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TECHNOLOGY DEPT.

AMERICAN

FEBRUARY, 1945
PRICE 25 CENTS
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WORLD'S GREATEST
BUILDING PAPER

BUILDER

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DETROIT

A N D B U I L D I N G A G E



**No. 1 War
Housing Job**
See Story Page 78

Available Now!

CELOTEX 1/2" BUILDING BOARD

This is the famous Celotex Standard building board—a 1/2" cane fibre product. Use it wherever a strong, rigid, lightweight board with heat resisting and sound insulating properties is required. It is smooth ivory-coated on one side—back is natural. And it is Ferox-Processed against dry rot and termites. Made in sizes 4 feet wide by 6, 7, 8, 9, 10 and 12 feet long.



Available Now!

CELOTEX ROCK-WOOL BATTS FOR HOME INSULATION

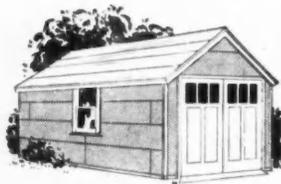


It's never too late to insulate homes—both for fuel savings now and for greater summer comfort later. Celotex Rock Wool Batts provide insulation of proved efficiency at moderate cost—but with fine profits to you. They are fireproof and come

in full stud thickness. Can be applied between attic floor joists or between the rafters. Celotex Rock Wool is also available for "blow-in" application. And easier FHA financing is available to your prospects.

Available Now!

CELO-SIDING... THE MULTIPLE-FUNCTION MATERIAL THAT DOES 3 JOBS Siding...Sheathing...Insulation



Ideal for farm buildings, factories, machine shops, warehouses and general buildings. Combines siding, sheathing and insulation in one weather-resistant, easily applied material. Applied direct to studding. Celotex Siding saves critical lumber,

time and labor. Available in bufftone or green colors and in two thicknesses—3/8" and 7/8". Sizes: 3/8" in 4' x 8' and 7/8" in 4' x 8' and 4' x 10' with square edges; 7/8" in 2' x 8' with T&G joints on long edges. Recommend 7/8" for greater strength and insulation value; 3/8" for lighter, lower cost construction.

CELOTEX
REG. U.S. PAT. OFF.
BUILDING PRODUCTS

IT PAYS TO FEATURE THE LEADER...

Celotex Building Products

New-Home Prospects Know and Accept Celotex Quality... That Means Complete Customer Confidence in You and the Job... More Business and Profits for You.

Celotex offers you a complete line of building products under one banner that America accepts with confidence. This nationwide acceptance has been built up through more than 20 years of consistent Celotex advertising.

Today, New-Home Prospects Know That...

- Celotex is the only manufacturer of cane fibre building boards in this country.
- the long, tough, interlocked cane fibres give these boards greater strength and insulating value.
- only Celotex insulation board products are protected against termites and dry rot by the exclusive, patented Ferox Process.

The famous Celotex standard of quality at low cost is maintained by continuing research and tests plus steady improvements in manufacture. In laboratories and field work, Celotex technicians are constantly at work developing new multiple-function materials incorporating the features of Celotex cane fibre products. Best of all, there are plenty of Celotex building products for you to use now in place of "hard-to-get" lumber. See your Celotex dealer.

Available Now!

CELO-ROK WALLBOARD AND WEATHER-PROOF SIDING



Celo-Rok gypsum wallboards meet the rigid Celotex tests for quality. They are fire-resistant—won't warp, expand or contract. Their light weight makes them easy to handle, easy to work with, yet they are durable and strong. They take any

standard type of decoration. Available in square, recessed or beveled edges—3/8" or 1/2" thick. Square edge also available in 1/4" thickness. All are 4 feet wide, made in 4, 5, 6, 7, 8, 9, 10, 11 and 12 ft. lengths.



Celo-Rok Weather Proof Siding is a fire-resistant gypsum board—a single structural material which will serve in place of both sheathing and siding. Both surfaces and all edges are treated with a weather-proofing compound. Exterior side is finished in green and requires no painting. Available in 1" thickness with ship-lapped long edges and 1/2" thickness with T&G long edges—24 inches wide, in 6, 8, 9, and 10 foot lengths.

Also Available!

- | | |
|--------------------------------------|------------------------------------|
| Celotex Insulating Sheathing | Celotex Insulating Lath |
| Celotex Insulating Interior Finishes | Cemesto |
| Celotex Triple Sealed Shingles | Celotex Triple Sealed Roll Roofing |
| Celo-Rok Anchor Lath | Celo-Rok Sheathing |
| | Celotex Asphalted Building Board |
| | Celotex Roof Insulation |
| | Celo-Rok Plasters |
| | Flexcell Expansion Joint |

THE CELOTEX CORPORATION • CHICAGO 3, ILLINOIS

Published monthly by Simmons-Boardman Publishing Corporation, 105 W. Adams St., Chicago 3, Ill. Subscription price, United States, Possessions, Canada and Mexico, 1 year \$2.00; 3 years, \$5.00; foreign countries: 1 year, \$3.00; 3 years \$6.00. Single copies, 25 cents. Entered as second-class matter Oct. 11, 1930, at the Post Office at Chicago, Ill., under the act of March 3, 1879, with additional entry as second-class matter at Mount Morris, Illinois. Address communications to 105 W. Adams St., Chicago 3, Ill.

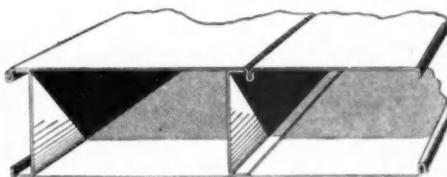
Better, Faster with these NEW *Fenestra* BUILDING PANELS



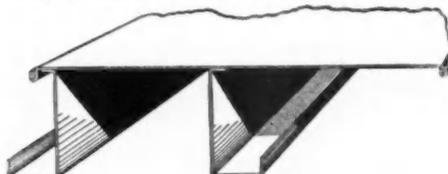
These new panels will enable you to construct your buildings with speed and economy as soon as restrictions are lifted. They're designed for great strength, yet are light in weight. They lock together—fast—with great savings in field labor.

The interlocking panels provide attractive flat or ribbed surfaces, ready for the application of any finishes you desire. They are vapor-sealed, non-combustible, can be insulated. Fenestra Building Panels can be used to form an entire enclosure of steel—or as floors, walls or roofs along with other structural materials.

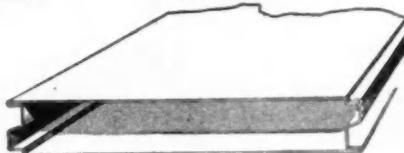
THREE TYPES



TYPE A consists of two channels with top and bottom plate which, with service cover, form a two cell box beam shape when interlocked with adjacent section. Service cover gives access to cell for installing service facilities, 16" width, 3" to 9" depth, elements of sections in combinations of 18 to 10 gauge.



TYPE B has one flat surface and two channel-type ribs. Can be used with flat side up or down, inside or outside. 16" width, depth 3" to 9", elements of sections in combinations of 18 to 10 gauge. As with Type A, this versatile panel permits easy application of wood, concrete or other surfacing materials.



TYPE C—used horizontally or vertically for walls. Normally filled with insulation at the factory. Corrosion-resistant metal can be used for outside sheet. Walls can be covered, inside or outside. 2" and 3" depth, 16" width. Gauges vary according to application requirements.

GET THE FACTS . . . SEND FOR CATALOG

Fenestra

BUILDING PANELS FOR

ROOFS

WALLS

FLOORS

DETROIT STEEL PRODUCTS COMPANY,
Building Panels Division (formerly Holorib Div.)
Dept. AB-2, 2260 E. Grand Boulevard,
Detroit 11, Michigan

Please send me, without obligation, information on Fenestra Building Panels.

Name _____
Company _____
Address _____

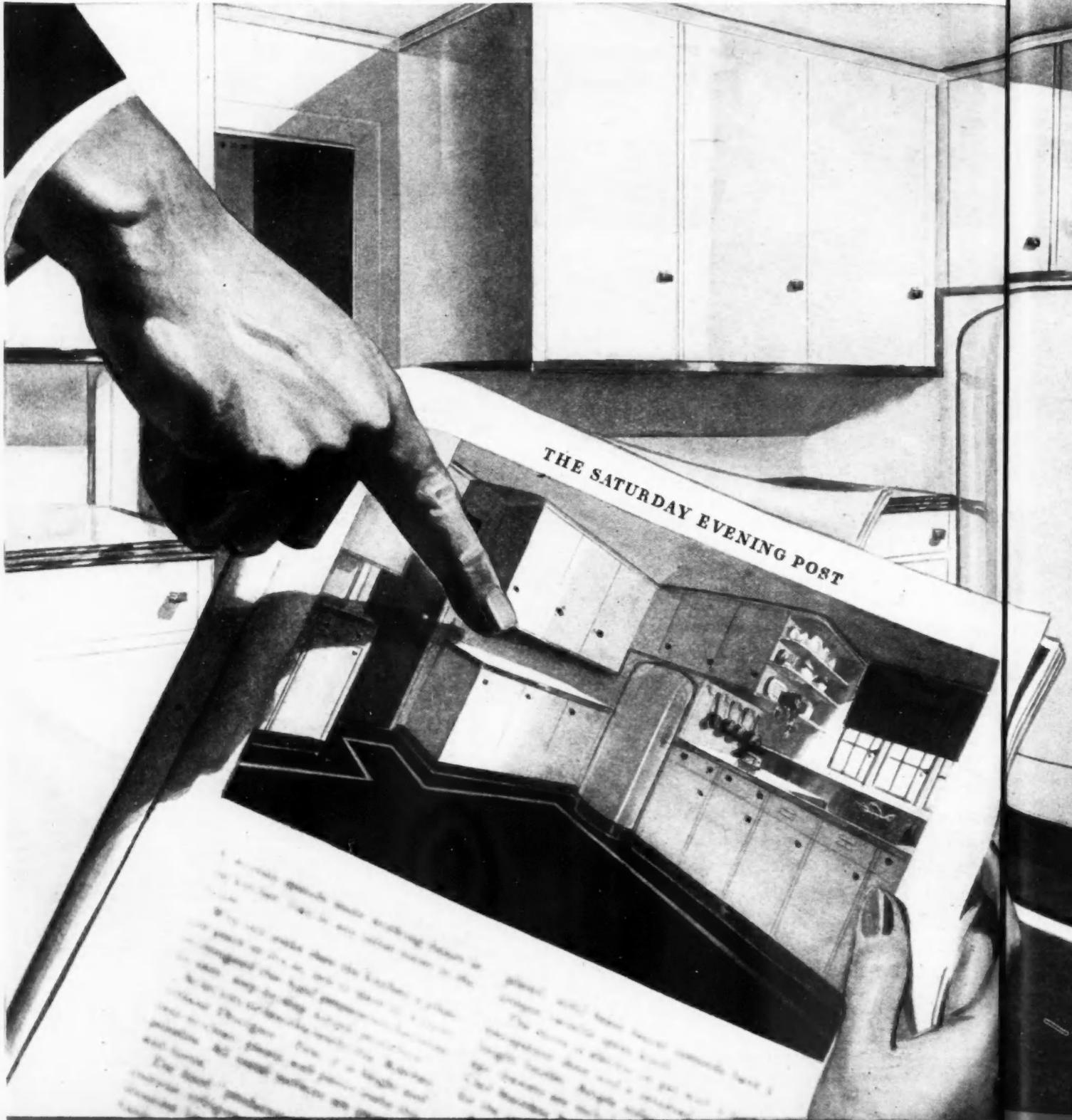
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Post Pages Start the Urge . . .



People Purchase Products that

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• that Ends with Buying Action



are Pictured in the

SATURDAY EVENING
POST

Your Customers are saying:

Five years ago, we installed your Upson Ceiling in several rooms and stairway as our plastered ceilings were cracked and unsightly. Our Upson Ceilings look beautiful and are as good today as when they were installed. They have required no attention or repairs outside of the usual wiping to refresh them.

G. D.*
Woonsocket, R. I.

Sept. 5, 1944

When I built my home 25 years ago, I used Upson Panels in living room, back hall and bathroom. They were so satisfactory that I used them again six years ago when I put bathrooms in a 200 year old house that I own. I am now planning a house in the mountains in North Carolina and expect to use your Panels again.

F. W. P.*
Providence, R. I.

Sept. 1, 1944

Three years have elapsed since Upson Strong-Bilt Panels were installed throughout our new home. It is with great satisfaction that I say we have no cracks in our walls and ceilings. Upson Panels have added to the warmth and artistic appearance of our home by making each room a better one to live in.

Oct. 31, 1944 Mrs. E. D. L.*
Mountainside, N. J.

*Name on request.

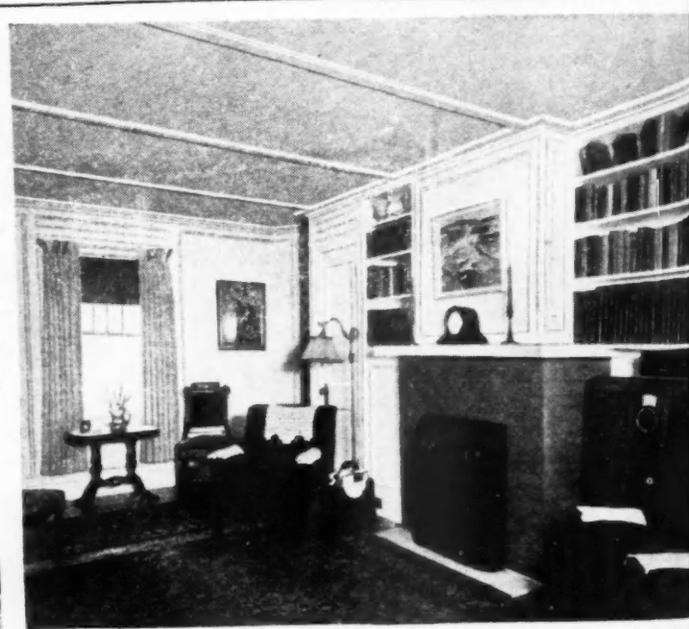
IN the universal satisfaction of Upson customers everywhere is *proof* of the quality and beauty you want in products for postwar jobs.

In a recent nation-wide survey is *proof* that you can depend upon the installation of Upson Ceilings for an important part of your postwar income. This survey reveals that:

Two out of every three homes today have cracked walls and ceilings.

And that *one home owner in every four* is planning cracked plaster repair work just as soon as it can be started.

What other type of job will you have a chance to sell



to one out of every four homes? Application is extremely simple and profitable. The time to investigate and prepare yourself is *now!* Consult your lumber dealer or write us for details on how you can begin. The Upson Company, Lockport, New York.

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

UPSON

PACEMAKER IN CRACKPROOF PANELS

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LETTERS

Marvels appreciated

To the Editor: I marvel at the amount of material that goes into your issue each month and appreciate the fact that it must take a tremendous amount of effort to produce such an issue.

I had a copy at our last meeting and made it a point that the entire membership had an opportunity to scrutinize the articles and photographs, and I intend to see that those who missed it at the last meeting get a chance to view it at the next meeting.—J. RAYMOND TOBIN, Rochester Home Builders' Assn., Rochester, N.Y.

In hospital, plans cabins

To the Editor: Please send me any literature you have on construction of log cabins of all types. I am a patient in the hospital and would like to plan on building one of these later on.—LT. LEWIS LEADER, A.A.F. Regional Hospital, Maxwell Field, Ala.

20 long years!

To the Editor: Here across our desk this morning came a little piece of interesting evidence of the power of *American Builder*. We have before us an inquiry from our advertisement on Page 9 of the December, 1924, issue. Believe it or not, the reader lives in Missouri.

So it's exactly twenty years ago since that ad was published, and indicates that there is a long, long life to *American Builder*, and it shows my predecessor was an excellent copywriter.—WILLIAM W. PETERSON, National Brass Co., Grand Rapids, Mich.

Deferred by war

To the Editor: In a recent issue of your magazine, an article appeared concerning the possibility of constructing a model house for the stimulation of post-war construction.

For several months, we were planning just such a program, and upon reading your article, made immediate contact with the N.H.A. and W.P.B., but were coldly advised that there was no possibility of help from them.

Would you kindly advise us as to whom we should contact relative to this matter.—ARTHUR E. WILSON, Henry C. Cox Const. Co., Long Beach, Calif.

Veterans live subject

To the Editor: I am very much interested in your articles and plans for ex-service men. I wish to be advised if a veteran's family whose husband or father is in active service would be eligible for priorities to purchase or build a new house. I also wish to know if a retired soldier, or discharged, would be eligible.—G. P. BROWNLOW, Columbia, Tenn.

A trade secret

To the Editor: Let me compliment you on Structor's column, "On and Off the Record" especially for last month's issue. Who is Structor? These little paragraphs really hit the nail on the head.

We are really having a time building houses under H-1 for \$6000. Apparently, there is no price control on materials and sub-contractors. The cost of these buildings right now are way in excess of \$6000.

I wonder just what is in store for us the next few months? This public housing thing seems to be getting really out of hand.—HENNY MOLLGAARD, The Mollgaard Co., Milwaukee, Wisc.

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FOUNDED—1879

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**DON'T LET YOUR NEW HOME
BECOME A "DRUG ON THE MARKET"**



... here's one way to prevent it!



DINING ROOM SETTING FROM THE JOHN SHILLITO COMPANY, CINCINNATI



AN ADEQUATE CHIMNEY gives you freedom to heat with *any* fuel—including the least expensive and most plentiful of them all, Bituminous Coal. And remember, today's *expensive* fuels may be even *more* so in the years ahead!

A HOME THAT costs too much to heat becomes not only a "headache" to own—but also a "drug on the market" when you try to sell it!

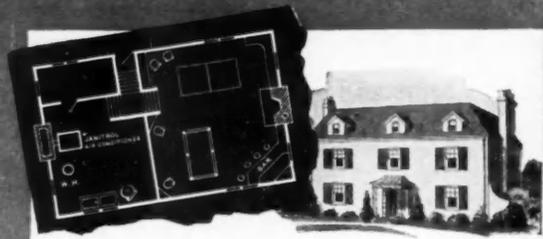
One way to make sure your home *won't* cost too much to heat is to make sure it has an *adequate* chimney—one big enough to handle *all* heating fuels equally well. Big enough, for instance, to provide the natural draft needed to burn Bituminous Coal—the fuel that gives the most uniform heat—the *least expensive* of all fuels—and the one fuel that will *always* be low in cost because America has a 3,000-year supply!

The extra cost of building such a chimney is small—only about \$16 for the average 7-room house! 4 out of every 7 homes in this country depend on Bituminous Coal for steady, even heat. And any home owner who has one of the modern coal-stokers knows how "automatic," how clean and odorless Bituminous Coal is, when properly burned.

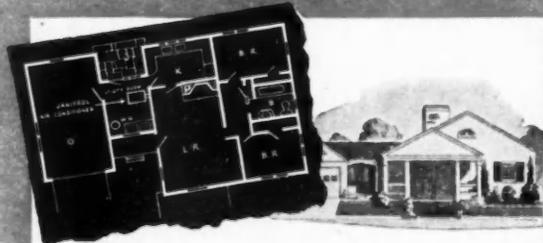
Your architect or builder will tell you that a chimney adequate for burning Bituminous Coal is also efficient for any other fuel you ever might choose. Talk it over with him—it will pay you to do so!

BITUMINOUS COAL INSTITUTE, 60 EAST 42ND STREET, NEW YORK 17, N. Y.

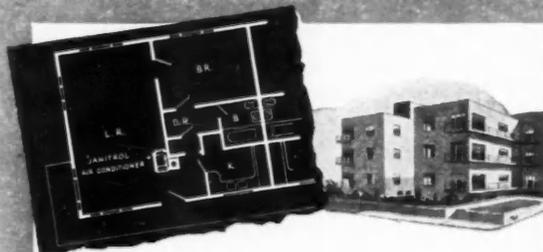
(This is one of a series of advertisements now appearing in home-makers' magazines)



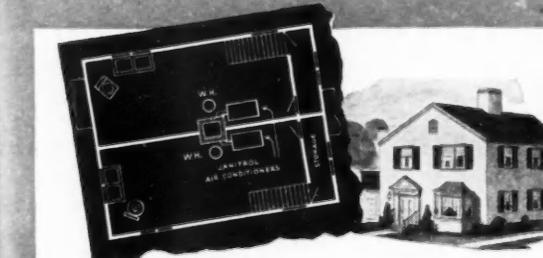
LARGE HOME: Janitrol Gas-Fired Winter Air Conditioner provides greater space for basement recreation room. Cleanliness of gas heat permits it to be placed with laundry and water heater in one section of partitioned basement.



BUNGALOW: Basement may be eliminated to keep down costs. Janitrol equipment requires no fuel storage, can be installed in a small utility room. For basement installation, a Janitrol Gravity Furnace is recommended.

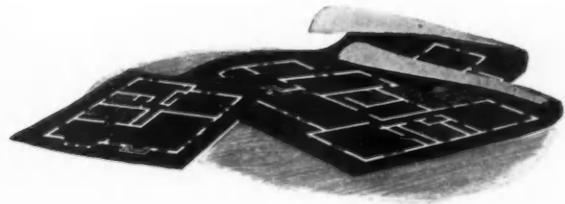


APARTMENT: Janitrol heating unit built into living room wall of each apartment allows each tenant to choose his own temperature, pay for his own heating. This materially lowers apartment house operating costs.



TWO-FAMILY DUPLEX: Basement divided to give each tenant privacy and separate laundry facilities. Separate Janitrol Winter Air Conditioners provide automatic gas heat, adjustable to each family's needs.

Heating systems that fit all plans



● Whatever types of homes you may have planned, there's a Janitrol Gas-Fired Heating System to fit each type. Thousands of successful installations—big community projects, private homes and apartments . . . in basements, attics, closets, kitchens, utility rooms, or walled up out of sight in living rooms—have shown that Janitrol's unexcelled *flexibility* makes it adaptable to practically *every* type of heating requirement.

But in all these installations, Janitrol is doing far more than merely meeting Btu specifications. Compactness, cleanliness, automatic operation—all add up to the kind of performance and solid heating comfort we like to call *long lasting liveability*.

There's *economy*, too. Quickly responsive temperature control wastes no fuel in overheating. Highly efficient burners squeeze maximum heat from a fuel which in itself is relatively cheap in most areas. Building costs can often be lowered—or more living area provided—because Janitrol requires no basement or fuel storage space.

So specify Janitrol Gas-Fired Heating Equipment to fit every housing plan, and to assure your clients of the *long lasting liveability* that brings customer satisfaction. For further data, write Surface Combustion, Toledo 1, Ohio.

Janitrol

**GAS-FIRED
HEATING EQUIPMENT**



**BUILT FOR HOMES
NOW BEING BUILT
WILL FEATURE
Automatic
HEATING
GENERAL  ELECTRIC**

TODAY IS NOT TOO SOON TO PLAN

IN planning postwar homes, consider these five facts: The new G-E Automatic Heating Units will cost less to install than did the prewar models; they will be more compact and more completely packaged; they will continue to be the *quality* units of the heating industry; they will be "competitively" priced—will cost less than prewar; and they will be available as soon as the demands of our fighting forces for war

materials have been satisfied.

So, before you begin to plan your first 194X residence, be sure to investigate the new G-E Automatic Heating Units. Put in a call for your G-E Distributor, who will be glad to supply you with postwar heating answers. And remember, **TODAY** is not too soon.

General Electric Company, Heating and Air Conditioning Divisions, Section 5112, Bloomfield, N. J.

☆ BUY... and hold... WAR BONDS ☆

GENERAL  ELECTRIC

Tune in: The "G-E HOUSE PARTY" every afternoon Monday through Friday, 4 p. m., E W T, C B S . . . The "G-E ALL-GIRL ORCHESTRA," Sundays, 10 P. M., E W T, N B C . . .
"THE WORLD TODAY" News, Monday through Friday, 6:45 P. M., E W T, C B S

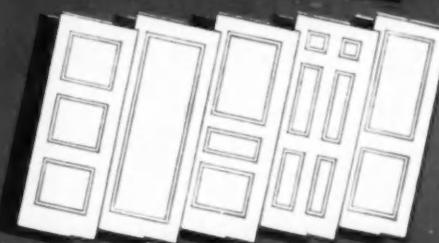
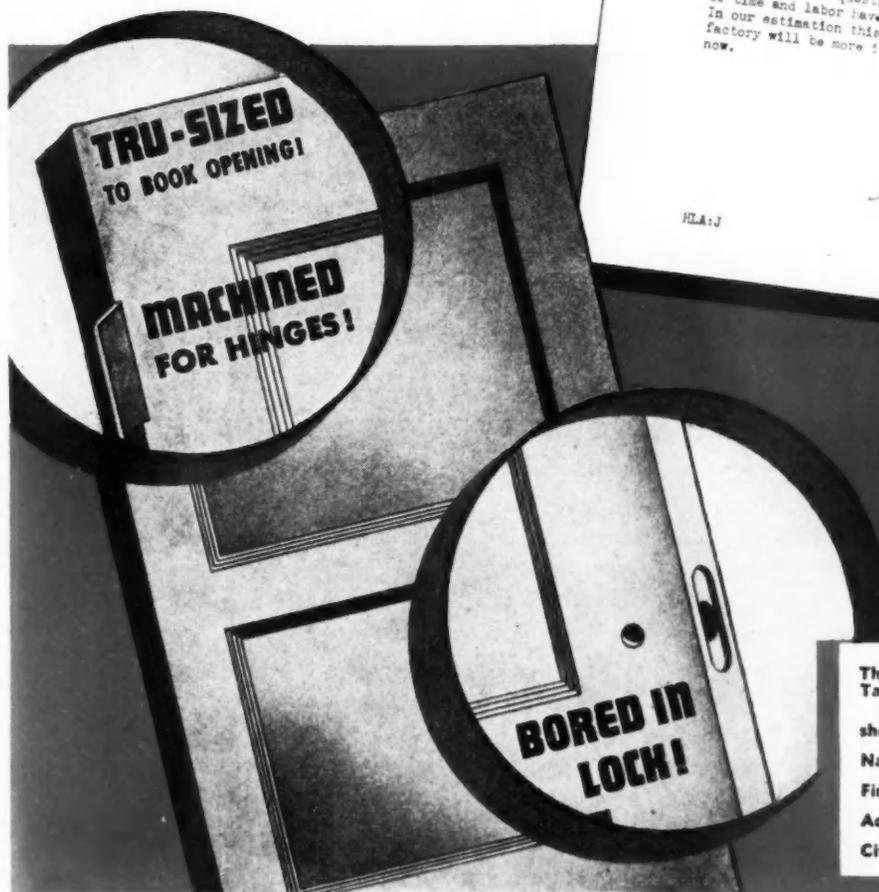
More speed *plus* uniform good fit because Wheeler-Osgood

Tru-sized DOORS

... ARE COMPLETELY MANUFACTURED READY TO INSTALL!

Tru-Sized Doors are designed to save valuable time and to help builders and carpenters do a better job than ever before. Because Tru-Sized Doors are precision machined to exact book opening, they fit perfectly any jamb that is plumb and square. Tru-Sized Doors, when ordered machined for locks and hinges, can save as much as 70 minutes on every door you install.

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



The Wheeler, Osgood Company, Dept. 7-25
Tacoma 1, Washington.

Please send me free literature and detailed guide sheet for ordering Tru-Sized Doors.

Name _____
Firm _____
Address _____
City _____ State _____

Good Buildings Deserve Good Hardware



*Our production is restricted
but our imagination has
Free Rein*

• While "business as usual" continues to be very unusual in *supplying* builders' hardware, no restrictions have been imposed on our THINKING about it! Thinking in new designs, new materials and new finishes to make builders' hardware more attractive to your clients and more easily selected.

Corbin hardware specialists are abreast of every

modern trend. As this war moves on into history, we suggest that periodic contact be maintained with your Corbin representative to the end that you may be fully advised of all product developments and supply possibilities.

"Good Buildings Deserve Good Hardware" post-war, as always. And, as always, you may rely on Corbin to provide it.



P. & F. Corbin

THE AMERICAN HARDWARE CORPORATION, SUCCESSOR

NEW BRITAIN, CONNECTICUT • SINCE 1849

forget miracle houses

what people really want is

full



convenience

Electrical Living

For years the use of electricity in the home has been increasing steadily. Today, there are over 40 servants in common use. Tomorrow, there will be more.

America wants the full convenience of modern Electrical Living, which requires adequate wiring. This means enough electrical circuits to deliver power where it's needed, and outlets at arm's length wherever they're required... served with plenty of power. Electrical Living also means better use of lighting, for decoration as well as illumination.

The cost of adequate wiring is a very small part of the cost of a home. Yet it has an outstanding influence on the value of homes—on appeal to the owner, or to buyers.

A careful study of your wiring plans will pay big dividends. And use of Westinghouse equipment will be your assurance of complete

client satisfaction. A consulting service on home wiring and lighting is available to the profession. Contact your nearest Westinghouse distributor or district office.

J-91503

Tune in: John Charles Thomas, Sunday 2:30 E.W.T. N.B.C.—Hear Ted Malone, Mon. Tues. Wed. Evenings, Blue Network.



Westinghouse
PLANTS IN 25 CITIES... OFFICES EVERYWHERE

BETTER HOMES DEPARTMENT

PEOPLE'S WANTS...TOMORROW'S LIGHT AND ROSES



1. Arm-Chair Editors have no place at House Beautiful. Digging out facts for their monthly "Home Planners Study Course" means first-hand contact with topflight authorities. Here Editor Elizabeth Gordon answers home-making questions at a meeting of The Home Planning Institute of Philadelphia, sponsored by the Quaker City Federal Savings and Loan Association.

2. "Possibilities vs. Probabilities" of future lighting are discussed by fact-ferreter Florence Paine with Dr. Matthew Luckiesh, G. E.'s Residential Lighting Director and nationally known master of lighting psychology. For a thorough analysis of the subject read "What Postwar Lighting Will Mean in Your Future Life," the sound factual article in House Beautiful's February issue.



3. Getting to the root of plans for postwar roses set House Beautiful's Garden Expert, Ralph Bailey, to checking on newly developed species in his trial garden before introducing them to the public. Here's famous rose-hybridizer Eugene S. Boerner, Vice-President and Research Chief of Jackson & Perkins Co., Newark, double-checking Bailey's results.

4. Analyzing Value Received for home-makers takes Feature Editor Marion Gough to John Gerald, Director of B. Altman's Decorating Department, for serious discussion. Her article "Do You Get More When You Pay More" in the February House Beautiful features four rooms designed by Mr. Gerald to show what \$1000, \$2000, \$3000 and \$4000 will buy in home furnishings.

HOUSE BEAUTIFUL is the magazine that interprets your market for you! It's FIRST in the home field...the must magazine for those who make it their business to know their business.

YOU KNOW IT'S RIGHT WHEN



It's Right from
HOUSE BEAUTIFUL

Do your Heating Plans include Toridheet Equipment?

That's a question which you may of course answer to yourself.

But we have the privilege of saying this to you: If your plans *do* include Toridheet Equipment you are moving on sure ground. If they do not include TORIDHEET it is not too soon to check with TORIDHEET.

Toridheet is in the heating equipment business on the modern side. What do we mean by that? Just this—that the history of Toridheet is a record of continuous progress. We have not been hampered by old ideas but have continuously moved forward in our thinking, in our designs and in our policies, not simply *with*, but generally *ahead* of the industry. Toridheet has always dared to be several steps in advance.

The significance of that fact to you now is twofold:

First, it definitely implies that Toridheet equipment is already in the modern swing. The minute conditions permit we can shift into production with products that definitely meet the demand of "tomorrow".

Second, it signifies that in Toridheet products, immediately after the war you will get heating equipment that has been proven and tested from the standpoint of all known measures of heating efficiencies. That is up-to-the-minute in accessories and conveniences. That it fits definitely into all modern plans for space conservation. That all Toridheet units are sweetly good looking in a business-like way—and this is important . . . backed by a nationwide reputation for dependability, ease of maintenance and high efficiency.

The TORIDHEET LINE includes: TORIDHEET OIL BURNERS, OIL BURNER BOILERS, AIR CONDITIONERS and WATER HEATERS. Also GAS HEATING UNITS and COAL HEATING UNITS.

If you seek AUTOMATIC Heating at its highest development you will give careful consideration to TORIDHEET. Shall we send you our newest literature?



TORIDHEET DIVISION

CLEVELAND STEEL PRODUCTS CORP. • CLEVELAND 2, OHIO

*Oil Burners • Air Conditioning Units • Oil-Burner Boilers
Coal and Gas Furnaces • Water Heaters*

INDUSTRIAL Washroom HOT WATER?

You BET
They'll Want It!

Modern workers expect modern washrooms . . . with *instant*, piping-hot water to "get the day's work off their hands". After a good wash-up they feel better . . . and they *work* better. You can be sure they'll welcome morale-building hot water on the post-war job, too!



Here's the **THRIFTY**
way to supply it!

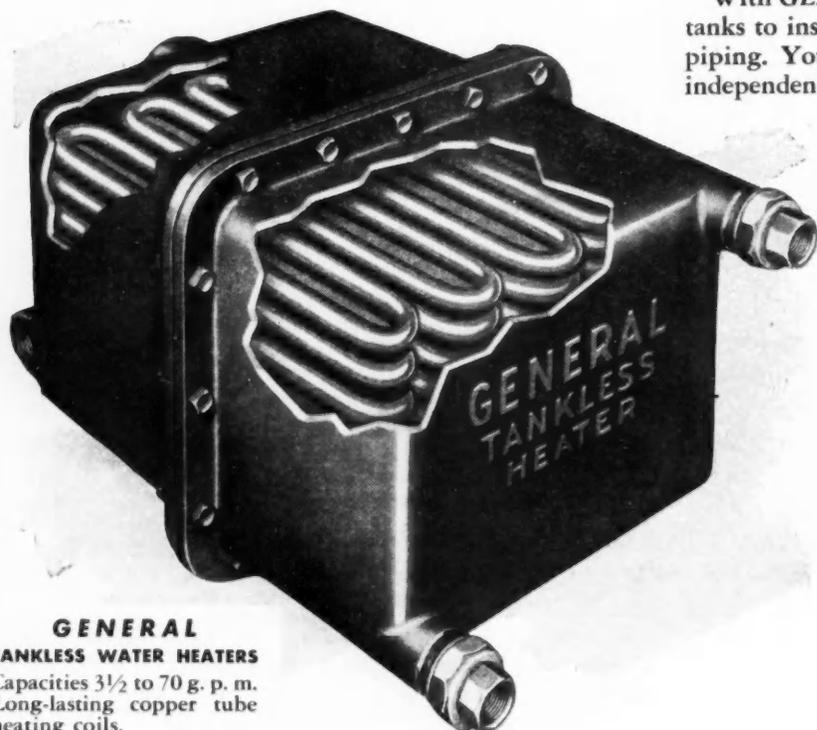
. . . To attract the best workers . . . to get the best out of them . . . to save the time wasted waiting for water to run hot . . . install the **GENERAL Tankless Heater!**

With **GENERAL Tankless Heaters** there are no tanks to install and maintain . . . no complicated piping. You insure minimum radiation loss - and independent operation for each washroom. And these efficient money-saving heaters hook up directly to boiler water or steam at any pressure. That's the kind of cheap hot water **GENERAL Tankless Heaters** put on tap . . . instantly, continuously!

You can do the best for your workers . . . and for yourself . . . by planning to install **GENERAL Tankless Heaters** as soon as war conditions permit. Write for complete specifications in Catalog 16. General Fittings Company, Dept. F, 123 Georgia Ave., Providence 5, R. I.



UNTIL VICTORY - a major part of our production is precision war work . . . torpedo and bomb parts, fuse setters, special Navy water heaters.



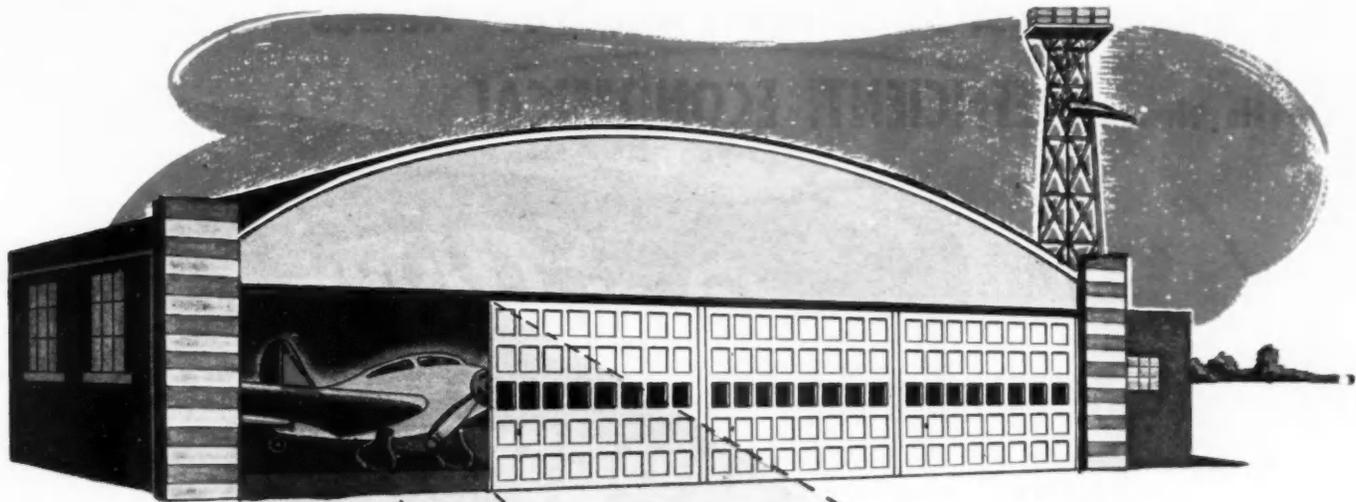
GENERAL TANKLESS WATER HEATERS
Capacities 3½ to 70 g. p. m.
Long-lasting copper tube heating coils.

GENERAL

WATER HEATERS AND HEATING SPECIALTIES

• Tankless and Tank-Type Water Heaters
for Washroom and Process Hot Water

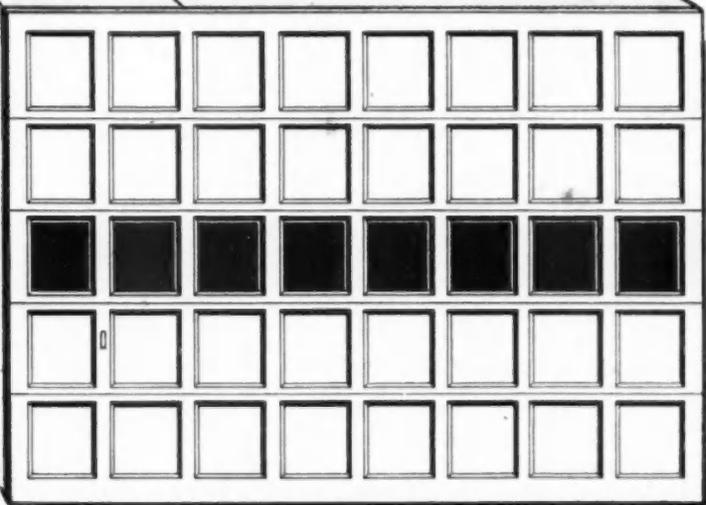
• Live-Steam Heaters • Water-Hammer Silencers • Thermostatic Mixing Valves • Coil-Heated Tanks



This hangar opening is neatly and adequately taken care of by four standard Crawford upward-acting doors, individually 10 ft. high by 12 ft. wide, and separated by three easily removable aluminum mullion strips which slip-lock into floor studs. Other glazing patterns may be used. Wire glass if desired.

HERE'S OUR SLANT

... on
hangar door
economy ...



BETWEEN the lines of the unfolding story of this war it isn't difficult to read the story of aviation coming of age. The postwar world—with thousands trained to handle planes and new hundreds of thousands accustomed to travelling in planes—will indeed be an air world.

Thousands of new hangars, public and private, will dot the land—and, though we have been up to our ears in the battle of production for war, we have been thinking of Crawford Door applications for hangars.

It is not too early for you to be thinking about this same subject. We have some unusual slants on efficiency and economy—quite naturally, too, since we have worked so long with similar problems for residential garage and industrial applications. We understand hangar door requirements, but you won't find our minds closed to special considerations you may present. Can we be of help to you? Just drop us a line—there's no obligation.

Crawford Door Company, 401 St. Jean, Detroit 14, Mich.

Crawford

UPWARD - ACTING

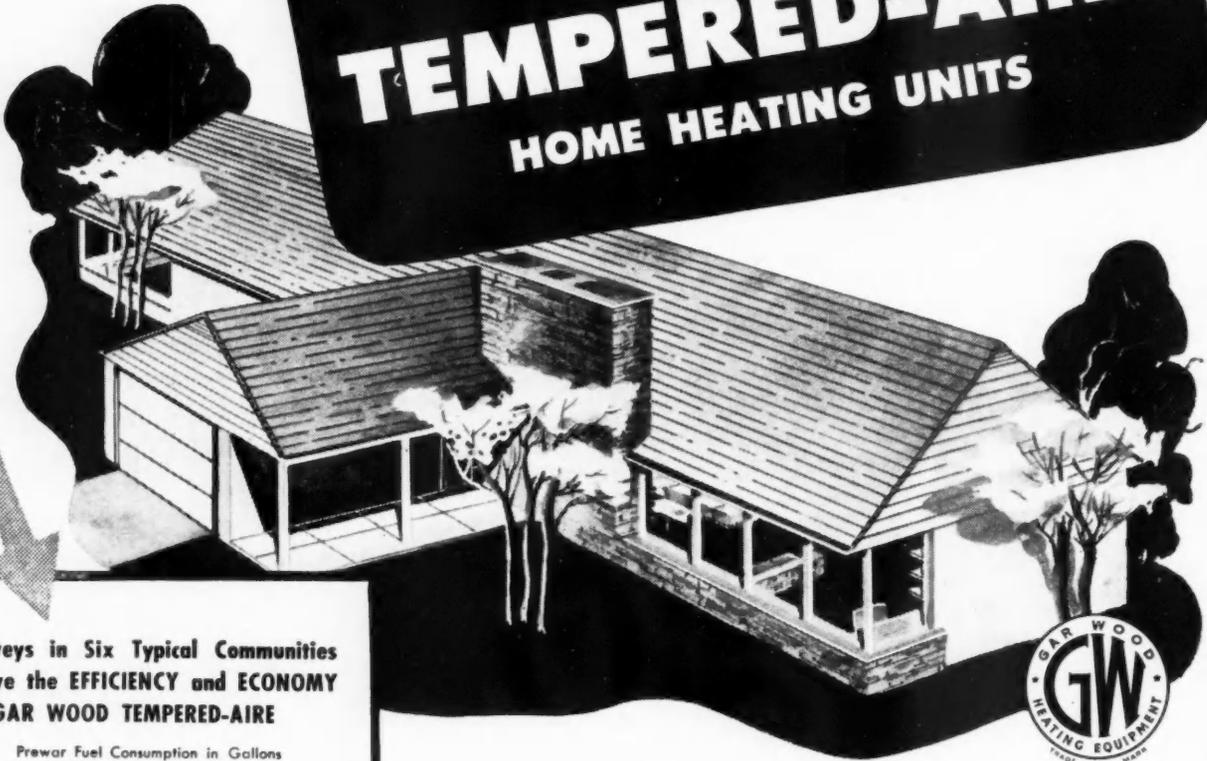
DOORS

Residential Garage Doors
Commercial & Industrial Doors
Hand or Power Operated Doors
Craw-Fir Doors



Build Long-Term Satisfaction into Your Homes

with these **EFFICIENT, ECONOMICAL**



Surveys in Six Typical Communities Prove the EFFICIENCY and ECONOMY of GAR WOOD TEMPERED-AIRE

Prewar Fuel Consumption in Gallons Per Square Foot of Floor Area

IN ROCHESTER	
Average for territory	1.65
Average GAR WOOD equipped	.77
IN TOLEDO	
Average for territory	1.54
Average GAR WOOD equipped	.77
IN DETROIT	
Average for territory	1.54
Average GAR WOOD equipped	.71
IN HARTFORD	
Average for territory	1.30
Average GAR WOOD equipped	.90
IN DREXEL HILL, PA.	
Average for territory	1.18
Average GAR WOOD equipped	.85
IN RICHMOND	
Average for territory	.97
Average GAR WOOD equipped	.86

Good homes, well planned and well built, offer the greatest possibilities for heating efficiency. Be doubly sure that your homes will give the utmost satisfaction by recommending either oil or gas-fired Gar Wood Tempered-Aire Units . . . famous for efficient, economical operation. Actual surveys have proven their outstanding performance. Ask the Gar Wood dealer in your community to notify you when the new post-war Tempered-Aire models are available.

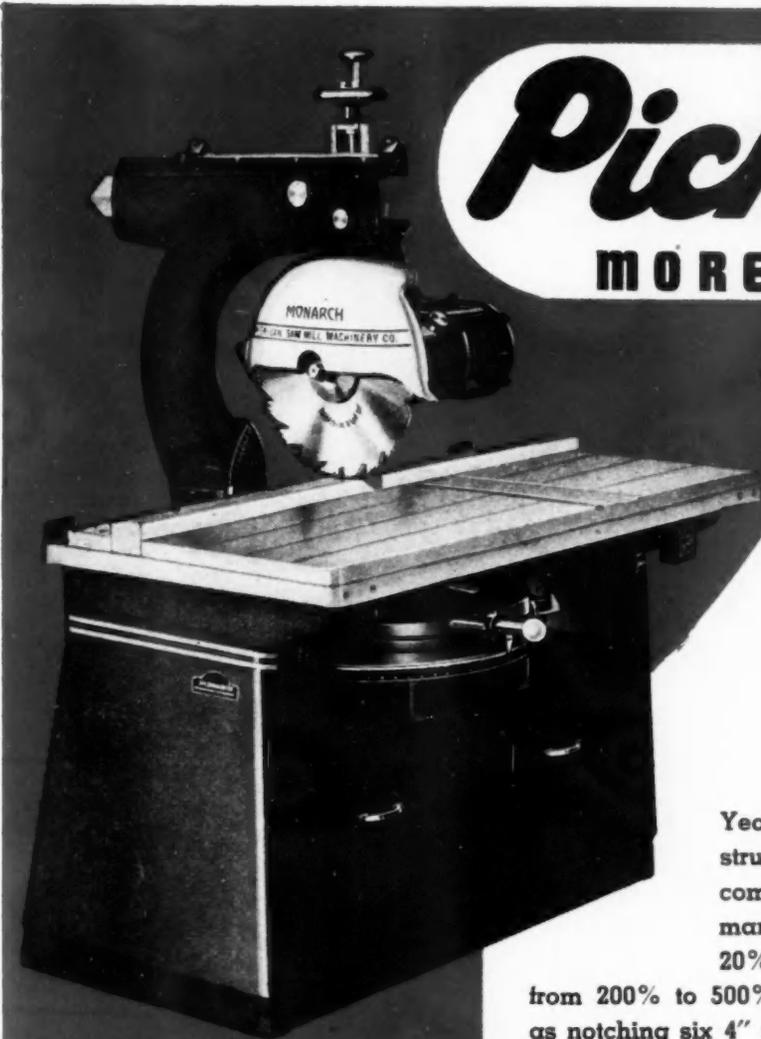
BUY U. S. WAR BONDS TO ASSURE VICTORY!

GAR WOOD INDUSTRIES, INC., HEATING DIVISION

7924 RIOPELLE STREET

DETROIT 11, MICHIGAN

HOISTS and BODIES . . . WINCHES and CRANES . . . TANKS . . . ROAD MACHINERY . . . MOTOR BOATS



Pick up 20%
MORE MAN-HOURS!

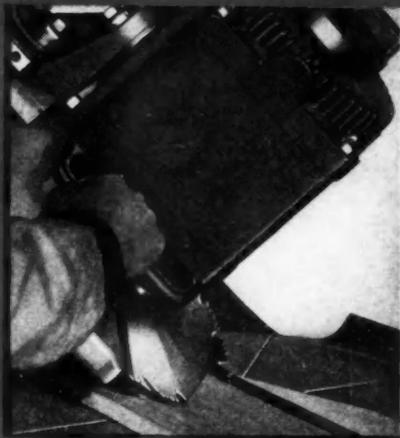
MONARCH
UNI-POINT
RADIAL SAW

Years ahead in design and simplicity of construction, this radically different power saw commands attention because it enables one man, on most types of construction, to turn out 20% more work in a given time. Savings of from 200% to 500% are possible on certain operations, such as notching six 4" rafters at one stroke, both angles being cut at same stroke.

UNI-POINT achieves production miracles by the principle of one-point cutting, which does away with frequent resetting of work and adjustments of machines; by combining two or more operations in one; and by other short-cut methods which speed up production and reduce fatigue on the part of the operator.

"Say, that's a slick machine," has been the comment of more than one builder on watching a demonstration. It's hard to believe that one machine will do so many things and do them faster and more accurately—but it's true! A UNI-POINT in your shop will pay for itself in two or three contracts. It will enable you better to meet the ever increasing production loads of war-time requirements. It will also put you out in front in the competitive race that lies ahead with the coming boom in home building, which will require pre-fabrication and volume production.

This is the time for action! Send for Catalog 60.



COMPOUND MITERING. By combining both operations of tilting and pivoting, the saw is easily set for compound miter cuts—the saw still cutting into work at the same point in the table.



AMERICAN SAW MILL MACHINERY CO.

60 MAIN ST.

HACKETTSTOWN, N. J.

Established 1903

Radial Saws
Shapers

Saw Bands
Sanders

Band Saws
Mortisers

Jointers
Swing Saws

Planers
Saw Mill Machinery

GOOD FOR BIG JOBS...



PENNVERNON WINDOW GLASS has the high degree of clarity, good looks, and freedom from distortion necessary to assure quality glazing of important structures like this Bankers Life Insurance Building, Macon, Georgia.

Architect: W. Elliot Dunwoody, Jr.

USE "PENNVERNON"
not just "Window Glass"

... OR LITTLE ONES



PENNVERNON WINDOW GLASS will also give complete satisfaction when sold for the windows of attractive residences like this. It has won wide spread acceptance for *both* kinds of jobs.

For big buildings or small, use Pennvernion... the window glass that has made a name for itself!



PENNVERNON window glass

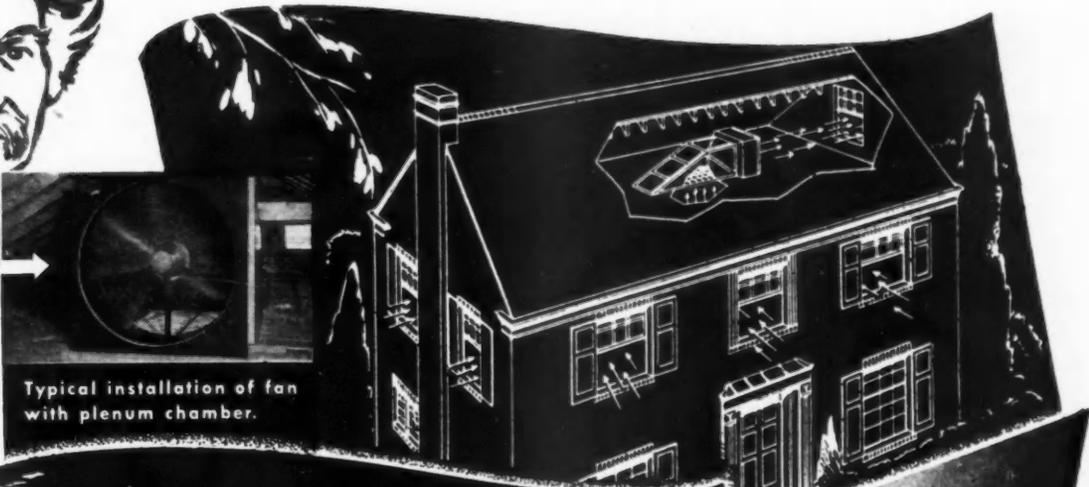
PITTSBURGH PLATE GLASS COMPANY
2037-5 GRANT BUILDING, PITTSBURGH 19 PA.

"PITTSBURGH" stands for Quality Glass and Paint

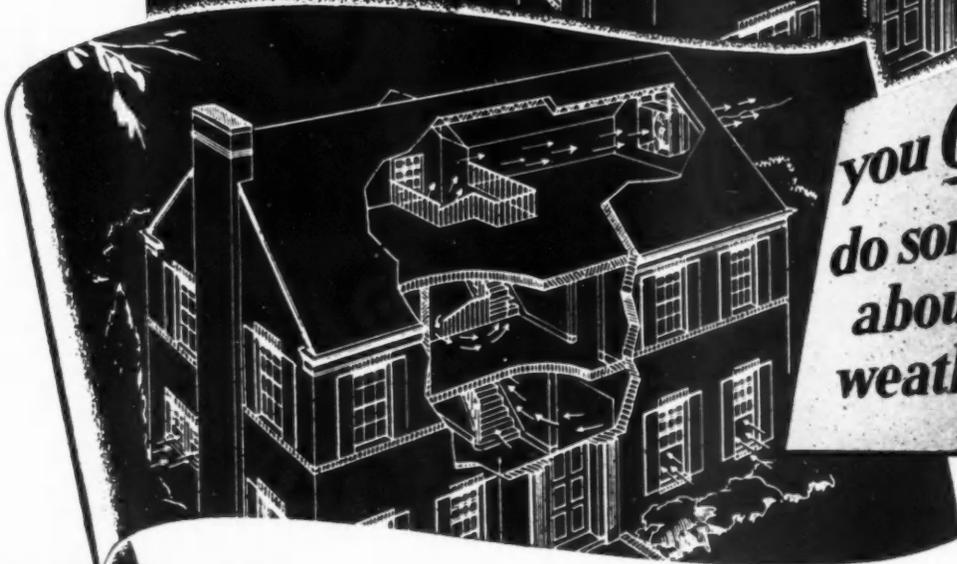




MARK TWAIN WAS WRONG!



Typical installation of fan with plenum chamber.



*you Can
do something
about the
weather*



Wall-mounted fan, equipped with either fixed louvers or automatic metal shutter.

IN the midst of confusing postwar dreams, here's one thing you can definitely include in your plans and specifications for tomorrow's homes.

With an Emerson-Electric Home Cooler Fan installed in the attic, your clients will be able to do something about the weather, besides talk. . . . After sundown, on hot, muggy days, they'll find welcome relief when this quiet, powerful fan forces out the accumulated hot air and replaces it with cooler, outside air, drawn through open windows and doors. . . . Furnished in sizes from 36-in. to 48-in., with displacements from 9,000 to 21,100 cubic feet of air per minute. Install in attics—easily adaptable to plenum chamber or outside wall mounting.

Write for complete specifications and dimensional data on Home Cooler Fans, also modern Emerson-Electric Kitchen Ventilating Fans.

THE EMERSON ELECTRIC MFG. CO., ST. LOUIS 3, MO.

Branches: New York • Chicago • Detroit • Los Angeles • Davenport

418



EMERSON ELECTRIC

HOME COOLER FANS

KITCHEN VENTILATORS



News, Views
and Comments

On and Off the Record

by **STRUCTOR**

100 MORE—The goal of the National Association of Home Builders for 1945 is an additional 100 affiliated local builder associations. This would mean a builder group in every metropolitan area of 50,000 or more.

To accomplish this a series of regional meetings will be held throughout the year with officers, directors and present local groups taking part in a vigorous attempt to expand N.A.H.B. to meet the problems ahead.

DESPITE EVERYTHING — The January Home Show and Convention was a remarkable achievement considering the difficulties. The biggest complaint heard was that accommodations in war-swollen Chicago were not enough to accommodate the huge crowds of builders that turned out.

TERMITE TWISTER—One of the bright young members of our editorial staff recently submitted the following puzzle (I suspect under the prompting of some maker of wood preservative):

"A column of termites 4 feet long is marching at the rate of 4 feet per hour toward a new house. An officer at the rear of the column learns through Termite Intelligence Headquarters that the structure has been proofed against termite invasion, and sends a messenger to the officer leading the march. The messenger reaches the head of the column, delivers the message, and immediately starts back to the rear. Arriving, he finds the column has moved ahead its own length, that is, 4 feet. How far did the termite orderly travel, and what was his average rate of speed?"

N.H.A.'s ESTIMATE—In its recent Bulletin No. 1, "Housing Needs," N.H.A. estimates that 12,600,000 dwelling units (non-farm) will be needed from 1946 to 1955. That's one of the biggest estimates yet and we hope isn't as starry-eyed as many N.H.A. calculations.

N.H.A. declares that 36 per cent of these should be under \$3,000. This is estimated on average family income, and is a most erroneous way to figure housing needs.

According to this same estimate, however, some 660,000 units ranging in price from \$3,000 to \$7,500 will be required annually during this period. Also an additional 150,000 a year in price brackets above \$7,500. This ought

to be enough of a market to keep private enterprise rolling.

But, of course, in its Bulletin No. 2 N.H.A. points out that the home building industry is so "technologically backward" that it despairs of any of these houses being built.

N.H.A. PUBLICITY—It is a strange coincidence that several publications of N.H.A. and a rather extensive barrage of newspaper stories appeared just in advance of the Taft hearings on housing.

Long ago top N.H.A. directors put the damper on F.H.A. publicity, disbanded most of the staff along with the elimination of many other F.H.A. activities. Thus all emphasis that gets into print is to the effect that a "consolidated" housing agency carrying on the present N.H.A. is needed.

VANISHED HOUSE—A perplexed lady in Brooklyn recently went down to see why she was no longer getting rent from her house located down near police headquarters. When she got there she found the house had vanished. Not a sign of it.

Naturally she was disturbed, and even more so when she found the city had condemned it and torn it down.

Later it developed she had bought the place from the H.O.L.C. only three months before for \$2800. It looked as though that notorious real estate shark, Uncle Sam, had done her in.

5,000 HOUSES FOR FRANCE—F.P.H.A. has agreed to ship some 5,000 temporary, demountable war housing units to France. This may be the start of a really big program to unload some of N.H.A.'s crackerbox war housing misfits on the unsuspecting people abroad. The first shipment of 500 demounted units is said to be already underway.

Well, I suppose this is about as good a way to get rid of this stuff as any.

BYRNES ON HOUSING—One of the significant items in War Mobilization Director Byrnes' recent fight order was a recommendation for action on housing. He said that "Congress should consider the extension and liberalization of the several measures in existence when war was declared to assist home builders in financing construction."

The report points out the severe

housing shortage that will exist after the war and apparently indicates that Judge Byrnes and his advisors do not believe that the present F.H.A. mortgage insurance program is adequate to meet all the post-war needs.

IKE'S REQUEST—The request by Eisenhower, Marshall, and other war leaders for more munitions production has had a far reaching effect on the conversion program. Most of the steps toward "creeping relaxation" have been halted. If the war continues through next spring the industry will have to get along on slim pickings.

FED UP—Many building men and building workers became tired of the war construction jobs they had. Whenever anything was done to encourage civilian construction, numbers of them quit their war jobs, went back to the work they really liked to do.

The present labor crisis is so serious that W.P.B. is forced to take every step possible to keep war workers on their jobs and get others to take jobs where they are badly needed. This hits the building reconversion hard.

GREEN PASTURES—I was talking with a prominent developer recently about the problem of providing housing for negroes. This man has been extremely successful—has developed several fine residential communities for white families that are an outstanding contribution to the community.

"What I'd like to do now as the crowning achievement of my career" he said, "is to build a whole new city for the negroes of this town. They need it. Set up a nonprofit corporation, buy a thousand acres, and build them a complete city of their own with the latest in homes, schools, churches, movies, and all. It can be done if I can get the right civic minded people to back me up." All of which indicates that at least one builder is interested in social progress.

ATKINSON'S FARM—Wm. P. "Bill" Atkinson of Oklahoma City is a remarkably interesting fellow who has interjected a host of new ideas into building activities in his area. He once was active in newspaper publishing, later became a professor of Journalism, then got into real estate and building in a big way.

His latest hobby is his big farm on the edge of town where he raises registered Herefords, hogs, turkeys, chickens and horses. He goes in for a red color scheme throughout—barns, fences, horses, chickens, and hogs are all red. Even the turkeys are red.

As soon as possible Bill plans to put up a fine new red brick home on his ranch, commanding an inspiring view of Oklahoma country side. And incidentally it won't be too far away from the post-war project Bill and his associates are planning, described in last month's *American Builder*. Bill is also justly proud of the shopping center shown in this issue.

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Tomorrow's Homes...

HOW WILL THEY BE HEATED?

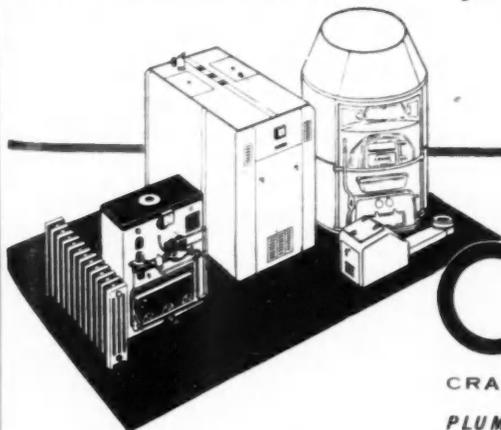
● Many builders are laying plans now for the homes they expect to construct after the war. An important phase in this planning is how these homes are to be heated.

Obviously no one system is best for all houses—every type of system—every kind of fuel has its advantages. Climate, price, style of house and personal preference—all have important bearing on the heating system most suitable for the homes you are planning today.

To aid the builders of tomorrow's homes, Crane Co. will of-

fer a complete line of boilers for steam and hot water, furnaces for warm air, radiators, controls, valves, fittings, oil burners and stokers—in fact, everything necessary for every type of heating system.

Right now there are necessary limitations on heating equipment that is available. However, when it is possible for you to start construction, your Crane heating dealer will be able to offer the latest and the most advanced types of heating, from the complete Crane postwar line.



CRANE



CRANE CO., 836 S. MICHIGAN AVENUE, CHICAGO 5, ILL.

PLUMBING • HEATING • VALVES • FITTINGS • PIPE

NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, AND HEATING DEALERS

COTTON INSULATION

is 4% to 36% more EFFICIENT!



Says the
ARCHITECT

"The superiority of cotton as an insulator is obvious. It is more efficient in every way, with lifetime durability. I specify Cotton Insulation because I know that it backs up every inch of my best judgment."



Says the
BUILDER

"The homes I build are modern, which means that they're insulated with the best material on the market—Cotton Insulation. The building dollars I invest in it are quickly returnable, for Cotton Insulation helps sell houses."

Tests of every kind—laboratory and in use—establish Cotton Insulation as definitely superior in every phase of efficiency.

IT HANDLES BETTER

Compressed in its container—no waste in transportation or storage. Uniform in density—no doubt about value received. Cotton Insulation is free from abrasive particles—cannot harm skin or clothing.

INSTALLATION EASIER AND QUICKER

Although available through competent applicators, Cotton Insulation is so simple to install that anyone can do it with ease. It unrolls like a rug. No special equipment is needed.

REDUCES WEIGHT

Cotton Insulation is snowy-light—weighs about 220 pounds per thousand square feet—three inches thick. It decreases thickness too—provides equal insulation value with 20% to 25% less bulk than some comparable insulating materials.

NEVER SETTLES—NEVER PACKS

The efficiency of Cotton Insulation increases with age. Heat and vibration, which may cause some insulations to settle and lose effectiveness, tends to fluff Cotton Insulation to a greater thickness and it becomes more efficient than before. The durability of Cotton Insulation is lifetime.

EXCEEDS ALL TECHNICAL REQUIREMENTS

Cotton Insulation refuses to burn—only chars—when a 1600° F. flame from a blowtorch is applied to it for a period of 20 minutes. It repels insects and vermin and sheds destructive moisture. No priorities are required. Included in standard specifications of FHA and FPHA, Cotton Insulation transmits less heat per inch of thickness than any other insulation material commercially available today.

MADE TO U. S. GOVERNMENT STANDARDS

Cotton Insulation is fabricated to conform to the specifications of the United States Department of Agriculture. All production, including the vapor barriers, is inspected, approved and certified by trained government inspectors.

For more detailed information and a full account of government tests of amazing product, write to—**NATIONAL COTTON COUNCIL, Box 18, Memphis 1, Tenn., for the booklet "Cotton Insulation."**



Says the
CONTRACTOR

"My installation problems are over! Cotton Insulation is so easily and quickly installed. In these days of labor shortages, this really means something to me—lower labor costs and fewer man hours—and it surely does the work."



Says the
DEALER

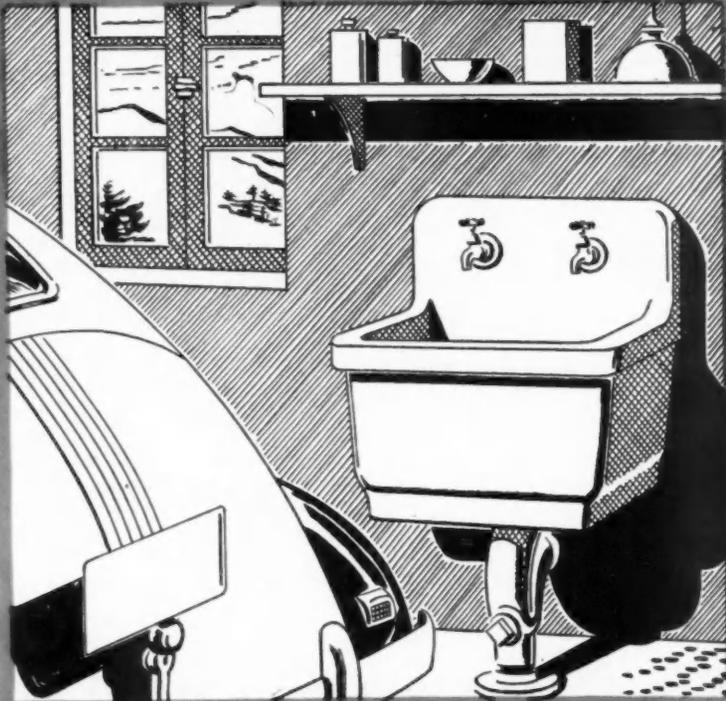
"The many advantages offered by Cotton Insulation make it easy to sell. Its blankets are packaged—rolled in clean sections—no waste, handled with ease, and profitable! It brings lasting comfort and its price fits into any family budget."

NATIONAL COTTON COUNCIL OF AMERICA

COTTON INSULATION ASSOCIATION

FOR OFFICIAL GOVERNMENT TESTS WRITE NATIONAL COTTON COUNCIL, BOX 18, MEMPHIS, TENNESSEE

ELJER PLUMBING FIXTURES



Suggestion = Acceptance

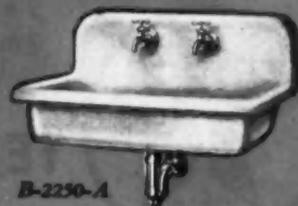
for an ELJER service sink in the garage

There's real need for an ELJER service sink in many of your garage plans for tomorrow's new homes. It is an important suggestion which should bring ready acceptance from your clients.

Installing such a fixture provides handy access to water facilities for outdoor use. By establishing a convenient point of "cleaning up" after home maintenance chores, the service sink also excludes much dirt and grime from the equipment and furnishings of the regular bathroom, kitchen or downstairs washroom.

Merchant builders, too, will benefit through accelerated sales by offering this convenience to home buyers.

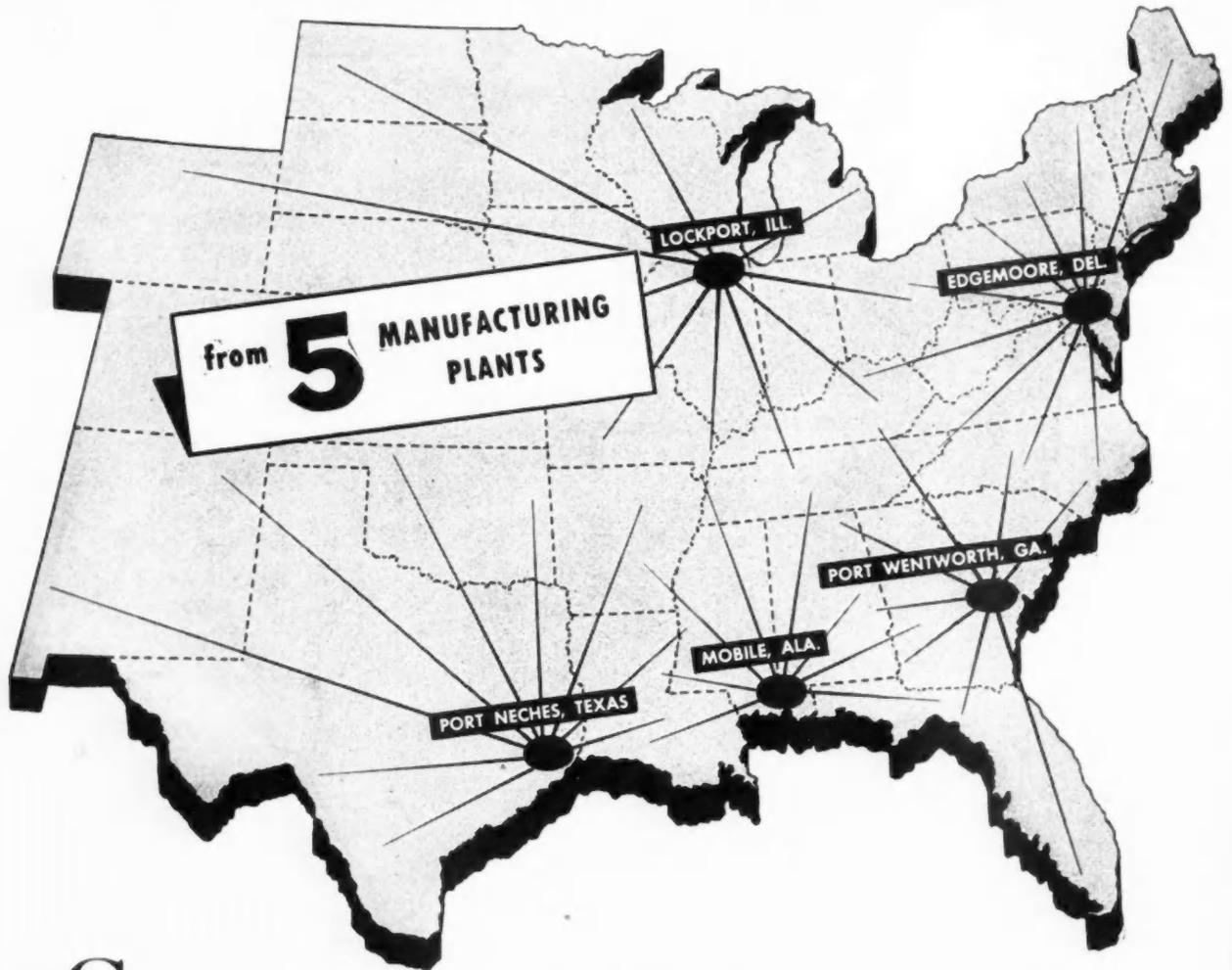
ELJER CO. FORD CITY, PA.



SINCE 1907 MAKERS OF FINE PLUMBING FIXTURES

To assure you **CONVENIENT SUPPLY**

of **TEXACO** quality Asphalt Shingles and Roofing



CONTRACTORS and builders are assured economical and convenient supply sources for **TEXACO** quality Asphalt Shingles and Roofing, through **TEXACO** Roofing DEALERS... who are in turn assured of their stock supply through these 5 key roofing plants...and through a large network of **TEXACO** warehouses East of the Rockies.

For more than a quarter century **TEXACO** quality Roofing Products have been distributed through **TEXACO** Roofing DEALERS, to builders and contractors, who know and trust this famous name in roofing.

*Drop in, write or 'phone your nearest **TEXACO** Roofing DEALER, or write The Texas Company, Roofing Sales Division, 135 E. 42nd St., New York 17, N. Y.*

SELL THE NAME THAT MILLIONS KNOW



TEXACO



SHINGLES and ROOFING

Saw gr
release
Three
cable
with
protect
clamp
wire
gro
-prev
Carb
ool
and
with
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Large
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31

18 REASONS WHY

men who know fine tools choose **BLACK & DECKER Quick-Saws**

The Service you get out of tools depends on what's built into them

The 18 construction features detailed below are 18 built-in reasons why Black & Decker Quick-Saws give you year after year of continuous service—why so many contractors and other men who know fine tools specify Quick-Saws, products of Black & Decker engineering and precision workmanship.

These Black & Decker Quick-Saws are ten times as fast as hand sawing. Using a variety of blades and abrasive discs, they crosscut or rip; make all such cuts as angles, grooves, dados; and cut a wide variety of materials including tile, ceramics, asbestos-cement, compo-board, corrugated galvanized sheet and light ferrous and non-ferrous metals.

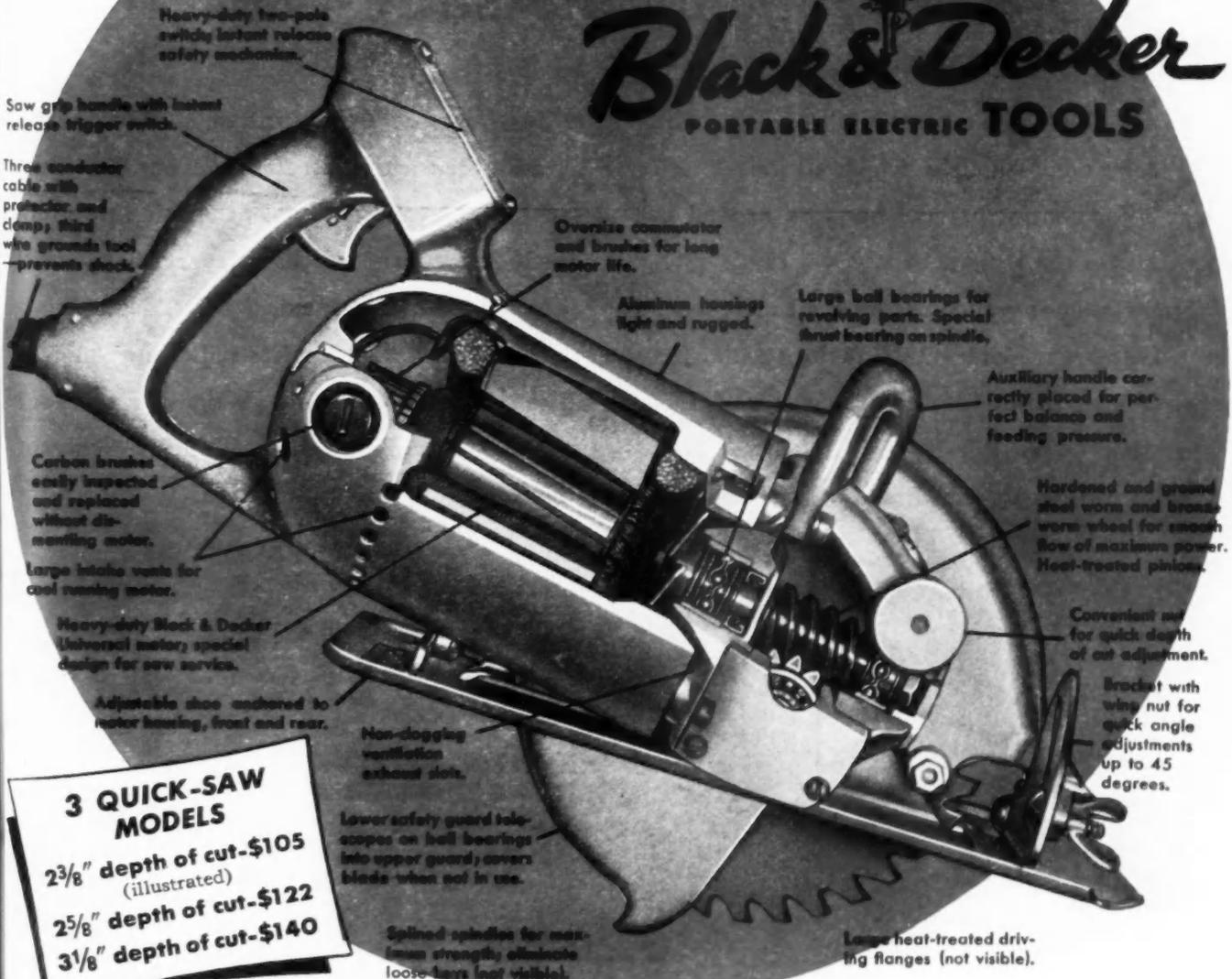
Three Quick-Saw models are available: No. 75, cuts to 2 3/8" depth; No. 85, cuts to 2 5/8" depth; No. 95, cuts to 3 1/8" depth. Each model has its own, individually designed motor engineered and built completely by Black & Decker to deliver maximum efficiency and performance in that particular tool.

For additional information on Black & Decker Quick-Saws, send for free copy of our fully illustrated Black & Decker Portable Electric Saw Handbook. For expert advice on selecting the saw most suited to your needs, call your nearby Black & Decker Distributor. He'll gladly help you on that or any other tooling problem. The Black & Decker Mfg. Co., 666 Peena. Ave., Towson 4, Md. (In Canada: Black & Decker Mfg. Co., Ltd., Toronto 1, Ontario.)

LEADING DISTRIBUTORS EVERYWHERE SELL

Black & Decker

PORTABLE ELECTRIC TOOLS



Heavy-duty two-pole switch; instant release safety mechanism.

Saw grip handle with instant release trigger switch.

Three conductor cable with protector and clamp; third wire grounds tool—prevents shock.

Over-size commutator and brushes for long motor life.

Aluminum housings light and rugged.

Large ball bearings for revolving parts. Special thrust bearing on spindle.

Auxiliary handle correctly placed for perfect balance and feeding pressure.

Carbon brushes easily inspected and replaced without disassembling motor.

Large intake vents for cool running motor.

Heavy-duty Black & Decker Universal motor; special design for saw service.

Hardened and ground steel worm and brass worm wheel for smooth flow of maximum power. Heat-treated pinions.

Adjustable shoe anchored to motor housing, front and rear.

Non-dragging ventilation exhaust slots.

Convenient nut for quick depth of cut adjustment.

Bracket with wing nut for quick angle adjustments up to 45 degrees.

3 QUICK-SAW MODELS
2 3/8" depth of cut—\$105 (illustrated)
2 5/8" depth of cut—\$122
3 1/8" depth of cut—\$140

Lower safety guard telescopes on ball bearings into upper guard; covers blade when not in use.

Spined spindles for maximum strength; eliminate loose keys (not visible).

Large heat-treated driving flanges (not visible).

KNOW

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ontractors will find new opportunity in the store-front field!

IN PLANNING your future, don't overlook the store-front field—a field which promises rich rewards for contractors and builders, as well as architects, in the years ahead.

Surveys among all types of retail merchants show that an overwhelming majority plan to improve their stores and install new store-fronts just as soon as possible.

Many progressive contractors will special-

ize in the store field—others will use it to diversify their activities. In any event, Kawneer—with a powerful national promotion program already influencing merchants everywhere—will cooperate in many practical ways. New products, new ideas, new services will help you capitalize on store-front work. Write the Kawneer Company, 602 Front Street, Niles, Michigan, today for additional information.

Kawneer
STORE-FRONTS

MACHINES FOR SELLING!

Like other building materials

WOOD

IMPROVES TOO with
CHEMICALS and GLUE



There's nothing static about wood, even though it *is* man's oldest building material. While manufactured materials or substitutes are improved by science as the years go by, modern chemistry helps keep wood abreast, and ahead, of the field!

Today, wood is given longer life through wood preservatives, while it is given new strength, new span, and new usefulness through modern glues, as strong and stronger than the wood itself.

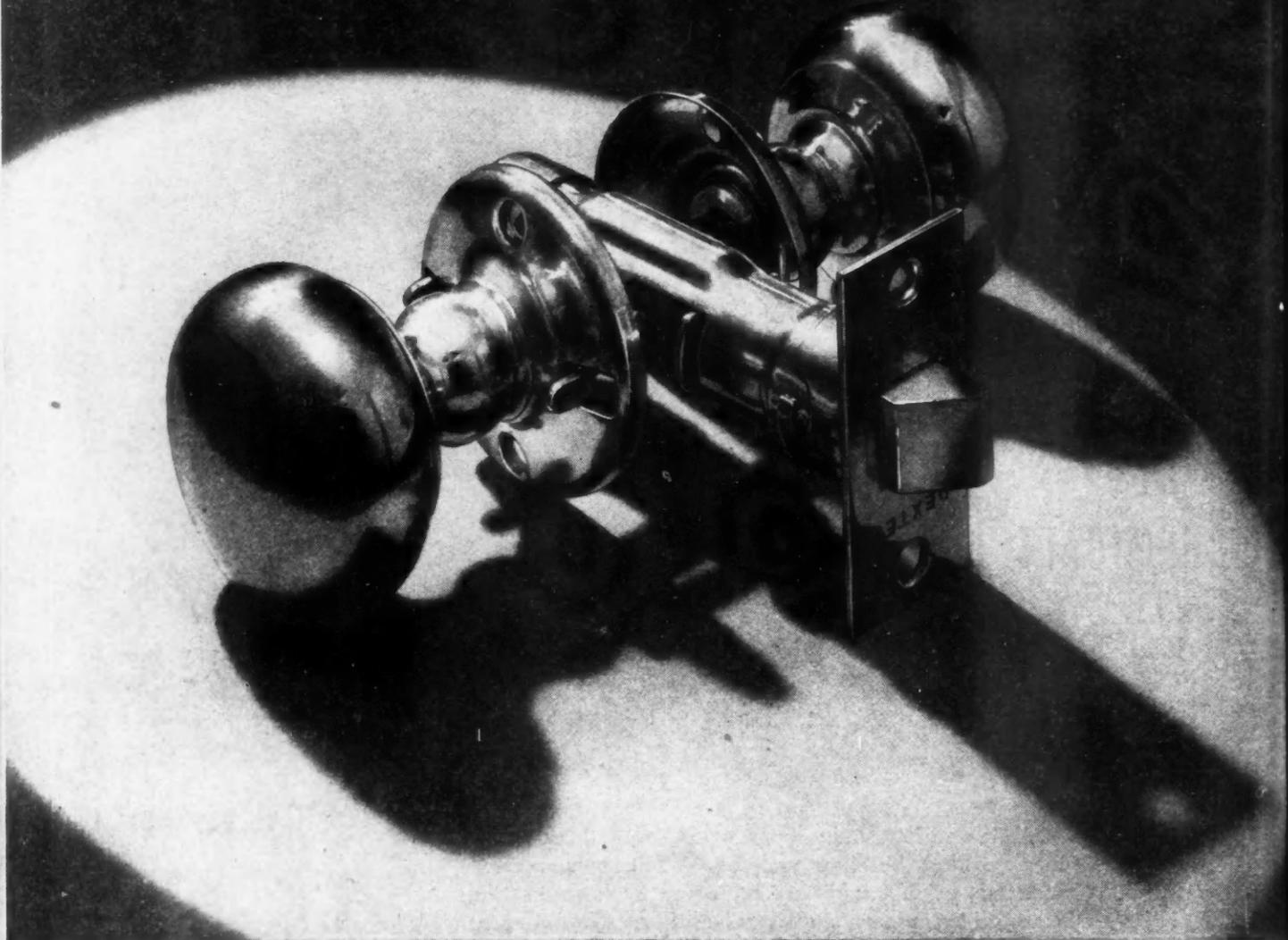
With the natural advantages of friendly warmth and beauty, and with versatility, easy fabrication, and economy all on its side, wood continues a No. 1 favorite building material.

To serve wood better, Monsanto Chemical Company, pioneer producer of modern chemicals for wood protection, and I. F. Laucks, Inc., world's largest manufacturer of industrial glues, today are combining their experience, their research and their talents. You can look here with confidence for the developments that will insure to wood its preferred position as a modern building material.

MONSANTO CHEMICAL COMPANY
Organic Chemicals Division
1700 South Second Street, St. Louis 4, Mo.



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A Subsidiary of Monsanto
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LAUCKS, LTD.
Vancouver, B. C.
Stanbridge, Que.



IMMEDIATE SHIPMENT — that's the good news about Dexter-Tubular Latches. Immediate shipment with trims of plastic Duralin in a choice of ivory, walnut or black. Everlasting Duralin has no plated finish to wear off. It is the same solid, attractive material through and through.

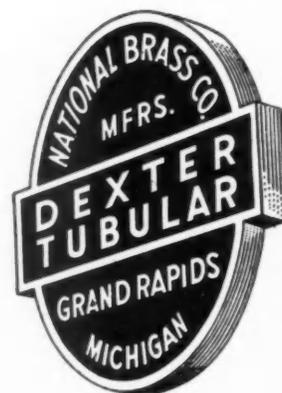
The real reason for preferring Dexter-Tubular is, of course, their reputation for proven quality — a quality that insures rugged, dependable service. Every Dexter-Tubular Latchset is sold with the famous Dexter Lifetime Warranty — a Certificate accompanies each one.

Remember, too, this is only one from the complete line of original Dexter-Tubulars. There is a specifically designed, Lifetime Warranted, Dexter-Tubular Lock and Latch for every door in the home.

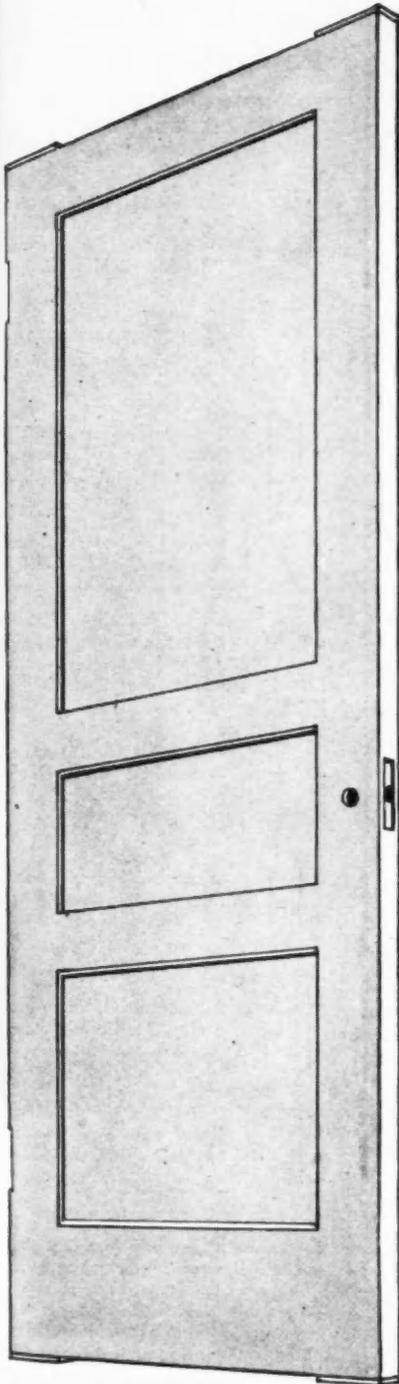
NATIONAL BRASS COMPANY, Mfrs., Grand Rapids, Mich.

Sales Representatives in NEW YORK • BOSTON • MILWAUKEE • COLUMBUS, Ohio • TAMPA, Fla. • DETROIT • PORTLAND, Ore. • ST. LOUIS • BALTIMORE • FORT WORTH • CHICAGO • PHILADELPHIA • LOS ANGELES • KNOXVILLE, Tenn.

(Above) Actual portrait photograph of Dexter-Tubular Latch set — dependable quality — backed by written Lifetime Warranty!



MAKERS OF BUILDERS, CABINET, SCREEN DOOR AND SHELF HARDWARE



Save time and money on the job - - with Douglas Fir FACTRI-FIT Doors!

Ready today in limited numbers for essential wartime building—ready for all jobs the moment war restrictions are lifted—Douglas Fir FACTRI-FIT Interior Doors will save up to 55 minutes on every opening. When these durable, attractive, modern doors are specified "FACTRI-FIT" all sawing, fitting, mortising and gaining or boring is done at the mill by high-speed precision tools. That means time and labor savings on the job — savings which more than offset the slight additional cost of FACTRI-FIT features.

Write today for a new catalog showing the complete line of Douglas Fir Interior Doors, Tru-Fit Entrance Doors and new specialty items. And plan to take full advantage of FACTRI-FIT features when civilian building is again resumed!

FACTRI-FIT

FEATURES

1

FACTRI-FIT doors are pre-fit at the mill, trimmed to exact size, ready to hang without sawing or fitting.

2

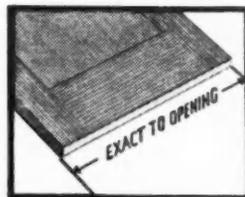
FACTRI-FIT doors may be ordered completely machined at your option—gained, bored or mortised by high-speed precision tools.

3

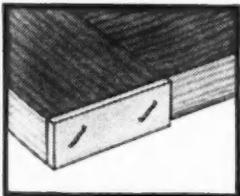
FACTRI-FIT doors (like all Douglas Fir Doors) are edge grade-marked for ease in ordering, specifying and supplying.

4

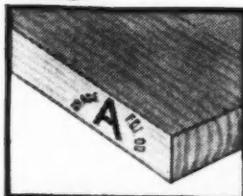
FACTRI-FIT doors are scuff-stripped to protect the precision-cut corners during handling and shipping.



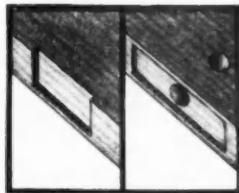
1



4



3



2

Douglas Fir DOORS
FIR DOOR INSTITUTE

Tacoma 2, Washington

Remember!
 NATURE MAKES
 DOUGLAS FIR
 Durable!

Durable Douglas Fir Doors are made from all-heart-wood, vertical-grain, soft, old-growth Douglas Fir.

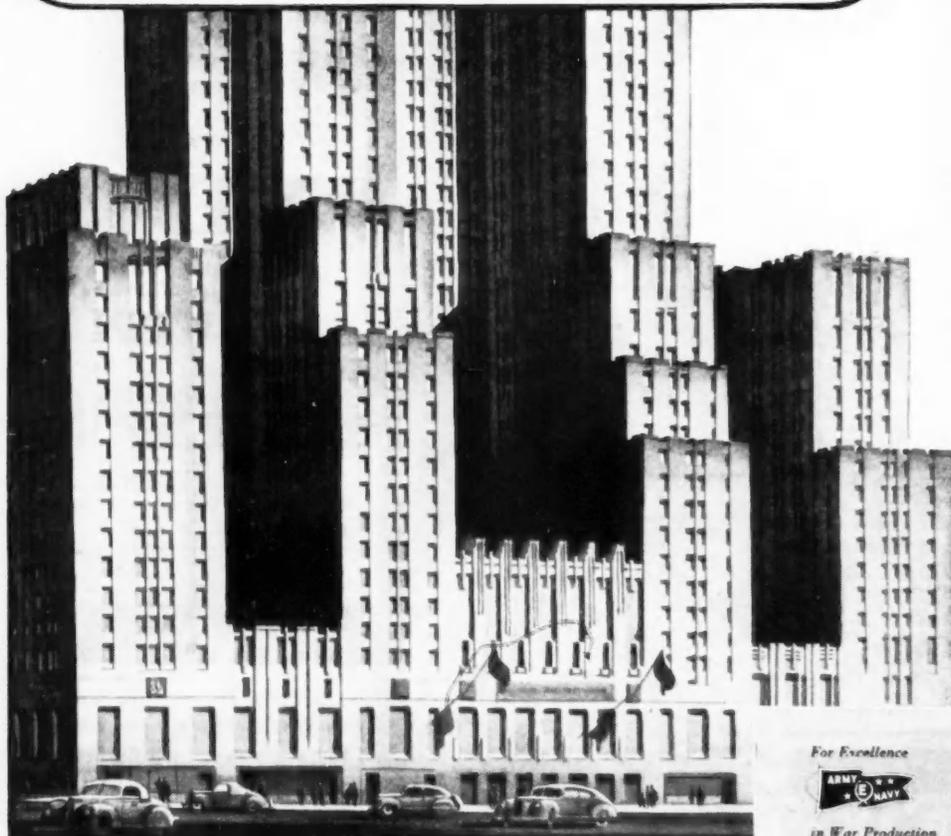
NOTICE: Douglas Fir Interior Doors are manufactured three ways:

- 1—STANDARD—Purposely made oversize for fitting to inexact openings.
- 2—PRE-FIT — Trimmed to size, ready to hang.
- 3—FACTRI-FIT — Prefit, gained, and bored or mortised.

THE NATIONAL ASSOCIATION OF FIR DOOR MANUFACTURERS

Whether it's a single home or
a huge building project

*Look to the favorite
Look to Frigidaire*



The WALDORF-ASTORIA—New York City. In the thirteen years since it was completed, more than six hundred individual Frigidaire installations—service refrigerators, air conditioners, water coolers and ice cream cabinets—have been made in this world-renowned hotel. Lucius Boomer, president, says, "I believe the fact that we have turned again and again to Frigidaire is indicative of the complete confidence we have in the dependability of Frigidaire equipment."

Frigidaire Peacetime Products

FOR HOMES AND APARTMENTS,
OFFICES AND BUSINESS
ESTABLISHMENTS



Household Refrigerators
— in all sizes and models
— including the famous
Frigidaire Cold-Wall.



Electric Ranges — from
small apartment models
to full-size deluxe cabinet
models.



Fully-automatic Electric
Water Heaters — in many
capacities and models.



Home Freezers for freez-
ing foods and storing
frozen foods in the home.



Portable self-contained
Air Conditioners — for
window installation.



Home Air Conditioners
— complete in a single
package.



Water Cooling equipment
for all applications.



Self-contained, large ca-
pacity, Air Conditioners.



Refrigeration Cooling
Units* and Compressors*
for large refrigerators.

Certain Frigidaire compressors* and cooling units* are now in production in limited quantities for replacement of vital worn-out equipment or to provide additional capacity for essential needs. As war production permits, other Frigidaire products will be made available. See your Frigidaire Dealer. Find his name in Classified Section of telephone book under "REFRIGERATION". Or write Frigidaire Division, General Motors Corp., 404 Amelia St., Dayton 1, Ohio. In Canada, 316 Commercial Rd., Leaside 12, Ont.

For Excellence



in War Production

FRIGIDAIRE

Made only by

GENERAL MOTORS

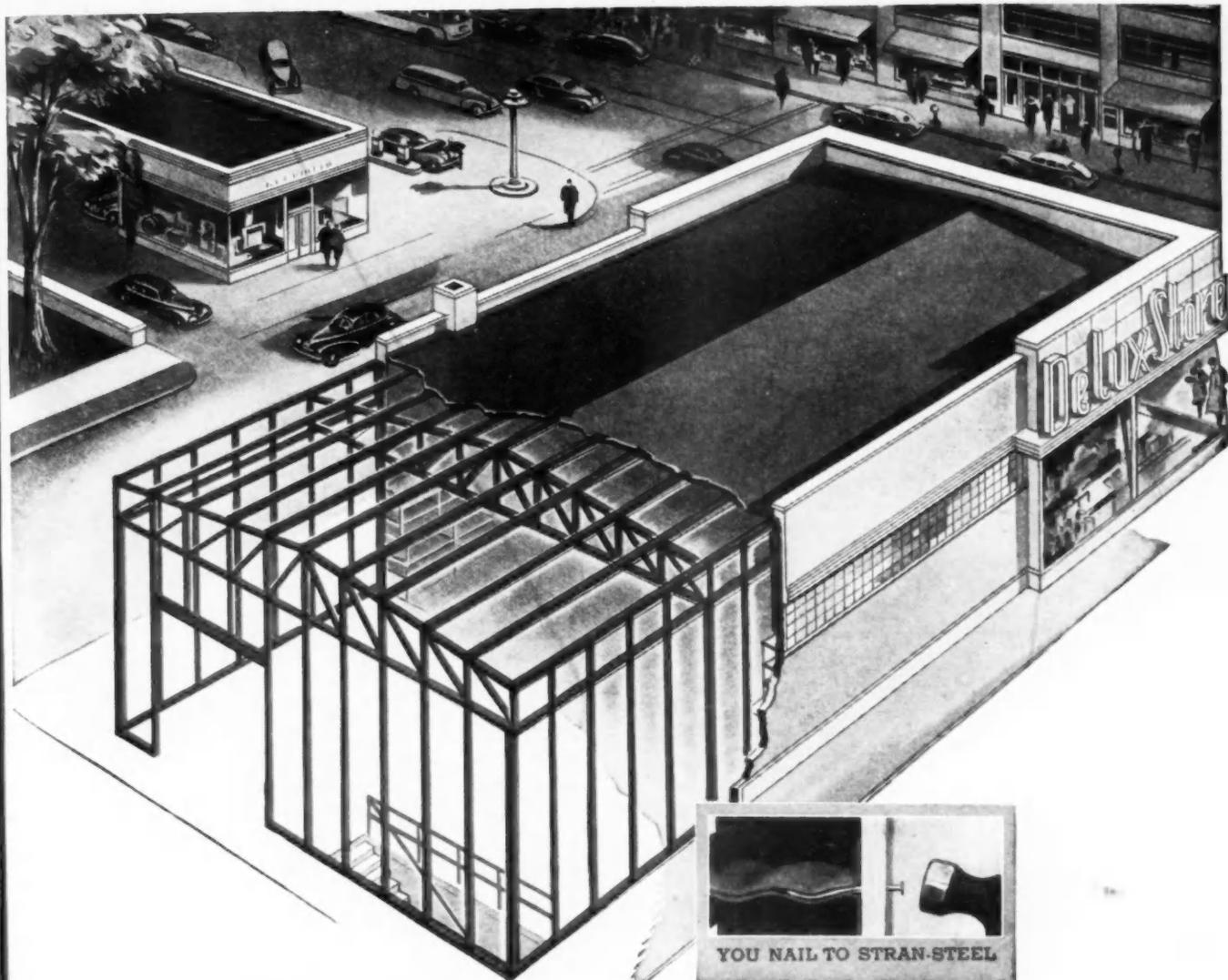
Peacetime products

COMMERCIAL REFRIGERATION • AIR CONDITIONERS
BEVERAGE, MILK, AND WATER COOLERS
ELECTRIC REFRIGERATORS • RANGES • WATER HEATERS
HOME FREEZERS • ICE CREAM CABINETS



Stran
groov
new e
ment
econo
accus
Stran
unlim
streng
erecti
Design
possib

U N



**Safeguard design
with the permanence of steel**

Stran-Steel, the light steel framing member with the patented nailing groove, has taken its place as a universal building material, bringing new efficiency and flexibility to building design. Small homes, apartment buildings, factories and other commercial structures may be built economically and quickly with Stran-Steel—by builders who are accustomed to other types of construction.

Stran-Steel, new and improved, is a precision construction material of unlimited adaptability. Joists, studs and plates are of steel—steel for strength, durability, uniformity and fire-safety—steel for speed of erection, rigidity, freedom from warp and sag—steel for permanence. Design in steel; build the world of tomorrow in steel. Explore the possibilities of standardized Stran-Steel.

Think in terms of
**STRAN
STEEL**

**SERVING TODAY IN THE
NAVY'S FAMOUS QUONSET HUT**

GREAT LAKES STEEL CORPORATION

STRAN-STEEL DIVISION • 37TH FLOOR PENOBSCOT BUILDING

DETROIT 26, MICHIGAN

UNIT OF NATIONAL STEEL CORPORATION

STANDARD OF
COMPARISON IN

Pre-finished
HARDWOOD FLOORS

BRADLEY
PRE-FINISHED
STRAIGHT-LINE
HARDWOOD FLOORING

At no time within the life of our operations has our determination to make a superior product been more successfully accomplished than in Bradley Pre-finished Straight-Line Hardwood Flooring.

Dealers and distributors planning for postwar business are urged to write us for complete information and persuasive selling helps.

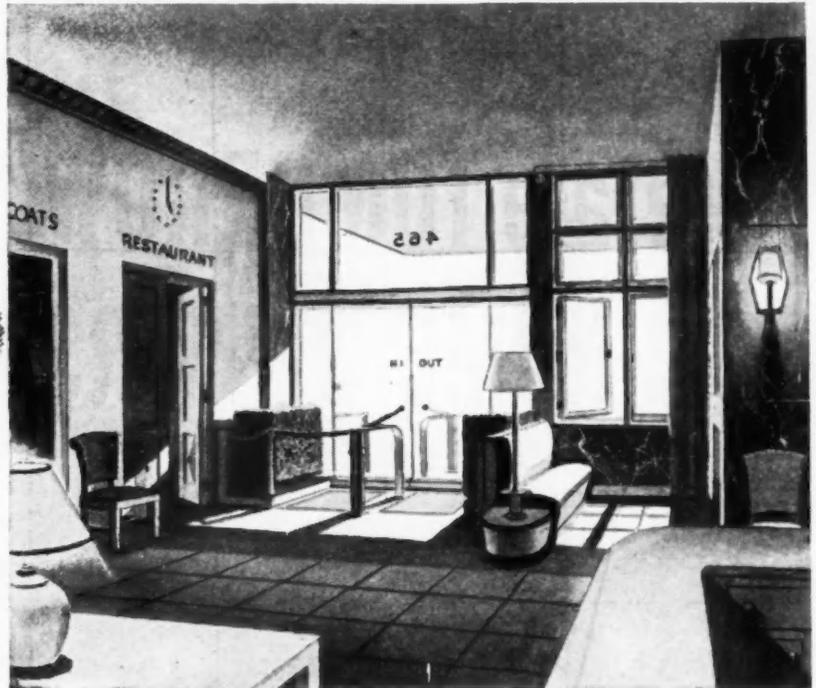
BRADLEY LUMBER COMPANY *of Arkansas*

WARREN, ARKANSAS





PLAN NEW APARTMENT BUILDING JOBS



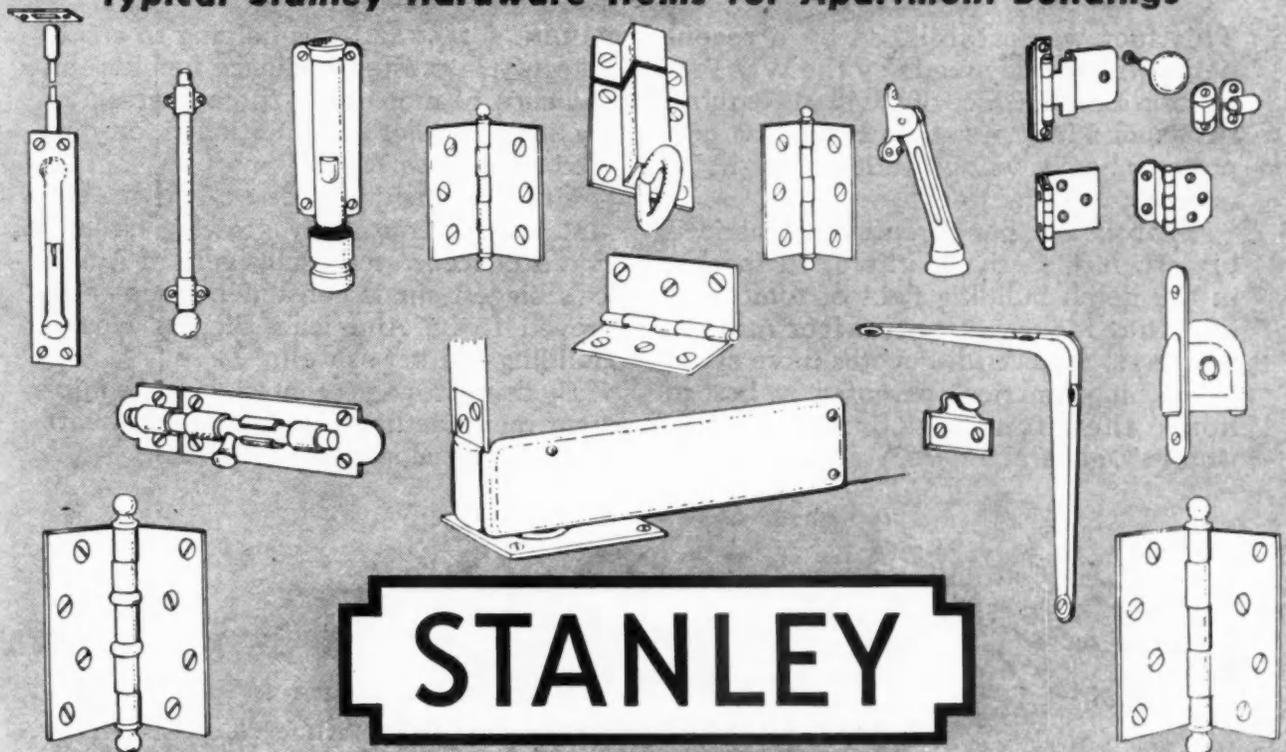
with **STANLEY HARDWARE**

All over America, new apartment building plans await materials and labor. When builders turn their skill to this peacetime construction, they know they can count on the fine quality and helpful variety of Stanley Hardware.

with fine appearing, well-performing, long-enduring items from the Stanley line. That's what makes the job a credit to your abilities, gains owner satisfaction, and leads the way to further profitable jobs. The Stanley Works,

This preference gives you the inside track New Britain, Connecticut.

Typical Stanley Hardware items for Apartment Buildings



ESTABLISHED 1843

Here are TOMORROW'S HOME OWNERS



MORE THAN 2/3 OF THE COMING MARKET FOR HOMES WILL BE AMONG FAMILIES WITH CHILDREN—AMERICA'S BIGGEST HOME-BUILDING MARKET

This fact was established by a recent nationwide survey made by the War Production Board, Office of Civilian Requirements, and indicates that 2 out of 3 new postwar homes will be built or bought by families with children.

That means that parents are America's biggest, most actively interested market in the home building field of tomorrow, and that is why, month after month, PARENTS' MAGAZINE devotes more space to teaching America's parents how best to house their families than any other women's, general, or weekly magazine.

PARENTS' MAGAZINE is helping to create a keenly interested audience for you—an audience of more than three-quarters of a million families preconditioned for your products and services.

One hundred percent of PARENTS' MAGAZINE'S constantly growing circulation is concentrated exclusively in America's biggest single consumer group—now proved to be America's Biggest Home-Building Market as well.

By using its pages, materials and equipment manufacturers will reach the heart of this promising postwar market!

*Advertise to America's
Biggest Home Building
Market!*



PARENTS' MAGAZINE

52 VANDERBILT AVENUE, NEW YORK 17, N. Y.
CHICAGO • BOSTON • ATLANTA • SAN FRANCISCO

Get ready for store remodeling work!

Line up store jobs NOW . . . so you'll
be set for fast action when building
restrictions are lifted



BEFORE

THIS PROPERTY in Omaha, Neb., is a good example of how Pittsburgh Glass can mean better-looking stores and better business for merchants . . . and profitable modernizing jobs for you. Architect: Ed. Sessinghaus. Contractor: E. E. Gilmore Company.



AFTER

CONTRACTS today mean quick profits tomorrow. Talk to the store-remodeling prospects in your territory. Get them committed. And the minute building bans go off, you're ready to go to work!

Right now, as you read this, we're helping to prepare the way for you. We're running powerful advertising in more than twenty of the most important retail fields. We're urging

your prospects to get store modernization plans approved *now* . . . for better looking store interiors and store fronts.

We're telling them that the quicker they make their plans, the quicker they'll get the work done when the use of Pittsburgh Glass and Store Front Metal in store construction returns to normal.

Start covering your territory to-

day . . . and line up store remodeling jobs. And whenever you build, remember that Pittsburgh Glass Products are known and preferred by your prospective clients, due to many years of consistent advertising.

Meanwhile, send the coupon for our free books of facts, figures and photographs about many actual stores remodeled with Pittsburgh Glass.

"PITTSBURGH" stands for Quality Glass and Paint

PITTSBURGH GLASS

for Store Fronts and Interiors

PITTSBURGH PLATE GLASS COMPANY

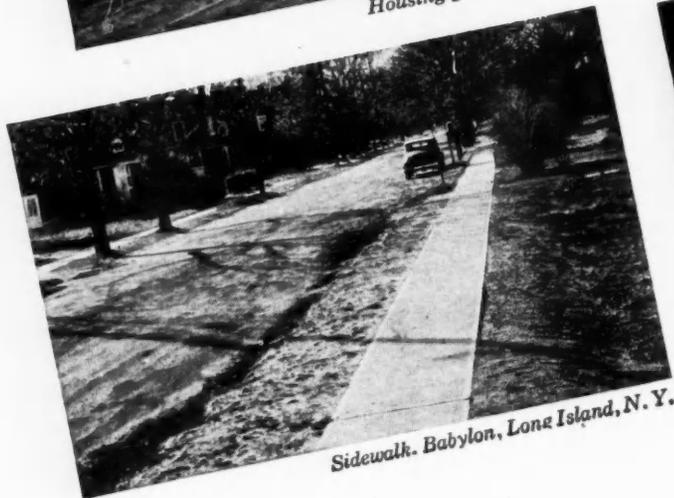
Pittsburgh Plate Glass Company
2074-5 Grant Building, Pittsburgh 19, Pa.
Please send me, without obligation, your illustrated booklets on store modernization.

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

BETTER CONCRETE AT NO EXTRA COST



Housing group, Kansas City, Mo.



Sidewalk, Babylon, Long Island, N. Y.



Courthouse steps, Millersburg, Ohio

ATLAS DURAPLASTIC

**AIR-ENTRAINING PORTLAND CEMENT
MAKES CONCRETE MORE WORKABLE,
MORE UNIFORM AND MORE DURABLE**

Atlas Duraplastic, the air-entraining portland cement originated and developed by Universal Atlas, represents one of the most significant advances in cement and concrete in many years. It has long since passed the experimental stage. It has been used with gratifying success since 1939 for over 2½ million sq. yds. of paving and a variety of other jobs including houses, sidewalks, tanks, buildings, retaining walls, block and pipe. Experience on these jobs shows that Atlas Duraplastic cement makes concrete more plastic and more workable, increases durability and produces concrete that spreads, screeds and finishes more easily. Its use requires no additional materials on the job.

Send for free booklet describing development and uses of Duraplastic cement and concrete. Write to Technical Service Bureau, Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York 17, N. Y.

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

QUICK FACTS

About Atlas Duraplastic Air-Entraining Portland Cement

1. Complies with ASTM specifications.
2. Sells at same price as regular portland cement, requires no additional materials, and makes better concrete at no extra cost.
3. Provides the proper amount of entrained air by intergrinding with the cement the precise amount of air-entraining material needed for satisfactory field performance.
4. Requires less mixing water for a given slump.
5. Makes concrete more workable, more plastic, more cohesive, more uniform and more durable throughout.
6. Minimizes segregation and bleeding.
7. Produces concrete that spreads, screeds and finishes more easily.
8. Fortifies the concrete against the effects of freezing and thawing weather.
9. Renders paving concrete highly resistant to scaling due to action of de-icing salts.
10. Tends to reduce manipulation scale.
11. Called DURAPLASTIC because it makes concrete more durable and more plastic.

AB-D-11

ATLAS DURAPLASTIC

TRADE MARK REG.
U. A. C. CO.

The Air-Entraining Portland Cement That Makes Concrete More Durable and More Plastic

**CASH IN ON
THE POPULAR TREND WITH...**

Daylight **ENGINEERING**



Architect Allan Wallworth

Prominent in designs for postwar houses is the wider use of glass.

It points to the fact that a sure way to mark your postwar houses as up-to-date—and a good way to please home buyers—will be to use glass for better daylighting and to provide an attractive view of the outdoors.

DAYLIGHT ENGINEERING has been given new impetus, new opportunity, through the introduction of Thermopane—the new L-O-F windowpane that insulates. This clear-vision, double-glass insulating unit enables you to provide large windows, without causing new heat loss problems. And it does away with the need for putting up or taking down extra glass for window insulation.

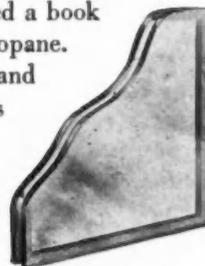
Thermopane consists of two or more panes of glass, separated by an insulating air space. This

space is hermetically sealed at the factory with a patented metal-to-glass bond—the *Bondermetic Seal*. This bonds the panes into a single unit to prevent dirt or moisture from entering the air space.

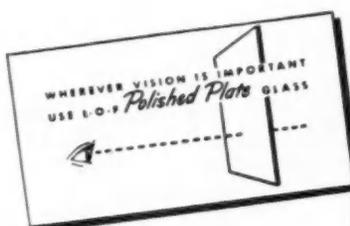
Write for Free Book on Thermopane

To help you plan Daylight Engineering into your postwar houses, we have prepared a book of facts and figures on Thermopane.

How to use it, sizes, thicknesses and other data are all included in this new book. Write for your copy, and ask for our new Technical Data Sheets by Don Graf. Libbey-Owens-Ford Glass Co., 1125 Nicholas Building, Toledo 3, Ohio.



Thermopane—the windowpane that insulates.



LIBBEY • OWENS • FORD

a Great Name in **GLASS**

ONLY WITH CONTROLLED PRODUCTION

could Bird create this tornado-proof roofing



Proslate roofing, with concealed nails and sealed laps, has been proved by tropical suns and northern storms.

There's a "reason-why" behind Bird Proslate Roll Roofing that everyone interested in better building materials should know. It's a hard fact story that's being written in wear-records on barns, sheds and industrial buildings all over the country. For only with Controlled Production could Bird produce this super-roofing.

Every step from raw materials to the finished product is controlled . . . completely controlled. The dry felt base—which largely determines the inherent strength of the roofing—is made in the Bird plant under the most rigid laboratory specifications. The fibres are cross-felted for greater strength and increased absorbency of the asphalt saturant, while this asphalt too is controlled, refined to Bird's specifications, with final treatment in Bird's own stills.

When this extra-tough base has been super-saturated with Bird's special asphalt, the surface is covered with mineral granules of controlled size and quality . . . And every step is laboratory controlled, checked, tested

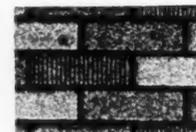
Other examples of Controlled Production:



BIRD MASTER-BILT Shingle—rich in texture and color, thick butts for extra protection.



BIRD TRI-TAB HEX Shingle—colorful, draft-free—wind-resistant.



BIRD INSULATED SIDING, in many attractive brick tones.

and examined for the tiniest imperfections.

But even such a superior product didn't satisfy Bird. For the best roofing is only as good as its application. So Bird devised the double-lock method to apply Proslate to buildings . . . first, with concealed nails, that cannot tear the covering layer; then with Bird Quick-Set Cement. This remarkable adhesive, developed in the Bird laboratory, literally bonds the laps of the roofing strips together so tightly that the joints become even stronger than the roofing itself. The roof is then one great wind-proof, leak-proof sheet.

All that extra trouble, extra expense, extra care may seem wasted on a building material that sells for only a few pennies more than average roll roofings. But for 150 years Bird has always produced the highest quality of products for each particular need . . . which may explain why Bird is one of the very few companies in the United States that can observe 150 years of continuous service to the American people.

FOR HOMES



ASPHALT SHINGLES • INSULATED SIDINGS
INSULATION BOARDS • FLOOR COVERINGS
WALLBOARDS • BUILDING PAPERS

SINCE **BIRD** PRODUCTS 1795

Men who know the best know

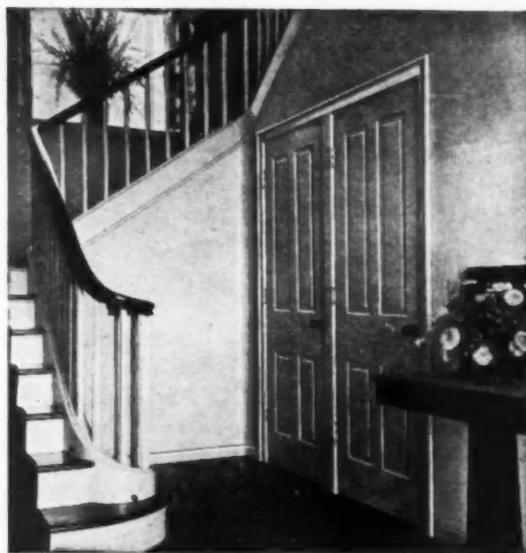
BIRD

FOR INDUSTRY



RUBBERLIKE FLOOR RUNNERS • INDEX PRESSBOARDS • SHIPPING CONTAINERS
SHOE CARTONS • BUILT-UP ROOFS
BIRD-FIBRE WOOD FRAME CASES

Bird & Son, inc. • East Walpole, Mass. • New York • Shreveport, La. • Chicago, Ill.



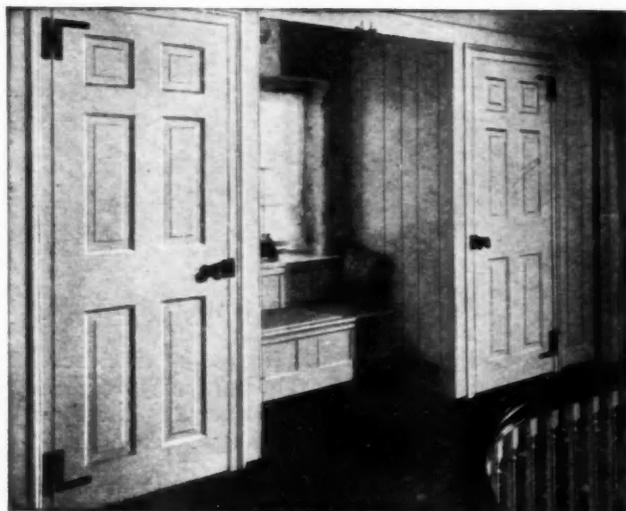
CLOSETS IN THE HALL—Two closets in the entrance hall are better than one—as this attractive arrangement demonstrates. Note how the stock doors of Ponderosa Pine enhance the effect of graciousness and serenity.

When they want more storage space . . .

Woodwork of Ponderosa Pine Makes Your Planning Easier!

"Where to put it" is one of America's biggest housekeeping problems. And you'll find it easier to plan for more storage space if you specify stock woodwork of Ponderosa Pine.

Ponderosa Pine doors, for example—including louvered doors and sliding doors—help to provide utility and charm at low cost. Here are a few instances:



CLOSETS WITH EXTRA FUNCTIONS—Two roomy closets form this restful alcove. Note the architectural grace of these Ponderosa Pine doors. Note, too, the stock window. Stock sizes and designs of Ponderosa Pine add charm and dignity.



DOUBLE UTILITY CLOSETS—The two closets have mirrored Ponderosa Pine doors—giving the owner "front and back" views. A great variety of stock sizes and designs of both windows and doors makes them economical to use.

USE THIS HELPFUL BOOKLET

"The New Open House," 32-page Ponderosa Pine booklet, is a storehouse of door and window ideas for every room. Send today for a copy—yours without cost or obligation.

Ponderosa Pine Woodwork, Dept. MAB-2, 111 West Washington Street, Chicago 2, Ill.

Ponderosa Pine
WOODWORK
 THE BEST IS YOURS . . . WITH PONDEROSA PINE

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ISTRY

INDEX
 TAINERS
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 USES

ago, Ill.

The LINCOLN TUNNEL APPROACH

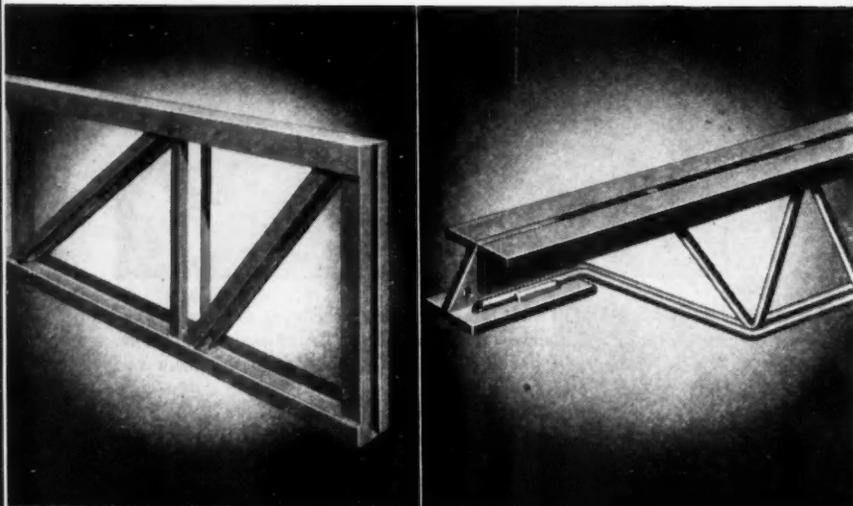


From coast to coast, bridge builders have been quick to recognize and apply the advantages of the CECO welded reinforcing truss. Its use for concrete floors in the Lincoln Tunnel approach, the Golden Gate Bridge, and the San Francisco-Oakland Bay bridge all attest to the expert fabrication, and close engineering tolerances which insure accurate and economical placement of reinforcing materials. Ceco steel trusses are assembled in jigs and arc welded in a manner similar to that used so successfully in the manufacture of *CECO steel joists*, which are as invaluable to builders of apartments, hospitals, offices, schools, and residences, as the Ceco trusses are to builders of monumental bridges.

The Ceco steel joist is of special interest today with the acute lumber shortage and provides these definite advantages to all builders of light occupancy buildings:

1. Sturdy lightweight floor and roof construction.
2. Eliminates warping, shrinkage and dead rot.
3. Convenience and ease of installation—easy concealment of heating, plumbing and electrical wiring systems.
4. Reduction of property loss through fire.

Ceco manufactures a complete line of joists including standard open web steel joists, the Ceco nailer joist, and the Ceco longspan joist. And maintains a staff of experienced construction engineers to assist with your construction problems. These engineers will furnish estimates, check details and designs, make recommendations and suggestions for the improvement of your projects. Be sure to call on them and let CECO engineering skill aid you in present and post war construction.



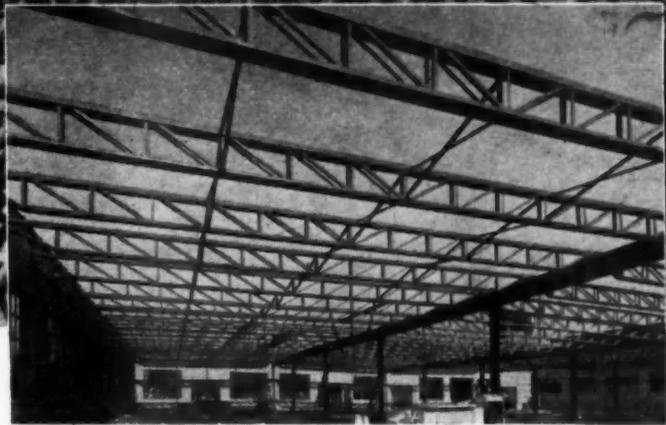
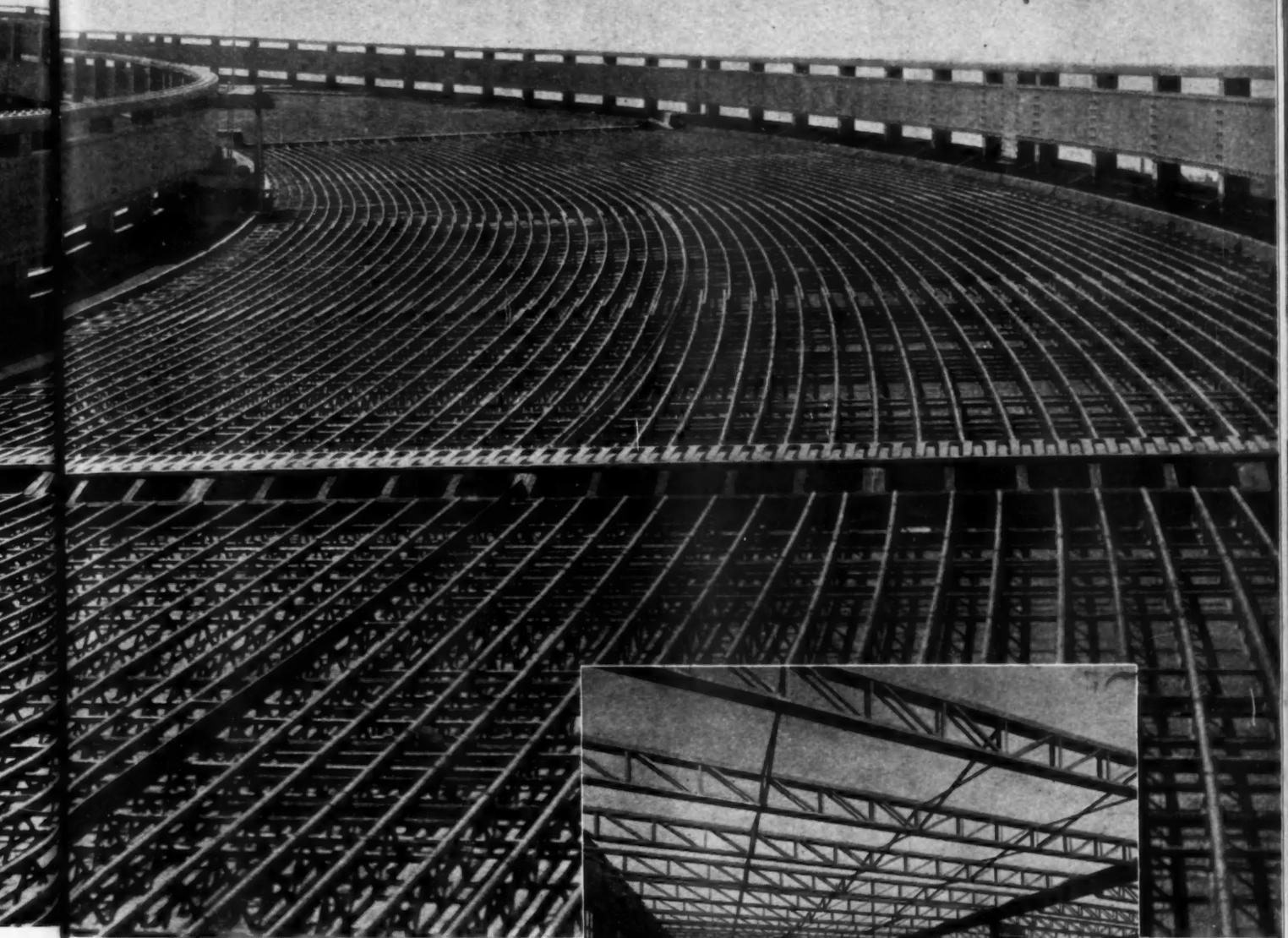
Ceco open web steel joists: (left) wide top chord provides greater lateral rigidity, gives greater bearing surface, increasing efficiency of floor and roof slabs. The bottom chord permits easy positive attachment of ceiling lath by standard tie wires which stay attached.

Ceco longspan joists: (far left) clear openings up to 64 ft. One story stores or garages can be erected without use of inside columns with Ceco longspans.

Ceco nailer joists: are similar to Ceco standard joists with the addition of a 2x3 wood nailer attached to top chord securing wood deck construction.

ENGINEERING MAKES THE BIG DIFFERENCE IN CECO JOISTS

H-CUSHIONED ON STEEL TRUSSES BY CECO



Ceco longspan joists increase floor efficiency by reducing number of columns.



Ceco open web steel joists provide fire resistance and low maintenance cost.

p chord
greater
of floor
mits easy
standard
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can be
ith Ceco
standard
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OTHER CECO ENGINEERED PRODUCTS:

all types of industrial and residential steel windows, steel doors, metal frame screens, metal lath, metal weatherstrips, steel roof deck, Meyer flange and adjustable type steelforms, adjustable shores and clamps, concrete reinforcing bars, and welded fabric.

CECO STEEL PRODUCTS CORPORATION

General Offices: Omaha, Nebraska

Manufacturing Division: 5701 W. 26th St., Chicago, Ill.

CECO CONSTRUCTION PRODUCTS

A IMPORTANT REASONS why builders are recommending S



Servel *All-Year*

ing Servel *All-Year* Gas Air Conditioning

for their post-war homes!



It provides a "new quality of living."

Through every season, homes with Servel *All-Year* Gas Air Conditioning provide a comfortable climate indoors. Even during the hottest summer months, the air is cool and fresh. Sticky humidity is completely banished. And in winter, the same simple Servel unit keeps homes delightfully warm with clean, humidified air. There are no drafts, no dirt. This is the type of all-year air conditioning that 72% of the people who plan to build or buy after the war have said they want.



It is a proved success.

More than 400 Servel *All-Year* Gas Air Conditioners are in operation today in homes and commercial buildings from coast to coast. Everywhere users are enthusiastic about the "new quality of living" they're enjoying.



Financing agents endorse it.

Says one, "A home with this type of equipment can be appraised at a higher figure." Another writes, "We think so well of it that we are prepared to extend longer than usual terms on buildings so equipped." Still another says, "It will greatly retard the obsolescence rate of the home structure." Such statements are typical of the high regard that financing agents have for the Servel *All-Year* Gas Air Conditioner.

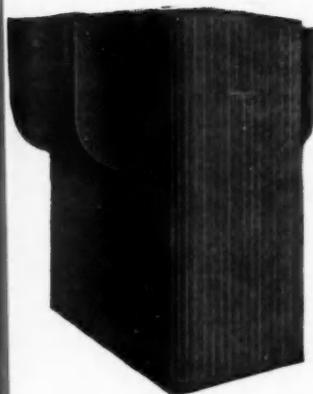


Gas Companies support it.

Leading gas utility organizations all over the country are already actively promoting the Servel *All-Year* Gas Air Conditioner to their customers. Air conditioning engineers from your local Gas Company will be glad to assist you in planning Servel *All-Year* Gas Air Conditioning for your post-war homes.

Taken together, these four big facts explain why so many prominent builders are recommending, and planning to install, Servel *All-Year* Gas Air Conditioning in their post-war homes. This modern equipment will mean faster sales, larger profits, easier financing—and

better satisfied customers. But even the facts above do not tell the whole story about this revolutionary new development in all-year air conditioning. Get complete details today from your local Gas Company, or write direct to Servel, Inc., 1502 Morton Avenue, Evansville 20, Ind.



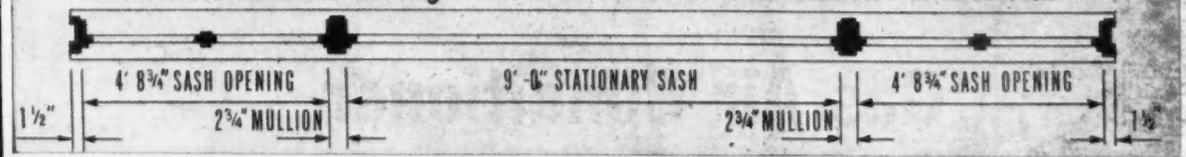
Gas Air Conditioner

**SUMMER COOLING—WINTER HEATING—IN ONE SIMPLE UNIT
MADE BY THE MAKER OF THE SERVEL GAS REFRIGERATOR**

Windowalls



Andersen Horizontal Gliding Window Units No. 48046 on each side of fixed sash



... AT WORK AT HOME AT THE SEA

**WINDOWALLS OF ANDERSEN
COMPLETE WOOD WINDOW UNITS**

When there's work to be done at home . . . when the home is at the sea . . . use wide, view-framing Windowalls that can breathe in ocean breezes or stop them short against a weathertight barrier. Andersen Windowalls are both windows and walls . . . with all the advantages of each.

In this office-study, Architect E. Gunnar Peterson has used two large Andersen

Horizontal Gliding Window Units, one on each side of a wide fixed "picture" window, thereby opening up a view ventilating the room, yet insulating it thoroughly.

For details of these wood window units that combine so ingeniously to form Windowalls, consult Sweet's Architectural Catalog, or write to Andersen. Distributed through lumber dealers everywhere east of Rockies.

Andersen Corporation

BAYPORT

MINNESOTA





130 Warships Since Pearl Harbor!

Unique "roll-over" method of construction
produces stronger hulls at one-fourth the former cost

BY BUILDING warships upside down and then rolling them over in their cradles for completion, Defoe made construction history in speeding delivery of 130 fighting craft—from PC Subchasers to 1700-ton Destroyer Escorts—to the Navy, after Pearl Harbor. ★ ★ ★ Until the Axis is defeated, Defoe's facilities will be devoted to all-out production for Victory. For only by the continued and united efforts of industry and labor in producing more war materials—and of the public in buying more War Bonds—can we bring this war to the quickest possible conclusion. ★ ★ ★ After Victory, the Defoe organization, in addition to building yachts and commercial vessels again, will launch an even more important program by the new Housing Division. This department will produce quality homes, scientifically designed and built for permanency. ★ ★ ★ In applying war-taught techniques to large-scale peacetime manufacture, Defoe will take its place with leaders of industry in helping provide higher standards of production, living and employment for the American people.

DEFOE SHIPBUILDING COMPANY, BAY CITY, MICHIGAN

Defoe

Four White Star Renewal Citations now decorate
the Navy "E" Award won by Defoe workers.

BACK THE ATTACK
—BUY WAR BONDS

SHIPS FOR VICTORY
SERVANTS FOR PEACE



Put Yourself Right into This Picture —

Imagine an attractive Cape Cod Home standing out on a carefully selected site in your community with a sign bearing your name as builder!

We asked Royal Barry Wills, noted Boston architect, to design just such a home. Here it is!

But, of course, the real secret of owner satisfaction is not *who* designed it.

The secret of winning over an owner and his acquaintances is to be found in *what* is included in the design. Heating is important. For heating equipment is the heart of every home. And Timken Silent Automatic Heating is the highest quality heating money can buy. Yet, because of its exceptional economy, it costs less in the long run than ordinary automatic heating.

HOW YOU PROFIT!

As the builder, you reap the rewards of owner good will. You save time and trouble, too, for factory-trained Timken Dealers will help

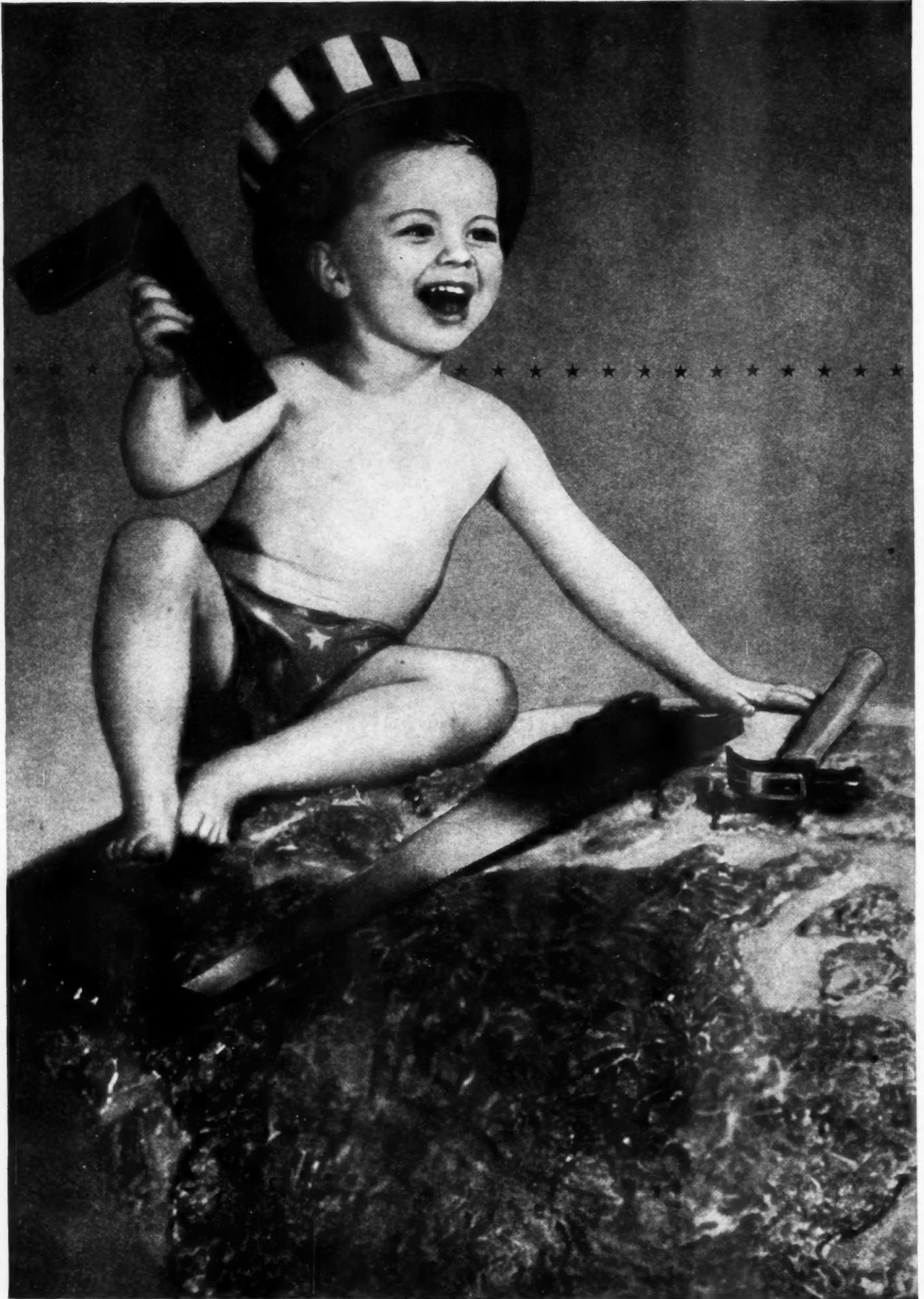
you select the right equipment, see that you get a first-class installation job, and provide dependable service with factory-trained mechanics after the sale.

You can't lose if you put yourself right into this picture. Timken Dealers are accepting Reservation Orders now to insure early delivery of new, improved Timken Silent Automatic Oil Heating when wartime restrictions are relaxed.

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Quality Home Appliances for Comfort, Convenience and Economy. 20 Years of Faithful Service to American Homes.
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“What’s ahead for Me?”



Plenty, little feller. Plenty. For you’re a young American . . . and America itself is *young*. Young in years! Young in vigor! Young and strong in determinations! It’s going places. And so are *you!*

That’s why, in this land of yours, there’s a great future for young men like you. But we mustn’t waste time! Once we’ve won the war—and the peace—we’ve got to start building!

Yes, sir . . . *building!* You know, that’s the way our forefathers started this country. They *built homes!* That’s the way they began to make America grow. And we’ve been building and growing ever since. But alongside what we’re going to build in *your* day . . . why, we’ve hardly even begun!

In the years ahead we’ll build millions of *new* homes!

Beautiful, livable, economical homes—the kind Mummy and Daddy dream of for *you!* There’s work to do— young man! Millions of homes to be repaired, remodeled, made new! Millions of wonderful *new* homes to be built!

And why do we Americans believe so in building? Because we want every youngster in our democracy to grow up in the healthy environment of a home of his own! But that’s not all! We want you—our children—to know the blessings of American progress and prosperity. And both depend so much upon the building of these homes.

All over our land building can be—will be—the spark-plug of our peacetime prosperity . . . the foundation of our country’s continued growth.

Young America—that is what’s ahead for you! A greater country, a greater future, a greater opportunity—because yours is the land of “Home, Sweet Home!”

CERTAIN-TEED

BUILDING



PRODUCTS

FOR THE GOOD OF YOUR BUSINESS! This striking national advertisement in full color will be seen this month by millions of home loving people! It is designed to sell one thing—the importance of home building to America’s future. During 1945 other Certain-teed advertisements will continue to pre-sell the advantages of specific Certain-teed Building Products. CERTAIN-TEED PRODUCTS CORPORATION, 120 S. La Salle St., Chicago 3, Illinois.

Simple Suggestions for More Attractive Wall Design Treatments with Douglas Fir Plywood

No. 2 of a Series

Illustrated below is another of many wall design treatments possible with Douglas fir plywood. In this instance, a two-panel treatment is used, with panels in horizontal arrangement. Vertical joints should be used at each side of top of doors and at top and bottom of windows as shown in diagram. In cases where the width of the wall is 10 feet or less, however, panels may be run horizontally with the openings

cut out (Note B in diagram). In all cases, follow this basic rule: start at the openings with vertical joints and divide the plain wall spaces in an orderly pattern for the most pleasing effect. If special patterns, or patterns made up of small panels are desired, the most satisfactory method is to

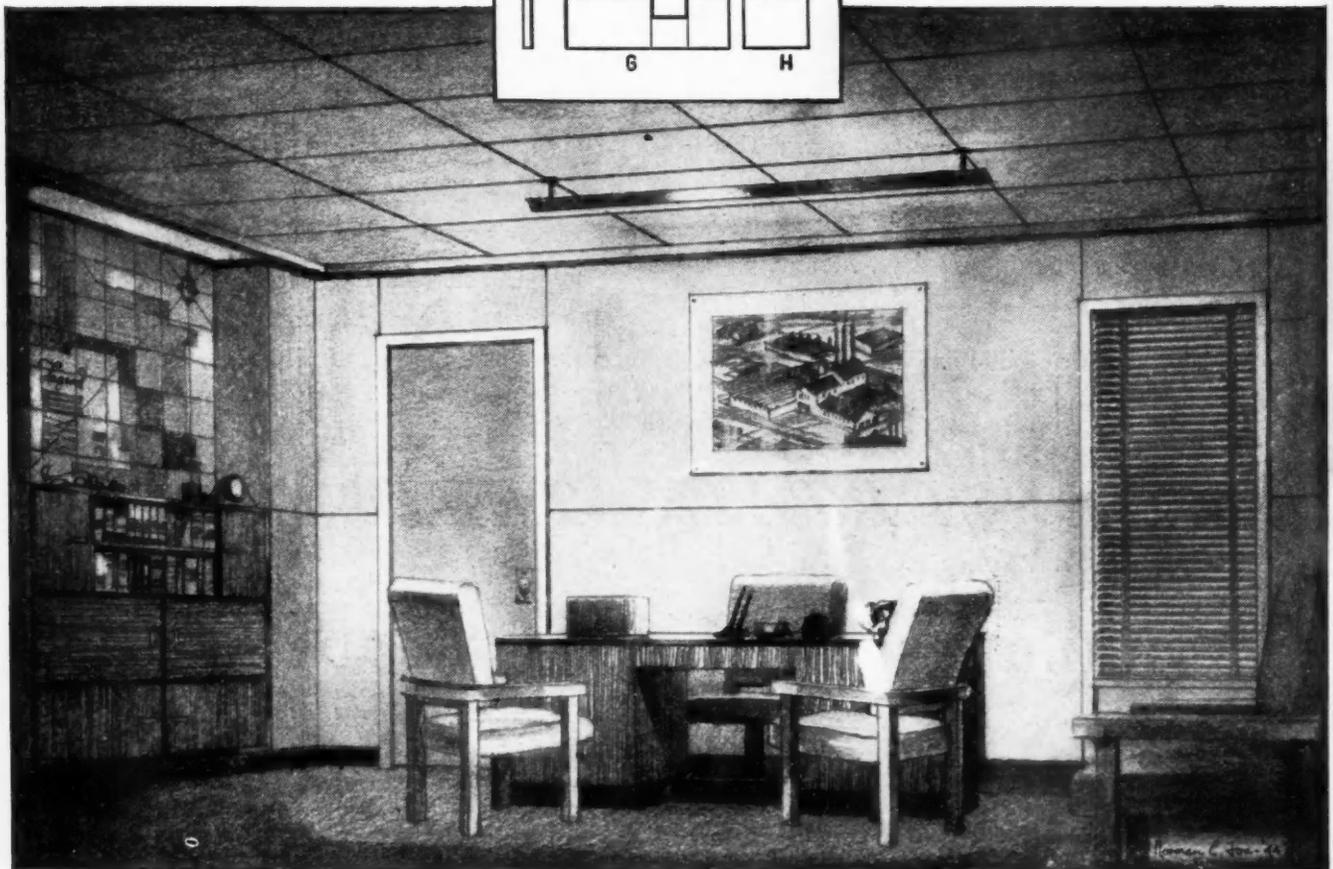
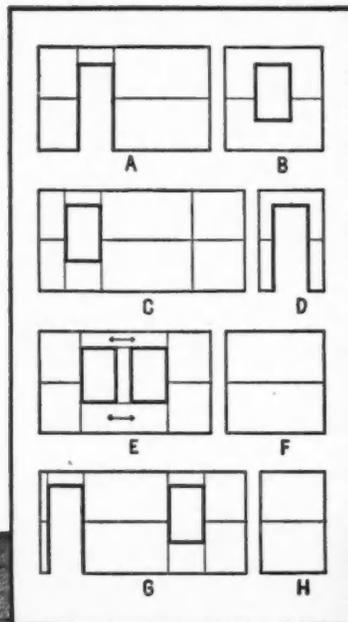
sheath with $\frac{1}{8}$ " of $\frac{3}{8}$ " Plyscord placed horizontally and apply the finish panels (Plypanel or Plywall) as desired. For technical data on these various grades, see Sweet's File for Architects.

DOUGLAS FIR PLYWOOD ASSOCIATION
Tacoma 2, Washington



CAN PLYWOOD BE SPECIFIED NOW FOR POSTWAR USES?

The increased capacity of the industry will make **MORE** Douglas fir plywood available for civilian consumption **THAN EVER BEFORE**, as soon as the needs of the armed services lessen or war restrictions are lifted. There will be no reconversion delays; the same types and grades of Douglas fir plywood that are now being made can flow immediately into peacetime building and construction.



"From the word Go"

NATURALLY, home buyers are going to stumble over each other to buy new homes the moment they're available.

But from the word "go" the builder who plans homes designed for better living will have a decided sales advantage.

Farsighted construction men visualize a steady market for possibly a million new homes a year. And they're planning to get a greater share of these big-volume sales by planning homes that will give more satisfaction to the buyer.

Such homes will be designed "from the inside out." They will be well built, adequately wired and will include automatic heating, proper lighting, as well as a well-planned electric kitchen and laundry.

The best is easiest to sell

Surveys by many organizations—FORTUNE, the U. S. Chamber of Commerce, and government agencies—show that electrical equipment will have close to first claim on the postwar buying dollar.

Home buyers have been led to expect vast improvements in postwar construction.

"All-electric" homes were merchandised successfully by hundreds of builders before the war.

The mortgagee will like the "all-electric" home, too—a complete home, giving satisfaction to its owner, is one of the best possible payment assurances.

General Electric is busily engaged in war work. G-E appliances and materials are not at present available. But after victory, you can count on G.E. for your needs, and on aggressive support of a complete building and merchandising program tailored to your operation.

The service and counsel of G-E Home Bureau are available to you. Simply call on your nearest General Electric distributor, or write us direct. Home Bureau, General Electric Co., Appliance and Merchandise Department, Bridgeport, Conn.

FOR VICTORY—General Electric is working night and day to back the attack. You can help, too, by buying and holding more War Bonds than before.

TUNE IN: "The G-E House Party," every afternoon, Monday thru Friday, 4 p. m., E.W.T., CBS. "The G-E All-Girl Orchestra," Sunday, 10 p. m., E.W.T., NBC. "The World Today," News, Monday thru Friday, 6:45 p. m., E.W.T., CBS.



Key to Better Living 

COMPLETELY
GENERAL ELECTRIC
EQUIPPED

RANGE REFRIGERATOR DISHWASHER
GARBAGE DISPOSAL STEEL CABINETS
ELECTRIC LAUNDRY AUTOMATIC OIL FURNACE
ADEQUATE WIRING

See JOHN DOE Builder
or Call YOUR BROKER




Everything Electrical for After-Victory Homes

GENERAL  ELECTRIC

"My repairs are profitable because they're permanent"



"I'm through wasting time, money and energy making repairs that don't stay repaired. That's a needless waste that I avoid by using Stonewall Board...it's maintenance-free!"

Stonewall Building Board is the efficient answer to farm repair problems. Once on the building, it's off your mind forever!

A BUILDING PLAN SERVICE TO HELP YOU

Your name on a penny postage to the address below will bring our free home maintenance book and farm home plan folder... helpful, practical hints on more efficient farm building, repair and maintenance.



Because it's made of impermeable asbestos-cement, Stonewall is permanent... fireproof and termite-proof, won't rot or corrode. Comes in large, can't-rot sheets that don't even need to be sawed... you just score and break them to size. No trouble to apply, no trouble after it's applied.

RUBEROID STONEWALL BOARD

Made only by
The RUBEROID Co.,
Executive Offices, 500 Fifth Ave., New York 18, N. Y.

EVEN HURRICANES CAN'T BUDGE TITE-ON SHINGLES!



Monday's Dairy Farm, North Dorchester, Mass.



The night of Sept. 14, 1943, the fiercest blow down ever to our coast but your Tite-On Shingles stood the gale and remained solid to the roof.

Northshore Farm, North Dorchester, Mass.

• The best proof of Tite-On's performance is the tremendous increase in sales following every big storm. You see, roofs built with these unique shingles come through unscathed—but far from unnoticed! People who've had ordinary roofs go shopping for Tite-Ons. People who already have Tite-On roofs write us letters like the one we quote above.

Concealed interlocking keeps Tite-Ons in place when other shingles go flying. This patented feature makes your roof permanently windproof and weather-and in addition has concealed nailing in four points. The result is a roof that's virtually "un-gripable," and that can't rust or even loosen. Don't wait for howling winds and damage to remind you—cover all with Ruberoid Tite-On shingles!

RUBEROID TITE-ON SHINGLES

MAIL THIS COUPON TODAY FOR FULL INFORMATION:

The RUBEROID Co., 500 Fifth Ave., New York 18, N. Y.

I want an 8x12 Tite-On Shingle
 I want the entire Ruberoid Book?

Name _____
Address _____
City _____ State _____

Advertising that helps get jobs TODAY!

● Here's the kind of advertising that Ruberoid is using this coming season... actual materials in actual use... real life examples of Ruberoid's "available now" products.

Starting off with a bang during February and March, these advertisements will be followed by others straight through the year.

Both the Farm and Home markets will be covered. Leading farm magazines will carry Ruberoid advertising

to 4,500,000 farmers. Color advertisements in "Better Homes & Gardens" will reach an additional 3,000,000 home owners... people who use these products, who actually have property to repair and re-model... your best market.

Emphasis will be placed on:

Stonewall Board. Builders have found that Stonewall is not just a substitute for lumber... that it supplies their need for a building board

that's fireproof, weatherproof, needs no painting... available today!

Tite-On Shingles. The windproof, colorful, fire-resisting, durable shingles that can't curl or come loose. Tite-Ons out-ride the hardest storms... even hurricanes can't budge them!

Contractors and Builders using these Ruberoid products today have no worries about priorities or shortages. They can really complete the jobs on which they estimate.

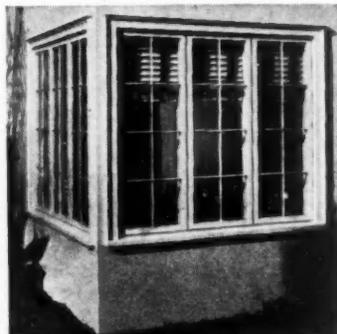
The RUBEROID Co.

Executive Offices: 500 Fifth Avenue, New York 18, N. Y.

ASPHALT AND ASBESTOS BUILDING MATERIALS... INSULATION AND INDUSTRIAL SPECIALTIES



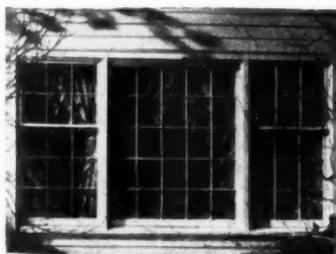
Bay windows need not be luxuries— if built of Curtis Silentite stock units. Use Curtis bays to make small rooms look larger—to add charm and variety to your plans. Curtis offers several styles from which you can choose.



Even the smallest homes can have modern window arrangements when you specify Curtis Silentite Windows. These are Silentite casements. The wide variety of sash styles gives you greater scope in your planning.

There's a wealth of architectural distinction in this Curtis picture window. Notice the narrow muntins—a feature of Curtis "streamlined" window design. Your clients will be sure to like "window walls" like this.

Silentite's narrow mullions (no weights or pulleys) give a more beautiful effect when windows are grouped. More light is admitted, too. You'll find it easy to "sell" home owners on Silentite's many features.



Mr. and Mrs. America will be critical, discriminating "window shoppers." They want more windows, of course. BUT those windows must be weathertight . . . able to bar out chilly drafts . . . thrifty windows that keep fuel costs low. And they must be easy to operate, too.

America will find true weathertightness in the famous Curtis Silentite line—so well known to millions. Here are windows made of wood—in itself an efficient insulating material. Here are windows factory pre-fit for easy installation—insulated windows with built-in weatherstripping.

Curtis leadership in research—Curtis improvements in window and woodwork design—will meet the post-war demand for modern windows of all styles and sizes. Keep up to date on windows and stock architectural woodwork with Curtis—mail the coupon for complete information.



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ALITIES

4 Reasons Why



WOMEN WILL LOOK FOR THIS SEAL ON THEIR NEW GAS RANGES



1. ONLY GAS RANGES BUILT TO THE HIGHEST SPECIFICATIONS

—bear a 'CP' Seal in addition to their own brand names. 'CP' is the trademark of Association of Gas Appliance & Equipment Manufacturers.



2. THE NEW REVOLUTIONARY 'CP' SPECIFICATIONS

—combine the best ideas of range manufacturers, designers, housewives, engineers and home economists of the entire gas industry.



3. FOR THE PROTECTION OF HOMEMAKERS

—gas ranges built to 'CP' Specifications are pre-tested by world-famous laboratories to provide a certified buying guide for the homemaker.



4. THE FINEST AND MOST ADVANCED FEATURES

—of all cooking appliances are combined in gas ranges bearing the 'CP' Seal. That's why they give maximum saving in time, food, fuel and money.

...AND MOST IMPORTANT OF ALL

WHEN YOU specify and install the fully automatic gas ranges bearing this famous 'CP' Seal, you have the safeguards of two famous trademarks—the name of a leading manufacturer plus the 4-way protection of the 'CP' Seal!

The 'CP' Seal is every woman's *buying guide*. That's why war-wise women, weary of

wartime makeshifts and obsolete, time and money wasting cooking equipment, will look for, *and insist on*, fully automatic gas ranges built to 'CP' specifications in the New Freedom Gas Kitchens of their new and remodelled homes.

For information, write to Association of Gas Appliance & Equipment Manufacturers, 60 East 42nd Street, New York 17, New York.

It Will Be Made By The Following Manufacturers: _____

A. J. LINDEMANN & HOVERSON CO.	THE TAPPAN STOVE CO.
O'KEEFE & MERRITT CO.	WESTERN STOVE CO., INC.
ROBERTS & MANDER STOVE CO.	<i>In Canada:</i> CLARE BROS. & CO., LTD.
CO. GEO. D. ROPER CORP.	GURNEY FOUNDRY CO., LTD.
STANDARD GAS EQUIPMENT CORP.	MOFFATS, LTD.

PUT THIS BLADE
IN YOUR
SKILSAW

...and cut
grooves
in one
operation!

● Here's how the SKILSAW GROOVER BLADE does 3 jobs at once! When grooving wood, there's no need to cut each edge of the groove, then chisel out the center . . . because this blade cuts both edges smoothly and chips out the center all in one quick trip through the material.

Forged, hardened and drawn to the proper temper to hold the set longer . . . properly balanced at our factory to run smoother and prolong the life of your SKILSAW. Diameter 5½ in., available in 8 thicknesses for ¼ to 1⅜ in. grooves. Call your distributor right now for a demonstration!

SKILSAW, INC.

5033-43 Elston Ave., Chicago 30, Ill.
Factory Branches in All Principal Cities



SKILSAW  **TOOLS**
PORTABLE ELECTRIC

MAKE AMERICA'S HANDS MORE PRODUCTIVE

Use this Blade for all portable or stationary power saws with round arbors. Available in 7, 8, 9 and 10 inch diameters, in 9 thicknesses for cutting grooves 3/16 in. to 7/8 in. wide. Order through your distributor who will supply you from factory stock.



How do you rate with your neighbors?

You build their homes... their churches
... their schools. You build their town.
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And, on these buildings, your reputation
rests. You know this... and you build well.
We, at Flintkote, know it, too. And we
know that no structure is better than its
materials.

That's why every Flintkote product is

**THE EXTRA YEARS OF SERVICE
COST NO MORE!**



carefully pre-tested to insure extra years
of peak service.

That's why materials, manufacture and
inspection must meet rigid Flintkote
standards... why, at Flintkote, skilled
labor works under expert, experienced
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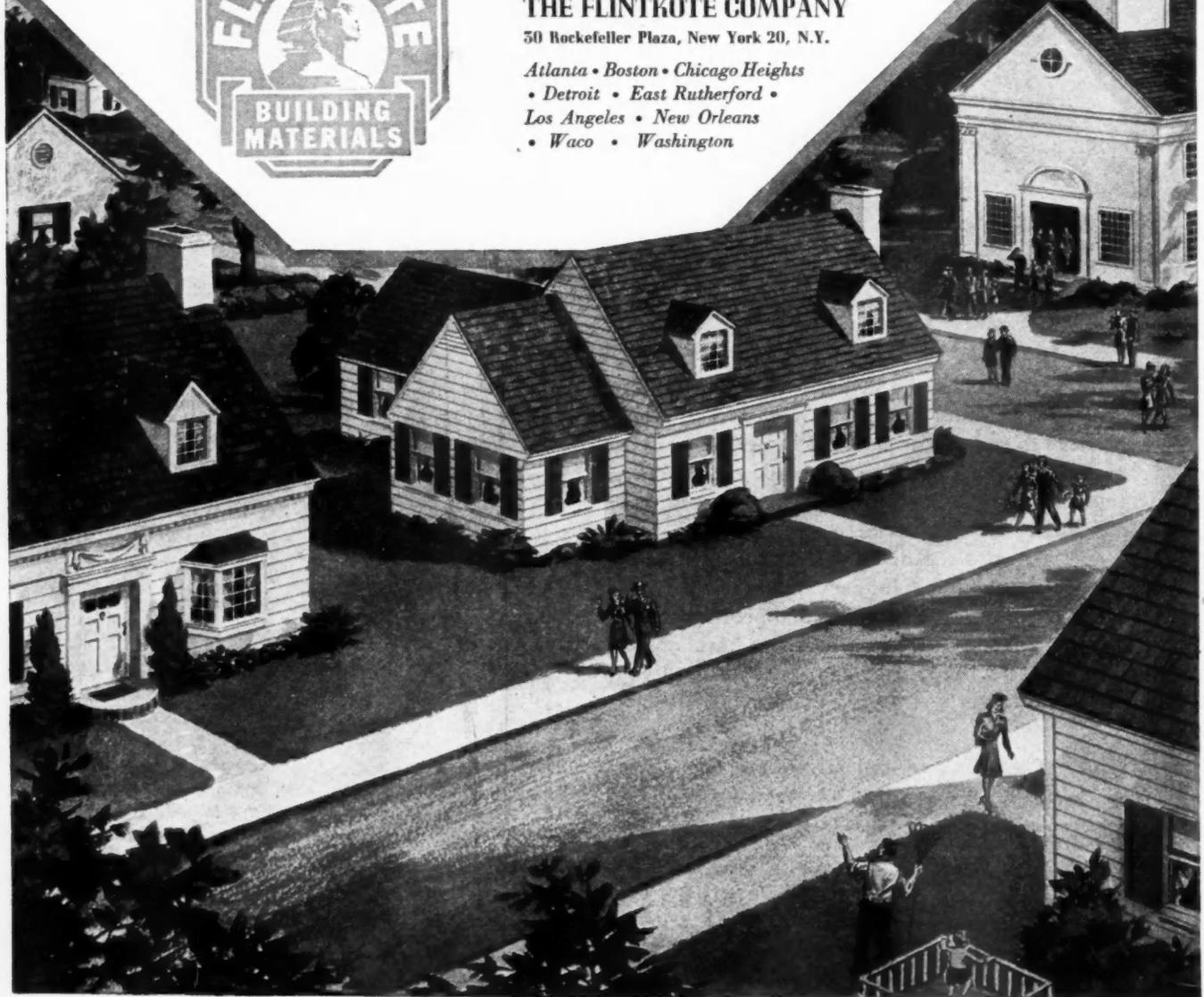
We've been making building materials for
a long time at Flintkote... almost 50
years. And all we've learned about mak-
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insulations, is passed on to you in every
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Builders' News Review

Latest Washington developments—News of the National Association of Home Builders and Local Associations



Country's Builders Flock To First National Home Exhibit And N.A.H.B. Annual Meeting

NEARLY four thousand builders from all parts of the country, from Canada and from Hawaii, packed Chicago's Hotel Sherman the week of January 15th. to see the first annual Home Exhibit, sponsored by the Chicago Metropolitan Home Builders Association. The scene was also the occasion of the annual conference of the National Association of Home Builders.

The exhibit, planned many months before the recent government ban on such gatherings, included more than one hundred displays of products and techniques by the country's leading manufacturers of building products. Insofar as wartime restrictions on material and manpower would permit, it was a preview of the home of tomorrow.

Model Homes Attraction

The most popular attractions of the show were the models of the six prize-winning contest homes, built to scale by Diorama Corporation. These were set up in a natural background, and there were also wall displays of the plans of the houses which won honorable mention.

Illinois Court Upholds Slum-rebuilding Act

The Illinois Supreme Court has held constitutional an act empowering the assembly of land tracts in blighted areas for resale to private builders for slum clearance. In its decision the court ruled that the legislature may delegate to neighborhood redevelopment corporations the power to take private property by eminent domain for public purposes.

Subject to Municipal Commissions

Private corporations operating under the act are subject to municipal commissions, who shall determine what is slums. There is a further provision that such a corporation must first acquire at least sixty

A second point of constant activity was the literature room. Manufacturers' representatives were kept busy refilling their racks, and builders with armfuls of descriptive material to be taken home for scrutiny and study were a common sight.

Day and Night Sessions

For three days and nights, the men who will build tomorrow's homes crowded the meeting rooms and listened to speeches by, or engaged in open forums with, leaders of government, finance, labor, home building, and building product manufacture. The annual home builders banquet was held on Wednesday night, at which the awards in the home design contest were presented by F.H.A. Commissioner Abner H. Ferguson, and on Thursday many of the visiting builders were conducted on a housing tour of Chicago.

The Home Exhibit, as the first completely representative National Conference and Exposition of Building Materials in the country, received national coverage by important newspapers and magazines.

per cent of its building site through private acquisition. It must be evident beyond doubt, the court said further, that the land so acquired will be used in the public interest by elimination of conditions conducive to ill health, crime, juvenile delinquency, etc.

Will Have Wide Effects

The court's finding is expected to have far-reaching effects in that private builders will thus be materially aided in land acquisition and assembly. It is believed corporations operating under this act will be able to furnish low-cost housing to groups they could not serve without it, and a consequent diminution of the need for publicly-financed housing for such groups will occur.

Haynes Named Director of W.P.B. Construction Bureau

War Production Board has appointed John L. Haynes Director of its Construction Bureau, to succeed Arthur J. McComb. Mr. Haynes, who has headed up W.P.B.'s Building Materials Division since April, 1942, has long been associated with the construction industry; worked on the remodeling of the White House in 1927, and was resident engineer on the \$1 million Federal Warehouse in Washington, D.C. In his new assignment he will deal directly with builders and all other factors in the construction industry, with particular emphasis on the problem of getting the industry quickly into full swing when time for reconversion arrives.

"Pre-fab" Advisory Committee Appointed by O.P.A.

Twelve members whose companies produce prefabricated homes have been named to an advisory committee by O.P.A. They will consult with O.P.A. on pricing problems within the industry and discuss provisions of a proposed new price regulation for prefabricated homes.

N.A.H.B. Elects Merrion, 14 Regional Vice-Presidents Chosen

The National Association of Home Builders, at its annual meeting in Chicago on January 16th, elected Joseph E. Merrion, well-known Chicago builder, president for the year 1945, to succeed Robert P. Gerholz. Other officers chosen were David D. Bohannon, San Francisco, first vice-president; Milton J. Brock, Los Angeles, secretary; and Joseph Meyerhoff, Baltimore, treasurer.

Regional vice-presidents

Also chosen were fourteen regional vice-presidents and eighty directors. The vice-presidents include John Olson, Worcester, Mass.; Harold Genrich, Snyder, N. Y.; George Goodyear, Pittsburgh; Morris Macht, Baltimore; Wallace E. Johnson, Memphis, Tenn.; Joseph W. Davin, Jacksonville, Fla.; Joseph Haverstick, Dayton, Ohio; John C. Lindop, Chicago; Ralph S. Duke, St. Louis; Ben C. Wileman, Oklahoma City; F. Orin Woodbury, Salt Lake City; F. E. McCambridge, Denver; L. C. Simms, Portland, Ore.; and Fred W. Marlow, Los Angeles, Cal.



CHICAGO'S MAYOR Edward J. Kelly (right) welcomed the builders to his city in January. He is seen here with Joseph E. Merrion, newly-elected president of N.A.H.B.



ALBERT BALCH, Seattle, O. builder, N.A.H.B. director, was caught as he confers with Paul Stark, Madison, Wis.

Surplus War Housing to Serve French Workers

Temporary shelter for 150,000 workers in France, engaged in repairing dock areas for war use, will be provided under an agreement between the French Provisional Government and the U.S. Foreign Economic Administration. The latter will use Federal Public Housing Authority as its agent to procure the housing.

With the required units to be of the barracks type, F.P.H.A. points out that as much as possible will be supplied from surplus war housing in this country, of the sort that can be sawed into panels, packed, shipped and re-erected abroad. The remainder will be built in panels and packaged for shipment, under W.P.B. material limitations, with lumber substitutes to be used wherever possible. No war housing which could be utilized in this country will be shipped abroad, W.P.B. declares.

W.P.B. Halts Project

W.P.B. has halted completion of "Clearview," Westmoreland County, Pa., residential project, for alleged violation of L-41. According to the agency's compliance division, five single family residences were started between August, 1942 and March, 1943, without authorization and costing \$5300 each.

St. Louis Guild, Producers' Council Sponsors Construction Forum

The Builders Guild of St. Louis and the Producers' Council Chapter of that city have announced joint sponsorship of a Construction Forum to be held on the evenings of the 5th, 6th, 7th, 12th, 13th and 15th of February in the David Rankin School of Mechanical Trades.

Leaders in various building fields will come to St. Louis to discuss latest developments in the home-building industry and endeavor to bring all interested elements of the industry "up to date." Subjects to be covered include prefabrication, plastics, air conditioning, heating and ventilating, kitchen planning, waterproofing, and financing methods.

The aim of the project, it is pointed out, is to have all those who will be responsible for a home-building program in the

St. Louis area ready to act promptly when war-time restrictions are eased. The subjects to be covered are those in which Guild members evidenced the highest interest in response to a recently submitted questionnaire.

Advocates F.H.A. Approval Of All Veteran Loans

Pointing out the threat of inflation inherent in the G-I lending program, L. E. Mahan, president of the Mortgage Bankers Association, recently advised veterans to wait rather than to pay excessive prices. He appealed to all members of his organization and other lenders to make every effort to forestall the sale of properties to veterans at inflated prices. The best means, he suggested, to protect against inflated prices and appraisals would have been to have F.H.A. process and pass on all loans, in view of that agency's success in combatting inflationary influences.

Houston Chapter Expands

Houston, Texas, Chapter has asked N.A.H.B. for a revised charter to enable it to take in more area, to increase membership to 100.

Earl C. Bradley has been made 2nd vice president, J. Francis Morrogh exec. vice president and secretary. Latter will occupy new offices at 725 Kress Bldg.



FRANK W. CORTRIGHT, N.A.H.B. Executive vice-president, welcomes **Cyrus Crane Wilmore**, past president of the National Association of Real Estate Boards, to the Chicago Home Exhibit.

F.P.H.A. Aiming at Rural Slum Clearance; Solicits Applications for Post-War

Commissioner Klutznick of F.P.H.A. has announced that rural housing authorities have been asked to submit applications for low-rent housing construction they are prepared to undertake in the three immediate post-war years if Congress makes funds available. He pointed out that such action is necessary in order that any recommendations made by this agency to Congress shall reflect the desires and determinations of local communities.

Rural authorities were asked to include in their estimates plans for small towns as well as farms. It was suggested that possible modifications of the U.S. Housing Act may be made to allow for the purchase of houses by tenants.



FRED W. KELLER, South Bend, Indiana (left), and **Walter S. Johnson**, Niagara Falls, N. Y., both large builders, swap experiences on conventional and "pre-fab" construction at Chicago Exhibit.

WINNERS REWARDED with six \$1,000 War Bonds for the first prize designs in the N.A.H.B. six class Design Competition. Abner H. Ferguson, F.H.A. Commissioner, one of the five judges, made the awards to the winners who appear in the background. They are Earl Carrothers, Charles A. Nixon, Hugh G. Selby, Charles Schreiber, E. C. Mahoney, and Todd Tibbals. Keen interest was shown in the large models made of the first prize house designs. It could be said to be the highlight of the show. American Builder furnished a folder showing floor plans as a guide in viewing the models.





EARLY ARRIVALS in Chicago were Dave Bohannon of California (left), and Bob Gerholz, Flint, Michigan, retiring president.

Blandford Says Non-war Housing Must Wait Till War Needs Satisfied

In view of urgent new demands for arms and ammunition and a consequent increased need for war housing in certain areas, N.H.A. Administrator Blandford announced recently that all housing activities must continue to be for essential workers only. It may be, he pointed out, that any large program, even to alleviate congested conditions in war-crowded communities, will be delayed "for some time." N.H.A.'s planned transitional programs must go by the board for the present, along with other reconversion measures.



GOOD NEIGHBORS from the north, Reg Dixon, builder (left), and W. H. Almond, building supplier, came from Toronto to see the NAHB home exhibit and attend convention.

W.F.A. To Handle Lumber Needs For Farm Home Repairs

Farmers who need lumber for emergency maintenance and repair of farm dwellings must now apply for preference ratings to War Food Administration, instead of War Production Board field offices, as formerly. W.F.A. has been handling allocation of lumber to farmers for all other permitted uses. Transfer of 15,000,000 board feet to W.F.A. was made by W.P.B.

Lumber Production Below Last Winter's Supply, Says W.P.B.

The winter months from December to March will see a substantial decline in lumber production from that of last winter, according to a recent statement of W.P.B. The greatest expected drop is in the Pacific Northwest.

Lack of manpower is the chief factor curtailing production, with men leaving the woods and mills for jobs in other war industries. Another hampering factor has been unfavorable weather conditions, and a third is the heavy tire shortage, lack of which is keeping many trucks out of operation.

New controls may have to be placed over distribution, according to the agency, to offset the expected production decline.

Small Southern Pine Operators Appointed to O.P.A. Committee

O.P.A. has appointed a subcommittee to the Southern Pine Industry Advisory Committee, to bring into the committee's membership form the first time representatives of small southern mills, the agency recently announced. Membership up to this time has been limited to larger operators. Members from Georgia, Florida, Kentucky, Tennessee and Virginia have been appointed, with other southern states to be represented shortly.

Smorgasbord Party

Fred Reinholt, president of the Anchor Concrete Products Corp., Buffalo, N.Y., invited all builders from both Rochester and Buffalo who attended the convention to be his guests at a famous smorgasbord restaurant.

Cortright's Column

By Frank W. Cortright

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



The following report made by Cortright at the N.A.H.B. National Convention in Chicago is carried instead of his usual coverage of Washington news. The column will revert to its usual form in the March American Builder.

At this great conference of builders it seems appropriate to take a moment to consider the story of the first builder. You will recall that the Book of Genesis gives the plans and specifications for his first big job—"And God said unto Noah. . . . Make thee an ark of gopher wood: rooms shalt thou make in the ark, and shalt pitch it within and without with pitch. And this is the fashion which thou shalt make it of: The length of the ark shall be 300 cubits, the breadth of it 50 cubits, and the height of it 30 cubits."

Major General Fleming, Administrator of the Federal Works Agency suggests that as Noah was laying the keel, the devil suddenly popped up out of the ground and said, "Morning, Noah. What are you doing?"

Noah said, "I'm building an ark."

The devil surveyed the job from various angles and said, "It's sure going to be a big one."

"None too big," said Noah, "for the purpose I have in mind."

"How are you going to float it?" the devil asked. "There's no water around here."

"There soon will be," Noah replied, reaching for another nail. "I have information that it's going to rain like hell around here—forty days and forty nights of it."

"That's crazy," the devil scoffed. "It's not going to rain. Even if it should, you could leave everything to the private rowboat building industry."

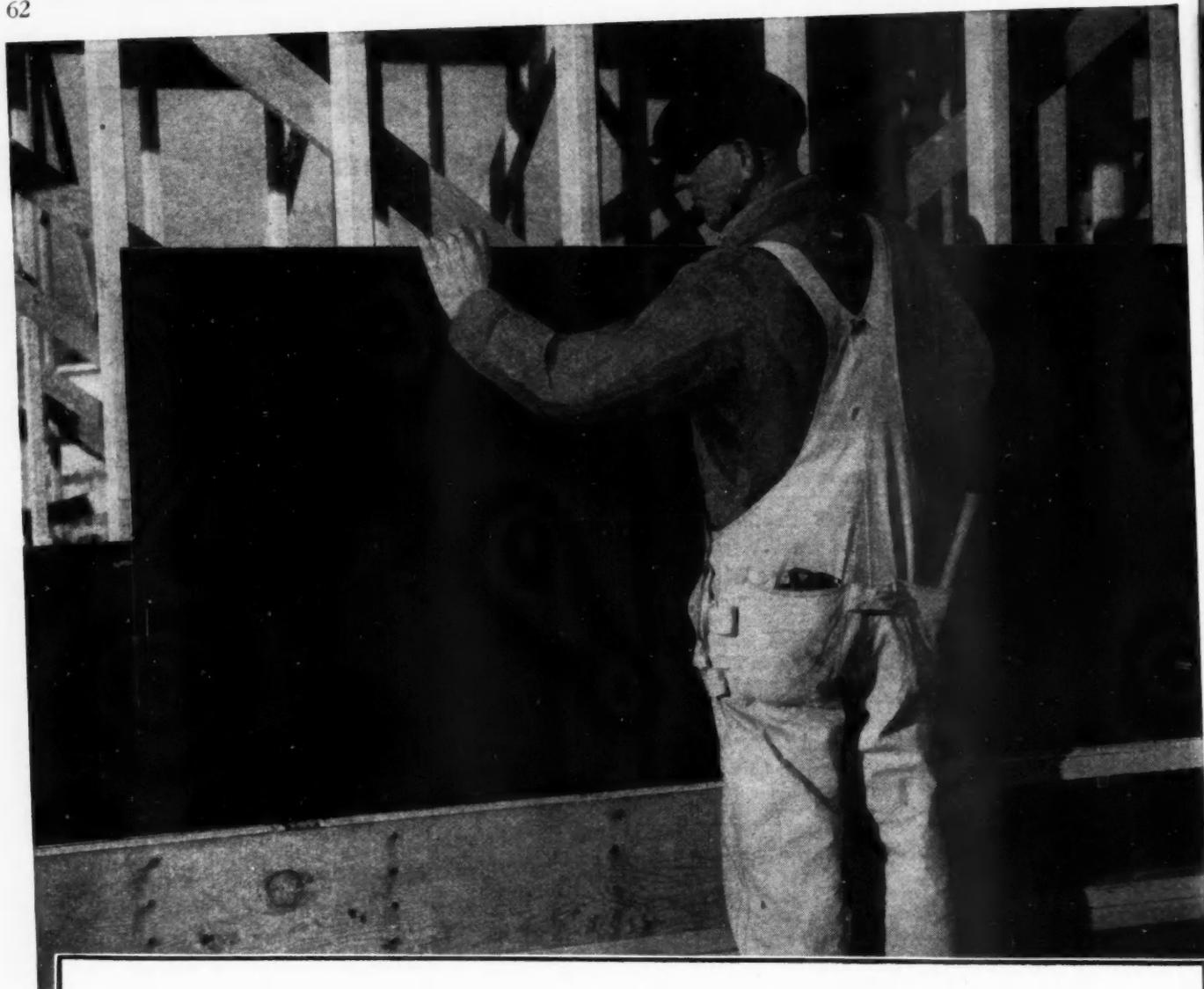
"I have nothing against rowboats," Noah replied, "but if it rains as hard as I think it will, rowboats won't be enough. Maybe it won't rain, like you say, but I think I'll go ahead and build this ark anyway. Working on it keeps my mind off my troubles, of which I've got plenty, and furthermore I know the lumber dealers need the business. Moreover, I've noticed it kind of clouding up lately."

Although we heartily disagree with the moral the Administrator of the Federal Works Agency has drawn, we must agree with him that Noah was a really smart entrepreneur and much can be learned from this Biblical story.

In the first place, Noah listened to the storm signals while others scoffed at the need for organized activity to meet the dangers ahead. You will note that as a good Assn. man he called in all his brethren, drew his plans and went to work.

Secondly, he made no small plans. The structure he set out to build had to be strong enough to ride the stormy seas, and large enough to carry safely all those dependent upon him. Adequate evaluation of his responsi-

(Continued to page 96)



CAN YOU BUILD A FIREPROOF WALL AT LOW COST?

THE answer to that one is—you can't build it fireproof, but you can make it a lot more fire-safe—by using *fireproof* Gold Bond Gypsum Sheathing and *fireproof* Gold Bond Gypsum Lath. Home owners are entitled to this extra fire protection and this improved type of construction will be featured extensively in post war days.

Gold Bond Gypsum Sheathing goes up fast without waste and builds a stronger, wind-tight wall, protected against fire from the outside. Gold Bond Gypsum Lath, the perfect plaster base, protects the studs from fire within. The complete wall, including its fire protection costs no more.

Gold Bond Gypsum Sheathing and Gold Bond Gypsum Lath are only two of over 150 different products of National Gypsum Research that help you build better with Gold Bond. For complete information see your Gold Bond Dealer.



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AMERICAN BUILDER

Editorial

N.H.A.'s one-piece wall

WHAT the building industry needs to solve all of its problems is a good one-piece wall, according to National Housing Agency's Bulletin No. 2 now receiving extensive publicity in the newspapers of the country.

The building industry, it seems, is guilty of technological backwardness, handicraft methods, restraint of trade, "imbalance" and many other things. But worst of all, it is guilty of not having developed a one-piece, self-supporting wall panel "complete with interior and exterior surfaces" which can be used in all parts of the country under all conditions and for all types of houses.

Stubborn and perverse?

N.H.A.'s Technical Division learnedly points out in Bulletin No. 2 that if the cost of the shell of a house could be reduced 50 per cent the overall cost of house and land would be reduced 30 per cent.

But, implies N.H.A., this stubborn, perverse, and technologically backward industry of ours refuses to invent a universal one-piece wall. So let's have the U.S. Government do it. Appropriate a few more millions or billions so that N.H.A. can set up a research department to invent a one-piece wall and then, if necessary, cram it down the throats of every builder or home owner in the country.

That is N.H.A.'s present idea of how to solve the "high cost" problem of the building industry. Bulletin No. 2 reads like a college freshman theme, full of wonder at suddenly discovered Great Truths. It declares that land costs are too high, building materials too high, wages too high (a remarkable discovery), distribution costs too high, "handicraft methods" too high.

Would "routinize" home owners

In fact, N.H.A. concludes, the cost of a house is still too high for the average family to own or rent a home. And it finds everything else about the industry is wrong.

Not only is the cost of a new home too high, say N.H.A.'s experts, but the "maintenance of homes is a very disorganized operation" and also expensive. Home owners, they say, fail miserably to "routinize" the care of their property and they suggest that special service companies be set up on a nation-wide basis to take care of their homes for them. (No this suggestion is not a joke—N.H.A. actually proposes

this on Page 29 of Bulletin No. 2)

Of all the things wrong with the building industry perhaps the worst, according to N.H.A., is its horrifying practice of employing 14 individual layers—count them—14—in the exterior wall of a modern frame house. This item has been taken up especially by social-minded newspaper writers—strangely enough all located in Washington—as a glaring example of how backwards the building industry is.

N.H.A. publicizing faults

A rash of newspaper stories has broken out since publication of Bulletin No. 2 which strongly suggests that N.H.A.'s publicity experts have been in close touch with Washington feature writers, who have apparently been led to feel that they are unveiling something of far reaching social significance.

Thus we have the remarkable spectacle of a government agency, supposed to represent a huge industry, engaged instead in defaming, distorting, and spuriously debunking it.

Fair minded men will admit that the building industry, because of its vast disorganized nature and the fact that its products are scattered over thousands of sites in many other thousands of communities, is far from perfect. But its faults and shortcomings will not be corrected by the kind of soft minded, arm-chair generalizations N.H.A. is handing out to the newspapers and anyone else who will swallow them.

What N.H.A. lacks is a realistic knowledge of basic conditions and practices that create the industry's problems. The building industry collectively is made up of several millions of hard working individuals of average or better American intelligence. They certainly are not opposed to technological improvements or to progress of any kind—even N.H.A.'s one-piece wall. They deeply feel the need for a constructive approach to present problems. But they also deeply resent the kind of blanket indictments N.H.A. has been passing out.

The newspaper stories that have flared into headlines as a result of N.H.A.'s efforts have painted the building industry in the blackest terms. Does anyone at N.H.A. really believe that this kind of publicity is helpful to N.H.A.'s stated objective of more and better homes for this nation? It appears to the men of the building industry a very backhanded way to encourage home building and home ownership.

Their Minds Feasted at a 'Smorgasbord' of Ideas

Homes for veterans and urgent need for more war housing vie for attention with post-war planning at historic congress of builders.

By John E. McNamara

Associate Editor

YES, there was hand shaking and back slapping. Yes, old friends swapped good stories. No, no drinks went begging at business-promoting cocktail parties. But frivolity knew its place, retired to a far-back seat as alert minds, in dead seriousness, avidly absorbed the knowledge they came seeking.

Seriousness Astounding

America's home builders, who gathered in Chicago in mid-January from nearly every home-building community in 42 states, astounded the newsmen of America, over a hundred of whom covered this largest annual convention-exposition of the National Association of Home Builders.

They were astounded because they had expected to see a bunch of rough, boisterous men off on a holiday.

Instead they found a group of *clean-cut, business-like executives* who came to gain new ideas on methods and techniques from others who *knew how* by doing. They found *serious minded men* who sought to learn from exhibitors new facts about the use of building products and equipment—facts which would enable them to improve the homes they build now for war workers and discharged veterans, and the homes they will build post-war to help America reach a higher

plane of livability when war ends.

LAND PLANNING Panel was the first general meeting. A capacity audience flabbergasted the speakers—amazed that this group of builders would spend the first evening eating up information instead of night club fare. Seward Mott, director of Urban Land Institute, acted as moderator for Hugh Potter, delayed by transportation trouble. He keyed the panel with the statement that there is "increasing emphasis on the creation of complete residential neighborhoods as contrasted with the scattered development of small groups of isolated houses; further, builders must come to realize that good planning is good business."

Creates Sound Investment

Gabriel C. Harman, Chief of F.H.A. Land Planning, told how his section had inspected and reviewed plans for more than 11,000 residences in the first 10 years of F.H.A. Its purpose is to create building sites in such a manner as to gain the best urban environment and to create sound investments. *Success or failure of a new neighborhood development is many times determined by its design. Protective covenants should (1) cover uses of land for homes, stores, parks, etc., (2) establish set-*

back lines, (3) prohibit redivision into smaller lots, (4) keep out temporary structures as residences, (5) outlaw nuisances, (6) set minimum floor area costs of homes, (7) create easements, (8) set up committees to control architectural designs. During the question period Harman stated "750 to 1,000 families are minimum for a successful shopping center."

Everett G. Kincaid, executive director, Chicago Planning Commission pointed out that larger cities are composite of smaller communities. Chicago is merely 25 to 30 smaller cities, each with a character of its



OVERFLOW from the ballroom of

CAPTURED by *American Builder's* photographers at largest builders' conclave: Names read left to right. Left group shows Lou Alper, John Weinhart, Edward Kuhlman and William J. Malloy, all from Detroit, which had largest delegation outside of Chicago. Center group has Mrs. Duke, Milton Brock and Col. Wm. H. Evans, all from Los Angeles. Right hand quintet contains Edwin Sandberg, C. E. Asbahr, Samuel O. Dunn, publisher of *American Builder*, T. R. Asbahr, and H. A. Schmitt. All but Dunn hail from Portland, O.





Man Hotel, Chicago, excluded many from this picture of N.A.H.B.'s annual banquet to over seventeen hundred home builders.

own. In the future cities must do away with some of the present obsolete practices if population is to be maintained instead of lost to the suburbs. Too many states have hindered the building up of areas. Competent city planners want to be helpful and a part of the post-war building picture; builders, too, should participate in city planning.

Ronald Campbell, subdivision designer (did planning for Bohannon projects described elsewhere in this issue), said that developments are cells within a master highway plan. One of the first jobs in creating a new

cell is to allocate areas for particular uses—parks, shops, parking, etc. *Streets are arteries designed to serve specific purposes. The widths can vary from 24 feet to 110 feet, according to use, rather than all the same widths as in the past.* If city or county will not accept dedication and maintenance of park areas, a homes' association can be formed to collect such costs on an annual basis per home owner—\$2 or more a year. Houses should determine the widths of lots according to size and cost. Good planning can (1) create desirable living communities and reduce sales cost,

(2) attract better types of buyers who will maintain character of community. *Little custom building is expected on the West Coast after the war; developments using a variety of houses will meet anticipated market in all price brackets,* Campbell said.

Ben C. Wileman, Oklahoma City, reviewed the co-operative planning and building job done by 16 builders at Midwest City, and told of post-war plans for another similar venture. *Important comment: "best use of land planning cannot be had on tracts of less than 30 to 40 acres."*

(Continued to page 100)

BLOW TORCH (left) in the hand of Chairman George F. Nixon cuts wire, opens exposition. Others in front row are Joseph E. Merrion, John Cummings Lindop, Holman D. Pettibone, Patrick J. Sullivan, president, Chicago Building Trades Council (A.F. of L.); and Robert P. Gerholz. In next picture to right is Kenneth Schuham, nicknamed the "convention's helping hand." Next right shows Mr. and Mrs. George F. Nixon. At far right Peter D. Kreist, exec. sec. of Builders' Association of Greater Cleveland and Hugh Selby, a prize winner.



In brief A WORD PICTURE of the convention

Douglas Whitlock, president of Producers' Council, called for a reshuffling of housing functions of the government to older government agencies where they formerly were. Advocated elimination of National Housing Agency—no public housing—local welfare relief for those who can't pay economic rent.

R. J. Thomas, C.I.O., said home building industry must provide 6 million jobs by building 1 3/4 million homes a year. Called for public housing and building of mutually owned projects among C.I.O. members.

Boris Shiskin, American Federation of Labor, urged that local housing authorities with assistance of federal government clear slum areas and rebuild with subsidized public housing. For private homes, A.F. of L. advocates 32-year amortization, reduced interest rate, better construction.

Arthur Motley publisher of American Magazine, championed a "selling war" to increase purchase of homes and consumption of all the equipment and gadgets which go into them to prevent future unemployment.

Walter S. Johnson, Niagara Falls, N. Y., registered disgust with Blandford's contention that home builders are giving a "lousy" value.

Morris Macht, of Baltimore, said the way to reduce monthly shelter cost is to extend amortization with interest rates as low as possible.

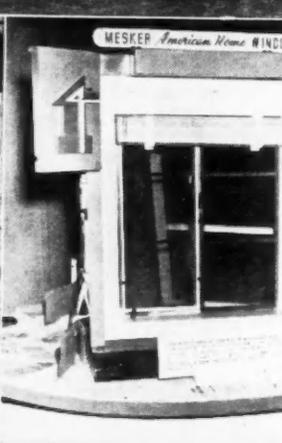
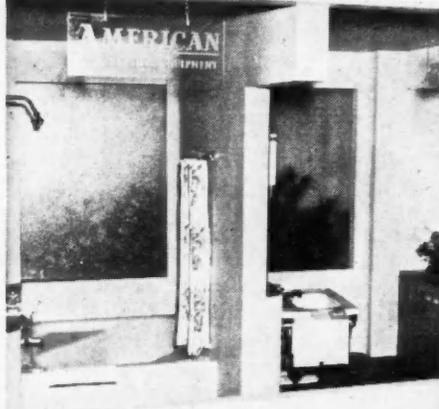
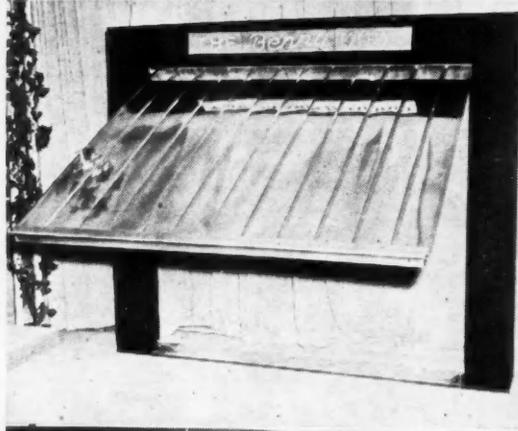
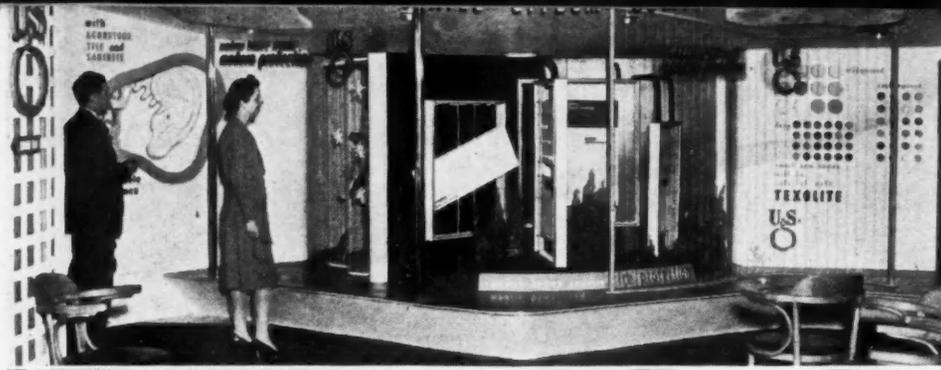
Fritz B. Burns, of Los Angeles pointed out need for improved selling tools for home builders in forum of modern sales methods.

Fred Keller, of South Bend, Ind. said veterans won't get best value in homes until present one-house-at-a-time method is changed to permit building 25 homes at a time for veterans.

Robert P. Gerholz, past-president of N.A.H.B., reported he traveled 27,000 miles, held 130 meetings in 6 war centers. Predicted huge population shakedown when war ends.

Howard Myers, Architectural Forum, said building boom post-war is not automatic because of government regulation and controls, restraints by labor and obsolete building codes. Sees only 400,000 homes first post-war year.

PICTURES show several of the exhibits of equipment shown at the N.A.H.B.'s first exposition, to be available for first post-war home



ABOVE
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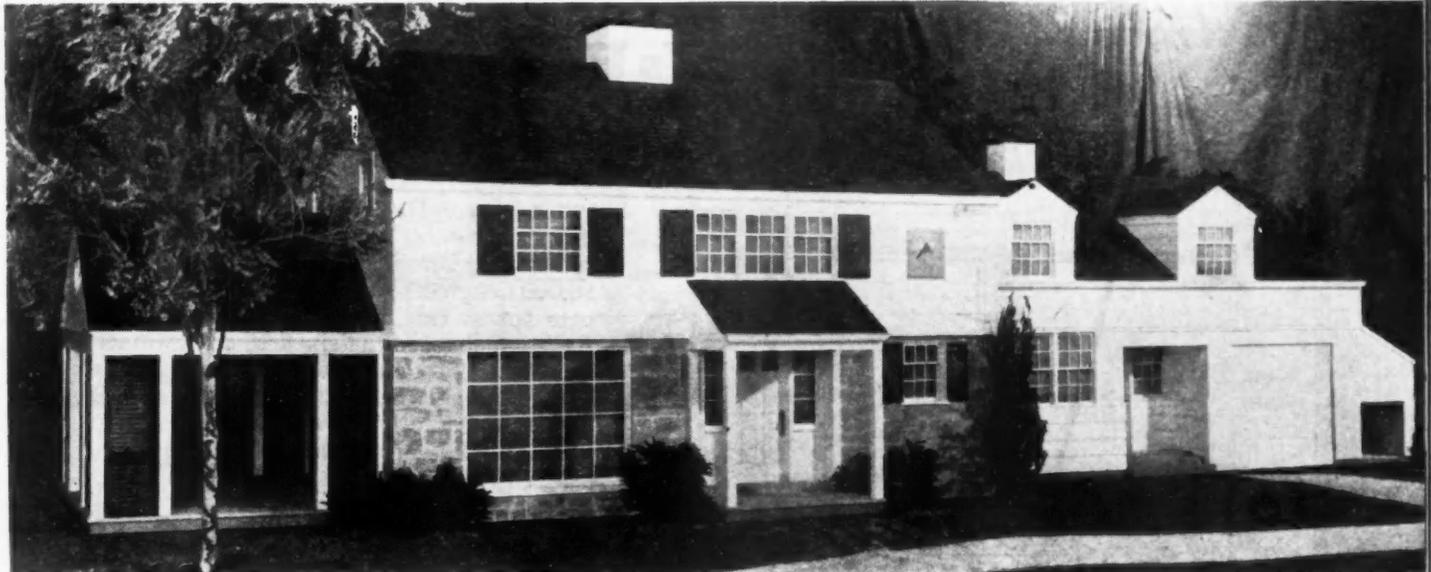
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Prize Winning Models



ABOVE: Model of the Suburban Home prize-winning design. Submitted by Charles and Arthur Schreiber of Chicago, this was one of the outstanding planning jobs, packed with forward-looking ideas.

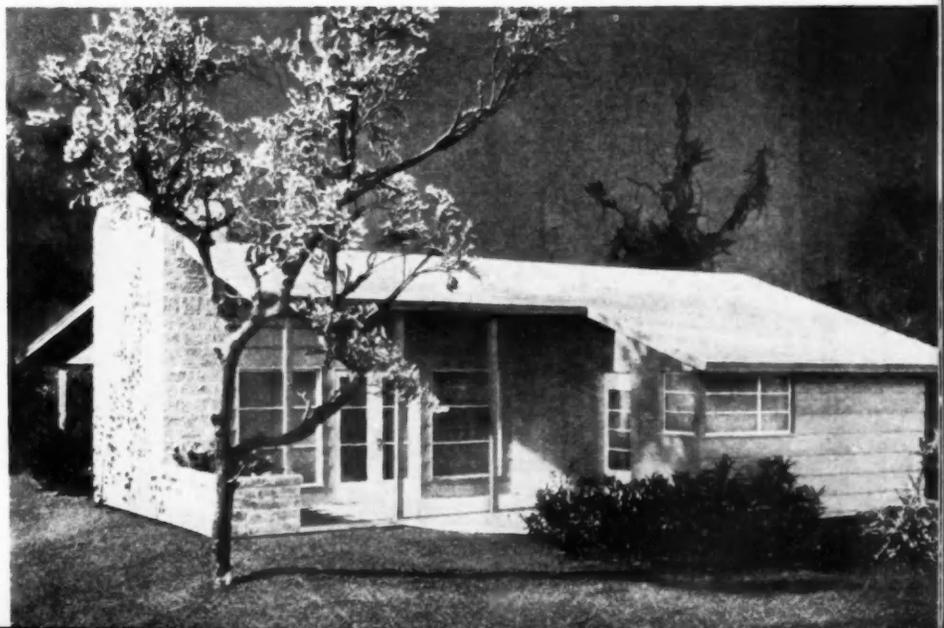
BELOW: This attractive model of the prize Farm Home by Charles H. Nixon and Architect Carl A. Kastrup interested many at the show because of its flexibility in basic design: it can be built in units.



BELOW: Looking ahead to the days of motor travel to Summer Resort Homes, the model from prize plans of Earl Carrothers and Architects Martin Braun and A. J. Del Bianco was carefully inspected; good value in this type of design estimated to be built for \$2,000 or less.

Center of Interest at Builder's Show

ONE OF the feature attractions of the N.A.H.B. Meeting was the group of six excellent models of the prize contest winners. These were exact reproductions of the designs and it was natural that builders were anxious to get a bird's-eye view of what the judges picked as the homes of the future in the various classes. They were dramatically displayed on a completely landscaped setting in the Conference Gardens. All of the winning designs, including the three here, were shown with complete plans in the January issue.

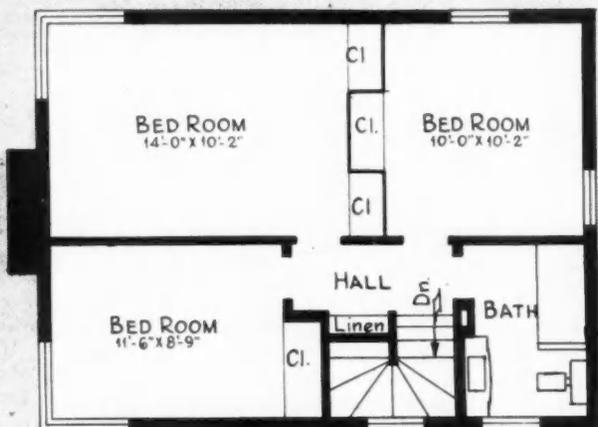


**SEVEN
SELECTED
HOMES FROM
N.A.H.B. PRIZE
CONTEST**



**For Areas with High-Cost Land
A Worker's Home Must Be Narrow**

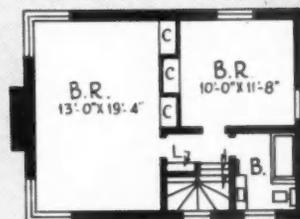
This honorable mention award winner in the industrial worker's home class, is an entry of Carrothers and Braun, Oak Park, Ill., in N.A.H.B.'s \$6,000 design competition. Six other award winners appear this month. Last month *American Builder* published the six first prize winners. It was especially planned to be built in densely populated sections where land costs are notoriously high. Since the lot is very definitely a part of the cost of a worker's home, the house must be planned to take as little land as possible. Braun and Del Bianco are the architects.



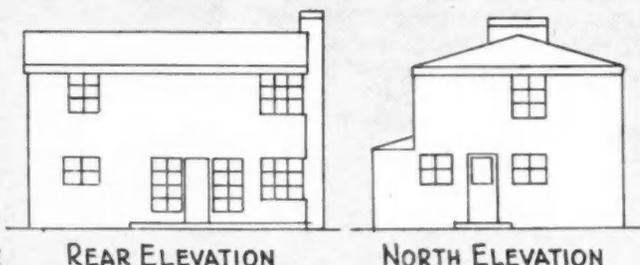
SECOND FLOOR PLAN
28'-6"



FIRST FLOOR PLAN

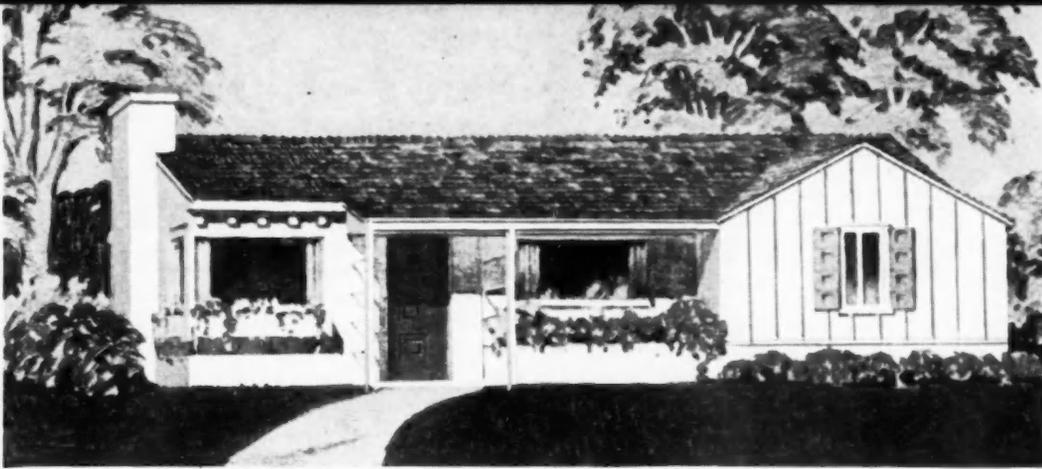


ALTERNATE 2ND FLOOR PLAN



REAR ELEVATION

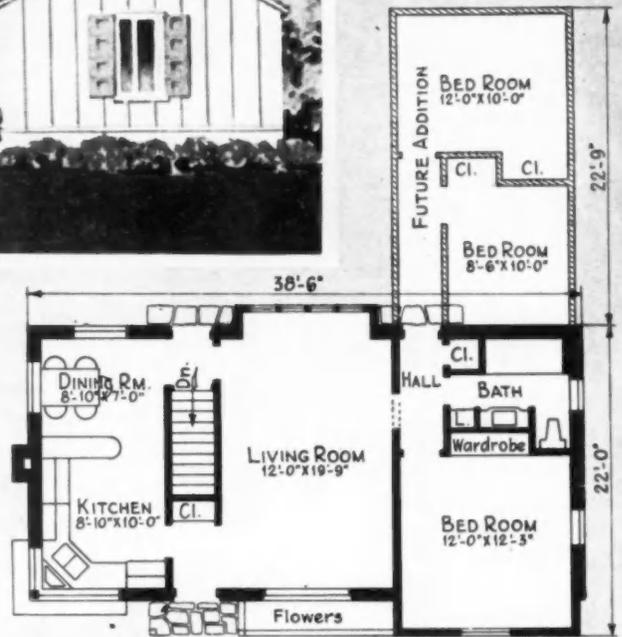
NORTH ELEVATION



For Spacious Homesite

Anderson and Schuh of Chicago submitted this one-floor plan which suggests living with a minimum of drudgery because of its step-saving utility room. Automatic central heat and air conditioning provide *correct indoor climate* without attention. Upholstered dining area is a part of the perfect kitchen plan, which saves many more steps.

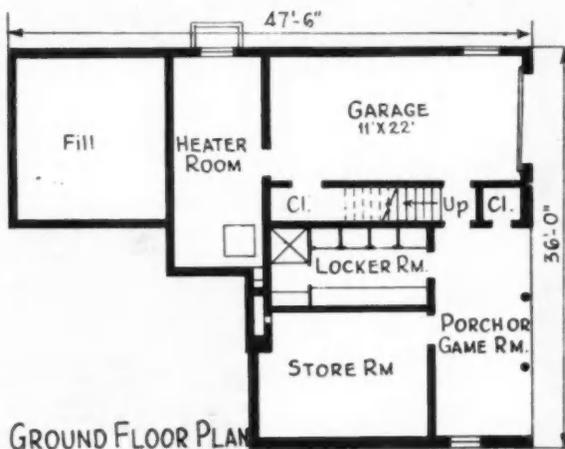
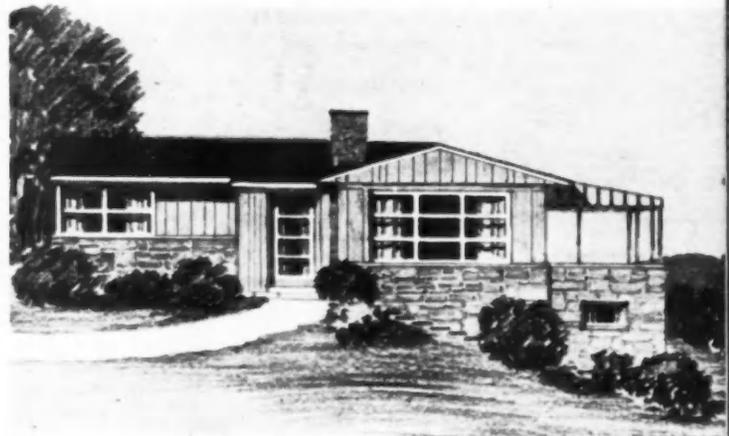
The alternate plan will please those who desire a basement for storage space and recreation room. The architects were Braun and Del Bianco.



FIRST FLOOR PLAN



FIRST FLOOR PLAN

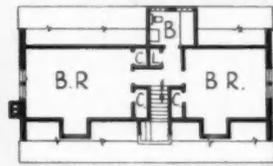
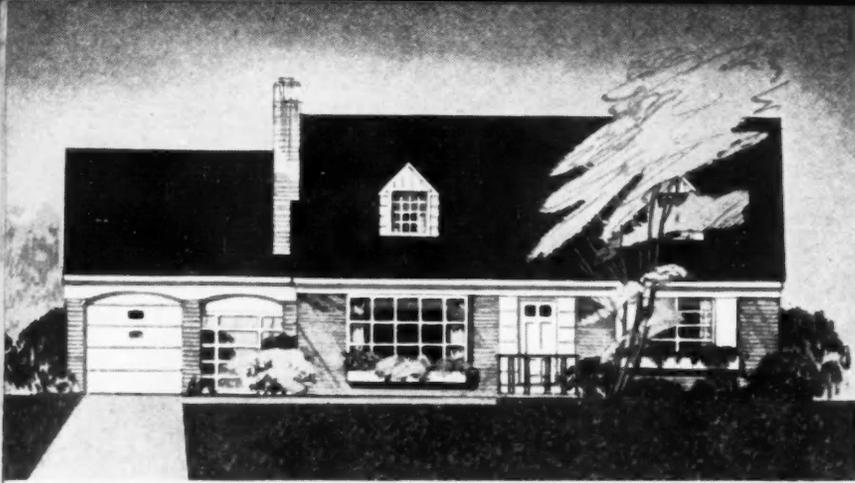


GROUND FLOOR PLAN

All Year Summer Home

While it was entered in the *summer resort home* class by Harris Homes of Chicago, Ill., this home was conceived as the type of dwelling which could also serve as an all year home.

"This home was designed as a lake shore residence where the normal conditions provide for a rather steep slope to the lake front. Advantage was taken of this condition to allow for a heater room and bath house facilities, including a porch which may be used as a game room on the ground floor so that bathers will not be required to come through the first story section of the home." Quoted from the statement made by Harris Homes. Harris Homes estimated the cost of this home at \$6,750 in Northern Illinois, subject to the type of equipment to be included.



SECOND FLOOR PLAN

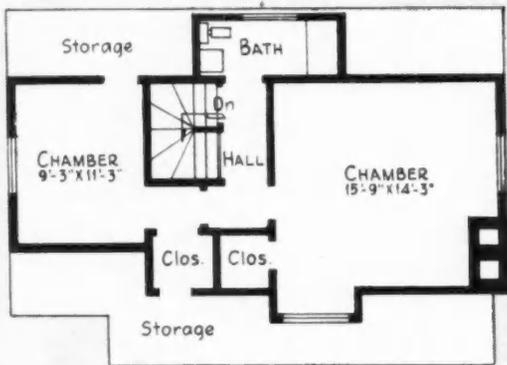
For the Suburbs

Rudolph A. Matern of Matern, Graff and Paul, New York City, captured honorable mention with this two-bath, four-bedroom design intended for a lot 80 by 125 feet.

It is intended for the middle-class suburban development, catering to the "junior executives" group, according to Matern. The second floor could be finished in later years to accommodate the family's growth. When children reach maturity and leave home, the parents have complete living facilities on the ground floor without the hazard of using stairs in their old age.



FIRST FLOOR PLAN



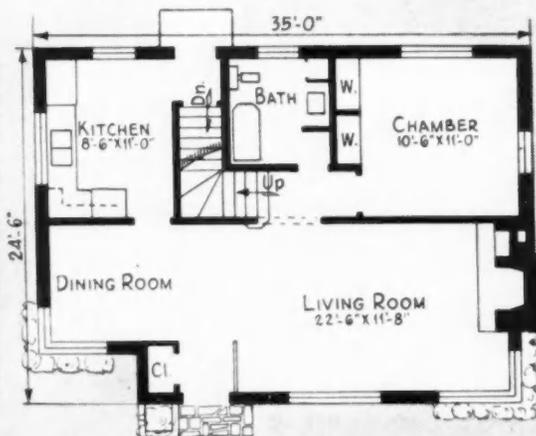
SECOND FLOOR PLAN

Home for Two—Others Later

While it won an award in the *home for two* class, with inexpensive alterations it can accommodate others who might be hoped for later. So say Carrothers and Braun, of Oak Park, Ill., who entered this compact design along with others which won first prizes and honorable mentions. Architects are Braun and Del Bianco of Oak Park.

The spacious living room for entertaining makes it ideal for the young couple starting out. This is not commonly planned into the smaller, lower-cost homes, Earl Carrothers said.

The house provides space for expansion on the second floor. The builders estimate the cost at \$5,000. The large bedroom, they say, can be added for \$400 and the smaller one for \$300. The cost of the second bath is given as \$400, the garage as \$350.



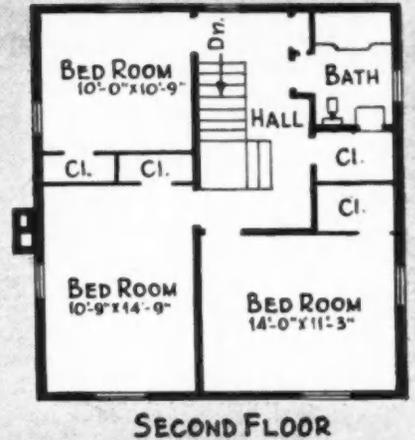
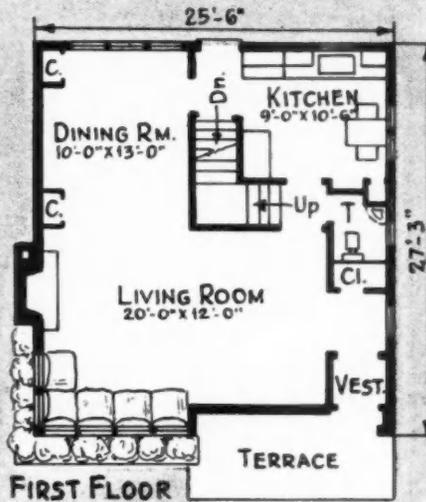
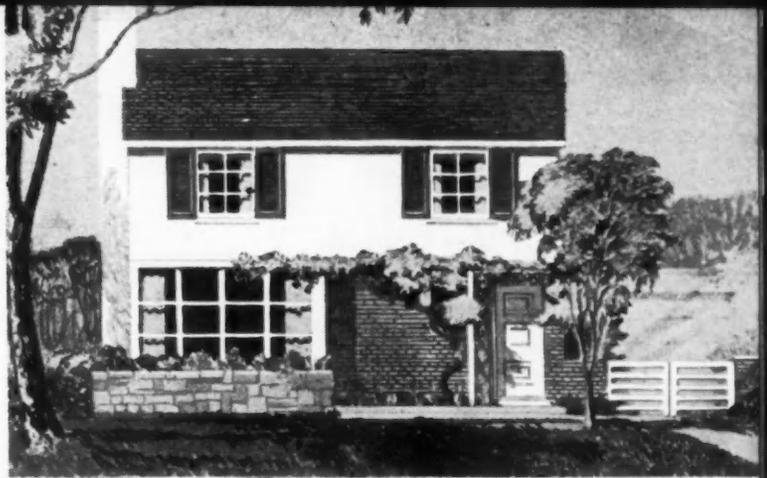
FIRST FLOOR PLAN



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Livability In Town

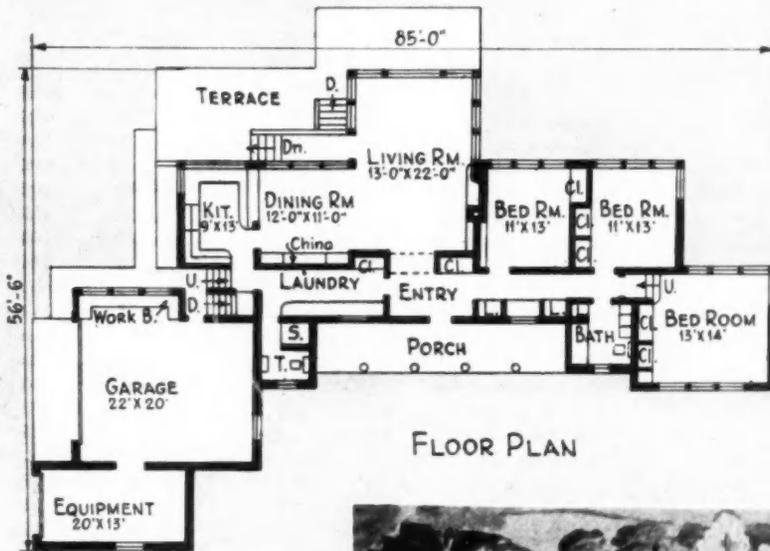
Hugh G. Selby, Lakewood, Ohio, who won the first prize for the city home class, also placed in the honorable mentions with the design presented here. The living room is generous in size and well planned for furniture placement. A spinet piano and desk fit in with a five-piece, modern davenport. The kitchen makes serving into dining room or paved terrace an easy task of few steps. Kiddies with dirty shoes reach the lavatory without traipsing through the house.



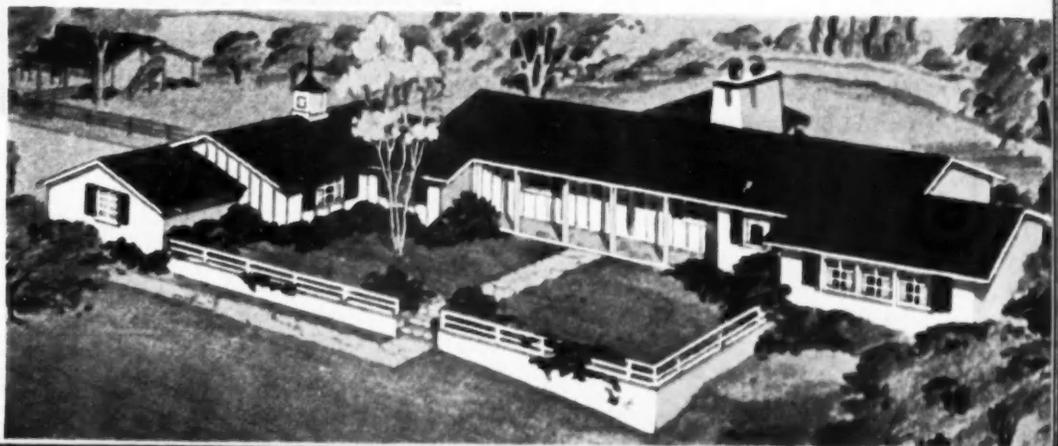
This Farm Home Lifts Livability

THIS charming, rambling home, entered in the National Association of Home Builders' \$6,000 design competition by The Richard B. Pollman Company, of Detroit, Mich., received an honorable mention award in the farm home class. Six others which received the same award appear this month. Last month *American Builder* showed the first prize winners in the six class competition.

The plan merits careful study for its excellent planning of broad window-walls and the kitchen-dining area with its step-saving character.



GLASS WALL surrounds the workbench wing of the garage, assuring an excellent flood of light. Lavatory is convenient to kitchen, modern laundry and entry without passing through other rooms.



**WHERE
the Housing
Dollar Goes**

**N.H.A. blames high costs on
lack of technological ad-
vances; suggests government
agency to sponsor research**

of its cost. If the cost of producing and distributing these items could be chopped in half, a substantial saving would be achieved in monthly carrying charges over the lifetime of the house. In other words, if the public could buy a \$5,000 house for \$4,000, it would save money, N.H.A. discovers.

Since building is such a localized activity, the value of a nationally average chart, such as the one quoted on this page from the N.H.A. bulletin, is questionable. Contrast it, for example, with an actual set of figures for a \$5,000 house built in a small town just outside New York City. The difference in labor costs alone—29½ per cent according to N.H.A., 34 per cent in the other instance—is substantial, and post-war the 34 per cent figure will doubtless be closer to reality.

The figures given on the specific case cover only the physical items that make up a structure, no matter upon what local site it may be built, and do not include such variables as land and cost of land improvements, as in the N.H.A. chart. This latter item, incidentally, usually calls for considerable labor costs, which are not shown as such.

Statements May Be Questioned

There are a number of statements in the bulletin which may be questioned. For example, all conclusions

are based on the theory that a family can only afford a house whose value is not more than two times its annual income. Most standard mortgage practice, and certainly F.H.A. insurance practice, has been to allow two and a half, and in many cases three times annual income as a proper figure. The incredibly low percentage of F.H.A. losses seems to bear out the soundness of this ratio.

Again, in attempting to show that comparatively little home building is done for the low income bracket, the following statement is made:

"For example, although 25 per cent of all non-farm families earned less than \$1,000 in 1941 (a high income year) and could afford a house costing not more than \$2,000, only 1 per cent of the houses insured by F.H.A. under Title II during 1940 and 1941 was valued at less than \$2,000."

For a proper comparison on \$1,000 incomes, houses up to a \$2,500 valuation at least should have been included; and, though 1 per cent is admittedly low, the statement seems to assume that all who had \$1,000 incomes and bought homes in 1941 necessarily must have bought them in that or the previous year. A good number, in proportion at least, might well have been bought in the years preceding or to follow. Finally, no mention is made of F.H.A. Title 1, Class 3, where a good part of that

(Continued to page 106)

THE problem tackled by "Housing Costs," the second in a series of National Housing Agency bulletins, is the "high cost of building houses." The solution offered is a government agency, presumably N.H.A., whose job will be intensive research in collaboration with private industry to develop new and cheaper products and methods of distribution.

It is, according to the bulletin, the products that go into the "shell" of a house which comprise 60 per cent

N.H.A. COST ESTIMATE						
(Items as percent of total cost of \$5,000 house and land)						
	Manu- facture	Distri- bution	Trans- portation	Com- bined Profits	Price De- livered	
1. Cost of Materials at Site:						
Lumber	4.19	4.64	1.42	1.60	11.85	
Masonry	2.17	0.73	0.30	0.25	3.45	
Concrete and mortar	1.70	0.86	0.33	0.44	3.33	
Plaster, lath and wallboard	1.31	1.54	0.46	0.96	4.27	
Insulation	0.11	0.06	0.03	0.04	0.24	
Roofing	0.62	0.32	0.10	0.21	1.25	
Flooring	1.35	1.02	0.24	0.34	2.95	
Millwork	2.88	3.10	0.38	1.00	7.36	
Paint	0.88	0.34	0.04	0.15	1.41	
Finish hardware	0.29	0.29	0.03	0.10	0.71	
Plumbing	3.63	0.90	0.35	0.60	5.48	
Heating	0.89	0.30	0.09	0.14	1.42	
Electrical	0.39	0.40	0.05	0.14	0.98	
Miscellaneous	0.49	0.30	0.08	0.13	1.00	
All materials	20.90	14.80	3.90	6.10	45.70	
2. Cost of Site Construction Labor						29.50
3. Contractor's and Subcontractors' Overhead and Profit						12.30
4. Total Cost of House						87.50
5. Value of Unimproved Land (including profit on land)						7.00
6. Cost of Land Improvements (including profit on improvements)						5.50
7. CAPITAL COST						100.00

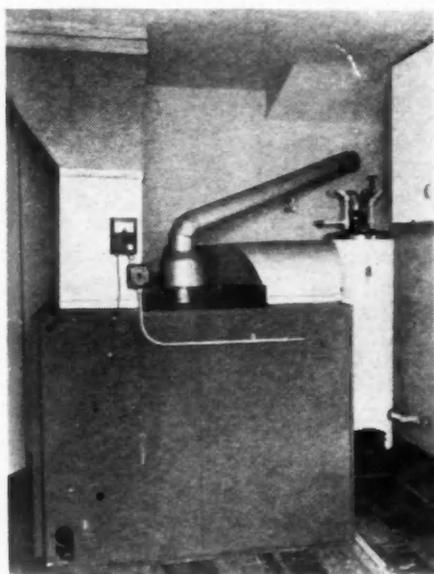
ACTUAL COST FIGURES				
House and Lot Valued at \$5,000—Built in New York Area				
	Material	Labor	% of To- tal Cost	Total
Excavation		\$136	.031	\$136
Masonry	\$440	296	.163	736
Rough Lumber	500	196	.156	696
Exterior Mill Work	231	78	.068	309
Asbestos Shingles	87	40	.029	127
Asphalt Shingles	65	35	.023	100
Interior Trim	183	61	.054	244
Stairs	47	14	.014	61
Oak Flooring	77	37	.029	114
N.C. Pine Sub Floor	10	9		19
Rough & Finish Hardware	44		.009	44
Sheet Metal Work	8	5	.002	13
Lath & Plaster	136	135	.060	271
Tile Work	20	5	.005	25
Plumbing	336	127	.103	463
Heating	238	40	.062	278
Electric Work	50	15	.015	65
Painting	42	87	.029	129
Insulation	29	6	.007	35
Miscellaneous	53	41	.021	94
Net Total	\$2,596	\$1,363	.88	\$3,959
Overhead & Profit			.12	476
Total			1.00	\$4,435
Material =	66%			
Labor =	34%			
Total	100%			

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Blueprint House Brings in Year 'Round Summer



UTILITY room has efficient conditioner with supply trunk over ceiling joists; other equipment—heater, storage cabinets and washer.

BRING in the outdoors with plenty of light, fresh air and view. That's a good theme for future living and just what Builder Carlton A. Smith did in his own home completed shortly after the war started. The lot he selected in his Prospect Heights development near Chicago is wide and deep with curved frontage; it called for a ranch house styling with large windows and rambling plan to fit the site. However, as many builders have found, this type in northern areas presents some tough problems of heating.

The design as shown on these three pages has worked out entirely satisfactorily. After three winters of living in it Mr. Smith says that the heating plant handles the load easily even when it's 20 below or colder. The larger bedroom is exposed on three sides and is farthest from the conditioner in the utility room. Adequate sizes of all heating equipment and thorough insulation is the an-

swer. The result is year 'round comfort.

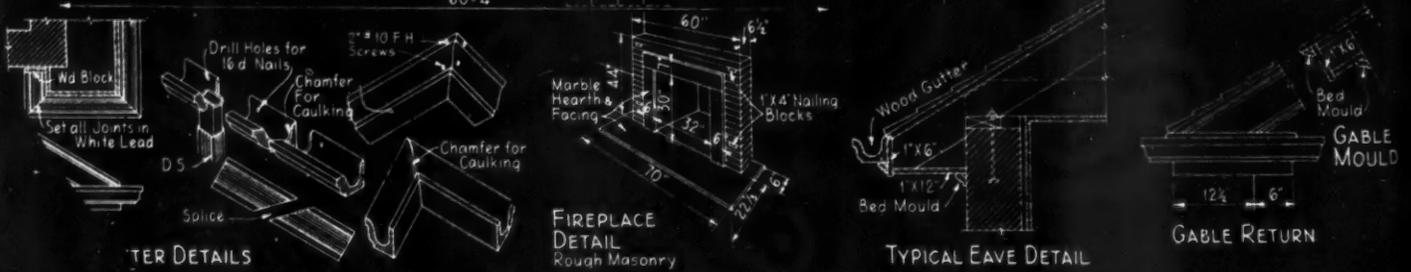
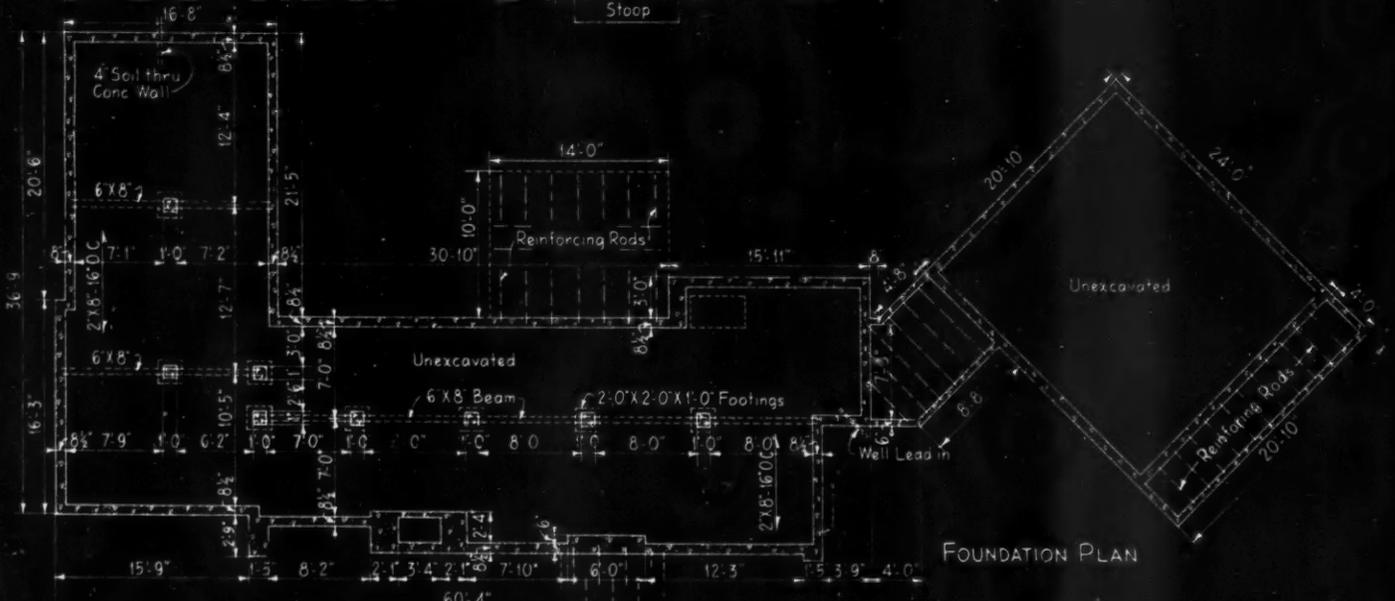
The gas-fired system has a rated capacity of 120,000 B.T.U.'s. With registers for both supply and return properly located as shown on the floor plan, the system can do a complete heating job even under extreme conditions. Overhead supply duct runs through space under the roof; except for a small area under the utility room reached by a trap door and used for extra storage, there is only crawl space under the floor. So in this job all the problems were encountered—no basement, spread out plan with maximum exposure, first floor utility room and large glass areas.

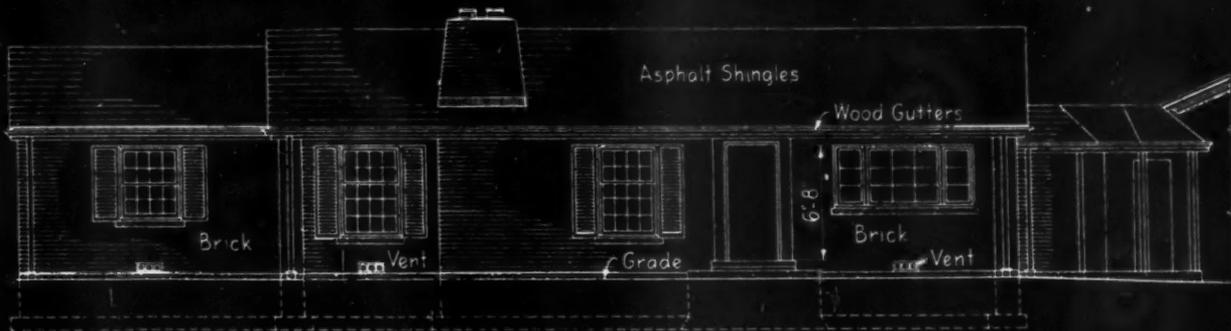


See next two pages for front view, plan, and details of this house.



Builder's Plan for Post-War Living





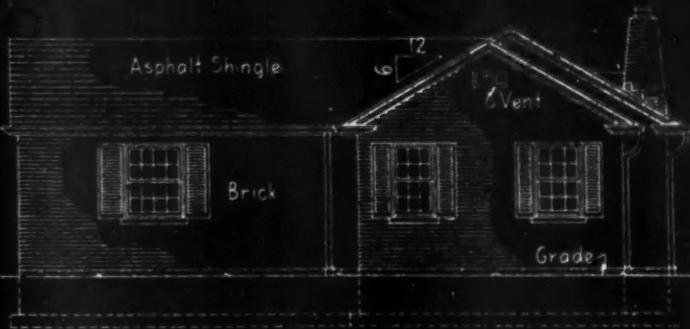
FRONT ELEVATION



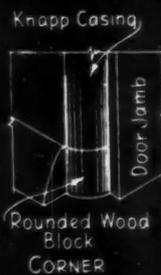
REAR ELEVATION



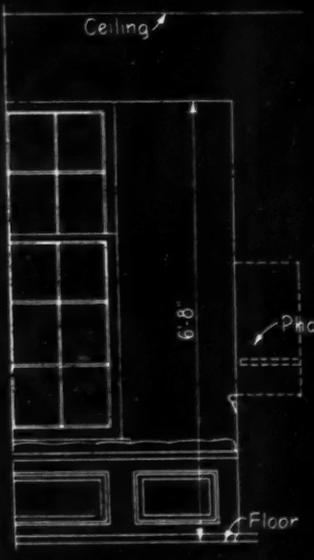
RIGHT SIDE ELEVATION



LEFT SIDE ELEVATION



SECTION
BASE DETAIL



DETAIL OF WINDOW SEAT



SECTION

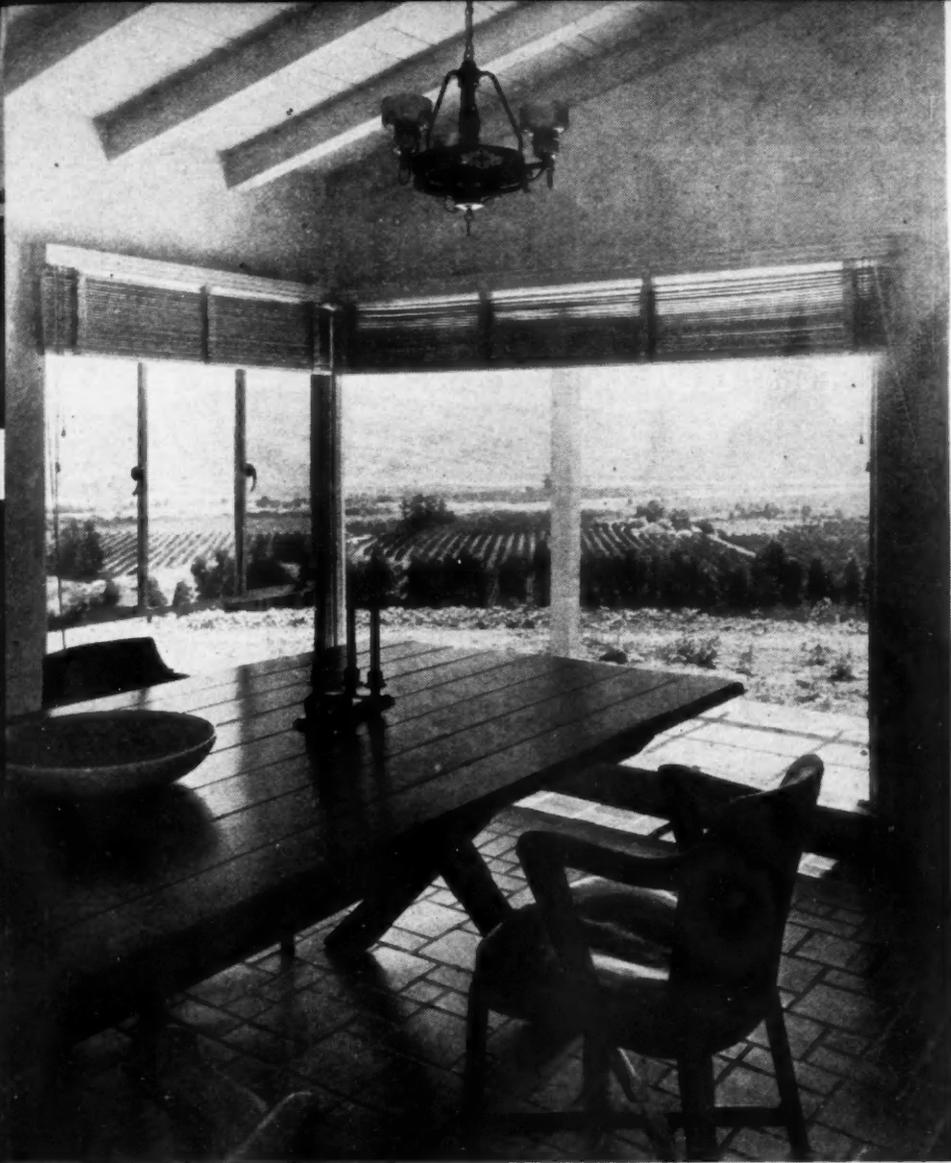
Year 'Round Comfort Built into Home with a Future

No. 2 of New Blueprint Series—This home of Builder Carlton A. Smith, Prospect Heights, Illinois, is designed for comfortable country living—story and other views on page 73. Heating a rambling, basementless house is a major problem; as detailed here, 100 per cent satisfaction resulted.

Other features of the Smith home include a large living room with picture window overlooking garden and a built-in telephone window seat on the opposite side of room (see left). Breakfast room and screened terrace replace the usual dining room. Storage space throughout including kitchen is well planned.

Windows With an Outlook for the Future

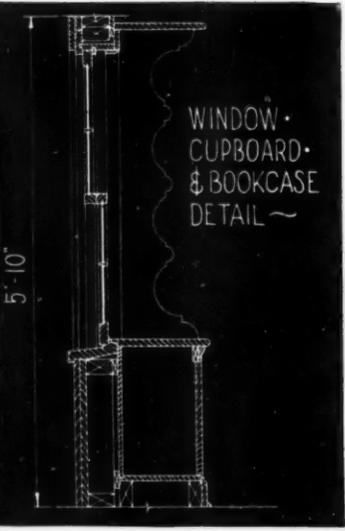
THREE-IN-ONE—Picture window, corner window and ventilating sash combined for beauty and utility. As well as allowing an extraordinary view, plenty of daylight and air, this combination saves space along other walls.

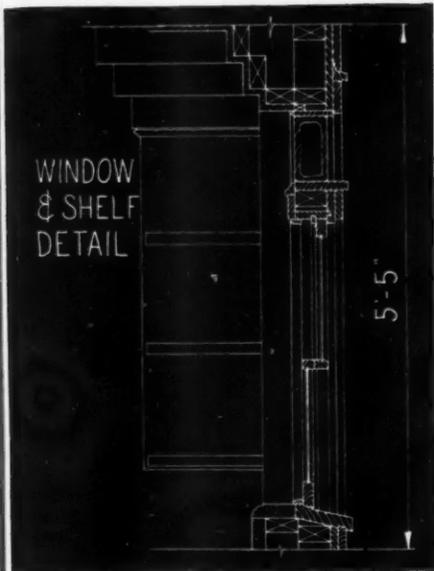


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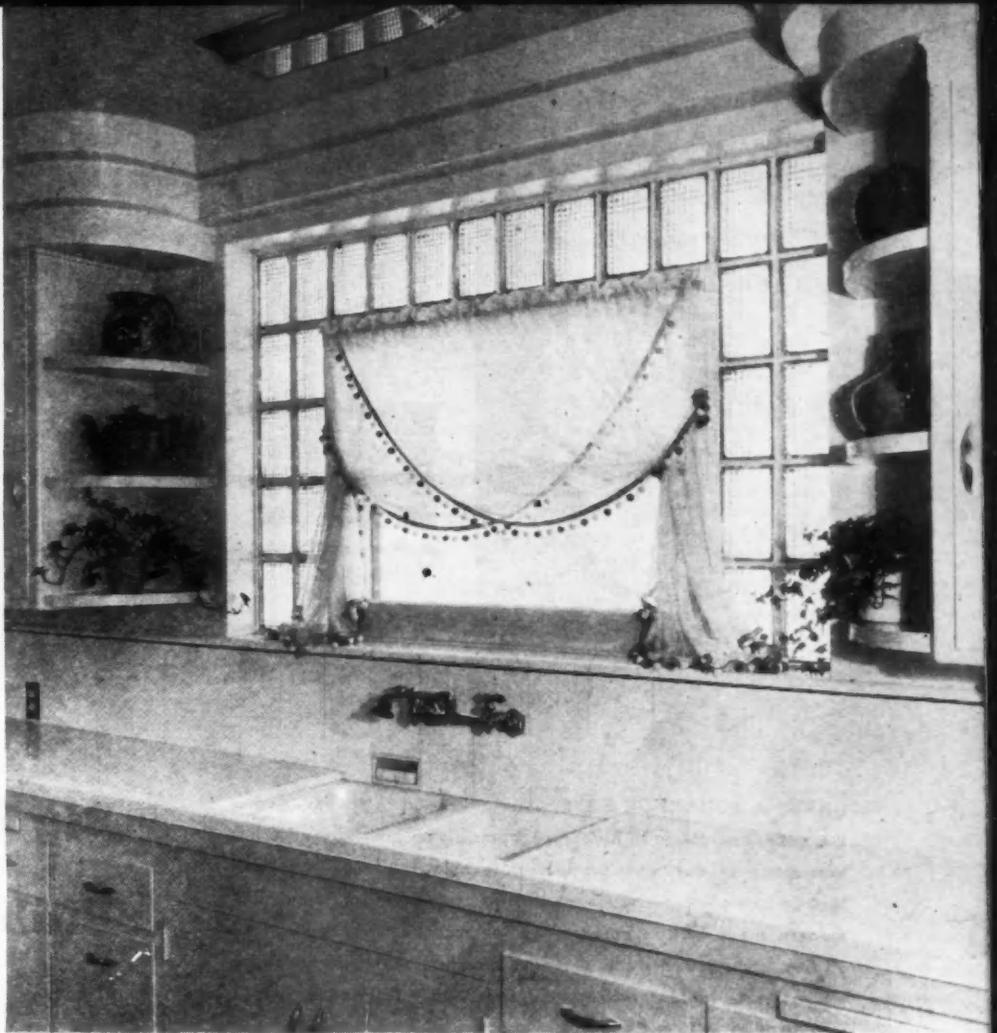
SURROUNDED WITH UTILITY—Good-looking shelves and cupboards completely fill the wall space around bedroom double windows. Note pattern of doors carried up as back of cases.



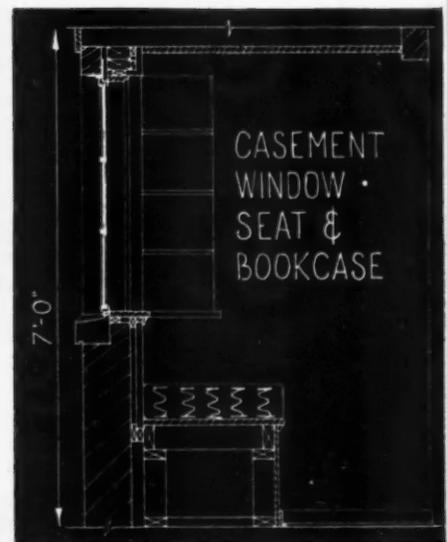


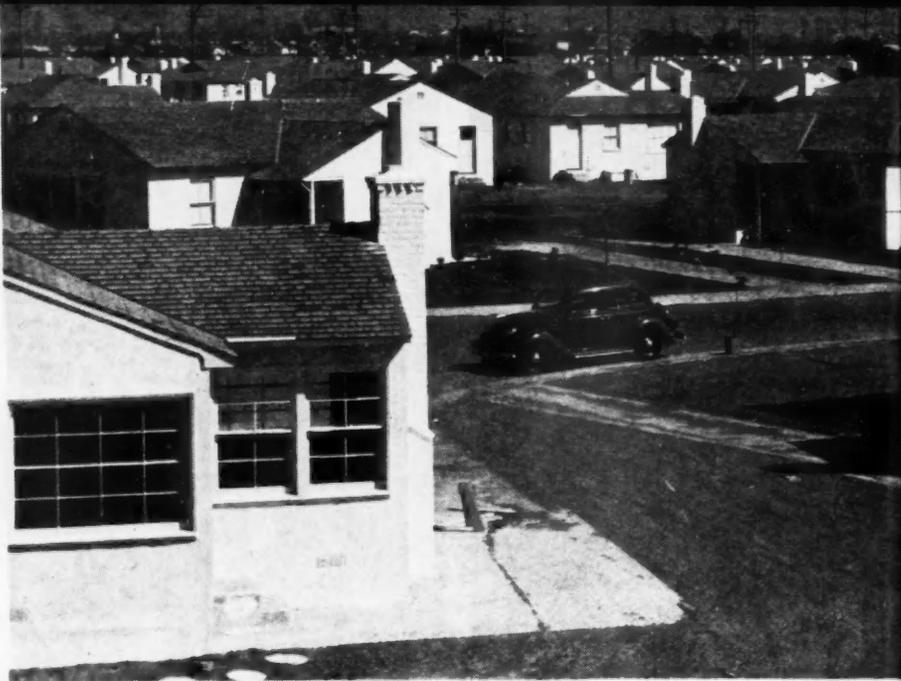
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PLENTY OF LIGHT—As well as the usual window over the sink, glass block gives additional daylight to this important work area. Attractive fixture overhead floods sink with light at night. Section indicates construction of windows, head and sill; corner shelves repeat curve of soffit. Equally useful for modernizing or planning new home.



CHEERFUL SPOT—This bay would be equally attractive off a living or dining room. Two casement and two fixed sash make this nook light and airy; built-in seat and shelves complete inviting spot.





DAVID D. BOHANNON SAYS: "The overhead factor incurred in the super-operations of high speed production has fully offset the economies of our mass-production techniques. We now know that a competent builder utilizing power equipment and modern methods can compete as to cost. The builder of forty or fifty homes, under the personal direction and efficient supervision of the builder, without the overhead factors of the super-organization will come out just as favorably in his final cost, as we can with our 1,000-home-plus projects."

Big Builder Bohannon Tells Builders Can Compete in

Some of the facts of this story were brought out in an important discussion session on "Low Cost Housing" conducted by Bohannon at the N.A.H.B. Convention.

IN PLANNING San Lorenzo Village we were not satisfied to supply merely shelter, but were resolved, in spite of war-time obstacles, to provide quality houses that would be real and enduring homes. Thus, our two-fold objective was to help speed Victory by meeting urgent war-housing needs, and at the same time to create an attractive and permanent modern community. It is highly gratifying to be able to say that our objective has been attained."

So stated David D. Bohannon, modern Master Builder and Community Developer of California, who again has demonstrated that private enterprise, if it be intelligent, courageous, progressive and devoted to the public interest, can overcome all obstacles—even those imposed by the cumulative exigencies of global war.

With Bohannon's early notable achievements in the housing field, readers of *American Builder* are already familiar. In the April, 1943, issue, a story told how the Bohannon Organization had built hundreds of homes—not just houses; but durable,

livable, attractive homes—for San Francisco Bay shipyard workers; and, through modern methods of highest skill and efficiency, had built them faster than government projects—all without government subsidy or aid.

In his latest accomplishment, Bohannon has even excelled his previous fine record. For here he has not only filled urgent immediate war-housing needs, but has also created a fully-integrated, permanent community providing—besides enduring homes—facilities for schools, churches, markets, stores, parks, playgrounds; everything that goes to make for a healthy, happy, harmonious community life today and in the years ahead.

How the Job Was Done

To do this, Bohannon had to overcome obstacles far more formidable than those generally imposed by war-time material and labor shortages and restrictions. These he was faced with, of course, for the problems of manpower and supply have been extremely acute in the whole San Francisco Bay Area all through the war period.

The need for precutting and maximum mechanical operation was greater than ever, to overcome not only the meager labor supply but its inexperience as well.

To achieve quality homes at low cost and in quick building time, Bohannon again has demonstrated the superiority of intelligent private enterprise. First, the community was completely planned and laid out by Ronald Campbell, a leading planning engineer and consultant. Then, utilizing the most efficient of tested modern mass production equipment, methods and technique, Bohannon and Chamberlin, the construction firm of the Bohannon organization created expressly for war-time building—with Ross H. Chamberlin in charge; Harry Arnold, Superintendent, and Sam Chartock, head of the Drafting Department, proved the ability of private industry to do the job in the best, the quickest and the most economical way.

Concrete was mixed at the rate of 5 sacks of portland cement to the cubic yard of aggregate for all foundations, walks, driveways, etc. Forty-eight hours after pouring, walls were

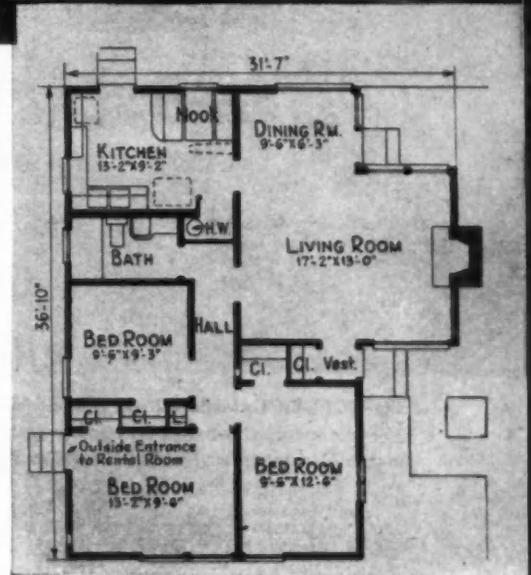
"The small builder will continue to be the most important factor in the post-war home building program," Bohannon says.

LEFT: View of San Lorenzo Village nearing completion. The nearest house shows rear view of typical house (front view and plan below). Note slab for future garage, bedroom that can be rented for extra income.



Bohannon Tells How Small Concrete in the Post-War

The first of two important American Builder articles on the planning and construction methods behind the nation's Number One war housing job.



BELOW: Street view of San Lorenzo houses with different front treatments ready for finish materials. Quality construction of framing includes complete bracing, ample members.

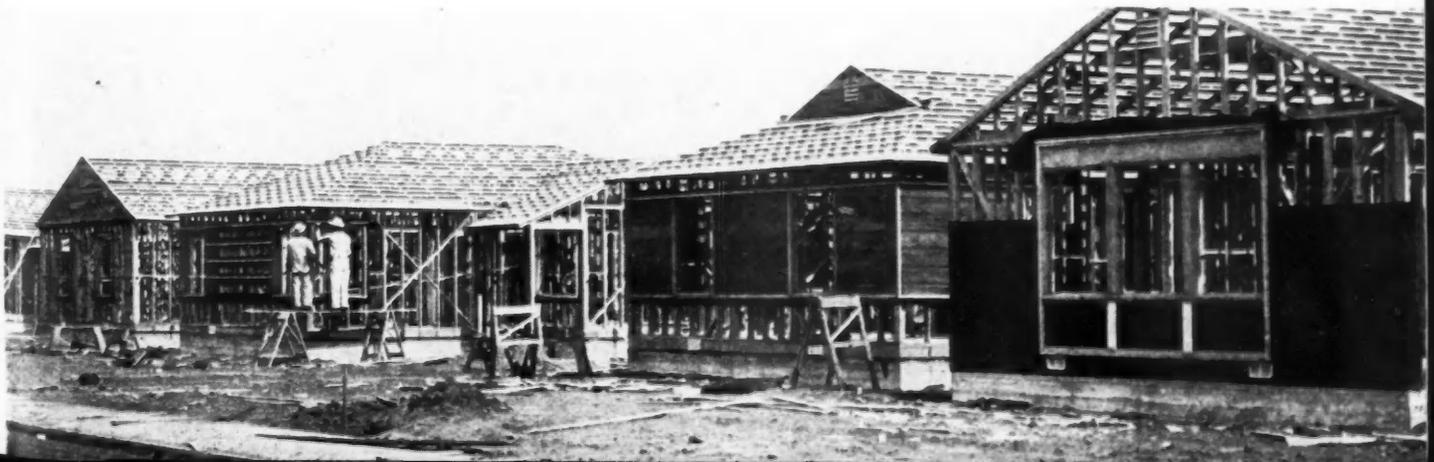
stripped and sprayed with a paraffine seal cure. Other surfaces were sprayed as soon as finished.

Outside house finishes are redwood rustic and stucco in a variety of arrangements and colors. Inside walls and ceilings are plaster over perforated gypsum lath. Baths have tile floors, bases and dressing table basin combinations while kitchen and breakfast nook floors are linoleum over felt. Electric wiring was planned for the anticipated heavy post-war use with a 3-circuit system to carry added load. Streets are 30 feet between curbs

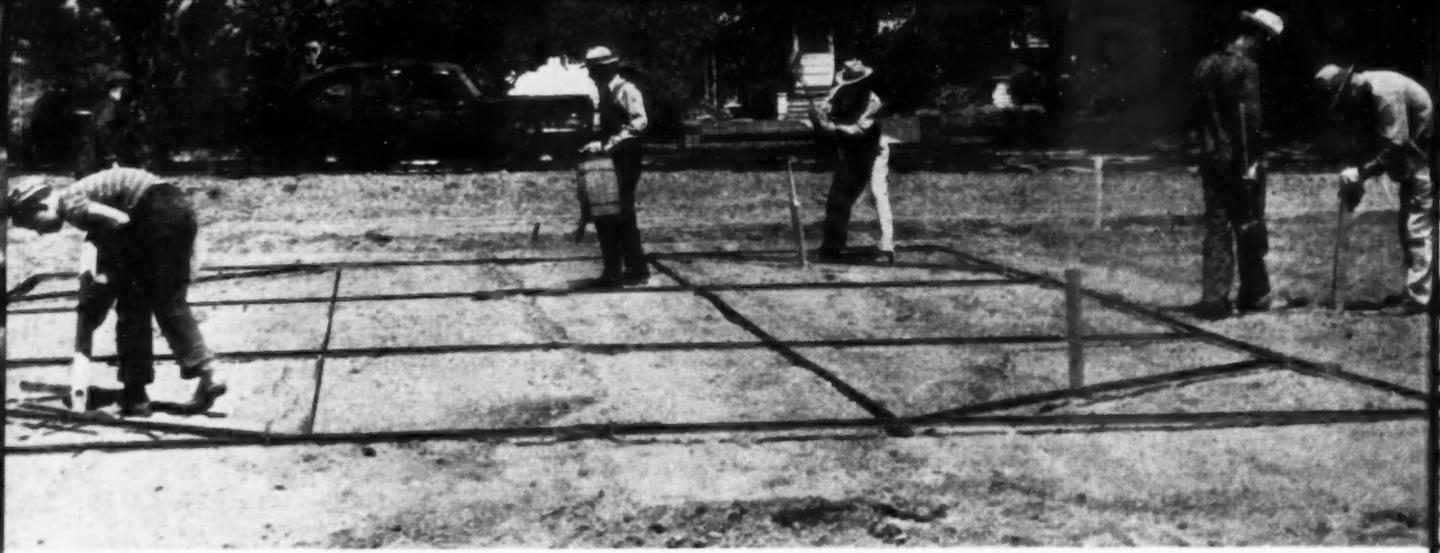
with roll formed curbing and sidewalks of concrete. Street paving is a 2-inch plant mix over a hard rolled 4-inch rock base course.

Construction was organized in terms of crews, each with a definite task to perform. These, as far as possible, worked in tandem, framing houses in pairs simultaneously as they went along. Multiples of the crews raised entire blocks of houses at a time, each crew had to maintain a definite schedule to avoid blocking or retarding the operations behind them.

(Continued to next page)



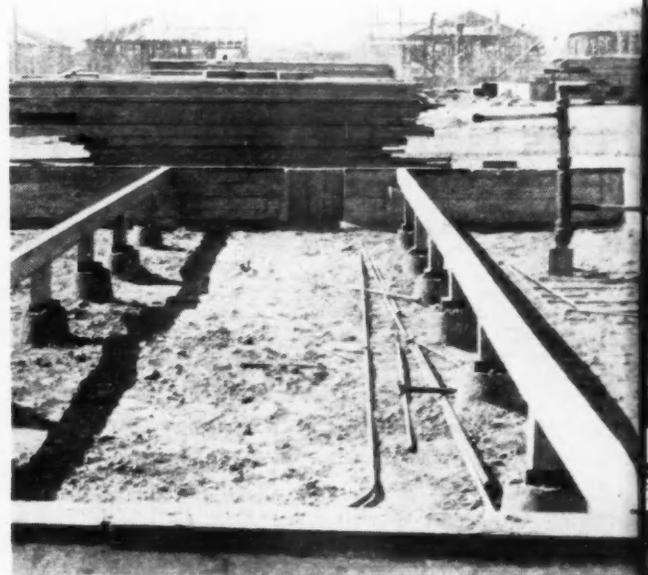
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1 A TIME-SAVER AT START OF JOB—In his San Lorenzo Village project Builder Dave Bohannon used as many time- and labor-saving methods as could be devised. Here, above, workmen are setting metal template in position at points marked by surveyors. Position of foundation walls and piers are quickly and accurately located, then template is lifted to next site and so on down the street.



2 CONCRETE LOADED AT CENTRAL MIXER is carried in a Mixermobile buggy for pouring into foundation forms; 48 hours later forms are stripped, walls sprayed with a seal cure.



3 POST AND GIRDER FRAMING ready for floor joists; notice plumbing stack in place, and redwood blocks on piers. Forms piled in background are of 2-inch lumber to stand constant re-use.

4 PR
do
lifting

(Continued from preceding page)

Sidewalks and curbing were poured at the rate of a thousand feet a day, using some 4,000 feet of metal forms. The foundation walls and piers were laid out with metal templates at points set by the surveyors. Foundation wall forms were used and re-used, being made of 2-inch lumber in units that could easily be detached and reassembled. Fifty sets permitted pouring 25 foundations a day. Pier holes at the rate of 450 for each 8-hour day were dug by one man using a Ford Ferguson system tractor with a boring attachment. Concrete to fill them was carried in high speed, three wheel buggies from 2 Mixermobiles located at points central to the day's work.

The house framers started work only when all concrete was in place

and set. Power for each framing crew was furnished by a portable 3,000-watt generator driven by a single cylinder gasoline motor. This power was utilized for sawing, boring, and sanding.

Because most of the 9½ million board feet of lumber used came in large sizes, it had to be ripped and graded on the site by the contractor. This was an assembly line job. Except for sheathing and flooring, all sawing operations were conducted in the stockyard and each kind of framing piece placed in a separate pile. Loads were assembled in the stockyard so that they could be dropped at the job sites by lumber trailers specially designed for the purpose in the order in which it was to be used. As

an instance of this method, a length of 2 x 4 passes a line through 4 saws for different cuttings and emerges as a roof rafter ready for use. Seven men cut 700 rafters an hour.

Experience gained in earlier housing projects has constantly augmented over-all efficiency until Bohannon is in position to say:

"We have demonstrated beyond question that by our methods we can build a conventional house with fewer man-hours than would be needed to build one of equal size by prefabrication away from the site which requires carrying the whole wall sections to the site and assembling them there."

IN A COMING ISSUE, more details on this important operation will be featured.

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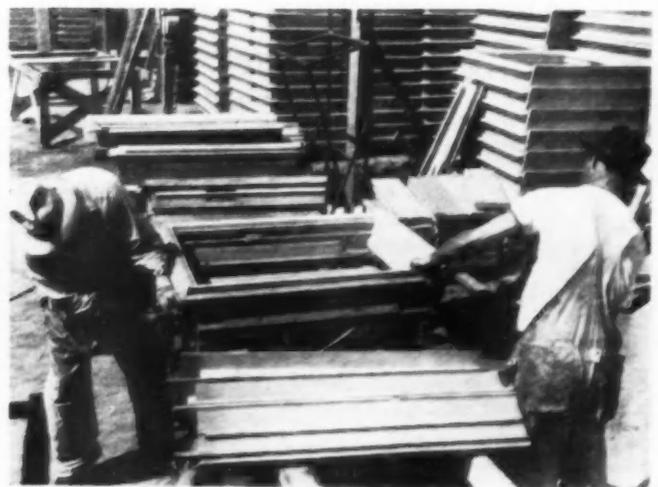
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4 PRECUTTING AN IMPORTANT STEP as shown above. In insert two workmen near stock pile are multiple marking studs for window, door openings, partitions, etc. From there framing is passed along to the cutting line where two cuts can be made without lifting off roller table as shown in larger view of cutting yard. Seven men cut 700 rafters in an hour with a setup such as this.



5 ALL FRAMING FOR ONE HOUSE—this is the last load delivered to its site on San Lorenzo Project. "Bob" Smiley, cutting yard superintendent, looks happy about this big job well done.



6 MILL YARD IS BUSY keeping up with frames needed by erecting crews; here door and window frames are being assembled. View on page 79 shows houses ready for completion.

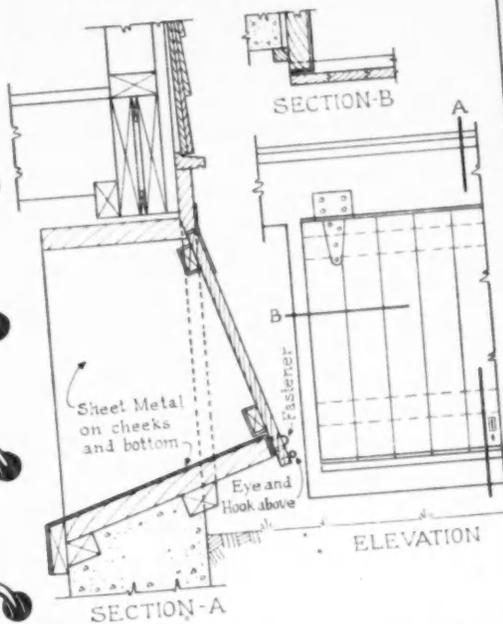
HANDY NOTEBOOK WORK SHEETS

American Builder JOB HELPS Prepared by Don Graf

Builders' short cuts, time savers and how-to-do-it ideas for use in office or on the job. A continuing editorial feature appearing monthly. Sheets or notebooks are not for sale or available in any other form.

HOW TO BUILD A WOOD COAL CHUTE

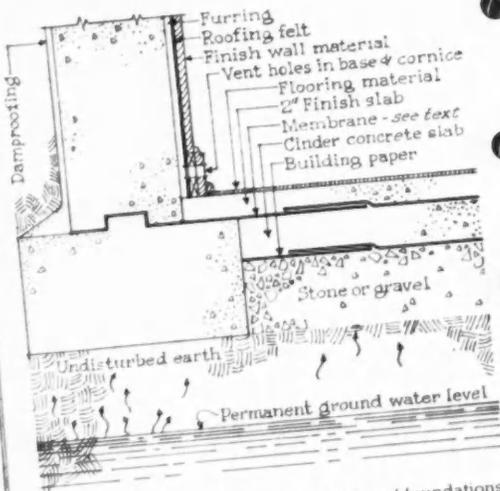
AMERICAN BUILDER HANDY NOTEBOOK WORK SHEETS



Any planking may be used to construct the wood coal chute shown in the drawing. One of the best materials for the four sides of the chute is standard T & G soft-wood flooring in 1½" x 5½" or better yet 2½" x 5½" size. The door can be made of the same material in 1-5/16" x 2½" size. The clear opening should be not less than 18" x 24"—and can be up to 24" x 30". Heavy sheet metal lining inside cheeks and bottom will prolong life.

HOW TO DAMPPROOF BASEMENTS (1 of 2)

AMERICAN BUILDER HANDY NOTEBOOK WORK SHEETS



As to the distance between the bottom of foundations and the permanent ground water level, all depends upon the character of the intervening earth. In the same way that oil rises in a lamp wick, or ink creeps in blotting paper, water will climb by capillarity in coarse sands 2 or 3 feet, and in fine sands, silts, loams, and clays from 5 to 8 feet. Borings should be made in doubtful soil to insure that the water level for the type of soil encountered is a safe distance down. If the slightest doubt exists, the precautions shown in the drawing should be taken — because after the building is up, correction of a damp condition in the basement is prohibitively expensive. Where the permanent (or intermittent, due to rains) water level is above the foundations, complete membrane waterproofing is needed.

HOW TO DAMPPROOF BASEMENTS (2 of 2)

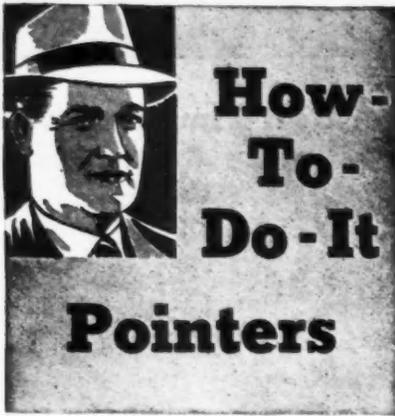
AMERICAN BUILDER HANDY NOTEBOOK WORK SHEETS

VALUE OF DRY BASEMENT — Real estate operators have estimated that a light, dry basement can add as much as \$500 to \$1000 to the value of a house. In a national survey it was found that a finished basement added about 10% to the rental value of a dwelling! Dampness in a basement combined with darkness, promotes mildew, decay, putrefaction and the corrosion of metal. A damp basement is unwholesome, unpleasant, unsanitary, and unhealthy. It shortens the life of the building and the contents of the basement.

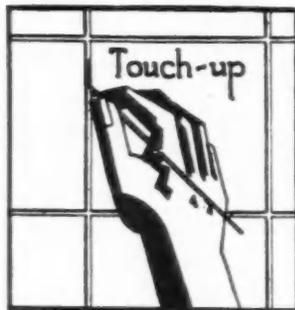
EXCAVATIONS — Footings should always rest on undisturbed earth, and if a dampness condition is foreseen, especial care should be exercised in mixing the concrete for the footings so that they will be as impermeable as possible. Under the floor area, where the load per sq. ft. is small, there should be a well-tamped layer of cinders, coarse gravel, or broken stone. Capillary action will be broken by such voids as exist in this type of underlayment.

ROUGH SLAB — Over the stone, gravel, or cinders should be laid building paper or empty cement sacks. Such a layer maintains an even thickness of the fill against displacement caused by workmen walking over it during the pouring of the slab. It also prevents the wet mixture from flowing into and filling the voids in the layer of fill which depends for its functions upon the existence of such voids. The mix for the rough slab should obviously be as dry as possible.

MEMBRANE — A copper armored building paper, lapped 9" at end and side joints with a mopping of bituminous compound will be adequate for ordinary conditions. For severe cases a membrane of several plies, constructed like built-up roofing will be necessary.

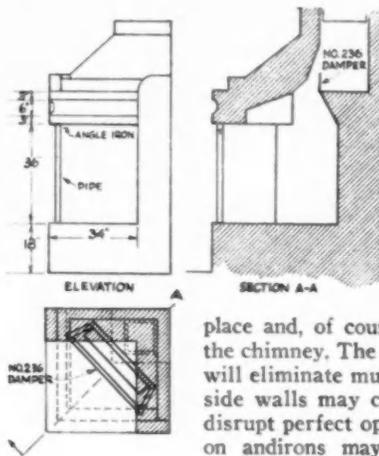


How To Fasten and Finish Wall Boards



SUCCESSFUL installation of wall boards depends upon knowing just how, and this goes for all finished wallboard as well as that explained here by the installation experts of The Tylac Co. The top of wainscots must be level; if this special wallboard is sawed, do so with a fine-toothed saw and always have the finish side up when sawing. Cement the back side, nail in the scorelines, then putty, clean and touch up as shown.

How To Build a Corner Fireplace



ATTRACTIVE and unique effects can be achieved with corner fireplaces but a fair warning is that they may have ills not common with the modern type of side or end wall fireplace. However, the Donley Brothers Co., have gone into the subject thoroughly and their layout at the left gives practical features well worth considering.

In the old Scandinavian corner fireplaces the firewood was usually stood on end at the rear of the fireplace and, of course, much of the heat went directly up the chimney. The throat and damper shown in the sketch will eliminate much of this, although the fact is that the side walls may cause currents of air to now and then disrupt perfect operation. Short firewood laid horizontal on andirons may give much better results.

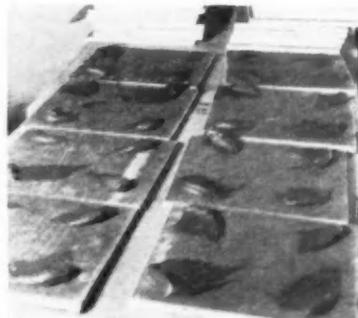
How To Use Portable Sander Efficiently

FINISHING operations in building construction and maintenance work can be done at a saving in time and money by the use of a portable hand sander in comparison with hand work. Tests made by engineers of the Sterling Tool Products Co. prove the point, especially so as is shown on the rehabilitation job being done on the Continental Hotel. The difference in color is proof of the efficiency of this sander which is a one-hand tool. Changes from coarse to fine abrasives are readily made by changing the detachable, flexible pad. The pads are loaded with any type abrasive desired, and the operator can quickly change from dry to wet sanding work.

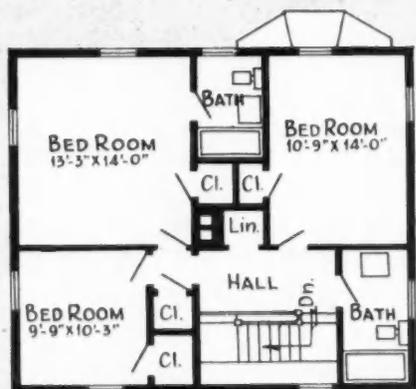


How To Apply Cement to Acoustical Tiles

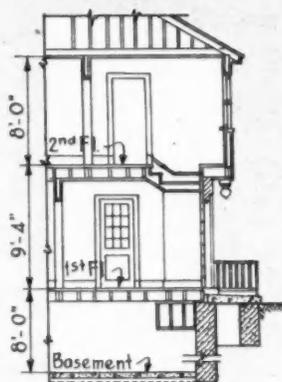
ACOUSTICAL tiles are becoming more and more a part of all kinds of ceilings. This is true in commercial buildings as well as homes. Because the material is light in weight and easy to handle, it is usually applied with a special cement, such as the Armstrong installation specialists have devised for their own Cushiontone acoustical tile. The illustration shows how the four corners of each tile are daubed with cement before being applied to practically any flat, even surface. Such tiles weigh only between 8/10 to 1 3/10 pounds per square foot depending upon the thickness, which varies from 1/2 to 3/8 inches.



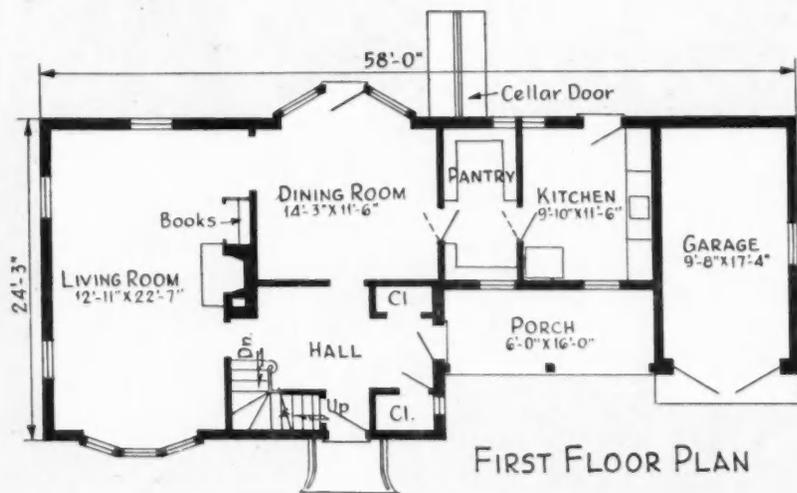
Application can also be made to furring strips on the ceiling by nailing. The tiles are bevelled on the edges and re-decoration by painting can be done by any method, brush or spray.



SECOND FLOOR PLAN



SECTION



FIRST FLOOR PLAN

Well Designed Baltimore Home Gets Approval

A CERTAIN amount of finesse is needed these days to compete with the "Miracle House" about which so many future home owners are intrigued. Architect T. Worth Jamison, Jr., has added up the various parts of the problem and has put the answer down on a blueprint, part of which is reproduced at the left.

The Roland Park Co., Baltimore, through Major "Jock" Mowbray and B. Franklin Hearn, Jr., appreciate this architect's solution and have built his practical house, as the photograph above illustrates.

A study of the floor plans will show, first of all, an entrance hall which, very cleverly, has what it takes to make a 3-bedroom, 2-bathroom house sell. If, as and when the right to go ahead with private building is broadcasted, this type of house will ring the bell in practically any part of the country.

Bay windows add to the inside livability as well as to the architecture.

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Architect Cassidy Creates Outstanding Design

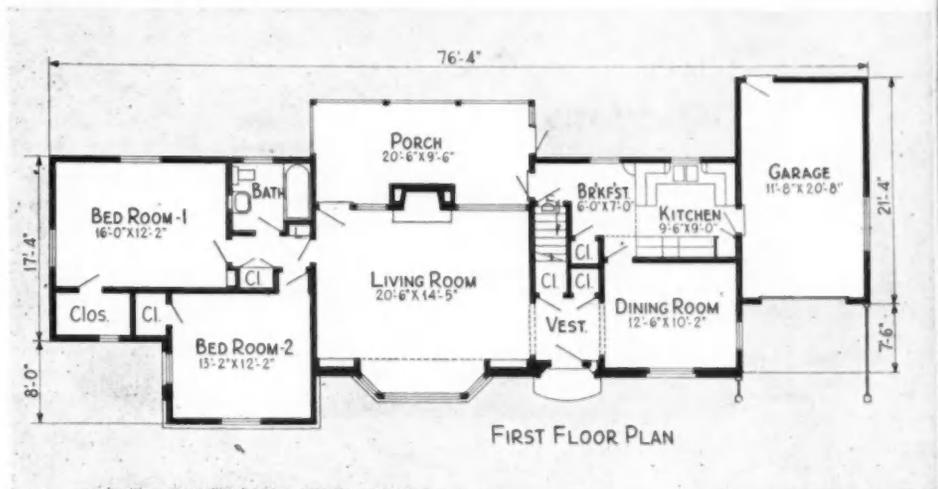


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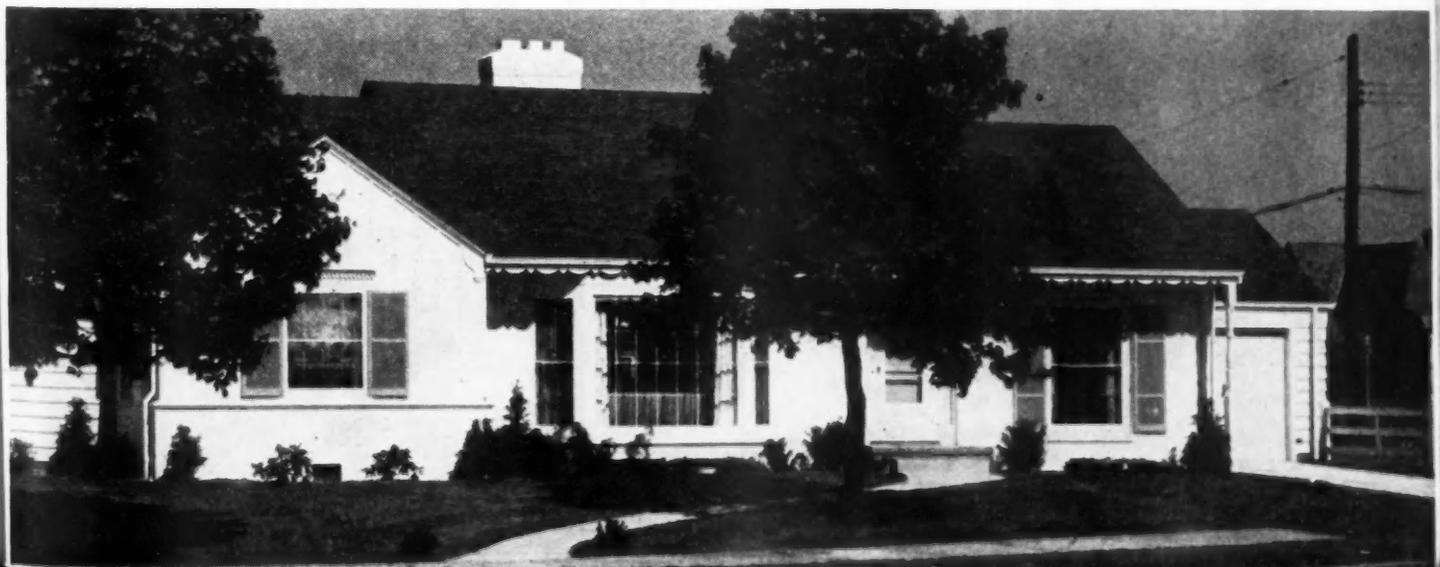
THE inviting niceties of architecture, plus the livability of a one-floor home with necessary practical features, are very well demonstrated by this home built for Jack Heslop of the Heslop Building & Realty Co. of Akron, Ohio.

Sloping roof, well-proportioned chimney, large window areas, neatly-proportioned shutters and the decorative "valance" board across the front, all add up to sales appeal in promotional building as well as to individual family appeal.

This attractive house has a half-basement in which are located the laundry and heating room (automatic gas heat) and a recreation room. Other portions are excavated 2 feet below joists (which are treated against rot).



AS SHOWN above, there are two bedrooms and bath with connecting hall on main floor.



Battle of the Building Front

Mass Production Cuts Costs, Will Broaden Home Ownership

THE shelter industry is in for a revolutionary change in both the production and merchandising of homes, Foster Gunnison, president of Gunnison Homes Corporation, New Albany, Indiana, believes. This is the prefabricated homes company in which U. S. Steel Corporation bought a controlling interest some months ago.

Gunnison, who remains at the head of the company, does not expect this revolution to take place in a day, a month or a year, but over the period of a decade in the post-war years.

What Mass Production Means

Gunnison sees a constantly increasing number of homes of the future produced by mass production. It would be well at this point to have some definitions.

"Mass production, like prefabrication, is a word that is often abused," Gunnison says. "Strictly speaking, it should be distinguished from quantity production.

"An item isn't mass produced simply because it is made in large

quantities. Compare for a moment a furniture factory with an automobile plant. The average furniture factory is a quantity production operation with a multitude of more or less independent cutting, assembling and finishing operations segregated in various departments. Assembly line operation is mostly non-existent, so production rates vary from man to man, department to department, and production is never balanced. There are plenty of machines, of course, but poorly integrated, and final assembly is chiefly manual.

"Take an automobile plant, on the other hand. The final assembly operation, completely mechanized, with a step-by-step building up of the automobile as it moves at constant speed down the assembly line, dictates the speed of every other job in the entire plant, including that of the engine assembly line, and all other departments and sub-assemblies.

"The same distinction can be applied to prefabrication. Practically all prefab operations today are of the quantity production type (chiefly because the industry is small).

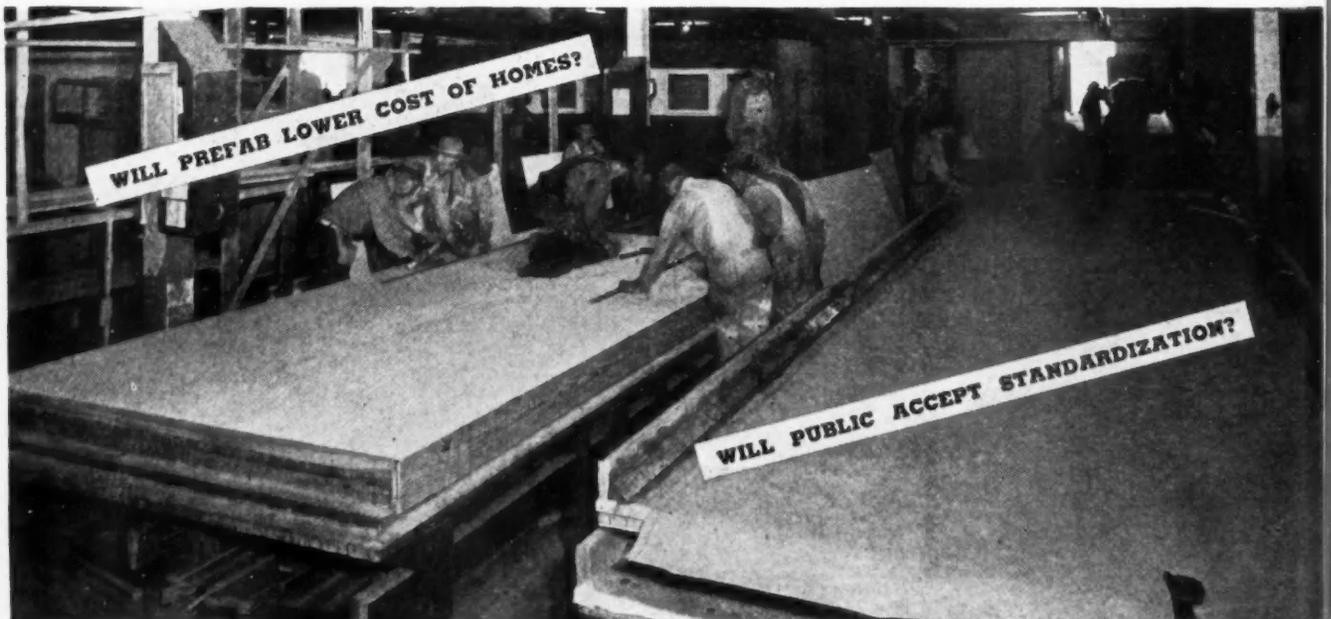


FOSTER GUNNISON, president of Gunnison Housing Corporation, New Albany, Indiana, pioneer of prefabricated homes, who says old-line building men will not fit temperamentally into mass merchandising methods demanded by the line-production homes industry.

A House Every 18 Minutes

"Mass production in our plant is based on time and motion study and complete mechanization. A chain or belt conveyor moving so many feet per minute, defines a specific amount of work for every man to accomplish, whether he works on the main line or at a sub-assembly that feeds into the main line. No one can work faster or slower than the conveyor-established rate. During our war production, a complete house comes off the conveyors every 25 minutes—we are now designing a post-war

(Continued to page 108)



Prefabricated vs. Conventional

Individual Preferences Must Be Met in Competitive Market

"WHILE there is no real battle between prefabricated and conventional home building," Fred W. Keller, veteran builder of South Bend, Indiana, says, "there are certain very definite limitations facing the future of the prefabricated home producing industry."

Keller may be described as an impartial authority on the subject for he is one of the few large developers and builders of residential areas who has both built conventional homes for many years and used prefabricated homes in the last several years. It should be added that he has had a satisfactory and successful experience with both.

In his comments made here, Keller wishes it understood that he is not

confining his remarks on prefabricated homes to the product of any particular prefabricator.

Getting the public to accept the standardization which is a necessary quality of prefab homes is, in his opinion, one of the first difficulties which will hinder the speedy acceptance of the product by the public.

Prefabs slow at first

While this is one of the main obstacles to prefabs, it is, in Keller's opinion, quickly overcome after a number of the houses have been erected in a community and then the owners of the homes become great boosters and quickly influence others to accept prefabs who formerly thought they wanted only conventionally produced houses.



FRED W. KELLER, president of Whitcomb and Keller, builders and realtors, South Bend, Indiana, who in the past half a century have built over 2500 homes. In late years they have built both prefabricated and conventional homes. Keller sees both sides of the picture.

Keller cites his own experience in the following words: "In our first year's experience with prefabs, we erected eighteen homes. They moved rather slowly. In the second year we built half conventional and half

(Continued to page 114)

How To Continue Home Building

National Homes Foundation series will give details on conserving critical materials for H-2 program and veterans' homes. Paves way for greater employment in war-to-peace period.

THE National Homes Foundation is demonstrating to the government that present restrictions on customary lumber sizes for house building do not justify the continuation of rigid controls on home building.

To prove its point the foundation appointed a technical committee, headed by Miles L. Colean, which conducted research into the newer developments and applications of techniques for use of tried materials rather than the introduction of new and perhaps unheard-of materials in the home building field.

National Homes Foundation is an informal, non-profit organization of trade associations and companies interested in home building. Among those participating on the technical committee for this research are the American Iron and Steel Institute, Gypsum Association, National Lumber Manufacturers Association, Portland Cement Association, and Structural Clay Products Institute. In addition the committee included representatives of the N.A.H.B. and The Producers' Council.

Identical house plans were taken by each of the industry groups. Working drawings have now been completed showing the latest techniques for building with any of the following products: Concrete, clay tile and brick, gypsum, steel or lumber. The lumber industry has shown methods of using the most available sizes, those least in demand for the war effort.

The foundation believes that home building can logically be expanded to a reasonably large volume even before the war is over in areas where man power is available, if the non-critical materials featured in this study are widely adopted.

American Builder on the following two pages presents the first of these studies. This month the Portland Cement Association's recommended method for building houses of concrete is shown.

In the next four months there will be presented the methods recommended by the other four industries participating in this project of the National Homes Foundation so beneficial to home builders.

»SEE NEXT PAGE FOR FIRST OF SERIES«

AMERICAN BUILDER TECHNICAL SECTION

NATIONAL HOMES FOUNDATION shows how to continue home building with proven products and a minimum of critical materials.

Building with Concrete

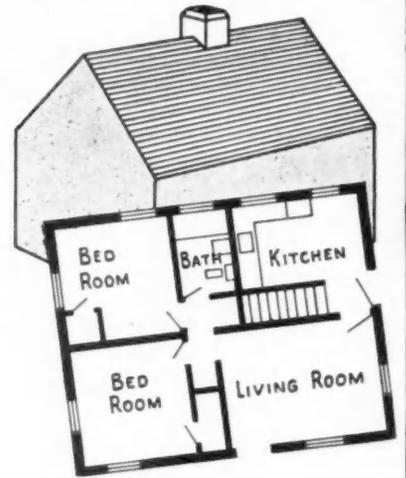
In this co-operative effort of the National Homes Foundation to assist the home builders of America to provide necessary small homes of high quality the Portland Cement Association was not thinking of any particular styles or layouts of houses. It recognized that home builders all over the country were well acquainted with styles and types of houses best suited to their localities. Whether or not the plans proved to be popular was not considered of first importance so long as they were suitable for illustrating the use of concrete and concrete masonry in low-cost construction to provide a saving of critical materials.

The first step in Portland Cement Association's program was the preparation of complete plans and working drawings showing concrete construction and use of a minimum amount of critical materials. The second step was the preparation of quantity surveys. An analysis of the surveys shows a savings in lumber requirements of 72 per cent for the one-story house shown.

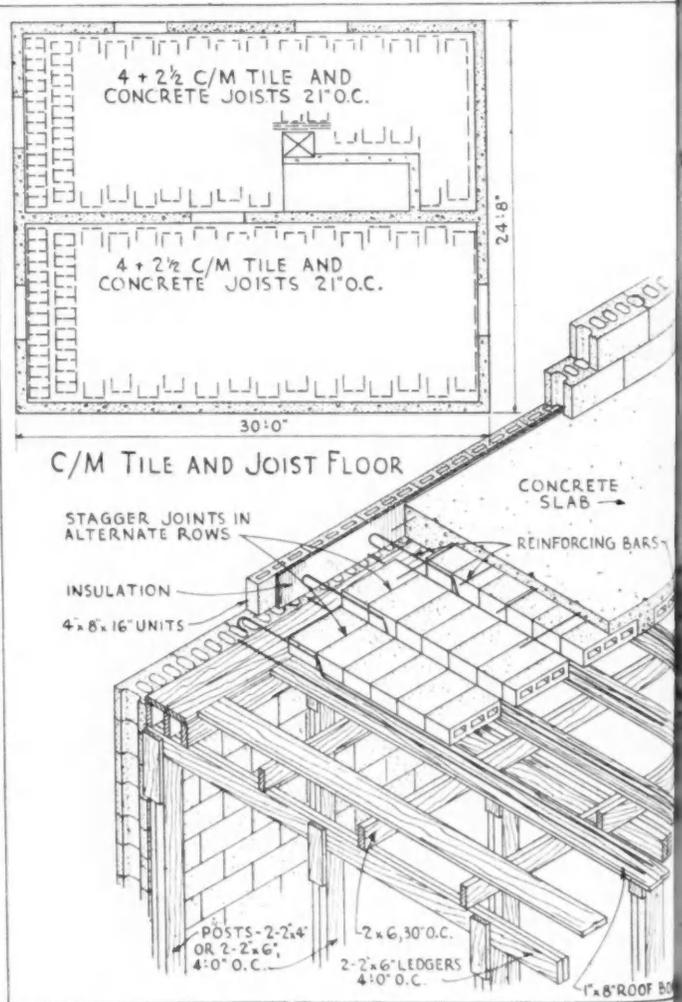
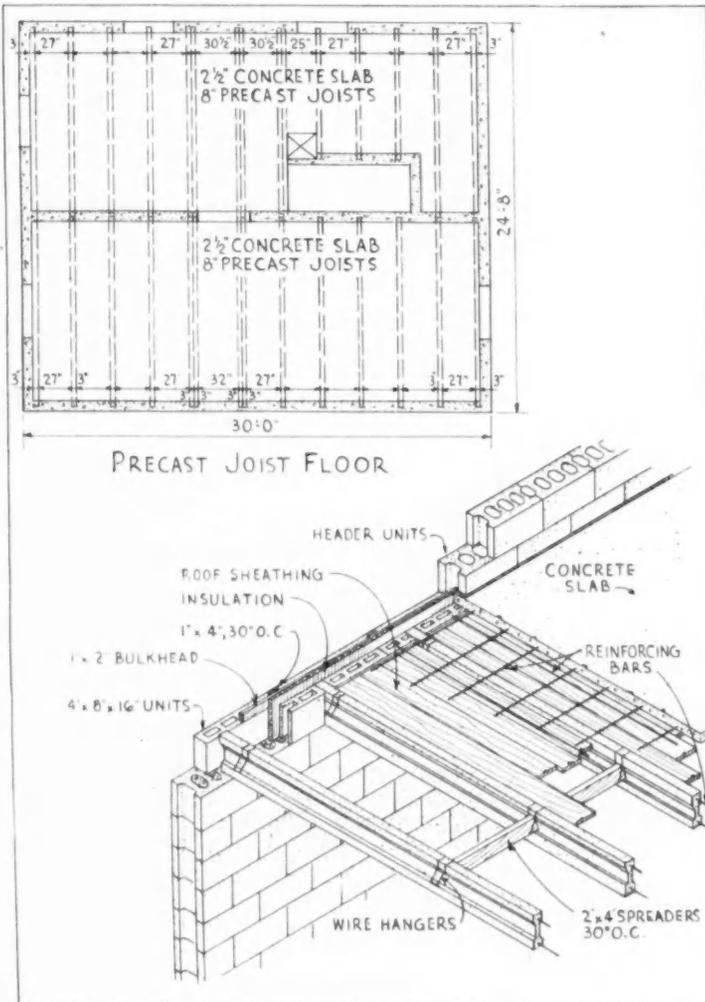
No trick methods of construction were used in the concrete adaptation and only standard materials, widely available, were included. The house is designed with rigid firesafe concrete floors and walls built of concrete

masonry, adequately insulated. The roof is covered with cement asbestos shingles. A house of this construction is economical to build, and has very low annual cost whether built for rental or for owner occupancy.

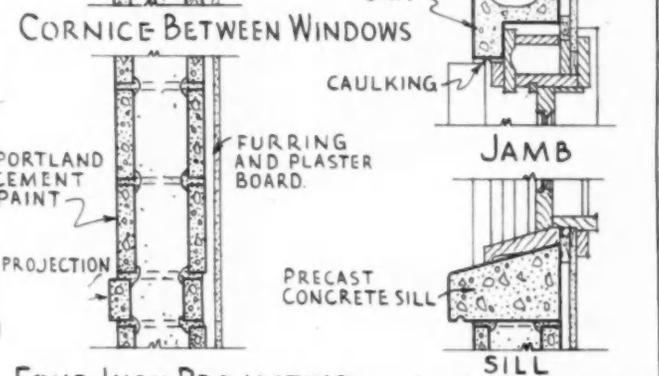
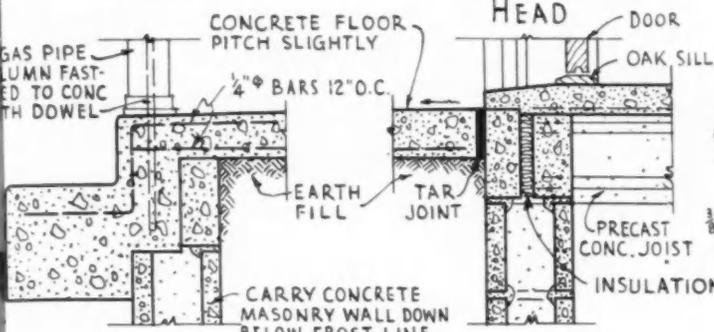
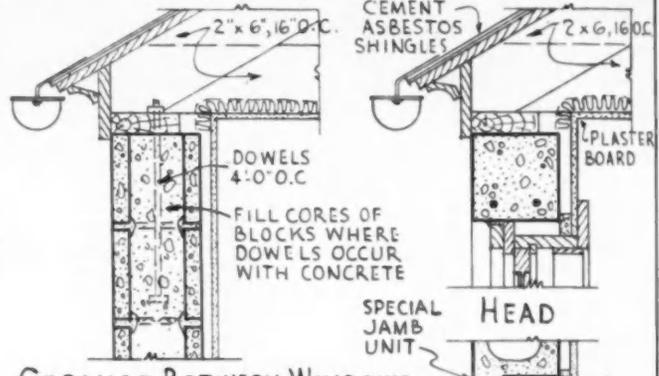
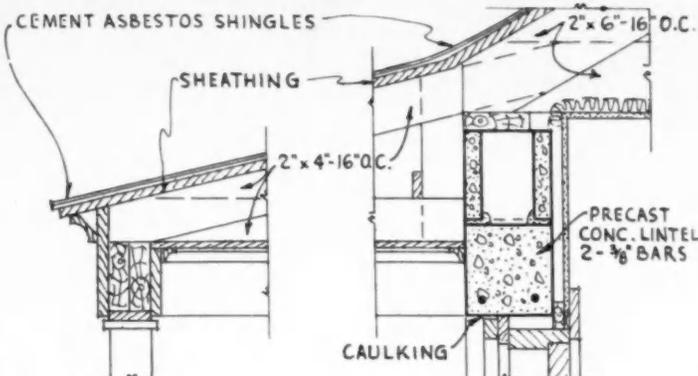
Construction is according to standard building code requirements and is adaptable to war as well as post-war building. Construction details shown in this article for walls, floors and foundations, while worked out for a low-cost house, are equally adaptable to all price ranges and architectural styles.



SHOWS floor plan of simple, one floor design used by all five industry groups. Each industry shows how to build this house of its products with least use of critical materials.

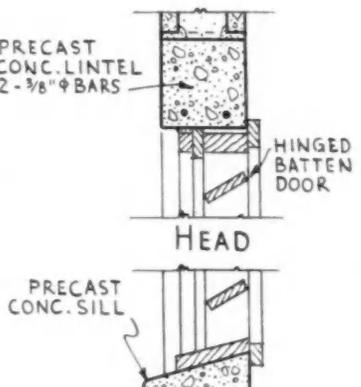
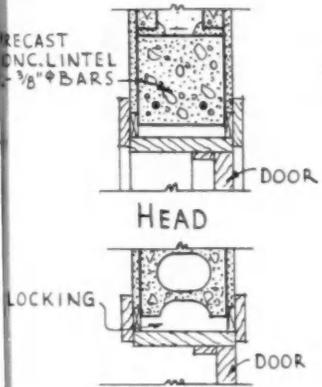


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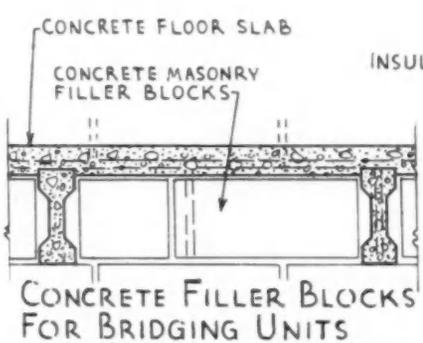
PORCH DETAILS

CORNICE BETWEEN WINDOWS
FOUR INCH PROJECTING COURSE AT SILL LINE

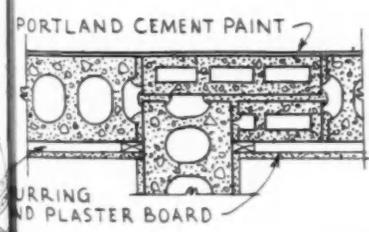


DOOR DETAIL FOR INSIDE PARTITIONS "4\"/>

SILL LOUVERS IN ENDS OF GABLES



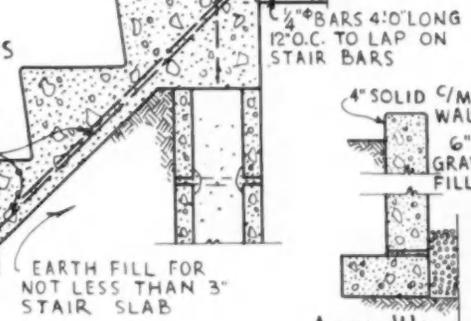
CONCRETE FILLER BLOCKS FOR BRIDGING UNITS



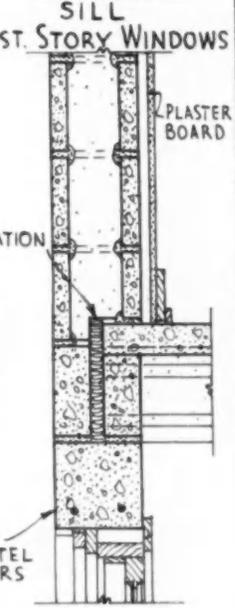
DETAIL SHOWING JOINING OF INTERIOR TO EXTERIOR WALLS OTHER COURSE REVERSE"



BASEMENT STAIRS



AREA WALL



HEAD

BASEMENT WINDOWS

EXTERIOR OF ALL CONCRETE MASONRY WALLS BELOW GRADE TO BE COATED WITH 1/2\"/>



DRAIN TILE

BASEMENT FLOOR AND FOOTING

CONSTRUCTION DETAILS FOR THE USE OF CONCRETE TO CONSERVE CRITICAL MATERIALS—PREPARED BY P.C.A. FOR AMERICAN BUILDER

Now Building for Tomorrow's Cars



Designed by Bruce Barry, A.I.A., Oklahoma architect, and built for Atkinson brothers, this building for tomorrow's cars is the last word in smart commercial planning.

NOW UNDER construction, this sales, service and gas station hits a high spot in American optimism by being the first rather than the last word in meeting future business

OPTIMISM is the basis of American future development. Optimism, however, must be intelligent, well-thought-out and definitely practical.

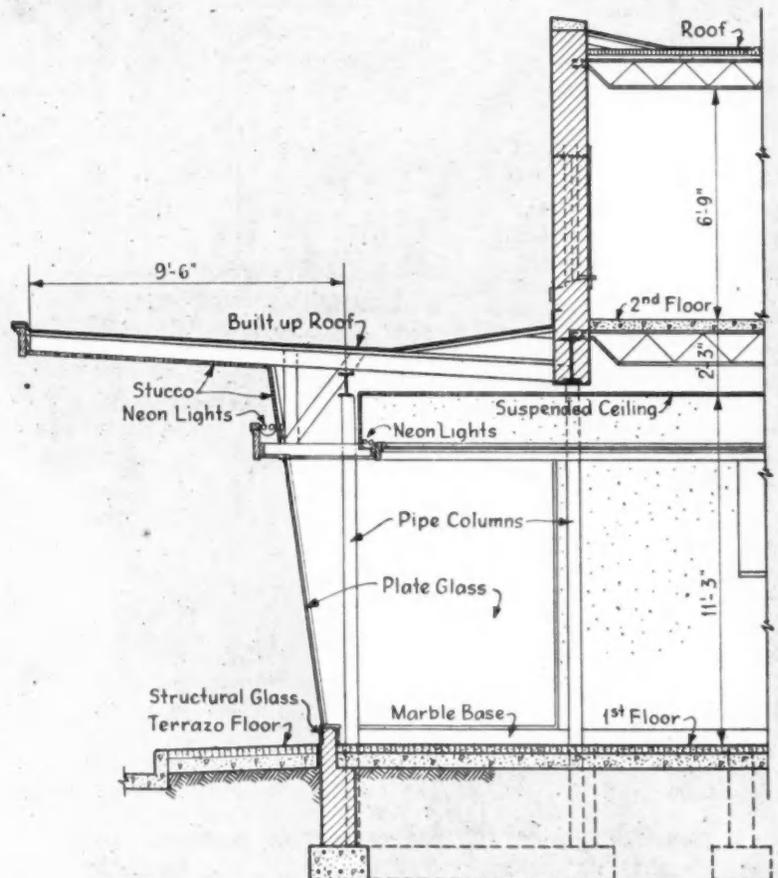
Such is the thinking of "Bill" Atkinson, as demonstrated by his automotive sales and service garage illustrated and described on these pages.

This building is a unit of an original master plan for the Midwest City development. The building is designed in accordance with the latest information supplied by leading automobile manufacturers.

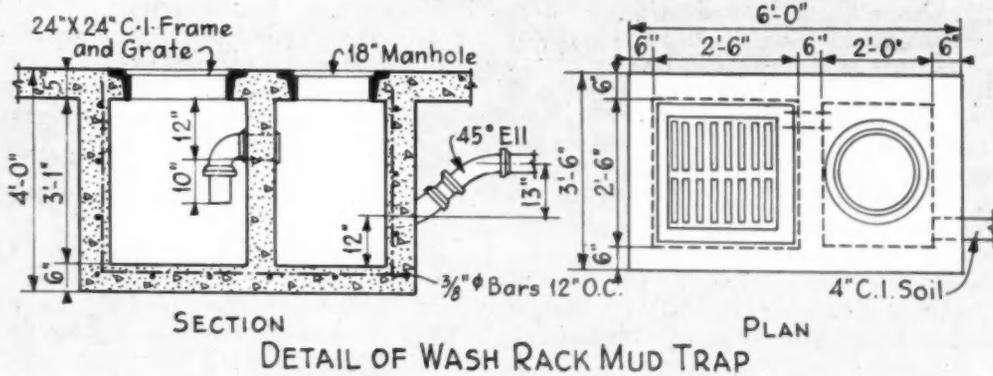
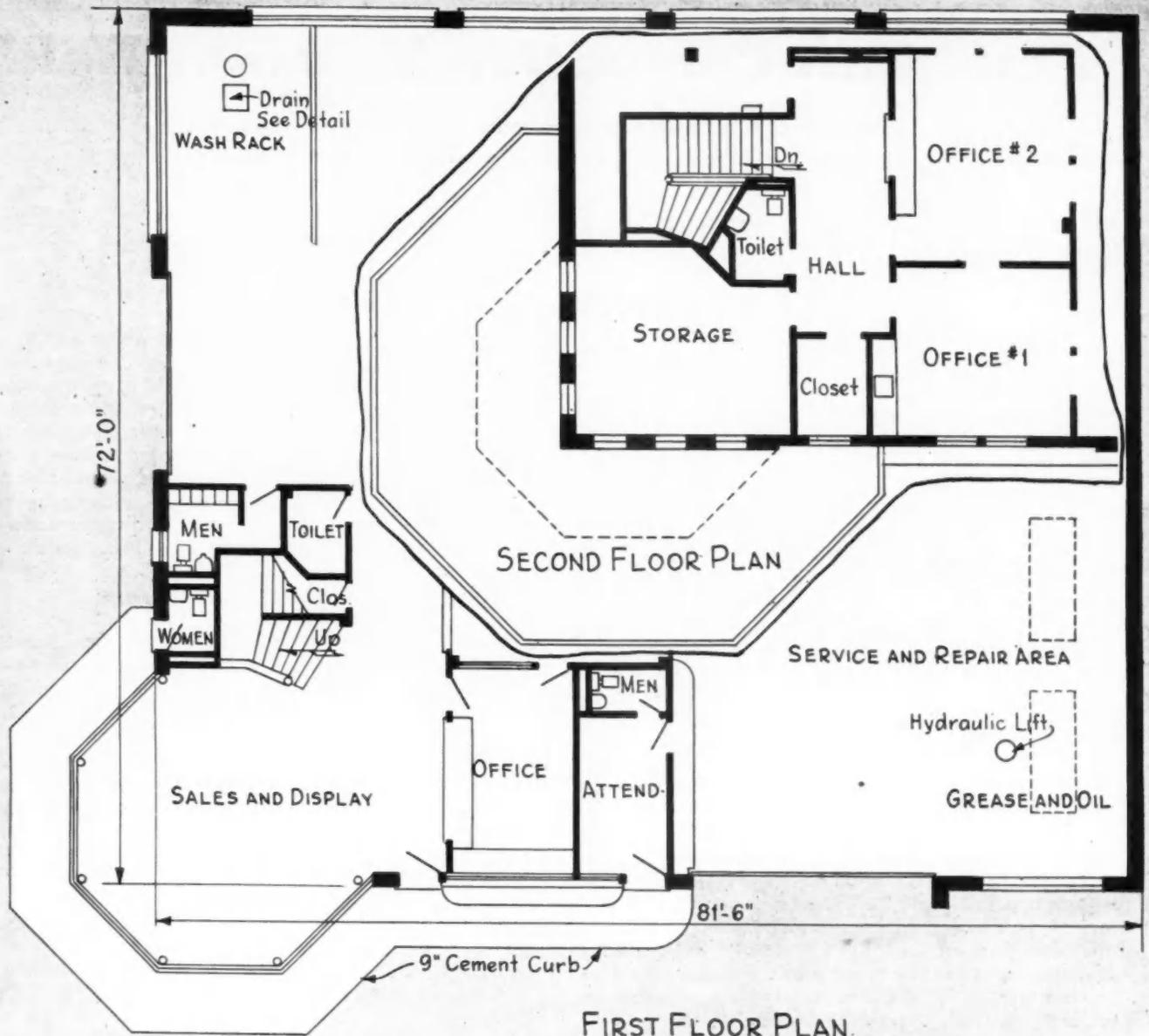
The building is so designed that it can function in three different ways. The filling station is designed to operate as a unit apart from the other service; likewise the office and sales department can operate separately from the other units, and the service area in the same fashion.

The service and repair area is laid out for most convenient entrance and exit of automobiles. The service department is to be equipped with

(Continued to page 104)



SECTION THRU FRONT WALL AT DISPLAY ROOM



SOUTH ELEVATION

Final Taft Committee Hearings Held

Blandford, Klutznick urge permanent N.H.A.; Ferguson, Fahey, testify without making a positive endorsement.

AT the final hearings of the Taft Committee on post-war housing, which opened in January, John B. Blandford, Jr., N.H.A. Administrator, in a 71-page statement and plea, supported by 36 pages of charts and exhibits, reviewed the war housing chore performed by his agency. He entered a strong recommendation that N.H.A. be continued post-war as a permanent government setup, to consolidate, as under the terms of the war-time emergency order, all present government authorities dealing with non-farm housing.

Such an agency, according to his recommendation, would devote its efforts to co-ordinating every segment of the housing industry for an all-out attack on rehousing America, and to the encouragement of research, by government and private industry, aimed at lowering housing costs in order that better and cheaper housing might be available to all. He contended that one agency would be more economical and efficient, and would better enable the housing policies of the government to be executed with "consistency of purpose, minimum friction, and without duplication or cross-purposes."

Reviews War Housing Program

The N.H.A. Administrator pointed out that his agency's total war housing program embraced almost four million units, of which two million were provided by use of existing structures without change. He said that 836,000 units were provided by privately financed new construction, and 207,000 by privately financed conversions, while the much-heralded publicly-financed conversion program accounted for only 48,000 living accommodations. Publicly-financed temporary new construction created 583,000 new units, and 197,000 units were brought about by publicly-financed permanent new construction.

The N.H.A. Administrator referred to his agency's survey which, he declared, showed a need of 12,600,000 new units in the ten immediate post-war years to care for newly created and undoubled families, as well as to replace units now substandard or to become so within that period. The survey showed, he stated, that 46 per cent of these units must be provided at a rental of not more than \$30 per month, or its equivalent; 38 per cent in the price range of \$30 to \$50 per month; and the remaining 16 per cent at a rental above \$50 per month or a sales price in excess of \$5000. Provision of housing on this scale, he declared, would employ 3,500,000 workers on and off site, as contrasted with 1,476,000 so employed in 1939.

Makes Recommendations For Post-war

Blandford recommended several "main lines of action" in post-war, including the following:

1. Communities and enterprises within them should obtain better facts about the housing market.
2. More emphasis should be placed on a program of technical research to reduce housing costs, this to be aided by the federal government through the recommended permanent N.H.A.
3. Improvement of "fiscal tools" to enable private enterprise to reach lower in the income scale.
4. Improvement of tools for urban land acquisition,

assembly and redevelopment of blighted areas.
5. Realization that the job of providing decent housing for all citizens is a matter of broad public interest.

Within this framework, Blandford pointed out that public housing had a necessary role in a well-rounded post-war housing program and that, while housing was essentially a community "phenomenon" and communities and their enterprises should be stimulated to solve the problem insofar as possible, the federal government had an important role, in the matter of research and financial assistance, to care for what the communities wanted and could not achieve alone. He suggested also that permanent legislation to set up all housing agencies under one roof should give the administrator authority to regroup and redistribute certain sub-functions.

F.H.A. Commissioner Testifies

F.H.A. Commissioner Ferguson told the committee that F.H.A. operations during the ten years of its existence had totalled nearly \$8 billion of which \$6 billion was on Title II mortgages. Of this amount, he declared, almost \$3,500,000,000 has been paid off. War-time operations of the agency resulted in insurance of over 400,000 units under Title VI. This, taken in conjunction with Administrator Blandford's statement that 800,000 units of new construction were provided by private capital, would indicate that almost 400,000 of these units were provided under "peace-time" Title II of the act, or without government insurance.

The Commissioner referred to F.H.A. objectives, as delineated in the original Housing Act, as the realization of a greater degree of stability in residential construction, facilitation of the flow of mortgage funds, improvement of mortgage lending practices and procedures, improvement of housing standards and conditions, and the development of more adequate information concerning housing conditions, practices, and customs.

Ferguson's statement was devoted primarily to an explanation of F.H.A. practices and procedures and did not include any recommendations for post-war changes in the housing setup.

Fahey Speaks For F.H.L.B.A.

Commissioner Fahey, of the F.H.L.B.A., told the committee that large volume building post-war would be impossible without a substantial supply of mortgage money at reasonable interest rates and a more general use of the long-term, monthly payment loan. Concerned as it is with augmenting the credit available for home ownership and rental housing, F.H.L.B.A.'s war-time function, he declared, was to encourage thrift and protect the savings of American citizens. He warned also of the menace to the expansion of the home-building industry inherent in the price rise of residential properties and said that, if a disastrous "boom" and resultant collapse are to be averted, we must not only have adequate mortgage credit, but must employ it cautiously.

Philip M. Klutznick, F.P.H.A. Commissioner, strongly urged the continuation of a National Housing Agency and underlined the need for an F.P.H.A. or its equivalent to meet the housing needs of citizens unable to pay

(Continued to page 115)

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All Over America
 You will find Dependable
 Sales and Installation Service

available on
Ro-Way
 OVERHEAD TYPE DOORS

*There's a
 Ro-Way for
 every Doorway!*



AGRICULTURAL BUILDINGS



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are available now for
 Industrial Buildings,
 Commercial Buildings,
 Government Buildings
 and Agricultural
 Buildings.

Write for complete new Catalog of Ro-Way Overhead
 Type Doors. See our Catalog in Sweet's.
ROWE MANUFACTURING CO.
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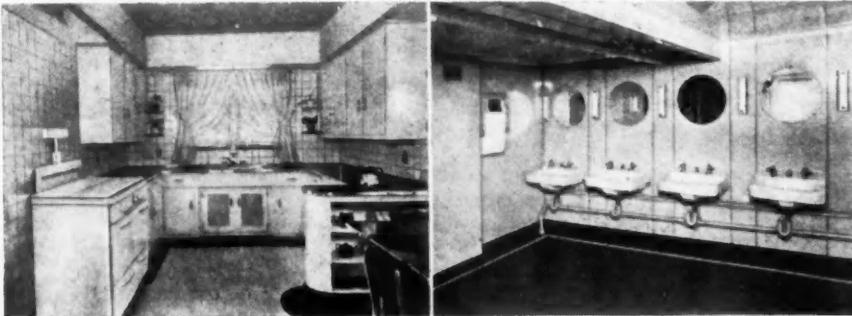
*Blurmities — destructive agents, harmful to the finish of many wall, ceiling and counter surfaces.

Bury BLURMITE* Troubles for Good ... install Plastic-Finished MARLITE Interior Wall and Ceiling Panels!

Why take a chance on ordinary wall panels that soon may become dingy, drab and displeasing to customers? Why risk your reputation—and future business—on interior surfacing materials that may "fold up" under the first severe attack of Blurmities (grease, oil, acids and alkalis, chemical fumes, dirt, water and strong cleansing agents)? Yes, WHY — when attractive, sanitary, durable Marlite assures installations that will serve as a testimonial to your selection of materials; that immediately become the pride of their owners!

HIGH-HEAT-BAKE FINISH—that's what counts!

Marlite's pioneer high-heat-bake finish guards the surface against penetration of harmful dirt and moisture; reduces maintenance time; assures original beauty for many years; makes repainting and refinishing unnecessary! Marlite is moderately priced and manufactured in large wall-size panels that are easy to cut, fit and install (new construction or remodeling) with carpenter tools.



Marlite is ideal for installation in all types of rooms, in all types of buildings... homes, commercial and industrial buildings, institutions, theaters and hotels.



MARSH WALL PRODUCTS, Inc.
23 MAIN ST., DOVER, OHIO

PLASTIC-FINISHED WALL PANELS • FOR CREATING BEAUTIFUL INTERIORS

Cortright (Continued from page 61)

bilities and skilled construction techniques assured his preservation.

Next, it is interesting to note that this great builder was able to complete his job before the storm broke. This indicates not only that he knew where to get his lumber, his roofing and his plumbing fixtures, but more important that his reputation and credit with the local mortgage brokers and savings banks was in good shape.

Finally, it appears that Noah was a free enterprise operator. No National Ark Building Agency had programmed the project through a determination of need by a local or national Weather Forecasting Bureau. No maximum construction requirements had to be chiseled on marble P-55-C's. Fortunately for Mr. and Mrs. Giraffe, there were no O.P.A. ceilings. As a result Noah did the job fast and well, with no subsidy from the Mt. Ararat Nat'l Treasury.

A Time For New Plans—So, like Noah, the builders of the nation have now come together in the first completely representative National Conference and Exposition of Building Materials to make their plans for the stormy years ahead. Let us see to it that the breadth of our vision, the measuring of the difficulties with which we are faced, the skill of our planning, and the courage of our execution are such as to carry us through the dangerous and troublesome times which face this industry over the next decade.

It is a hopeful sign that not only have the builders of the nation come together here but with them have come the manufacturers, the dealers, the mortgage brokers, the architects, and the representatives of labor upon whose cooperative and harmonious functioning the future of this great industry depends.

Public Housing—There is no question but that the greatest threat to our industry lies in the direction of government ownership and operation of housing for a great number of our people. Because some millions are still inadequately housed, it is proposed that the inadequacies be corrected by government itself. This has not been the case in the matter of food and clothing, which with shelter are the three essentials of life. But as in socialized Vienna, communist Russia, Nazi Germany, and even in democratic England, the patterns established have already been transplanted to this great, free democratic nation of ours. Should you doubt the inroads which have been made under the guise of slum clearance, employment relief and public war housing, let me tell you that the Commissioner of the Federal Public Housing Authority heads a going concern—greater in size than General Motors itself.

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Coordination of Agencies—

At this very moment, Senator Taft's Subcommittee on Housing and Urban Redevelopment is taking testimony preliminary to the initiation of housing legislation. Of the seven Senators comprising this Committee, we find Senator Wagner, the father of the United States Housing Act; Senator Ellender, Congress' outstanding proponent of public housing; Senator LaFollette, whose liberal ideology is well known; Senators Ball, Chavez and Radcliffe.

It is generally agreed that a substantial majority report in favor of public housing and of governmental regulation and assistance will be made. The continuance into the post-war period of NHA will probably be proposed by legislative recommendations.

It is a sorry spectacle indeed to find all liberal groups presenting a united front, while those speaking for the various banking interests, the producers and distributors of materials and equipment, the engineers and architects, the contractors, builders and brokers whose existence and well-being is dependent upon the outcome of these issues, have failed to agree on more than a few generalities.

Under the Reorganization Act

of 1939, most independent agencies were placed under either Federal Works, Federal Loan, or Federal Security. With the establishment of the National Housing Agency by Executive Order in 1942, some 16 agencies concerned with housing were consolidated under a single administrative head. As might be expected, both advantageous and disadvantageous conditions have resulted. Therefore, it must be determined whether this structure erected for emergency operation should be continued or a redistribution made. If so, can any of these agencies be returned to an independent status, and should a Department of Housing or of Construction with Cabinet stature be created?

These are the grave questions

with which the Taft Committee is concerned, upon which your Association must immediately take a stand and upon which our industry as a whole should be in agreement. The most convincing arguments can be made that this or that agency will prosper best operating independently or in coordination with other agencies dealing with allied activities. In the year ahead we must avoid the cliches of superficial thinking and as an industry assume a united front upon these momentous issues, dealing in statesmanlike fashion with these problems of such far-reaching effect upon our future well-being.

As success in Europe is achieved, the ability to resume construction here at home may be expected. There seems no doubt, however, that with the fall of Germany comparatively

Speaking of the post war young executive market...



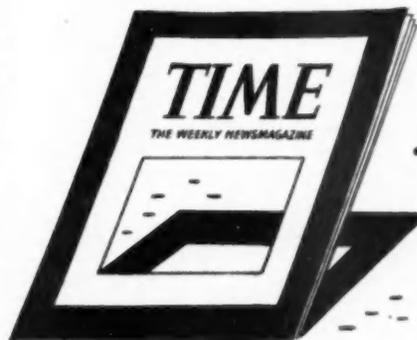
TIME is the Favorite Magazine of Army, Navy, and Marine Officers . . .

Writes an Army Captain:

"TIME has been coming in right on the beam and I am a popular man hereabouts with all the news-hungry G.I.s clamoring for my copy. I have to keep my TIME carefully hidden until I have finished it and then it really makes the rounds. Funny thing how important fresh magazines are even though we do have the radio every day. The little news fragments never seem to fit together until they are boiled in the TIME pot."

Writes another one:

"After a letter from home, TIME is our most highly prized reading matter and is passed around and around. Even the British officers beg for an old copy after we from the 'States' are finished with it."



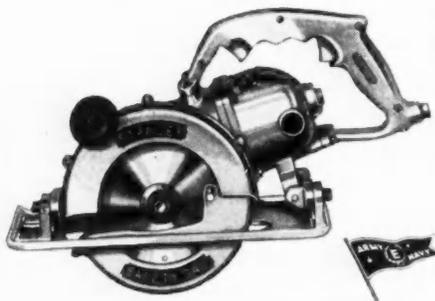
Tops with tomorrow's top people too!



This STANLEY helper is no "apprentice"

Stanley Safety Saws need no initiation or apprenticeship. They have the requirements of every job built into them! You'll discover this the first moment you team up with a Stanley Saw. It is aluminum-light and nicely balanced, yet rugged and packed with power. Easy adjustment for depth of cut and bevel angles. Its swinging guard and automatic switch are constant safety features.

Stanley Safety Saws are made in sizes to cut 2 1/2"-2 3/4" and up to 3 1/4". May be equipped with all standard blades or special blades for stone and tile cutting. Write for folder. Stanley Electric Tools, Division of The Stanley Works, New Britain, Connecticut.



Stanley W8 Safety Saw with cutting capacity up to 2 3/4" is a rugged, powerful and practical tool for carpenters and builders. Its Duplex Handle, exclusively Stanley, permits easy operation in any position.

STANLEY

STANLEY SAFETY SAWS

unrestricted operation in the home building field will be granted. Until that time, there are many major issues which must be met. Some of these are of immediate interest and others of long-range importance.

The war housing job must come first. Along with this will be a gradually expanding program of H-2 housing to relieve congestion in war centers. Although it presently has dwindled to an infinitesimal size, there is no question but that, with the new ammunition and war materiel program satisfactorily in motion, allocations under H-2 will step up and become substantial in the interim period preceding the lifting of L-41.

The maximum utilization of all war housing, the relaxation of occupancy restrictions and the privilege of selling housing constructed on rental priorities are all issues of immense importance to Home Builders.

Policy governing the disposition of public war housing, as long since determined, must be supported to the end that the temporary housing actually is demolished in accordance with the terms of the Lanham Act and the permanent public housing sold at the earliest possible moment to private interests.

Cooperation With FHA—A favorable picture is presented as we anticipate our activities with the Federal Housing Administration. The transition from Title VI war housing to peace-time Title II housing will not be smoothly made.

Resumption of conservative evaluating processes, higher construction standards and return to conditional commitments require an entirely different approach by both Home Builders and the FHA.

With 10 successful years' experience and with new problems and opportunities ahead, certain liberalizations in the Title II procedure are desirable and necessary. The production by private enterprise of unprecedented quantities of housing to meet the employment and the housing needs of the early postwar period, particularly in moving down into an untapped lower-cost housing field, both for rental and sale, necessitate a broader application of the insured mortgage device.

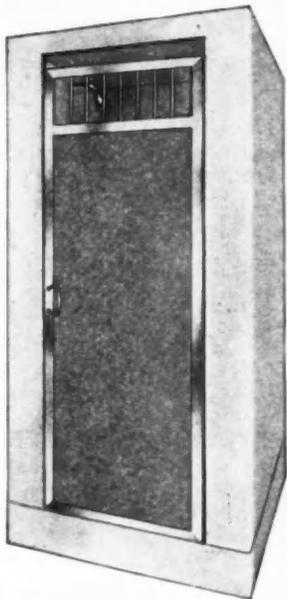
Never before in the history of this nation has there been a comparable demand for housing. More important, many billions of dollars are already earmarked for the purchase of this housing. A golden decade lies immediately ahead. More homes, better homes, and homes accessible to all income groups must be produced through a harmonious functioning of an integrated industry.

It is your responsibility to capitalize upon this unprecedented opportunity—as men of vision, skill and courage you must bring to reality the high objective of an Adequately Housed America.

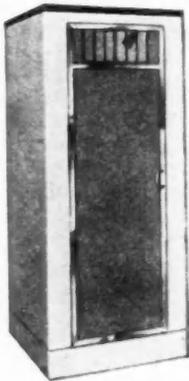


Now Architects, Builders, and home owners can make definite post-war plans—and be sure that Bathe-Rite Shower Cabinets will fit those plans when construction begins! Bathe-Rite engineers have established *standardized sizes* and will build all post-war shower cabinets to those standards. Not only will this facilitate and speed up planning now, but it will greatly aid specifications and actual construction.

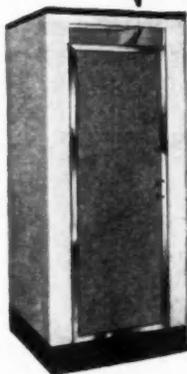
These standardized sizes will, of course, be available in many attractive designs, to lend themselves readily to modern beauty in every type of surrounding, in homes and public buildings. And they will be rich in many typical — and new — Bathe-Rite "extra-value" features of design, construction, greater strength, easier installation. Use Bathe-Rite Standardized Sizes in your new plans.



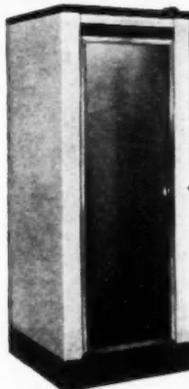
Bathe-Rite "DELUXE" MODEL NO. 4
 Luxurious bathing facilities for the finest residences, offices and institutional buildings. Available with top and glass door.
 Standard Sizes:
 32 x 32 x 80" — 36 x 40 x 80"
 36 x 36 x 80" — 40 x 36 x 80"
 40 x 40 x 80" (Corner design)



All-Purpose Model No. 3
 Sizes: 32 x 32 x 80"
 36 x 36 x 80"
 40 x 40 x 80"
 (Corner design)



Bathe-Rite Model No. 2
 Sizes: 32 x 32 x 80"
 36 x 36 x 80"
 36 x 36 x 80"
 (Corner design)



Popular-Priced Model No. 1
 Size 32 x 32 x 76"

MILWAUKEE STAMPING COMPANY
 800-S S. 72ND STREET • MILWAUKEE 14, WIS.

Bathe-Rite . . .
 TODAY'S QUALITY STANDARD IN SHOWER CABINETS

Yes, You can actually
**INSTALL IT IN
 15 MINUTES!**



One of the Remarkable Advantages
 Found Only in the
 OVERHEAD-TYPE

BERRY GARAGE DOOR

Just use 4 lag screws to attach the door, a few nails to attach the weatherstrip, 4 screws to attach the lock; make a few adjustments—and the job is done. Never before such simplicity . . . No grief . . . No trouble!

ALL-METAL

Here is a rigid, sturdy, all-metal door, light in weight and PRICED NO HIGHER THAN LOWER-PRICED OVERHEAD-TYPE WOOD DOORS . . . the result of long door-manufacturing experience combined with the latest aeronautical engineering practices.

NEW COUNTERBALANCING

We completely enclose the hardware in the door itself by the use of a revolutionary, new counterbalancing method. There are no tracks, weights or exposed springs.

NO HEAD ROOM NEEDED

The Ceiling can be plastered flush with the under-side of the head jamb.

NOTICE: Owing to the fact that we have had to double our war production in the last few months, we are obliged to postpone indefinitely our reconversion to residential garage door manufacturing. As soon as the situation changes we shall advise you.

BERRY DOOR COMPANY
 BIRMINGHAM, MICHIGAN



For a great many years American floor surfacing machines have been money-makers for thousands of contractors. They do the job of surfacing floors quickly, efficiently, at low cost.

Today the owners and operators of American floor surfacing machines are making money. Maintenance work of all kinds in war plants alone would... without other contracts...keep them busy. But this is not all... for beyond war contracts is even a much larger field of operation.

Tomorrow is yet to come. None can know when war will end...but everybody knows that with peace the greatest market of all times will come in the building field. And in this field American floor surfacing machines will be called upon to play their part in providing more and better homes throughout America.

We shall be happy to send you complete descriptive literature on all models. You will find them money-makers. Write.

AMERICAN
FLOOR SURFACING MACHINE CO.
511 SOUTH SAINT CLAIR ST.
TOLEDO, OHIO

"Smorgasbord of Ideas"

(Continued from page 65)

Joseph W. Davin, of Jacksonville, Florida, wound up the panel with a complete description of a small neighborhood shopping center that he has planned for building after the war; he told of new design features, construction, materials and equipment that will be used.

Hugh Potter, Houston, Texas, who arrived late, added an important figure—in calculating size of shopping facilities allow five feet of frontage per 50 families to be served.

BACK TO SCHOOL—WHAT'S NEW? was the theme of the second panel. Nearly five hundred more crowded into this than into the first. It ran over into the next scheduled meeting. Curt C. Mack of F.H.A. was schoolmaster.

Mack planned a lively course of study on the subject of post-war planning. Under the head of materials and equipment he read off a list of leading questions devised to whet the student-builders' appetite for more knowledge on the following subjects: Domestic Heating & Air Conditioning, Plastics in Home Construction, Electronics Applied to Household Controls, Gas Kitchens and Gas Appliances, Electric Kitchens & Equipment, Practical Lumber Substitutes, New Uses for Glass, Refrigeration and Frozen Storage.

Industry Leaders Answer Questions

As his guests, schoolmaster Mack had high authorities on these subjects in the persons of sales and engineering executives of leading companies engaged in these industries. The students used their privilege of shooting direct questions at these authorities—and how they used it. Forceful, direct, value-packing answers were their reward.

New Construction Techniques constituted the other half of this panel. Here men who had performed recently in the actual use of new methods of construction and improved building techniques were the authorities aiding the schoolmaster in question answering. David D. Bohannon, San Francisco, California presided over this section.

THE PANEL ON FINANCING probably hit the peak of interest. Why not? It dealt with the G. I. Bill of Rights with Charles M. Potter of the Housing Section of the Veterans Administration and Deputy F.H.A. Administrator Earle S. Draper fitting answers to questions in quick succession on the many conundrums raised by the G. I. Bill of Rights. Here are some of the questions and answers:

Ques.: Can a veteran buy a vacant lot on a guaranteed loan? Ans.: No.

Ques.: Can 20 veterans each borrow \$2,000 and put it in an apartment house with an apartment for each?

Ans.: Yes, as a business venture but not as a home loan.

Ques.: Does a veteran's widow have the right to a guarantee for a loan for purchase of a home? Ans.: No.

The few given are only samples of hundreds shouted from the floor and balcony of this meeting attended by an estimated 1700 questioning builders.

Labor Given Marked Attention

In addition to the question and answer panels described, there were other meetings in which direct speeches were delivered by inspiring, provoking and challenging talkers:

Both labor groups gave their post-war housing platforms.

C.I.O. spokesman R. J. Thomas, president of United Automobile Workers, told N.A.H.B. members that labor expects the building industry to provide a minimum of six and one-half million jobs post-war, of which two and a quarter million must be in the residential building field.

He urged creation of a Federal Department of Housing and Community Development with its head a member of the President's Cabinet, and pointed out the role construction and rehabilitation of our cities must take post-war to satisfy our economy and provide its share to bring full employment.

Boris Shiskin, secretary of A.F.L.'s Housing Committee, offered six proposals to N.A.H.B.'s membership to secure rapid post-war growth of home ownership. They included:

- (1) A unified program to create an effective housing market for all families.
- (2) Continued price control on materials until the danger of runaway prices is past.
- (3) Removal of temporary war housing.
- (4) Federal grants to individual communities for project planning.
- (5) New legislation to reduce interest rates, extend amortization to 32 years, allow for a moratorium on defaults due to unemployment.

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GRAND RAPIDS
Invisible
SASH BALANCE

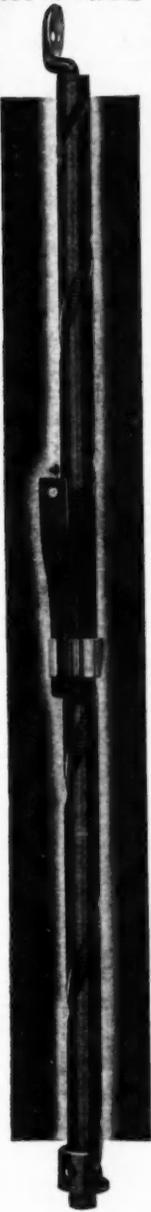
WINDOW PLANNING Begins Now!

In planning post-war construction of hundreds of thousands of new homes, contractors will be forced to take advantage of every product whereby time can be saved without sacrifice of installation time, satisfactory service and dependable performance.

To assist manufacturers of window assemblies with the speedy, economical and correct installation of window and sash hardware, Grand Rapids Hardware Company offers a trained and competent engineering service to cooperate with them right on the job. These men can be of assistance to all who agree that window planning should begin now and who are willing to observe first hand what the Grand Rapids Invisible Sash Balance will do for them.

These services are rendered without charge or obligation.

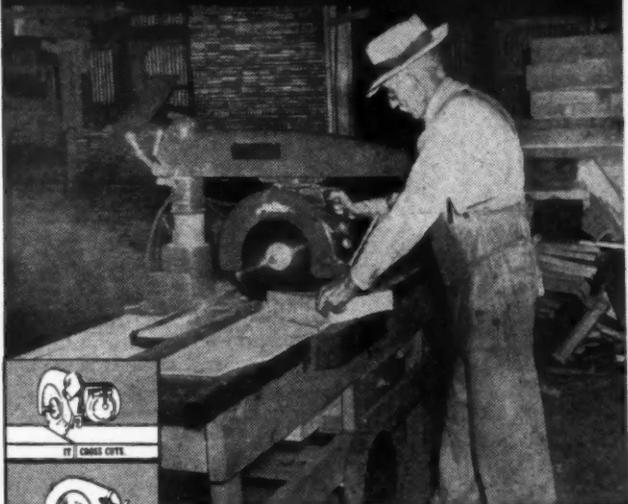
- 1 Easily installed. Only 6 simple steps. No odd sizes. Completely interchangeable.
- 2 No tapes or cables or exposed tubes. Entire sash balance moved with the sash. Always invisible.
- 3 Deliveries of Grand Rapids Invisible Sash Balances are governed by government priorities. Send for catalog for information and delivery details.



Sash pulleys will be available as soon as materials are released.

GRAND RAPIDS HARDWARE COMPANY
GRAND RAPIDS • MICHIGAN

BUILD BETTER HOUSES AT LESS COST WITH THE NEW **DeWALT** BUILDER'S SAW



"I'm building better homes for less money with DeWalt." That's what modern home builders all over the world are saying.

This is only natural, because the new portable DeWalt is especially designed for use by builders.

A DeWalt, with proper tools, makes any cut quickly, safely and accurately. In addition to cutting your framing, DeWalt cuts the mill work you need without mill costs. It is the ideal machine for your maintenance and repair work as well.

DeWalt saves time, money and material on the job. What's more, operators like it because it is so simple to handle and can be carried so easily from job to job.

Available in three sizes for prompt delivery . . . 1½ HP only \$248; 2 HP for \$280; 3 HP for \$285 f.o.b. factory. If you are planning to stay in the building business and want to capitalize on the post-war building market, now's the time to "cut out" the coupon and get the facts.

DeWALT PRODUCTS CORPORATION
12 Fountain Avenue, Lancaster, Pa.
Please send me information on DeWalt Saws.

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

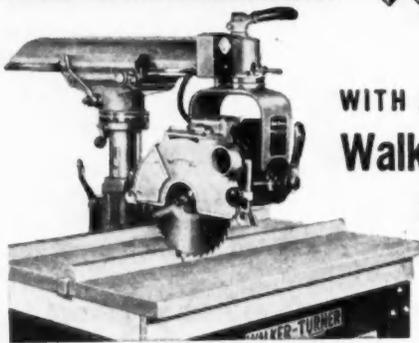
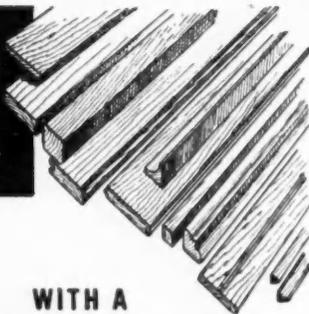
**Structural,
Reinforcing or
other Blding Steel
Shipped from Stock**

Write for Stock List—
your guide to over 10,000
different kinds, shapes
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shipment from ten plants.

Joseph T. Ryerson & Son, Inc. Plants at Chicago, Milwaukee, St. Louis
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**PRECUTTING
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**WITH A
Walker-Turner
RADIAL
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Prime requisite for suc-
cessful precutting is an
accurate, rugged power

saw, capable of cutting all shapes and sizes of lumber . . . and that's
the performance you get with a Walker-Turner Radial Saw!

This versatile, cost-cutting machine crosscuts, rips, dados, shapes,
routs, tenons and miters . . . on wood, metals, plastics and ceramics.
Sliding ram travels 21½", affords clear view of work. Convenient
controls provide accurate setting. Write for literature.

Walker-Turner Co., Inc., 1154 Berckman Street, Plainfield, N. J.

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COMPANY, INC.
MILWAUKEE, WIS.
MACHINE TOOLS
DRILL PRESSES - HAND AND POWER FEED - RADIAL DRILLS
METAL-CUTTING BAND SAWS - POLISHING LATHES - FLEXIBLE SHAFT MACHINES
RADIAL CUT-OFF MACHINES FOR METAL - MOTORS - BELT & DISC SURFACERS

**CATALOGS and
HOW-TO-DO-IT INFORMATION**

107—METAL WINDOWS WILL FIT MANY POSTWAR JOBS—from small homes to mile-square manufacturing plants. A manufacturer of 63 years of experience, and a pioneer in steel window development, has made available a comprehensive booklet on many types of metal windows. It is the William Bayley Company of Springfield, Ohio. In the 32-page booklet is a utility chart about windows which tells where each type of window is suitable in what kind of building. Another feature is the layout of sizes and shapes of windows to fit practically any opening.

108—LITTLE ONES OUT OF BIG ONES—In other words, the story of air conditioning in the new Hotel Statler, Washington, D. C., which has just been issued by Carrier Corporation, describes in nontechnical language this large "weathermaster system" and tells how it provides personally chosen air conditioning so that the same idea might be carried into the small home as well as into the 1,000-odd-room hotel.

109—PLASTIC-SURFACED PLYWOOD—is a new product, born of war-time requirement, that will find varied uses in post-war construction. In a booklet by Kimberly-Clark Corp., Neenah, Wis., this new "Kimpreg" material is openly discussed and well illustrated even to small samples for personal inspection.

110—NEW GYPSUM PARTITION PANELS—have been developed by the National Gypsum Co. The panels are suitable for interior partitions in offices, apartments, stores and even low-cost housing. A booklet explains their uses and gives detail drawings regarding installation methods.

111—SELECTING GREASE INTERCEPTIONS—is greatly simplified by a card pull-out device small enough to carry in the pocket. It is simple to follow and easy to use. The "Josameter" is offered by the Josam Mfg. Co., Cleveland, Ohio, and it lists a wide range of average-size sinks and fixtures for residential, commercial and also industrial installations.

112—A RADIAL CUTTING MACHINE—by Wilson of the Equipment Service Engineering Co., Kansas City, Mo., is the sort of woodworking machine that completes an operation in less time than it takes to make-ready an average machine. A 12-page booklet illustrates and describes this versatile machine.

113—ALL KITCHEN WORK ELIMINATED—is one of the funniest as well as most practical expositions of the miracle-house bunk you ever saw. The Schaible Co., Cincinnati, Ohio, has a four-page leaflet written by everybody from office boy to kitchen sink. It will help dispel fanciful desires for the impossible on the part of postwar home buyers.

SERVICE COUPON—CLIP and MAIL to CHICAGO

Readers Service Department, (February, 1945)
American Builder,
105 W. Adams St., Chicago 3, Ill.

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

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OCCUPATION*

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

BLUEPRINTS FOR YOUR HOUSE of TOMORROW



YOU MAY HAVE TELEVISED TELEPHONES

Imagine, actually seeing the person you are telephoning to! Post-war television improvements may make this dream a reality.

BUT -
Your Heating Plant will be KOVEN WATERFILM



DE LUXE MODEL
For Better Grade Homes

The marvels of modern invention may make tomorrow's home a "Push-Button" paradise but in the future, as well as today, a KOVEN WATERFILM BOILER will still offer the best assurance of heating comfort.

The patented construction of the KOVEN WATERFILM BOILER assures you of quick heat...even room temperature...plenty of domestic hot water...and greater operating economy. This fast steaming boiler is made especially for automatic firing for oil, stoker or gas and is available in various sizes. Its compact size and modern design make the KOVEN WATERFILM BOILER popular for both home and industrial use. The sectional series for apartment house or industrial plants can be taken through a 2 foot door thus eliminating rigging and alteration costs. Call or write KOVEN today for complete information,

WATERFILM BOILERS, Inc.

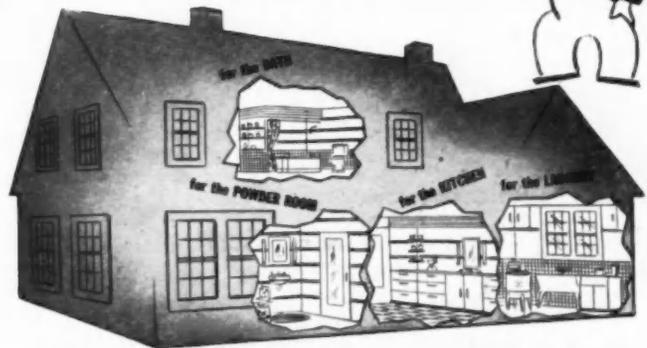
154 OGDEN AVENUE

JERSEY CITY, N. J.

PLANTS: JERSEY CITY, N. J. • DOVER, N. J.



Tylac bathrooms like this will be the order of the day in tomorrow's millions of new and modernized homes.



EVERY HOME A PROSPECT
for

Miracle Walls by TYLAC

EVERY home is a prospect for not one but *multiple* TYLAC installations. The ideal wall covering for Bathroom, Kitchen, Powder Room and Laundry. Millions of home owners will demand the economical, easy-to-install, easy-to-clean, long-lived beauty of TYLAC wall coverings for post-war construction and modernization. Plan now for a prosperous future as a TYLAC Dealer.

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



TYLAC COMPANY
MONTICELLO, ILLINOIS
MANUFACTURERS OF ENDURING-MODERN WALL COVERINGS

For Half a Century

1895 *Angier* 1945
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Your Waterproof Papers for Postwar Building



BROWNSKIN For Sheathing

Its S-T-R-E-T-C-H sets it apart from ordinary sheathing papers, as does its special treatment against deterioration, passage of water or moisture. No sheathing paper like it. As long as a building lasts, so will BROWNSKIN.



BROWNSKIN VAPORSEAL For Vaporsealing

Protects all kinds of insulation. Use on the warm side of insulation, leaving cold side free to breathe. Thus, ideal dry conditions will be maintained.



ECONOMY BROWNSKIN Protects Flooring

One side is crinkled BROWNSKIN, the other flat kraft. Between flooring, the BROWNSKIN side goes down. Also unexcelled as a protector of finished floor surfaces in rooms where men are working. Here the BROWNSKIN side goes up.



ECONOMY BROWNSKIN REINFORCED Has Extra Strength

An all-purpose waterproof building paper, useful for temporary partitions, coverings, and the protection of all types of floors during construction.



COPPERSKIN Protects Hidden Places

Electro sheet copper, bonded to BROWNSKIN by asphalt. Use in concealed places to protect insulation, for drip pans, and to flash windows, doors and all exterior openings.

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1945 — Angier Golden Jubilee Year. A half Century of Protection to the Products of Our Nation and Its Industries — in Peace and War



ANGIER CORPORATION
CORROSION PREVENTIVE AND WATERPROOF PAPERS
FRAMINGHAM, MASSACHUSETTS

Building for Tomorrow's Cars

(Continued from page 92)

the latest and most modern devices such as wash racks, lubrication rack, wheel alignment machinery, motor testing department, etc.

One of the outstanding features of the building is the sales and display space which includes a single car spot which is enclosed by sloping plate glass to eliminate reflections and glare, and is lighted both inside and out with direct and indirect fluorescent lighting.

One of the smart parts of developing and building housing communities is the retaining of business areas by the builders and leasing the shops they build on a percentage basis. This method of operating is attractive to prospective merchants because they can set up business surrounded by customers living in the development, and pay their rent determined by a percentage of their gross business.

From the standpoint of the developer and builder, this is good business because he continues to own and therefore control the retail commercial outlets which serve his development. Properly handling such business sites and buildings produce a continuous income and, in some cases, a retail building and the cost of the rent has been written off in a matter of three to five years. All in all, then, this type of operation proves the soundness of private building because it pays for itself as it goes along, and also produces enough income so that maintenance funds can be set aside to keep up the housing development over future years.

As the title of this article says, "Now Building for Tomorrow's Cars," is but another way of saying intelligent optimism is what will keep America ticking.

WHY *Streamline* MAKES MEASURING

EASIER... FASTER... MORE ACCURATE



To cut measuring time, the new Streamline has more real honest-value advantages than any other rule on the market today. Here are seven of the many reasons WHY . . .

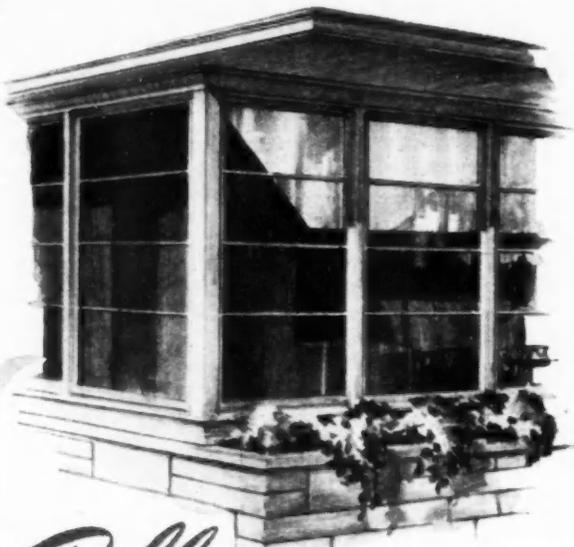
1. Its 7/16" tip serves as a hook for measuring to points hard to reach.
2. New "channel" slide for tape means wear and tear is deferred. Graduations stay clean and legible and action is smoother.
3. Lever lock is more conveniently placed and braking shoe has been enlarged, giving positive lock for readings.
4. Case "take-down" to clean, oil or replace blade, has been simplified.
5. Redesigned case makes inside measuring deadily accurate and eliminates guess work.
6. Case — of high grade tempered steel — is chrome plated for protection.
7. Graduations permanently etched on high carbon spring steel blade . . . both sides, all edges.

For quick action use coupon at right.

MASTER
WOOD AND TAPE RULES

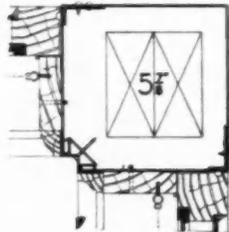
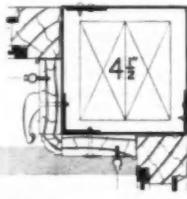
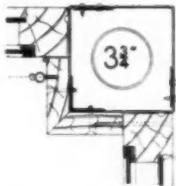
MASTER RULE MFG. CO., INC.
815 E. 136th St., New York 54, Dept. D-2
Enclosed find \$2.65 for the new 6 ft. "Streamline" complete with spare blade.

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Pella
CASEMENTS
with steel corner mullions

in 3 popular sizes

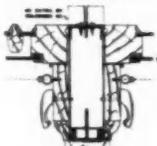


**for greater light area
and neater appearance**

LARGER GLASS AREAS are easier to achieve through the use of these smaller steel corner mullions . . . created by Pella designers.

Prefabricated of heavy gauge, galvanized, rust-proofed steel. Pella corner mullions are available in three space-saving sizes—ranging in size from 5 7/8" x 5 7/8" down to 3 3/4" x 3 3/4", creating a neat, narrow-line corner. Pella prefabricated corner mullions save material and hours of construction time. Steel construction prevents rotting and warping. Permanent plumbness assures smooth window operation.

Investigate Pella's extensive line of stock size casement units that permits more than 480 possible combinations of single windows, corner windows, bays, picture and kitchen windows. All factory fitted and assembled, ready to set in wall.



Pella's all-steel joining mullion is only 1 5/8" wide! It is a real space saver, stronger than the best wood mullion.

FREE for Architects and Builders
A file pocket containing 22 loose sheets of scaled details that enable you to create individual and unusual window arrangements from Pella's stock size Casement Units. Send for your FREE set today. The Rolscreen Company, Dept. C-25, Pella, Iowa.



Pella CASEMENT WINDOWS

ALSO MAKERS OF PELLA LOW COST AWNING AND PROJECTED SASH AND PELLA VENETIAN BLINDS

**What is
ORDER L-335,
DIRECTION 2A?**

... actually, it's a compliment!

To put it briefly, Direction 2a has commandeered Western Pines for direct war use. Their sale for general use has been temporarily prohibited.

This most stringent restriction was necessitated because the manufacturers of boxes and containers used for shipping ammunition and vital war material to the battle fronts have definitely acknowledged the superior qualities of Western Pines and are practically unanimous in specifying them on all government orders. So great is this demand and need that even with all-out production of Western Pines there will not be enough to fill these orders, let alone supply you as formerly.

Being denied Western Pines will naturally disappoint retail lumber dealers and builders. But actually no finer tribute could be paid to the all-round usability of Western Pines than Direction 2a to Order L-335.

WESTERN PINE ASSOCIATION

Yeon Building, Portland (4) Oregon

* Idaho White Pine

* Ponderosa Pine

* Sugar Pine

* THESE ARE THE WESTERN PINES

For Tomorrow

BILT-WELL WOODWORK OF PONDEROSA PINE



and Tomorrow

Just as the past 78 years have expressed Bilt-Well's unshaken confidence in America's preference for fine woodwork, so our plans for the "house of tomorrow" embody the finest artistry of the designer and the most painstaking technique of the craftsman in wood.

and Tomorrow

Throughout the years, we have maintained the same firm and uncompromising attitude toward quality materials and workmanship. Likewise, we shall continue in our belief that a world of experience, plus a willingness to keep pace will be the prime factors in the "home of tomorrow."

CARR, ADAMS & COLLIER CO.
DUBUQUE, IOWA

BILT WELL
WOOD WORK
REG. U. S. PAT. OFF.

Where the Housing Dollar Goes

(Continued from page 72)

agency's small home financing is underwritten.

"Monthly Cost to Own"

One of the items included under "Monthly Cost to Own" a house is "loss of interest on cash payments." This life-time charge of \$1.50 per month is arrived at by concluding that the owner might have kept his \$600 down payment in a savings bank, or in bonds, and thus earned interest of that amount every month. Inclusion of items like this, if carried to its logical conclusion, would necessarily have to bring in, by way of *reducing* monthly cost to own, additional savings as a result of a monthly payment that was less than rent, interest gained on those additional savings, etc., ad infinitum.

Highlighted in the report is the fact that it takes 14 separate materials or operations, in many cases, to build a wall. The only "solution" proposed for that is intensive research under government sponsorship to develop a material which will "perform the necessary functions required of an exterior wall and yet which could be efficiently molded into single-thickness wall panels or sections, thus combining many layers into one."

Building Industry Scored

The building industry in general comes in for criticism at several points because it has not "kept pace with other industries in the development of new and efficient techniques of organization, production and distribution." Further, "because of its peculiar organization into many small and independent business enterprises, the building industry has been unable to undertake scientific industrial research on a scale comparable with modern mass production industries."

The fact that "many small and independent business enterprises" have created not only the building industry

(Continued to page 108)

Thorough Termite Control

Is a Contractor's Job

▼
An Opportunity to Represent
a National Termite Control System

A thorough termite control job requires structural knowledge; and usually structural modifications; and is usually a job of substantial size and profit. Thorough termite control is work that fits right into a building contractor's regular operations.

The ANTIMITE system of termite control is a national system that is applied by only authorized operators. It is a complete and thorough system that has a national reputation and a background of more than a quarter century.

ANTIMITE has representation in many localities, but we are increasing our operation; and in consequence are looking for representation in many more localities. The representative selected is given exclusive rights in his community. He receives our full co-operation in proven business-getting plans and instructions in the ANTIMITE system. No investment is required. It is a franchise that is valuable and profitable in itself, and that leads to new contacts and increased construction work.

We are inviting inquiries from building contractors who see the prestige and profit for them in becoming the local ANTIMITE representative. A proven record of integrity and progressiveness is required. If you are interested and can meet these requirements, communicate immediately with the address below.

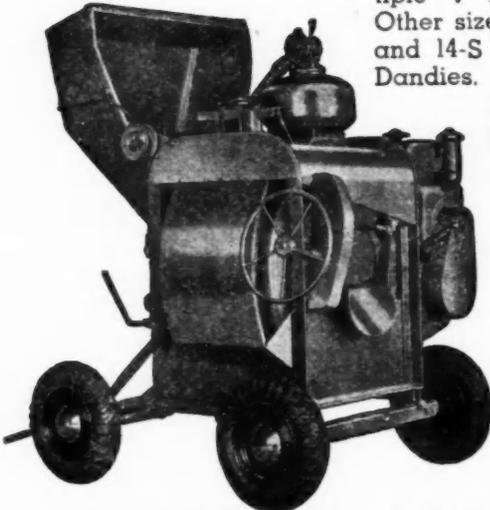
▼
ANTIMITE

A National System of Termite Control
Applied by Only Authorized Operators

▼
THE ANTIMITE CO., 5137 Southwest Ave., St. Louis 10, Mo.

KWIK-MIX MIXERS

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



KWIK-MIX 10-S DANDIE



Kwik-Mix 3 1/2-S Concrete Mixers . . . side or end discharge . . . tilting or non-tilting . . . anti-friction bearings . . . spring mounting . . . high speed trailing . . . welded construction.

KWIK-MIX 3 1/2-S SIDE DISCHARGE TILTER

KWIK-MIX PLASTER-MORTAR MIXERS



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

KWIK-MIX COMPANY
 KOEHRING SUBSIDIARY
 PORT WASHINGTON • WISCONSIN



FIT THE SASH AND GROOVE FOR WEATHERSTRIP WITH THIS ONE CARTER TOOL

STANLEY-CARTER "Wasp" Power Plane

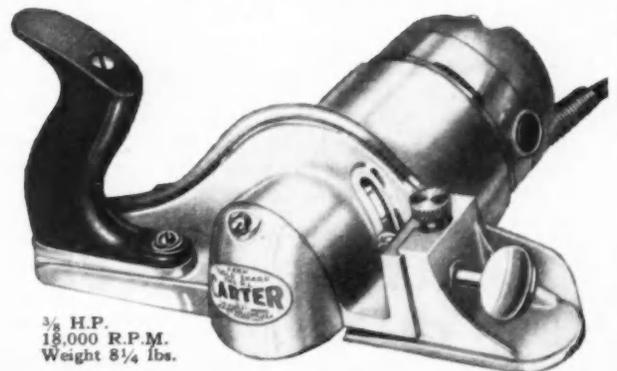
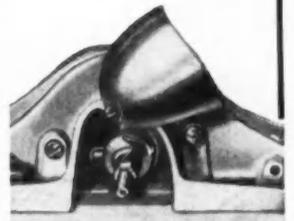
FOR FAST FITTING of doors, window sash, storm sash, screens, transoms, and inside trim, there's no tool better than the Stanley-Carter "Wasp" Power Plane. The patented spiral cutter, speeding at 18,000 R.P.M., "shears" to a smooth, waveless surface.

CONVERTS FOR WEATHERSTRIPPING! When the job calls for weatherstripping, you simply substitute a weatherstrip cutter for the spiral cutter, and cut the grooves accurately and quickly.

HUNDREDS OF USES The "Wasp" can speed up an unlimited number of everyday jobs for you. With Carter Shaper Cutters, it can be used for shaping and moulding cuts on straight surfaces.

The illustration (right), with the guard lifted, shows the "Wasp" fitted with the weatherstrip cutter.

WRITE for complete details. **STANLEY ELECTRIC TOOLS**, Dept. C, Division of The Stanley Works, New Britain, Conn.



3/8 H.P.
 18,000 R.P.M.
 Weight 8 1/4 lbs.

CARTER STANLEY **TOOLS**



Restore Old Buildings with Concrete Materials



Old dairy barn with new concrete foundation before application of cement asbestos siding to walls. Concrete masonry milk house in foreground.

Better than new with concrete foundation and cement asbestos siding, this dairy barn is now a valuable farm asset.

THIS old dairy barn was completely restored, for many more years of useful service, with concrete masonry and cement asbestos siding and shingles, all of which are readily available throughout the country. Timely repairs with these materials can increase the firesafety and usefulness of farm buildings everywhere.

There's no shortage of concrete and cement asbestos materials for building repairs, maintenance and improvements.

Concrete builders should let farmers know that necessary improvements can be made now without the use of scarce materials.

We have suggestions for inexpensive advertising to use with farmers. Send for your copy of "Restoring Old Farm Buildings With Concrete." Free in United States and Canada.

PORTLAND CEMENT ASSOCIATION

Dept. A2-3, 33 W. Grand Ave., Chicago 10, Ill.

A national organization to improve and extend the uses of concrete...through scientific research and engineering field work

BUY MORE WAR BONDS

(Continued from page 106)

but America is completely overlooked. The bulletin seems, in short, to be an argument that government must lead the way, not only in planning future housing but in discovering and perfecting products, techniques and distribution methods. We are inclined to believe that the tried American manner, in which highly competitive manufacturers within the building industry underwrite competent private research staffs to improve their products and thus expand their business, is preferable.

* * *

Gunnison on Prefab—

(Continued from page 88)

plant that will cut the time down to 18 minutes. A standard automobile conveyor rolls off a car every 50 seconds and there is no reason why, in years to come, that cannot be achieved with houses.

"As a result of mass producing through mechanizing our plant, our labor force has been reduced 50 per cent for the same number of houses.

"Site prefabrication and conventional building operate on a basis of 178 days a year at a maximum, as compared with 250-300 at the factory, so on an annual basis our men earn more than those in the old fashioned building industry at higher hourly rates.

"Prefabricated houses go up so rapidly that little time need be lost on account of weather at the site. So, home building becomes a year-round industry. After the war we shall have a number of plants strategically located throughout the country.

"The Gunnison house is furnished as a complete 'package' to the dealer. The package includes all the structural elements as well as the heating, all sink and other cabinets, electric fixtures, bath accessories, etc. The dealer supplies, according to Gunnison specifications, the foundations, electric wiring, plumbing and one exterior coat

(Continued to page 110)

Majestic Building Necessities

Portable and Built-in Home Incinerators

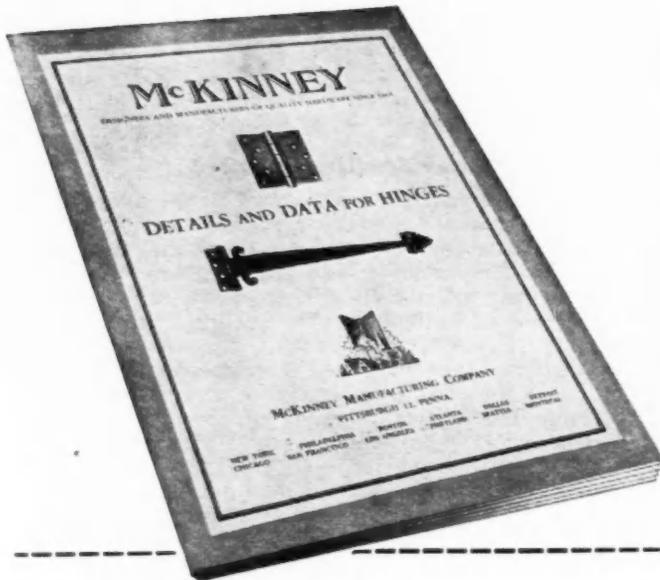
A Home Convenience in Big Demand



For better postwar living, Majestic will again offer the complete answer to growing demands for quick, easy, low-cost garbage disposal right in the home. Model 30, the portable unit at left, features ingenious draft design that burns wet or dry garbage quickly, sanitarly, without separate fuel! Majestic also makes gas, coal, and wood-fired incinerators for both portable and built-in installation. Write for details!

THE MAJESTIC COMPANY
973 Erie St., Huntington, Indiana

*Yours
for the asking.*



This new booklet of valuable hinge information has just been compiled and published by McKinney. It contains detailed diagrams of various types of hinges, important tables of dimensions and clearances, proper type hinges for wood and steel doors, and other hinge data you will want to keep. Your copy is ready. Use the coupon.



*Designers and Manufacturers
of
Quality Hardware Since 1865*

MCKINNEY MANUFACTURING COMPANY
1400 METROPOLITAN STREET
PITTSBURGH 12, PENNSYLVANIA

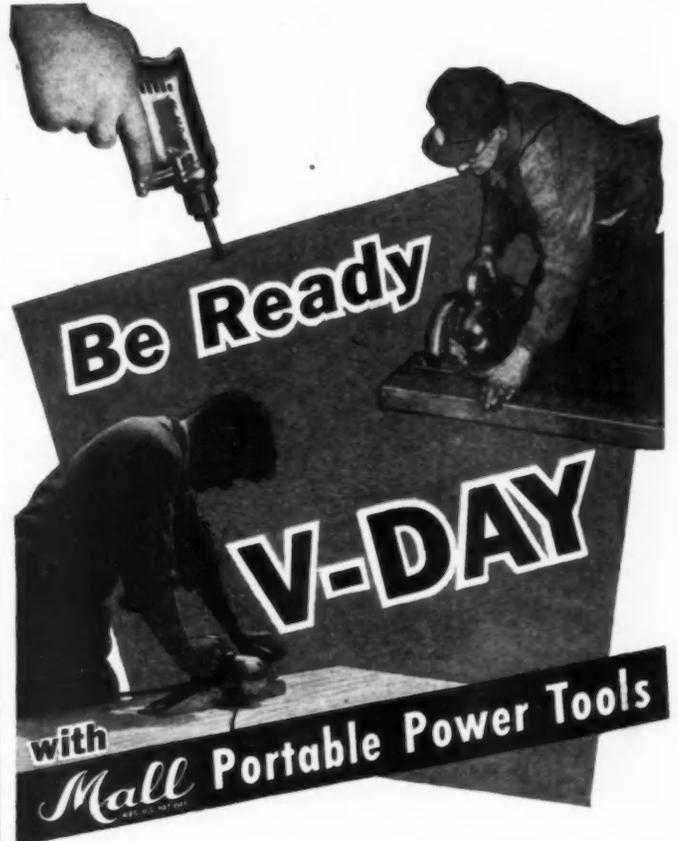
Please send me a copy of the new booklet "McKinney Details and Data for Hinges."

Name

Company

Address

..... City State



1/4" Mall Drill —a handy, compact, light-weight (3 lb.), cool-running drill for drilling in wood, metal and plastics. Made to order for close quarters. Ruggedly constructed with steel alloy gears and extra long brushes for long service. Commutator is easily accessible for servicing. Brushes can be replaced without dismantling drill. Available for 110-volt A.C. or D.C., also 220-volt A.C. or D.C.

Mall Saw —2 powerful electric models: model 85 has 8 1/2" blade and 2 3/4" cutting capacity for cross cutting and ripping rough or dressed lumber, making bevel cuts up to 45 degrees and other sawing. Model 120 has 12" blade and 4 1/2" cutting capacity for extensive sawing and ripping of heavy lumber and timbers.

Both models operate an abrasive wheel for cutting non-ferrous metal, cutting and scoring tile, stone and concrete.

Mall Plane —(Electrically driven) is 10 times faster than a hand propelled jack plane yet does a smoother, accurate job. The operator simply guides the plane across the work —plane makes cuts up to 1/8" by 2 1/2" wide in both pine and hardwood. Cutter is under constant control. Depth of cut easily varied 0" to 1/8" by simply turning handle. Full ball bearing mounted.

Ask your Dealer Today for Mall Drills, Mall Saws, Mall Planes, and Mall Concrete Vibrators or write for literature



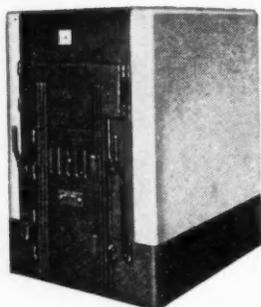
MALL TOOL COMPANY

7737 South Chicago Ave., Chicago 19, Ill.

Mall
REG. U.S. PAT. OFF.

**PORTABLE
POWER TOOLS**

**Top
acceptance**
from
men who
know



**NO. 3 SERIES
HEAT EXTRACTOR
BOILER***
FOR COMMERCIAL
BUILDINGS
AND LARGER HOMES

Heating Contractors—men who specify, sell and install—know boilers. They have told us that the NRC No. 3 Series Heat Extractor Boiler is the best they have ever handled. It's easy to set up . . . attractive . . . exceptionally well designed heating surface . . . performs with economical dependability.

It is the **ONE** boiler which was designed for convertibility to any fuel—without loss of rating. Hand or mechanically-fired, the same rating is obtained, no penalties for postwar fuel conversion. Ratings 700 to 2300 sq. ft. steam.



The Maritime "M" Award
For Outstanding
Production Achievement

Install the NRC No. 3 Series on your next job . . . you too will be sold that it is TOPS in modern boilers.

*Furnished with jacket when WPB permits.

The NATIONAL RADIATOR Co.

226 Central Avenue • Johnstown, Pa.

OVER 50 YEARS OF SERVICE TO THE BUILDING INDUSTRY

(Continued from page 108)

of paint. The panels are so constructed as to permit rapid installation of plumbing and wiring without cutting and fitting. The dealer erects the house with three carpenters and two laborers and needs no hoisting or special equipment. He has no money tied up in inventory because we ship each house as he needs it.

New Merchandising Method

"Just as our mass-produced homes are fully standardized, so also must our merchandising methods be," Gunnison says, "at least insofar as this can be achieved among human beings."

"All dealers must function according to our uniform method of operations. Their efforts are all tied together through our standardized catalogs and our advertising. In addition, and following the method of the automobile industry, dealers are aided and guided by our district managers, who in turn report to zone and regional managers, who report to our general sales manager," Gunnison says.

Individualists Shunned

In his correspondence with prospective dealers, Gunnison frankly points out the types he does not want. Among those he does not want are those who are "gadget-minded." They want to add specialties to the houses to express their individuality. There is, he says, no room for this type of individuality in selling a standardized product.

Nor does he want anyone whose interest in prefabrication lies in the design problem. They are forever trying to redesign the houses. Outside of his expert staff of *product designers*, who design yearly models in tune with the market, free from technological "bugs," suited to the company's mass production facilities, and capable of being handled by the company's entire dealer organization.

(Continued to page 112)

TRAIL SMITH

7-S or 10-S

Spring-mounted axle — Roller bearing auto type wheels — Oversize low pressure pneumatic tires — Automatic skip vibrator — Enclosed gear reduction — Multiple V-belt drive — Vertical syphon-type tank.

Compact, lightweight trailer mixer. Tows behind car or truck at fast driving speed. Husky, "able-to-take-it" construction. Famous end-to-center mixing action. Write for descriptive bulletin.



THE T. L. SMITH COMPANY
2849 North 32nd St. Milwaukee, Wisconsin

SMITH MIXERS
THE BOULDER DAM MIXERS

Saves Time and Money For Builders and Contractors

This modern, simple, highly accurate, combination Level-Transit is being used and praised by builders and contractors everywhere. It is especially designed for running levels and taking vertical angles on all survey and check-up work.



Universal LEVEL-TRANSIT

Patented Ball Bearing Race assures perfect adjustment under severest conditions... 25 power telescope... light, easy to operate. Has many features of higher-priced models.

FREE BOOKLET
"How to Lay Out Building Lots"

- "Universal" Level-Transit with tripod and carrying case.....\$115.00
 - With Stadia Wires..... 5.00 extra
 - Extension Leg Tripod..... 10.00 extra
 - Compass..... 12.50 extra
- WRITE today for full information and Free Booklet. Expert repairing on all makes of instruments.

DAVID WHITE CO. 
311 W. COURT STREET
MILWAUKEE 12, WIS.

Try them on your toughest problems!

For years the Hool and Kinne Library has been providing structural engineers with the facts they need on every problem concerned with the design and construction of civil engineering structures. This is a library that must be USED to be fully appreciated—that is why we want YOU to use it. We want you to forget the financial side of this proposition until you have solved some knotty problem that you may be up against—to find out how a specialist in that particular field would handle it. We want to prove to you that this library furnishes you with what amounts to the consulting services of 54 recognized structural engineering specialists.

HOOI AND KINNE'S STRUCTURAL ENGINEERS' HANDBOOK LIBRARY

Now newly revised and brought up to date

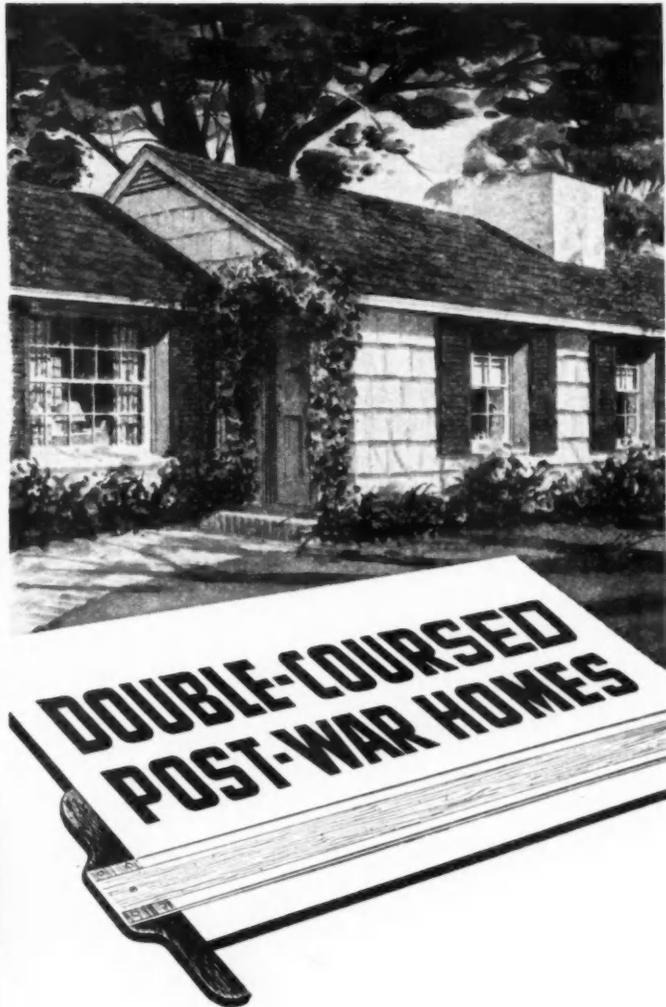
The most complete compilation of structural engineering data ever published from records of actual practice. Cover the how and why of foundation and substructure design and construction, general theory of structural members, detailed design of such members and the design of their connection with other members—explain the principles of statics, reactions, moments and shears in beams and trusses, influence lines, methods of computing stresses in lateral trusses and portal bracing—give details of design and construction of steel, timber, and concrete structures of all types.



10 days on approval
LOW PRICE • EASY TERMS
6 vols. 3575 pages, illustrated

—McGRAW-HILL EXAMINATION COUPON—
McGraw-Hill Book Co., Inc., 330 W. 42nd St., New York 18, N. Y.
You may send me Hool and Kinne's Structural Engineers' Library for my inspection. If the books prove satisfactory, I will send \$3.50 in 10 days and \$3.00 per month until I have paid the price of the books, \$27.50. If the books are not what I want I agree to return them postpaid within 10 days of receipt. (To insure prompt shipment write plainly and fill in all lines.)

Name.....
Home Address..... Occupation.....
City and State..... Company..... AB 2-45



Most builders in the post war period will continue to build the homes that were the most popular in the last housing—the modified Colonial and the California types.

These are ideal types for double-coursed Certigrade Red Cedar sidewalls. Use No. 1 or 2 grade for the outer-coursing and for economy, the cheaper grades for under-coursing. Double-coursed Certigrade sidewalls are sturdy and amazingly economical. The over-lapping butts create deep and beautiful shadow lines.

FREE BLUEPRINTS—We are offering you a complete set of working blueprints of Certigrade Red Cedar Shingle application, including double-coursing, the standard roof, over-roofing. For your set... Address:

RED CEDAR SHINGLE BUREAU
5508 White Building, Seattle 1, Wash., U. S. A.
Metropolitan Building, Vancouver, B. C., Canada

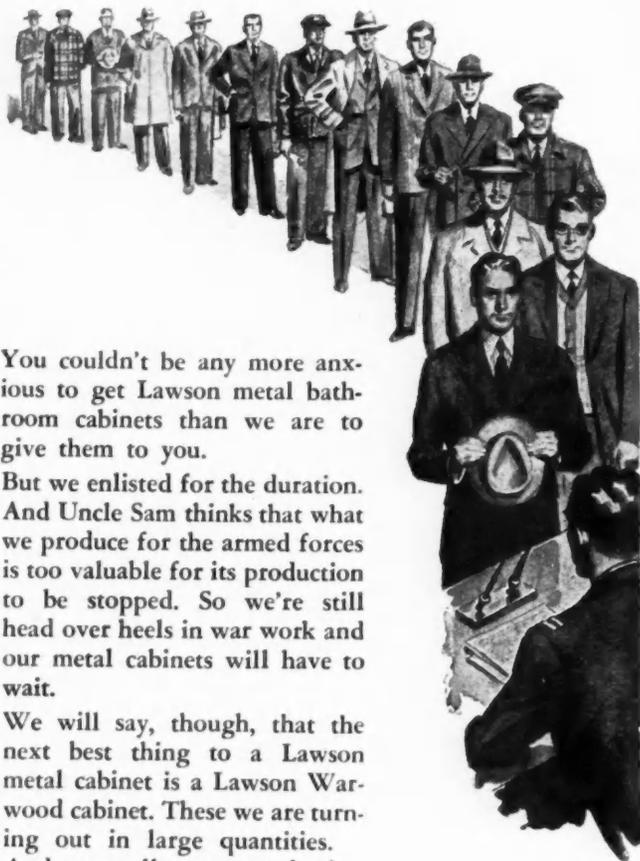
CERTIGRADE
Red Cedar
SHINGLES
ON ALL GRABIS

Red Cedar
SHINGLES

A LABEL BOUNDED TO THIS BUREAU RATING GRADE AS NO. 1, NO. 2 OR NO. 3 IS ATTACHED TO ALL CERTIGRADE SHINGLES
RED CEDAR SHINGLE BUREAU



AND WE'RE NOT DEMOBILIZED YET



You couldn't be any more anxious to get Lawson metal bathroom cabinets than we are to give them to you.

But we enlisted for the duration. And Uncle Sam thinks that what we produce for the armed forces is too valuable for its production to be stopped. So we're still head over heels in war work and our metal cabinets will have to wait.

We will say, though, that the next best thing to a Lawson metal cabinet is a Lawson Warwood cabinet. These we are turning out in large quantities. And we really are proud of our Warwoods. For full information write to The F. H. Lawson Company, Cincinnati 4, Ohio. We'll guarantee you the finest non-metal cabinet on the market today.



THE F. H. LAWSON COMPANY
CINCINNATI 4, OHIO

(Continued from page 110)

"In short," says Gunnison, "we do not want men who are so temperamentally individualistic they are unable to operate within our uniform methods of procedure. Such men create untold difficulties for us in maintaining our high standard of relationship with the buying public."

What He Looks For

Following are the qualifications Gunnison says he wants in dealers:

1. The head of the dealership must be a sound, solid businessman who has had a record of success in his community.
2. He must be a capable executive and know the necessity of maintaining a good sales volume, erecting homes properly and within a definite cost budget, and in rendering proper service thereafter. (Dealers are paid for the service they render to the owners, just as in the automobile industry.)

Need Sound Business Men

3. As sales volume is the lifeblood of the business, the head of the dealership must definitely be sales-minded. Men are sought who have specialty sales experience, particularly in products where the major sales emphasis is directed to women. Men who have sold automobiles, refrigerators, etc., are said to make excellent salesmen for Gunnison Homes.
4. The head of the dealership must be a good administrator and must know the necessity for keeping neat, accurate records.
5. He must have a keen sense of public relations and realize the necessity for requiring his entire organization to conform to the uniform pattern of operations.
6. He must have sufficient working capital and must be financially-minded. If he has not had experience in mortgage financing, he must be able quickly to grasp simplified methods.

(Continued to page 114)

Now available
Cabinet Hardware
in matched sets
modern . . . streamlined



No. A61-200
Pull



No. A58-2364E
Hinge



No. A61-048
Knob



No. A61-3327
SPRING CATCHES for flush or offset doors. Complete with strikes and screws.



No. A61-2047
SNAP-GRIP CATCHES — A patented, quiet operating Door Catch. Supplied with strikes and screws.

This is one of National Lock's moderately priced matched design Cabinet Hardware sets. Set includes Hinge, Pull, Catch and Knob, perfectly matched. Due to wartime restrictions, this set is supplied in Bright Zinc and Lacquered finish only.

To insure early delivery we suggest placement of your order at once.

INDIVIDUAL ENVELOPE PACKING
Each item is packed in attractively printed strong Kraft paper envelope to protect finish. Each envelope includes screws and instructions for application.

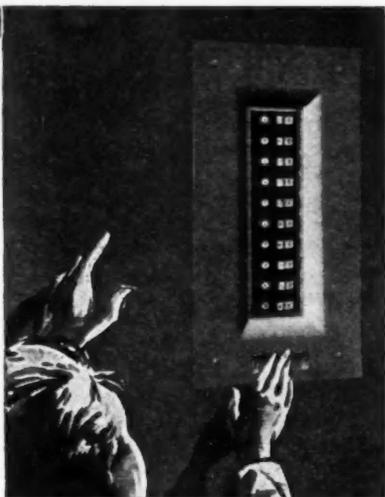


NATIONAL LOCK COMPANY
BUILDERS HARDWARE DIVISION
Rockford, Illinois

W
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**Type AC
THERMAG
Circuit Breaker
LOAD
CENTER**



Here is a "must" for all modernization jobs. Ⓜ Load Centers or Service Equipment give your customer the feeling that you have done him a favor. You have! For here is modern, attractive, tamper-proof, positive circuit protection. Combination THERmal and MAGnetic trip assures automatic disconnect on harmful overload or short circuit, yet service is restored with a flip of the finger.

List price of illustrated model \$19.35. Write for BULLETIN 63 giving complete description, wiring diagrams and prices. Frank Adam Electric Co., Box 357, St. Louis, Mo.

Frank Adam
ELECTRIC COMPANY
ST. LOUIS

**What
To Do About
TERMITES**



Termites are a nation wide scourge and become particularly active with the approach of spring weather. The home infested with termites is in a serious condition and the termite control to be effective must be done with both thoroughness and skill. A knowledge of construction is essential to the proper inspection and the proper application of controls. For these reasons termite control is a job that often can be done best by the building contractor.

TERRATOX—The Wood Treating Chemicals Company is a leader of the field of wood preservation and wood control. It is out of this exceptional knowledge and experience that **TERRATOX** has been developed. The base of **TERRATOX** is Pentachlorophenol, an active agent recommended by the U. S. Dept. of Agri. **TERRATOX** comes in both water and oil solutions to meet varying conditions. It is in concentrated form for high effectiveness and economical use. Properly used, **TERRATOX** not only does a highly effective immediate job of termite control, but its protective effect extends over a five year period.



SEND FOR BULLETIN—Sent to architects, building contractors, lumber dealers; full descriptions and prices of **TERRATOX** . . . and full and easily followed descriptions of the "what" and "how" of a thorough termite control job.

WOOD TREATING CHEMICALS CO.
5137 Southwest Ave., St. Louis 10, Mo.

**SIX STEPS OF PROTECTION
IN THE PUBLIC INTEREST**

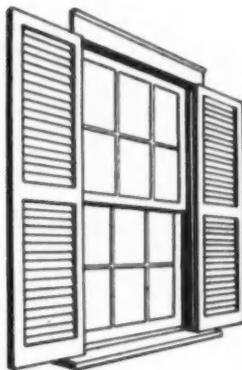
... (6th of a Series)



**Knowledge is
protection**

Because architects and builders take pride in quality construction . . . because homeowners want long-lasting value . . . the NDMA seal of approval on toxic preservative treated wood products has won widespread acceptance. Knowledge of that seal—and of the principles for which it stands—has resulted in an increased measure of public protection . . . in an increased understanding of wood's ability to keep pace with modern service requirements in such building products as windows, doors, screens and frames.

It is for this reason that the sixth step in the NDMA program consists of educational effort in the public interest . . . consistent effort which spreads knowledge of the scientific research, the careful testing symbolized by the NDMA seal of approval.



The NDMA Seal of Approval—available by license to all manufacturers and distributors who conform to the toxic preservative standards of the NDMA—represents these six steps of protection:

1. An efficient test for measuring effectiveness of toxic preservatives
2. Minimum standards governing the toxic preservative treating of wood-work products
3. A seal identifying products treated in conformity with NDMA Toxic Preservative Standards
4. Mill inspection of treating equipment and practices
5. Laboratory check-tests of preservative solutions
6. Educational effort in the public interest

NATIONAL DOOR MANUFACTURERS' ASSOCIATION
McCORMICK BUILDING · CHICAGO, ILLINOIS

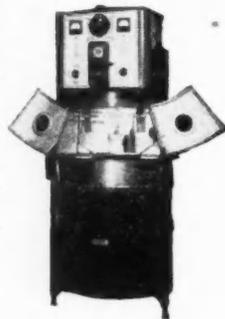


Let the sun blaze in...
it won't fade this wall!



3 Years of Sunshine in 25 Hours—That's What Every Monowall Color Must Withstand in the Armstrong Fadeometer

DIRECT sunlight—3 years of it—is crowded into the fadeometer test which Armstrong uses on Monowall colors. If they fade or yellow under these concentrated ultraviolet rays they're rejected immediately. Armstrong's laboratories regularly put Monowall through many other torture-tests, too—outdoing even the most severe conditions in actual usage. When you sell Armstrong's Monowall, you know it is prewar quality . . . or better.



For kitchens, bathrooms, hallways, various commercial interiors . . . gleaming, mirror-smooth Monowall is a durable wall finish that's easy to keep clean. It is available in a variety of attractive plain colors and scored tile-designs that harmonize with almost any decorative scheme.

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(Continued from page 112)

7. He need not know anything about construction, engineering, or architecture. The whole approach, both in product and methods, is quite the opposite to anything found in the old-fashioned building industry. However, the dealer should have a reasonable mechanical aptitude. He will select a good manager to head his erection department, but must have sufficient mechanical aptitude to see that the work is done properly and efficiently.

8. Men are preferred who have had experience with large companies that manufacture and mass-distribute consumer products, because such men are organization-minded and thus quickly grasp simple, standardized methods.

9. Above all, steady businessmen who are interested in building up sales volume and in making profits are desired.

10. Dealers must devote themselves exclusively to this business. If large realtors, etc., are appointed as dealers, they are required to establish a separate Gunnison Homes department. No dealer is permitted to handle any other line of prefabricated homes.

Because they have succeeded in the past through the life-long habit of exercising novel ideas born of their high degree of individuality, old line men in the home building business are not of the type who are likely to succeed in selling prefabricated homes of the type Gunnison will produce. He does not expect to see many of them active in the merchandising and selling of mass produced homes in the post-war period.

Keller on Prefab—

(Continued from page 89)

prefab. On this group, the prefabs sold more rapidly than the conventionals. Of course the prefabs were up and completed before any of the conventionals were



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finished. But the principal cause of the rapid sales, by investigations made with buyers, was the high praise coming from the eighteen buyers of the previous year who had had their tongues in their cheeks when they bought."

Prefabs have a definitely limited market, Keller believes. In design, they are exclusively limited to the bungalow-type, one-story house. In price range they are pretty much confined to the market under \$6,000. Most home buyers who want homes above this figure will likely want homes closely fitting their own preconceived ideas and with special features built in. Also, those who want two-story houses will not find what they want in the prefab market.

The availability of labor will be an important factor. If there is plenty of labor, the conventional market will be accelerated and prefab will suffer. If, on the other hand, there is a great scarcity of labor, the big operator in home development will then turn to prefabricated homes faster by far than before the war.

Despite these objections, Keller expects to use a great volume of prefabricated homes himself at the same time that he builds higher priced conventional homes.

TAFT HEARINGS—

(Continued from page 94)

economic rents in dwellings that private enterprise could provide.

He pointed out that in his agency's planing for public housing post-war, a "no-man's land" of fifteen to twenty per cent was to be left between what private capital could provide and public housing must do. He declared it to be his hope that this no-man's land would be occupied by private enterprise as it found new methods and techniques to enable it to build more and more cheaply, and that public housing would not find it necessary to creep up into this area.

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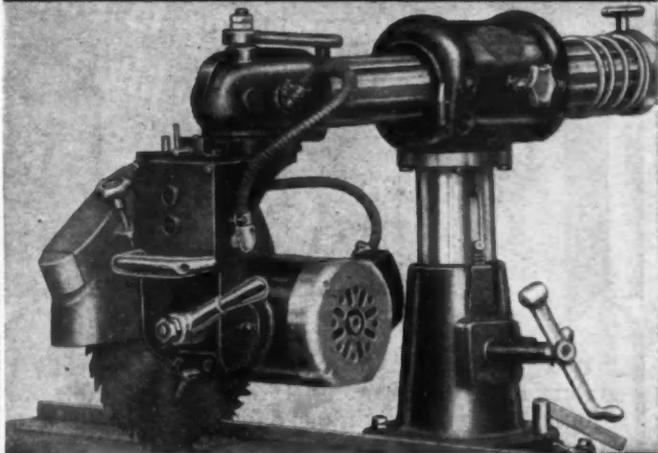


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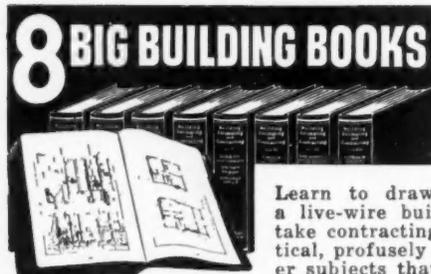
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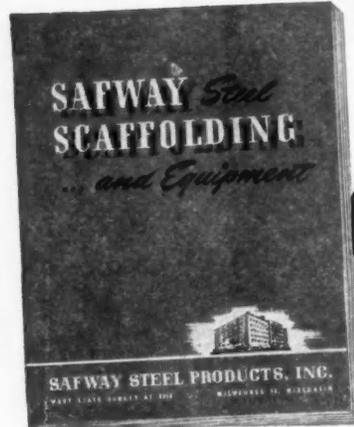
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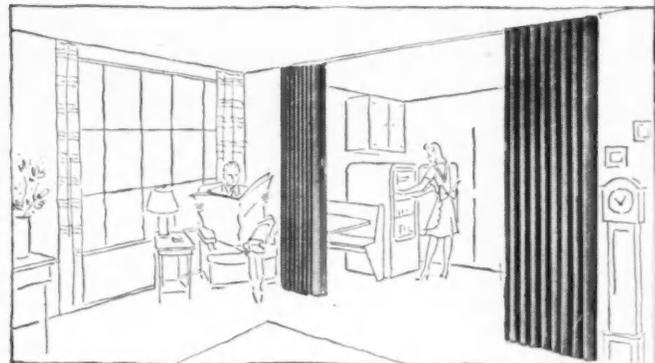
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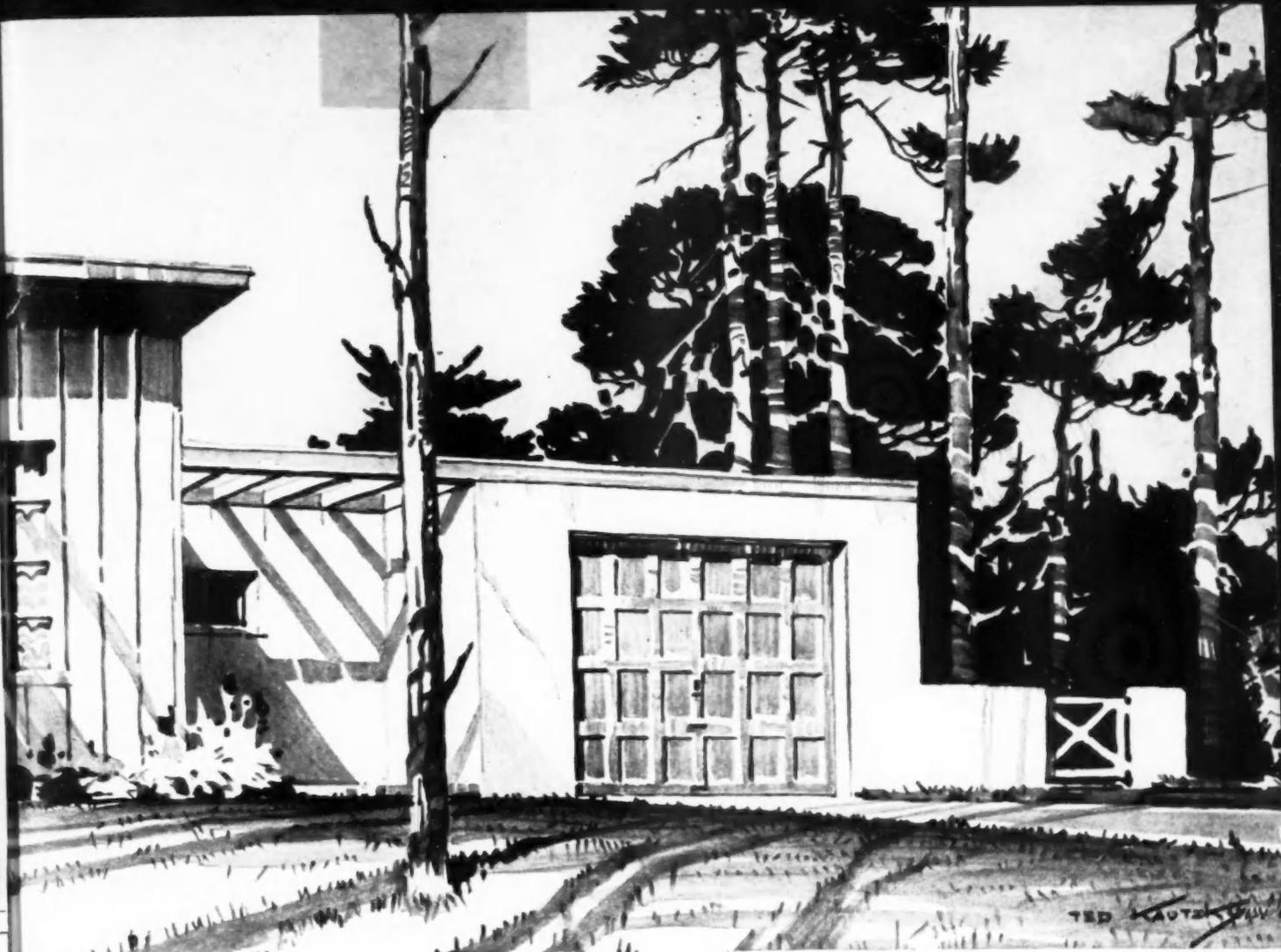
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