard states.
**DISTRIBUTION:** Authorized dealers.
**BASIC UNIT:** Living room, dining room, kitchen, 2 bedrooms, bath, utility room, 24' x 28' overall dimension.
**TYPE OF CONSTRUCTION:** Plywood panels, wall size.
**EQUIPMENT AND EXTRAS:** Hot water heater, range and refrigerator.
**UTILITIES:** Foundation, plumbing, wiring, and heat.
**ESTIMATED CAPACITY:** Up to 8,000 units per year.
**PRICE RANGE:** $4,500 to $5,500.

**American Houses, Inc.**
**New York 22, N. Y.**

**AREA SERVED:** East, Southeast, Middle West, Southwest, and North Central sections of the United States.
**DISTRIBUTION:** Builders and architects.
**BASIC UNIT:** Panels only.
**TYPE OF CONSTRUCTION:** Plywood panel exterior, 4' x 8'; gypsum board on steel frame interior.
**EQUIPMENT AND EXTRAS:** None.
**UTILITIES:** Customary.
**ESTIMATED CAPACITY:** Up to 15,000 units per year.
**PRICE RANGE:** Moderate.

**Anchorage Homes, Inc.**
**Westfield, Mass.**

**AREA SERVED:** 250 mile radius of plant.
**DISTRIBUTION:** Various types of dealers.
**BASIC UNIT:** Living room, kitchen-dinette, 2 bedrooms, bath, utility room, 24' x 32' overall dimension.
**TYPE OF CONSTRUCTION:** Wood siding exterior; composition board interior.
**EQUIPMENT AND EXTRAS:** Hot water heater.
**UTILITIES:** Foundation, plumbing, wiring, and heat.
**ESTIMATED CAPACITY:** Up to 10,000 units per year.
**PRICE RANGE:** $4,000 to $7,500.

**Crawford Company,**
**Baton Rouge, La.**

**AREA SERVED:** 250 mile radius of plant.
**DISTRIBUTION:** Dealers and special contractors.
**BASIC UNIT:** Living room, kitchen, 2 bedrooms, bath, 27' x 19' overall dimension.
**TYPE OF CONSTRUCTION:** Wood siding exterior; composition board interior.
**EQUIPMENT AND EXTRAS:** Garage and hot water heater.
**UTILITIES:** Plumbing, wiring, and heat.
**ESTIMATED CAPACITY:** Up to 2,500 units per year.
**PRICE RANGE:** $5,000 to $8,000.

JOHN A. JOHNSON & SONS, Inc. will draw on 50 years' building experience in producing the homes shown at the left.
Defoe Shipbuilding Company,
Bay City, Mich.

AREA SERVED: 250 miles radius of plant.
DISTRIBUTION: Authorized dealers.
BASIC UNIT: Living room, kitchen, 2 bedrooms, both, 24' x 32' overall dimension.
TYPE OF CONSTRUCTION: Plywood sections, room size.
EQUIPMENT AND EXTRAS: None.
UTILITIES: Foundation, plumbing, wiring and heat.
ESTIMATED CAPACITY: Up to 8,000 units per year.
PRICE RANGE: Approximately $6,000 and up.

Green Lumber Company,
Laurel, Miss.

AREA SERVED: Southern states.
DISTRIBUTION: Authorized dealers.
BASIC UNIT: Living room, kitchen, 2 bedrooms, both, 24' x 32' overall dimension.
TYPE OF CONSTRUCTION: Wood siding exterior; composition board interior.
EQUIPMENT AND EXTRAS: None.
UTILITIES: Foundation, plumbing, wiring and heat.
ESTIMATED CAPACITY: Up to 8,000 units per year.
PRICE RANGE: $5,850 to $6,500.

Green's Ready-Built Homes,
Rockford, Ill.

AREA SERVED: 300 mile radius of plant.
DISTRIBUTION: Authorized dealers.
BASIC UNIT: Living room, dining room, kitchen, 2 bedrooms, both, utility room; 19'6" x 58'6" overall dimension.
TYPE OF CONSTRUCTION: Stressed skin plywood panels. 3'3" x 8'.

LE TOURNEAU COMPANY’S Tournalayer will produce a concrete house a day.
ECONOMY PORTABLE HOUSING CO. unit loaded on truck.

EQUIPMENT AND EXTRAS: Hot water heater, range, refrigerator, laundry, built-in furniture and fireplace.
UTILITIES: Foundation, plumbing, wiring and radiant heat.
ESTIMATED CAPACITY: Up to 2,000 units per year.
PRICE RANGE: $6,500 to $10,000.

Gunnison Homes, Inc., New Albany, Ind.
AREA SERVED: Approximately 200 mile radius of plant.
DISTRIBUTION: Authorized dealers.
BASIC UNIT: Living room, dining room, kitchen, 2 bedrooms, bath, utility room, 24' x 28' overall dimension.
TYPE OF CONSTRUCTION: Stressed skin plywood panels, 4' x 4'.
EQUIPMENT AND EXTRAS: Hot water heater, range, refrigerator, steel window frames.
UTILITIES: Foundation, plumbing, wiring and heat.
ESTIMATED CAPACITY: Up to 7,500 units per year.
PRICE RANGE: $3,500 to $10,000.

Harnischfeger Corp., Port Washington, Wis.
AREA SERVED: 250 mile radius of plant.
DISTRIBUTION: Dealers and contractors.
BASIC UNIT: Living room, kitchen, 2 bedrooms, bath, 34'3" x 24'3" overall dimension.
TYPE OF CONSTRUCTION: Plywood panels.
EQUIPMENT AND EXTRAS: None.
UTILITIES: None.
ESTIMATED CAPACITY: Up to 2,600 units per year.
PRICE RANGE: $4,000 to $8,000.

Homeola Corporation, Chicago 6, Ill.
AREA SERVED: Entire United States.
DISTRIBUTION: Lumber dealers.
BASIC UNIT: Living room, kitchen-dinette, 2 bedrooms, bath, 20' x 24' overall dimension.
TYPE OF CONSTRUCTION: Plywood panels, 4' x 4'; steel framing.
EQUIPMENT AND EXTRAS: Hot water heater.
UTILITIES: Foundation, plumbing, wiring and heat.
ESTIMATED CAPACITY: Up to 12,000 units per year.
PRICE RANGE: $3,500 to $15,000.

Houston Ready-Cut House Co., Houston, Tex.
AREA SERVED: 350 mile radius of plant.
DISTRIBUTION: Lumber dealers.
BASIC UNIT: Living room, kitchen, 2 bedrooms, bath, 34'3" x 24'3" overall dimension.
TYPE OF CONSTRUCTION: Plywood panels.
EQUIPMENT AND EXTRAS: Hot water heater.
UTILITIES: Foundation, plumbing, wiring and heat.
ESTIMATED CAPACITY: Up to 4,000 units per year.
PRICE RANGE: $4,750 to $6,000.

John A. Johnson & Sons Brooklyn 32, N. Y.
AREA SERVED: Ga., N. J., S. C., and Tenn.
DISTRIBUTION: Builders.
BASIC UNIT: Living room, kitchen-dinette, 2 bedrooms, bath, utility room, porch, 31' x 20' overall dimension.
TYPE OF CONSTRUCTION: Wood siding exterior; composition board interior.
EQUIPMENT AND EXTRAS: Hot water heater and range.
UTILITIES: Foundation, plumbing, wiring and heat.
ESTIMATED CAPACITY: Up to 10,000 units per year.
PRICE RANGE: $5,500 to $15,000.

National Homes Corporation, Lafayette, Ind.
AREA SERVED: 200 mile radius of plant.
DISTRIBUTION: Authorized dealers (builders and realtors).
BASIC UNIT: Living room, kitchen-dinette, 2 bedrooms, bath, basement, 24'12" x 28'12" overall dimension.
TYPE OF CONSTRUCTION: Plywood panels, wall size; steel bar joists.
EQUIPMENT AND EXTRAS: Hot water heater and aluminum window frames.
UTILITIES: Basement, plumbing, wiring and heat.
ESTIMATED CAPACITY: Up to 4,000 units per year.
PRICE RANGE: $4,750 to $6,000.

Pease Woodwork Company, Inc., Cincinnati 23, Ohio.
AREA SERVED: 300 mile radius of plant.
PHMI Provides Leadership, Coordinates Activities of Prefabricators

Organization pioneers in prefabricated home field and promotes welfare of growing industry

Dawson W. Winn

Harry H. Steidle

YOUNG in years but vigorous in stature, the Prefabricated Home Manufacturers Institute is playing a vital role in shaping the destiny of the prefabricated home building industry. Established in 1943 with 12 charter members—its membership now numbers nearly 50 of the leading home manufacturers in the United States and Canada—it has become the focal point of the industry's united activities and the initiation of association programs.

Dawson W. Winn, PHMI president, is vice-president of Green Lumber Co., Laurel, Miss. Other officers are: Austin Drewry, secretary of Gunnison Homes, Inc., New Albany, Ind., vice-president; and John Pease, Pease Woodwork Co., Cincinnati, O., secretary-treasurer.

Directors, in addition to Mr. Winn, are: James R. Price, National Homes Corp. of Indiana, Lafayette, Ind., and W. Hamilton Crawford, Crawford Co., Baton Rouge, La.

The Prefabricated Home Manufacturers Institute, under the direction of Harry H. Steidle, manager, maintains its headquarters in the Shoreham Building, Washington 5, D. C. Mr. Steidle has been with the organization since its establishment and is well-known in home building circles outside the prefabrication industry.

Mr. Winn, who joined Green Lumber Co. in 1909, has been in charge of prefabricated housing activities for the company since 1933 when it began the production of CCC camps and similar buildings. During the war it prefabricated some 10,000 military structures and residences for war workers, receiving the Army-Navy "E" award for this accomplishment. Mr. Winn was one of the 12 charter members instrumental in organizing the institute and served as vice-president until his recent election as president, succeeding James Pease of Cincinnati.

At its annual meeting recently PHMI adopted a resolution endorsing the so-called Wyatt Veteran's Emergency Housing Program. It pledged the institute's fullest cooperation towards the fulfillment of the program, which sets up as a goal the production of 850,000 permanent prefabricated homes in the next two years. However, provision providing a guaranteed market for prefabricated housing was opposed as unnecessary.

The meeting also proposed that, because of the critical shortage of building materials, the supplies available for prefabrication should be directed into those plants which: (1) Have an established organization experienced in the prefabrication of homes; (2) Have a product of sound design and permanent type meeting the requirements of Commercial Standard, CS 125-45, for Prefabricated Homes; and (3) Have a sound program for the distribution and erection of prefabricated homes through dealers or other distribution channels.

In his annual report, Mr. Steidle said that the past year had been an eventful one in which factory-built homes had emerged from the "haze and doubt of public cynicism" to full stature as a new and promising industry. "We have seen an attitude of hostility toward prefabricated homes changed to one of passing interest and later to enthusiastic support," he asserted. "Prefabricators, who two short years ago had to fight and connive for a small portion of war housing, have been called upon to provide 850,000 permanent units by 1947."

HOUSTON READY-CUT HOUSE CO. unit.
REDESIGNED lines of stock architectural woodwork announced by Curtis Companies, Incorporated, Clinton, Iowa, offer new economies to retail lumber dealers and builders without sacrifice of the architectural beauty that has characterized Curtis products for 80 years. Most of the new designs, like many that have preceded them, are the work of nationally known architects who were commissioned by Curtis to produce new styles in stock woodwork, from which items can be chosen to harmonize with any style of home architecture. An important feature of the entrance line is dimensional flexibility in some of the larger entrances, and interchangeability of parts in the smaller, low-cost designs, which are ideal for the G.I. house and other medium priced building. These features have been incorporated to permit smaller inventories for dealers and at the same time give them a wider variety of treatments to offer builders and architects, as well as to reduce the number of different parts the contractor has to buy, and still provide each of his customers with individual woodwork items of distinction and of high architectural merit.

This presentation deals with entrances, stairways, and mantels, and illustrates the manner in which adjustability and interchangeability features are applied to these new Curtis products. The entrance illustrated at the left is typical of many of the finer entrance designs in the higher price brackets. The complete frame con-

PEDIMENT type entrance. Frame and door designed by George W. Stoddard, architect.

THIS entrance has gracefully curved pilasters. Frame designed by George W. Stoddard.

STATELY, classical entrance. The frame was designed by Willis Irwin, architect.

CURVED pediment entrance is outstanding. Frame was designed by Cameron Clark.
Company Redesigns Complete Line

Adjustability to opening sizes and interchangeability of parts add economies in ordering and handling and variety in design to new lines created by nationally-known architects for Curtis Companies Incorporated.

The entrance consists of cap, pilasters, casings, architraves, jambs, plain or threshold sill and apron. The sill is oak, and all other parts are W. P. Pine. All pine parts are treated with a toxic water-repellent preservative. The frame is shipped with cap set up, pilasters and back casings assembled, and pilaster caps and bases loose to facilitate height adjustments. Jambs, sill, apron and adjustable architraves are shipped loose. The frame is adjustable to door openings from 2-8 to 3-4 wide and 6-6 to 7-0 high. Adjusting the entrance width within the allowable variation is accomplished by means of the architrave. The adjustment is made between the inside face of the pilasters and the door opening by setting with more or less reveal. The overall width and height of the frame remain constant for the particular series of frames. The jambs are identical for all designs. To adjust the height within the allowable limits the side jambs are recut to 6-6 or any other height between 6-6 and 7-0. Head jambs are cut to length and dadoed for the door width specified.

The entrances for small homes are constructed from standard parts and do not have the adjustable architrave, since there is definite standardization of door sizes for small homes. These frames, consisting of interchangeable parts, are made for doors 3-0 by 6-8 only. A wide variety of designs from standard parts is thus made available by reversing the face of the pilasters, and by applying various plaques and ornaments to the pilasters and head casings.

For brick veneer or masonry walls, subjambs and a screen door rabbit mold are furnished. The mold, plowed to receive the tongue on the inside edge of the subjamb,
BEAUTIFUL stairs have nice proportions, finely formed parts, graceful lines. These features are combined in the stairway above.

GRACEFUL Colonial adaptation, suitable for the short run of open type of stairway often found in traditional designs of small houses.

This big new Curtis Woodwork style book offers a wide selection of stock woodwork to fit any architectural treatment. One hundred pages of beautiful photographs—many in full color—make a unique selling aid for builders, dealers and architects.

is to be nailed to the edge of the standard door jamb with a \( \frac{3}{8} \) inch reveal.

There are twenty-six different entrances in the present Curtis line—and twenty-five are new styles and offered for the first time in the 1946 Curtis line. Every price bracket is covered and every architectural style of home may be appropriately fitted with one of these doorways.

The new Curtis mantels are equipped with an adjustable architrave which surrounds the wood opening. The architrave is supplied with the mantel, and by omitting it or reducing its width, the size of the wood opening is varied. All mantels except one are made to accommodate an extension shelf and side returns. They are carton packed to insure clean, unmarred delivery to the job.

There are fifteen mantel designs in the present Curtis line—twelve of these are new designs by outstanding architects—and three are carried over from the old line because of their wide popularity. The price range is wide so even the lowest budget can be met—and there are styles to suit everyone's taste.

Since 1920, new Curtis designs have been created by architects of high standing and again the new items were selected from designs prepared by well-known architects. These men are: Cameron Clark of New York City, Willis Irving of Augusta, Ga., H. Roy Kelley of Los Angeles, Calif., and George W. Stoddard of Seattle, Wash. Other designs are the work of the late Dwight James Baum, Frederick L. Ackerman and Russell F. Whitehead. Thus, all sections of the country are represented in the architectural expression embodied in these new creations now being introduced by Curtis.

What is perhaps the most effective sales aid ever offered to dealers and builders by a woodwork manufacturer is in the form of a big new style book by Curtis. Approximately 15 by 19 inches in size, in stiff cloth-bound board covers of blue, the Style Book contains 100 pages of natural color and sepia photographs of entrances, kitchens, mantels, stairways trim, cabinets, windows, doors, and other woodwork. The book is for the use of Curtis dealers and is furnished on a lease basis at a fixed fee per book. It may be leased or borrowed through the local Curtis dealer by architects, contractors, builders, schools, and prospective home builders.

This big new Curtis style book is really a "Show Room" of new ideas for home builders. It not only provides new woodwork ideas, but also color selections and decorative schemes which the prospective builder will welcome. A preview of this book at builder's shows aroused the enthusiastic acclaim of builders, dealers, and architects. It will soon be featured in the showrooms and displays of Curtis dealers from Coast to Coast.

The new line of Curtis woodwork is also beautifully displayed in a new dealer's and builder's catalog. This book is 8 1/2 x 11 inches, with cover in four colors, and contains nearly 200 pages. It is thumb indexed and features large illustrations—an excellent selling aid.
OUR Colonial houses differ decidedly from those of the eighteenth century, reflecting the changes incident to our modern living. This mantel follows that trend, and the bowed fascia accentuates its simple charm. Designed by George W. Stoddard.

THIS MANTEL reflects the modernized Georgian period. Bowed fascia board and simple ornaments make this mantle a lovely choice for modern homes. Designed by George W. Stoddard.

SUGGESTED by an English example of Early Nineteenth Century, this design has been given a modern character, adaptable to today's interiors. Designed by Dwight James Baum, F. A. I. A.
Comfort and Utility
Packed with Appeal

This two-story house designed in the traditional manner by Norman R. Johnson, St. Paul architect, suggests cheerful living

Whether it be placed on a narrow city lot, or with the enhancing influence of suburban acreage, this splendid example of traditional design, with its modern influence, is equally at home because of the adaptability of this house to any site. A view of the exterior is framed by the large bay window in the living room, where a seeking of the out-of-doors as a part of the indoors has been completely fulfilled.

Wide siding with thick butts further emphasizes the horizontal lines of the house, the exception being the very interesting arrangement of plywood and vertical battens that provides an eye arresting feature for the entrance detail.

Large, comfortable rooms with a compact arrangement prevail throughout both floors. Space for dining and preparation of food with cupboards for storage is unusually generous. Basement is completely excavated.
Modern in Expression, Modest in Size

This house of the month provides a clean-cut and conservative approach to the contemporary trend in residential design. It is a sincere attempt to arrive at a solution that is fresh and modern in feeling, yet economical to build and easy to maintain.

WALTER T. ANICKA, Ann Arbor, Mich., architect, has based his theory of small house design on the assumption that the majority of the buying public is seeking something different from the hackneyed prewar "Colonial," but it is not yet ready to accept the severely modern designs which have been receiving so much publicity of late. Referring to his designs he states, "I have tried to incorporate the spaciousness and flexibility of the modern, without resorting to spectacular and costly individuality. I like to refer to it as a transitional design; a compromise between the conventionality of the past and some of the radicalism of the present."

A sprayed white waterproof finish applied to the surface of 8" cinder blocks is used for all exterior walls, except the gable ends where vertical siding is applied. Roof is of black asphalt shingles. The first floor utility room solves the problem of a crowded service entrance, also serving as a laundry. A feeling of spaciousness is obtained by planning the main rooms as one large flexible unit. Doors have been left off garage for sake of economy.
REPLICA of 17th Century farmhouse, built in Glenburnie, Va.

Early Virginia Farmhouse

ENTRANCE HALL, looking toward living room, has stone floor; winding stairway and woodwork are of Longleaf Heart pine.
Andrew L. Kidwell, Richmond architect and builder, re-creates pre-Revolutionary beauty in a home which has all modern improvements

With more than fourteen years of successful building experience, Andrew L. Kidwell has definite ideas on the sort of home Richmond, Va., citizens will want to build when restrictions permit. He is laying his plans for them now. Meanwhile, for its over-all beauty and for individual items in its construction, the replica he has done in Glenburnie, of a Virginia farmhouse of the period 1670-1700, has interest for builders all over the country.

All outside woodwork of the house is of heart cypress, creosote stained, and with antique finish. Special wrought-iron nails are used on the outside, and the roof is of reinforced concrete shingles—each made by hand and no two alike—to simulate the moss-covered shingles that were used during that period. Huge T-shaped chimneys of the Tudor type are at either end of the house.

All first floor rooms, except the bedroom and kitchen, are paneled with old Longleaf Heart pine, finished in a natural antique. Iron nails are used, with wrought iron hinges and hardware. Plastered walls and woodwork are painted.

First-story floors and the upstairs hall are random-width oak, both nailed and screwed to the sub-flooring, with screws countersunk and false walnut pegs inserted. It took 4800 holes, and 4800 one and three-quarter inch wood screws and walnut pegs, glued in, to complete the job.

The artistic has not profited at the expense of the practical in the design and construction of this house; modern advances leading to greater and less costly livability, such as complete four-wall and ceiling insulation, are included. The foundation is of brick, with concrete footings. Joists are creosoted, and closely spaced, while all sheathing, sub-flooring and roofing are 13/16-inch tongue and groove. There is an individual radio outlet, with built-in aerial for short-wave reception.

A modern circulating type hot-water heating system, oil-fired and with winter hook-ups, copper pipes and concealed radiators, provides efficient heat.

Den, at right, is completely paneled in pine, and has an attractive Dutch door to outside.

DINING ROOM, above. has pine-paneled fireplace wall. Door at right leads to bedroom.

ABOVE. living room with fireplace. Through doorway can be seen gun cabinet in den.
These homes, like thousands of others throughout the nation, would have been ready for March occupancy if a steady flow of materials and equipment had been available to the builder.
TWO OF the features of this plan, welcome to all, are the bath and bedroom located on the first floor to save steps for the housewife.

Plans Compact Suburban Homes

TYPICAL of the activities of dozens of builders in Chicago and other metropolitan areas is that of William C. McLennan & Co., builders, located on the northwest side of the Windy City since 1912. Several months ago McLennan began construction of thirteen houses, occupying more than a full block on one side of a street in Park Ridge, Chicago suburb. Four are two-story houses, and the remaining nine include five Cape Cod houses and four bungalows.

The development is located within two blocks of a small shopping area, has a church on one corner, and is conveniently situated for bus or railroad transportation to the Chicago Loop. All the houses are designed with large rooms and minimum hallways. Exteriors are brick, and variations of treatment avoid similarity.

THIS CAPE Cod has plenty of closet space, all of good size and easily accessible. The rooms are large and arranged to good advantage.
Accent on Tradition

House designed by Norman R. Johnson, St. Paul architect, provides the ultimate in comfort and pride of ownership.

The above house located in the Highland Section of St. Paul has for its exterior treatment an interesting combination of vertical battens and wide horizontal siding painted white. The large bay window in the front wall is the dominant feature of the house, having been given precedence over the entrance detail. Plan is compact and livable, with ample closet space.
House with Modern Accent

Walter T. Anicka, Ann Arbor, Mich., architect, provides flexibility in compact plan for use on a narrow lot.

This house is designed for cinder block construction, with white waterproof exterior finish and black asphalt shingle roof. Interior walls are furred and plastered. To create a feeling of spaciousness the living room, dining room and reception hall have been planned as one large, flexible unit, while rooms may be separated from each other by furniture arrangement. A total of seven closets provide ample storage space. Kitchen is streamlined, with linoleum-topped cabinets arranged along walls. A built-in bench for kitchen eating is an essential requirement in a small house. The garage may be omitted for present-day economy.
PORTABLE POWER FOR SPEED

To deliver 1,000,000 homes a year, builders must utilize all types of power equipment

SPEED is of importance in the building industry today, and builders who are anxious to meet the heavy volume production demands of 1,000,000 homes a year are turning more and more to power machinery to help reduce costly time and manpower losses and cut lumber waste. An important advance in this direction is the lightweight portable saw recently added to the Monarch Uni-Point line of woodworking machinery made by the American Saw Mill Machinery Co., Hackettstown, N.J.

Made principally of light, non-rusting magnesium, the unit, complete with carrying frame and 1½ h.p. electric motor, weighs approximately 200 pounds and can be carried readily by two men. It is so compact that it is easily carried through a 30-inch doorway, yet it has a 3 by 16-inch crosscut and 20½-inch wide ripping capacity, and will handle all the different kinds of work that heavy stationary radial saws will do. It can be carried and plugged in anywhere.

Chief among the features of the portable saw is the Uni-Point cutting principle calling for fewer adjustments. Other features include the added safety, speed and accuracy made possible by the saw’s heat-treated, hardened-steel safety arm; a specially designed saw guard with a telescoping undercarriage to keep all the teeth covered all the time, with a kick-back preventer for ripping which is positive and cannot slip; the “contour design” of the saw which means rounded corners and edges and eliminated projections.

A great deal of time is saved in operation because, with the Uni-Point principle, the blade may be left running while crosscut angles are changed. Saw and material need not be moved to a different point on the table to make all the accompanying adjustments. Additional time is also saved when changing crosscut angles, since it is not necessary to raise or lower the blade during this operation. When the Monarch portable’s blade is once properly set, it is correctly positioned.
Now Fashion says that dining rooms must go,
And styles them "mid-Victorian" today.
In some far corner, where it will not show,
There is a drop-leaf table where one may
Be hurried through the meal, and whisked away.

Oh, shades of all the generous, bounteous past,
Of fringed red tablecloths and willowware,
Of prismatic ruby hanging lamps that cast
Their warming glow on gray and golden hair
Bowed low to bless a steaming meal with prayer.

Oh, shades of children with their books outspread
To chant their sums and spelling in the ear
Of conscientious parents! Folk were fed,
Both soul and body, in that room. Its cheer
Was something to be held forever dear.

Be careful, builder, in your zeal for art,
Lest you design a house without a heart!

For Bounteous Living

Habits of the American public may change, but the art of
dining remains as a cherished tradition of good living.
Preserve the family meeting place by planning ample
dining space in tomorrow's homes.
A NEW complete home improvement service based on the principle of one responsibility for home planning, construction, equipment and financing is the purpose and goal of the Complete Home Improvement & Equipment Co., Buffalo, N. Y., according to its president, Henry S. Henschel.

Located a short distance from the heart of the downtown business district on a main thoroughfare, the firm is housed in an attractive and unique merchandising establishment. The building, formerly a residence, has been converted into an ultra-modern unit containing display rooms, consultation rooms, model kitchens and laundry, and private offices.

A highlight of the new construction is the circular display window at one corner of the building, facing a street intersection. The semi-circle of glass has a copper trough just inside the glass, recessed below the display floor level, filled with flowers and ferns. Immediately inside this is a footlight trough which serves to light the merchandise from below, supplementing the customary overhead window lights. Inside this is a seven-foot circular platform, turning at the rate of four revolutions per minute, on which can be mounted, for example, a range and refrigerator, back to back.

Facing the main thoroughfare is an all-glass show window having a seventeen-foot front and ten-foot depth. As the roof of this window is cantilevered out from the old building to the street line, there are no visible supports. This window will be used to feature contrasting displays, such as an old fashioned kitchen or bathroom, and a modern installation complete with the newest equipment and furnishings.

All rooms are lighted by flush fixtures with continuous fluorescent tubes concealed above diffusing glass in the ceiling. Great attention has been given to attractive color harmony, coordinating the floors, walls, ceilings, fixtures and accessories. Off the reception room is a projection room for still and motion pictures. "The twenty-five seats are to be used for training the salesmen and showing groups of prospective customers the latest films supplied by nationally ad-
Plans Home Merchandising Service

Converts well-located residential structure into uniquely planned, modern, attractive headquarters

MAXIMUM merchandising space without confusion was the object of these layouts.

or she may want in the line of home improvement and equipment.

"Finally, we maintain our own warehouse and mill in an industrial section of the city. There we store carload lots of home equipment which are rechecked, delivered and installed by specially trained crews. We also have power wood working and metal working tools for building custom jobs and fitting standard units into unusual situations. Thus, these coupled with our other facilities will enable us to give the public a complete home improvement and equipment service."

EFFECTIVE USE of the available wall space is shown by these pictures of the well-lighted, attractively furnished display rooms.
California Motel Offers Comfort to Travelers

CLOSE-UP VIEW of one unit of Monrovia, Calif. motel showing accessibility of garages to entrances.

American Builder, June 1946.

AT LEFT is shown a plan of typical motel unit, consisting of two bedrooms, with dressing rooms and baths, and adjoining garages with upward-acting doors. Bedrooms are of good size, and a small dressing room with dressing table and built-in chest of drawers leads into roomy bathroom. Owner's four-room apartment, at far left, adjoins office.
On Route 66 at Monrovia, Calif., about twenty miles from downtown Los Angeles is a new motel which is destined to be filled to capacity for many years to come.

Possessing an inviting exterior, it attracts motorists in search of lodgings. The interiors live up to the expectations raised in the minds of travelers who stop to inspect the development. The accommodations are spacious and comfortable, almost luxurious. They are designed to be living quarters that will cause lodgers to return, and to recommend the motel to their friends.

The motel consists of twelve units—six double and six single—plus a four-room apartment for the owner. The frontage is 100 feet and is valued at approximately $150 per foot. The property runs back 500 feet from the road and the owner may later erect housekeeping cottages at the rear of the motel.

Each independent unit consists of a large bedroom, a dressing room with built-in drawers, mirrors, etc., and a bathroom. The bedrooms are furnished in maple. Each unit has a chest of drawers, an easy chair, a straight-back chair, a night table and a dressing table for the ladies. The beds are provided with reading lamps and covered with bright colored spreads. The bedroom is carpeted wall to wall; attractive draperies decorate the windows. Every effort is made to create a home atmosphere.

Day and Night Panelray infra-red gas heaters built into the walls furnish instantaneous heat on cold mornings because they are designed on the principle of heating the body rather than the air in the room.

Some motel bathrooms are so small that it is impossible to turn around in them. The bathrooms in this motel, however, are roomy and have medicine cabinets with good mirrors over the lavatories. The feature, however, is the luxurious shower stall with colored tiles up six feet on the walls and on the floors. Each unit has tiles of different colors. Glass doors further embellish these attractive shower stalls. Instantaneous hot water is supplied by four gas water heaters.

From the owner's point of view, one of the most attractive features of this motel is the four-room apartment for himself and family, consisting of large living room, two bedrooms, kitchen, bath and adjoining office.

The motel was built by Adolph Johnson, 68 Pomelo Road, Arcadia, Calif., and the owner is Kenneth Robinson who paid a reported purchase price of $80,000, including about $10,000 worth of furniture. It is estimated that the property will bring in about $2,000 per month at capacity levels.
BURLINGAME, California, takes its main street seriously. The business people of that thriving suburban center just south of San Francisco believe that the best way to develop new business for their shopping area and retain old business from their citizens is to make the shopping district better looking, more appealing and better in every sense of the word than the several competitive communities close at hand.

With this in mind the active Chamber of Commerce in Burlingame, under the capable direction of its manager, Granville Browning, is now in the process of rebuilding the city's business center both physically and spiritually. Frank E. Cox, the instigator of such remodeling crusades throughout the Pacific Coast area, inaugurated this work as an official of the California State Department of Education and is now carrying it on in his present position as Seattle district manager of The Kawneer Co.

Cox, Browning and their associates believed that, "to lift the face of Main Street," it was necessary to do a good many more things than just consider the physical improvements to the store fronts on that main street. So, with the full cooperation of the entire Chamber's personnel and Board of Directors, together with the Merchant's Committee, a plan was developed which has come to be referred to as the Burlingame Plan.

In keeping with good strategy for the accomplishment of any project, definite objectives for the plan were determined. These were as follows, some being of the long range variety and some for immediate action:

**First,** the improvement of the office of the Chamber of Commerce. This was accomplished without delay and included some beautiful hand-painted murals of local scenes to brighten the walls of the Chamber office. This was good because it sold visitors on the community's beauty.

**Second,** an ordinance was sponsored and enacted by the City Council eliminating overhanging signs from the main street. The owners were given a year to remove these signs. Some of them did so at once. This in itself made a vast improvement in the appearance of Burlingame Avenue. No longer do neighbors compete with each other in size and color of overhanging signs. The signs are going back against the building where they make a better appearance and are certainly a factor on the side of safety.

**Third,** a course of six evening meetings for the local merchants was arranged to bring them up to date in their thinking and planning for the problems they face today. Such a series of meetings is known as a "Business Planning Institute" and is being promoted throughout the state by the California State Department of Education through its Bureau of Business Education with the cooperation of the local public school service associations as follows:

1. Educational Service Center of San Mateo County
2. Pacifica Elementary School District
3. San Mateo Union School District
4. San Bruno School District
5. South San Francisco School District
6. Redwood City School District
7. Millbrae School District

Such meetings can be sponsored by any community to demonstrate the need for the community's business leaders to face today's business problems and economic factors.

The meetings will be held in the main room of the Chamber of Commerce building from 7:30 to 9:30 on various dates as noted below:

- [Date 1] Presentation on community planning
- [Date 2] Discussion on zoning restrictions
- [Date 3] Session on land use and property taxes
- [Date 4] Panel discussion on business finance
- [Date 5] Workshop on marketing strategies
- [Date 6] Roundtable on community development

MODERN FRONT of uniform style with each unit designed for sales appeal. BUILDINGS at left looked like this before start of modernization, each different.
Points Way to Business Remodeling

BLOCK restyling as proposed by the campaign committee produced effect at right.

schools and business, trade, labor, service and civic organizations and associations. Its major objectives are as follows:

1. To aid businessmen to plan store and building improvements.
2. To provide employment for returning veterans and for ex-war workers.
3. To suggest plans for more efficient executive control and supervision.
4. To assist management in selecting and improving personnel through planned training.
5. To increase the efficiency of distribution, facilitate the flow of merchandise and services, thus lowering distribution costs.
6. To help stabilize the state's economy.
7. To assist in raising the American standard of living, increasing consumer buying power, stimulating demand, and thus absorbing the additional supplies that must be manufactured in order to provide needed employment.

The program of the Institute is state-wide. The series consists of six meetings to be held once each week for six weeks. Each meeting is two hours long and covers two or more subjects of interest to retailers.

Each subject is covered by an authority who can qualify as a specialist in his field. These specialists will be practical people selected from business, professions and industry because of their ability, training and experience.

The Business Planning Institute for San Mateo County was conducted with great success. The local merchants, together with hundreds from neighboring cities, crowded the auditorium of the Burlingame High School for the Institute sessions. That was last fall. Since then the ideas advanced there have been and are being translated into brick, tile and glass in the ways indicated by the accompanying photographs and architects' sketches.

The building industry was anxious to cooperate in this store modernizing campaign. It took particular interest in the subjects which were discussed during the period of the six

(Continued to page 120)
How to Cut
Freehand Mitre

ERWIN INGLE, Bondurant, Iowa, says: “This is a short cut I believe all carpenters should know. Set the molding on edge on your bench or saw horse, making sure that the face of it is in the vertical plane (or whatever position desired). Now set your saw to the edge of the molding in position to saw, and at approximately a 45 degree angle. Notice the reflection that the molding makes on the side of the saw. When the reflection forms a perfect square with the molding, you are then in a position to cut a nice 45 degree mitre.”

How to Cut Sheet Metal

B. D. JOHNSON, Corpus Christi, Texas, a returned veteran, submits this improvised method of cutting sheet metal with nothing more than an inverted wood saw. He states that this idea was a life saver where there were no fancy devices such as shears.

How to Build a Soot Flue in Fireplace

EDWARD H. PETERS, East Chicago, Ind., offers this improved fireplace design, which provides for a 4" x 4" funnel shaped flue to catch and deposit soot into the ash pit. Note the curvature in the back of the fireplace. This tends to deflect heat out into the room to a greater extent than the ordinary flat wall.

How to Form Arches Out of Sheetrock

R. W. FLESSA, Ackley, Iowa, attempted an experiment with sheetrock which has proved so successful that he considers it worth submitting as an idea. The arch at the left was scored on the backside, closest to the wood form. A heavy cement coat was applied to the face of arch which then was sanded. The arch at the right is a half round type. Here the face side of the sheetrock was scored and broken on 1 1/4" centers. One tape was used for each two breaks. The surface was then cemented and sanded.

How to Make a Bench Vise

E. C. CANNON, Anderson, Ind., in submitting this idea sets forth the following instructions:
1—Use a piece of hard grained wood.
2—Lay out as shown, using 30 degree bevel on one line.
3—Saw apart.
4—Lay 3 pieces on bench with 1/4" between part A & B.
5—Screw A & C to bench.
6—Part B can then slide in or out so as to form a hold on the piece to be held. A slight tap on the end of part B will either tighten or release the vise action.
How to Build a Dog House

OSCAR WEST, Bryan, Ohio, in submitting the following, states: "When building a dog house make a floor of boards nailed to battens which extend beyond the floor. Do not fasten the floor to the walls. Build the walls to fit outside the floor and to extend to the bottom edge of the floor. This will exclude wind and rain. When necessary to clean the house, lift the upper portion off from the floor and you have the two portions easily accessible for cleaning."

How to Build Cabinet for Kitchen Sink

JOHN MENKVELD, Grand Rapids, Mich., in submitting this idea says: "I have been building cabinets like this for a long time and the customers are well pleased. I have eliminated the metal ventilators on the face of the sink cabinet and have recessed the doors directly under the sink 3" in from the face. On the underside of this recess 1" holes are bored which provide sufficient ventilation and are entirely out of sight. The recess also provides for knee space under sink."

How to Make a Preacher

CECIL J. WALTERS, Newton, Kans., says, "When cutting lap siding to fit against corner boards, door or window casings, a good joint can be achieved with the use of a 'Preacher' which is simple to make and easy to use. "Hold the siding board in position, place the 'preacher' flat on the piece of siding and snug against the corner board or casing. Mark and cut as shown in the diagram and the fit will be perfect."

How to Make a Lock Marker

J. G. CALDWELL, San Mateo, Calif., in submitting this idea says: "To make this template measure brace to be used at point (C). Square a line on a piece of 1" x 4", 3'-1" from end. Mark off on this line the dimension 11/16", 13/4", and 23/8". Bore a 3/8" hole at 13/4" in from edge on 1" x 4". Nail 3/8" x 13/8" x 6" piece of door stop on edge of 1" x 4". To use lock marker wedge the door in open position and place same on edge of door. Drive a nail through lock marker on 11/16" mark (center line of door). Then place marker on stile of door and mark 23/8" (this is backset on locks I use.) Place 1" x 4" in position (C) and bore holes."

How to Make a Nail Puller

WM. E. MOORE, Evanston, Ill., states that a convenient device can be made out of 3/4" x 1" flat iron bar stock. This device can be used as a nail puller when wrecking forms or when pulling nails out of asbestos shingles that are being removed from roof or siding in remodeling jobs.
How to Make a Joist Scale

J. G. CALDWELL, San Mateo, Calif., in submitting this idea states: "When making out a lumber list I use this scale for counting the number of floor joists required. "This scale is made out of an ordinary yardstick from which I plane off all the lettering on one side. Then I cut down its length to 24" and mark off in inches with the mark each inch space into thirds. Number each division as shown in the drawing above. "When this scale is used on a floor plan drawn to ¼" equals 1'-0" it shows at once how many joists are needed for floor and ceiling, also the number of sheets of wallboard that will be required for the walls. It also indicates how many studs to cut for any wall."

How to Build a Clothes Catcher

C. D. ROBB, Frankfort, Ohio, in submitting this detail states that it is an arrangement that is seldom found on builders' plans but should be included. The letters placed in the dimension lines indicate that these are to be determined on the job to conform to individual needs.

$5 for an Idea

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

Construction Details for Basement Stairs

By R. J. Alexander

THE building industry needs apprentices—young men who are willing to learn the building trades. Old timers should encourage these young men; help them to become experienced and qualified carpenters, masons, etc. American Builder Detail Plates will endeavor to give the young carpenter practical suggestions on building construction details and "how-to-do-it" ideas.

A simple stair for a beginner to build is one to the basement, having a straight run. The first step in laying out the stair is to determine the number of risers required.

An old and workable rule for the proportion of rise to run says that the sum of two rise cuts and one run cut on the rough horse should equal 24 inches. For example: two 7 3/4" risers and one 9" run will equal 24".

Each stairway will vary, the rise however should be from 7 3/4" to 8". To determine the number of risers required a trial riser of 7 3/4" is used. Dividing the total rise, 8 3/4" by 7 3/4" we find that 13 risers will probably be required. Then by dividing the total rise by 13, each of the 13 risers would be 7 17/24".

The sum of the two risers would be 15 5/16" and deducting this from the 24" we find that 8 11/16" or 8 2/3" for the run would make a satisfactory stair.

Two 2" x 10" 12'-0" long will be sufficient for the rough carriages for most basement stairways. Lay out the 13 risers and 12 treads on one of the carriages, fasten the two together and on the edge of the second carriage mark the points where the tread and riser lines meet. This will make the jacks exactly alike.

Three methods of laying out the jacks are shown on the detail. Note that the bottom riser must be cut off the thickness of the tread used, and that the top cut of the carriage should have an extra ¼" to allow for the finish riser.

Accuracy in making the cuts is essential so that the treads will rest firmly on the carriages without twisting and so that the carriage will rest securely on the floor and against the bearing at the upper end. Note that the top and bottom cuts are not at a 45 per cent degree angle to the edge of the carriage, but squared off from tread and riser.
No. D. 21. Layout and Cutting of Stair Stringers

Plan of Stair Well Framing

Floor Joist: 2 x 10
6-10" Double header
Double trimmer joint
6-10" Double header

Note: Fence K made from 1 x 1-1/2 x 18 piece. Slot ends to receive tongue and blade of Steel square. Core holes for bolts with wing nuts and fasten to square.

Diagram of Stair and Floor Opening

12 Treads @ 8 3/4"
22 1/4" Total run

Finish basement wall floor to first floor. 7-7/8" Joint. 1 Joint.

Footings: 2' x 10' Joints.
NEW PRODUCTS
Offered by Manufacturers

HIGH SPEED SAWING MACHINE AB6611
Designed for fast cutting in wood, plastics, composition boards and asbestos cement products, the Zephyr 16 has just been announced by the DoALL Co. It is also applicable to cutting 3/4-inch sheet steel, aluminum, brass, magnesium, etc.

The combinations of controlled saw speed and the hardened tooth buttress blade make very fast cutting possible. The machine can cut arcs, circles or intricate contours, straight line, bevel, angle or compound angle.

TUBULAR LATCH SET AB6603
P. & F. Corbin has introduced a new tubular latch, the lock of which is made for fast and easy installation. Factory-fit dimensions, made to fit the Fir Door Institute specifications, permit time-saving standard premortising by the door manufacturer. A special lubricant is applied to the internal moving parts during assembly. These latches are available in a variety of designs.

ASPHALTED-GYPSUM SHEATHING AB6604
A newly developed asphalted-gypsum, weather-proof core sheathing has been developed by United States Gypsum Co. One man can handle the sheets quickly. Edges are tongue-and-grooved for wind-tight fit and strength and only four nails per stud are needed under wood siding or stucco. It can be cut and fitted to the studs; there is no need to measure and saw it as all the workman does it score and snap the unit to fit.

SCAFFOLDING BRACKET AB6605
Ideally suited for scaffold horses, barricades for streets and highways, tables which can be knocked down, stored and moved from place to place are the brackets designed by Edward B. Brittin. They also find a ready use for minor construction and repair work in institutions, public buildings and other structures where continuous maintenance is necessary. Bracing is unnecessary as the brackets are bolted on through the cross-head with four bolts. All brackets are the same shape, no right or left, and are made of 12 gauge steel bolted on to the cross-head with four 3/4 x 2 1/4-inch bolts.

TAPE FOR DRIPPING PIPES AB6602
A pliable, cork-filled, easy-to-handle tape to prevent cold water pipes from dripping has been introduced by J. W. Mortell Co. The tape forms a snug, leaf-proof, life-long, and gives trouble-free service. The suction inlet is directly in line with the impeller furnishing direct flow suction. There are no angular corners to clog and no restricted internal passages.

AUTOMATIC CENTRIFUGAL PUMP AB6607
Designed to handle any type pumping operation, this pump, manufactured by Barnes Manufacturing Co., increases operating efficiencies. It is self-priming, sealed jacket around pipes, is quickly and easily applied without tools or experience, and completely covers valves, fittings, etc. It is ideal for pipes one inch in diameter and smaller.

ATTIC VENTILATOR AB6601
A low-cost attic ventilator for original construction is the Ventilouvre, manufactured by The Swartwout Co. Its installation requires no wood framing other construction. Designed to fit between two normally-spaced vertical studs, the Louvre is fastened outside the sheathing with nails passing firmly into the studding. The unit is substantially built of one-piece sheet steel stamped frame, with louvers spot-welded inside.

(Continued to page 116)
All over America

—You will find dependable sales and installation service on...

Rô-Way
OVERHEAD TYPE DOORS

See your Classified Telephone Directory or write for name of representative serving your territory.

Write for complete new Catalog of Ro-Way Overhead Type Doors. See our Catalog in Sweet's.

ROWE MANUFACTURING COMPANY
793 HOLTON STREET, GALESBURG, ILLINOIS, U.S.A.
COMBINATION FIREPLACE AND FURNACE

"Hearth-air-place," manufactured by Hearth-Aire Co., is primarily a hi-boy two-story heat exchanger, with fireplace facing living room, set within a fire-proofed recess or metal shell. Air enters at bottom by gravity or blower and discharges out of sides of recess walls, or out of top through ducts to rooms; thus the furnace is between the rooms it heats. One "Hearth-air-place," preferably in the living room, will heat four to six rooms, using coal, oil or gas.

STEEL ROOFING

Triple-protected steel roofing and siding has been announced by Protected Steel Products. The base is corrugated steel with a weather-tested plastic covering and exterior mica coat. This is used for farm and industrial buildings. The sheets are light in weight yet strong and rigid. The large sheets are easily handled and applied at minimum labor cost. Plasteel's coating is impregnated with pure mineral mica for improved appearance and economy.

INSULATING SIDING

A product for exterior use in remodeling and resurfacing homes and other structures has been developed by Insulite. It is made with % inch Insulite gray-lite board as the base, thereby embodying insulating and strength qualities, and will be available in popular colors of red, a white blend in brick designs, and a gray in stone designs.

NEW UPWARD-ACTING DOOR

THIS door is completely assembled when delivered and may be installed in 15 minutes. No further installation of parts is necessary. The total weight of the door and all hardware is approximately 50 pounds. The heavy, full-length side weatherstrips completely seal the opening, and provide rigid closing. This door is available in single and double sizes from the Strand Building Products Company.

METAL WINDOW EQUIPMENT

Complete protection against cold, dampness, dust, dirt and soot is provided by using Dura-Seal metal weatherstrip-sash balance window equipment manufactured by Zegers, Inc. It assures free, easy window operation because the complete runways and parting stops are covered with metal. This smooth operating equipment does away with window rattling, noisy chains, open pulley holes and stretchy sash cords. It eliminates old-style inefficient pulleys, cords, weights and leaky box frames.

ELECTRIC WALL HEATER

Hydro-Aire, Inc., has announced production of an electric wall heater. The unit is enclosed in a heavy steel casing and fits flush with the wall.

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DOUBLE-DUTY DOOR CHIMES

A bracket shelf that is also a door chime has been created by Edwards and Co. Antique white, in carved effect, the shelf serves an ornamental purpose, holding plant, knick-knack or clock. It sounds a two-note melody for the front entrance and a single peal for rear door.

CHECK NUMBERS AND MAIL COUPON FOR INFORMATION

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

NAME . ADDRESS

CITY . STATE

AB6601 AB6602 AB6603 AB6604 AB6605
AB6606 AB6607 AB6608 AB6609 AB6610
AB6611 AB6612 AB6613 AB6614 AB6615
HIP, HIP, HOORAY!

Simply wrap twice around the leg and there you have it. Original, and, to say the least, dependable.

Both are features, as you know, of Dexter-Tubular Locks and Latches, originated by Dexter 23 years ago, and so dependable that they are backed with an unconditional written guarantee. Many Dexter's are in service today that were made 23 years ago; and during all this time most of them have not received so much as a single drop of oil. They are preferred by progressive builders because they install easier, faster, because they assure lifetime satisfaction.

Surely you plan to use DEXTER-TUBULARS for your building — at the dealer in your community — complete information and demonstration.

Catalog No. Type "E" 5-Pin Tumbler Cylinder Lock. No extra charge to key alike in pairs for front, grade and rear doors.

NATIONAL BRASS COMPANY, Mfrs.
Grand Rapids, Michigan
MAKERS OF BUILDERS, CABINET, SCREEN DOOR AND SHELF HARDWARE
Catalogs and HOW-TO-DO-IT INFORMATION

236—COLORFUL KITCHEN CATALOG—now released by Youngstown Kitchens contains plenty of kitchen plans and ideas. A variety of installations in full color provides a lot of information. Special attention is drawn to "before and after" kitchens showing how typical, old-fashioned rooms have been modernized by means of new steel sinks and cabinets. The complete Youngstown line and major specifications are shown.

237—VENTILATED WOOD AWNINGS—is the title of a new brochure issued by National Ventilated Awning Co. The folder contains photos of residential and commercial installations. Included are salient facts concerning the advantages of using wood awnings in construction.

238—GLASS IN THE HOME—is the keynote of a new booklet by Pittsburgh Plate Glass Co. A hundred and one different ways in which glass can be used to make the home more attractive and livable are pictured. Full-color illustrations depict how mirrors, glass block, and structural glass can contribute to gracious living.

239—SCREEN DOOR GRILLES—of hand wrought iron are described and illustrated in a folder by Wooda B. Elliott. Styles available and prices for each are contained in the folder, that also lists the other items available such as porch and balcony panels, house silhouettes, house number markers and others.

240—HYDRAULIC WATERPROOFING—for "after-rain" leaks is covered in a folder issued by The Reardon Co. The brochure deals with waterproofing from the inside, and conditions that can be corrected are floorline cracks, mortar joints and wall cracks. The leaks are plugged up with the waterproofing, which can be applied with brush or trowel.

241—RED CEDAR SHINGLES—in home building are presented in a booklet issued by the Red Cedar Shingle Bureau. Application of shingles to farm buildings and different type homes is illustrated and explained in detail. The booklet contains plans and photos of twelve house designs that can be obtained through the local lumber dealer.

242—FARM AND INDUSTRIAL HOISTS—are described and illustrated in a folder issued by Bennett-Ireland. All the types manufactured are shown and the back page tabulates pulley sizes, loads, speeds, etc. One of the models shown has a typical band-type brake around the outside of the drum flange. This can also be set by a ratchet brake foot pedal. On a single line this hoist can raise between 1000 and 1200 lbs. On a double line it has a capacity of about one ton.

Write for latest descriptive literature and prices, no obligation.

THE AMERICAN FLOOR SURFACING MACHINE CO.
511 So. St. Clair St.
Toledo 3, Ohio
THE WALKER-TURNER RADIAL SAW

does more than pay for itself

"it SPEEDS
the work!"

"it SLASHES
building costs!"

"it MULTIPLIES
profits!"

Here's why:

GEARED MOTOR (patented)—gets the blade right down to the work—deeper cuts with greater applied power.

FULL 21½" RAM TRAVEL—takes care of all types and sizes of cuts.

CLEAR VIEW OF WORK—Ram and head are always in same relative position—no interference to vision.

EASY POSITIVE CONTROL—All position changes, lock and index levers, are smooth and positive.

8 PRECISION BALL BEARINGS IN RAM—The ram *slides* its full length with finger-touch ease. 8 Bearings give firmness and stability. Literature on request.

WALKER-TURNER COMPANY, INC., PLAINFIELD, N. J.
A bonus for buildings!

New

EAGLE Ready-To-Use WHITE LEAD PAINT

The glory of a brilliant white gloss that holds its whiteness can now be given to your buildings. And because of meticulous care in mixing, Eagle Ready-To-Use White Lead Paint possesses an exceptional smoothness that makes it more useful to property owners, easier to use for painters. It delivers to your clients a paint job that surpasses their greatest expectations, and enhances your reputation.

Traditional white lead in a new, convenient form

Eagle RTU Paint is backed by the 2000-year-old white lead reputation plus more than a century of Eagle-Picher paint making experience. It preserves the durability, beauty and economy made famous by white lead ... and adds new, time-saving convenience. You can specify it with complete confidence.

Two forms: Primer Sealer and Outside White Finish Coat. One, two and five gallon pails:

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

A 103-YEAR-OLD FAVORITE
Eagle White Lead Paste continues available

EAGLE PURE WHITE LEAD PAINT

Buy more U.S. Savings Bonds

American Builder, June 1946
ANYSTREAM SELF-CLEANING SHOWER HEAD

NOW AVAILABLE
FOR PROMPT DELIVERY

In new construction or in modernizing, no shower is at its best unless it has a Speakman Anystream Shower Head. Here’s a shower that’s built for years of unmatched service. With a turn of the adjustment handle the user may adjust the spray at will.

There are no annoying “hollow spots” in the Anystream spray. Nor will an Anystream become a “squirter” producing a scattered spray pattern—the self-cleaning feature keeps it from clogging.

Use Anystream Self-Cleaning Shower Heads to keep new installations up-to-date...and to rejuvenate old shower baths. For homes, hotels, apartments, schools, hospitals and institutions.

Speakman Showers and Fixtures are distributed nationally through plumbing wholesale supply dealers and plumbing contractors.

A condensed catalog of Speakman Showers and Fixtures is listed in Sweet’s Architectural File.

Speakman Showers and Fixtures
“The best in brass since 1869”

SPEAKMAN COMPANY, WILMINGTON 99, DELAWARE
Increase the Utility of your Stanley Safety Saw

with this inexpensive saw frame

Get more productive time out of your Stanley Safety Saw by adding this Adjustable Saw Frame No. 158. Converts your Stanley W-7, W-8 or W-9 portable saw into a bench saw that makes square, bevel and bevel mitre cuts. Readily adjustable for depth and angle and a real time-saver cutting lumber to exact size. With abrasive wheel, will cut slate, marble and other hard materials.

Save man hours laying out and marking each piece of lumber. Ask your distributor for a demonstration or write for complete information. Stanley Electric Tools, New Britain, Connecticut.

American Builder, June 1946.

merchant. In most instances the average storekeeper does not have ready access to accurate and current information. By making him aware of the changes in merchandising methods and by giving him accurate information, the Institute lectures quite often are able to demonstrate that his operations can be up-graded to the extent where his efficiency will be increased, thus adding to his profits, lowering his selling prices and increasing his service to the public. In some instances the information so obtained from reliable sources meant the difference for the small merchant between continued success and mediocrity.

In the development of the Business Planning Institute of Burlingame a long-range view was taken. The purpose of the Institute was to urge merchants and property owners to delay their actual modernizing programs if necessary to obtain a good grade of material and the right quality of workmanship. In the meantime, however, said these specialists, the wise merchant would make a survey of a number of things, including the extent of his trading area, population, income, number of families, number of people in the families, number of male and female population, adequacy of transportation facilities, records of past sales by departmental lines with an analysis of turnover, appraisal of possible changes in lines to carry and many other things. Even with a business where the total retail sales might run no more than $25,000 per year a survey could be profitable.

Explanations and discussions were carried on at the Institute meetings.

Before starting the Institute several committees were formed. The most important committee was the one which was called the Architects' Committee. This was composed of nine individuals, some of them merchants and some of them architects. Their job was to analyze the main street area and determine what one block could best be selected for the purpose of demonstrating the value of a unified store remodeling operation. After careful study this committee picked a block in Burlingame Avenue and had pictures taken of the buildings as they were before the restyling. These pictures were put together in panoramic style and the tenant merchants or property owners, or both, were contacted to obtain their suggestions and ideas about improvements.

Next, the active assistance of four local architectural firms was secured—Angus McSweeney, James H. Mitchell, Leo J. Sharps, and William B. Glynn. These architects prepared a dramatic wash-rendered elevation and entrance floor plan of the entire block as it could be transformed. All this work was carried on before and during the actual conduct of the Institute. Enlargements were then made of these "before and after" treatments and they were unveiled at the last meeting of the Institute.

(Continued to page 124)
CAUTION! Do not nail any higher than shown. Nailing in these positions increases resistance to lifting and tearing.
To Help You Build
Better, Faster
at lower cost

here are some facts about UNI-FORM Foundation Panels

fact 1 You save time when you form with them. UNI-FORM Foundation Panels employ a simplified method of assembly, are light enough for one man to handle, are faster to erect, easier to strip and require alignment on one side only.

fact 2 You save material when you form with them. They are ready to use... every Panel can be re-used from 75-100 times before replacement of plywood is necessary. The rigid, all-metal welded frames are virtually indestructible.

fact 3 You save money when you form with them. The low material cost (less than 3¢ per square foot of form area) and long life of UNI-FORM Foundation Panels makes them the most economical, most practical prefabricated forms you can use.

fact 4 You can pour better concrete with them. The UNI-FORM Tie locks the Panels together to provide tight joints, accurate forming and spreading. Positive alignment assures straight walls of uniform thickness.

fact 5 There are no extras for you to supply. The UNI-FORM System of Foundation Forms is complete—everything is included. Panels are 2' wide and come in 6', 7' and 8' lengths.

WRITE TODAY FOR DETAILS. THEY'RE READY FOR YOU.

American Builder, June 1916.

As a result of this activity, a committee was then organized for the purpose of determining how many actual jobs could be depended upon to go ahead. As a final climax to the Institute, the local daily newspaper developed a double-page spread and ran the “before and after” pictures, together with other cuts and descriptive material as to what had been and what would be accomplished. A list of the merchants or property owners who had committed themselves to make improvements was published in this double-page spread. This not only had a good psychological effect on those who definitely planned action but it also had a very encouraging effect on others who had hesitated. The amount of work that can be considered as a backlog of construction for Burlingame in the business district has been variously estimated at from four to five million dollars.

Two things will be accomplished as a result of this. The trading center will be improved and thus attract and hold the trade; also employment for men together with sale of materials will be in reserve after the emergency housing situation has passed.

Everyone in Burlingame agrees that it will take from three to four years to complete fully this “face-lifting” project. In the meantime, however, careful planning is definitely having an influence on the business that Burlingame will do five and ten years from now.

As a result of the publicity given last fall to the first block, other blocks have now been considered. It is generally true that when one store in a block fixes itself up the neighboring stores are encouraged to do likewise. The same thing occurs when one block on the main street takes on a new dress; in self-protection the other blocks down the street must follow suit. This has proved to be the case in Burlingame. Already the equivalent of three additional blocks has gone through the same treatment of “before and after” pictures, together with a unified effort of the group in the block to make their modernizing plans harmonize with each other. New stimulation is coming to the surface all the time. The retail sales in Burlingame will, of course, show a vast increase as a result of the improved facilities.

Community planning has been the secret of the success of the Burlingame venture on main street. It required careful selection of the membership of committees and constant attention to a pre-arranged plan. In addition to the physical improvement of the buildings outside and in, the operational phases are likewise receiving attention. Sales people are being schooled in pre-war courtesy, new conceptions of customer relations are being developed, new merchandising control methods, advertising programs, and many other phases of the operational end of the business are receiving adequate and expert help.
CUT BUTT MORTISES

6 times faster...100% accurate

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

Depth of cut adjusted by turning motor in base... one turn for \( \frac{1}{16}'' \), half turn for \( \frac{1}{2}'' \) and quarter turn for \( \frac{1}{4}'' \). Templet fits any size door and reverses to fit jamb.

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

Almost everyone is a prospect for TyLac because it meets the need for all interior wall covering. Tytac patterns and color range appeal to home owners, stores, factories, institutions, etc., alike because they make possible an endless variety of harmonizing or contrasting decorative combinations—to please every taste, and suit every pocketbook.

TyLac offers permanent, low cost installation—it is easy to install, requires no special tools, does not chip, crack or craze, is resistant to household acid, fats, oil, fruit, alcohol and boiling water stains, and retains its newness and spotless beauty with only an occasional mild soap and water washing.

Write for the new TyLac color chart which shows 18 lustrous tints and shades. TyLac products offer limitless profit opportunities.
INSTALL WEISWAYS

WITH CONFIDENCE IN THIS 4-WAY PROTECTION
1. GALVANIZED
2. BONDERIZED
3. BAKED PRIME COAT
4. BAKED SYNTHETIC ENAMEL

Weisway Cabinet Showers are the practical answer to the bath requirements in both new and remodeled housing. These precision-built pre-fabricated units are easily, quickly installed without special treatment of building walls or floor.

Weisways are complete, self-contained, leakproof baths which meet the preference for shower bathing which has increased rapidly, especially during the war years. Weisway service-tested materials and quality construction insure owner satisfaction.

Our new book of bathroom floor plans and sketches shows how Weisways make more baths possible in small floor area. Mail coupon for your copy.

HENRY WEIS MFG. CO. INC., 601 WEISWAY BLDG., ELKHART, INDIANA

Weisway CABINET SHOWERS

HENRY WEIS MFG. CO. INC.
601 Weisway Bldg., Elkhart, Ind.

Gentlemen: Please send me your book of bathroom floor plans, "The Mark of a Modern Home."

Name
Street
City
State

Allen Reopens Offices

FRESH from five and one-half years of active Army service, Col. Arthur E. Allen, nationally-known architect of popularly priced homes, has reopened his offices for the practice of architecture in Jamaica, Queens, N.Y.

ARTHUR E. ALLEN

Col. Allen created plans from which were built more than 27,000 houses in the metropolitan New York area in the years 1927-1940. Welcomed back by builders in the small home field, where activity looms largest in the coming years, Allen revealed that he has already received orders for more than 2000 dwellings.

Stanley Acquires North Brothers

R. E. PRITCHARD, president of The Stanley Works, has announced the acquisition of the business and plant of the North Brothers Mfg. Co., of Philadelphia, Pa., manufacturers of the well-known line of Yankee tools.

The North Brothers Mfg. Co. will continue to operate in Philadelphia under the same equipment and personnel. Management will be under the direction of M. A. Coe, general manager of Stanley Tools. Messrs. Weierstall and Fegley, North Brothers officials, will continue their association as vice presidents of the new corporation of the same name formed by Stanley to produce Yankee tools.

U.S.-Mengel Plywoods to Open New Warehouse

THE sixth in a chain of plywood distributing warehouses will be opened in a new 20,000 foot building in St. Louis, Mo. This announcement was made by L. B. Olmsted, vice president and general manager.

H. C. McFarland, for two years United States Plywood representative in St. Louis and with Mengel for 15 years, will manage the new branch.

The expansion program calls for additional distributing warehouses to be established in other key cities, Mr. Olmsted said. The five already in operation are located in Louisville, Ky.; Jacksonville, Fla.; Atlanta, Ga.; New Orleans, La., and Houston, Texas.
Inexpensively-cut, clean round holes are needed by the thousands in your building, modernization and repair jobs today. Jobs involving the use of steel, cast iron, sheet metal, wood, plastics, porcelain—in the installation of heating, plumbing, electrical, refrigerating, air conditioning and insulating systems . . . and many others.

Using Black & Decker Hole Saws is a sure-fire way to hold down costs and boost profits on these jobs. These clean-cutting saws are made in 27 different sizes to cut absolutely round holes from 3/4" to 4" in any material a hacksaw will cut—a lot faster! Drive them with Black & Decker or any other portable electric drill.

See your nearby Black & Decker Distributor about your Hole Saw needs. For complete catalog of more than 100 Black & Decker Portable Electric Tools, write to: The Black & Decker Mfg. Co., 666 Pennsylvania Ave., Towson 4, Maryland.

**LEADING DISTRIBUTORS**

**EVEYWHERE SELL**

**Black & Decker**

**PORTABLE ELECTRIC TOOLS**
Paine Rezo Doors
give you everything needed by builders today

1. faster, easier hanging and finishing
2. low installed cost
3. better appearance

Never before have the basic patented elements of Paine Rezo doors meant so much to harassed builders and contractors as now... for these best engineered 1⅛″, air-cell doors exactly meet the need of the hour for speed, economy and beauty in housing construction. Pre-fitted, light-in-weight, Paine Rezo doors go up fast. Their clear, flush surface takes little time for painting or staining, less than half of that required by common panel doors. Bonus values include a strong, trouble-free door that minimizes warping, and eliminates shrinking and swelling, plus beauty in appearance that makes small rooms seem more spacious and charming. Over one million are in service today—made by a company that has specialised in door production for 93 years. Ask your dealer for Paine Rezo or write for factual bulletin.

Manufactured by the
PAINE LUMBER CO., Ltd. Esthwaite, Wisconsin
ESTABLISHED 1853

S&W Moulding Co.
988 Parsons Ave., Columbus 6, Ohio

There's an S&W Mira-Trim shape for every installation need... produced in all five materials to please the most discerning taste. No "general use" styles to bring on installation headaches and customer dissatisfaction. Every trim engineered to meet every requirement completely, practically and attractively. Customer satisfaction is yours with S&W Mira-Trim... the complete trim line. Write for illustrated catalog today!

The Mira-Trim Line... Miralite, Mirachrom, Miravel, Miraplas and Mirasteel
Your Straightest Line to Flooring Profit is
Bradley's PRE-FINISHED (Straight-Line) FLOORING

HERE'S WHY:

1. Straight-line ripping
2. Machine sanding—steel wool polishing
3. No raised grain
4. Best quality filler, rubbed in
5. Deep penetrating finish seals wood pores
6. Finish dries evenly in "controlled weather"
7. Final polishing by high-speed brushes
8. Heavy-bodied wax, machine buffed
9. Uniform color, rich, lustrous, lasting beauty

NINE CARDINAL POINTS of Superiority in Bradley Pre-Finished (Straight-line) Flooring equip you to sell a better floor at a substantial saving to your customer.

Builders and floor layer planning to take a larger share of the hardwood flooring market in their communities are invited to write for data and specifications.
WRIGHTFLOR
Combines Style with Utility

Unlimited designs... innumerable patterns can be had with Wrightflor. The mottled-color combinations have no limits! You can mix 'em or match 'em anyway you please... to harmonize or contrast.

And with all this high floor style goes the assurance that Wrightflor can't be beat for long wear under the heaviest traffic abuse. Wrightflor colors can't wear off... they're built right through the tile. Its resilience makes it easy on the feet... absorbs shock and sound. Its smooth, high-density surface is impervious to stains... resists cracking and scratching. Write for color samples, with prices and specifications.

WRIGHT-ON-TOP
Compression Base

The modern finish between wall and floor. Flexible coving overlaps floor... stays snug despite floor shrinkage. Keeps out dirt and water. Specify Wright-on-Top with every type of floor. Write for details.

TAYLOR MANUFACTURING COMPANY
Wright Rubber Products Division
3050 W. Meinecke Ave., Milwaukee 10, Wis.

WRIGHT RUBBER TILE
Flooring of Distinction

Insulation Value of Various Insulations

Statistics prove that inch for inch thickness, INSL-COTTON is superior in insulation value to any other type of insulation material available today. And here's the proof.

<table>
<thead>
<tr>
<th>Type of Insulation</th>
<th>Pounds per cu. ft.</th>
<th>Lbs. &quot;K&quot; Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton Insulating Batt</td>
<td>10.00</td>
<td>0.368</td>
</tr>
<tr>
<td>Rock Wool: Fibrous material made from rock</td>
<td>1.50</td>
<td>0.270</td>
</tr>
<tr>
<td>Glass Wool: Fibrous material made from</td>
<td></td>
<td></td>
</tr>
<tr>
<td>glass cloth</td>
<td>3.62</td>
<td>0.270</td>
</tr>
<tr>
<td>Rigid Insulation made from sugar cane fibres</td>
<td>3.40</td>
<td>0.250</td>
</tr>
<tr>
<td>Chemically treated wood fibre between layers</td>
<td>1.80</td>
<td>0.270</td>
</tr>
<tr>
<td>of paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Felt: between layers of paper</td>
<td>8.80</td>
<td>0.410</td>
</tr>
<tr>
<td>Stitched and creped expanding fibrous blanket</td>
<td>7.60</td>
<td>0.270</td>
</tr>
<tr>
<td>Shavings: Various from planer</td>
<td>15.90</td>
<td>0.330</td>
</tr>
<tr>
<td>Corkboard: No binder added</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rigid Insulation made from wood fibre</td>
<td>24.20</td>
<td>0.460</td>
</tr>
<tr>
<td>and cement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With a "K" value of 0.24, INSL-COTTON transmits less heat per inch thickness than any other type of insulation material on the market. INSL-COTTON is from 4% to 36% more efficient—it is tested by a U.S. Government inspector and approved—it exceeds technical requirements for approved insulation in FHA, FPHA, and HUD-152 specifications. Cash in on this fast selling product that is growing in popularity every day—cash in on a product you can sell NOW!

Certified INSL-COTTON INSULATION IS

V Harmless to handle V Moisture resistant V Light weight
V Non-settling V Vermic resistant V Effective
V Easy to install V Flame-proof and fire-retarding

Certified—No other insulation except flame-proof cotton insulation made under Federal supervision can make this claim. The Government tests and certifies Insl-Cotton insulation.

DEALERS... DISTRIBUTORS—Some territories still open for competitively priced Insl-Cotton. Write today for details.

INSL-COTTON DIVISION
Taylor Bedding Mfg. Co.
The Originators of Flame-Proof, Fire-Retarding Cotton Insulation
TAYLOR, TEXAS

INSL-COTTON DIVISION
Taylor Bedding Mfg. Co., Taylor, Texas
Gentlemen:
Please send specifications and full information on INSL-COTTON.

Name:
Address:
City and State:

Am interested in: □ Distributorship □ Architect □ Contractor.
Kelvinator means
greater user satisfaction!

For apartments, or homes, or housing developments of every kind, you'll find that it pays to install Kelvinator refrigerators.

Powered by famous Polarsphere—lubricated for life because it's sealed in steel—Kelvinator refrigerators have an enviable record of trouble-free performance, day after day, year after year.

In every other element, too, that makes for user satisfaction, Kelvinator's thirty years of production experience assure top-notch quality.

That's why Kelvinator means greater user satisfaction, because the built-in quality and dependability mean long-term satisfaction, fewer replacements, lower maintenance cost, less time out for repairs, and longer life!

For complete information and data, see your Kelvinator dealer. His name and phone number are listed in your local classified directory.

Or write Kelvinator, Detroit 32, Michigan.

WHAT PROPERTY MANAGERS WRITE

...in letters now in Kelvinator's files:

INDIANA—"We can without a doubt make the unequivocal statement that the 300 Kelvinator refrigerators we have had the opportunity to service and maintain, is one of the finest pieces of equipment in our developments. If all our problems involved in the maintenance of our units were as small as those caused by your refrigerators, the management of housing would be very dull."

SOUTH DAKOTA—"I wish to say that the 35 Kelvinator refrigerators in use in this project have given excellent service. I have had a few repairs, the total cost not to exceed $10.00 for the period July 1, 1941 to January 1, 1945. I have had about 150 different tenants occupying these units during this period and have not had a single complaint."

Kelvinator

DIVISION OF WASH-KELVINATOR CORPORATION, DETROIT

REFRIGERATORS • ELECTRIC RANGES • HOME FREEZERS • WATER HEATERS
Assistant Advertising Manager for Duo-Therm

Mr. Anderson was formerly an account executive in charge of several leading midwest accounts for the Jaqua Company, a Grand Rapids advertising agency. He will assist Karl Egeler, advertising and sales promotion manager, in promoting the line of fuel oil appliances which the company manufactures.

New Representative for Roberts & Mander Ranges

Mr. France has had wide experience in marketing, merchandising and servicing major appliances and has been active in this field since 1926.

LEARN to ESTIMATE

Today, more than ever before, you must know how to analyze building costs. If you want to become a successful builder, learn how to prepare a correct estimate in a hurry. Get in on the profitable work now available wherever you turn. Your success is assured if your estimates are right; otherwise you are licked before you start.

The Tamblyn System of Estimating will make a real estimator out of you in a few weeks of your spare time. We are so sure that you will want to learn it, that we will send you our complete home study course for ten days examination absolutely free. If you don't think it is the finest thing you ever saw, just return it and it won't cost you a cent. If you like it and want it, send us five dollars a month until you have paid the total price of only thirty dollars.

This estimating system is based on forty years of actual construction experience. It has been sold all over the world for more than twenty years. Thousands of estimators and contractors swear by it. Our offer isn't hot air and big talk. We don't give you a diploma or a lapel button, but we do teach you down to earth estimating which will bring you profitable business.

Just send us your name and address today, and we will mail you the complete course at once for your approval.
BEAUTY PLUS! Tinted to blend with interior and exterior of the home.

WEAR PLUS! 100% corrosion-proof, impervious to salt-spray, rain, sun. Never a screen bleed stain!

STRENGTH PLUS! Resists up to six times more impact than metal screen-cloth of equal gauge without denting, bulging or breaking.

HANDLING MINUS! One-fifth the weight of metal, easy to stretch taut in framing. Cuts with ordinary scissors. Leaves no sharp ends.


Listen to the Voice of Firestone Monday Evenings over NBC
Bishop Director of Sales for Sylvania Electric

ROBERT H. Bishop has been named director of sales for all divisions and subsidiaries of Sylvania Electric Products, Inc., according to an announcement made by Don G. Mitchell, executive vice president.

Mr. Bishop, who joined Sylvania Electric in 1936, will be responsible for the coordination of selling policy in all divisions of the company as well as its subsidiaries, Colonial Radio Corp., and Wabash Corp. He will also have direct line responsibility for the sales organization of the lamp fixture, radio tube and electronics divisions.

New Position for Plain of MANDO

T. McMURRAY, vice president in charge of sales, Minnesota and Ontario Paper Co. has announced U. L. Plain as his assistant.

Mr. Plain has been with the Insulite division in various sales capacities since he came with the company as assistant export manager in 1928. When the company's Finland Insulite mill went into production in 1931, he was transferred to Amsterdam, Holland, the headquarters of the European operations.

After his return from abroad he was made Canadian sales manager and in 1940 was appointed Pacific district manager.

Since his return to Minneapolis he has been assistant to the general sales manager.

Building Materials Prices Analyzed

PRICES of building materials in general today are not out of line with prices of other goods. Over the last thirty years, prices of building materials have moved closely with non-agricultural goods in general, and there has been no serious divergence in movement during World War II.

These conclusions are drawn in a study of building materials price movements by Lester S. Kellogg, Acting Chief, Prices and Cost of Living Branch, Bureau of Labor Statistics, U. S. Department of Labor.

“Compared with price movements during World War I, advances in building material prices during and since World War II so far have been moderate,” Mr. Kellogg states. “Over the six years since August, 1939, wholesale prices of building materials as a group have advanced about 32 per cent, and the major part of this increase was in the price of lumber. Other building materials showed much smaller price increases.

“Readjustment of building materials prices in general to prices in other fields,” he said, “is not a problem, although prices for particular materials will likely face realignment.”

Peckham Returns to U. S. Plywood

THE United States Plywood Corp. has announced the appointment of F. B. Peckham as architectural representative. An employee of U. S. Plywood from 1933 to 1942, when he enlisted in the Army, his new duties will be to provide information and advice on plywood and its uses, both technical and general, to architects, builders and designers.

Ilg Names Four Managers

FOUR new staff appointments for Ilg Electric Ventilating Co. of Chicago have been announced by P. D. Briggs, vice president and general sales manager.

F. H. Bigelow, who has been manager of the Memphis office since 1937, has been named manager of the Ilg office in Atlanta, Ga.

Replacing him at Memphis is H. H. Wilson, recently released from the Navy.

The Knoxville, Tenn., office has been re-opened under the supervision of E. Lloyd Widmer, manufacturers’ representative for the last twelve years.

Henry M. Lutes has been established as manager of the Louisville, Ky., office. These moves bring the total number of Ilg branch offices to forty-three.

Mechanics by Correspondence

THE Extension Division of the University of Wisconsin at Madison, through its department of civil and structural engineering, is now offering two revised correspondence-study courses in mechanics for engineers, mainly for qualified students not currently attending schools of engineering. The aim of each is to afford a preparation in the principles of the subject and in their application to engineering problems.

The courses are Mechanics 1a (statics) and Mechanics 2 (dynamics). Each embodies 24 assignments and allows these credits toward a degree in any branch of engineering. These credits are accepted by most institutions of higher learning.
NEW Corbin tubular latch set for easy installation on low-cost home and commercial construction

It takes you no longer to install the new, improved Corbin Tubular Latch Set — but the added strength of the vital parts means a sturdier tubular latch set that will give added years of service to the home owner. All sizes are standardized to fit the time-saving pre-mortised doors specified by the Fir Door Institute.

The excellent performance of this new Corbin Tubular Latch Set has been achieved as a result of three new Corbin features:— (1) Reinforced latch bolt; (2) Extra large hub arms; (3) Cold rolled steel shoe and lever for retracting the latch bolt. In addition, CORBIN'S newly designed square face and curved lip strike with square ends to match has been incorporated.

P. & F. Corbin
DIVISION AMERICAN HARDWARE CORPORATION
NEW BRITAIN, CONNECTICUT
These two types of
FIREPLACE UNITS
will help you meet new building requirements

For plenty of circulating warmth—without smoke—
some homes require one type of fireplace unit, other
homes a different type—depending on construction.

1. BENNETT Fresh-Aire FIREPLACE UNIT
Designed especially for tightly constructed, fully insulated, weatherstripped homes. Under these conditions
a Fresh-Aire Unit gives benefits impossible
with a recirculating type. Heats
and circulates fresh air from outdoors.

2. BENNETT Warm-Aire FIREPLACE UNIT
This recirculating type is recommended
particularly for camps, cottages, and
southern homes without central heating.
Cool air is drawn from the floor of the
room through intake grilles into the
heating chambers.

Both types permit unlimited freedom
to design the mantel. And, both types
are guaranteed to provide evenly distributed, circulating
warmth—without a trace of smoke.

American home builders have never been more modern-minded. To satisfy this progressive state of mind, more
and more architects and builders are specifying Lo-“K”
Cotton Insulation as the undisputed leader in modern
insulation benefits.

Lo-“K” not only provides 4% to 36% greater insulation
efficiency, by actual test, but has the added advantage of
being the lightest weight insulation on the market. Thus
Lo-“K” is easier to handle—quicker and more economical
to install. Moreover, it guarantees extra long life through
its resistance to fire, moisture, rot and vermin.

Rely on Lo-“K” to provide the utmost in modern, scientific
up-to-date insulation plus economy—for homes,
churches, schools, office and industrial buildings, hospitals
and other public institutions.

For full particulars.

Mail YOUR coupon TODAY
for full particulars.

COTTON INSULATION
A Product of
LOCKPORT COTTON BATTING CO.
Established 1870
LOCKPORT, NEW YORK

Send for Bennett Fireplace Catalog—or see Sweet’s
BENNETT-IRELAND INC.
Chartered in 1906
646 MARKET STREET, NORWICH, N. Y.
NOW AVAILABLE
the original inside screens that roll up and down like a window shade

ROLSCREENS in a house are a "trademark" of good planning. They are a year 'round advertisement for the builder who puts them in. They help to keep a house up-to-date and protect its salability over the years. A big part of your business is selling CONVENIENCE. ROLSCREENS help you to do it easier and better than any other window appurtenance.

CONVENIENCE OF ROLSCREENS SELLS ON SIGHT
Once in place . . . always in place. That's Rolscreens! No putting up! No taking down! No storing! No painting! No seasonal repairs! Installed and operated on the inside. For all types of windows — both old and new construction.

10 YEAR GUARANTEE
This is your assurance that your customers will be satisfied and enthusiastic about Rolscreens over the years.

BUILDING SPECIALTY DEALERS—
A number of choice Rolscreen territories are open. Write for details if interested.

The National Door Manufacturers Association provides an efficient test for measuring the effectiveness of toxic preservatives for woodwork such as windows, screens, doors and frames. This test, developed after many years of research, resulted in the establishment of definite minimum standards for toxic treatment.

These minimum standards establish a definite yardstick for wood-treating which supplements the natural lasting qualities of wood products, adding still further to the durability which wood has demonstrated in the homes of America.

The NDMA seal, stamped on wood products, provides positive evidence of sound practice in toxic preservative treatment. This seal is available by license to all manufacturers and distributors who conform to the toxic preservative standards of the NDMA.

NDMA makes laboratory check tests of preservative solutions in order to assure absolute conformity to NDMA standards.

The NDMA seal, stamped on wood products, provides positive evidence of sound practice in toxic preservative treatment. This seal is available by license to all manufacturers and distributors who conform to the toxic preservative standards of the NDMA.
Versatile Fred W. Wappat Electric Hand Saws

CUT LUMBER and over 20 other building materials
Fast... Accurately... in any Position... at Less Cost!

With a Fred W. Wappat Electric Hand Saw on your job, you have more power than you'll ever need (with thorough operator protection), assuring continuous high-speed cutting... you get absolute accuracy, thanks to visible cutting line and rigid, simple angle settings on saw frame... top performance is maintained whether saw is trimming sub-flooring, wall sheathing, or hung inverted for ripping operations... your operating and maintenance costs are minimized through such features as the Fred W. Wappat lubricating system, and special Fred W. Wappat-designed gears, produced under our rigid shop standards.

In addition to working lumber, you can quickly fit your Fred W. Wappat Saw with special blades and cut over twenty other tough building materials, from insulating board to light metal sheets, still utilizing the Fred W. Wappat basic advantages! Write today for full information, or ask for free copy of Bulletin S-10.

CUT JACK-RAFTERS OR WIDE PANELS THE EASY, FAST, ACCURATE WAY, with an improved Fred W. Wappat Radial Guide. Inexpensive, portable, in models from 25” to 120” capacity. Ask for free copy of Bulletin S-8, today!

Versatile tied L/ Wappat Electric Hand Saws

American Builder, June 1946.

Today, more than ever before, home buyers want to know what their money is buying. They want value throughout—and that’s why they look for the G-E emblem on switches, convenience outlets, lampholders, fuses, and other wiring devices.

The name of General Electric is something to be proud of, for it signifies that there has been no skimping on quality, no outmoded design, in the wiring devices installed in the buyers’ prospective homes.

It’s easy to specify G-E wiring devices on your building plans, because the G-E line is complete. Just say “G.E. throughout.” Your nearest G-E Merchandise Distributor will gladly give you complete details on G-E wiring devices, or you may wish to write for information to Section D665-80, Appliance and Merchandise Department, General Electric Company, Bridgeport, Connecticut.
LARGE
MEDIUM
SMALL

AND ALL SIZES IN BETWEEN AVAILABLE IN THE EFFICIENT NEW JC HEATING UNITS

Heating jobs come in all sizes—and so do JC Furnaces, available in models with 160,000 to 2,800,000 BTU output. Factory buildings, stores, churches, schools, residences of every type—each can be comfortably heated at low cost with a specific model JC Furnace. These compact, well designed heaters are engineered with 90% direct radiation surface that captures more heat from less fuel for distribution by blower. Sturdy one-piece welded steel construction minimizes heat loss and prevents soot and fumes from entering air stream.

Most JC Furnaces are easily converted to burn coal, gas, or oil. All are honestly built to the high standards of quality that for 65 years have distinguished all products of the Jackson & Church Co.—“Work Well Done Since ’81.”

JC
JACKSON & CHURCH COMPANY • ESTABLISHED 1881
SAGINAW, MICHIGAN
Hottest Thing On The Market!

THERMAFLO
THE Scientific FIREPLACE

Only Thermaflo Has This Feature

THERMAFLO Has All These Advantages:

... Thermaflo circulates a steady flow of warm smoke-free air throughout the room... produces maximum heat per pound of fuel consumed... Thousands of satisfied users proclaim Thermaflo superior to any fireplace unit of its type—More economical to install, to maintain, to use.

Interior rear view showing air conducting baffles

Patents Pending

NEW BEAUTY, ECONOMY AND UTILITY FOR DOUBLE HUNG WOOD WINDOWS

Made possible by using DUPELEX the only adjustable FLAT SASH BALANCE

DOUBLE HUNG WINDOWS MOST POPULAR—There is no satisfactory substitute for wooden double hung windows. They are lowest in first cost and use inexpensive hardware. They are readily equipped with standard storm sash, screens and weather-stripping. Ventilation, light control and curtaining are simple and easy.

NOW AN IMPROVED DOUBLE HUNG WINDOW—Duplex—the only adjustable flat sash balance—has brought to double hung windows the ultimate in simplicity of construction, great economy in materials and other advantages never before attainable. Duplex adjustable balances permit modern, attractive, narrow mullions; provide noiseless, finger-tip sash control and are guaranteed in writing for the life of the building.

PATENTED DESIGN MEETS ALL REQUIREMENTS—Just two sizes of Duplex adjustable balances meet 98% of all residential building needs—an important advantage which simplifies ordering, stocking and installing.

SEE OUR CATALOG IN SWEET'S or WRITE US

In Sweet's or Write US

626 North La Peer Dr.
Los Angeles 46, Calif.
THREE THINGS YOU CAN DEPEND ON in Paranite Type R Wire leading to panel boards, lighting circuits or factory machinery—

One: THE "FISHABLE" SLICK FINISH
Pulls smoothly through conduits—slides easily around bends and elbows—no joint jams. This non-migrating finish will not soften, gum or tack in hot weather or become brittle and crack in cold.

Two: FAST CLEAN STRIPPING
Outer braid strips with minimum effort. Inner rubber slips off cleanly exposing clean tinned copper conductor. No sticky, time-consuming layer of adhering compound to scrape. No dangerous reduction of conductor capacity by scraping of copper or accidental severing of strands.

Three: LOWER INSTALLATION COST
Just as 1 plus 2 equals 3, Point ONE (Paranite Fishability), plus Point TWO (Paranite Clean Stripping), equals Point THREE (Paranite Lower Installation Cost). THAT'S PROFIT!

PARANITE WIRE AND CABLE
Division of ESSEX WIRE CORPORATION
General Sales Offices: Fort Wayne 6, Indiana.
Manufacturing Plants: Marion, Indiana; Joplin, Missouri.
WAREHOUSES AND SALES OFFICES: Detroit, Mich.; Newark, N.J.; Philadelphia, Pa.; Cleveland, Ohio; Chicago, Ill.; St. Louis, Mo.; Kansas City, Mo.; *Atlanta, Ga.; Dallas, Texas; San Francisco, Calif.; *Los Angeles, Calif.; Seattle, Wash.; Washington, D.C.

IF IT'S PARANITE IT'S RIGHT!
The old law of supply and demand plus high wages and other costs make time a most important factor in any installation job. The Grand Rapids Invizible is a time and money saver because it is by far the easiest of all sash balances to install. If you, too, are interested in cutting off time at this end, make a date with the Grand Rapids Invizible. You’ll be impressed with its durability, ease of adjustment and the fact that it is actually invisible — no exposed tubes — tapes and cables entirely eliminated. And, too, only 10 sizes meet 95% of all residential requirements.

SEND FOR SASH BALANCE CATALOG
which contains complete information on sash balance sizes, directions for installing, etc. All fully illustrated.

GRAND RAPIDS HARDWARE COMPANY
GRAND RAPIDS · · MICHIGAN

A good contractor may not be a first class salesman but with this big loose-leaf Manual at hand he can quickly give the prospect the information he is looking for. The contractor can insert extra pages of special information of local interest in the back of the Manual and thus make it a complete selling kit. It contains:

1. A selection of 65 modern New England Colonials and other popular 4 to 6-room types within the present average price ranges, designed by top flight architects.
2. A complete set of open Specifications which provide for the use of stock materials throughout and meet FHA and local building code requirements.
3. A completely itemized Material List Estimate form.
4. Contractor’s Bid and Budget Estimate forms, in triplicate.
5. Forms for any “extras” or changes in a contract.
6. A set of court tested Home Owner’s Property Records and a 72-column Building Operations Chart.

Tell your prospect to sit down and look over this Manual. It will help crystallize his general ideas. You can then focus his attention on the particular services you have to offer. In case he wishes to borrow a page showing a certain house, or a certain section of the manual we can replace it for you at small cost if necessary. Send for a copy of this new type of selling aid today and give it a five day working tryout. Satisfaction or your money back.

250 pages, 65 illus., charts, 8½ x 11, 3-ring Binder, $5.00

American Builder and Building Age
30 Church Street, New York 7, N. Y.

Please send me a copy of the HOME BUILDERS MANUAL, for which I enclose check for the list price of $5.00. I will give it a five-day working tryout. If not satisfied I will mail it back and you will refund my money.

Name ___________________________ Address ___________________________
City ___________________________ State ___________________________ A.B. 6-46
Architects and builders knew it; now War has proved it again... Homasote's structural strength, insulating qualities and big sizes make an unbeatable combination.

This weatherproof insulating and building board is right—for new construction and modernization alike.

As interior finish—in residences—Homasote provides the ideal, crackproof surface for paint or wallpaper. And the big sheets eliminate unnecessary wall joints and batten strips.

As sheathing or exterior finish—in residences, garages and other buildings—Homasote's great structural strength and top insulating qualities make it the practical building material. And the big sheets mean less handling, fewer nailings, less waste.

We invite architects and builders to write for our new fully illustrated booklet—suggesting some of the many uses for weatherproof Homasote. The book gives physical characteristics, performance charts, specification data and application instructions. Write for your copy today.

HOMASOTE COMPANY, Trenton 3, N. J.
YOU'D SEE THIS

UNSEEN

GUARDIAN

WORKING IF YOU COULD SEE

THROUGH THE WALLS OF A HOUSE

Year in...year out...for the life of the dwelling, good building paper guards against the elements...against driving wind and rain...dust...and destructive moisture. For the little it costs...for the protection it gives...good building paper makes an unsurpassed contribution.

No one should underestimate the great importance of building paper just because it can't be seen when the house is finished.

Good Building Paper is most important...and because it is, only the best should be used...especially since the recognized "best," Sisalkraft, costs so very little more.*

The SISALKRAFT Co., 205 W. Wacker Dr., Chicago 6, Ill.
New York * San Francisco * London * Sydney

*Sisalkraft Building Paper...applied over sheathing on a $7,000 house, costs only a few dollars more than ordinary building paper...only an estimated 16¢ a year more for the life of a house.

In builders hardware, as in the building itself, design is a major consideration. The Barrows line of builders hardware offers a notable selection of design—traditional and contemporary—to harmonize with and accent the artistry and individuality of the architect's plan. Barrows moulds in metal with an eye for charm in appearance, but, too, with sound provision for, the important virtues of easy application, dependable operation and lasting satisfaction.

BANK ON

SISALKRAFT
BUILDING PAPER

BARROWS
NORTH CHICAGO, ILLINOIS

Copyright 1946
Barrows Lock Works
The Tile-Tex Asphalt Tile Contractor Gives You That Kind of Service And That Kind of Product

Builders everywhere recognize the extra values they get in flooring with Tile-Tex Asphalt Tile. They appreciate the intelligent, prompt, and expert installation service which a Tile-Tex contractor is equipped to render. They know from experience the advantages of Tile-Tex Asphalt Tile over similar types of flooring.

Here is an asphalt tile flooring that's made right, installed right, and performs right. Tile-Tex Asphalt Tile contractors are located in nearly all principal cities and towns throughout the country. Ask for the name of the one in your city—and for a copy of the new Tile-Tex booklet "Floors That Endure."

THE TILE-TEX COMPANY, INC.
Asphalt Tile Mfr.
Subsidiary of The Flintkote Company
Chicago Heights, Illinois
220 E. 42nd Street • New York City

"I want my Floors INSTALLED FAST and INSTALLED TO LAST—"

KOVEN WATERFILM BOILERS
• economical • quick heat

An essential item in every heating unit is economical heating comfort. The attractively jacketed KOVEN WATERFILM BOILER incorporates every principle of engineering and design to give maximum, uniform heat.

The patented construction of these fastest steam-ing boilers on the market utilizes all the modern scientific improvements that provide trouble free, long life operation. The KOVEN WATERFILM BOILER, made for automatic firing with oil, stoker or gas, assures you of quick, abundant heat, even room temperature and a plentiful supply of hot water at all times.

WATERFILM BOILERS are available in a variety of models suitable for large or small homes, apartment houses and industrial plants. Write to KOVEN for more detailed information.

WATERFILM BOILERS, Inc.
154 OGDEN AVENUE, JERSEY CITY 7, N. J.
PLANTS: JERSEY CITY, N. J. • DOVER, N. J.
ALL ABOUT FENCES

and how to build them with Western Pines is described in this booklet

A FREE COPY IS YOURS FOR THE ASKING. Now is the time to order it so you can have it on hand for your customers to read. It's a great salesbuilder of fence-building material. Ask for Booklet No. 408. Address—

WESTERN PINE ASSOCIATION
Dept. 6-B • Yoor Building • Portland 8, Oregon

in matched sets ... in all price ranges

IN THIS modern matched set of Cabinet Hardware, we combine the color permanency of plastics with the brilliancy of highly polished, chromium plated metal.

Shown above is one of four popular matched Cabinet Hardware designs that is profit-packed and styled to sell on sight. The display board below includes each of the four designs available. Smaller boards with your choice of any two designs in matched sets are also available. Put these eye-catching silent-salesmen to work for you on your counters and in your store windows. Write for colorful, descriptive Catalog.

NATIONAL LOCK COMPANY
Builders Hardware Division
Rockford, Illinois
FIAT Skipper solves the bathroom problem for low cost housing . . .

- Low installed cost
- Minimum floor space required
- According to surveys made at camps the majority of Veterans, both men and women, have expressed a preference for shower bathing
- Fiat Skipper showers are available

Specifications

SIZE—32x32x76.

WALLS — BONDERIZED, GALVANIZED STEEL. Finished inside and out with white baked-on-synthetic enamel.

RECEPTOR — Semi-flat standard type Stonetex; slip-proof, leak-proof, non-absorbent. Brass drain for 2" waste connection cast integral with receptor.

VALVES — Combination hot and cold compression valves with shower head and arm.

ACCESSORIES — Curtain rod and curtain.

FIAT METAL MANUFACTURING COMPANY
1205 Roscoe St., Chicago 12, Ill.
21-45 Borden Avenue, Long Island City 1, N. Y.
42 S. San Gabriel Blvd., Pasadena 8, Calif.

Right now, with good lumber scarce and with shortages in many other good materials, it pays to take every precaution for your clients against the possibility of "green lumber" and other material quality deficiencies.

"Three hinges to a door" insures smoothly swinging doors for the life of the building—prevents sticking, sagging and warping with resultant out-of-line latches and locks that operate inefficiently or not at all.

The ten or twelve extra hinges needed in an average sized home would pay for themselves a hundred times over in the saving of later repairs and replacements.

Your client may never think about the importance of this detail when building unless called to his attention . . . yet it costs him so little to make sure. And, he will be grateful to you over and over in years to come if you advise him correctly now.

"Three hinges to a door" has always been good building practice—now, it is needed more than ever. Recommend "three hinges to a door" throughout your clients' homes.
The appointment of Harvey A. Craig as Pacific Coast manager, Republic Steel Corp., has been announced by J. M. Schlendorf, vice president in charge of sales.

In this new post, created to bring under one head the many sales problems peculiar to the coast, Craig will supervise the territory served by all three coast sales offices. He will, however, continue as manager of the Los Angeles office.

Stephen E. Kovach to Re-Enter Construction Business

Returning to civilian life after 41 months' service with the Army Corps of Engineers and Air Forces, Lt. Col. Stephen E. Kovach, Jr., has announced plans to re-enter the general construction business in the Palm Beach area and Pittsburgh, Pa. Recognized as the largest private builder of rental housing in the Pittsburgh area before he entered the service in 1942, he has revealed plans for immediate construction of 72 units for veterans' housing in West Palm Beach.

Devoe Appoints New Company to Handle Advertising

The appointment of Charles W. Hoyt Co. Inc., to handle the advertising for the products of Devoe & Raynolds and affiliated companies—Wadsworth-Howland & Co. Inc.; and Peaslee-Gaultbert Paint & Varnish Co., has just been announced by W. H. Mathews, vice president in charge of sales. The new agency, with offices in New York and Hartford, is one of the oldest of national advertising agencies. It is expected that their long experience with consumer and industrial products, together with the agency's proved success in considering both national advertising and merchandising efforts as a coordinated whole, will be of special benefit in an operation as diversified as that of Devoe & Raynolds.

Superior Fireplace

The HEATFORM is a double-walled, assembled unit consisting of firebox, throat and damper, around which the masonry walls are easily built, to complete a fireplace of any design that will not smoke. A SUPERIOR FIREPLACE costs but little more because the HEATFORM replaces other materials and saves labor necessary in constructing the old-fashioned fireplace.

Write for complete information today—and prepare to serve your customers who see our national advertising in leading home building magazines.
NEW Radiiluxe STAINLESS STEEL CABINET SINKS

NEW BEAUTY AND EFFICIENCY IN STAINLESS STEEL CABINET SINKS....

2 IMPORTANT FEATURES

1—DOUBLE-PITCH DRAINBOARDS
Radiiluxe Stainless Steel Sinks have drainboards pitched sidewise toward the bowl, as well as endwise—providing smooth, even drainage from every angle. No channels to clean, no grooves to endanger fine glassware.

2—IN-BUILT ANTI-SPLASH RIM ON BOWLS
Top rim of bowl is curved slightly inward and joined to sink top in a seamless weld, forming an anti-splash rim. The welded joint is polished to a smooth, satin finish.

NEW FREE BULLETIN describes Radiiluxe Sinks with single or double bowls, with or without drainboards; straight, "U" or "L" types... standard sizes or custom fabricated to your specifications. Write today.

KERNERATOR Oil burners, kitchen stoves, screens... these are taken for granted in homes put up by speculative builders. Add Kernerator Incinerators to the list of items included and you have better selling homes. For, the modern home of today and tomorrow to be complete should have incineration such as the Kernerator provides... such as, for example, the built-in type illustrated.

You can make a nice profit by putting in Kernerators in the homes you are building. Write for specifications, prices and deliveries.

Kerner Incinerator Division
MORSE BOULGER DESTRUCTOR CO.
209-B East 42nd Street • New York 17, N.Y.
Representatives in Principal Cities

8 REASONS WHY ALUMINUM PALLETS
SPEED PRODUCTION

1. EARLY DELIVERY—MANY SIZES SHIPPED FROM STOCK.
2. NO BENDING, WARPING, RUST OR CORROSION.
3. FIRST COST IS USUALLY LESS THAN CAST IRON OR STEEL PALLETS.
4. WORN AND BROKEN PALLETS RETURNABLE AT MARKET VALUE OF ALUMINUM—ABOUT 30% OF ORIGINAL COST.
5. LARGE PLANTS REPORT LESS THAN 2% PALLET BREAKAGE PER MONTH.
6. MORE UNIFORM BLOCKS—LESS BLOCK BREAKAGE.
7. DUE TO SHORT SUPPLIES OF STEEL AND THE SLOWNESS OF CAST IRON PRODUCTION, ALUMINUM DIE CASTING IS THE ONLY METHOD THAT WILL GUARANTEE EARLY DELIVERY OF SIZABLE QUANTITIES OF PALLETS.
8. LIGHT WEIGHT MEANS LESS OPERATOR FATIGUE—LOW SHIPPING COST.

Mail or express sample or drawing of pallet required for prompt quotation and delivery. We make aluminum, cast iron and brass castings of every description to buyers' specifications.

FLORIDA DIE CASTING FOUNDRY
PHONE 2-1138 • ORLANDO, FLORIDA
THE JUNIOR

Thousands of Juniors are serving builders today. Within its capacities the Junior Comet is a superb machine. Because of its utility the demand for this model grows daily.

THE CLIPPER

The Comet Clipper. This model has been a favorite with builders since it was first added to the Comet line. Medium weight, nevertheless, has more horsepower than Junior models.

THE SENIOR

Here is the famous Comet Senior. This is the saw that set a pattern of performance which swept it into national prominence. Designed for heavy duty.

THE SENIOR "8"

This newest model increases the range of the Comet line. It has the inherent sturdiness of the other models plus an abundance of power to handle the work for which it is specifically qualified.

THE TIMBER CUTTER

Big, rugged, with a terrific capacity for tough jobs, the Timber Cutter finds its place in lumber mills, shipyards, and wherever else heavy cutting is required. It offers the ultimate in large power saw performance.

CONSOLIDATED MACHINERY & SUPPLY CO., LTD.
2029-33 Santa Fe Avenue, Los Angeles 21, California

COMETS cut quicker

Wyatt Appoints Director of Prefab Unit

JAMES L. PEASE, president of the Pease Woodwork Co., Cincinnati, O., recently was appointed director of the Prefabrication Production Branch for the Veterans' Emergency Housing Program by Wilson W. Wyatt, National Housing Expediter and Administrator of the National Housing Agency.

In making the announcement, Mr. Wyatt said, "It is obvious that Mr. Pease has the complete confidence of the prefabrication industry and we are sure that he will have its full cooperation in the major task the prefabricators have been assigned in the Veterans Emergency Housing Program."

Mr. Pease has assumed his duties in Washington heading up the branch organized to handle matters related to prefabricated housing under the veterans program.

One of the charter members of the Prefabricated Home Manufacturers Institute, Mr. Pease served as its president in 1945-46. He has also served on the advisory committees of the OPA and Civilian Production Administration.

Wilson Radial Headquarters Moved

The expanding demand for cutting and conveying equipment in the nation's unprecedented lumber supply situation has brought the removal of headquarters of Wilson radial cutting machine and allied lines from Kansas City, Mo., to St. Charles, Ill. The well-known equipment is marketed nationally by Equipment Engineering Co., division of the Nall corporation. The extensive marketing division as well as the entire engineering and service departments will be concentrated in the headquarters building at St. Charles.

Abundant, low-cost HEAT and HOT WATER from one small, automatic Oil Burner

The New ECONOLUX 150V

Here's a super-efficient new Boiler-Burner Unit for forced or gravity Hot Water Heating Systems that is easy to install, powerful, and amazingly economical to operate. It comes to you completely assembled, ready for connection to flue, wiring, and water lines.

This beautiful new Econolux is so small (24" x 60") it will fit into close quarters...even in the kitchen or laundry. It's entirely automatic. Night and day the year 'round, it supplies ample faucet hot water from the double-shell outer hot water jacket. It stores 10 gal. and heats additional water almost instantaneously as it is drawn off.

Powered by a 150,000 B. T. U. output Bankheat Burner, the Econolux has ample heating capacity for any 10-room house or small commercial bldg. Ask your Johnson Dealer or write direct.

Johnson Oil Burners...

S. T. JOHNSON CO.
940 Arlington Ave., Oakland 8, Calif.
401 No. Broad St., Philadelphia 8, Pa.
Majestic
ASH DUMPS and CLEAN-OUT DOORS

Built for
RUGGED SERVICE

The top-quality materials and sturdy design of these typical MAJESTIC products assure lasting satisfaction in any type of building. MAJESTIC Clean-out Door and Ash Dump feature formed steel construction,* and are coated with asphaltum paint for resistance to rust and wear. The Clean-out Door has positive mortar lock for anchorage and a close-fitting, free-acting door. The ash-dump lid is permanently hinged to prevent dropping out. Write for details.

The Majestic Co.
1081 Erie Street, Huntington, Ind.

ASH DUMPS and CLEAN-OUT DOORS

ATLAS LABOR-SAVING SPEED FORMS

A Poured Concrete Foundation Complete In ONE Day

Build Solidly and Save
Costs Less Than Cinder Block
Forms Go Together Quickly Wedge Bolts

You can cut costs and put a real honest-to-goodness poured concrete cellar under the houses you build with Atlas SPEED Forms. Easy to erect and strip. Inexpensive to buy. Lasting—Built of blue annealed steel and can be used over and over again. Available now for early delivery.

Write For Folder
IRVINGTON FORM & TANK CORP.
IRVINGTON 1, NEW YORK

Ideal "Dual Purpose" Hinges
(Full Surface or Half Surface)

For Storm and screen doors, casement sash, etc., well finished and packaged with screws

No. 323CD (Dull Cadmium) $3.60 List Dz. Pr.
No. 323US4 (Dull Brass Plated) $4.80 List Dz. Pr.
Solid Brass Pins Slightly Extra

We also make a hinge No. 324 similar to above which can be used Full Mortise or Half Surface by reversing one leaf.

Sold only through Hardware Distributors
"Satisfaction Guaranteed"

Ideal Brass Works
250 E. Fifth St.
St. Paul 1, Minn.

Manufacturers of Builders Hardware Specialties, such as Ideal Screen Door Latches, Barn Door Latches, Storm Sash Adjusters, Screen Door Hinges, Casement Sash Friction Stays and Other Popular Items.
Custom-Built Steel Kitchen

A MODEL kitchen was recently installed in the Lewis & Conger store at New York by Cox Kitchens, Inc. This is the first kitchen to be illuminated with fluorescent fixtures, specially designed by Sylvania Products, Inc. Carefully installed over work surfaces, this scientific light is evenly distributed, casting no shadows.

The incorporation of glass brick at either side of the window enhances the appearance, both inside and out, admits more light and eliminates the necessity for curtains.

Steel, streamlined kitchen cupboards make the most of all available space. A special feature of these units is the undersink cabinet, which contains a special automatic switch and turns a light on when the cupboard door is opened. Vegetable bin cabinets are divided into separate compartments. Adjustable shelves permit the convenient storage of various sized bottles and food containers. The flour and sugar bins pull out, and are equipped with a sifter at a convenient height for measuring.

HOW TO USE COLOR ON CONCRETE BLOCK

Many Helpful Ideas in New Booklet

FREE to American Builder Readers

A cement block structure can be made outstandingly attractive by the proper use of Bondex colors applied to the exterior. Send for the new booklet which gives actual color ideas for beautifying cement block buildings and homes with Bondex Waterproof Cement Paint.

The Reardon Company, 2208 N. Second St., St. Louis 6, Mo.

Please send me the booklet "How to Use Color on Cement Block."

NAME__________________________
ADDRESS________________________
CITY____________________________
STATE___________________________

Mail This Coupon Today for Valuable Information
Contractors and Builders

YOUR WATER PROBLEMS CAN BE SOLVED BY INSIDE APPLICATION, AGAINST PRESSURE

THIS IS A WET BASEMENT PROBLEM TO THE BUILDER AND HOMEOWNER.

A WATERPLUG, a quick-set hydraulic compound, seals streams of active water streaming through wall. Set begins in from 3 to 5 minutes after mixing water is added.

Write for circulars descriptive, in photographic detail, of how to waterproof a basement, how to seal the surface of manufactured block, brick, concrete or any type masonry with THOROSEAL.

Request your Lumber or Builders' Supply Dealer in your home city to order for you.

Standard Dry Wall Products, Inc.

PROTECT YOUR BUILDINGS with

WOOD TOX is recommended for control of all mold decay, moisture deterioration and termite damage on all exterior woodwork against decay, mold, termites, warping and shrinking.

TERRATOX is recommended for all timbers already in place to prevent termite and borer infestation and moisture deterioration.

For dimensional control, WOOD-FIX is unexcelled for resisting warping, checking and grain raise. For interior woodwork.

WATERPROOFING

5137 Southwest Ave.
St. Louis 10, Mo.

CEILING VENTILATION

in every G.I. home

Blo-Fans Ceiling Ventilators cut both cost and frequency of interior cleaning. These efficient modern ventilators literally scoop up cooking smoke and soot as fast as they rise—before they smear walls or furnishings. Blo-Fans combine the principles of both breeze fan and blower. They have lower plus volume. Blo-Fans belong in both single and multiple dwelling units—in kitchens, bathrooms, servants and laundries. The cost is little.

Buyer or renter, the G.I. family wants a home that's free from cooking greases walls and delineates odors. There are Blo-Fan models for all classes of homes, from the smallest to the most imposing.

Distributed by Franchised Wholesalers Throughout the Country

Pryne & Co., Inc.
Los Angeles 54, California

Manufacturers of Instruments for Engineers, Surveyors and Builders.

For prevention of mold, decay, moisture deterioration and termite damage on all exterior woodwork against decay, mold, termites, warping and shrinking.

For dimensional control, WOOD-FIX is unexcelled for resisting warping, checking and grain raising. For interior woodwork.

WOOD TREATING Chemicals Co.

5137 Southwest Ave.
St. Louis 10, Mo.

Wood Fixing Against Decay Termite Warping

OIL SOLUBLE TERRATOX is recommended for all timbers already in place to prevent termite and borer infestation and moisture deterioration.

For dimensional control, WOOD-FIX is unexcelled for resisting warping, checking and grain raising. For interior woodwork.
...Now you can specify Super-Efficiency

Yes, closets can be super-efficient. Just provide your clients with beautiful, colorful Modernfold—the accordion-type door. It multiplies closet capacity . . . increases visibility . . . eliminates crowding . . . and makes the entire closet readily accessible. But Modernfold is never limited! You can use this fabric-covered, metal-framed door in practically every room in the residence to eliminate swing area, save space and provide a practical, economical means of room division. It is equally efficient in commercial installations. Write for full details.

NEW CASTLE PRODUCTS
1607 | Street, New Castle, Indiana
Dealers in All Principal Cities in the United States and Many Foreign Countries

Manual of Letter Writing Hints For Building Material Salesmen

THE Barrett Division, Allied Chemical & Dye Corporation, has released "Better Letters," an attractive eighty-page book of sales letters and suggestions as to how to write them. Called by the Barrett advertising department "a short course in sales letter preparation," the book details the particular "personal" advantages of letters as contrasted with general printed direct mail advertising, and advocates greater use of sales letter campaigns as effective means of selling roofing, siding and insulation.

Inside, the introductory pages include a section explaining the selling power of letters; a chapter devoted to thirteen tips on how to write good selling letters; advice on the best methods of quantity letter reproduction; and sixty-five sample letters. The last section is a two-page spread of up-to-date postal regulations, along with postal rates.

BETTER JOBS—BETTER PAY

The postwar building boom is in full swing and trained men are needed. Big opportunities are always for MEN WHO KNOW HOW. These books supply quick, easily understood training and handy, permanent reference information that helps solve building problems.

Coupon Brings Eight Big Books For Examination

AMERICAN TECHNICAL SOCIETY
Dept. GA33

You may ship me the Up-to-Date edition of your eight big books, "Building, Estimating, and Contracting," without any obligation to buy. I will send you $2.50, and after the first $2.50 a month, until the total price of only $24.80 is paid. I am not obligated in any way unless I keep the books.

Name
Address
City State

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

Designed with two pairs of integrally formed attaching legs, these self-locking SPEED NUTS can instantly be driven into anchored position. When used in THICK wood, the com-like structure of the attaching legs forces them outward as they are driven deeper into the wood, permanently anchoring the SPEED NUT in place. When driven into THIN wood, the attaching legs peen over against a backing plate. These SPEED NUTS lock parts together with a vibration-proof, spring tension grip. Write today for samples.

TINNERMAN PRODUCTS, INC.
2159 Fulton Road, Cleveland 13, Ohio

Where "foil" is desired, to compensate for mis-alignment of clearance holes, we recommend A954, similar to A6279. This "foil" type is laid down over a plain hole in the retaining saddle. The outer edge of the saddle is covered by the "U" nut and is offset to permit full contact with the wood surface.

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Dept. GA33

You may ship me the Up-to-Date edition of your eight big books, "Building, Estimating, and Contracting," without any obligation to buy. I will send you $2.50, and after the first $2.50 a month, until the total price of only $24.80 is paid. I am not obligated in any way unless I keep the books.

Name
Address
City State

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

Designed with two pairs of integrally formed attaching legs, these self-locking SPEED NUTS can instantly be driven into anchored position. When used in THICK wood, the com-like structure of the attaching legs forces them outward as they are driven deeper into the wood, permanently anchoring the SPEED NUT in place. When driven into THIN wood, the attaching legs peen over against a backing plate. These SPEED NUTS lock parts together with a vibration-proof, spring tension grip. Write today for samples.

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MOLLY SCREW ANCHORS

For easy installation of fixtures and accessories.

Fastens securely in any wall... concrete to thin fiber board.

Anchor will not pull if screw is removed.

The THERMAG Circuit Breaker Panelboard has all the newest improvements you and your customers want for lighting and appliance circuit protection and control. There's a safe Bakelite front with no danger of shock. Automatic, thermal-magnetic protection on short circuit and overload is tested for ten thousand complete operations. Four to forty-two circuit breakers in 15 to 50 amperes capacities, 120 volt AC service.

Manufacturers of Electrical Equipment for Half a Century
FRANK ADAM ELECTRIC CO.
Box 357 St. Louis, Mo.
ALPHABETICAL INDEX TO ADVERTISERS, JUNE, 1946

A

B

C

D
defor Shipbuilding Company 64 Delco Steel Products Corporation 3 Douglas Fir Plywood Association 20 Duplex, Inc. 140

E
eagle-Fisher Company, The... 120 East & Easton Company 140 Edison General Electric Appliance Co., Inc. 39 Elyson 17 Essex Wire Corporation 141

F
Fiat Metal Manufacturing Company 147 For Door Institute 9 Firestone 133 Flinckote Company, The 38 Florida Die Casting Foundry 149 Ford Metal Molding Company 10 Ford Motor Co. 26 Frigidaire 73

G
General Electric Corporation 21-138 General Motors Corporation 73 General Tire & Rubber Company of California 33 Grand Rapids Hardware Company 142 Great Lakes Steel Corporation 29

H
Homantce Company 147 Hotpoint Institute, The 39

I
Ideal Brass Works 151 Ingersoll Steel Division, Borg-Warner Corp. 17 Insulte 56 Irvington Fork & Tank Corp. 151

J

K
Keesey & Mathison Company 12 Kelvinator Division 111 Kennedy, Inc., David E. 20 Keran Insulator Co. 149 Kinnear Manufacturing Co., The... 134

L
Legion Utensils Co. 132 Leslie Welding Co. 155 Libby-Owens-Ford Glass Company 44-67 Lockheed Cotton Batting Company 136 Louisville Cement Co., Incorporated 21

M
Majestic Co., The... 151 Mail Tool Company 147 Maris Wall Products, Inc. 141 Mastice Asphalt Corp. 8 McGraw-Hill Book Co. 142 McKinney Manufacturing Company 147 Mcelroy, Inc. 70 Metcalf Manufacturing Company 57 Molly Corporation 155 Morse Boulger Destructor Co. 149 Mueller Furnace Co., L. J. 25

N

O
Overhead Door Corporation 3rd Cover

P
Paint Co., The 157 Paine Lumber Co., Ltd. 128 Paradise Wire and Cable Division 141 Pittsburgh Plate Glass Company 37-40 Ponderosa Pine Woodwork 48 Prims Products, Inc. 40-41 Fryne & Co., Inc. 153

R

S

T

U
United States Plywood Corporation 78 United States Savings and Loan League 28 United States Steel Corporation Subsidiary 68 Universal Atlas Cement Company 68 Universal Form Clamp Co. 144 Universal Zonolite Insulation Co. 24 Uponom Company, The... 6

W

IDEAL FOR HOUSE CONSTRUCTION!

AMERICAN TRUSSED RAFTERS
WRITE FOR FULL INFORMATION
AMERICAN ROOF TRUSS COMPANY
6511 STONY ISLAND AVE. CHICAGO 48, ILLINOIS

Hydro-Flo HEAT
Forced hot water heating for radiant, convective, unit heater, baseboard and radiant panel systems. Water Heaters for home and industry
BELL & GOSSETT CO.
Morton Grove, III. Dept. 0-11
SAWS - RAFTERS WITHOUT MARKING!

Here's the most practical contractor's saw on the market today—the Wallace No. 1 Radial Saw. With the exclusive Wallace Angulator, it cuts rafters completely with only ONE handling and without marking.

It's a real money-maker on framing work, saving $75 to $200 on average homes. Handles every kind of sawing operation, and can replace first-class shaper, dadoing, ploughing, grooving, fluting, bevelling, routing. We make a complete line of machines for every woodworking operation. Write today for full information.

J. D. WALLACE & CO.
136 So. California Ave., Chicago, Ill.

RAFTERS WITHOUT MARKING!
Here's the out marking.
fluting, beveling, routing, etc.
today for full information.

J. D. WALLACE & CO.
136 So. California Ave., Chicago, Ill.

BE A SUCCESSFUL BIDDER
The successful bidder is the man who bids the right price. A correct estimate is the foundation of any builder's success. A job taken too cheap results in a loss; a bid too high is lost to a competitor. Whether you are a beginner or experienced in estimating, you can't afford to pass up this offer to examine the Tamblyn System of Estimating absolutely free.

This system is based on forty years of actual construction experience, and by its use you can estimate costs according to your local taxes and conditions. Thousands have used it successfully during the twenty-five years it has been on the market. This year the course has been completely revised to help you get your share of the postwar business.

Study the course for ten days absolutely free. If you decide you don't want to keep it, just return it. Otherwise you will be charged $5.00, and pay the balance of $25.00 at $5.00 per month, making a total of $30.00 for the complete course. Send us your name and address today, and we will send you plans, specifications, estimate sheets, a copy of the Building Labor Calculator, and complete instructions. What we say about this course is not important, but what you find it to be after you examine it is the only thing that matters. You be the judge; your decision is final.

TAMBLYN SYSTEM, Johnson Building AB, Denver 2, Colo.

SPOT CORD
REG. U.S. PAT. OFF.

Samson Cordage Works
Boston 10, Mass.

Spot Cord
— the most durable material for hanging windows

When hanging pipe, conduit or cable, use Paine Offset Clamps. Each clamp has correct size stove bolt already inserted to save time when buying and installing. Special offset feature—that holds cable away from wall—speeds installation and maintenance. Available in rigid and thin wall sizes. Guaranteed rust proof.

Ask Your Hardware Dealer or Write for Catalog

The Paine Co.
2935 Carroll Ave.
Chicago 12, Ill.

Spot Cord

Paine Offset Clamps
Easy Buying - Installation and Maintenance

Paine Offset Clamps

CAULKING GUN
with a Lifetime Guarantee

For Cartridge or Bulk Compounds

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