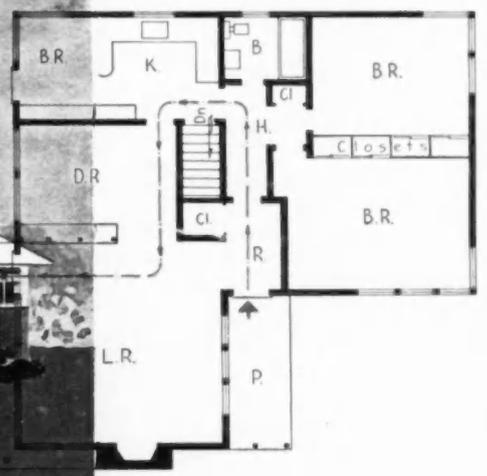
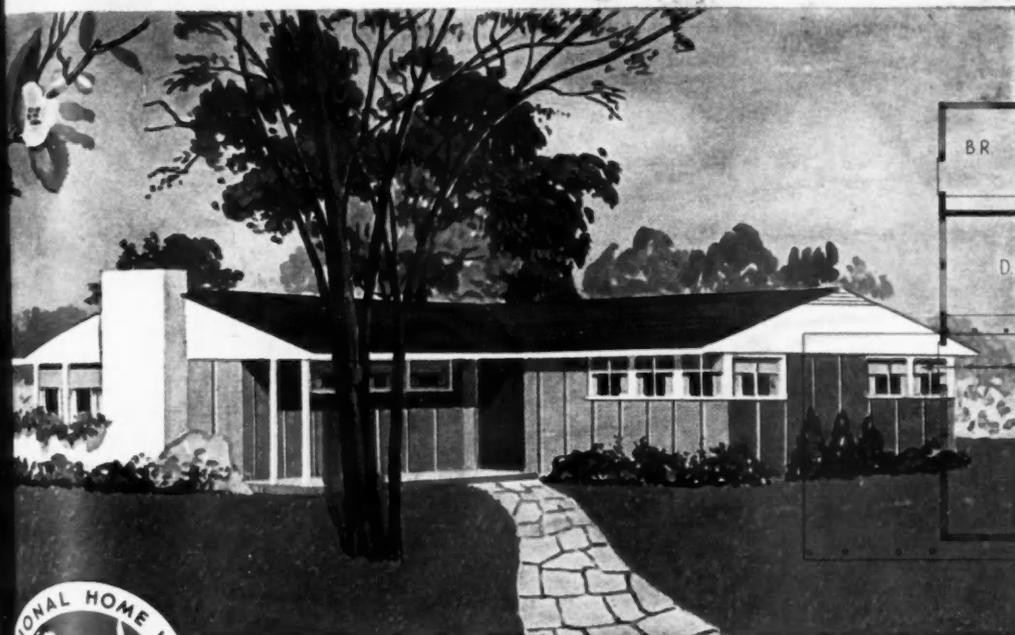


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# AMERICAN BUILDER

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BUILDING PAPER



American Builder National Home Week Houses



Complete  
Plans Inside



How to Plan, Build and Sell Homes Today

# How's this for Proof

## OF CELOTEX STAMINA AND DURABILITY?

A. J. McMullen, President and Manager

R. J. McMullen, Vice President

**OLEAN LUMBER & SUPPLY CORPORATION**  
FOREST PRODUCTS  
LUMBER, SHINGLES, SASH AND DOORS  
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OLEAN, N. Y.

Feb. 17, 1949

Mr. Marvin Greenwood  
General Sales Manager  
The Celotex Corp.  
120 So. La Salle St.  
Chicago, Ill.

Dear Sir;

While talking with a customer and explaining the merits of Celotex board, I showed him the use our company has made of Celotex. He seemed very much interested so I thought perhaps the Celotex Corp. would also be interested.

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Our company has handled Celotex since 1921, being one of the first dealers in this vicinity, and my personal opinion is that it is hard to beat Celotex for interior or exterior installation of any kind.

Hope this is of interest to you.

Very truly yours,  
*A. J. McMullen*  
President & Manager  
Olean Lumber & Supply Corp.

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This letter is evidence  
of the kind of performance  
that has made Celotex the  
Greatest Name in Insulation.  
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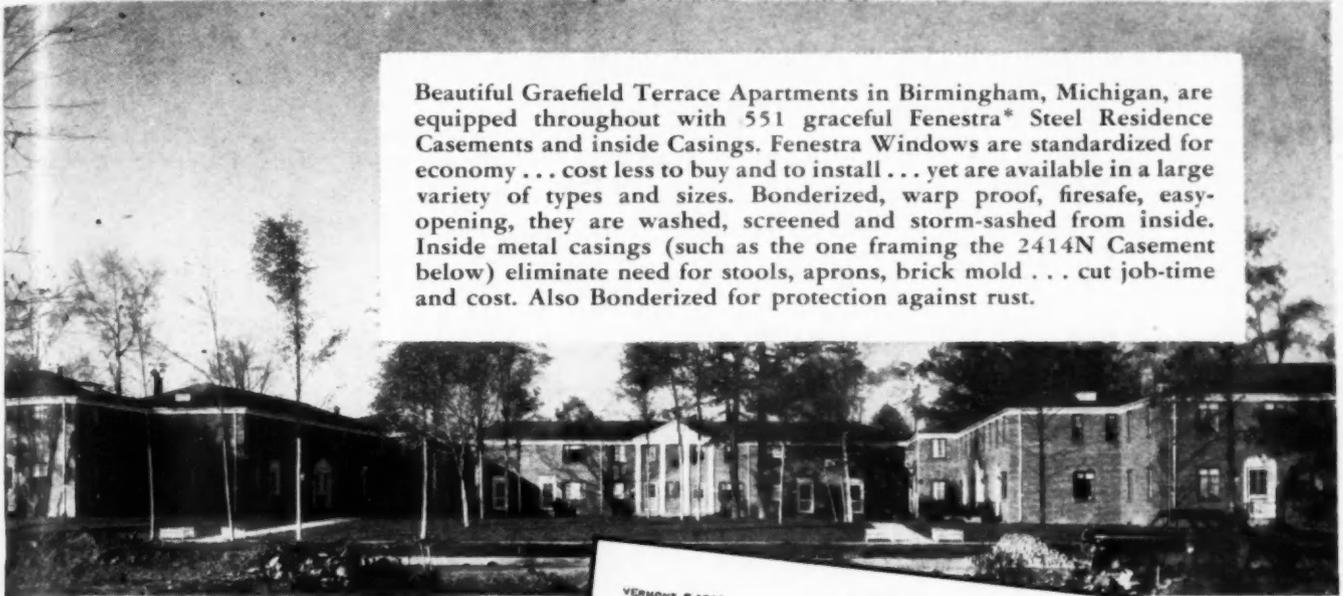
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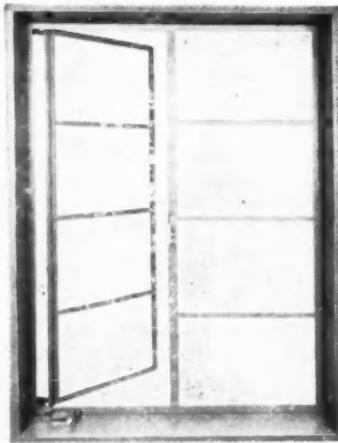
**THE CELOTEX CORPORATION, CHICAGO 3, ILLINOIS**



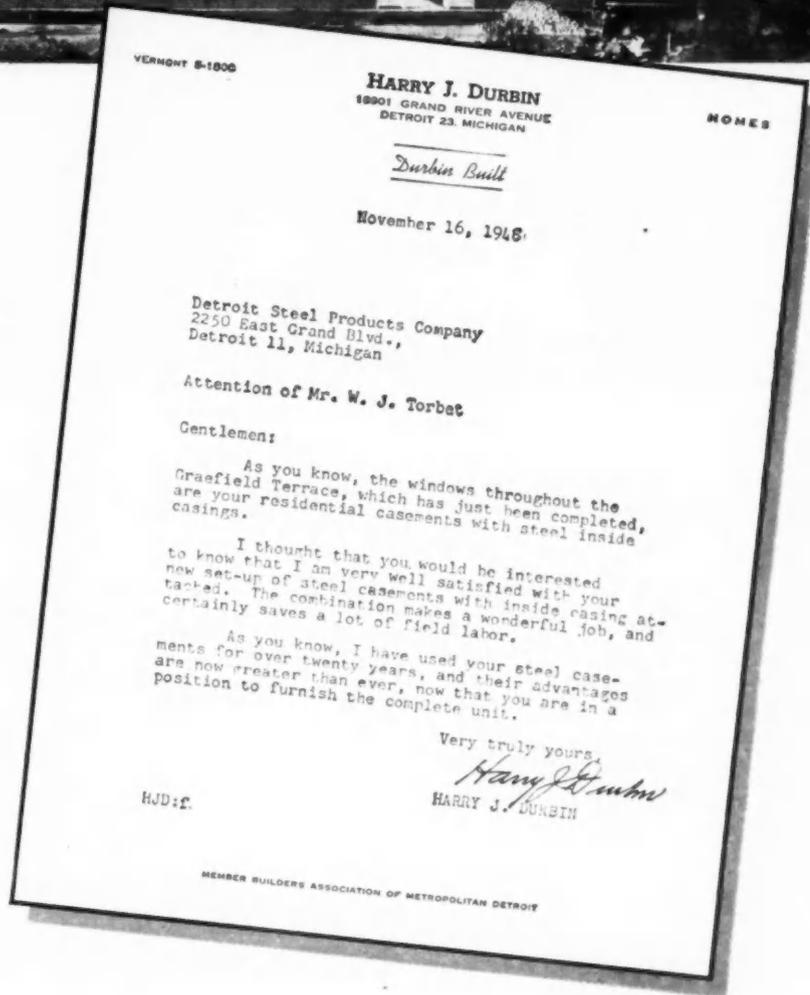
Beautiful Graefield Terrace Apartments in Birmingham, Michigan, are equipped throughout with 551 graceful Fenestra\* Steel Residence Casements and inside Casings. Fenestra Windows are standardized for economy . . . cost less to buy and to install . . . yet are available in a large variety of types and sizes. Bonderized, warp proof, firesafe, easy-opening, they are washed, screened and storm-sashed from inside. Inside metal casings (such as the one framing the 2414N Casement below) eliminate need for stools, aprons, brick mold . . . cut job-time and cost. Also Bonderized for protection against rust.

Architect: Merle William Hogan, Detroit.  
Contractor-BUILDER: Harry Durbin.

**"Advantages of your  
Steel Casements  
are now  
GREATER THAN  
EVER"**



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VERMONT 5-1800

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DETROIT 23, MICHIGAN

HONES

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November 16, 1948

Detroit Steel Products Company  
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Detroit 11, Michigan

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Very truly yours,

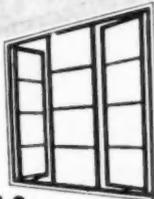
*Harry J. Durbin*  
HARRY J. DURBIN

HJD:f

MEMBER BUILDERS ASSOCIATION OF METROPOLITAN DETROIT

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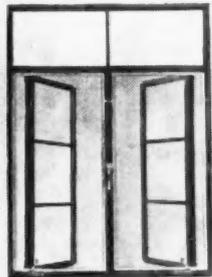
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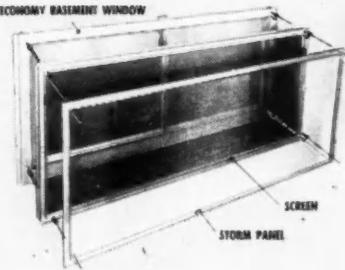
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## Publisher's Page



### How to Lick the Socializers

SINCE ATTENTION has been drawn on this page in *American Builder*, and editorially in its sister publication, *Railway Age*, to the rapid progress being made in rubbing out the middle class, by depriving it politically of its income, and of the disposition of the property it still owns—many letters have come in saying, in effect: "What you say is true, but what can I do about it?"

Two successful social movements suggest the answer, viz., the repeal of prohibition and the progress of the group known as Alcoholics Anonymous.

Prohibition held on politically long after it had lost any possible claim on majority opinion, because so few people "voted the way they drank". A veteran politician, who long supported the Dry cause although he personally opposed it, explained his action this way.

"The Drys are loyal. They are Drys first. As long as I vote Dry, they don't bother how I vote on any other question. The Wets, on the contrary, are Wets last; they are Republicans or Democrats or almost anything else first. I gain a lot of votes and lose none by voting Dry. I would lose a lot of votes and gain none by voting Wet."

The Wets, however, eventually became so exasperated at the hypocritical effrontery of political control of their drinking that they began to ask whether a candidate was wet or dry *first*, not last; and when

the politician's stand on that one issue became the primary criterion which swayed the voter's choice, prohibition vanished practically overnight.

Socialism would vanish with similarly startling speed, if people who oppose socialization of their own businesses would begin acting and voting against socialism of any kind, anywhere, or for any purpose. The delusion that a body politic, organized as free enterprise, can remain healthy in most of its members, while it nurses along the cancer of socialism in only a few of its organs, needs to be extirpated first. When that delusion is expelled, surgery on the socialism will follow fast enough—provided the infection has not gone so far it cannot be successfully excised.

Now to consider the other example, Alcoholics Anonymous: That organization has succeeded in curing thousands of otherwise hopeless drunks (1) because it does the reforming on the individual from within instead of applying coercion on him from without, and (2) because at least one of its founders, and quite likely both of them, got the idea that their "cure" would remain permanent only so long as they worked sacrificially to help other people in trouble similar to their own.

This tradition has been continued in the organization—the members strive to make others "free" (in their case, of alcoholism) not for

purposes of economic gain, but because they realize that working for the freedom of the other fellow is the only way they can stay free themselves. By contrast, most of the yells against socialism come only from the people under socialist attack.

So far, the doctors object to being taken over by the government, but builders and steel manufacturers and railroad men are little if any concerned. They do their complaining only when socialism attacks *them*. And the socialization of transportation does not worry the builders or the steel people any more than railroad men lose sleep for fear steel or housing will be socialized.

When business and professional men and other members of the "bourgeoisie" begin to vote and otherwise behave as genuine anti-socialists, even at some self-sacrifice, instead of merely applauding anti-socialist abstractions they hear at dinners, then the Reds will take to the woods as fast as the Drys did in the dying days of the Hoover regime. When they begin to oppose socialism for the "other fellow," regardless of some immediate gain they may get when socialism takes the other fellow over, then there will not be a microscope powerful enough to detect the socialism left on this side of the Atlantic. But this had better happen soon, because with socialism as with cancer, there comes a time when it is too late to operate.

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The author of the above editorial is James G. Lyne, co-editor of *Railway Age* and president of the Simmons-Boardman Publishing Corp.



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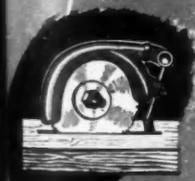


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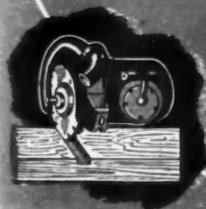
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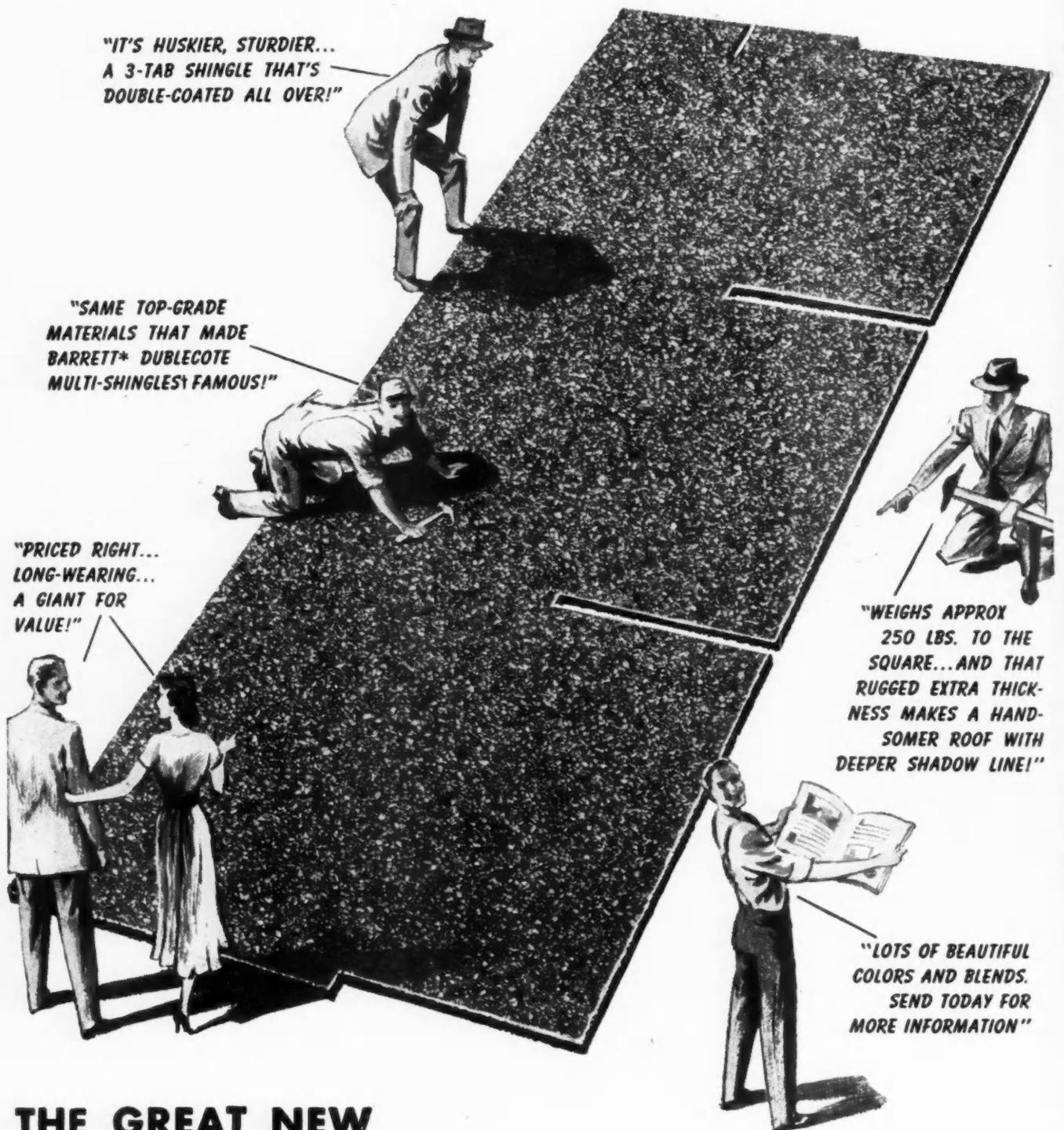
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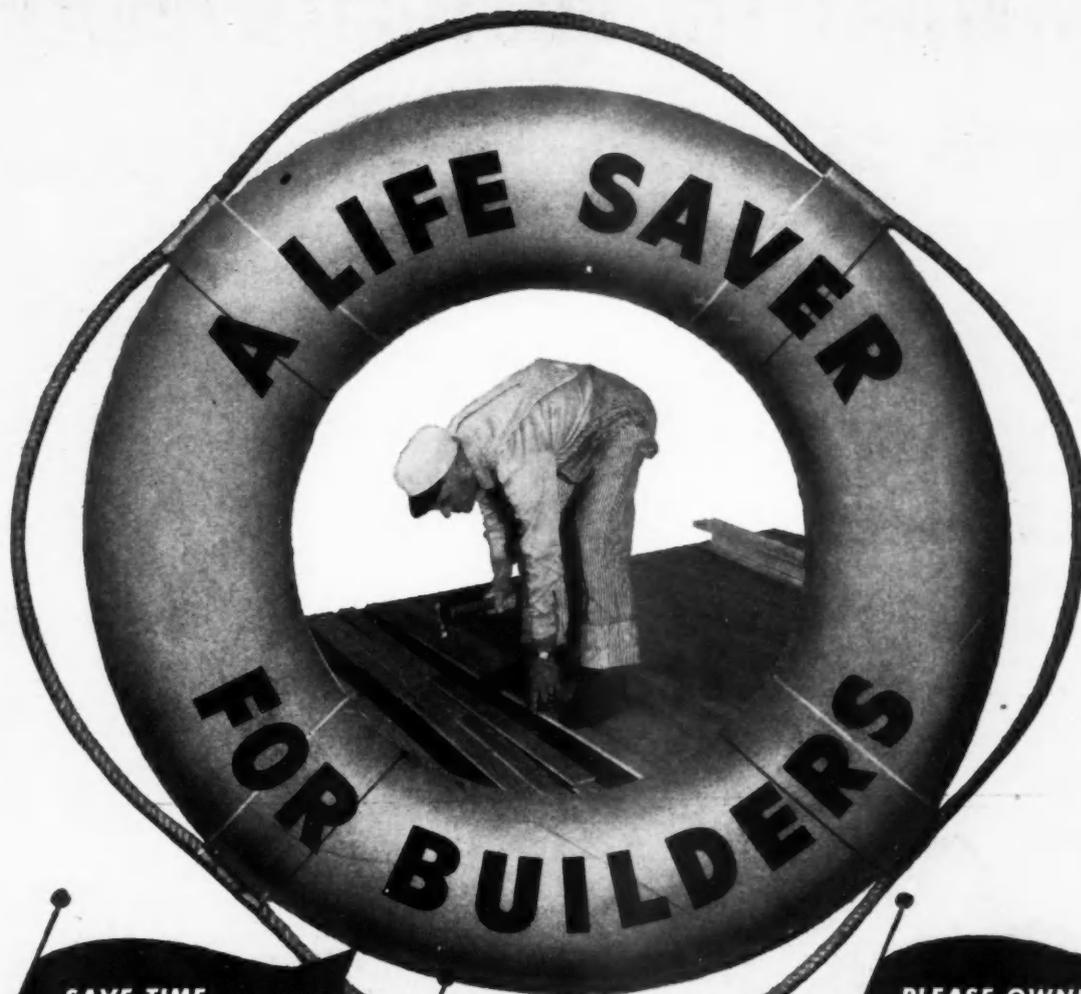


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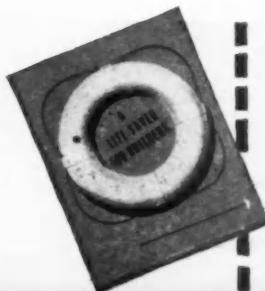
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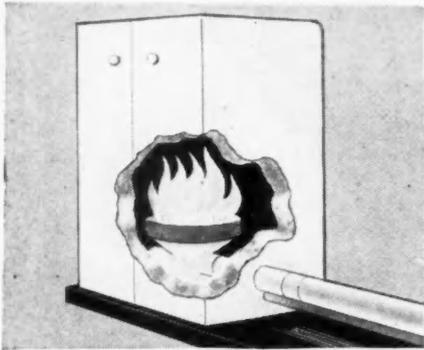
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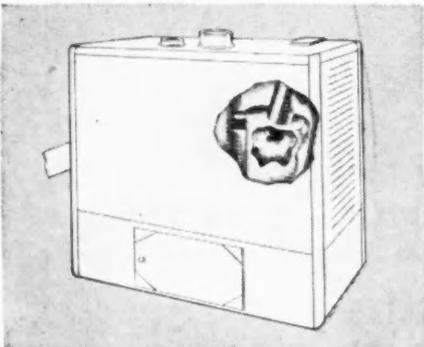
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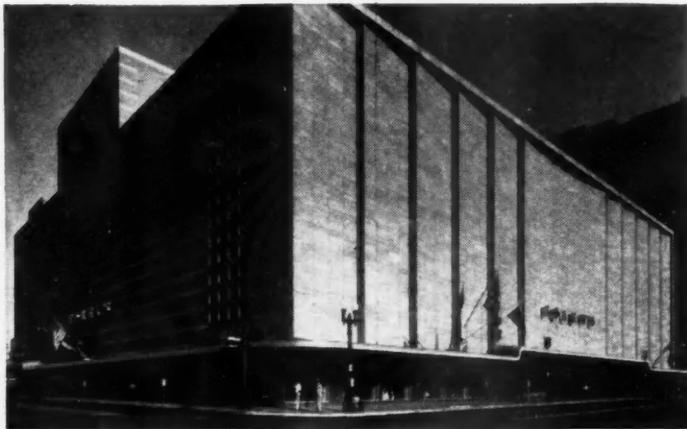
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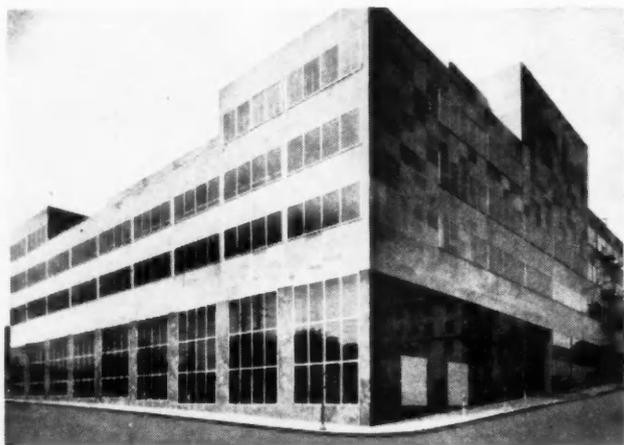
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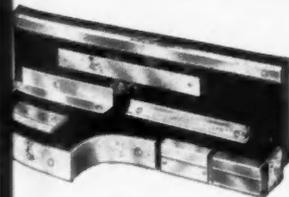
WAREHOUSE DISTRIBUTORS IN PRINCIPAL CITIES



**Order Now!**

YOU MAKE  
**100%**  
Gross PROFIT  
on this  
assortment

MODEL ON FRONT SHOWS  
ALL 9 SECTIONS



Yes, Nu-ART Moulding is really a money-maker!

This complete standard assortment costs you only half of what you sell it for . . . and you get the handsome display case and model free at no additional cost.

What's more, the standard assortment (illustrated below) includes nine all-purpose sections which have proven themselves to be the most popular and fastest-selling styles of all. However, if you desire, substitutions of other shapes may be made. Write today for complete information and prices.



WE PREPAY  
AND ALLOW  
FULL FREIGHT  
CHARGES  
ON THIS ASSORTMENT

# Get this handsome **DISPLAY CASE** AT NO EXTRA COST

with your order for this complete assortment of

## **NU-ART** ALACROME OR STAINLESS STEEL **MOULDING**

This handy, attractive display case is a sales-maker, as well as a profit-maker!

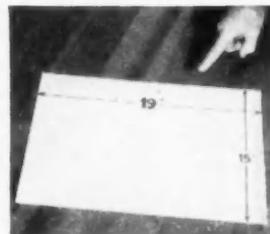
Convenient to use . . . takes little space . . . shows customers in a glance how beautiful Nu-ART Moulding will look in their homes.

The case contains an all-purpose assortment of 9 popular sections that home-owners can install easily. Packed in lengths of 6 ft., each length in kraft paper tubing to protect its highly polished finish, with screw holes already drilled. Necessary screws for each length comes in individual envelopes.



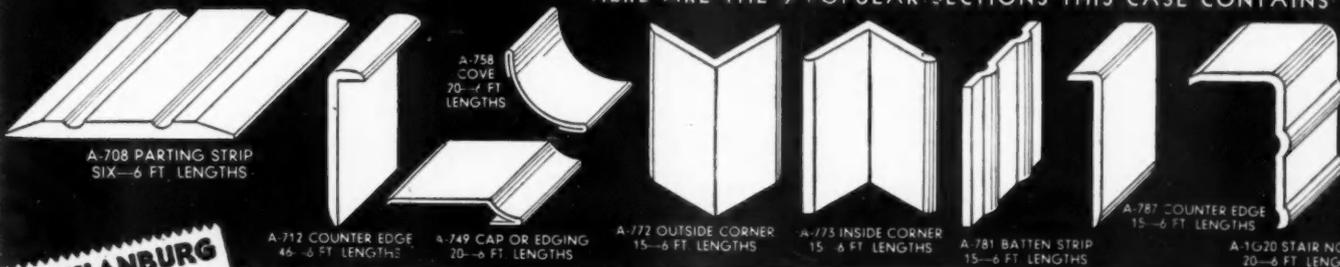
Display case is designed so that you can easily dispense from a ceiling as low as 7 ft.

Entire case occupies a floor space of only 15"x19".



**YOUR ORDER WILL BE SHIPPED SAME DAY RECEIVED**

HERE ARE THE 9 POPULAR SECTIONS THIS CASE CONTAINS



**MACKLANBURG-DUNCAN CO.**  
OKLAHOMA CITY 1, OKLAHOMA

# Linoleum, Tile, Carpeting— All Need This Better Base Panel



PLYBASE is a NEW GRADE of Interior-type Douglas fir plywood with a face of B (solid) veneer, and a back of D veneer. All sanded both sides. For full details on PlyBase use and application, see Sweet's File, Architectural, or send for the new 1949 Basic Plywood Catalog. Write the Douglas Fir Plywood Association office nearest you: Tacoma Bldg., Tacoma 2, Wash.; 1707 Daily News Bldg., Chicago 6; 1232 Shoreham Bldg., Washington 5, D. C.; The 500 Fifth Avenue Bldg., New York City 18.

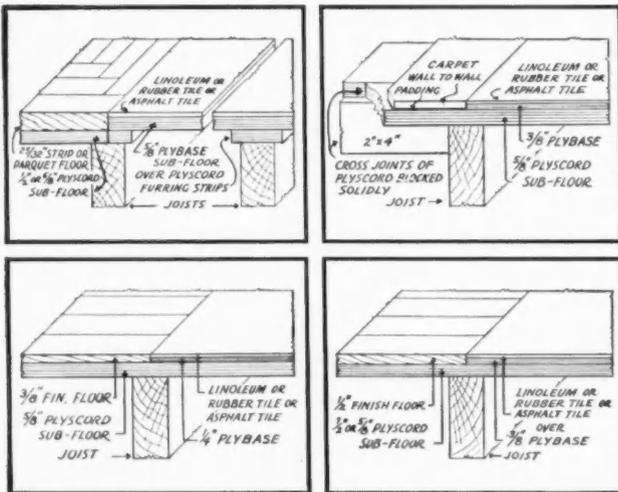
**PLYBASE THICKNESSES:**  
3/16", 1/4", 3/8", 1/2", 5/8", and 3/4".

**PLYBASE WIDTHS:**  
30", 36", 42" and 48".

**PLYBASE LENGTHS:**  
60", 72", 84", 96", 108", 120", and 144".

## PLYBASE Makes Coverings Look and Wear Better!

### SUGGESTED DETAILS FOR THE USE OF PLYBASE IN TYPICAL FLOORING JOBS



### For Subfloors—PLYSCORD

Under PlyBase or any type of finish flooring, PlyScord is the ideal subflooring. The big panels of PlyScord cover joists quickly, provide a smooth, even surface that's strong, rigid, tight and draft-free. Identified by the "grade-trademark" at the right.



**PlyBase** is the ideal base material for all types of modern wall-to-wall floor coverings. Joints are reduced to a minimum; the covering is smooth, firm . . . looks better, lasts longer.

Sanded smooth, PlyBase presents a tight, solid surface. The large panel sizes go down quickly, are easy to handle, save time and labor on the job. Use PlyBase on remodeling work, too, as a firm surface for new coverings over old, rough, worn floors. And on walls, PlyBase serves as a backing for wall tile and over finish coverings which require a smooth, solid backing.

Specify PlyBase—identified by the grade-trademark shown above!

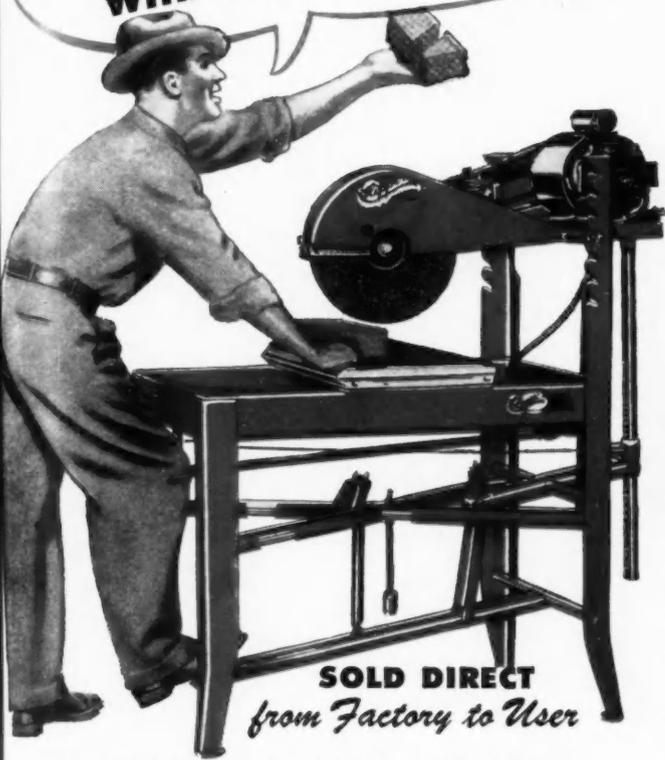
## Douglas Fir PLYWOOD

LARGE, LIGHT, STRONG

*Real Wood* Panels



LOOK! JOE... I made this cut with my Clipper in 5 seconds!



SOLD DIRECT from Factory to User



Yes... CLIPPER MASONRY SAWS Make Any Cut Quickly and Easily!

Yes, you can slice through the hardest materials in seconds with the 1949 Clipper Masonry Saws. Smoother, faster cutting action than ever before. You'll find Clipper's the Genuine answer to any masonry cutting problem. Contractors agree on the New wet or dry cutting Model HD for the 100% Answer to ALL masonry problems. Actually the HD is Two Saws In One—it will meet your DUSTLESS cutting requirements in confined areas and will cut dry for outside operations. Every Clipper Masonry Saw is GUARANTEED, "To provide the Fastest Cut . . . at the Lowest Cost . . . with the Greatest Ease . . . Any Time . . . Any Where!"

PACKED WITH 1949 FEATURES

DUSTLESS CUTTING WITH MODEL HD



The outstanding Self-Contained Circulating Water System on the 1949 Model HD makes possible Completely DUSTLESS Cutting. Yes, completely DUSTLESS cutting for intricate jobs in confined areas. When dust is no problem merely turn the pump valve for dry cutting. No, you don't have to disconnect the pump on the Model HD Clipper to cut dry for it is to eliminate such time consuming adjustments.



BLADE PRESSURE EQUALIZER

That smooth, sensitive cutting action on every Clipper is a result of another exclusive Clipper feature, the Pressure Equalizer Spring with its Automatic Action.



ADJUST-A-CUT CONTROL

Clipper's exclusive "Adjust-A-Cut" Control—just pull the knob to instantly lower or raise the cutting head for materials of varying sizes. A "One-Man" operation!



SNAP-ON BLADE COVER

A Clipper feature that lets you cut wet—with-out getting wet! An outstanding safety feature for both wet and dry cutting operations.

Not 1... But Nine New 1949 Models!

Nine New 1949 Clipper models available on FREE TRIAL and each with outstanding features for smooth, fast and economical Clipper Cutting Action. See why Clipper, the original masonry saw, is acclaimed OUTSTANDING! See the "Adjust-A-Cut" Control; "Snap-On" Blade Guard Cover; and the "Streamlined" Ball Bearing Conveyor Cart. Remember—not 1 but NINE MODELS!



FREE TRIAL

Nine Clipper Models available on FREE TRIAL. Priced from \$195 . . . Shipped Direct from Coast to Coast Clipper Factory Branches.

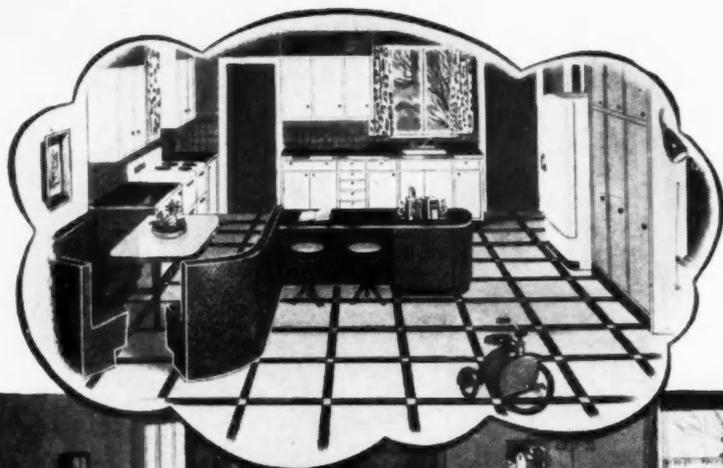
TEAR OFF AND MAIL

CLIPPER MANUFACTURING CO., 2808 WARWICK, KANSAS CITY 8, MO.

Send TODAY information on the FREE TRIAL Offer and complete literature and prices on the 1949 Clipper Masonry Saws.

NAME .....
COMPANY .....
STREET .....
CITY ..... ZONE .....
STATE .....

Clipper MANUFACTURING COMPANY KANSAS CITY 8, MO.
NATION-WIDE DIRECT FACTORY SERVICE
Factory Branches Philadelphia • St. Louis • Cleveland • Austin, Tex. • San Francisco



**BUT** how about  
the cost?



**M**ANY remodeling and construction costs come down to earth — and quality goes up — when you build with time-proved Masonite brand hardboards.

There's one for every purpose. In remodeling this kitchen, for example, smooth, durable Masonite Tempered Presdwood was used for the upper walls, flush doors and work surfaces. Standard Presdwood made the cabinets — for Presdwood is one of the finest woods for cabinets at any price. Masonite Temprtle for wainscoting looks, wears and cleans like tile. And — for

the dramatically unusual — rugged Masonite Leatherwood, with the look and feel of fine, Spanish grain leather, was used for the inviting breakfast nook.

Seven different Masonite hardboards are now available. They haven't gone up in price like some alternate materials. Easy to install and with virtually no maintenance cost, they are the practical answer to today's home and commercial building problems. These "wood-made-better" hardboards are available at lumber and building supply dealers. Masonite Corp., Chicago 2, Ill.

**MASONITE**<sup>®</sup>  
  
**PRODUCTS**

- STANDARD PRESWOOD
- TEMPERED PRESWOOD
- BLACK TEMPERED PRESWOOD
- LEATHERWOOD • TEMPRTILE
- PANELWOOD • TEMPERED DUOLUX

*"Presdwood" and "Temprtle" are registered trade-marks. "Masonite" signifies that Masonite Corporation is the source of the product.*

**FREE SAMPLES!**

**MASONITE CORPORATION**  
Dept. AB-4, 111 W. Washington St., Chicago 2, Ill.

Please send me samples of Masonite hardboards and interesting literature about their application.

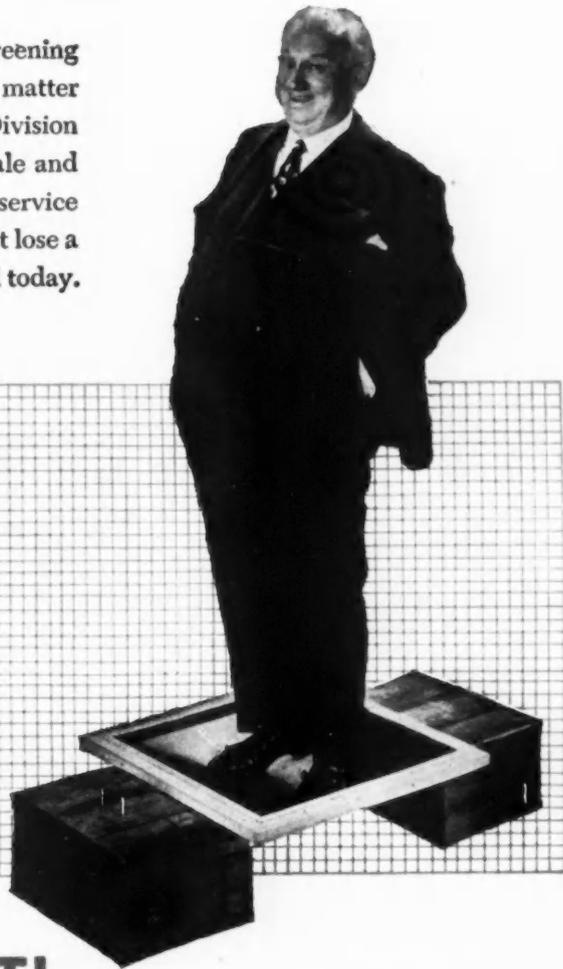
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# YOU CAN GET IT FAST!

No more "out of stock" headaches in the height of your screening season. Now you can get Firestone *Velon* screening *fast* — no matter how fast your stock is going! Firestone Industrial Products Division can make immediate shipment on receipt of order to wholesale and jobbing outlets in all major trading areas. That means quick service for you — with only a normal inventory. That means you needn't lose a single sale for Firestone *Velon* screening, so heavily in demand today.

# Firestone *Velon*\* SCREENING



# YOU CAN SELL IT FAST!

Just mention *Velon's* advantages to your customer and you have all the extra values that make a customer out of every prospect:

**VELON SCREENING WON'T RUST** — *can't bleed or stain the house front . . . never needs painting . . . safe to leave up, all year 'round.*

**VELON SCREENING WON'T ROT** — *rigorously tested and proved in all climates. Impervious to sun, cold, salt spray, heavy wind and water.*

**VELON SCREENING WON'T BULGE OR SAG** — *amazing impact resistance and perfect recovery. This 235 lb. man actually stood on a *Velon* screen for 15 minutes yet it returned to its original shape almost immediately.*

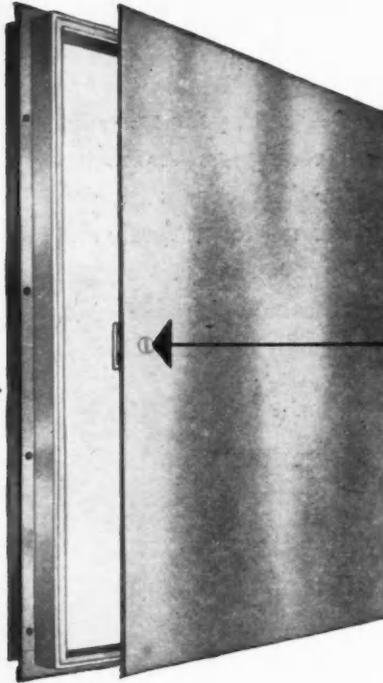
And *Velon* is priced competitively *low* for volume business. Ask your wholesaler for free *Velon* screening merchandising aids — consumer folders, window streamers, counter cards, newspaper mats and *Velon* screening samples.



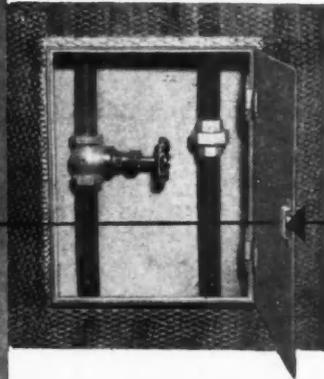
YOU CAN DO IT LIKE THIS,  
BUT THERE'S AN EASIER WAY!



**Milcor Steel  
Access Doors**  
(flush with wall)



Every house needs at least one  
Milcor Steel Access Door. Public  
buildings need hundreds!



A SCREW DRIVER  
DOES THE TRICK!

Instant Access to Key Points in plumbing, heating,  
electrical, and refrigeration systems

Ready to install • No special framing • Painted with rust-inhibiting prime coat • Concealed hinges • Flush, screw-type lock • 11 Sizes — from 8 3/8" x 8 3/8" to 24 3/8" x 36 3/8"  
• For plastered or non-plastered walls • With or without expanded metal wings.

*look better, last longer, cost less*

— and earn you credit for delivering the best job at the least cost!

Yes, these handsome flush-type Milcor steel access doors actually cost less than the old type!

For one thing, they cut labor costs and building time. They are installed quickly and easily—flush with the wall or ceiling. You can paint or paper right over them. And they eliminate costly special construction required by other types of installation.

These advantages speed up your jobs — and increase your profits.

When you deliver the kind of job that adds to your reputation as an "up-to-the-minute" builder, your customers are satisfied and stay satisfied. Recommend and use Milcor steel access doors on every job — it pays in more ways than one!

**INLAND STEEL PRODUCTS COMPANY**

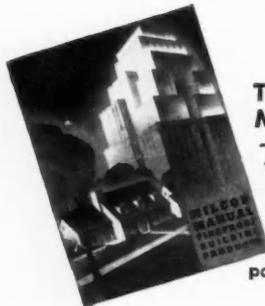
FORMERLY MILCOR STEEL COMPANY



MILWAUKEE 1, WISCONSIN

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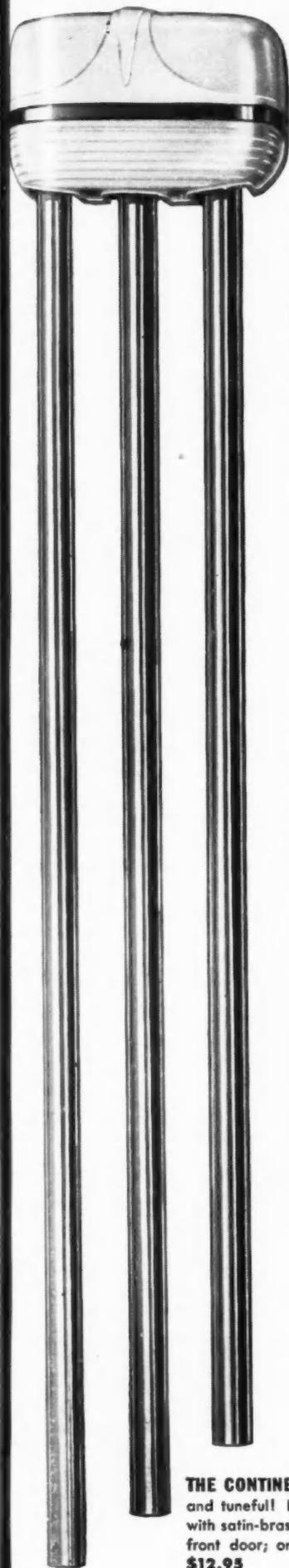
F-322H



This 20-page  
**Milcor Manual**  
—with complete information on the Milcor Metal Lath Products line — is yours for the asking! Tear out coupon and mail today!

INLAND STEEL PRODUCTS COMPANY, 4101 West Burnham Street, Milwaukee 1, Wisconsin  
Send me (without obligation) a Milcor Manual with full details on Milcor Steel Access Doors and other products in the complete Milcor Metal Lath line.

Name..... Title.....  
Company.....  
Address.....  
City..... (.....) State.....



WHEN WOMEN SEE THESE  
*"Dress-ups"*  
 YOUR HOUSES SELL FASTER!

Trust women to notice accessories that *dress up* a house! Trust women to remember them, *talk* about them . . . and decide *because* of them which house they'll buy.

NuTone has a "Package" of "dress-ups"—all tremendously appealing to women. A handsome illuminated brass door knocker . . . luminous push buttons . . . tuneful door chimes (instead of nerve-wracking door bells) . . . and quiet ventilating fans to carry off kitchen heat and odors.

Add this "Package" to your new houses—and to houses that are slow-selling. A small investment—a minor addition to the mortgage—but it can make a *lot* of difference!



Write for full information to NuTone, Inc., Dept. A-49, 1451 Merchandise Mart, Chicago 54, Ill.

SALES OFFICES: NEW YORK  
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**NUTONE DOOR CHIMES**  
 14 models, including de luxe chime-and-clock combinations. \$3.95 to \$69.95, list.



**NUTONE TRANSFORMERS**  
 16 and 24 volts; can't burn out.



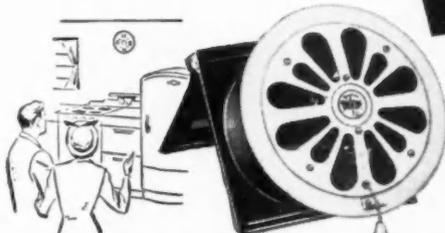
**NUTONE DOOR KNOCKERS**  
 2 models; \$2.95 and \$4.95, list.



**NUTONE PUSH BUTTONS**  
 6 styles, all luminous—they glow at night. 35¢ to \$2.50, list.



**NUTONE VENTILATING FANS**  
 5 models, built-in, for wall or ceiling. \$24.95 to \$34.95, list (incl. Fed. ex. tax)



"WONDERFUL! A VENTILATING FAN!"

**MODEL NV-18**—Wall model, quiet and efficient—for all wall thicknesses. Fan starts automatically as shutter opens. List \$24.95 (incl. Fed. ex. tax)



"SEE! A KNOCKER THAT LIGHTS UP!"

**THE BEACON**—Illuminated cast-brass door knocker, with name plate and keyhole spotlight. Needs no wiring. List \$4.95



**THE CONTINENTAL**—Beautiful and tuneful! Ivory plastic cover, with satin-brass tubes. Two notes, front door; one note, rear. List \$12.95

farmers, homebuilders and industry  
are asking for lumber  
that's



*build  
with  
lumber  
that's*

Farmers use "PENTA"-protected wood for barns, hen houses, culvert bridges, and fence posts.

Homebuilders appreciate and want "PENTA"-treated wood because it safeguards their investment. Also, "PENTA"-protected wood can be obtained with a water repellent which

increases the wood's dimensional stability and its resistance to check.

In industrial and commercial building, the lower maintenance cost, longer life and greater salvage value of "PENTA"-treated lumber is becoming increasingly important.

PENTACHLOROPHENOL is the chemical that protects wood from decay and termites. Build with "PENTA"-treated wood and add to your reputation as a quality builder. Build with "PENTA"-treated wood and build greater customer satisfaction.

For information about where to get "PENTA" solutions and "PENTA"-protected lumber, write Dow, Dept. PE 39.

THE DOW CHEMICAL COMPANY  
MIDLAND, MICHIGAN



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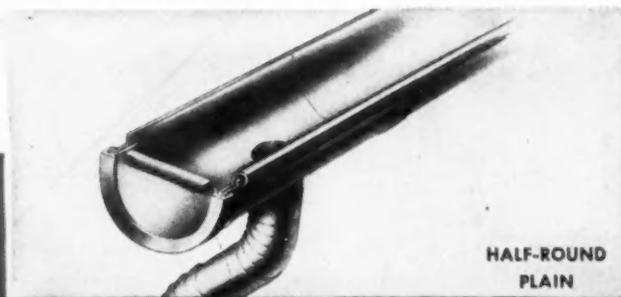
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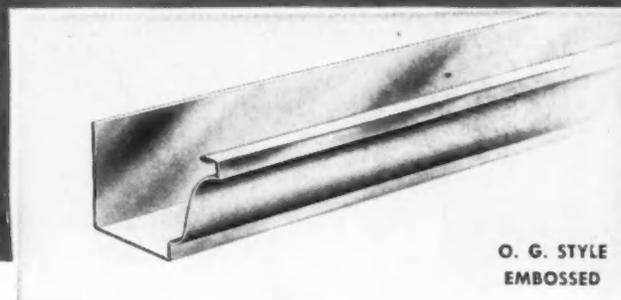
low-cost feature that helps sell houses!

# REYNOLDS *Lifetime* ALUMINUM

## Gutters and Downspouts



HALF-ROUND PLAIN



O. G. STYLE EMBOSSED

- **Rustproof Permanence**  
at about half the cost of other rustproof materials
- **Non-Staining**
- **Exclusive Reynolds Stipple-Embossed Finish**

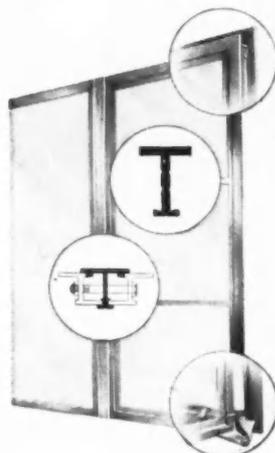
A sales feature that prospective homeowners can see and you can advertise, for very little more than the cheapest gutters. No painting, ever. No staining of walls. Simple slip joints, no soldering. Complete fittings. Half-round also available in plain finish. See your dealer or write for folder. **Reynolds Metals Company, Building Products Division, Louisville 1, Ky. Offices in 32 principal cities.**

IF YOU SEE RUST YOU KNOW IT'S NOT ALUMINUM



REYNOLDS *Lifetime* ALUMINUM BUILDING PRODUCTS

WORLD'S LARGEST PRODUCER OF ALUMINUM BUILDING PRODUCTS



for any type of construction  
**REYNOLDS ALUMINUM RESIDENTIAL CASEMENT, FIXED and PICTURE WINDOWS**

Four-point superiority: mechanical joints, extra deep muntins, full range of mullions, wide-opening extension hinges. 98 types and sizes. Write for 16-page booklet.

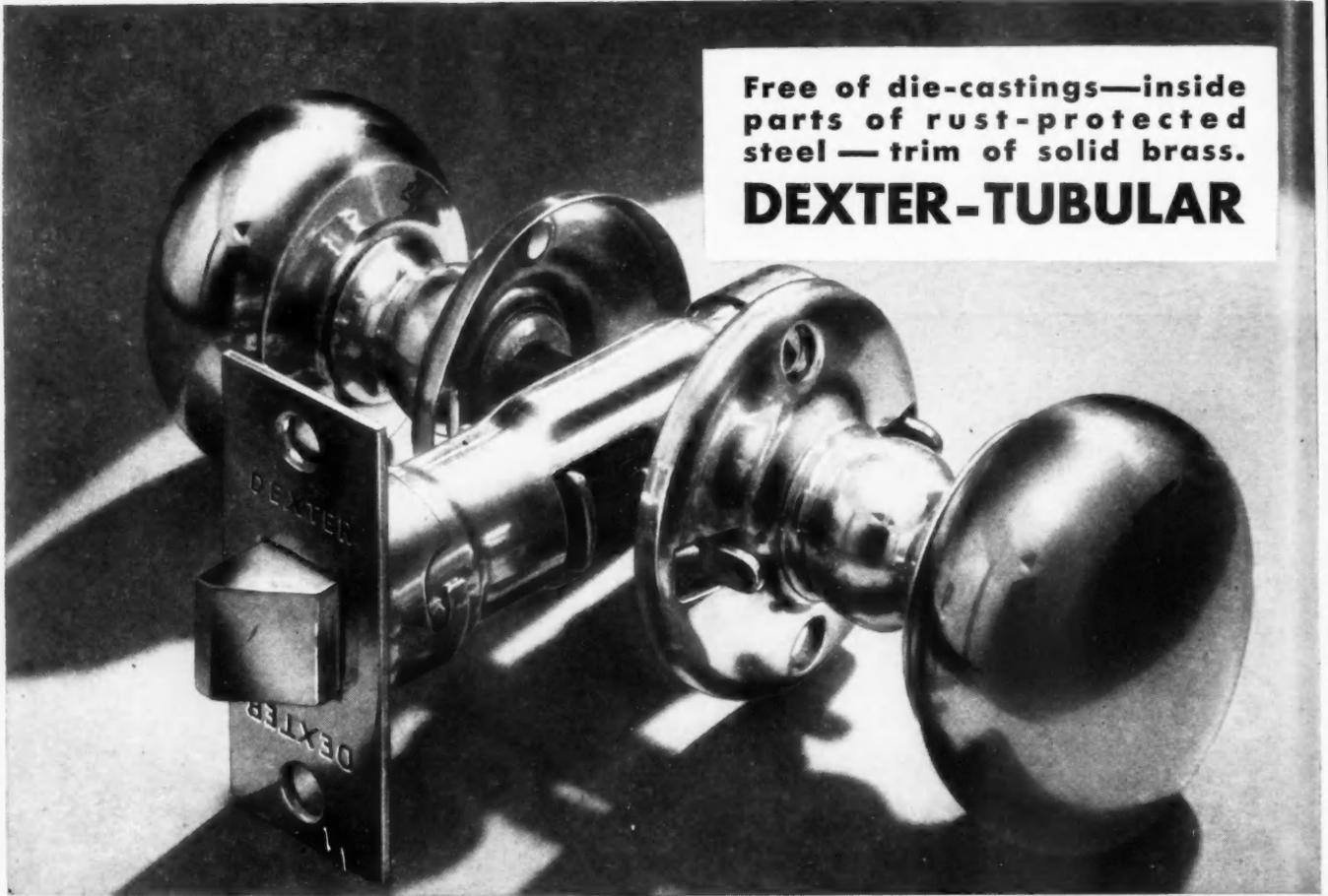
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Please send detailed literature on the products checked:

- \*Corrugated
- \*Snap-Seal Roofing
- Industrial Corrugated
- \*Built-up Roofing
- Reflective Insulation
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- Windows
- \*Stipple-embossed finish!

Name \_\_\_\_\_

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Free of die-castings—inside parts of rust-protected steel—trim of solid brass.  
**DEXTER-TUBULAR**

## Dexter's are the Real Mc Coy!

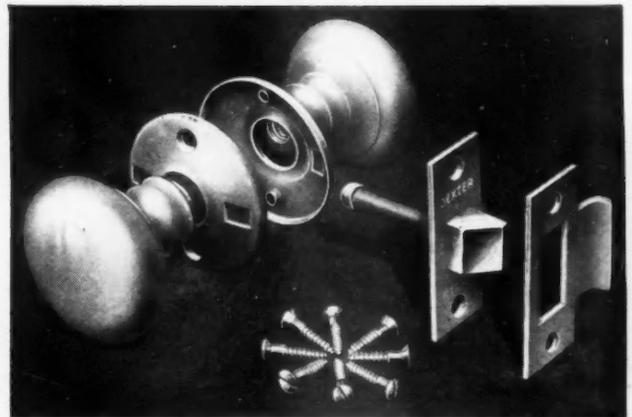
DEXTER'S HAVE TO BE BUILT to stand up and take it, for they have a lifetime warranty to live up to. That's why nothing but the genuine stuff goes into them. Solid brass for all outside trim—rust-proof cold-rolled steel for interior working parts—not a die cast or other soft metal part in the whole product.

That's the way it is with Dexter's— all the way through, in every detail. There's something *genuine* about Dexter's which makes them a pleasure to install—and when you add to this the many exclusive mechanical features, you find Dexter's are tops from every angle.

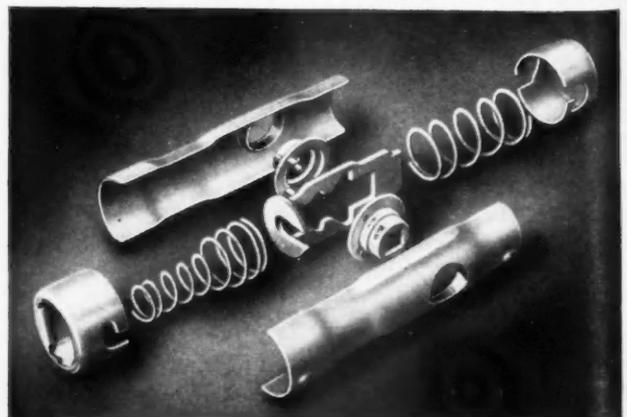
**NATIONAL BRASS COMPANY**  
 Grand Rapids, Michigan

**MAKERS OF BUILDERS, CABINET,  
 SCREEN DOOR AND SHELF HARDWARE**

*In Canada: Dexter Lock Canada Ltd., Guelph, Ontario*



**SOLID BRASS, outside** } *that's the way*  
**ALL STEEL, inside** } *it is with*  
**DEXTER-TUBULARS**



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Here's why

# Radial SKIL Saw

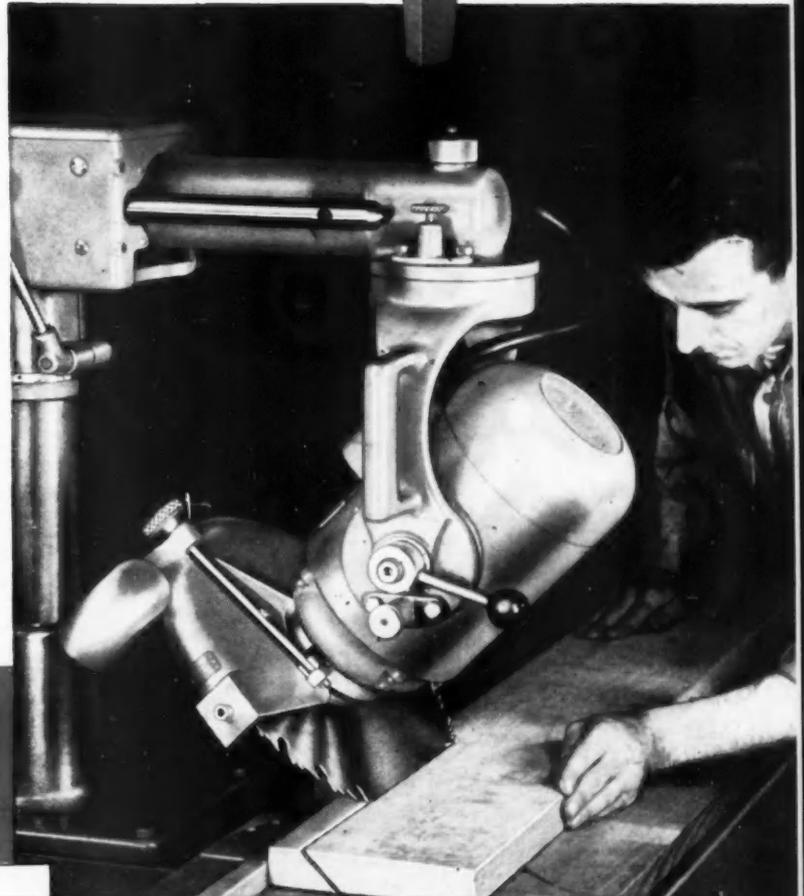
is your best bet for fast... precise  
... high-production sawing!



**Exclusive RETRACTABLE ARM!  
DOZENS OF SUPERIOR FEATURES!**

Radial SKIL Saw is tops... for speed... for precision... for ease of operation. Finger-Tip control... quick, simple adjustments (all made from the front)... constant accuracy and precision! They're all yours with this better tool!

Look at its features! Everything about Radial SKIL Saw adds up to peak production... finest performance... lowest maintenance costs and long service. Ask your SKIL Tool Distributor to demonstrate Radial SKIL Saw today!



**ALL THESE SUPERIOR  
DETAILS SAVE STEPS... SAVE TIME...  
SAVE MONEY FOR YOU!**

**FAMOUS RETRACTABLE ARM**

- **Slides freely** on double-row ball bearings!
- **Stays accurate** for precision cutting. Extra bearings at top front and lower rear, easily adjustable for true alignment!
- **More room for job set-ups** because sawing head moves out of the way!
- **Clear-view sawing** with layout marks always in sight!

**FRONT ADJUSTMENT OF ALL CONTROLS**

- Retractable elevator handle in front.
- Quick adjustments for all cuts without leaving operating position.

**DOZENS OF SPECIAL FEATURES**

- One-piece saw guard... easy to remove without tools.
- Plunger pin locks for rapid adjustment of sawing head.
- Felt wipers keep arm rails always clean.
- Flexibility to make all compound cuts.
- Ripping scale mounted on arm for accurate measurement.
- Tapered wedge lock for fast, precise location of straight and both right and left 45° cut-offs.
- Enclosed dustproof motor.
- Unique design.
- Finest engineering.
- Top quality workmanship and materials.

SKIL TOOLS ARE MADE ONLY BY SKILSAW, INC.

**SKIL** Tools

**SKILSAW, INC.**  
5033 Elston Avenue, Chicago 30, Ill.  
Factory Branches in Principal Cities  
in Canada: SKILTOOLS, LTD.  
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LEVITT AND SONS, INC  
MANHASSET, N. Y.

WILLIAM J. LEVITT  
PRESIDENT

From the desk of  
LARRY GILMAN



*Thanks a lot, Bill -  
We couldn't have said  
it better ourselves!  
L.G.*

Gentlemen:

I think you should know why we selected Cellulite for the insulation of all the houses that we intend to build in 1949.

First, from past experience, we have found that it does as good or better a job than any insulation we have ever used before.

Second, our mechanics like it because it's easy and pleasant to work with and causes no damage to their hands.

Third, our supply house and transportation problems are minimized because it is easily compressed into small space for storing and transporting and immediately fluffs back to its original thickness when workmen are ready to install it.

Fourth, it is so light and easy to install that tangible savings result from its use.

There is a fifth reason — and equally important. Our business relationship has been so pleasant that it contributes immeasurably to the smoothness of a rather complicated production line. Good luck to you, and the best of everything in 1949.

Very truly yours,

The Gilman Brothers Co.  
Gilman, Connecticut

MAIL THIS COUPON TODAY!

THE GILMAN BROTHERS COMPANY, Gilman 6, Connecticut

We're interested in receiving information about:

- Cellulite Cotton Insulation
- Cellulite Acoustical Blankets for sound deadening

Name.....

Firm.....

Street Address.....

City..... Zone..... State.....

— and have you heard about  
Cellulite's new acoustical blankets  
in 64" and 72" widths?

# YOU CAN BE SURE.. IF IT'S Westinghouse



## THESE BOOKS CAN HELP YOU make your house the Hit of National Home Week

Yes, there's still time to plan for the rugged selling days ahead . . . to make your Exhibit House the Hit of the Home Show.

Here are ideas developed especially to help you do that.

First, a folder that explains a program designed to help you cash in on the great National Home Week activity . . . the planning help that's available . . . and the merchandising package that will help you pull the crowds to your house . . . then sells

them the outstanding features and superior values you offer.

Second, a planning book that tells what people want in new houses, gives planning data to help you develop plans that meet those demands most effectively, efficiently and economically, describes and illustrates four houses where these principles have been tried and proved.

Yes, there's still time. Mail the coupon today. There's no obligation, of course.

**Better Homes Bureau  
Westinghouse Electric Corporation  
P. O. Box 868, Pittsburgh 30, Pa.**

*Please send my free copies of "How to Make Your House the Hit of the Home Show" and "Planning Book for Electrical Living Homes".*

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

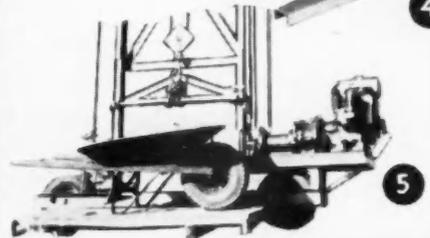
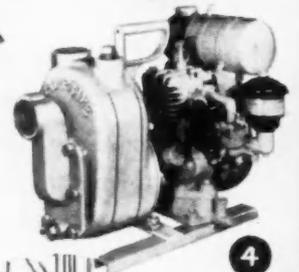
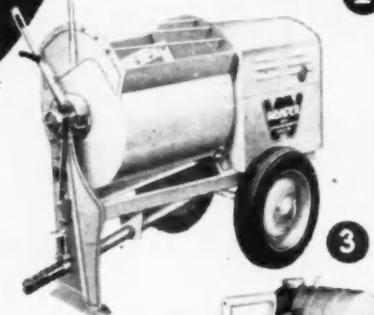
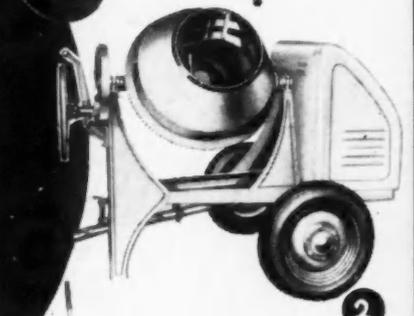
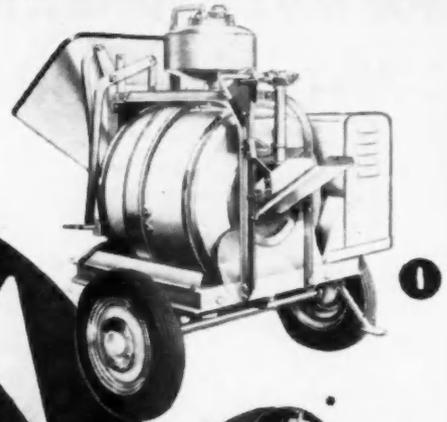
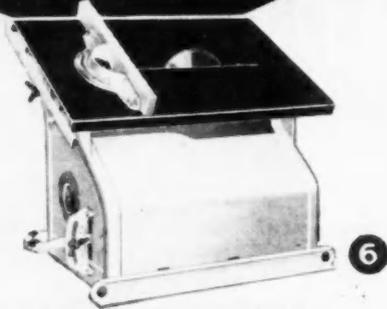
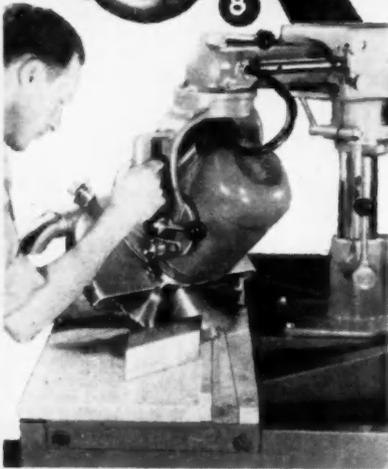
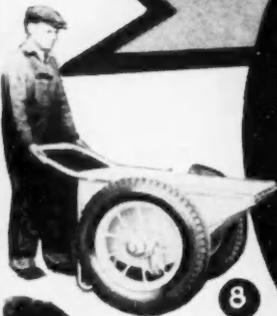
G-10064



# Westinghouse

## Better Homes Bureau

**For Performance  
You Can Depend  
On!**



**8 GOOD REASONS WHY THE CMC LINE IS TOPS**

1. CMC 3 1/2 S NON-TILT—A fast traveller on-the-job and on the road. The last word in mixing perfection and maximum dependability.
2. CMC 3 1/2 S TILTER—The greatest value in the tilting mixer field. "Figure 8" mixing means better concrete in less time.
3. CMC SUPER "6" "HOE TYPE" MIXER—Often pays for itself on first job. Triple action hoes with adjustable blades. Does FINEST mixing.
4. CMC DUAL PRIME CENTRIFUGAL PUMP — Unmatched self-priming speed. Exclusive CMC dual jet construction assures peak performance.
5. CMC ROLL-O-HOIST—Works like a ladder on wheels. Soundly engineered and a real money and time saver.
6. CMC KOST KUTTER—Makes more cuts faster. Does the work of much heavier saws. Sturdy — versatile — Streamlined.
7. CMC RADIAL SAW—Finger tip control and widest range of uses have made it the favorite among builders. Does everything faster, better, easier!
8. CMC DUMPOVER CARTS—Easier wheeling — easier dumping. No dead-weight to lift when dumping. Built to last longer.

THE QUALITY LINE SINCE 1909.

**CMC equipment is sold and serviced by leading equipment distributors everywhere.**

"...we shall continue using it at every opportunity."

**BRADLEY**  
PRE-FINISHED

STRAIGHT-LINE  
HARDWOOD FLOORING  
OAK BEECH PECAN

"Our first experience with Bradley Prefinished flooring was in 1942. That we made a wise decision in selecting it was proved repeatedly as our work progressed. No time was required for sorting, its tongue-and-groove fitting accelerated laying. Pre-finished at your factories, it required no machine sanding and finishing after it was laid. Its durable, uniform and lustrous finish, subjected to the constant handling and work of the mechanics in laying, was restored simply by cleaning.

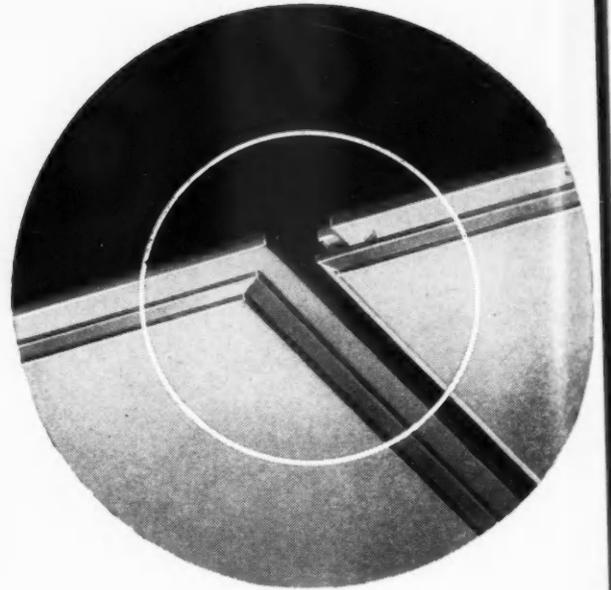
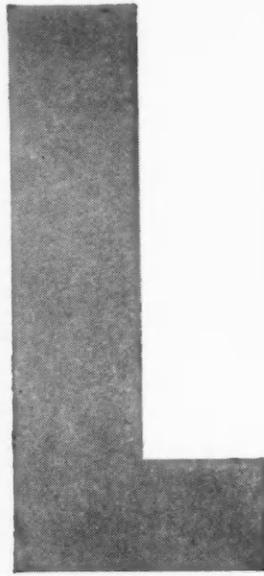
"Since then we have used Bradley Pre-finished Oak Flooring for about 95 jobs, with the same satisfactory experience. Needless to say, we shall continue using it at every opportunity."



STANDARD of COMPARISON  
in  
PRE-FINISHED HARDWOOD  
FLOORING

*What's behind this contractor's good opinion of Bradley Pre-finished is covered in our Data and Specifications. Write now for your copies.*

**BRADLEY LUMBER COMPANY of Arkansas**  
WARREN, ARKANSAS

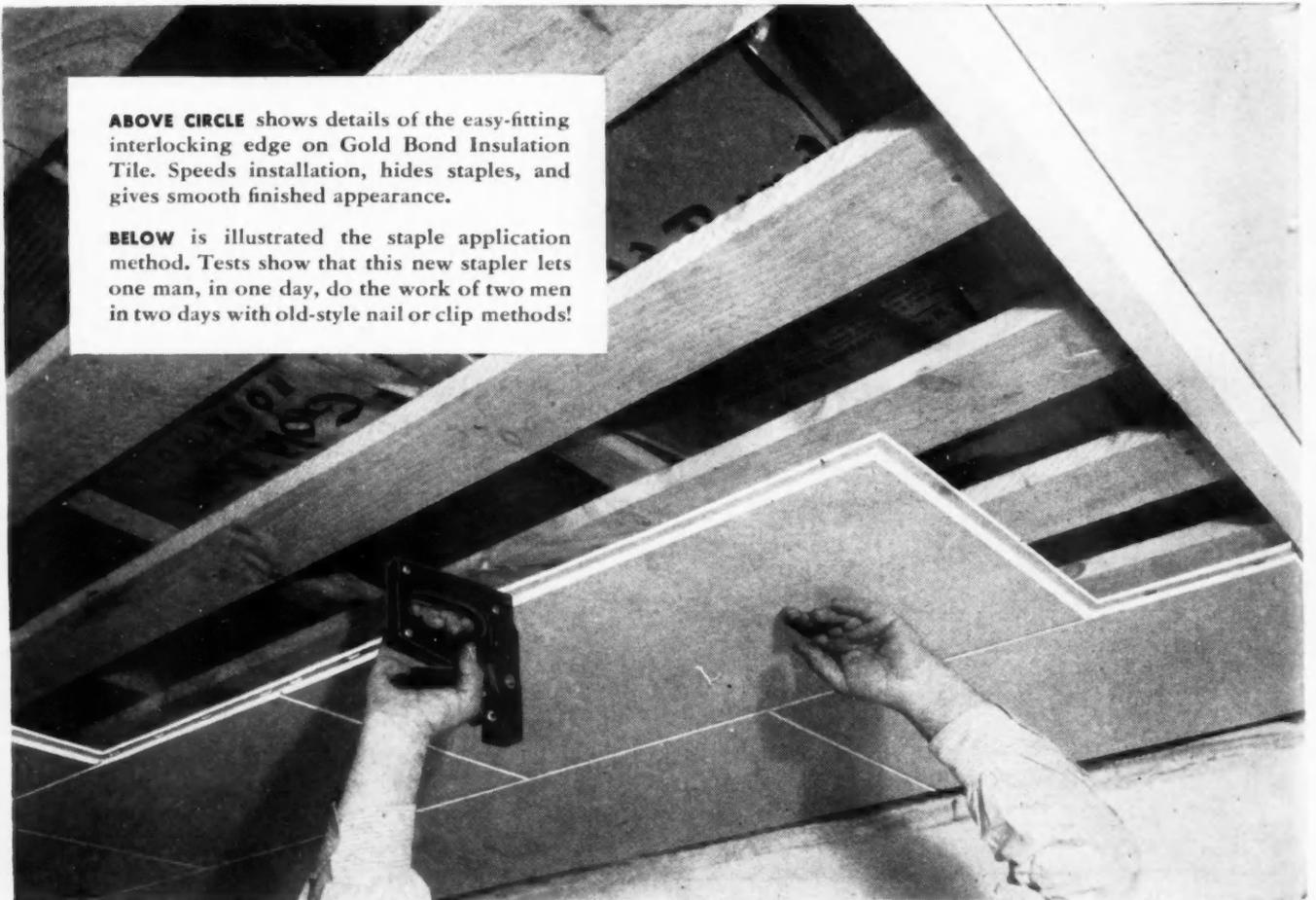


## YOUR CEILING JOB COSTS

## W

**ABOVE CIRCLE** shows details of the easy-fitting interlocking edge on Gold Bond Insulation Tile. Speeds installation, hides staples, and gives smooth finished appearance.

**BELOW** is illustrated the staple application method. Tests show that this new stapler lets one man, in one day, do the work of two men in two days with old-style nail or clip methods!



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# W W E R

## S WITH GOLD BOND INSULATION TILE!

**H**ERE'S a real time saver—a new method of applying fibre insulation tile in a fraction of the usual time. The new interlocking edges of Gold Bond Insulation Tile permit rapid installation with a staple gun instead of old-style clips or nails. Cuts your application cost in less than half—a mighty important factor in competitive bidding.

For modern ceilings that insulate, beautify and quiet noise, the new ivory-coated Gold Bond Insulation Tile is your best bet from every standpoint. No hammer marks, no burred tile edges if you use a staple gun which you can buy or rent from your local Gold Bond Dealer. Staples are completely concealed by the easy-fitting, interlocking edges.

You will like this new Gold Bond Insulation Tile and so will your customers. It's ideal for stores, restau-

rants, bowling alleys, offices, in fact, for just about every type job. Available now at your local Gold Bond Dealer's.

**NATIONAL GYPSUM COMPANY**  
**BUFFALO 2, NEW YORK**

*Over 150 Gold Bond Products including gypsum lath, plaster, lime, wallboard, gypsum sheathing, rock wool insulation, metal lath products and partition systems, wall paint and acoustical materials.*

You'll build or  
 remodel better with  
**Gold Bond**

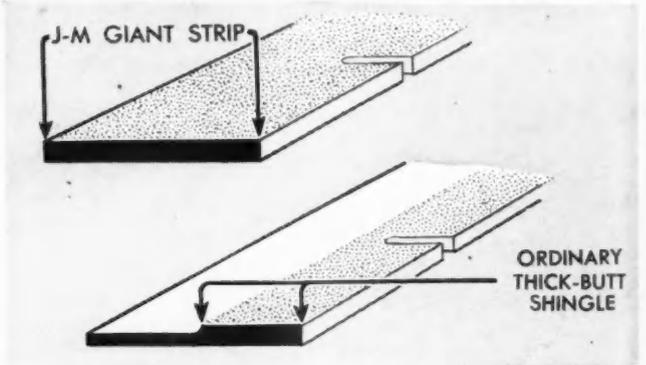
# Johns-Manville GIANT STRIP

... the heavier, more rugged asphalt shingle that

*"Stays put"*

Here is a shingle that gives greatly increased protection against wind, weather, and fire. It is the J-M Giant Strip, so named because it is *extra thick* and *extra heavy*. The entire surface has extra coating of selected weather-resisting asphalt, in which colorful, fireproof, mineral granules are uniformly embedded. This results in a thicker, more rugged shingle—one that "stays put" and lasts longer.

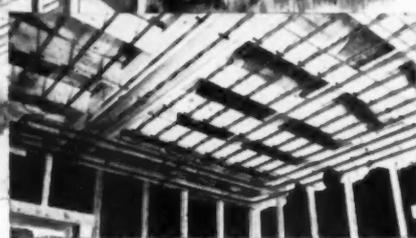
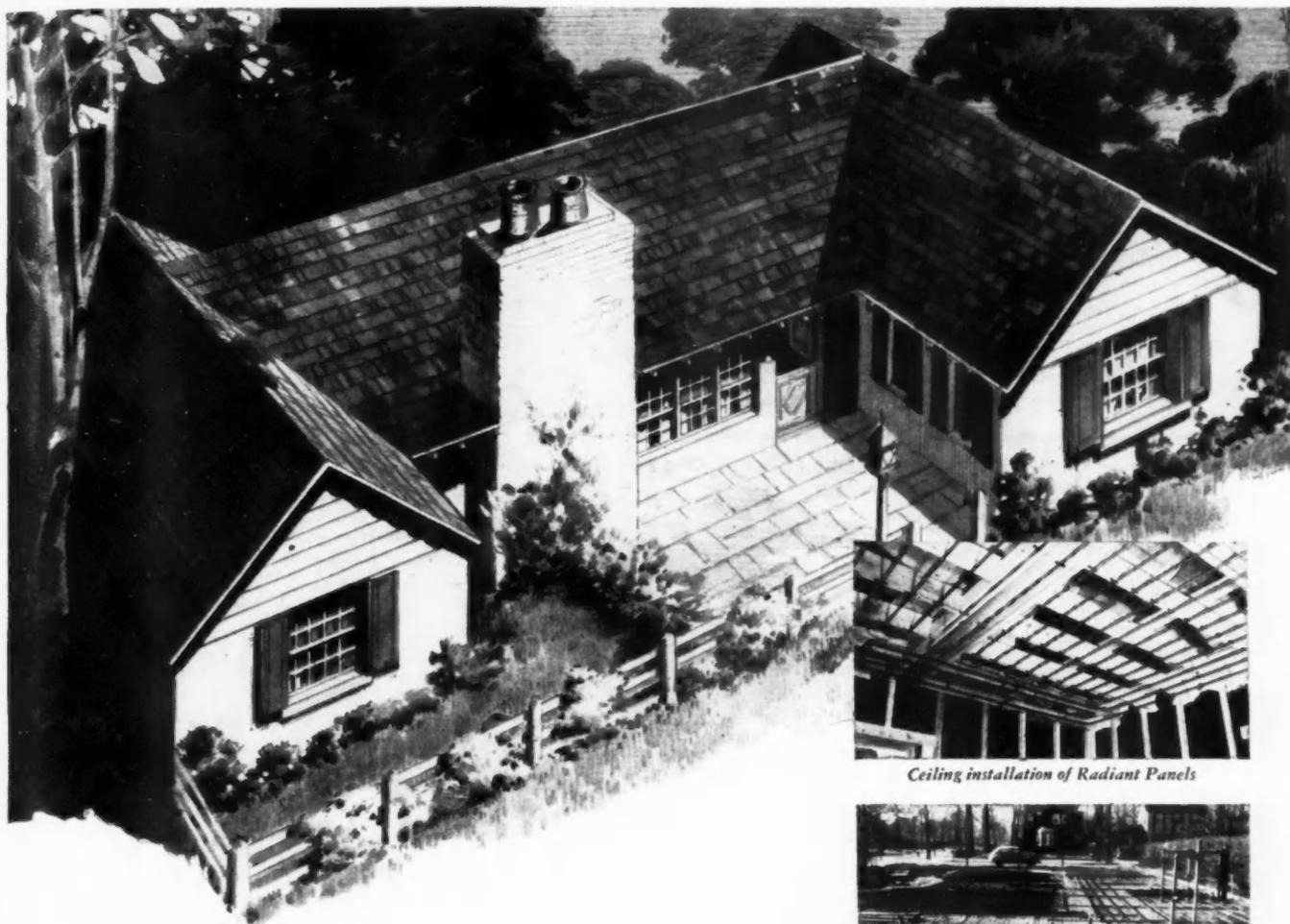
*Extra thickness over ENTIRE surface*



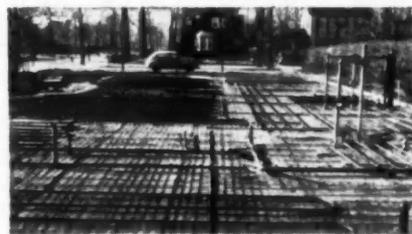
Sketch shows how extra protection is built into the J-M Giant Strip. Note that the entire surface—not just the exposed portion—is covered with an extra thickness of asphalt and fireproof granules. On the ordinary thick-butt type of asphalt shingle *only the butts* have the extra thickness.

When you sell J-M Giant Strip Shingles, you provide the homeowner with a product backed by 90 years of roofing experience. And it has the Johns-Manville name, recognized by millions as the mark of quality in building materials. For further details, write Johns-Manville, Box 290, New York 16, N. Y.





Ceiling installation of Radiant Panels



Radiant Panels installed in floor

### HOW TO HEAT A MODERN HOME . . .

# *the Modern Way*



It's easy to understand the swing to B & G Hydro-Flo Radiant Panel Heating . . . it offers exclusive advantages with instant appeal to both the man and woman of the house.

This heating system is hidden away in the floor or ceiling—nothing visible—nothing to prevent complete freedom of furniture and drapery arrangement. It spreads an overall blanket of radiant warmth—draftless—soft and soothing as Spring sunshine.

All this luxurious comfort and convenience is provided at low operating cost. B & G Hydro-Flo Heating automatically adjusts itself to every change in the weather—never overheats—never burns fuel needlessly.

And not least, B & G Hydro-Flo Heating furnishes an all year 'round supply of hot water—24 hours a day—plenty for automatic washers, showers, every household use.

For the complete story, send for free booklet, "Capture the Sun with B & G Hydro-Flo Heating."



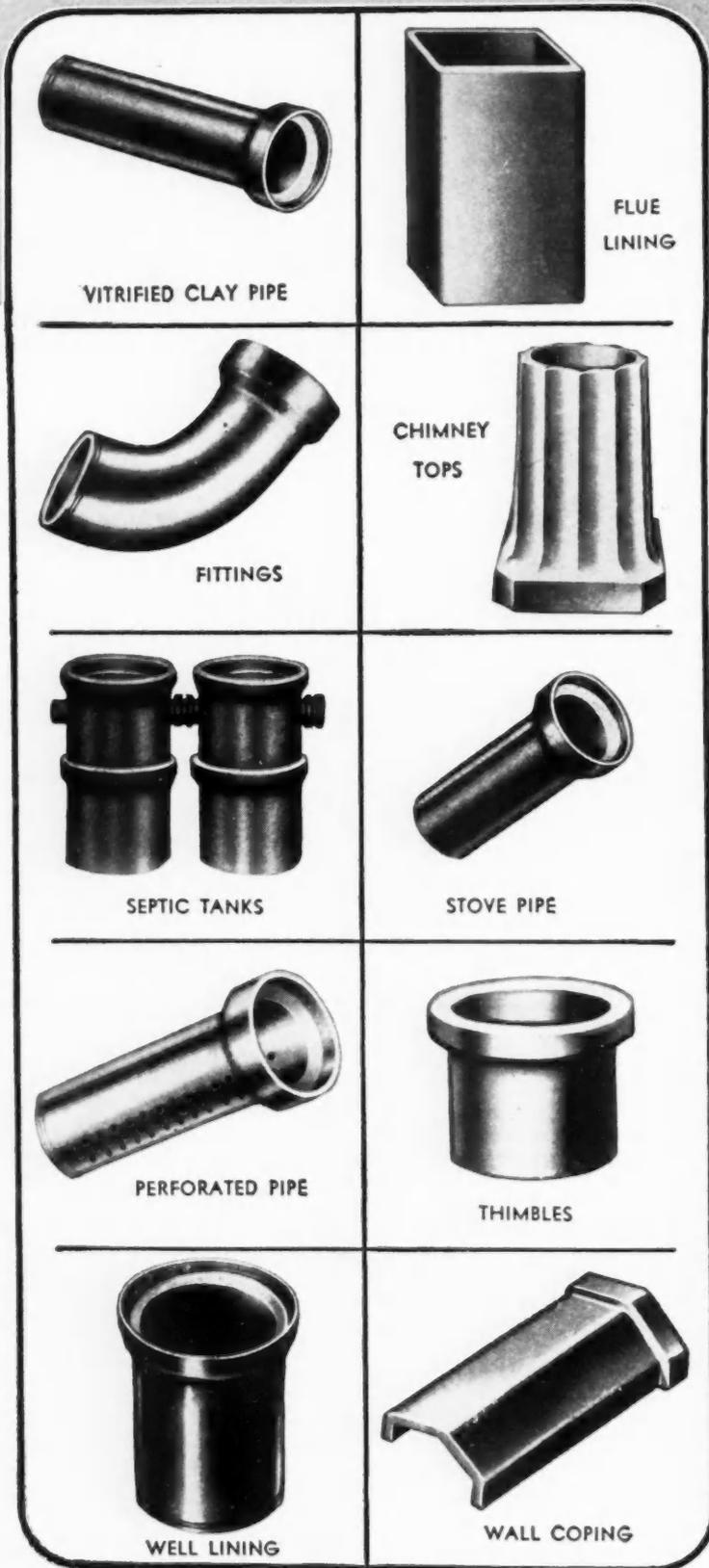
B & G HYDRO-FLO EQUIPMENT CAN BE INSTALLED ON ANY HOT WATER HEATING BOILER



## **Hydro-Flo Radiant Panel Heating**

BELL & GOSSETT CO., Dept. AY-11, Morton Grove, Illinois

Reg. U. S. Pat. Off.



C-249-3-A

**PLAY SAFE**  
**WITH THESE**  
*Vitrified*  
**CLAY PRODUCTS**



**Y**OU'RE safe when you use the complete line of Vitrified Clay Products. Their basic material — clay — is the *only* material which resists successfully the deteriorating action of acids, alkalis, chemicals, rust and other corrosive elements. *Vitrification* at fusing temperatures bonds this imperishable clay into strong, homogeneous pipe you can count on for any sewerage or drainage service.

You'll earn a reputation for top-notch craftsmanship and service by using Vitrified Clay Products wherever possible. Properly installed, they give generations of trouble-free service!

See your building supplies dealer, or send your specific questions to the nearest association office.

**NATIONAL CLAY PIPE MANUFACTURERS, INC.**

703 Ninth and Hill Bldg., Los Angeles 15, Calif.  
 1105 Huntington Bank Bldg., Columbus 15, Ohio  
 522 First National Bank Bldg., Atlanta 3, Ga.  
 100 N. LaSalle St., Rm. 2100, Chicago 2, Ill.

**CLAY**  
  
**PIPE**

C-249-3

BL

Method both edges

Method both edges

On me blo bri for wa

# GET BETTER TILE AND BLOCK-WORK with BRIXMENT!

Tile or block-work offers very little protection against the penetration of water, unless both inside and outside head joints are completely filled with mortar.

In laying clay tile, or concrete or cinder block, even when they are used only for back-up work, especial care should be taken to secure full head joints on both the inside and the outside edges of the unit. Either of the following two methods may be used:



Method 1. Full head joints should be thrown onto both edges of the tile to be placed, or—



Method 2. A full head joint should be thrown onto one edge of the tile in place and also onto the opposite edge of the tile to be placed.



Enough mortar should be used to cause excess mortar to ooze out of the joints on both sides of the tile.



Method 1. Full head joints should be thrown onto both edges of the block to be placed, or—



Method 2. A full head joint should be thrown onto one edge of the block already in place and also onto the opposite edge of the block to be placed.



Enough mortar should be used to cause excess mortar to ooze out of the joints on both sides of the block.

One of the reasons bricklayers prefer Brixment mortar is the way it *sticks* to the tile or block, as shown above. It "stays put." The bricklayer does not have to stoop to the board for more mortar. You get a stronger, more water-resistant wall. ● Brixment mortar is

easier to work, saves time, effort, and money. In addition, it has higher water-retaining capacity, greater bonding quality, is more durable. It is this *combination* of advantages that has made Brixment the largest-selling masonry cement on the market.

LOUISVILLE CEMENT COMPANY, Incorporated, LOUISVILLE, KENTUCKY



Hundreds of thousands of these valves now in use are giving trouble-free service.

# Eliminates Leakage

THE PATENTED vent which relieves pressure below the seat in a Thrush Flow Control Valve is only one of the features which make this valve outstanding. It has no tight fitting guides. There is nothing to bind or stick. Shut-off is positive. It is easy to install . . . and eliminates the need for a union. The convenient manual adjustment does not interfere with normal operation. With all its important advantages, the Thrush Flow Control Valve costs less than competitive valves. It is used with a Thrush Water Circulator to control circulation and prevents wasteful overheating in automatic Forced Circulating Hot Water Heating Systems. See our catalog in Sweet's or write Department G-4.

**H. A. THRUSH & COMPANY • PERU, INDIANA**



# Summer-Winter Hot Water Heat

*Helps Swing  
the Sale!*

**STANLEY**

*Floating*

**DOOR  
EQUIPMENT**



*Stanley 2732, for better residential and light commercial openings (up to 250 lbs.)*

The new homes you build will be more desirable and easier to sell if garage doors are equipped with Stanley "Swing-Up" Sets. Five out of five home buyers want this modern, low-cost door equipment. And to clients the name *Stanley* on hardware means lasting satisfaction.

The "Swing-Up" Set shown is just one of four Stanley Floating Door Equipment models. It is recommended for better class residential and light commercial openings. Two sizes: 7' to 8' wide, 6' 6" to 6' 11½" high; and 7' to 8' wide, 7' to 8' high. Comes complete with detailed instructions for installation.

Build better, sell faster—specify and install "Swing-Up" Floating Door Equipment by Stanley, the greatest name in door hardware. The Stanley Works, Garage Door Dept., New Britain, Conn.

*\*Copyrighted*



Reg. U.S. Pat. Off.

**HARDWARE • HAND TOOLS • ELECTRIC TOOLS • STEEL STRAPPING  
THE GREATEST NAME IN DOOR HARDWARE**

**For Any Residential, Commercial or Industrial Door that LIFTS — SLIDES — SWINGS — ROLLS — OR FOLDS**



Advertised in the  
**POST**  
pre-selling your  
clients for you!

This advertisement in the April 16 Saturday Evening Post creates acceptance for Stanley Floating Door Equipment. Cash in on the profitable combination of demand, POST selling power, and Stanley prestige in hardware.

MODERN STANLEY  
*Floating*  
DOOR EQUIPMENT

The new homes you build will be more desirable and easier to sell if garage doors are equipped with Stanley "Swing-Up" Sets. Five out of five home buyers want this modern, low-cost door equipment. And to clients the name Stanley on hardware means lasting satisfaction. The "Swing-Up" Set shown is just one of four Stanley Floating Door Equipment models. It is recommended for better class residential and light commercial openings. Two sizes: 7' to 8' wide, 6' 6" to 6' 11½" high; and 7' to 8' wide, 7' to 8' high. Comes complete with detailed instructions for installation. Build better, sell faster—specify and install "Swing-Up" Floating Door Equipment by Stanley, the greatest name in door hardware. The Stanley Works, Garage Door Dept., New Britain, Conn. \*Copyrighted



HARDWARE • HAND TOOLS • ELECTRIC TOOLS • STEEL STRAPPING  
THE GREATEST NAME IN DOOR HARDWARE

IT'S A CASE OF  
*Quality...*



The Robert W. Vahlbergs' house, Oklahoma City; designed by the owner-architect; built by Robert Parks, Oklahoma City

## ...in an architect's DREAM HOUSE

The dream house of the Bob Vahlbergs sprawls comfortably on a wooded slope. It is rooted to earth by a seventy-five-foot-long slab of concrete. From its wall of glass, framing a view to the South, to the Bryant Boiler that activates its unseen radiant coils, it is as modern as tomorrow.

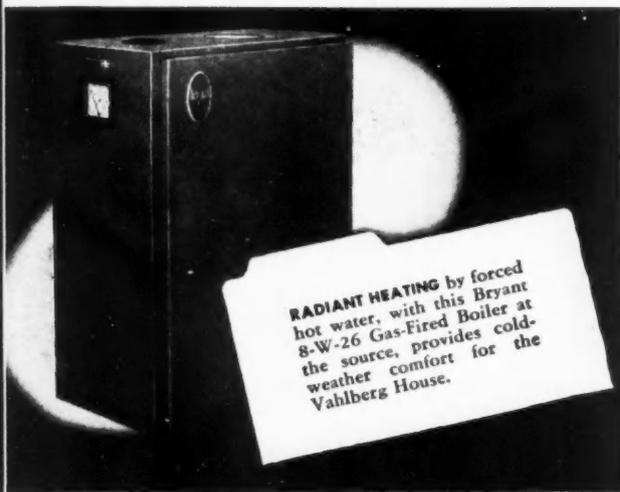
Architect Vahlberg has definite ideas about the things a house should have. He believes firmly in open planning to create a feeling of space; materials that are natural-looking and complementary to the setting of the house; wide expanses of glass, to capture the outdoors for indoor enjoyment; automatic heating that provides the warmth of Spring sunshine, no matter what the weather outside.

In the year or so of its existence,

the house has proved these things, and more, to the Vahlbergs. It gives them everything they want for their living enjoyment... their comfort. That, in word, is the proof. For, by and large, the components of anybody's dream house add up to just one thing: comfort.

We like to think of architects like Bob Vahlberg as men who deal in comfort, because that's a big part of our business, too. It's a kind of partnership... with creative architects and Bryant quality heating going hand-in-hand to provide the stuff that dream houses are made of.

And we're mighty pleased that many of these dealers in the much-sought commodity called comfort consider Bryant Automatic Heating part of their stock in trade.



(Installation by White & Messer Plumbing & Heating Co., Oklahoma City)



Let the pup be furnace man  
... and water boy, too!

# bryant

AUTOMATIC HEATING

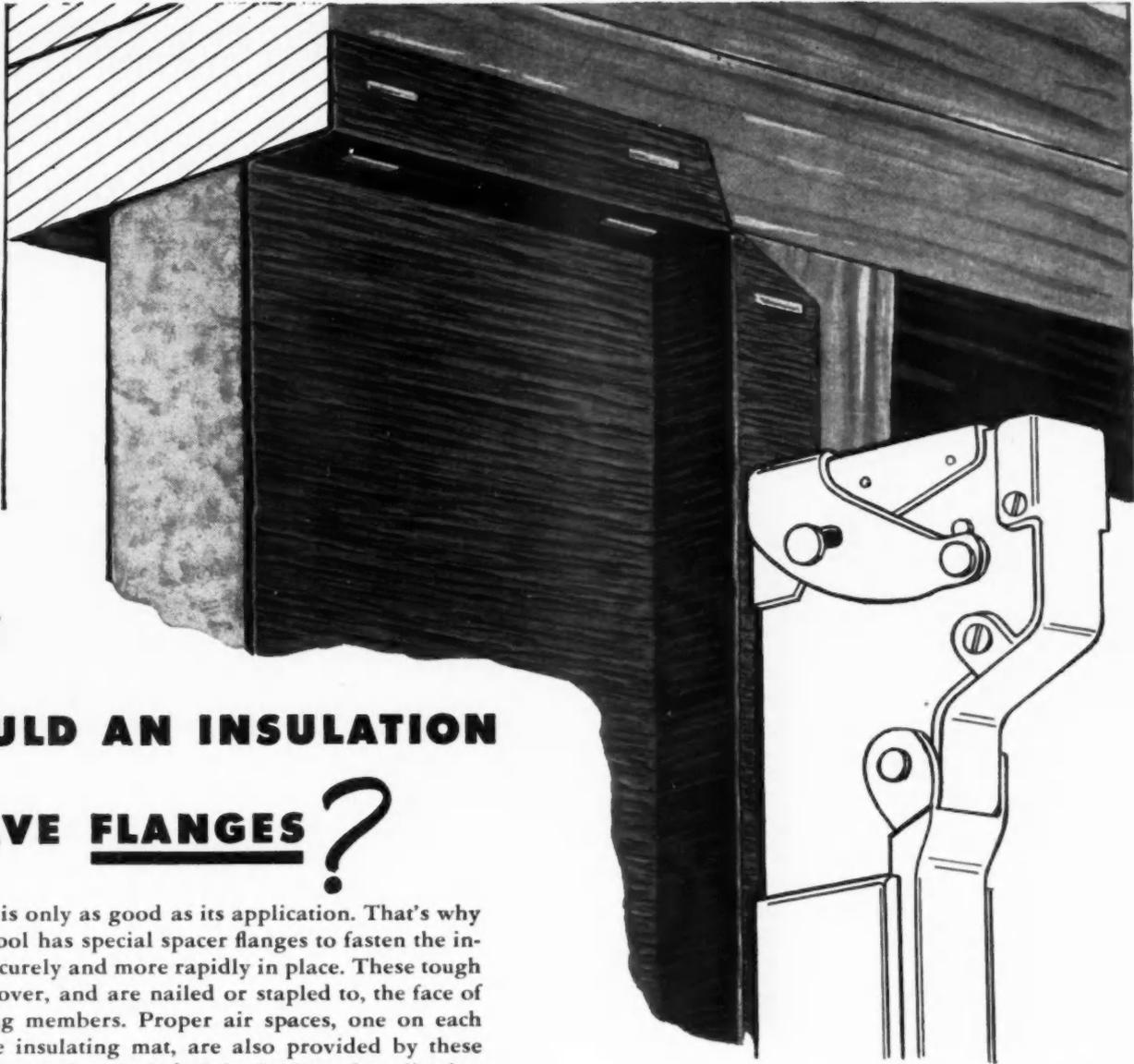
BRYANT HEATER DIVISION  
AFFILIATED GAS EQUIPMENT, INC.  
Cleveland, Ohio • Tyler, Texas

"I'll let the Pup be Furnace Man"

says ROBERT PARKS, builder of the  
Vahlberg House, Oklahoma City

"Bob Vahlberg's house taught me a lot; not only about modern house construction, but about heating as well. I'm sold, and my family is sold. We're going to have a house like it... and ours will have a Bryant, too."





# WHY SHOULD AN INSULATION HAVE FLANGES ?

Insulation is only as good as its application. That's why Balsam-Wool has special spacer flanges to fasten the insulation securely and more rapidly in place. These tough flanges fit over, and are nailed or stapled to, the face of the framing members. Proper air spaces, one on each side of the insulating mat, are also provided by these flanges. The result: a sealed, tight, foolproof application for maximum Balsam-Wool insulating efficiency!

Balsam-Wool, the completely *sealed* insulation, constantly adds latest scientific developments to its own time-tested features . . . combining practical "on-the-job" experience with laboratory research. The ever-increasing popularity of Balsam-Wool as the *complete* insulation results from these advantages to you and your clients:

You'll want to specify Balsam-Wool on your next job . . . for it's the insulation that stays put for life. Send today for your complete set of Balsam-Wool Data Sheets in A.I.A. folder.

- Continuous, Integral Vapor Barrier
- Sturdy Wind Barriers
- Double Air Spaces
- Special Spacer Flanges
- Rot and Termite Treatment
- Highly Fire Retardant
- Rigid Quality Control

32 Data Sheets provide hard-to-get facts on insulation application problems . . . mail the coupon now!



# Balsam-Wool \*

SEALED INSULATION

BALSAM-WOOL • Products of Weyerhaeuser • NU-WOOD\*

\*REG. U. S. PAT. OFF.

Wood Conversion Company  
Dept. 119-49, First National Bank Building  
St. Paul 1, Minnesota

Please send me a set of Balsam-Wool Application Data Sheets.

Name.....

Address.....

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

# How to seal the valleys with REVERE HOME FLASHING

**Seal the Valleys**

Every roof, regardless of its material, has certain vulnerable points which must be properly protected to keep water or moisture from seeping through. These are the places where watertight joints cannot be made of the roofing material itself. The valleys, for instance, where one roof surface intersects another.

Houses and buildings differ, so valleys may occur at various places on different roofs, at dormers or where main roofs intersect. There may be one or many, but all should be sealed because they act as troughs where water flows with great force and volume during a rainstorm, and where snow often is piled up by the wind.

**OPEN VALLEYS.** Valleys of Revere Home Flashing are made and nailed to be built with the edge of a single sheet of Revere Home Flashing on each side.

Several sheets may be needed. Nail each row together near the middle near the center angle or that of the valley.

**CLOSED VALLEYS.** To the extent that a piece of copper flashing can be used in these valleys, the Revere Home Flashing on the roof edge should be 1 1/2 inches above the edge of the other side. Below this flashing, seal the joint with a sheet of Revere Home Flashing, and seal the bottom of the valley by the second row of building paper.

**CLOSED VALLEYS.** The flashing should be 1 1/2 inches above the edge of the other side. Below this flashing, seal the joint with a sheet of Revere Home Flashing, and seal the bottom of the valley by the second row of building paper.

The lower edge of the copper sheet projects 1/2" beyond the upper edge only. The plywood is then over the edge, edge and corner under the lower edge which is over the bottom of the flashing on above. All flashing sheets should be nailed through the upper edge with 16d bronze nails. Nail the lower edge of the flashing to the sheathing with 16d bronze nails. When the joints of the valley is in the line of the lower edge of the sheet, the sheet should be nailed there. Nails should not be spaced through the copper. When used through a wall, use up with edge of flashing 1/2" in order to cover through hole slightly above the center of the copper.

The flashing pieces are nailed to the wall with 16d bronze nails. The lower edge of each flashing piece should be at the lower edge of the sheathing corner to be placed over it. Nail each flashing piece along its upper edge only.

A reproduction (1/3 the size of the original) of 2 typical pages in the Revere Home Flashing Instruction Book. You get a copy of this instruction book in every package of Revere Home Flashing.

**REVERE HOME FLASHING** is a new packaged system for use in valleys and flashing on low-cost houses. Based on a special size, special temper and special gauge of sheet copper, it is packaged, complete, ready to install.

Each package contains 10 sheets of this special copper, cut to 18" x 48"; 200 bronze nails; and complete, illustrated instructions for installation. Simply follow these step-by-step instructions and you are sure of protection that is good for a great many years.

Revere Home Flashing provides low-cost, easy-to-install weatherproofing not only for wall joints, but also at valleys, doors, windows, chimneys, and other roof joints. In addition, being copper, it adds an important selling point to the house; it shows

that the builder uses quality material; and it assures complete satisfaction for the owner. And it does all this at such low cost that you'll want to start using it right away.

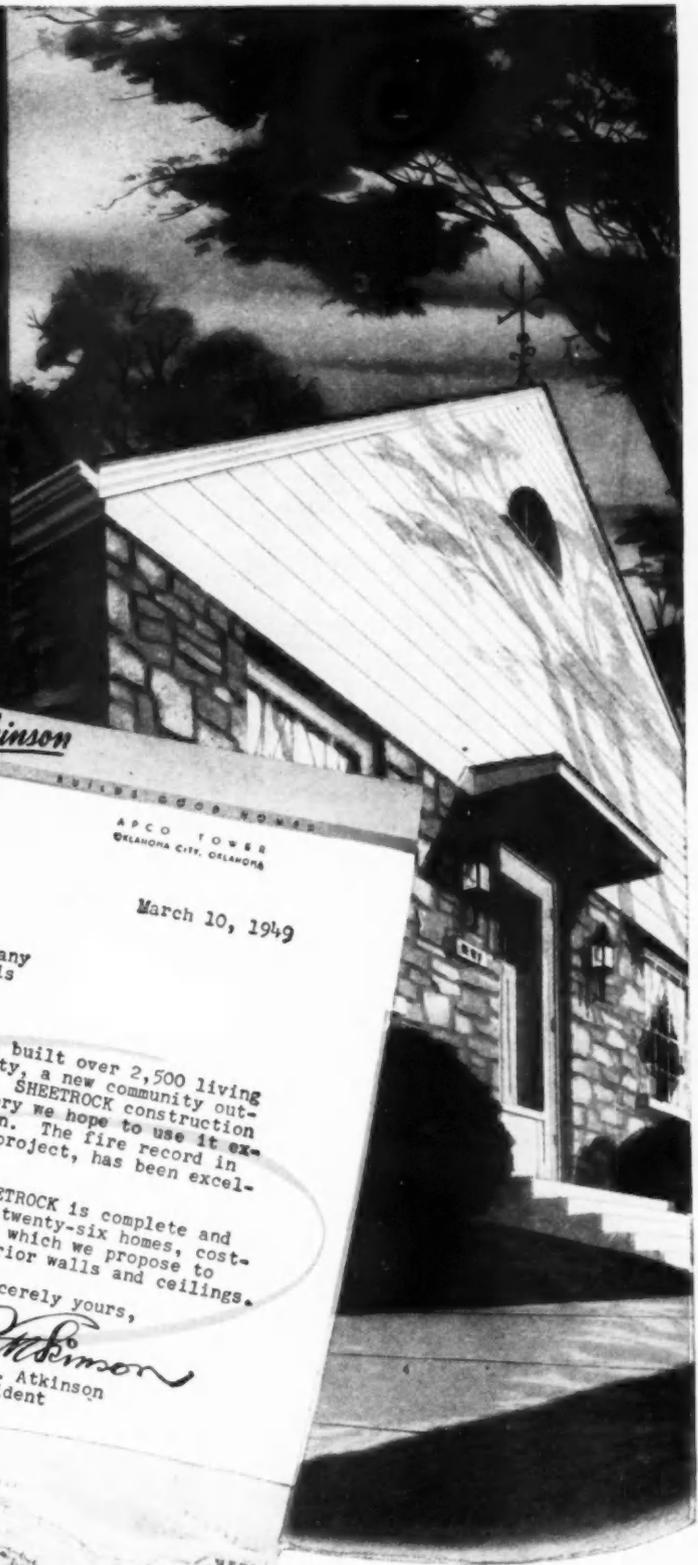
Your building supply dealer has Revere Home Flashing in stock or can get it for you promptly. Ask him about Revere Home Flashing today.

**REVERE**  
**COPPER AND BRASS INCORPORATED**  
 Founded by Paul Revere in 1801  
 230 Park Avenue, New York 17, New York

• • •

Mills: Baltimore, Md.; Chicago, Ill.; Detroit, Mich.;  
 Los Angeles and Riverside, Calif.; New Bedford, Mass.;  
 Rome, N. Y.—Sales Offices in Principal Cities,  
 Distributors Everywhere.

In 26 homes  
costing  
**\$50,000 and up**  
I'm using  
**SHEETROCK**  
T. M. REG. U. S. PAT. OFF.  
*Fireproof Gypsum Wallboard*



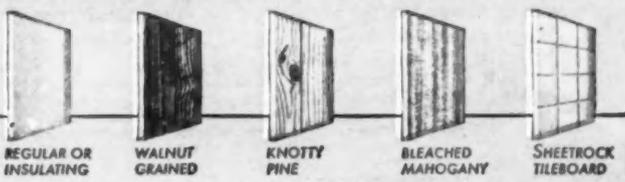
*W.P. Atkinson*  
 APRIL 1949 HOMES  
 APCO TOWER  
 OKLAHOMA CITY, OKLAHOMA  
 March 10, 1949  
 U. S. Gypsum Company  
 Chicago 6, Illinois  
 Gentlemen:  
 Since 1942, we have built over 2,500 living units in Midwest City, a new community outside Oklahoma City. SHEETROCK construction proved so satisfactory we hope to use it exclusively from now on. The fire record in particular, of this project, has been excellent.  
 Our confidence in SHEETROCK is complete and we now have plans for twenty-six homes, costing \$50,000 and up, in which we propose to use SHEETROCK for interior walls and ceilings.  
 Sincerely yours,  
*W.P. Atkinson*  
 W. P. Atkinson  
 President

Another chapter in THE AMAZING SHEETROCK STORY



United States Gypsum  
 For building • For industry

Gypsum • Lime • Steel • Insulation • Roofing • Paint





**"I've proved that Weldwood Paneling  
makes money for builders  
... saves money for buyers!"**

John J. Moosberger

ALLIED BUILDING CRAFTS INC.  
Cheverly, Md.

**"Homes are easier, more economical to build . . . easier,  
more profitable to sell . . . when you use Weldwood Plywood"**

Here's a man with a real "success story" . . . and Weldwood Plywood helped him write it.

When Mr. Moosberger completed the house above, several other new homes in the same vicinity were also offered for sale. Visitors streamed into the home with Weldwood paneling, while the others were almost deserted. Repeated comments expressed admiration for the living room, paneled in silver gray oak Weldwood . . . and the two bedrooms, one paneled in knotty pine, the other in Weldtex.

Price was deliberately withheld, and prospects asked to estimate before being quoted. Out of hundreds of visitors, *only two* underestimated the value. All the others felt the house to be worth considerably more than the established price.

Mr. Moosberger feels most of the credit is due to Weldwood. This fine paneling, he says, gives such a feeling of luxury and quality that visitors simply cannot believe the moderate cost he was able to quote.

Add "buy-appeal" like this to the actual structural advantages Weldwood gives you, and it becomes a material you simply can't afford to overlook.

Don't fail to include Weldwood paneling in the plans for the new homes *you* build. It *makes* more money for builders . . . *saves* money for buyers.

Weldwood Plywood is sold by lumber dealers everywhere.



Northeast corner of living room and entry, showing oak Weldwood paneling, and unusual corrugated glass partition.



Oak Weldwood makes a fitting frame for an expansive picture window in the Moosberger house, shown above.

## WELDWOOD Plywood

Weldwood Plywood and Mengel Flush Doors are products of

UNITED STATES PLYWOOD CORPORATION  
New York 18, N. Y.

THE MENGEL COMPANY  
Louisville 1, Ky.

Distributing units in Baltimore, Boston, Brooklyn, Buffalo, Chicago, Cincinnati, Cleveland, Detroit, Fresno, High Point, Los Angeles, Milwaukee, Newark, New York, Oakland, Philadelphia, Pittsburgh, Portland, Ore., Richmond, Rochester, San Francisco, Seattle. Also U. S.-Mengel Plywoods, Inc. distributing units in Atlanta, Birmingham, Dallas, Houston, Jacksonville, Kansas City, Kans., Louisville, New Orleans, San Antonio, St. Louis, Tampa. In Canada: United States Plywood of Canada, Limited, Toronto. Send inquiries to nearest point.

Weldwood\* Hardwood Plywood  
Douglas Fir Weldwood  
California Pine Weldwood  
Mengel Flush Doors  
Weldwood Fire Doors  
Weldwood Flush Doors  
Overhead Garage Doors

Tekwood\* (paper-faced plywood)  
Protokwood  
Weldwood Glue\* and other adhesives  
Weldtex\* (striated plywood)  
Decorative Micarta\*  
Flexwood\*  
Firzite\* and Satinlac\*

\*Reg. U. S. Pat. Off.

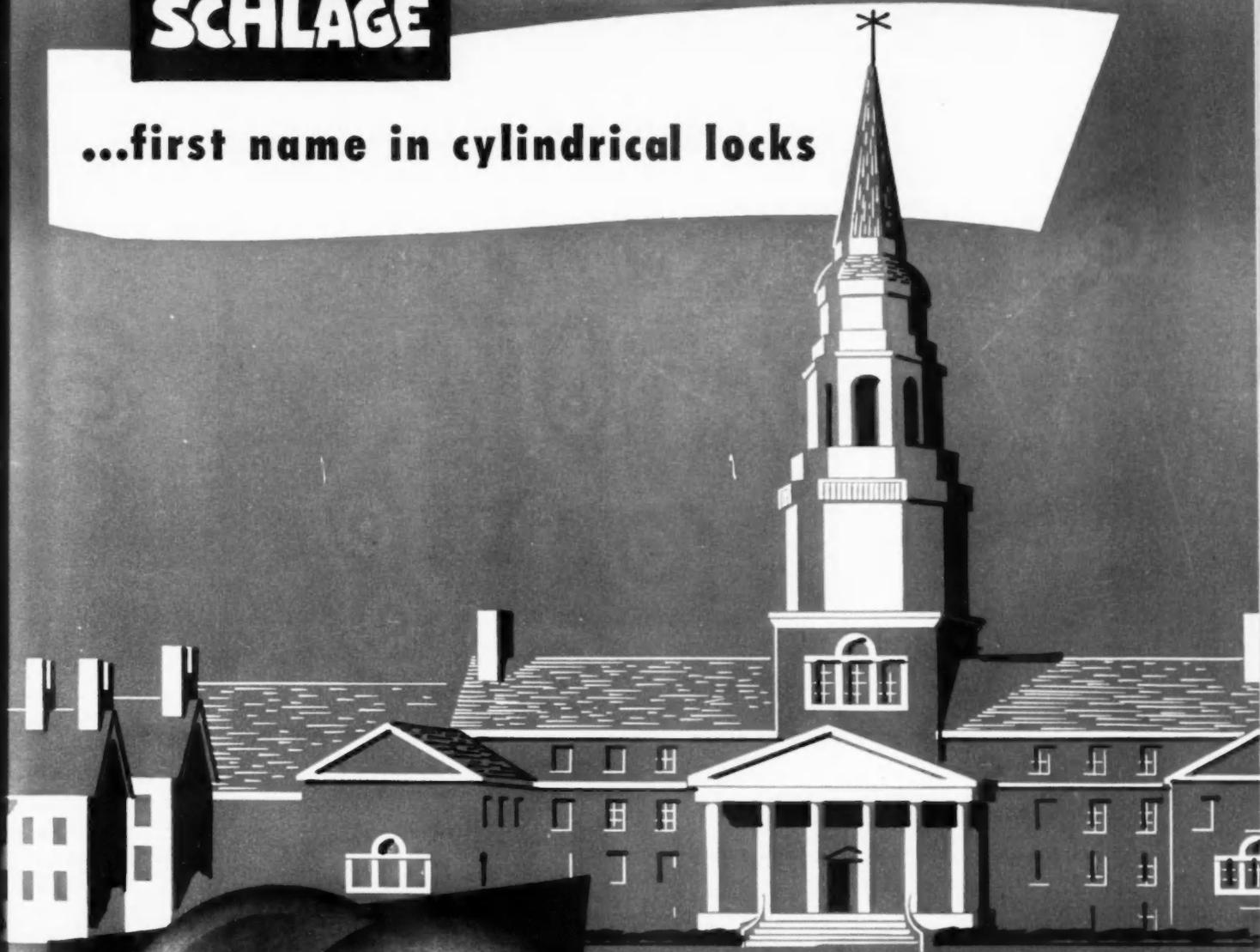


Plastics and Wood  
Welded for Good

Weldwood Plywood is made in both Interior and Exterior types, the former bonded with extended urea resins and other approved bonding agents; the latter with phenol formaldehyde synthetic resin.

**SCHLAGE**

**...first name in cylindrical locks**



**Maine's Colby College at Waterville**

a Schlage installation of heavy-duty cylindrical locks.

Architect: Jens Frederick Larson

**Plymouth Design** illustrated at left was used in this classic New England College.

**SCHLAGE**

**LOCK COMPANY**

SAN FRANCISCO • NEW YORK

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# BEST BUY in the WINDOW FIELD!

## The Truscon Series 138 DOUBLE-HUNG STEEL WINDOW

*trim, smart, streamlined*



### strong, sturdy, economical

You bet it's the best buy in the window field! These Truscon Steel Windows help you sell your homes and buildings, because *window beauty* combined with the ultimate in operating simplicity plays an important part in clinching house sales! You'll find, too, that you have universal acceptance because Truscon Double-Hung Steel Windows are structurally-correct!

And, of equal importance, you'll like the downright *economy* of these famous windows—not only is their initial cost

low, but because they are pre-hung, pre-fit, pre-weatherstripped and pre-adjusted, their installation cost is also amazingly low! They won't warp, rot, stick or shrink either before or after installation. And, in the most popular types and sizes—you can order direct from our local stocks.

Weights and cords are not used. Operation is controlled by motor-type spring balances equipped with tapes of Enduro stainless steel. Each window is completely factory weatherstripped in stainless steel. Screens and storm sash of the simplest and most economical type are available.

Shade, drapery, curtain or venetian blind fixtures, of standard types are easily attached to the interior side, in holes provided in all units.



**New Literature!** Send for new catalog complete with installation details and specifications on Truscon Steel Windows for every type of residential use.

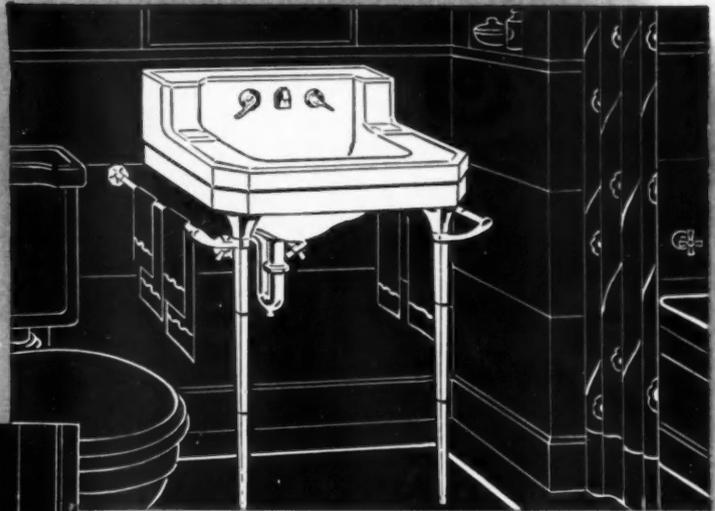
# TRUSCON STEEL COMPANY

YOUNGSTOWN 1, OHIO

Subsidiary of Republic Steel Corporation

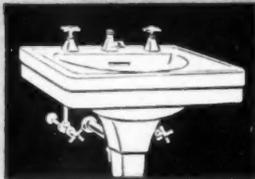
Manufacturers of a Complete Line of Steel Windows and Mechanical Operators • Steel Joists • Metal Lath • Steeldeck Roofs • Reinforcing Steel • Industrial and Hangar Steel Doors • Bank Vault Reinforcing • Radio Towers • Bridge Floors.

Richmond's  
at home  
in any home!



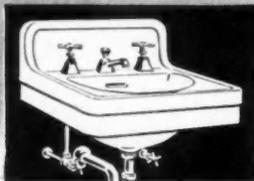
The **BROMLEY**, smart and modern, adds beauty wherever it goes! A shelf-back, square bowl lavatory with front overflow and anti-splash rim—available with or without chrome-plated legs and towel bars. Ideal for either powder-room installations or master bathrooms. Plate #G-132.

The new **RICHLEDGE**—only 19" x 17" overall—has all the big lavatory features. This compact wall-hung unit will fit into the smallest bathrooms as well as powder rooms. Small in size and low in price, the Richledge is perfect for the modern home. Chrome-plated legs and towel bars available. Plate #G-152. Richledge also obtainable in 18" x 15" size.



← The **Kingsbury**  
Good-looking lavatory slab, shown here with center leg, features rectangular bowl, rear outlet, integral open overflow and anti-splash rim. Also available with chrome-plated legs and towel bars. Plate #G-110.

The **Norman** →  
High-back, wall-hung lavatory, illustrated on right, is designed for all types of domestic or commercial installations. Has rectangular bowl plus rear outlet, open overflow and anti-splash rim. Plate #G-120.



### Richmond Vitreous China Lavatories Versatile in Application— Enduring in Satisfaction

Shelf-back, high-back or slab; wall hung, legs or pedestal—Richmond builds them all. Homes, apartments, office or factory—Richmond designs for them all.

The long-lasting finish and smooth, modern lines of Richmond lavatories guarantee jobs you will be proud of—that will delight your customers.



Richmond's whiter-white enameled cast iron sinks are at home in any kitchen.



# RICHMOND

RICHMOND RADIATOR CO.—AFFILIATE OF REYNOLDS METALS CO.



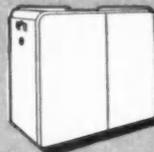
Vitreous China



Gas Boilers



Enameled Cast Iron Ware



Winter Air Conditioners  
Gas—Cast iron or steel  
Oil—Steel

See your wholesaler or MAIL COUPON TODAY

AB-4

Richmond Radiator Company  
19 East 47th Street, New York 17, N. Y.

Please send me further information and details on Richmond Vitreous China Lavatories. No obligations, of course.

Name.....

Company.....

Address.....

# This part of the house sells



*This is just what  
I've been looking for.  
Let's buy the house!*



# Is the **WHOLE HOUSE** faster!

## It's a fact—and it's proved every day...

New homes sell faster than ever when your prospects see the General-Electric Electric Sink—combining the G-E Automatic Dishwasher and G-E Disposall!\*

Why not? All that toil-saving, leisure-creating convenience costs the home buyer only \$1.67 extra each month.†

*Only \$1.67 a month never to have to touch dishwasher again!—Never to have to handle pesty garbage!*

## "Packaged Mortgage" makes paying easy!



Those are sweet words to the home-seeker. Those are the modern dream-kitchen advantages home buyers want. And they're easily within the average family's reach with the "packaged mortgage" plan!

The "packaged mortgage" includes the cost of the G-E Electric Sink in the monthly payments for the house! No burdensome extra installment costs!

That's the dream-kitchen story General Electric is telling millions in Dishwasher and Disposall advertising.

\*General Electric's trade-mark for its food-waste disposal appliance.

That's the dream-home bargain more and more home buyers insist upon. And that's the *selling* story that helps you make *quick* home sales!

Why not include these great electrical features in your new homes, renovations, and apartments?

## What about cost?

It costs you *nothing* extra! The retail price of each appliance is added to the price of the house. You get the retail profit!

## What about installation?

General Electric offers you the facilities of its Home Bureau in planning the installation of the G-E Electric Sink!

## What about selling help?

General Electric service starts with planning . . . and follows through to a complete advertising and merchandising program that speeds the sale of your new homes!

Write to General Electric Company, Appliance and Merchandise Department, Bridgeport 2, Conn.

Quick! Here come those home buyers with the G-E gleam in their eyes right now!

†Covers estimated financing charge.



### DISPOSALL

Means  
Good-by to Garbage  
Automatically



### AUTOMATIC DISHWASHER

Does the Dishes  
by Itself

You can put your confidence in—

**GENERAL**  **ELECTRIC**

# More Glass means

Here's additional proof that when you select from "Pittsburgh's" line of glass products and use "Pittsburgh's" experienced crews of workmen, you'll get a good-looking, practical front. And because today's business-wise merchant is familiar with the name "Pittsburgh," you'll find your selling job is made a lot easier simply by mentioning "Pittsburgh."



"More glass means a modern home" is particularly true if the home has picture windows like these of Pittsburgh Polished Plate Glass. When installing such picture windows, keep in mind that Twindow, "Pittsburgh's" new window has built-in insulation. That's because it's made of 2 or more panes of "Pittsburgh" Glass with permanently sealed air spaces and a protective frame of stainless steel.



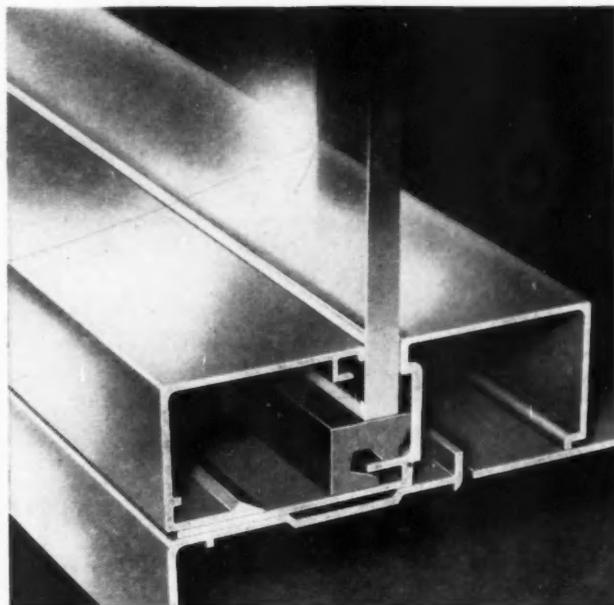
Because it is practical and long-lasting, as well as extremely good looking, Carrara Structural Glass is well-suited for walls and wainscots of kitchens and bathrooms. For splash panels, too...behind stove or lavatory...as a fireplace surround or for corner shelves or window sills—Carrara is certain to please customers. They'll like its pleasing colors (10 to choose from). Its easy cleaning. And the fact that it won't check, craze, fade, or absorb odors.

# modern buildings

here's proof  
from "Pittsburgh"



Pittsburgh Plate Glass Company has developed an instrument which makes it possible to "read" the thickness of a silver film at any point on a mirror. The remarkable instrument thus insures more uniform mirror silvering quality. This development is another practical result of "Pittsburgh's" energetic program to improve the quality and the performance of all "Pittsburgh" products. And it is another reason that you can always recommend "Pittsburgh" products with confidence.



This double-faced rectangular sash (Pittco De Luxe 15C) is for use where store front design calls for a plain surface, rich in tone and gloss. This sash is especially suitable for installations above the first floor level, for the sash can be reversed and necessary replacements can be made easily from inside. It can be used with any Pittco De Luxe moulding. Its strength, and clear, sharp profiles are assured by its extruded method of manufacture.

**Free!**

We will gladly send you free our special "Builders Kit" which includes illustrated literature showing how you can use glass effectively on all types of jobs in which you are interested.

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2095-9 Grant Building, Pittsburgh 19, Pa.  
Please send me without obligation your "Builders Kit" of illustrated literature.

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

\* Design it better with

# Pittsburgh Glass



PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS

PITTSBURGH PLATE GLASS COMPANY

# National Electric

# NE-O-PRENE

## NON-METALLIC

Listed and Approved by Underwriters' Laboratories, Inc.



The *FIRST* non-metallic sheathed cable made for use in wet locations, and conforming to standards of Underwriters' Laboratories, Inc.

### NEOPRENE SHEATH

TOUGH—DURABLE

### NEOPRENE INSULATION

SPECIAL RUBBER SPACER MEETS U.L. STANDARDS FOR SAFETY

REINFORCED WITH FIBERGLAS CORD FOR ADDED TENSILE STRENGTH

FIBERGLAS BRAID OVER CONDUCTOR ASSEMBLY. NON-ABSORBENT—FIREPROOF

SMALLER DIAMETERS

### NEOPRENE INSULATION

COPPER CONDUCTORS

### TWO STEPS TO INSTALL

1. Remove outer sheath
2. Strip conductor

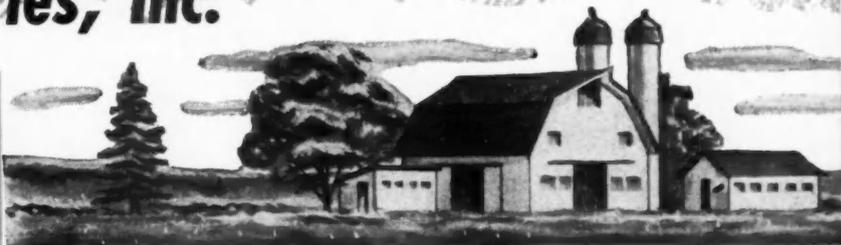
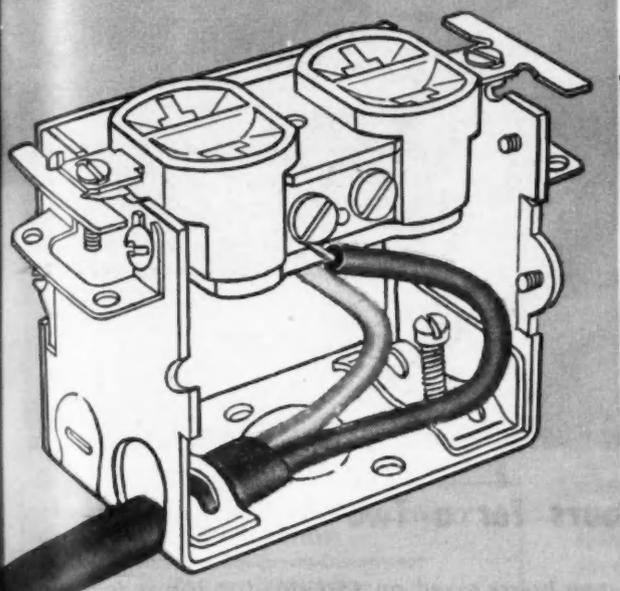
No kraft paper wrappings to be removed.

**NE-O-PRENE** Loomwire becomes a complete system of Farm Wiring when used with National Electric "Redege" Device and Switch Boxes and "EZ" Cable Connectors. All listed and Approved by Underwriters' Laboratories, Inc.

# id Announces

# LOOMWIRE SHEATHED CABLE

d by Underwriters' Laboratories, Inc.



#### IDEAL FOR:

Barns, stables, hatcheries, incubators, milk houses and other locations where moisture, ice, ammonia-laden air, rot, fungus and drastic weather changes are destructive to other approved types of wiring. **NE-O-PRENE** Loomwire is designed to avoid increased fire insurance rates.

**NE-O-PRENE** Loomwire construction is simple. The rubber spacer between conductors cushions the pressure of hammer-driven staples—prevents conductor damage. Smaller outside dimensions provide more room in device and outlet boxes.

**NE-O-PRENE** Loomwire is *stronger, tougher, more flexible, more resistant to abrasion* than ordinary non-metallic sheathed cable. **MOISTURE CANNOT PENETRATE THE NEOPRENE SHEATH.**

**NE-O-PRENE** Loomwire is now available in 2- and 3-conductor cable, sizes 14, 12, and 10. Standard coil lengths in cartons.

Sold exclusively through Electrical wholesalers.

At Last—an improved  
NEOPRENE-SHEATHED LOOMWIRE that

**SEALS OUT**  
FUMES—FLAME—MOISTURE  
OIL AND GREASE

**RESISTS**

ROT—ACIDS—MOLD  
MECHANICAL ABUSE

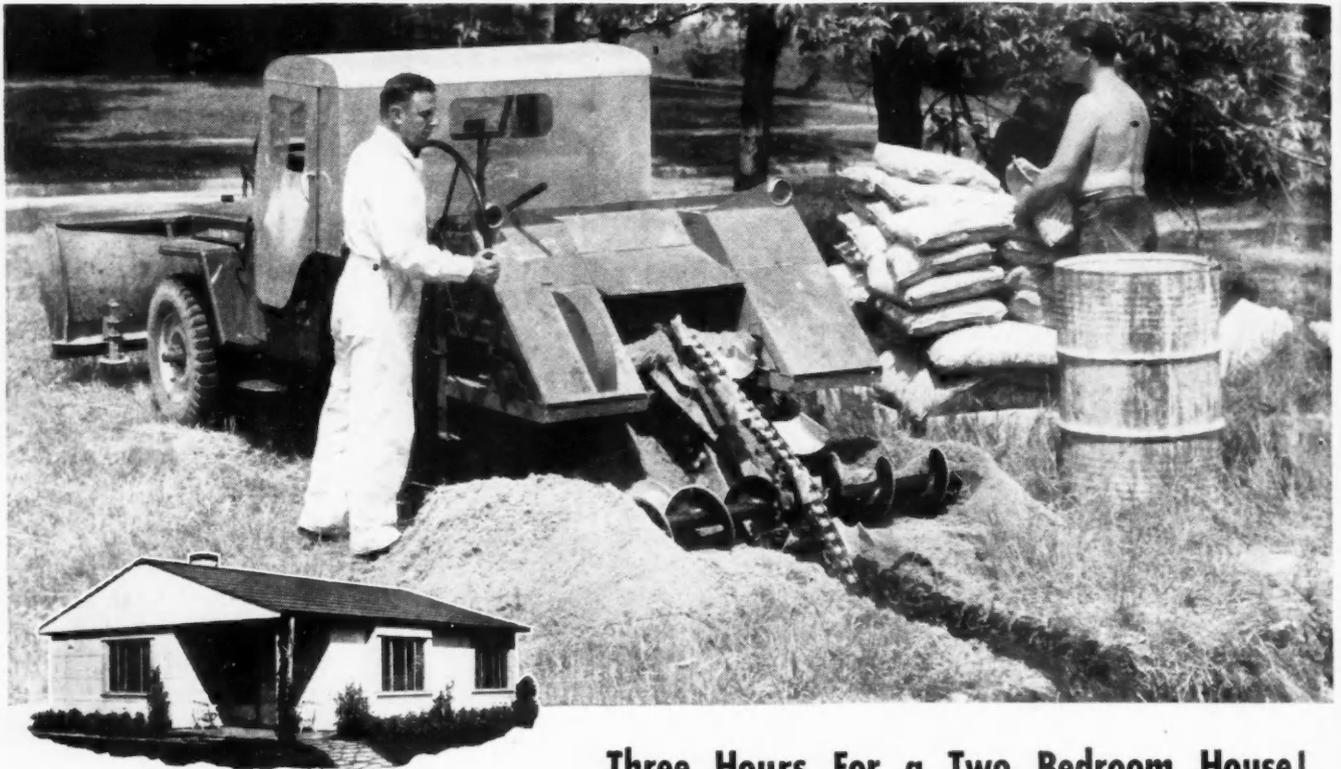
Approved for 600-Volt Service



**National Electric**  
PRODUCTS CORPORATION

1329 CHAMBER OF COMMERCE BUILDING  
PITTSBURGH 19, PA.

# 'Jeep' Digs a Foundation in Less Than Half-a-Day



This two bedroom house requires a trench 35' by 31' and 42" deep for a concrete footing. The Jeep-A-Trench does the excavating in 3 hours—a saving of 32 man hours over ordinary digging methods. After trench is completed, boom is raised to transport position and the unit is ready to move to the next job in a hurry.



Four-wheel-drive masters the mud of building sites to take tools and materials right to the job. In conventional 2-wheel-drive, the Universal 'Jeep' hustles along on the hard roads to run errands of all kinds.

## Three Hours For a Two Bedroom House!

Thirty-two man hours saved on a foundation job is typical of how the 'Jeep' speeds up construction. Comparable savings are effected on tile and pipe trenchings... for the 'Jeep' propelled-trencher digs up to 5 feet deep, at the rate of 300 feet an hour.

The trench digger is only one of many useful construction tools that can be operated by the 'Jeep'. From three power-take-off points it drives such varied equipment as generators, compressors and pumps. This versatile vehicle also does many jobs that would ordinarily require a tractor.

Contractors and builders everywhere rely on the rugged 4-wheel-drive Universal 'Jeep' to get through to jobs and speed up work. Consult your nearest Willys-Overland dealer today for complete information.

**4-Wheel-Drive**  
**UNIVERSAL** **'Jeep'**

WILLYS-OVERLAND MOTORS • TOLEDO 1, OHIO • MAKERS OF AMERICA'S MOST USEFUL VEHICLES

# Cut Your Costs On Every Type Of Construction Job... With BLUE BRUTES!

Here are typical examples of the up-to-the-minute design, long-lasting construction and smooth, dependable performance now proving to contractors all over the world that there's more worth in a Blue Brute. Your nearby Worthington-Ransome Dealer has the complete line of Blue Brute Construction Equipment. Write for his name.

**WORTHINGTON PUMP AND MACHINERY CORPORATION**  
Construction Equipment Department  
Harrison, New Jersey  
Distributors in All Principal Cities

**WORTHINGTON**



# BUY BLUE BRUTES

## Concrete Costs Less!

Count on Blue Brute Portable Mixers for lower-cost concrete on every job. Quickly spotted and towed, and with such features as smooth, positive gear-and-pinion drive . . . high-carbon, Timken-equipped drum rollers . . . and Ransome's famous mixing action, they're sure bets for speedier, better mixing.



## Water-Handling Cheaper!

You'll move *more* water — faster, farther, easier with a Blue Brute Self-Priming Centrifugal Pump. Rugged in every detail, with fast pickup, extra reserve power and high resistance to rust, corrosion and ordinary wear. Built in A.G.C. sizes to A.G.C. standards.

## More Air For Less Money!

Get *all* the air-power out of every drop of fuel with a Blue Brute 60' Portable Air Compressor. Strong, light and efficient, it provides constant, dependable, economical air supply through its easy-breathing Worthington Feather\* Valves. Other Blue Brute Compressors, from 105' to 500'.



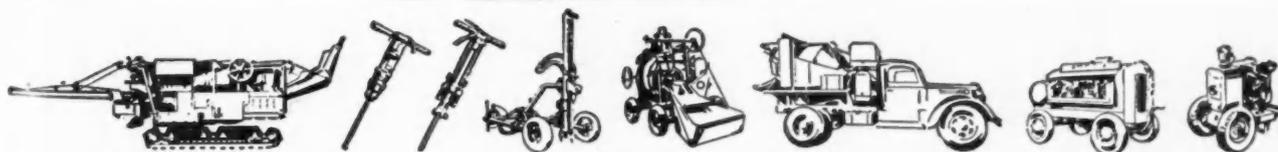
\* REG. U.S. PAT. OFF.

## Construction Expenses at Rock Bottom!



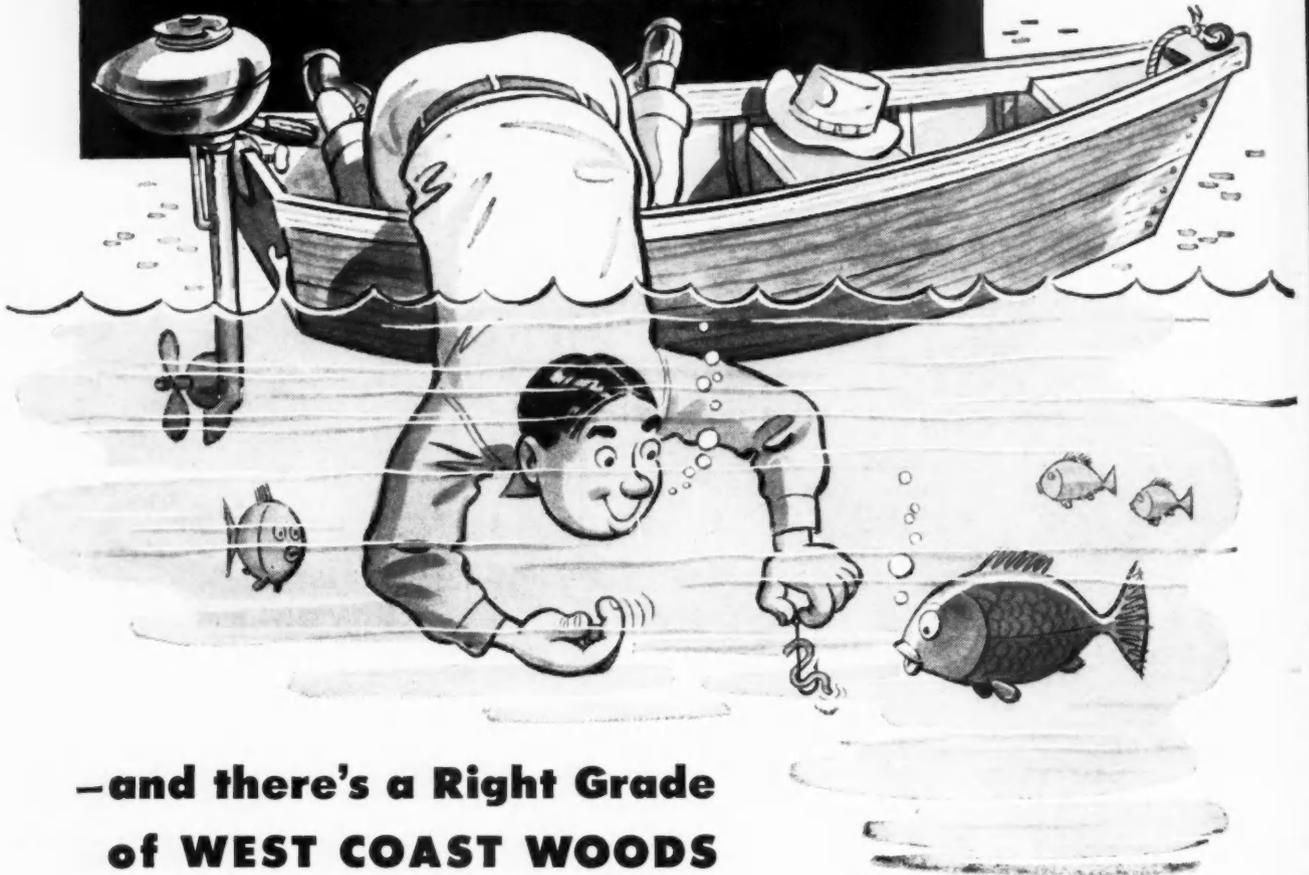
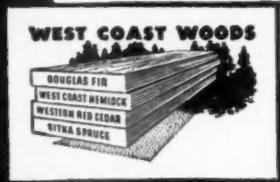
Team up these fast, hard-hitting Blue Brute Air Tools with Blue Brute Compressors — and watch your daily expenses go down. Though tough and powerful, they have the lightness and compactness to keep your workers more satisfied — and more productive.

411-2



**IF IT'S A CONSTRUCTION JOB, IT'S A BLUE BRUTE JOB**

THERE'S A  
**RIGHT WAY**  
TO DO EVERYTHING



**-and there's a Right Grade  
of WEST COAST WOODS  
for every building use**

**G**et the upper-hand on low-cost housing. Specify the least expensive grade of lumber suitable for your purpose . . . and that meets the requirements of sound construction. Today's price difference between grades makes real savings possible . . . while retaining all the qualities which make wood your client's favorite home building material.

It will pay you in every way to build with the right grades of time-tested West Coast Woods.

Timber is a crop...and grows on tree farms. Lumber, properly used, represents less than 20% of the cost of the average home.



IT'S SMART TO BUILD WITH THESE  
**WEST COAST WOODS**

**FREE BOOKLET!**

This illustrated booklet "How to Build Well and Save Money," is being offered to your prospective customers through national advertisements. You'll want to get a copy for your own information.

**SEND COUPON  
TODAY FOR YOUR  
FREE COPY!**



WEST COAST WOODS  
1410 S.W. Morrison, Room No. 643  
Portland 5, Oregon

Please send me your booklet,  
"How to Build Well and Save Money."

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_



**THESE CURTIS "READY-MADES"**  
*help you whittle down*  
**BUILDING COSTS**

When stock design woodwork achieves custom-built distinction—at lower cost—that's news for today's home planners and home builders! And that's why Curtis Woodwork is used so extensively in giving home-owners "more for their money." For Curtis Woodwork makes excellent design and quality construction available for any size or type of home. Here are a few reasons why:



*You can give any room the proper focus without expensive special millwork. This Curtis mantel, for example—Design C-6040—has a pleasing simplicity which gives it dignity and beauty. Designed for Curtis by Cameron Clark, Architect.*



*You can see the sure touch of a master designer in this charming Curtis entrance—Design C-1730. H. Roy Kelley, Architect. Curtis entrances assure lasting value and beauty.*



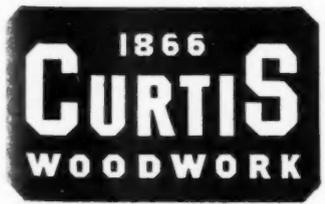
*A fine cabinet for the home owner who wants something out of the ordinary—Curtis Design C-6515. The Architect was Russell F. Whitehead. Curtis offers 18 styles of cabinets.*

**A NEW Curtis Development—**  
**PRESPINE**

Developed after years of research and testing, Curtis Prespine is a new wood material for use in panels in Curtis doors and as an integral part of other Curtis Woodwork. Prespine has a hard, satin-smooth surface that takes paint and other finishes beautifully. Tough and durable, Prespine will not warp, check or splinter. It is 93% wood—and resembles in color the species wood from which it is made. Picture on right shows the beauty of Curtis doors with Prespine panels.



*When in New York, visit the Curtis Woodwork Display at Architects' Samples Corporation, 101 Park Avenue.*



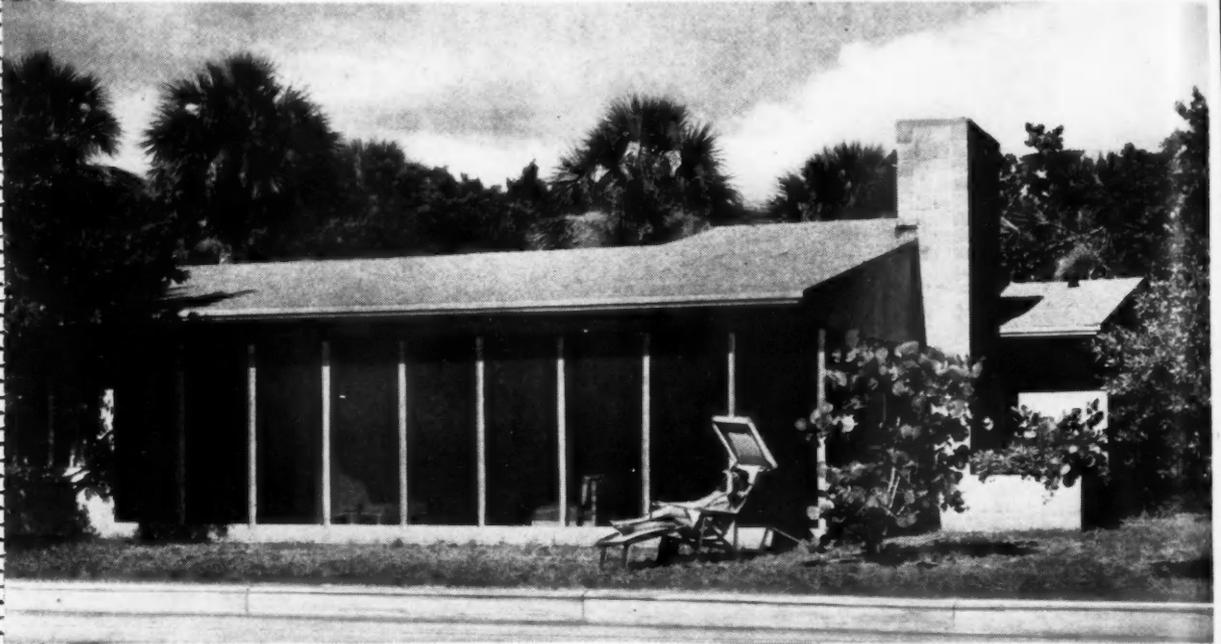
**MAIL COUPON for complete information**

CURTIS COMPANIES SERVICE BUREAU  
 AB-4W Curtis Building, Clinton, Iowa  
 Gentlemen:  
 Please send me your book on Curtis Stock Architectural Woodwork.

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

I am ( ) Architect, ( ) Contractor, ( ) Prospective Home Builder, ( ) Student. Please check.

## Why Florida Architect Chose LUMITE



*"Our experience shows nothing else stands up like this plastic screening."*

RALPH TWITCHELL  
RUDOLPH & TWITCHELL  
Sarasota, Florida

### SPECIFICATIONS

**EFFECTS OF ACIDS, ALKALIS AND SOLVENTS**  
—Essentially none.

**NON-INFLAMMABLE**—Will not support flame  
... is self-extinguishing. Melting point,  
340°F.

**WATER ABSORPTION**—Immersion 24 hours,  
less than 0.1%.

**TENSILE STRENGTH, ULTIMATE (of filament)**  
—Up to 40,000 lbs. per sq. in.

**IMPACT STRENGTH**—Greater than conven-  
tional type screening.

**INSTALLATION.** Cut with ordinary scissors.  
Fold cut edges under 1/2". Tack or staple  
the screening smoothly and evenly every 1 1/2".  
Being elastic Lumite will automatically draw  
itself into a snug, firm fit. For correct methods  
of machine framing, consult Lumite engineers.

Like thousands of other architects in localities where screening is subjected to severe climatic conditions, Mr. Twitchell has found that LUMITE provides the happy answer to screening problems.

Here is a screening that has absolute immunity to rust, rot, or corrosion. Neither high humidity, salt spray nor acid smoke has any effect on this amazing new plastic material. It cannot support mildew or fungus.

Because LUMITE is rustproof and corrosion-proof it cannot stain paint under windows . . . it need not be painted to prevent rusting.

LUMITE has greater impact strength than conventional screen material . . . it will never sag nor bulge, when properly framed. Punch it. It gives then regains its original shape.

LUMITE saves your clients money—costs little more than the cheapest screen and less than any other quality screening—only 11 1/2-12¢ per square foot—retail.

*Sold through hardware, lumber and building supply dealers and screen manufacturers.*

*For further information, consult  
Sweet's File or write Dept. AB-2.*

### LUMITE DIVISION

Chicopee Manufacturing Corporation  
47 Worth Street, New York 13, N. Y.

\*Registered Trade-mark

woven of saran



No sub  
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# THIS IS THE YEAR TO USE CREO-DIPT ZEPHYR RED CEDAR PROCESSED SHAKES

*Lower priced wood sheathing has greatly increased the number of home builders who can afford Creo-Dipt Sidewalls*

No substitute or imitations can match the individuality—the inviting rustic, homelike appearance of Creo-Dipt Zephyr Red Cedar Processed Shakes. With their rough, parallel grooves or ridges and distinctive long exposure, Creo-Dipt Zephyr Red Cedar Processed Shakes impart an appearance that ordinary smooth cut shingles can't approach. When stained, these grooves provide a pleasing gradation of different shades. Their heavy shadow line at butts and the wide variety of colors, that can't be duplicated by the limited colors available in imitation and substitute materials, add beauty and interest.



NO SUBSTITUTES AND IMITATIONS CAN MATCH THE INDIVIDUALITY OF CREO-DIPT RED CEDAR SHAKES

### PUBLIC LEARNING THAT IMITATIONS AND SUBSTITUTES DON'T HOLD UP

Home owners who have seen how imitation and substitute materials deteriorate, crack, chip, fade—prefer Red Cedar Processed Shakes initially stained and preserved at the factory with linseed oil base stain. When stained every five or six years they will outlast the house they cover.

### FAR GREATER INSULATION EFFICIENCY THAN CLAPBOARD OVER SHEATHING

In most localities on an average new 3 bedroom house, Creo-Dipt Zephyr Red Cedar Processed Shakes and Creo-Dipt Zephyr insulating board applied over wood sheathing will have about 30% greater insulation efficiency than clapboard over wood sheathing. On a residing job the saving is even greater. When applied over clapboard they will save more than \$2,500 in painting and fuel bills over a 20-year period. This is figured on (1) 35% increase in insulation efficiency; (2) restaining shingles every 5 years vs. repainting clapboards every 3 years.

### DOUBLE WALL CONSTRUCTION PROVIDES GREATER INSULATION AND AN EFFECTIVE WINDBREAK



DOUBLE WALL CONSTRUCTION OF CREO-DIPT ZEPHYR SHAKES AND UNDERWALL OF SPECIAL INSULATING BOARD

Creo-Dipt Zephyr Red Cedar Processed Shakes can be used for (1) *Single Coursing* at shorter exposure; (2) *Double Coursing*, i.e., Zephyr Processed Shakes applied over an undercoursing of low grade shingles; (3) *Double Wall*, i.e., Creo-Dipt Zephyr Red Cedar Processed Shakes applied over an underwall of Zephyr asphalt treated, weather-resisting insulating board.

Because it saves labor, Double Wall construction usually costs no more than Double Coursing, and is far superior. The insulating board undercoursing comes in sheets 4' long—is easy to apply. Creo-Dipt Zephyr Red Cedar Processed Shakes are laid over this.

On new houses over wood sheathing, Double Wall construction has far greater insulation qualities than Double Coursing and, furthermore, provides an effective windbreak, the solid surface of Zephyr insulating board preventing the infiltration of air.

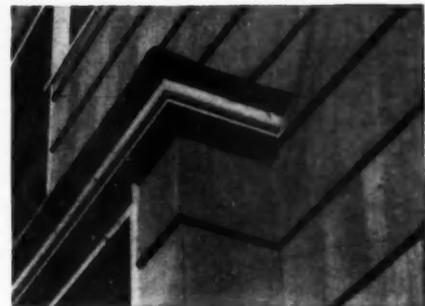


### ANY CARPENTER CAN APPLY THEM

Unlike ordinary shingles which require cutting and fitting on the job, Creo-Dipt Zephyr Red Cedar Processed Shakes are already stained—have butts and edges trimmed so that edges are parallel and at right angles to the butt. The job is further speeded and simplified by the Double Wall method whereby the shingles are laid over an under wall of special insulating board.

### BUILDERS SEE OPPORTUNITY TO INCREASE SALEABILITY OF HOMES

No other material holds so much charm for sidewalls as Creo-Dipt Zephyr Red Cedar Processed Shakes. No other material provides such color variations between roof, siding and trim. Buyers will cheerfully pay the slight difference in cost over ordinary clapboards when told the savings in painting and fuel bills.



TEMPLATE MAKES IT EASY FOR ANY CARPENTER TO OBTAIN A TIGHT, CLEAN CORNER FIT

### TEMPLATE MAKES IT EASY TO FIT CORNERS

A template inserted into every third carton of Creo-Dipt Zephyr Red Cedar Processed Shakes makes it easy to cut the insulating board to the proper angle for corners before it is applied, after which, when the shakes are applied, it is a simple matter to trim them to a tight, clean corner fit.

### 100 SQUARE FEET UNITS

Each unit includes outer wall Red Cedar Zephyr Shakes, a package of Zephyr backing board for Double Wall construction or undercoursing shingles for double coursing construction, plus sufficient special, small head, rust-resisting nails for recommended exposure.



CREO-DIPT ZEPHYR DOUBLE WALL UNIT

### SEE YOUR CREO-DIPT DISTRIBUTOR

Let him show you the attractive colors and explain how easy it is to build more saleable homes with Creo-Dipt Zephyr Red Cedar Processed Shakes.

When Their Eyes Say,  
"That's Exactly  
What We Want!"

**YOU HAVE  
MADE A SALE!**



**T**HAT look of delight that comes on a prospect's face when she sees the gleaming beauty of a WRIGHT RUBBER TILE kitchen floor often means that a sale is made! As every builder knows, it is details like the appearance of a floor that make the difference between "Sale" and "No Sale."

When *you* use WRIGHT RUBBER TILE floors in kitchens—bathrooms—playrooms—halls—*any* room in the house, you are making your houses *easier to sell*. It is hard to believe what a difference a floor can make until you see the gleaming beauty of an actual floor of WRIGHT RUBBER TILE. Many builders who have adopted WRIGHT RUBBER TILE profited by quicker sales at higher prices per house.

But, even more important, such floors make every customer a permanent booster of your work—a booster at

the end of five years, ten years, twenty-five years! Actual service records indicate that even after a hundred years the floors will still be as beautiful as the day they were first laid down. It is the easiest of all floors to clean. It is quiet and exceptionally comfortable underfoot. It resists damage that makes other floors look old before their time.

Make sure you have every possible advantage during the competitive days ahead! Learn the full story of WRIGHT RUBBER TILE from your dealer or write us direct.

#### WHAT DOES IT COST?

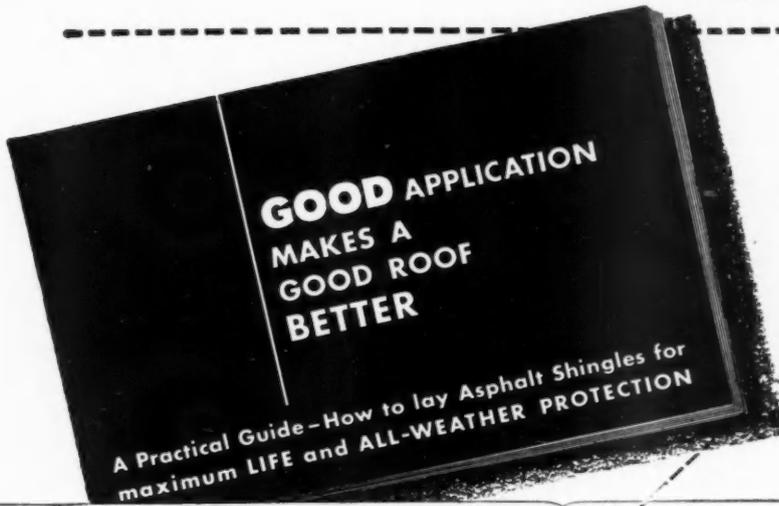
*Comparable in cost to standard gauge linoleum, WRIGHT RUBBER TILE is actually lower in first cost than many materials it replaces. Considering its advantages, it is easy to show a home buyer that it is the most economical floor he can buy.*

**WRIGHT MANUFACTURING COMPANY**  
P. O. Box 6567                      Houston, Texas

**W R I G H T   R U B B E R   T I L E**  
*Floors of Distinction*

# It's NEW!..It's

# FREE



Gives the "How" and "Why" of recommended good application practices.

### WHAT TO DO WHEN LAYING ASPHALT STRIP SHINGLES (SQUARE BUTT OR HEXAGONAL)

**WHERE AND HOW TO START A ROOF.** It is recommended that horizontal and vertical chalk lines be used to insure good shingle alignment. Their use is doubly important when courses must be kept aligned above a dormer or other projection. Where a roof surface is broken, start laying shingles from a rake toward a dormer or into a valley. Where unbroken, begin at the rake that is most visible. If both rakes are equally visible, start at the center and work both ways.

**STARTER COURSE.** The actual laying of Asphalt Strip Shingles begins with the application of a starter course whose function with both square butt and hexagonal patterns is to back up the first regular course shingles and fill in the spaces between tabs. The starter course is laid with tabs facing up, over the eaves flashing strip and flush with the rake and eave edge. With square butt shingles, cut along 3" off the first starter course shingle to insure that all cut-outs will be covered. With hex strips the first shingle is not cut.

**FIRST AND SUCCEEDING COURSES.** Start the first course with a full length shingle strip. Start the second course with a shingle strip from which a portion has been cut off. Start each succeeding course with full or cut shingle strip depending on the style of shingle and the method of application recommended by the manufacturer, see Figs. 12, 13, and 14.

**CORRECT NAILING.** The number of nails per strip and the placing of the nails are both vital factors in good roof application. With three tab square butt strip shingles use 6 nails per strip. See that each nail is properly placed—as shown in Fig. 16.

Align each shingle carefully. Start nailing from the end nearest the shingle just laid, and proceed across. This will prevent buckling. Drive nails straight so that the edge of the nail head will not cut into the shingle. Nail heads should be driven flush, not sunk into the surface. Proper nailing increases roof strength and resistance to high winds. Proper nailing is essential! Don't slump on nails.

FIG. 12

FIG. 13

FIG. 14

FIG. 15

FIG. 16

FIG. 17

## SEND FOR THIS USEFUL POCKET-SIZE BOOK NOW!

**"Good Application Makes a Good Roof Better"** is a booklet you will want for your own information as well as for the information of any fellow-workers or employees who may have to do with the sale or application of asphalt roofing products.

Prepared by the engineering committee of the Asphalt Roofing Industry Bureau after years of careful research and checking, this 24 page booklet provides a practical check list of the latest and most widely approved methods of laying asphalt shingles to assure maximum life and

maximum all-weather protection. It gives step-by-step information with detailed diagrams on such things as deck preparation, valley construction, metal drip edges, eaves flashing strips, aligning shingles, proper nailing, cementing tabs for extra wind resistance, hip and ridge capping, etc. There are 24 interesting and helpful pages in this pocket-size book. Use it as a reminder or as a guide. Write to the Asphalt Roofing Industry Bureau today for a FREE sample copy. Additional copies will be available through your supplier.

**ASPHALT ROOFING INDUSTRY BUREAU • 2 W. 45TH ST., NEW YORK 19, N. Y.**  
 SPONSORED BY 28 LEADING MANUFACTURERS OF ASPHALT SHINGLES • SIDINGS • ROLL AND BUILT-UP ROOFINGS

# ASPHALT SHINGLES

CONSTRUCTION'S BIGGEST DOLLAR'S WORTH



**... a Moulding Kit**

**in Pittco Premier Store Front Metal**

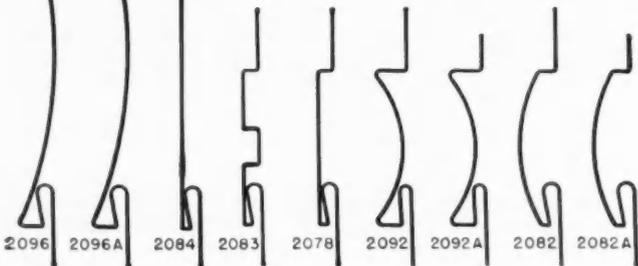
● The new basic mouldings in the Premier line of Pittco Store Front Metal may be truly called a Moulding Kit. They may be combined in a wide variety of attractive patterns, giving the architect fresh style and beauty, and great variety in design to help in the creation of distinctive, sales-winning store fronts.

Shown here with the same head and drip members are three of the many designs which may be formed with these new shapes. Cross sections of some of the new mouldings are shown at left.

Most of the shapes in the Premier Moulding Kit are interchangeable and may be used both horizontally and vertically. They make it easy to design several adjacent store fronts, giving each a distinctively different appearance through the proper selection and arrangement of mouldings.

This convenient Moulding Kit of Pittco Premier Store Front Metal, is another result of "Pittsburgh's" constant research, aimed at helping you solve architectural and building problems encountered in the field.

BASIC SHAPES OF MOULDING KIT (1/2 SIZE)



**PITTCO STORE FRONT METAL**



PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS

PITTSBURGH PLATE GLASS COMPANY



**NU-STYLE**  
**MULTIPLE-USE CABINETS**  
 the answer to the extra storage  
 space problem!

FOR INDUSTRIAL USES

IN THE LAUNDRY

IN DINING ROOMS

IN LIVING ROOMS

IN BATH ROOMS

FOR STORAGE WALLS

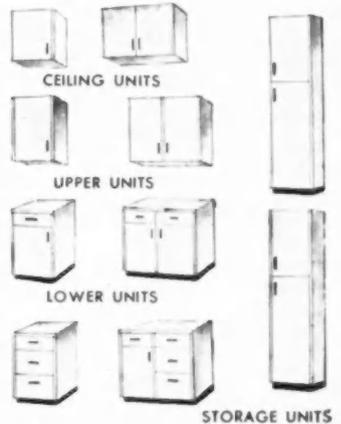
*The Bilt-Well Line*

- Superior Unit Wood Windows
- Bilt-Well Interior Doors
- Bilt-Well Exterior Doors
- Nu-Style Kitchen Cabinets
- Bilt-Well Entrances
- Bilt-Well Shutters
- Close-tite Casements
- Bilt-Well Basement Windows
- Bilt-Well Combination Doors
- Bilt-Well Louvres and Gable Sash
- Carr-dor Overhead Garage Doors
- Bilt-Well Corner Cabinets
- Bilt-Well Storm Sash
- Bilt-Well Screens
- Gli-dor Cabinets
- Bilt-Well Medicine Cabinets
- Bilt-Well Ironing Board Cabinets
- Bilt-Well Mantels
- Bilt-Well Telephone Cabinets
- Bilt-Well Stair Parts
- Bilt-Well Unit Linen Cabinets
- Bilt-Well Breakfast Nooks

**NU-STYLE** Cabinets are designed to fit any area and solve almost any storage problem. They are all-purpose cabinets, and the many standard units in which they come make it possible to use them practically any place.

They are produced from Ponderosa Pine wood, kiln dried, smoothly surfaced, pre-fitted, unfinished, semi-assembled, and packaged in a dust-proof carton.

This is a summary of standard Nu-Style Cabinet Units which are furnished in graduated sizes, thus making them adaptable for various arrangements, of which several illustrations are shown.



**CARR, ADAMS & COLLIER CO., Dubuque, Iowa**



*Windowalls*<sup>\*</sup>  
ANDERSEN



**PANORAMIC PICTURE** is caught within the broad reach of this **ANDERSEN WINDOWALL**.

The home overlooks the Mississippi River, and the awe-inspiring beauty of a broad river valley is framed by an Andersen Casement Picture Window Unit. This **WINDOWALL** functions both as a window and a wall—permitting entry

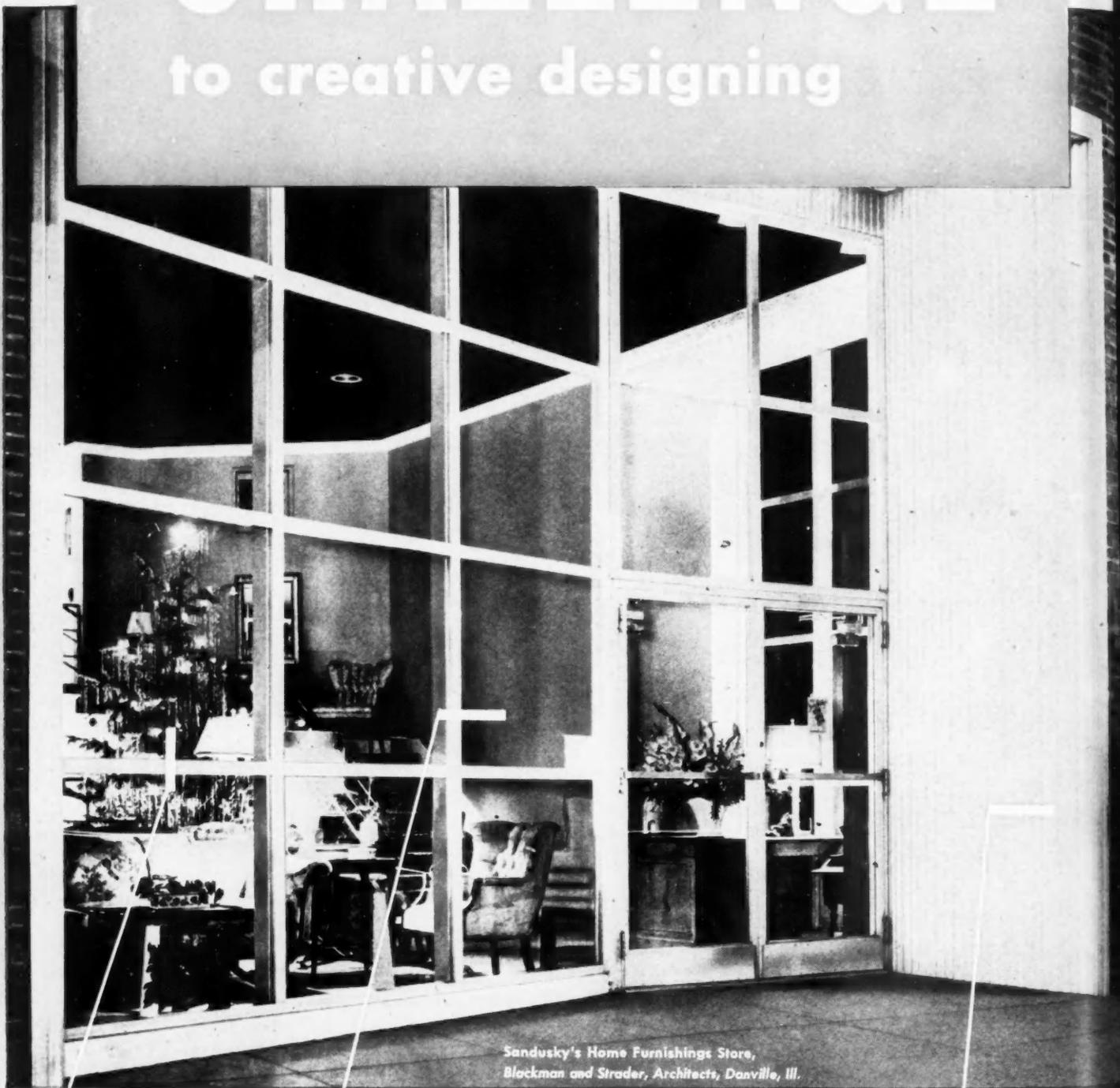
of sunlight and fresh air, and opening up a view, yet providing an insulated barrier against cold air.

Specification data on **ANDERSEN WINDOWALLS** is in Sweet's Architectural and Builders' Catalogs, or will be sent by us upon request. See your local lumber or millwork dealer for further information.

\*TRADEMARK OF ANDERSEN CORPORATION

*Andersen Corporation*  
BAYPORT • MINNESOTA

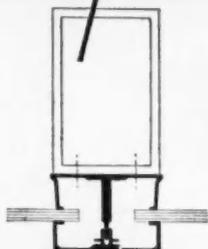
A modern store front is a  
**CHALLENGE**  
 to creative designing



*Sandusky's Home Furnishings Store,  
 Blackman and Strader, Architects, Danville, Ill.*



¼ size detail  
 of stock division  
 bar, used horizontally  
 in above store front.



¼ size detail of stock  
 division bar, used verti-  
 cally with aluminum  
 tubular reinforcement.



Zourite, the modern aluminum facing material. Available in  
 green, brown, or black porcelain enamel, and in aluminite.

Y  
 th  
 K  
 th  
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Kav  
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Storch F  
 Salisbury

**You can meet  
this challenge with  
Kawneer Metals—  
they offer custom-styling  
in stock shapes**

Kawneer Stock Store Front Metals possess the handsome appearance and striking individuality of custom-made shapes—yet they bring important cost-reductions to you and your clients. Kawneer Stock Metals cost far less than specially-made assemblies—they reduce the cost of drafting and detailing—and they eliminate costly delays.

Kawneer metals are styled and engineered to the highest standards of modern architecture. They also bring you new flexibility in designing, because many shapes are interchangeable and many serve multiple uses.

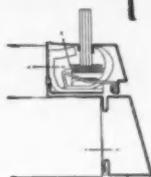
Pictured here are only a few of the Kawneer Stock Metals. Write for construction details. 207 North Front Street, Niles, Mich., 2507 8th St., Berkeley, Cal., or 817 East Third St., Lexington, Ky.

THE  
**Kawneer**  
COMPANY

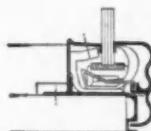
Store Front Metals • Modern Entrances  
Facing Materials • Aluminum Louvered Ceilings  
Aluminum Roll-Type Awnings



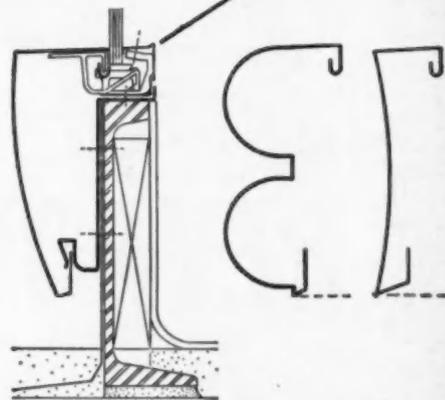
Bostonian Shoe Store, Chicago,  
Morris Lapidus, Architect, New York City.



1/4 size detail  
of stock glazing  
sash above.



One of the many  
other stock sashes.



Stock bulkhead  
assembly used in  
above store front.

Two other stock  
bulkhead faces  
which are also  
available.



Sterchi Furniture Co.,  
Salisbury, North Carolina.



1/4 size detail of  
stock division  
bar used at left.



Stock corner bar—  
angles from 90° to  
120°, 120° to 165°



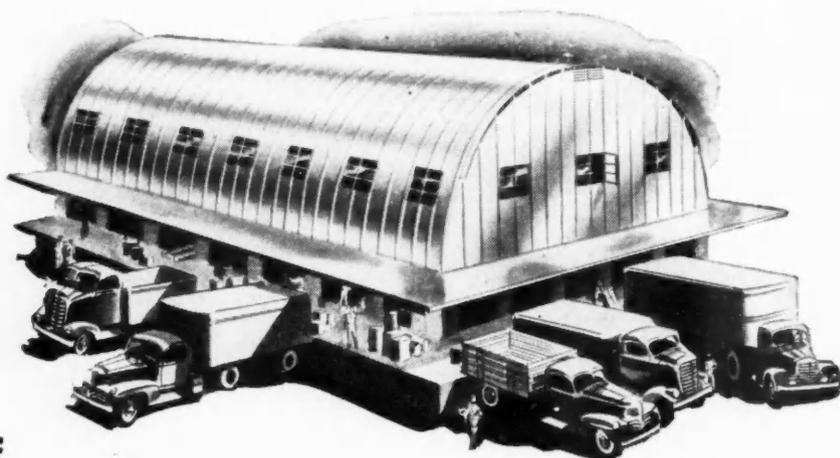
Stock reverse  
corner bar.

Stiffeners shown  
here are Medium.  
Also available—  
Light, Heavy,  
Heavy X stiffeners



Stock flush-glazing sash  
eliminates projecting metal.

# IMMEDIATE AND GROWING BUSINESS OPPORTUNITY FOR ENGINEERS—CONTRACTORS—BUILDERS



plan and  
construct  
installations of

## REYNOLDS ALUMI-DROME

All-purpose industrial, commercial and farm pre-fab...  
buildings range from \$3,800 up... we supply sales leads!

If you have the organization and facilities to plan and construct installations of Reynolds Alumi-Drome, you can start immediately in a growing field of profitable business.

The market for the Alumi-Drome is vast, and proven. Inquiries have come in too fast to handle, because each potential buyer needs a competent local construction firm. Wherever such a firm has taken over, successive installations have snowballed more inquiries and sales.

Your profit on Alumi-Drome installations is up to you. You buy the Alumi-Drome shipped complete in pre-cut parts, ready for quick assembly with aluminum bolts through pre-drilled holes. Your installation can vary from simple foundation to complete first floors, commercial facades, industrial loading docks, etc.

You figure your contract accordingly.

If you have the set-up to handle this type of work, it will be good business for both of us to get together. Mail the coupon today!



Reynolds Metals Company,  
Alumi-Drome Division, Louisville 1, Ky.

- ▶ All-aluminum ... patented all-bolt assembly
- ▶ No rust, no nails, no holes in any weather surface
- ▶ No painting, no maintenance
- ▶ Eligible for FHA financing

Reynolds Metals Company  
Alumi-Drome Division  
2003 South Ninth St., Louisville 1, Ky.

Please send me full information on construction agencies for the Alumi-Drome.

Firm Name \_\_\_\_\_

Type of present construction operations \_\_\_\_\_

Sender's name and title \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_

Zone \_\_\_\_\_

State \_\_\_\_\_

not just a new fixture—

# A NEW KIND OF LIGHTING!

So new, so exciting in design and performance, it will close many a "doubtful" sale.



## put **PACEMAKER** in your plans

Boldly overscaled, snug-to-ceiling designs in beautifully textured glass created by Carl Moser with scientifically engineered 3-way lens light.

Pacemaker's scientifically designed built-in colourvred lens\*.

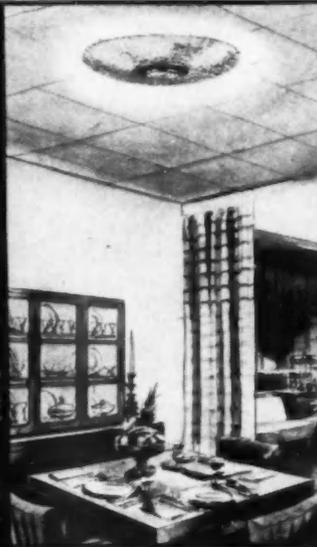


- ...blends into fixture contour
- ...spotlights center of room
- ...eliminates glare
- ...requires no special inside ceiling construction

\*Patented



**SPOTLIGHTING**



**BACKGROUND LIGHTING**



**BIG OCCASION LIGHTING**

# LIGHTOLIER

Pacemaker—Perfect for homes, for offices, stores, restaurants, public buildings.

"I like Pacemaker. I recommend it highly."  
Julian Roth,  
Emery Roth & Sons  
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People judge by names they know. Your prospect knows "It's a Lightolier" are quality words that bespeak a quality house.

Lightolier, Dept. AB4, Jersey City, N. J.

Please send me complete information on the revolutionary Pacemaker series. Also send me all the facts on Lightolier

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- Portable Lamps
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Name .....

Address .....

City ..... Zone ..... State .....

**Good looking roof**  
*but how storm-proof?*



**Here's extra protection against wind and storm... plus smart appearance!**

Due to their advanced, scientific design Ruberoid Dubl-Coverage Tite-Ons are truly windproof. Even hurricanes have failed to tear them loose! Fire-resistant and long lasting, they'll give you years of extra protection and freedom from roof worries... at a modest cost! They go on quickly, keep application costs down. These shingles are an exclusive development of The Ruberoid Company who for more than 60 years have pioneered in creating top-quality building materials. Ask for them by name... Ruberoid Dubl-Coverage Tite-On Shingles. See your local Ruberoid dealer, or use the coupon below for full information.

**You'll appreciate the difference**  
Interweaving gives that smart "basket-weave" appearance... makes two complete thicknesses over the entire roof. Concealed interlocking firmly links them so the roof is practically one-piece. No holding gadgets or exposed nails to rust away!

**Dubl-Coverage Tite-On Shingles**  
The RUBEROID Co.

**Building Materials For Home, Farm And Industry**  
"MORE YEARS FOR YOUR DOLLAR WITH RUBEROID"

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

Please send free booklet on Dubl-Coverage Tite-On Shingles  
 I am interested in shingles for new roofs  
 I am interested in shingles for re-roofing

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

SAVE TWO CENTS—PASTE COUPON ON PENNY POSTCARD



**Here's real freedom from roof worries!**

**Extra Protection Against Wind and Storm Damage**

Roofs on barns like these are a real test for any shingle. Because of their steep locations, wide expanse, and exposed eaves and curves, they are exposed to unusual storm hazards.

Ruberoid Dubl-Coverage Tite-On Shingles were created to answer problems like these. Their patented, interlocking design has been tested in windswept areas... Tite-Ons have actually withstood hurricanes up to 100 miles per hour!

They can take punishment like a bullet pointed on to protect your livestock and equipment. Ruberoid Tite-On Shingles cost less. They go on fast, with no expense down.

Years experience in the development of high quality materials is your assurance of protection for your investment.

Ask for Ruberoid Dubl-Coverage Tite-On Shingles. See your local dealer or use coupon below.



**The Secret is in the Design**

Concealed interlocking firmly links these shingles into a "one-piece" roof throughout (three in certain vital places). In addition, hidden nails securely hold each shingle in four places. No metal strips, holding gadgets, or exposed nails to rust away.

**STORAGE TITE-ON SHINGLES**  
RUBEROID Co.

**For Farm, Home and Industry**

**THIS COUPON TODAY**

Request free booklet on Dubl-Coverage Tite-On Shingles, and 10 shingles for re-roofing.

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**...and quite a roof over your business, too!**

Wherever you find a home owner, prospective home builder or farmer interested in getting the most roofing protection for his dollar you find an "active" Ruberoid prospect.

You'll find plenty... for they're getting the story every month of every year! They're being told *and sold* on the longer-lasting, truly weatherproof roof that only Ruberoid's unique, patented Tite-On Shingles can provide.

Paced by this hard-hitting pre-selling, alert dealers are building up year-round sales volume on these shingles. They can help keep quite a nice roof over your roofing business, too!

**The RUBEROID Co.**

**Manufacturers of Building Materials**  
**for Home, Farm and Industry**

**Executive Offices:**  
**500 Fifth Ave., N. Y. 18, N. Y.**

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### Twirls open... twirls shut like an automobile window

... that's how easily the new post-war Mesker Steel Casements operate! No wonder home buyers are so enthused about them. You'll be, too, when you see how much *value* Mesker has engineered into this competitively-priced line. See our catalog in Sweet's Builders File—or write us for a copy.

MESKER BROTHERS • 4342 GERALDINE • ST. LOUIS 15, MO.



*No tugging—no lifting—no struggling as with old-style windows. Mesker Steel Casements cannot swell, warp, shrink or stick.*



*One hand opens and closes Mesker Casements the easy modern way. Gears do the hard work — you just twirl the handy rotor handle.*

PUT THAT *modern look* IN YOUR HOME!

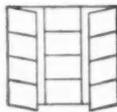
Standard sizes can be used singly and in combination to obtain any desired window effect in any size opening...



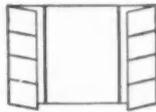
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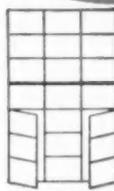
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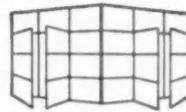
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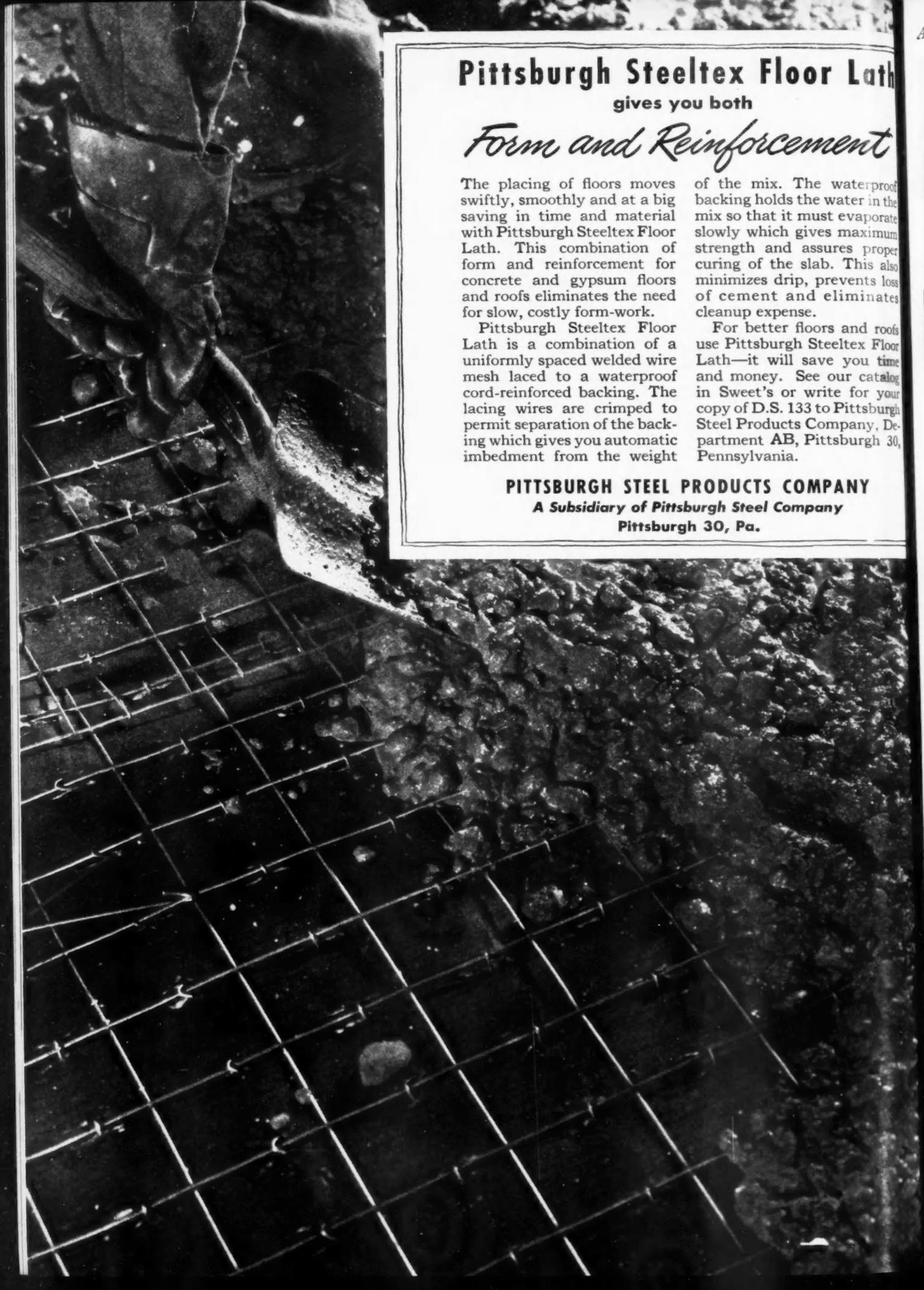
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gives you both

### *Form and Reinforcement*

The placing of floors moves swiftly, smoothly and at a big saving in time and material with Pittsburgh Steeltex Floor Lath. This combination of form and reinforcement for concrete and gypsum floors and roofs eliminates the need for slow, costly form-work.

Pittsburgh Steeltex Floor Lath is a combination of a uniformly spaced welded wire mesh laced to a waterproof cord-reinforced backing. The lacing wires are crimped to permit separation of the backing which gives you automatic imbedment from the weight

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**PITTSBURGH STEEL PRODUCTS COMPANY**

*A Subsidiary of Pittsburgh Steel Company*

**Pittsburgh 30, Pa.**

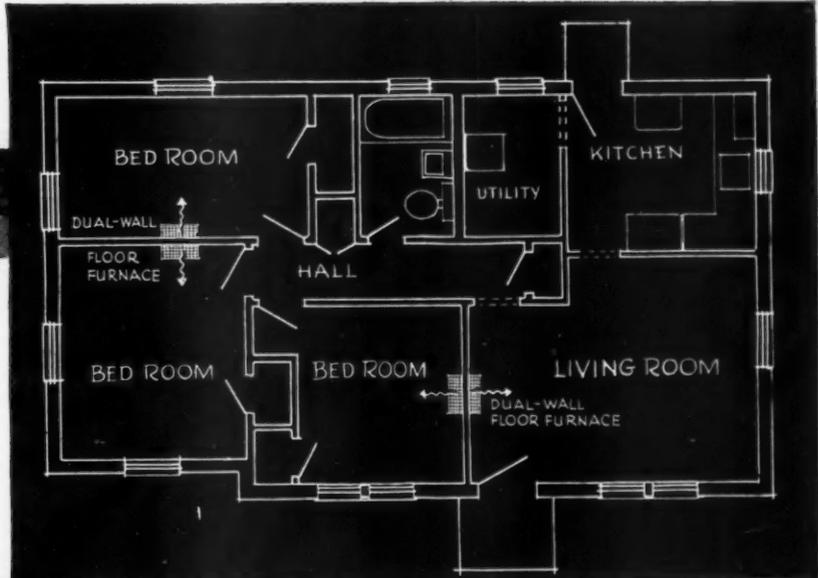
"Mansion Heating" Comfort For Low-Cost Houses! -- With

# Coleman DUAL-WALL Floor Furnaces



**Franklin L. Burns,**  
President  
Burns Realty and Trust Co.,  
Denver, Colorado

Mr. Burns' slogan is "Burns Better-Built Bungalows"—and Coleman Floor Furnaces help him build better!



This Fine Floor Plan Shows How Franklin Burns Uses These Coleman Installations To Uphold Quality

He uses Coleman's dual-wall models which set under the walls to heat separated rooms. Each provides powerful automatic heating for from two to five large rooms. They hold down building costs and bring real comfort—even in Colorado's rigorous mountain winter climate. As Franklin Burns says: "Coleman Dual-Wall Floor Furnaces fit in with our plans—they are a definite part of better building!"

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Now, contractors everywhere are using Coleman Floor Furnaces, to help give *better* homes for the money. You, too, can get either dual-wall or flat-register models in sizes from 25,000 to 70,000 BTU; you can have gas, oil, or LP gas burners. Meet building code and FHA requirements; give finest automatic heating with any floor plan. And you'll have no duct cost, low installation time charges. See your Coleman dealer *now* for the right Coleman Floor Furnaces for you.

### Available For Gas, Oil or LP Gas, Full Depth or Shalloflow

Yes, we have floor furnaces, flat-register or dual-wall, to meet every requirement of local fuel situations and building codes! Ask your Coleman dealer, or mail us the coupon.

**THE COLEMAN COMPANY, INC.**  
Wichita 1, Kansas



Gas, Oil or LP-Gas  
**DUAL-WALL**  
Floor Furnace



The Coleman Company, Inc., Builders Contract Dept. AB-667, Wichita 1, Kans.  
Please send me free information about your special cooperation for builders and contractors, and Floor Furnace Catalog for Builders. I am specially interested in:

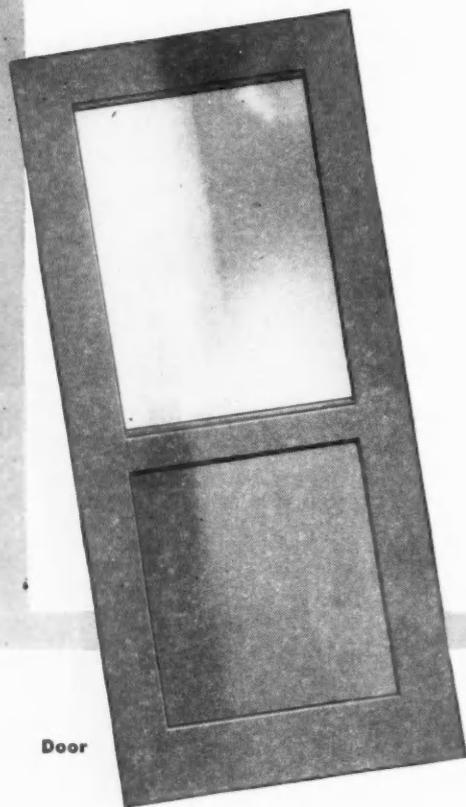
Gas    Oil    LP-Gas models

Name.....  
Address.....  
Town..... State.....

**No mortising, no drilling,  
no tapping, no prime painting!**

...with

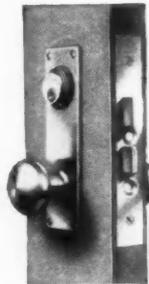
**FENESTRA'S DOOR  
"PACKAGE"**



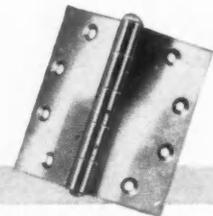
Door



Frame



Lock



Hinges

Just bolt the strong, steel frame together. Attach the frame to floor and anchor to walls. Screw on the template locks and hinges. Hang the door!

That's all! The rest is factory-done for you. Low-cost Fenestra\* Standard Stock Metal Doors come to the job complete with hardware and frames *already* sized and machined to fit. Man-hours saved. Money saved.

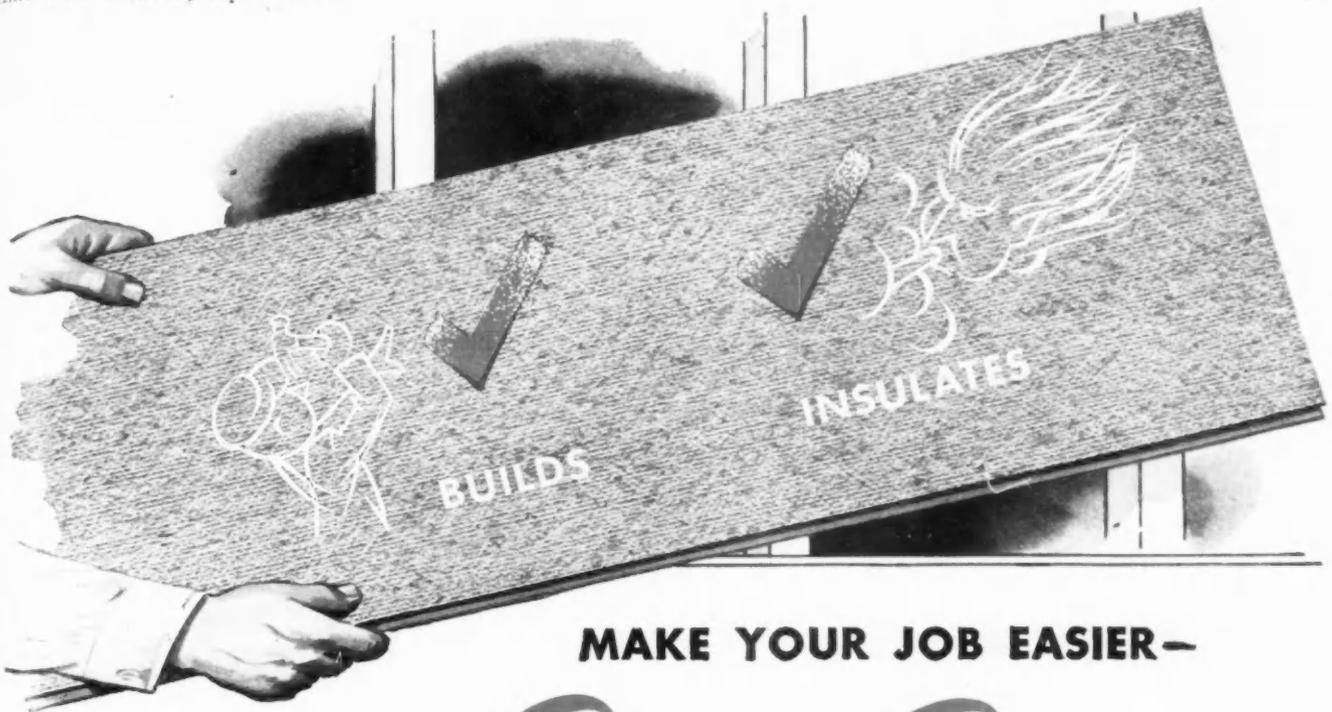
These good-looking, insulated doors reach your dealer carefully wrapped to protect the gleaming finish. And you can get them *right now*.

Doors are also available with the Underwriters' B Label.

For further information, call the nearest Fenestra office, or write Detroit Steel Products Company, Dept. AB-4, 2260 East Grand Blvd., Detroit 11, Michigan.

\*Trademark

*Fenestra* **STANDARD STOCK METAL  
SWING AND SLIDE DOORS**



MAKE YOUR JOB EASIER—

BUILD THE *Double Duty* WAY

# WITH **INSULITE**

Three important INSULITE advantages make your job easier and more profitable:

- (1) INSULITE builds and *insulates*; homes are easier to heat in winter, are cooler in summer.
- (2) INSULITE is easy to handle, nails on fast, saves time, waste is minimized.
- (3) INSULITE (Bildrite) Sheathing and Sealed Lok-Joint Lath used together form the Approved INSULITE Wall of Protection. This method of construction controls moisture condensation in walls. For better houses that sell easier, quicker and at a greater profit,

use Double-Duty INSULITE.

See Sweet's File  
for Builders—2c/11



*Double Duty*

# INSULITE

The GENUINE

INSULITE, DIVISION MINNESOTA & ONTARIO PAPER CO.  
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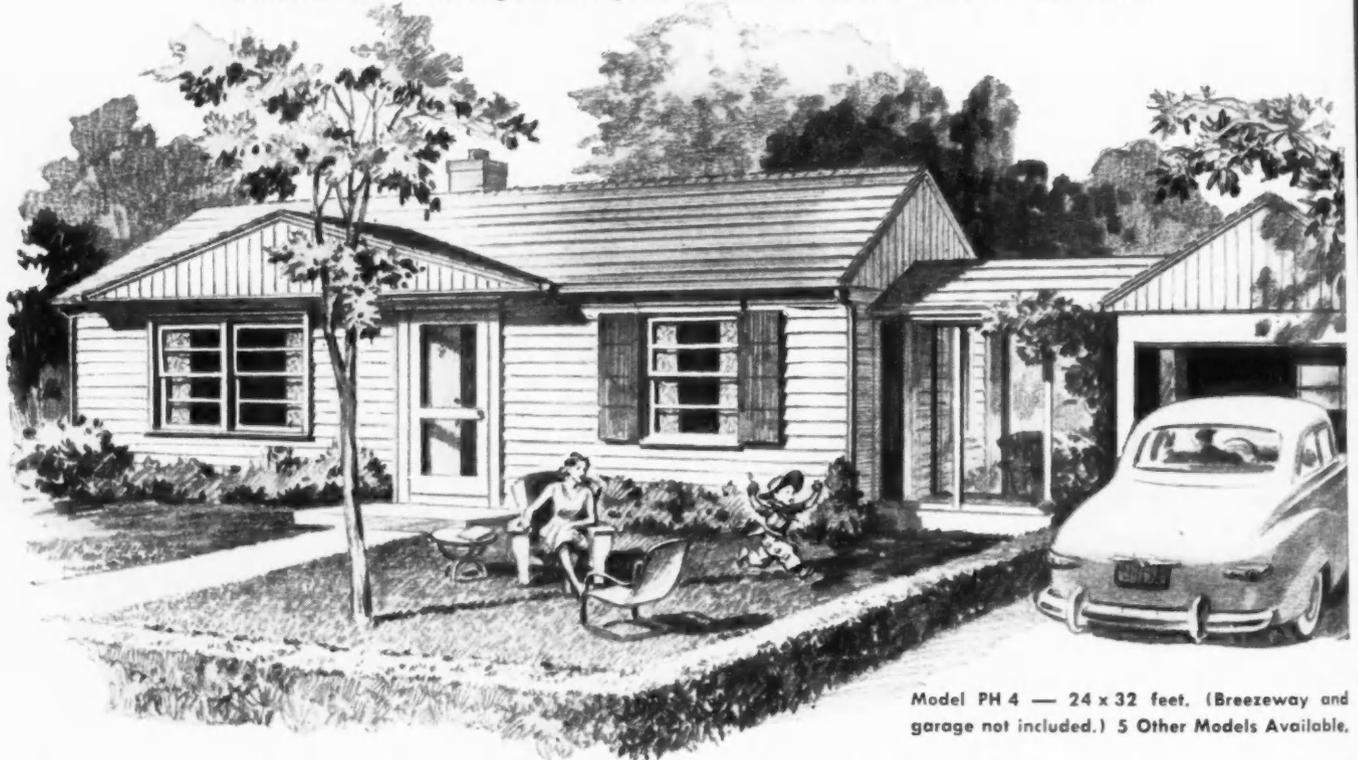
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INSULITE DIVISION  MINNESOTA & ONTARIO  
PAPER COMPANY  
MINNEAPOLIS 2, MINNESOTA

# The Economy Home

## IS THE ANSWER TO THE PUBLIC DEMAND FOR LOW COST HOUSING

Yes, this new series of PH Homes is the perfect blending of beauty, sound construction and low cost. And each quality speaks for itself in a manner that means business for builders in '49, and business means more profit for you, Mr. Builder. Write or wire for full details.



Model PH 4 — 24 x 32 feet. (Breezeway and garage not included.) 5 Other Models Available.

**Styled for today's market... a better home for the money**

Experienced builders who see these new PH Homes quickly recognize the values that home buyers are seeking — supremely good design, expert craftsmanship, high quality materials — real livability. P&H's modern production methods make the most effective use of time and materials — insure precision down to the last detail — shorten the period of construction

— effect the cost savings that are so important in today's market.

P&H Homes come to you from the factory 83% complete — fully panelized and insulated — requiring only 169 man hours or less to erect.

This low cost economy Home presents a great opportunity for the active builder.

### OUTSTANDING SALES APPEAL!

1. Full size — 24 ft. wide x 32 ft. long.
2. Large living room — 11' 7" x 17' 4".
3. Joint-free, crack-proof interior walls.
4. Choice of two or three bedrooms.
5. Flush doors throughout.
6. Built with or without basement.
7. Choice of heating equipment.
8. Highly rated for FHA financing.

**P&H HOMES**  
 301 Spring Street,  
 Port Washington, Wisconsin

**HARNISCHEFGER**  
 CORPORATION

EXCAVATORS - ELECTRIC CRANES - ARC WELDERS - P&H - ROISTS - WELDING ELECTRODES - MOTORS

# MOST POWERFUL

## 6" SAW

### New



Cuts 2" - Weighs 12 lbs!

Cuts More Material—faster!

Lumber, plywood, compositions, plastics, transite, tile — even sheet metal.

# ONLY \$65

Press the trigger of the New Guild A-6 Saw and there's a burst of speed and power *unmatched by any other 6" saw on the market today!* Just breezes through 2"-depth cuts.

Compact, lightweight, beautifully streamlined, the Guild A-6 is scientifically balanced for *easier handling . . . less fatigue . . . and accurate cutting . . .* good performance reasons why no builder can afford to be without this all-duty saw.

**Exclusive 3-Way Balance  
Makes Finest Running Saw**

**NO TIP!** Hold it this way, and the Guild does not nose down. It's in a horizontal, balanced position all ready to cut.



**NO TILT!** Place the Guild this way on a narrow straightedge. It does not tilt sidewise. Again, it's balanced. No veering or cramping.

**NO TWIST!** Suspend Guild Saw by a string. It holds steady when starting—no dangerous power twist typical of many saws.



### More for Your Money! And here's why:

- The Guild is cleverly ventilated: Harmful sawdust does not work back to the motor. Escapes through rear opening.
- Air from front opening keeps cutting line clean.
- Cutting guide always visible.
- Blade is on right side where it belongs!
- Knob raises or lowers blade for any depth cut between 1/8" to 2".
- Extra-broad shoe for steadier rest on work.
- Double-acting rip guide (extra).
- Helical-gear power drive for highest efficiency.
- Spring unfailingly returns retractable blade guard to protective position.
- Aluminum alloy frame—die cast.
- Uses abrasive cutting wheel for tile, metal, etc. Rugged quality throughout. Guaranteed.

*See* the Guild Saw today! Try its power, balanced handling, versatility. You'll be amazed. Now being shown at leading dealers. Information gladly furnished direct, on request.

## PORTER-CABLE MACHINE CO.

1604 N. Salina St. Syracuse, N. Y.

Manufacturers of SPEEDMATIC and GUILD Electric Tools

# Why

## more builders use **FIBERGLAS\*** BUILDING INSULATION than any other make



### BECAUSE

*It's easy to handle*

Roll blankets and batt blankets are fully enclosed, won't pull apart. (Fiberglas Insulation is the only mineral wool that comes in roll blanket form.) Compression packages pass easily through stud and joist spaces. Light in weight.



### BECAUSE

*Installed cost is low*

Fiberglas Building Insulation is competitively priced with ordinary insulations, and is actually cheaper to install than most. Strong nailing flanges simplify the job. A size and type for every insulation need.



### BECAUSE

*It's a good selling feature*

Your customers know Fiberglas Insulations as quality materials that are used in the best homes, trains, trucks, planes, home appliances. They regard Fiberglas Insulation as evidence of quality construction.



### 2 in 1 Quality... at no extra cost

- 1. Ageless, firesafe glass wool**
  - Fiberglas, the most efficient mineral wool can't rot, burn or absorb moisture.
  - Feather-light; never packs down in walls.
  - Permanently efficient, blocks heat loss, helps keep home comfortable—winter and summer.
  - Provides no food for insects or vermin.
- 2. Enclosed roll blanket—continuous vapor barrier**
  - Superior moisture protection. Continuous asphalted paper vapor barrier on the warm side. Perforated, vapor permeable paper on the cold side.
  - One-piece installation from floor to ceiling . . . no gaps or breaks.
  - Easy for workmen to apply correctly with tacks or staple hammer.
  - The only mineral wool roll blanket on the market.

Owens-Corning Fiberglas Corporation, Dept. 2018, Toledo 1, Ohio. In Canada: Fiberglas Canada Ltd., Toronto, Ontario

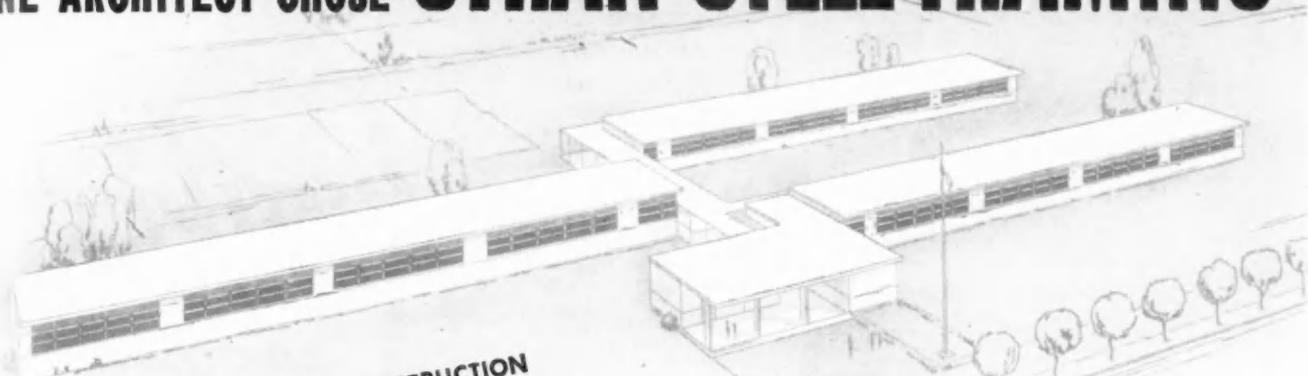
**AVAILABLE THROUGH 4 DISTRIBUTORS**

	 ARMSTRONG CORK CO. Lancaster, Pa.	 CERTAIN-TEED PRODUCTS CORP. Ardmore, Pa.	 THE FLINTKOTE COMPANY New York, N. Y.	 KELLEY ISLAND LIME & TRANSPORT CO. Cleveland, Ohio
---	--	--	--	--

\*Fiberglas is the trade-mark (Reg. U. S. Pat. Off.) of Owens-Corning Fiberglas Corporation for a variety of products made of or with glass fibers.

**3 REASONS WHY  
ONE ARCHITECT CHOSE**

# STRAN-STEEL FRAMING



- 1 EASE OF CONSTRUCTION
- 2 FLEXIBILITY OF DESIGN
- 3 ECONOMY

Here is what Benjamin Kenneth Wyatt, architect for the Robstown, Texas and other school buildings, says about Stran-Steel Framing:

"We have used Stran-Steel construction in several recent school buildings.

"Besides being most flexible for modern design, providing light cantilevered construction, thin window mullions used with collateral materials, economical suspended furring, Stran-Steel offers great rigidity with speed of erection for greater economy.

"Being able to nail to Stran-Steel framing gives the economy of wood framing for dry wall construction (Knox School) also eliminates furring for metal lath (Robstown Schools) in plaster construction. Fire-safety and long life is of paramount importance in school building construction, and incombustible Stran-Steel framework meets both of these requirements."

Stran-Steel framing makes it easy to design, easy to build **BETTER BUILDINGS** economically! If you are planning a housing project, a light industrial building or a private home, you can give your buildings a backbone of steel with Stran-Steel framing.

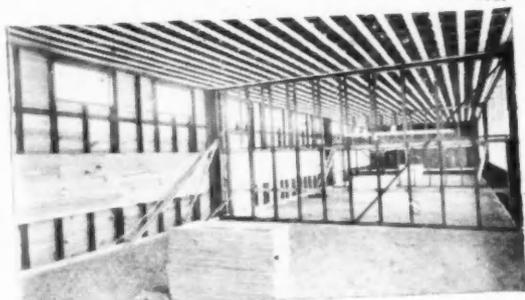
## GREAT LAKES STEEL CORPORATION

Stran-Steel Division • Dept. 30 • Penobscot Bldg. • Detroit 26, Mich.

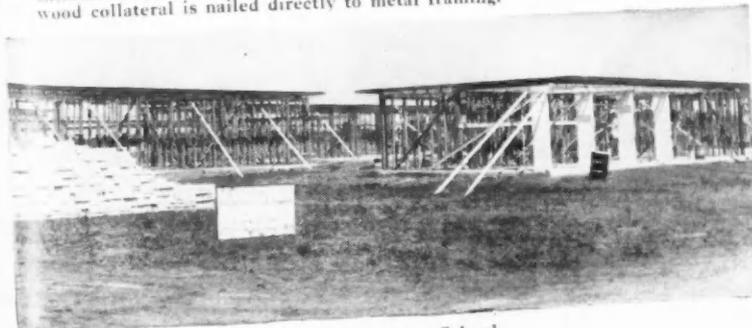
UNIT OF NATIONAL STEEL CORPORATION



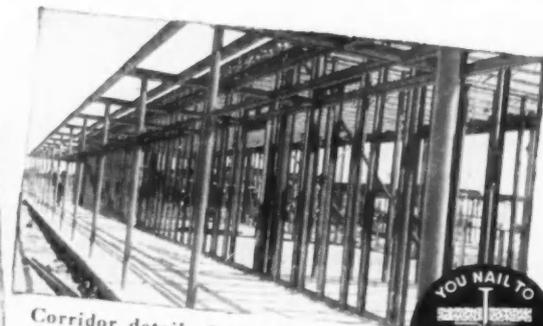
Exterior view of school. Electrical wiring is installed through factory-punched holes in frame members.



Interior view of school under construction. Note how wood collateral is nailed directly to metal framing.



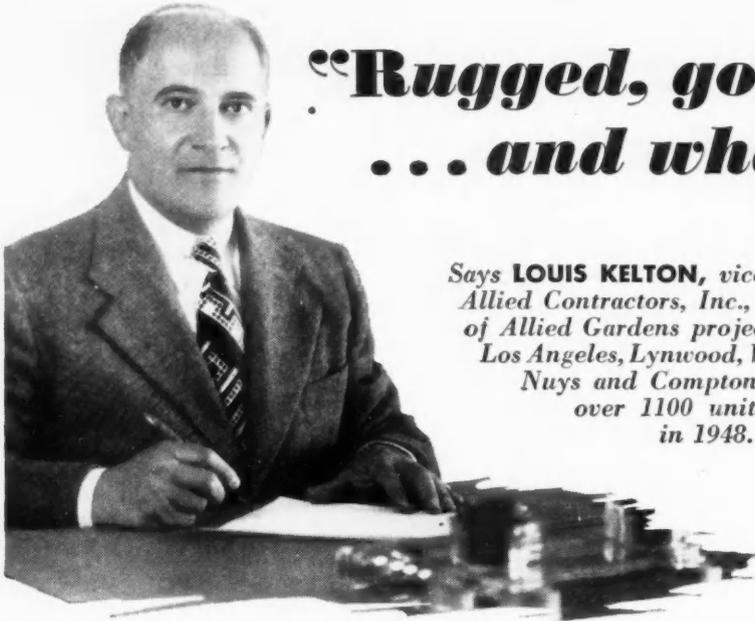
Stran-Steel framing for Robstown Elementary School.



Corridor detail of school showing Stran-Steel framing.



STRAN-STEEL REG. U.S. PAT. OFF.



## “Rugged, good looking locks ... and what a buy!”

Says **LOUIS KELTON**, vice president of Allied Contractors, Inc., builders of Allied Gardens projects in Los Angeles, Lynwood, Van Nuys and Compton—over 1100 units in 1948.



- Savings up to 20% on initial cost and installation time!
- Unconditionally guaranteed against defective materials or workmanship!
- Over 4 million now in use!
- Easy 2-hole installation!
- Hand finished for quality!

When you specify, sell or use Kwikset locks you add beauty and quality to homes. You guarantee years of trouble-free service. And—because they are low in cost and easy to install—substantial savings are the rule.

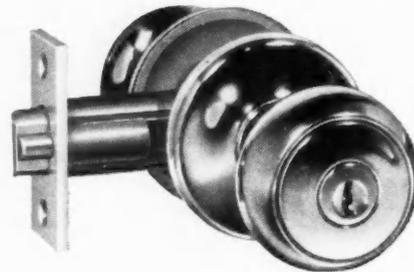
Born of wartime research, Kwikset lock parts are of brass stampings or pressure cast from Zamak No. 5—the same kind of tough, high-test alloy now used for precision tools and calculator parts. Pin-tumbler, cylinder locks assure top security.

Clean simplicity of design—coupled with fine hand-finished lustre—make Kwikset locks ideal for all residential structures. For beauty...for economy...for lasting service—Kwikset locks are tops!

*Kwikset locksets are available for all standard installations and in all popular U.S. finishes. Deadlatches are optional.*

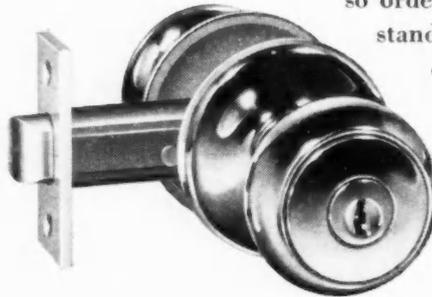
Manufactured by  
**KWIKSET LOCKS, INC.**  
Anaheim, California

Distributed by  
**PETKO INDUSTRIES, INC.**  
1107 East Eighth Street  
Los Angeles, California

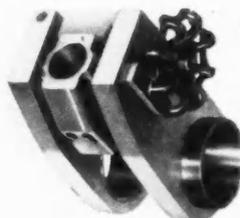


**400A**, 5-pin tumbler entry locking set for all exterior doors. Handle is separate from lockset and can be

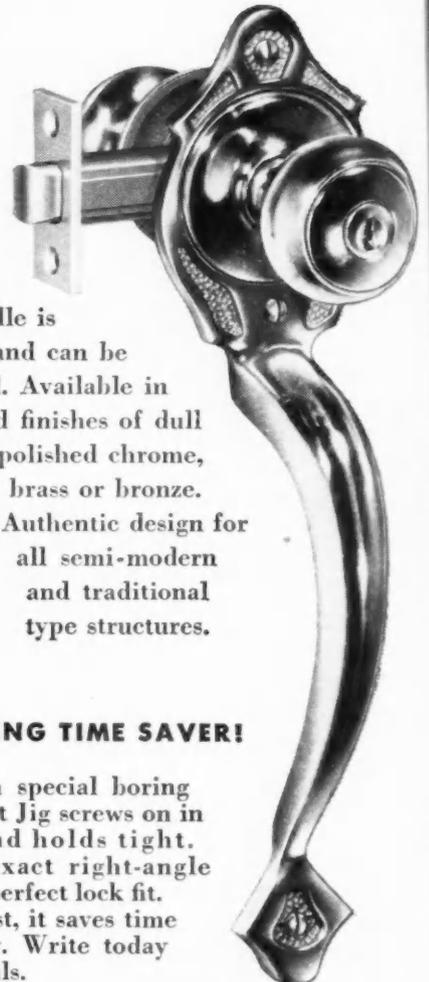
so ordered. Available in standard finishes of dull or polished chrome, brass or bronze. Authentic design for all semi-modern and traditional type structures.



### **KWIKSET JIG PROVES AMAZING TIME SAVER!**



Complete with special boring bits, Kwikset Jig screws on in a jiffy and holds tight. Assures exact right-angle holes for perfect lock fit. Low in cost, it saves time and money. Write today for full details.



Please send me complete information on Kwikset locksets and name of my nearest dealer. NOTE: Openings for distributors are still available in a few select territories. Write for details.

Name \_\_\_\_\_ Company \_\_\_\_\_

Street & No. \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

**PROVED BY  
ACTUAL TEST**

# Steelcraft Superior *One-Piece* STEEL DOOR FRAMES

Bring Amazing New *Efficiency and Economy*  
to Housing and Building Construction



- CUT DOOR FRAME ERECTION TIME 1100% \*
- ONE-PIECE ALL-WELDED COMBINATION DOOR FRAME AND TRIM
- HINGES SPOT-WELDED TO FRAME
- COMPLETELY ENCLOSED DUST BOX WELDED TO FRAME—BRASS ADJUSTABLE STRIKE PLATE FURNISHED
- FINISHED WITH ALUMINUM PAINT APPLIED BY ELECTRO-STATIC PROCESS AND BAKED ON

They're the talk of the industry! Imagine . . . a one-piece, all-welded steel door frame with hinges, adjustable strike plate, and dust box attached . . . completely fabricated at the factory . . . with electro-painted aluminum baked-on finish! Picture the sensational advantages in using these extra-strong, extra-rigid, quickly-erected units for almost any interior or exterior door frame purpose. And almost a DOZEN Steelcraft one-piece door frames can be set up in the time previously required to completely install *one* multiple unit frame and trim. Investigate the possibilities now; see how the use of STEELCRAFT one-piece DOOR FRAMES results in easier, quicker erection . . . *amazing reduction in installation costs.*

\*Based on accurately-timed tests.

Made by Manufacturers of Steelcraft Steel Casements and Steelcraft Metal Buildings.

**MAIL THIS COUPON NOW!**

*Write today! . . .*

for Complete Information and Specifications on Steelcraft One-Piece Steel Door Frames

**STEELCRAFT**  
MANUFACTURING COMPANY  
Rossmoyne, Ohio (In Greater Cincinnati)



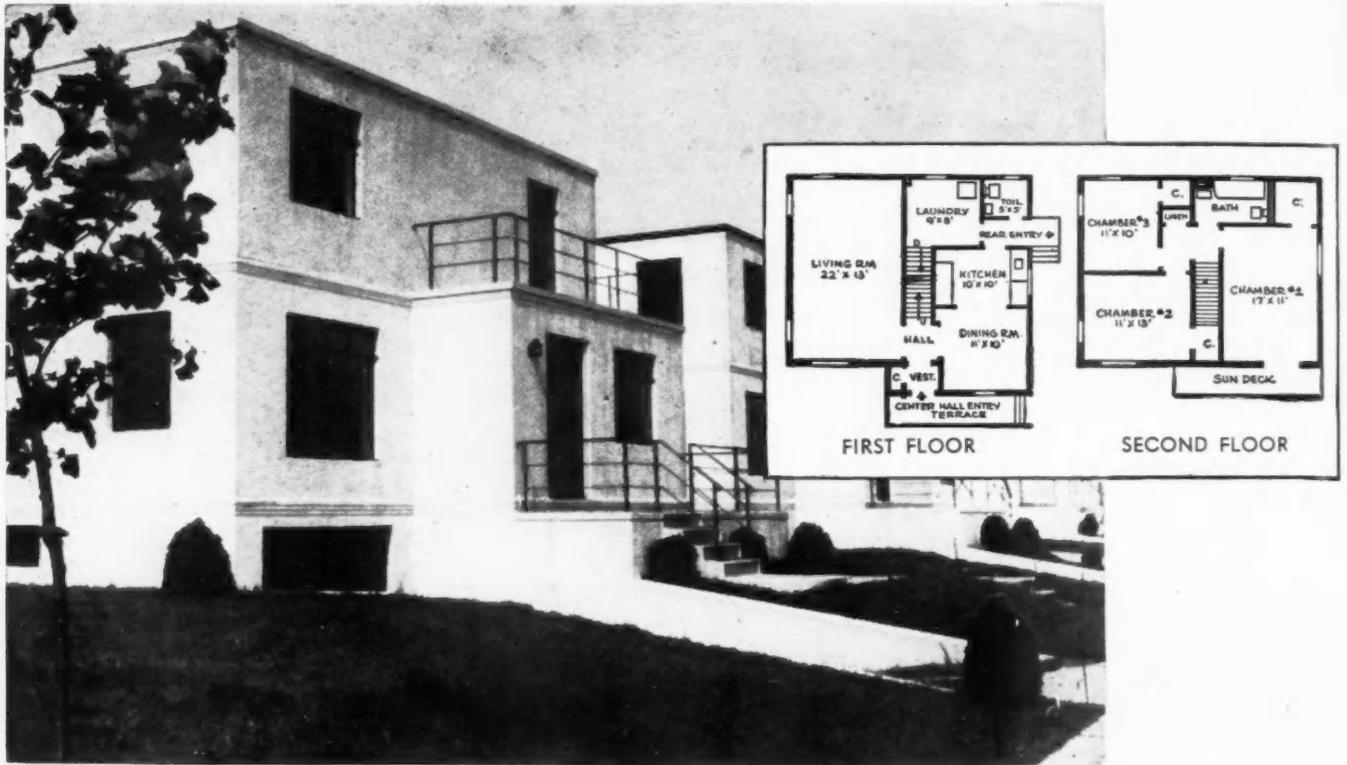
The Steelcraft Manufacturing Company,  
9148 Blue Ash Road  
Rossmoyne, Ohio (In Greater Cincinnati)  
Please send me complete information on Steelcraft One-Piece Steel Door Frames.

Name \_\_\_\_\_

Business Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

Position \_\_\_\_\_ Type of Business \_\_\_\_\_



# All-Concrete Homes

**AT COST OF LESS PERMANENT CONSTRUCTION**

**H**ERE is concrete construction at its rigid, rugged, economical best — walls, floors, roof all tied together in monolithic permanence. Outer walls are 8 in. of reinforced concrete, with 1-in. center insulating core of celotex — a 9-in. wall that is as dry as a bone.

Designed by OSCAR EHRLICH, Engineer, 150 of these 2-story-and-basement, all-concrete homes are being built by DRAKE CONSTRUCTION COMPANY at Long Beach, L. I. Houses are poured in pairs. Line-production methods were worked out using Lone Star Air-Entraining Cement for smooth, clean wall surfaces, with 'Incor'\* 24-Hour Cement in floors for faster form re-use — and it works like a charm.

These houses are replete with attractive features, such as streamlined kitchens, but the thing that sells best is the *character* of the construction:

A house that is proof positive against dampness, fire, storm and termites; only \$14.50 a month heating cost last winter, coldest in a long time; not a trace of dampness last Spring, wettest in years, under seashore exposure; an absolutely firesafe rating, saving 75% on fire-insurance — a house that helps pay its own carrying charges out of savings like these.

Biggest news about these all-concrete homes is the daily proof that people are deeply interested in substance as well as form. Construction ingenuity which gives them both, at no extra cost, is writing new definitions of value.

\*Reg. U. S. Pat. Off.



## LONE STAR CEMENT CORPORATION

Offices: ALBANY • BETHLEHEM, PA. • BIRMINGHAM • BOSTON • CHICAGO • DALLAS • HOUSTON • INDIANAPOLIS • JACKSON, MISS. • KANSAS CITY, MO. • NEW ORLEANS • NEW YORK • NORFOLK • PHILADELPHIA • ST. LOUIS • WASHINGTON, D. C.

LONE STAR CEMENT WITH ITS SUBSIDIARIES, IS ONE OF THE WORLD'S LARGEST CEMENT PRODUCERS: 15 MODERN MILLS, 27,000,000 BARRELS ANNUAL CAPACITY

# TRENDS

BUILDING MATERIAL — EQUIPMENT — APPLIANCES

## Number of Builders Up 33 Per Cent Over 1939

Although construction is the second largest gainful activity in the nation (only agriculture is larger), great confusion exists as to how many builders there are, whether they are typically large operators or small operators, and where they are located. It is comparatively easy to count the number of drug stores in the United States, but builders are apt to move from one locality to another and many operate from their homes. The government, industry, and the general public are full of advice for the building industry, but they have only a vague idea of the people to whom they are talking. For the first time since the Construction Census of 1939, data is available which shows a fair approximation of the number of builders in the United States, their locations and the relative size of their operations.

Current estimates of the number of builders have ranged from 40,000 to 200,000, but data just released by the Department of Commerce shows 46,000 in the continental United States. This is an increase of 13,000 (33 per cent) over the 33,000 reported in the Census of 1939. The data was obtained by a tabulation from social security returns made by builders for their employees during the first quarter of 1947. It is part of a report which presents statistics on all business establishments covered by the Social Security program.

These 46,000 builders employed 647,000 people in building construction in March 1947, or an average of 14 employees each. Later in the year there were undoubtedly more employees and, possibly, more builders reporting. However, 31,000 of the 46,000 builders employed only seven persons or less, and approximately 20,000 had three employees or less. Nine hundred firms had 100 or more employees, while only 111 firms in the country had 500 or more employees. This indicates that the building industry is predominantly comprised of small business firms.

The following summary shows the number of builders by number of persons employed and is more indicative of the size of the industry than any data since 1939:

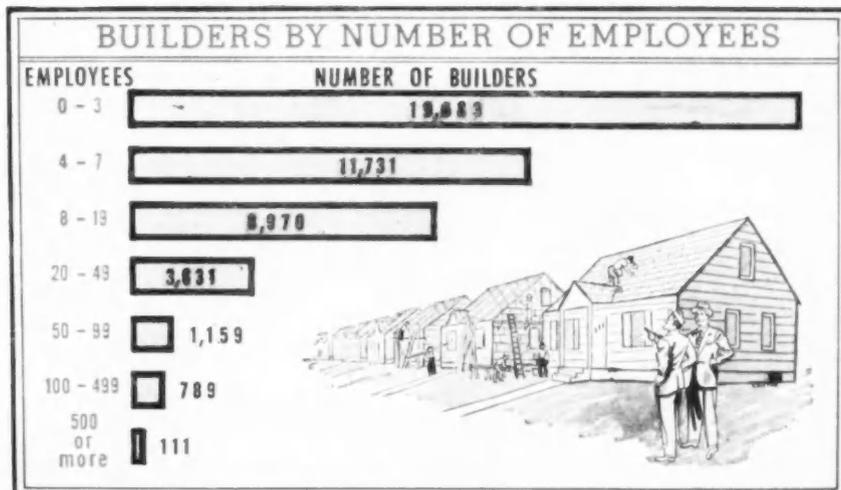
Building General Contractors	
0- 3 Employees.....	19,683
4- 7 Employees.....	11,731
8- 19 Employees.....	8,970
20- 49 Employees.....	3,631
50- 99 Employees.....	1,159
100-499 Employees.....	789
500 or more Employees.....	111
<b>TOTAL .....</b>	<b>46,074</b>

The report also shows that there were 25,500 lumber and building material dealers in 1947. Lumber dealers also are largely small business men as is indicated by the fact that 15,700 had seven employees or less, and only 900 had 50 or more employees.

It was to this audience then that Raymond Foley, Administrator of the Housing and Home Finance Agency, addressed his remarks last month when he said that "the housing industry has the capacity to reach at least the million mark in housing production this year if all parts of it combine their efforts toward meeting the prevailing market trends."

Currently it is predicted that there will be from 50,000 to 75,000 fewer houses produced this year than were produced in 1948 when the total reached 930,000. Mr. Foley said that we have the capacity to do better than last year and that the only way to do it is to achieve cost reductions that will make sound, acceptable housing available for more average families, with a much larger proportion of it for rent at prices more people can afford. But Mr. Foley didn't say "how to do it." To date builders have used much ingenuity in cutting costs through the use of new materials, new designs, and building methods. Possibly the only way that costs can be further reduced is through more efficient labor, a reduction in labor rates, or a general reduction in building material prices.

Unlike most industries where mass produced goods of the same type and model sell at practically identical prices in all parts of the country, residential and non-residential building depends on the individual decisions of about 46,000 contractors who go through all the operations of manufacturing, including the purchase and assembly of materials, the design of their product, the hiring of labor, and the final sale to the consumer.

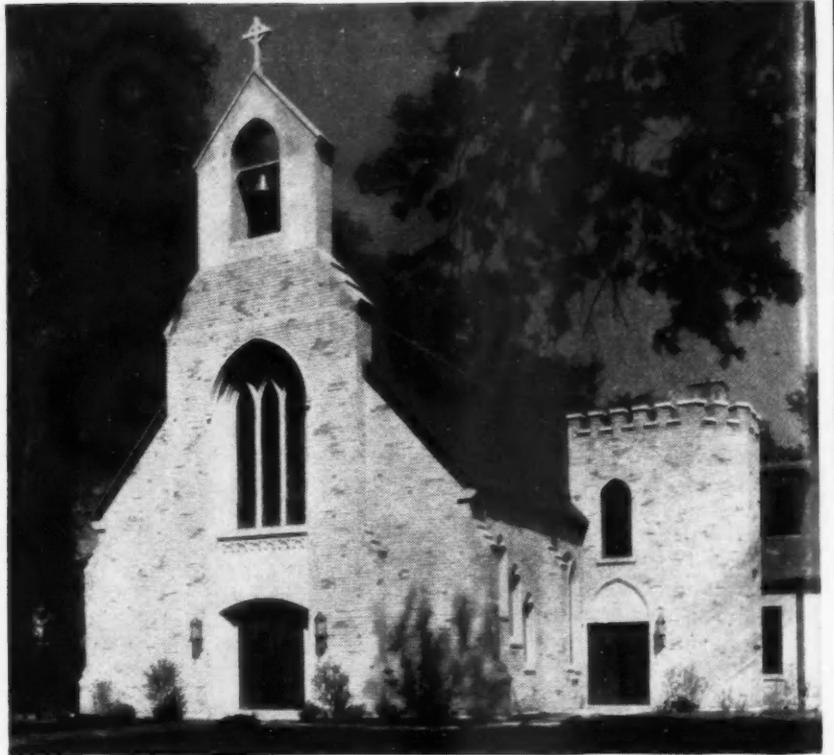


Source: Dept. of Commerce

American Builder Chart

## FOR BEAUTY— BUILDERS SAY

*"Brick rates first"*

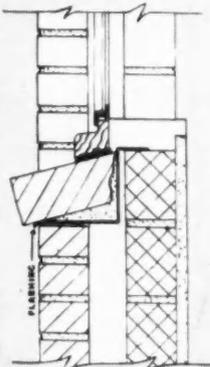


### TIPS ON GOOD MASONRY PRACTICE

#### HOW TO CONSTRUCT BRICK SILLS

Brick sills not only are attractive but are economical for practically all masonry. Procedure:

1. Brick are laid on edge with a slope of at least 2" to the foot.
2. Bottom edge of brick should project at least 1" to form a drip.
3. Cement or cement-lime mortar should be used.
4. The entire side of the brick should be covered with mortar before it is pressed into place.
5. All joints should be completely filled, pressed tight and tooled.
6. The bottom edge of the brick may be accurately lined by means of a wood strip fastened to the face of the wall.
7. Flashing should be installed as shown.



**BRICK SILL**  
Wood Surround and  
Steel Casing

Yes, brick is first for beauty, too.

And it's not surprising when you consider brick's great flexibility of design, its wide range of colors and textures, its warmth and permanent strength.

Because of these properties, you builders chose brick *first for beauty* among all materials in a recent nationwide survey of builders.

You put brick at the top for permanence, too... and fire safety, and real value, and customer preference. In fact, you named brick *first* 10 times on a list of 12 such qualities—for both residential and non-residential building.

So, when you build for beauty, build with brick. You'll get extra salability and top material quality as well. Take it from men like yourself, whose job it is to *know*. It's BRICK FIRST!



**HOW TO BUILD SIX BEAUTIFUL BRICK HOMES**—Send today for attractive planbook "Brick Engineered Homes." All are small, modular designed and easy to build. Send 25¢ with your name and address to Structural Clay Products Institute, Dept. AB-4, 1756 K Street, N.W., Washington 6, D. C. Detail drawings available.

**STRUCTURAL CLAY PRODUCTS INSTITUTE**  
1756 K Street, N. W. Washington 6, D. C.

News, Views  
and Comments

# On and Off the Record

**HERBERT D. WILSON**—Under what apparently is his by-line in the Chicago Daily News published a number of gross misstatements of fact about the home building industry on Dec. 31, 1948.

**AUTOMOBILES**—Wilson was trying to justify today's automobile prices. Why, is his business, but the means he employed are our business, since he took some pokes at home building which appear entirely unnecessary, and certainly reflect a colossal ignorance of what has taken place in the past 40 years.

**NO CHANGE**—Says Wilson, "Today the house that once cost \$1,600 sells, new, for about \$9,000. It's still built with essentially the same hand tools used back in 1910." In the first place, nothing even resembling the 1948 house was in existence in 1910. The 1949 house differs even more markedly from the 1910 house than automobiles of the same years. In the second place, if Mr. Wilson ever tells that "hand tool" gag to a manufacturer of modern power tools or machinery used in home building, he had better duck fast.

**AUTOMOBILES**—Wilson might know a lot about them, but he certainly is batting around in a complete fog as far as house building and house building statistics are concerned.

**FACT AND FANCY**—It would be very simple to dream up a lot of worried conclusions from either fact or fancy to show that in relation to houses, 1948 automobiles cost two or three times as much as they have any right to cost. Nothing would be gained by it, because under strict analysis it wouldn't make any more sense than Wilson's stuff does.

**LIFE MAGAZINE**—After a recent panel discussion which kept 17 people busy for 16 hours talking in circles, Life's reporter at the panel stated, among other things, that the average American has been encouraged by the age in which we

live to believe that his dream of a low-cost house of his own can and ought to be realized. If he has, it is because the idle explorations of panels such as the one reported have been presented to the public as conclusions which the average American can expect to realize.

**AVERAGE AMERICAN**—That's worth a look, too. What is an average American? There is no such animal, and there never has been. It is to be hoped that there never will be. Anyway, it is sheer nonsense to make a statement about what the "average American" wants. Even if there is an average American there are so few of him that the remaining 99 per cent who are not average are entitled to speak for themselves, and can be depended upon to do so.

**30,000 PARTS**—Long ago somebody pulled that one out of the air, and said that it is the number of separate parts in a house. Maybe so, if you count every nail, screw and glazing clip. It's an old bro-mide, and it was hauled out at the Life panel, and kicked around. The implication always is that mechanics at the job site actually handle that many parts. It's good hokum to throw at an unknowing public in an attempt to discredit home builders. Nothing is ever said about the preponderance of factory fabricated parts that arrive at the job site complete and ready to install. There must have been a lot said about it at the panel, however, since several eminent, pace-setting home builders were there.

**COMPARISONS**—If anyone ever seriously sets himself to make a comparison of both the quantity and quality of production by builders during the first three and one-half years following the close of the war with the production of any other industry (including the automobile) it will be found that builders outstripped all others. And this in spite of that classic team of messenger-boys, Wyatt and Bowles.

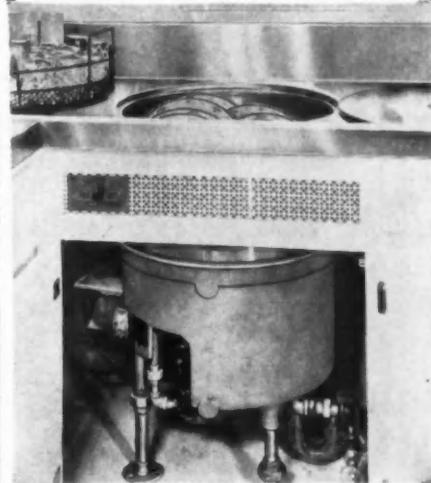
## New JACKSON BUILT-IN HOME DISHWASHER

THE SMASH HIT  
OF THE NATIONAL  
BUILDERS' SHOW!

NO WONDER builders who saw the new Jackson Home Dishwasher demonstrated have acclaimed it as the best ever.

Look at these features—

- 70 second operation! Dishes air dry faster due to removable basket.
- Unlimited capacity—baskets of dishes are washed and rinsed as fast as they can be loaded and unloaded!
- Easily installed—can be placed under wall cabinets or in corner locations if desired. Merely cut 19 1/4" hole and connect hot water and drain. Completely wired, ready to plug in.
- Ruggedly built—no service headaches!
- Proven performance and dependability!



Removable stainless metal cover fits flush with drain board. Machine also supplied in standard 24" cabinet.

Write today for fully illustrated information!

THE  
JACKSON DISHWASHER  
COMPANY

DISHWASHING SPECIALISTS SINCE 1925  
3703 EAST 93rd STREET CLEVELAND 5, OHIO



**BE Wiser** ..... **THAN YOUR COMPETITORS**



**...of course, it's Electric!**

Some builders are wiser than others. They have the knack of attracting customers. One way they do that is to install the kind of cooking equipment more people want—modern Electric Ranges. The trend to Electric Cooking is proved by the fact that another million American families switched to it last year. Conservative estimates indicate that the same thing will happen again this year.

So build houses that are modern today and will stay modern for years to come. During construction, include wiring for an Electric Range, leading to a range outlet in the kitchen. An Electric Range, like electricity itself, is now a "must" in every modern home!

**ELECTRIC RANGE SECTION, National Electrical Manufacturers Association, 155 East 44th Street, New York 17, N. Y.**

- ADMIRAL • COOLERATOR • CROSLY • ESTATE HEATROLA • FRIGIDAIRE • GENERAL ELECTRIC • GIBSON • HOTPOINT
- KELVINATOR • LEDO • MONARCH • NORGE • QUALITY • UNIVERSAL • WESTINGHOUSE

*Follow the trend...*

**WIRE** YOUR HOUSES **FOR ELECTRIC RANGES**

A SYMBOL OF ADEQUATE WIRING



**Another 1,000,000 American families switched to Electric Cooking last year**

## EDITORS' Round Table

**NATIONAL HOME WEEK** in 1949 will begin on September 11. It promises to be nothing short of colossal. Judging by plans already under way in most of the NAHB local chapters, and participation that many manufacturers are outlining, the week will be the greatest demonstration of the products of a single industry ever envisioned. The number of participating communities will run into the hundreds, and the number of houses to be shown will go well up into thousands.

**FEATURE ARTICLE** of this issue is a detailed, illustrated article showing step-by-step procedure for organizing local factors in the home building industry for a dramatic showing of modern homes during National Home Week.

**NO COMMUNITY** is too small to participate, and to reap the advantages of a tie-in with the national publicity planned for National Home Week. Communities with only one builder or one retail lumber dealer and no builder or dealer association of any kind can do an effective public relations job for home building and home buying.

**SEE THE OUTLINE** of procedure in the feature article. It is sufficiently flexible for adaptation by New York or Chicago on one hand, or a village of 500 people.

**REMEMBER THE G.I.** carpenter apprentice whose complaint against his builder employer was published in the September issue? Herbert Kellor, supervisor, division of vocational education, department of education, St. Paul, Minn., has some pertinent comments to make on the subject.

**SAYS MR. KELLOR**, in part, "This young G.I. who was supposedly exploited on his job did not take the recourse given to him under the apprenticeship training program to correct his problem. There is no need for an apprentice to be continuously working at common labor, and not having an opportunity to learn the trade, because he can petition the Joint Apprenticeship Committee for a survey of his working conditions, and they have the authority to take the

(Continued to page 86)



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**STRENGTH** get—

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**YOU SAVE MONEY.** BERMICO Sewer Pipe has strong walls, resists breakage. It's light, handles easy on the truck and on the job. Economical 8-foot lengths.

**YOU SAVE TIME.** BERMICO is fast-laying. One-two-three quick hammer blows and the joint is made—for keeps. No joining compound needed. You can back-fill right away, too.

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### EASY TO INSTALL



8-foot lengths reduce number of joints to be made.

### EASY TO JOIN



Root-proof, machine tapered joints require no packing.

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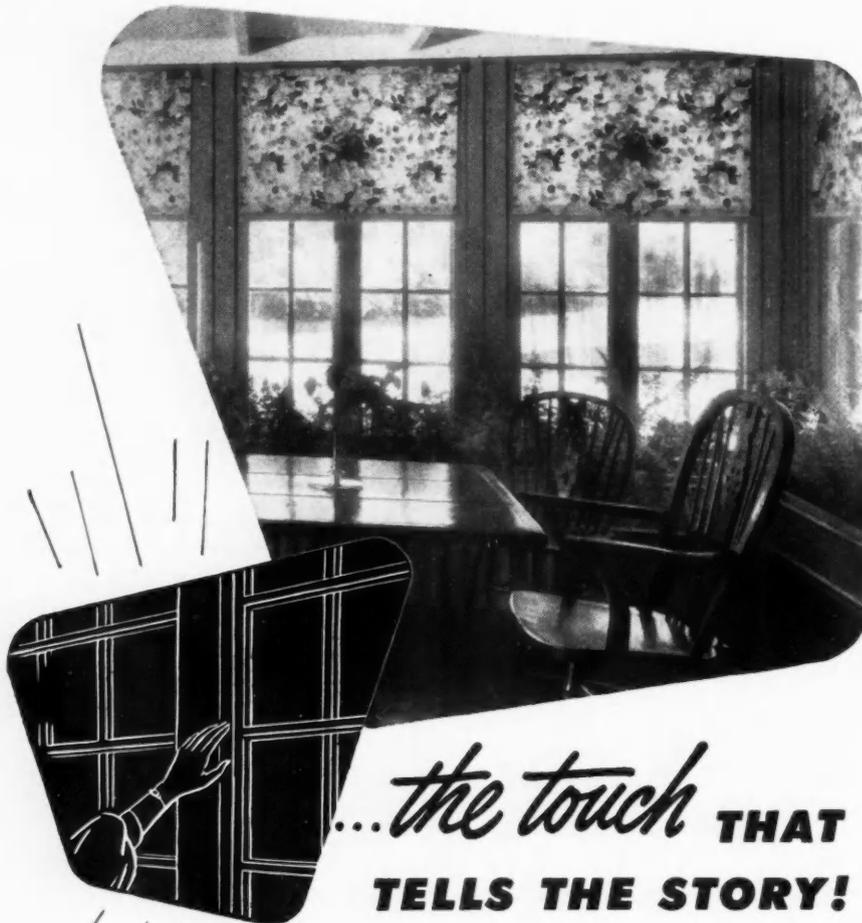


$\frac{2}{3}$ rds lighter than other types of sewer pipe.

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One touch of your finger will tell you why *wood* windows maintain their widespread popularity. For wood is a *natural* insulating material. It retards transmission of heat or cold, minimizing dimensional change due to temperature variation. Ponderosa Pine's low density, smooth texture, and uniform grain provide a natural bond for all finishes. Moderate in cost, and available in modular standard sizes in a wide variety of styles, Ponderosa Pine windows are correctly proportioned and precision made for quick installation. These windows are available toxic preservative treated in accordance with tested industry standards. Preservative treatment of your Ponderosa Pine windows gives added resistance where staining, decay, insect attack or humidity are problems.

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EDITORS'  
**Round Table**

(Continued from page 85)

necessary steps to correct any undesirable situations. The apprentice is indentured and given a set of standards that should be followed on the job."

"**WE FEEL,**" continues Mr. Kellor, "that the apprenticeship training program is the best possible means of training skilled craftsmen. This is not only the best method, but also the most economical, a method in which business, labor, management and the public cooperate in the training of the individual so all can benefit mutually."

**DEFENSE** of at least one public school system is made by Mr. Kellor, who outlines the units of instruction carried on in the St. Paul vocational evening school for carpenters. They include two courses in blueprint reading, steel square (elementary and advanced), wood science, use and care of tools and equipment, related mathematics, estimating.

**CARPENTRY** apprentices in St. Paul are required to attend evening schools two nights a week, three hours a night for 36 weeks. The committees carefully scrutinize reports from local schools as to attendance, quality of work, and attitude in classes. Apprentices whose reports are not up to standard must explain before the committee, and stand disciplinary measures if required.

**EVENING CLASSES** are taught by both skilled tradesmen and by specialists in various lines. Teacher training classes for craftsmen who have had a limited amount of teaching experience are held twice each year.

**MR. KELLOR** agrees that it is impossible to teach an entire trade in a school building, as the cost is prohibitive, and the environment is not similar to the environment on the job site. Exploration and pre-training courses are the best the schools can do.

**BUILDERS** and labor organizations could do a great deal, concludes Mr. Kellor, to point out to local school administrators the necessity of supplying some funds, equipment and space to carry on

(Continued to page 88)

*Built-in* COLOR is the **BIG NEWS** in Modern  
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 with **ART-ROC**



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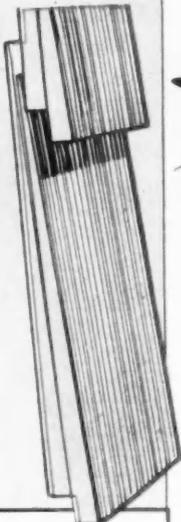
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RED CEDAR  
STAINED SHINGLES



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DUO-LAPS give homes the beauty and effect of expensive, wide siding at low cost. These luxurious, deep-horizontal shadows and wider exposures bring out the beauty of modern building design, give new life to older homes. Nature's prize insulator, Red Cedar, keeps homes cool in summer, warm in winter. Choice of eight colors.



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DUO-LAPS cover more area with fewer shingles, fewer nails, less labor. Applied easily over spaced or solid sheathing for new construction . . . over any kind of outside wall for remodeling. Can be laid with full 12" or 14" exposure. DUO-LAPS come to you pre-stained, eliminate your painting costs. Butted, squared and tapered perfectly for easy application. Immediate delivery.

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# American

## STAINED SHINGLE CO.

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EDITORS'

## Round Table

(Continued from page 86)

an adequate educational program in the local community. NAHB took a very forward step in training its own future members when leaders at the convention invited any or all of about 100 students in four-year light construction engineering courses to state where they would like to work on building jobs during the coming summer, and promised all who want work that they would get it in any city they chose.

**REPUBLICAN OPPOSITION** to the President's housing legislation, says a well known builder, plays right into Mr. Truman's hands. Present opposition of such men as Senator Taft, says the builder, is based upon nothing but whittling down the number of socialized houses the Administration plans to build.

**THAT**, he goes on to say, is exactly what Mr. Truman wants, so he can say to those who occupy such houses, "See what I got for you," and then hold out a promise to others for the future.

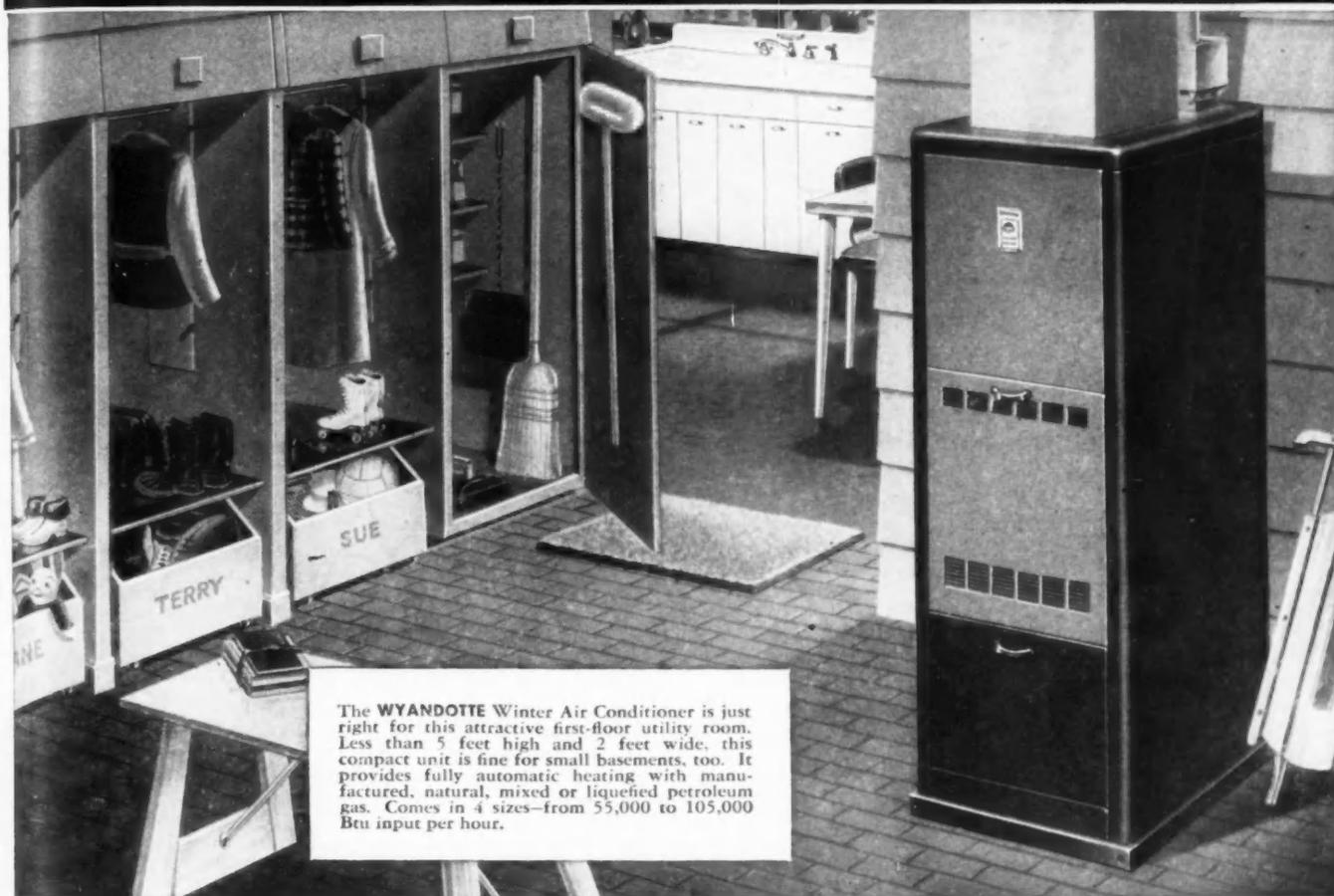
**LET'S JOIN THEM**, he advises, and recommend public houses for everybody. Insist that everybody be treated alike. That would kill the whole thing off in a hurry.

**JOHN BONFORTE** suggests that government subsidize home buying as well as renting, with subsidies on the same basis per unit cost of floor area. He suggests a ratio of one rental unit to four purchased. He also suggests that NAHB ask for at least twice as much as the Administration contemplates. He believes that would kick the props out from under the Administration, and pull the teeth of such men as Taft and Dewey who, he says, apparently believe that partial socialized housing is good if they recommend it, but bad if the Democrats recommend it.

**THAT KIND** of politics, believes Bonforte, who is a G.I. and a well-known builder in Colorado Springs, is the best way in the world to kill private enterprise, and he doesn't want it killed. He went to war to protect it, so he would have a right to enter the building business when he came back.

# AMERICAN-Standard

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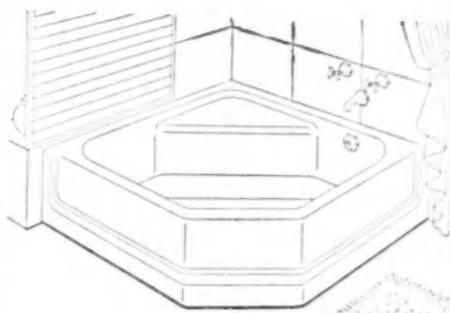


The **WYANDOTTE** Winter Air Conditioner is just right for this attractive first-floor utility room. Less than 5 feet high and 2 feet wide, this compact unit is fine for small basements, too. It provides fully automatic heating with manufactured, natural, mixed or liquefied petroleum gas. Comes in 4 sizes—from 55,000 to 105,000 Btu input per hour.

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The **NEO-ANGLE** Bath. Only 4-feet square, this luxurious bath actually provides roomier bathing space, yet fits into shorter wall lengths than conventional baths. Distinctive modern shape adds pleasing touch to any bathroom.

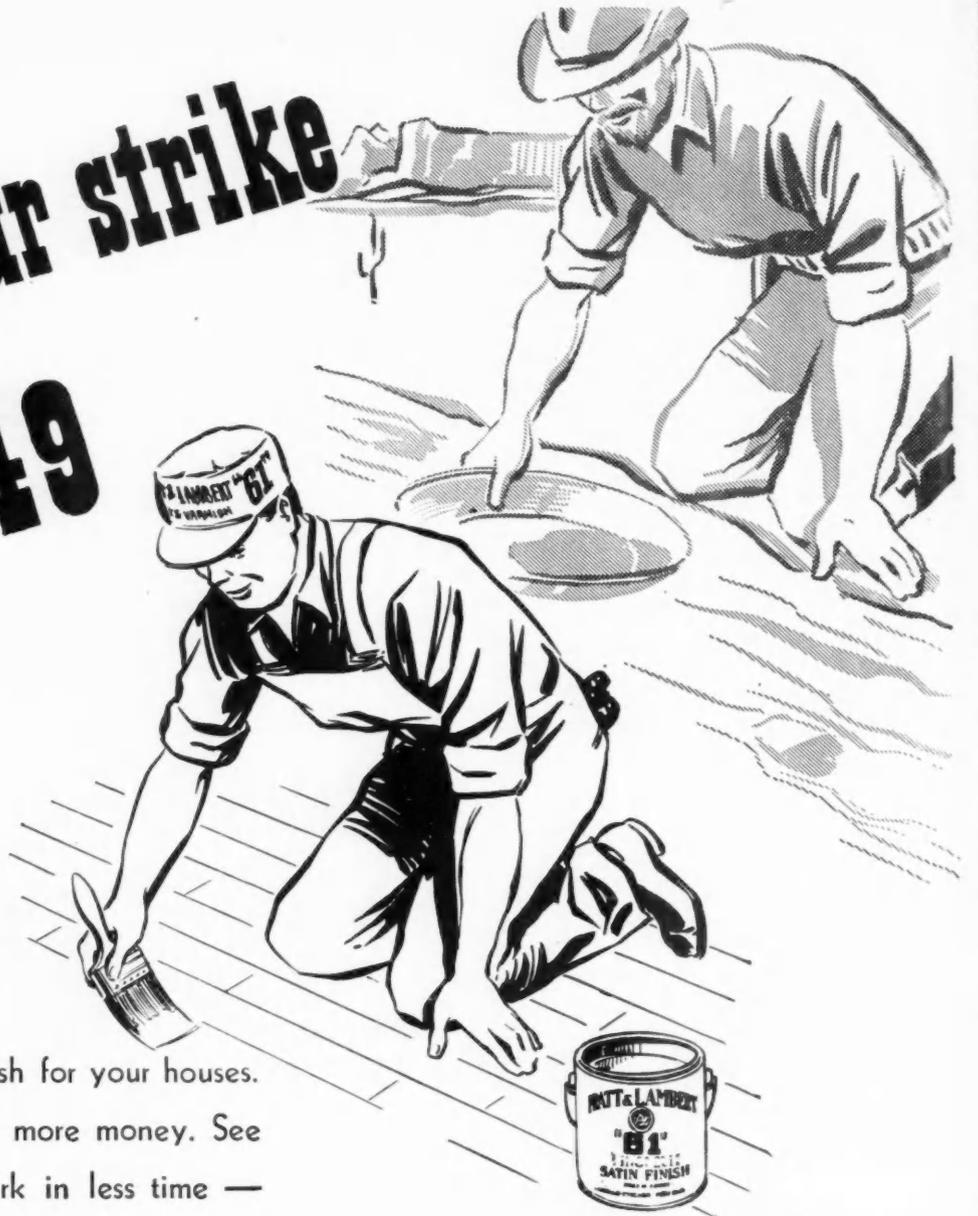


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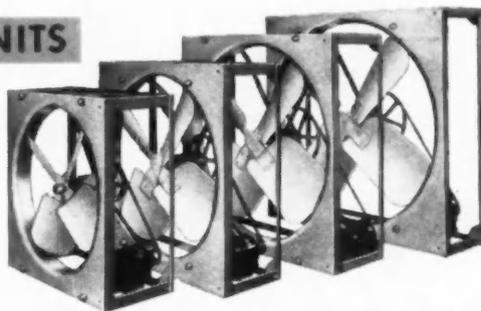
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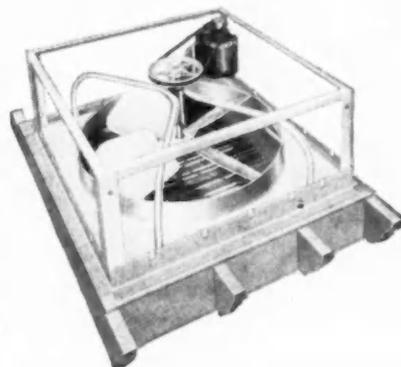
### *Niteair* PANEL UNITS

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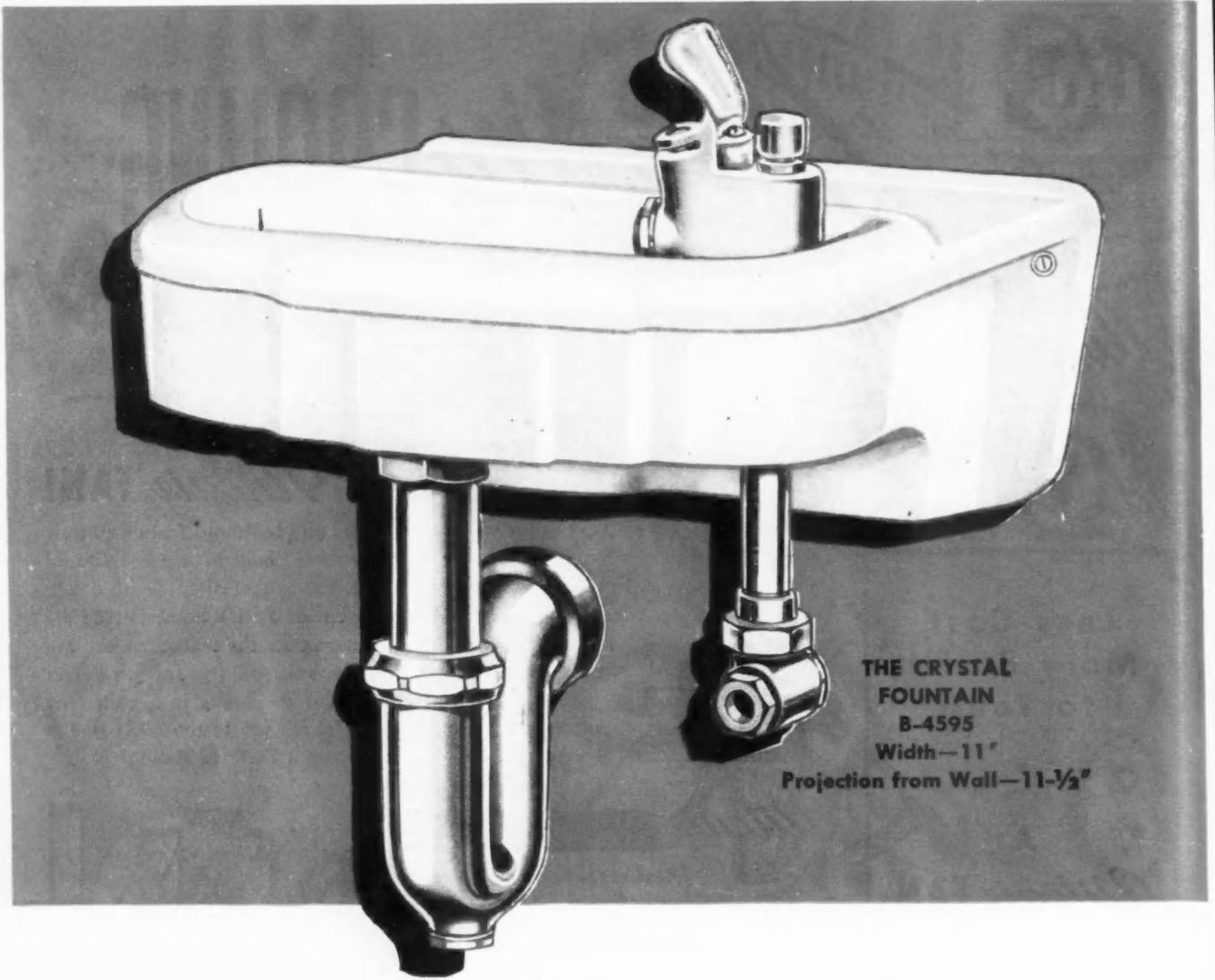
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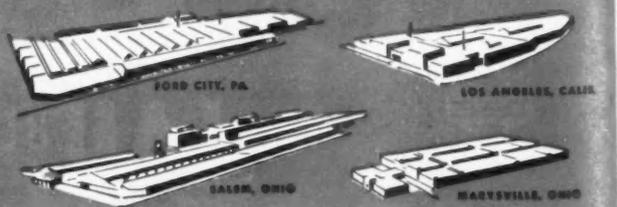
Made of *real vitreous china*, the Crystal Fountain is easy to clean and keep clean. Fittings are chrome-plated, featuring a trouble-free strainer, sanitary bubbler, and a completely automatic regulator that maintains a steady stream height—regardless of

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# ELJER





# MONTHLY REVIEW

## NEWS OF THE NATIONAL ASSOCIATION OF HOME BUILDERS AND AFFILIATED ASSOCIATIONS

### New York Builders Participants In Conference on Economy Housing

The Economy Housing Conference of the New York Metropolitan Area, which included builders, architects, engineers, and representatives of the FHA, VA, financial institutions, labor unions and state and national labor departments, sponsored a one day meeting, on the "1949 Economy Housing Program" at the Statler Hotel, New York City, in March.

Dr. Ernest M. Fisher, Director of the Institute for Urban Land Use and Housing Studies, Columbia University, was chairman of the program committee. Raymond M. Foley, HHFA administrator, spoke on "The Economy Housing Program for 1949."

Six panel discussions, followed by open forums, were held, all stressing ways by which economy can be achieved. Talks made by members of FHA underwriting staffs were "Economies of Land Planning," Myron Hendee, chief, Land Planning Section; "Economies in Design and Construction," John H. Hamann, chief, Architectural Section; and "FHA Administrative and Underwriting Suggestions," James J. Bly, chief underwriter.

VA construction standards were discussed by W. D. Brown and "Financing for Veterans Under Sections 501 and 505" by William V. Brown of the VA New York Regional office.

A panel on building was led by Alfred Gross, president, New York State Association of Home Builders. Appearing on the panel were Leonard Frank, president, Long Island Home Builders Institute; Fabian M. Crystal, president, Home Builders Association of Westchester; Bernard Krinsky, chairman, construction cost committee, Long Island Home Builders Institute; and Kalman Klein, chairman FHA-VA committee, Long Island Home Builders Institute.

On a panel comprised of architects and engineers, Adolph Goldberg, president, New York Society of Architects and Rudolph A. Matern, chairman of Architectural and Engineering committee, Long Island Home Builders Institute, spoke on economies in architecture; Walter P. Warendorff, second vice president, Queens County chapter, New York State Society of Professional Engineers, covered economies in engineering; and building costs and trends were discussed by Myron Matthews, vice president of Dow Service, Inc.

Financing was discussed by Nugent Fallon, president of the Federal Home

Loan Bank of New York; Lawrence A. Epter, president, Mortgage Bankers Association of New York; Dr. Herman L. Reis, New York State Savings and Loan League president; and Walter R. Williams, executive secretary, Savings Banks Association of the state of New York.

Louis F. Kreyer, director of the New York Lumber Trade Association, and William J. Avrutis, Structural Clay Products Institute, headed the discussion of materials.

### Ten New Homes an Hour 1948 Record for Los Angeles

A record 81,219 dwelling units, or ten new homes an hour were built in Los Angeles in 1948, according to the annual report of the Los Angeles Home Builders Institute, Inc.

Among the outstanding 1948 achievements of the Institute were preparation of plans and specifications for the 1949 economy house, which the builders expect to produce on a large volume basis; the adoption by members

of a guarantee on the homes they build; a comprehensive program in the promotion of National Home Week; and improvement of public relations through goodwill advertising in metropolitan newspapers.

The Los Angeles association has supplied its members with current information bulletins on government regulations at all levels.

At a recent meeting Arthur A. Beliveau was elected president of the Institute for 1949. Other new officers are Lloyd Whaley, first vice president; E. Avery McCarthy, second vice president; Ralph G. Burgbacher, third vice president; and Spiros G. Ponty, the retiring president, secretary.

### NAHB to Be Clearing House For Economy Building Data

The National Association of Home Builders will act as a clearing house for technical information in the industry drive for more economy houses.

In the nation-wide exploration of low cost housing problems, including construction, codes and standardization of new materials, the Technical Department of NAHB will process information as it is obtained and publish it for the entire industry.

### Southern Builders Meet at Jackson



REPRESENTATIVES of Southern NAHB builder associations met in Jackson, Miss., recently to discuss area problems and plan for the expansion of their local chapter work. Left to right, seated: William C. Chandler, NAHB regional vice president; Norm Watkins, NAHB Membership Department director; and Harold Pallet, president, New Orleans Home Builders Association. Standing: Jack Helm, executive vice president New Orleans Association; Donald Crittenden, executive vice president, Memphis Home Builders Association; and Charles K. Chandler, president, Memphis Assn.

## Builders Aid State Housing Survey



A GROUP of New Jersey builders who met recently to draft a plan for cooperating with Governor Driscoll of that state in his housing survey. The original committee named by the governor had no builders on it. Left to right, seated: Ed English, Carl Carlson, Willard Closs, N.J. Council president; Manny Spiegel and Morris Sarshik. Standing: Lewis Epstein, Alexander Feinberg, Byron Renninger, Louis Levin and Charlie Deubel.

### Robert B. Johnson Heads California Council

The Home Builders Council of California elected Robert B. Johnson, El Cerrito builder Council chairman at a recent meeting held jointly with the General Contractors Association of Contra Costa County. He succeeds Earl W. Smith of Berkeley. Council Secretary Milton W. Morris was re-elected.

Johnson, a native of Fresno, studied civil engineering at the University of California. He recently retired as president of the Contra Costa association.

Groups affiliated with the Home Builders Council of California are: Associated Home Builders of San Francisco, Associated Home Builders of Alameda County, Peninsula General Contractors and Builders Association, Marin Builders Association, Associated Home Builders of Sacramento and the Contra Costa association.

### Stringfellow Re-elected President of Seattle Unit

V. O. Stringfellow, who was re-elected president of the Seattle Master Builders Association at a recent meeting, was presented a gavel in appreciation of his work for the association during his first term in 1948.

Other officers named for 1949 were: A. E. Iverson, vice president; Meade Hargiss, secretary; and Maury Setzer, treasurer. O. M. Akers, C. E. Betcher, Lars Boyd, Ross Hebb, Harold L. Larsen, Cliff Mortensen and Roy Owen were named as trustees to serve for the coming year.

Members named to serve as NAHB directors were V. O. Stringfellow, Samuel Anderson and F. R. McAbee. Cliff Mortensen, Ross Hebb and A. E. Iverson will serve as alternates.

### California Group Holds Economy House Meeting

A day's conference on economy housing with some of northern California's foremost home building authorities as discussion leaders, was recently held in San Francisco.

Sponsored by the San Francisco Chamber of Commerce in cooperation with the Home Builders Council of California and the FHA, the meeting included morning and afternoon panels.

### Builders Meet with FHA

Federal Housing Authority officials and leaders of the Home Builders Association of Mahoning Valley discussed problems in the Economy Housing Program at a jointly-sponsored meeting in Youngstown, Ohio.

The speakers included J. L. Wadsworth, FHA district director; L. M. Toner, chief underwriter, FHA; E. H. Gensler, vice president of the Mahoning Valley group; E. D. Cronon, Chief architect, FHA; and W. H. Hackman and L. M. Leick, FHA staff members.

## 1949 Officers Installed at San Antonio

L. G. Hodges was elected president of the San Antonio Home Builders Association at the recent election of 1949 officers. He succeeds G. S. McCreless who relinquished the presidency after an active term.

The San Antonio chapter named Frank W. Falk, vice president; G. Marvin Watson, secretary, and W. Boyd Smith, treasurer.

The new officers, who were installed at a dinner in the Menger hotel, served as bartenders at a cocktail party pre-

ceding the dinner. L. E. Fite acted as master of ceremonies. Retiring President McCreless was cited for his work in 1948.

E. J. Burke, Jr., John F. Cunningham, and W. T. Thrift, Jr., were installed for three year terms as active directors. The new sustaining directors, elected for a one year term, are G. Marvin Watson and W. E. Thomas, Jr. Jack Kuntz and W. Boyd Smith were elected for one year terms as associate directors.



FOLLOWING their election to official positions in the San Antonio Home Builders Association, the men went to work immediately with a less serious assignment than some of their other duties will be. They are, left to right: L. G. Hodges, president; Frank W. Falk, vice president; G. Marvin Watson, secretary, and W. Boyd Smith, treasurer.

### William S. Banks Heads Washington, D.C., Association

The 1949 officer slate of the Home Builders Association of Metropolitan Washington is led by William S. Banks who succeeds Clarence W. Gosnell as president. Clarke Daniel is the new first vice president and Alvin L. Aubinoe is second vice-president.

New directors, to serve two year terms, are J. Wesley Buchanan, Morris Cafritz, Frank Calcara, Carl C. Crampton, T. Girard Lee, Russell Martin, Waverly Taylor, Robert Tiffey and Clyde J. Verkerke.

Directors who still have one year of a two year term to serve are: J. Garrett Beitzell, Lewis T. Breuninger, Vernon Briggs, Henry Connor, W. P.



WILLIAM S. BANKS

Croom Jr., D. E. Gingery, A. Milton Talbert, R. M. Watkins and Preston E. Wire.

The Washington chapter's advisory board now consists of the following: William P. Ames, William Bornstein, Joseph H. Deckman, W. H. Dyer, Richard W. Fisher, C. Vernon Hill, P. Y. K. Howat, C. W. Perrin, Charles H. St. John, Oliver Walker and Bryce Weaver.

### See 4,000 Homes Under \$8,000 In Fort Worth Survey for 1949

An informal survey by the Home Builders Association of Fort Worth of about 45 builders indicates that more than 4,000 homes priced to sell for less than \$8,000 may be built in that area in 1949.

The largest single project is the Kellis Park Addition, sponsored by J. E. Foster and Sons, Inc., which is expected to reach the total of 1,500 homes. Homes for veterans and economy homes for low income groups will comprise the project.

Ridglea Housing Corporation estimates that they will build 490 additional homes in their Ridglea West Addition. Six hundred and fifty homes have already been completed in this project. Taylor Todd Corporation plans to finish 350 homes this year in their Morningside Addition.

It is estimated that more than 300 homes will be built in the \$9,000 to \$50,000 class. If all plans are carried out, around \$25,000,000 will be spent in Fort Worth in 1949 for building.

## Cortright's Column

By Frank W. Cortright

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



The home building industry long has needed a better press.

It is imperative that we have better understanding of the industry problems among newspaper reporters and magazine writers.

One of the reasons we have not had that understanding is because we have not worked closely enough with these important public relations media. We've been too busy building houses to take time to sell our story to anyone but ourselves.

The Chicago Metropolitan Home Builders Association now gives us tangible proof of just how valuable it is to get the truth told about the industry in local papers. That proof is in the clear, positive stories that have been written about home building in Chicago in the *Chicago Tribune*. It is a tribute to the Chicago chapter that this powerful newspaper did listen to the facts about our industry, and was willing to look at the tangible evidence—in the form of houses—which proved those facts, and then told the facts to the public.

The *Chicago Tribune*, in turn, deserves a tribute. The editors knew that the public had been misinformed—had not been told the whole truth about home building. So it started telling the truth to its million readers, helping to restore the confidence of the public in the building industry.

The experience of our Chicago chapter is particularly interesting because of the way it came about, for it points to the tremendous advantage other chapters can secure by putting maximum effort into National Home Week for 1949. It was because of the job Chicago did on National Home Week in 1948 that the understanding and cooperation developed between the *Tribune* and the Home Builders.

We know that the nation's Home Builders have done a magnificent job. While not claiming perfection, they have broken all building records in the face of shortages of labor and materials. A million units last year is evidence of that job.

Our chief drawback, and one which has been frustrating, is that the public didn't believe the facts because it was the home builders who were telling them. We have cited only official facts and figures, but even these have not fully convinced the public.

Now, because we actually were doing the things we said we were doing, there are tangible developments that can be pointed to, such as were reported in the *Chicago Tribune*. And when an independent institution like the *Tribune* points to these tangible accomplishments—photographs and houses, and projects—people begin to believe them.

This example of the good public relations achieved by the cooperation of the *Chicago Tribune* and our Chicago chapter is not the only benefit that grew out of National Home Week, but is cited because of the particularly impressive developments that followed.

The *Tribune* assigned Thomas Buck, one of its by-line reporters, to look over the entire Chicago building picture. Mr. Buck wrote a series of feature articles which were illustrated by aerial pictures. These were run in the *Tribune* during the week of December 6, 1948, for the entire week.

The series of articles was then reproduced in a booklet under the title of "Housing Report" and over the name of the Chicago Metropolitan Home Builders Association. In the front of the booklet, on the Association letterhead, was a message signed by Martin C. Huggett, Chicago's executive vice-president, which was headed very aptly, "Prologue to Accomplishment".

The production and distribution of this booklet was handled by the *Chicago Tribune*. It sent copies to members of Congress, the President, and other interested parties. It is the kind of positive publicity the industry needs.

Every city should profit by the experience in Chicago. Similar action can and should be taken. Let's get together with the press and really sell our story of past accomplishments and ability to solve the problems of the future!

### New England Home Show Scheduled April 18-24

The fourth annual New England Home Beautiful Show will be held at the Mechanics Building, Boston, Mass., April 18-24. The show will combine all of the features previously included in the All-Electric and the Modern Homes Show, which in the past have been held on separate dates.

The New England exposition is produced jointly by the Home Builders Association of Greater Boston and the Electric Institute of Boston, Inc. It will be staged and directed by Campbell-Fairbanks Expositions, Inc., Boston.

### New Officers for 1949 Announced by Minneapolis

The Minneapolis Home Builders Association has announced the election of its 1949 officers. Emil Fronk is the new president; Harold Rosendahl, vice president; and Arthur Fritz, secretary-treasurer.

Active directors are Fritz, Earl Ware and William Wilkinson. Harold Bach, Stanley Bjorklund, William Rafferty and Clarence Sather are associate directors.

National directors named by the Minneapolis chapter are Henry Thernell, S. G. Pearson and Emil Fronk. Alternates are Harold Franzen, Fred Hey, and Roy Olson.

### NAHB to Release Movie on 'How Not to Build a House'

"How Not to Build a House," a motion picture short which stresses the problems in store for amateur builders who plan to erect their own homes without professional help, is being produced for NAHB by Gibraltar Pictures in Hollywood. An estimated 36 million persons will see the film when it is released in the near future.

The film will stress the fact that methods used by organized, reputable home builders are streamlined and adapted to economical construction.

A number of well-known Los Angeles housing developments are being used in the picture.

### Early 1949 Chicago Survey Shows Increased Home Sales

Sales of new homes in the Chicago area have steadily increased since the first of the year, according to the Chicago Metropolitan Home Builders Association's most recent survey. The 300 builder-members surveyed represent 60 per cent of the residential construction in the area.

Seventy-two per cent of the replies indicated either normal or increased sales. The remaining 28 per cent reported a slowdown of sales and a diminished interest on the part of prospective buyers. In December unsold houses averaged 2.5 per builder as compared to an average of 2 per builder in February, 1949.

## Portland Installs New Officers

Herman A. Schmitt was re-elected president of the Portland Home Builders Association at their recent election. Other officers named include Palmer Biggness, vice president; Frank D. Evans, secretary-treasurer, and Sanford J. Langoe, sergeant-at-arms. The new officers were installed by Edwin Sandberg, regional NAHB vice president and a past president of the local chapter.

Will Fromme was elected national director, succeeding Ralph Harris. Sandberg and Schmitt are the other national directors.

The executive board is composed of T. B. Winship, Arthur Hansen, John J. La Porte, Alford Norbraten, Al Disdero, George Welby, Frank Payne, Edwin Sandberg, Frank Evans, Herman Schmitt, Ralph Harris and Palmer Biggness.



IT'S DONE WITH MIRRORS! Retiring President Herman A. Schmitt of the Portland Home Builders' Association hands over the gavel to President-elect Herman A. Schmitt while Palmer Biggness, new vice-president (right), and Frank Evans, new secretary-treasurer (left), look on.

## Legislators Visit Revere Model Home



MAURICE J. FISHMAN, new president of the Home Builders Association of Greater Cleveland, discusses building plans with State Representative James M. Carney (left), and Ohio Congressman-at-large Stephen M. Young. The scene is the much-visited Revere Model Home, located on a newly-started 1200 home project in the Cleveland area. Fishman is president of Precision Housing Corp., which launched the project.

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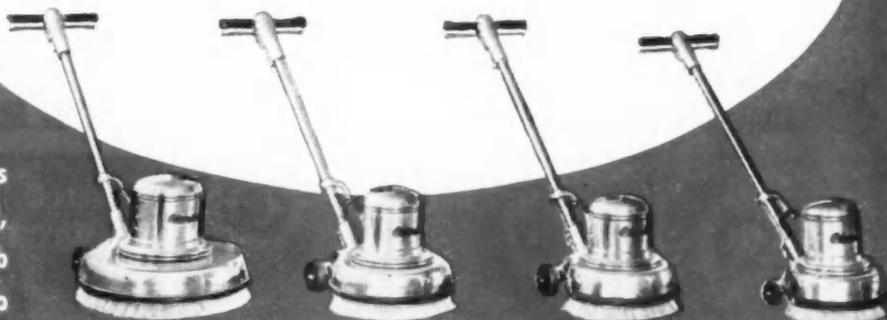
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and Shampoo



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Motor—1 h.p.

P-17 17" Diameter  
Motor—¾ h.p.

P-15 15" Diameter  
Motor—½ h.p.

P-13 13" Diameter  
Motor—½ h.p.

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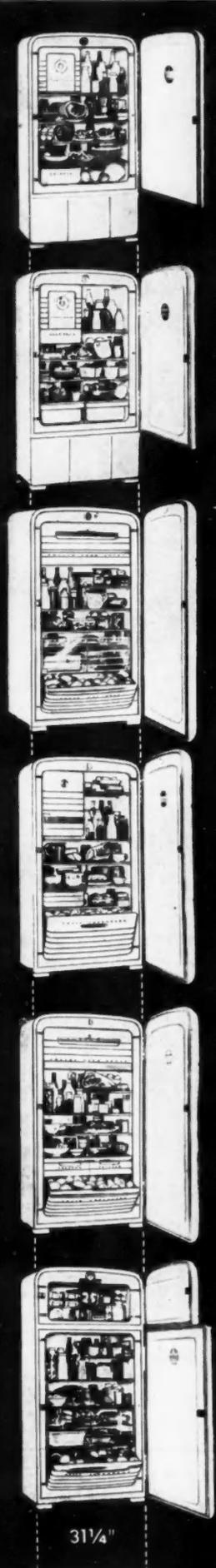
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# AMERICAN BUILDER

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E D I T O R I A L

## **Livability and Low Price**

**N**O ONE should quarrel with the motives behind the industry's effort to produce houses for low-income families. The motives are laudable, and so are some of the results. But, there is room for serious criticism of the manner in which the problem is being approached by many who are studying it. All too frequently, three false approaches are being used.

The first of these is reducing living area unreasonably. The second is stripping a house—offering it for sale without insulation, some of the interior doors and trim, window shades, door bell, refrigerator, range, hot water heater, and other items viewed as necessities. The home buyer has to purchase most of them anyway, and usually on 21-month terms that jeopardize his ability to meet his payments on the house. The third is reducing the quality of construction to a point where the house is not worth any amount of money, however small. Producing low-price houses on any one or a combination of these bases is simply producing sub-standard housing and false economy which will please no one.

Any approach to developing houses within the reach of low-income families which does not start with adequate size, quality construction standards, and assured comfort through fully equipped modern kitchens and bathrooms, efficient heating systems, including insulation, and other items which are economies in and earmarks of contemporary American living, is a false premise, the results of which cannot be afforded by either the home building industry or the low-income buyer. If the price and terms of purchase of houses which are livable by modern standards are now too high for low-income families, prices will be adjusted downward through competition, and purchase terms must be eased. No sacrifice of values is necessary or desirable. The return of a balance between supply and demand for materials, service, and labor is, as always in a free economy, bringing about a competitive condition that already is reducing costs at all the necessary manufacturing, distributing, and building levels. Since few low-income families even can amass a sizable percentage of the cost of a house to use as a down payment a financing system can and must be devised which requires only a token down payment.

These are the elements which will reduce prices, simplify purchasing, and bring livable houses within the reach of many low-income families. Let us have low-price houses, but *not* by all means. Let us have them by all means *except* sacrifice of modern living standards. Let us establish a fixed policy of refusal to compromise livability, and then bring the prices of livable houses down to an irreducible minimum by eliminating wasteful practices. There is a cost, probably not yet determined, below which no house should be built.

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# National Home Week

**Here is a suggested outline of procedure for observing this major annual national event in communities of all sizes. Observance this year will include broad representation of all segments of building industry**

**N**ATIONAL Home Week has already become a major annual national event. Staged for the first time last September, it reached such heights of success as a means of focusing the public's attention on activities of the home building industry that a much broader representation of industry segments will participate in 1949—September 11 to 17.

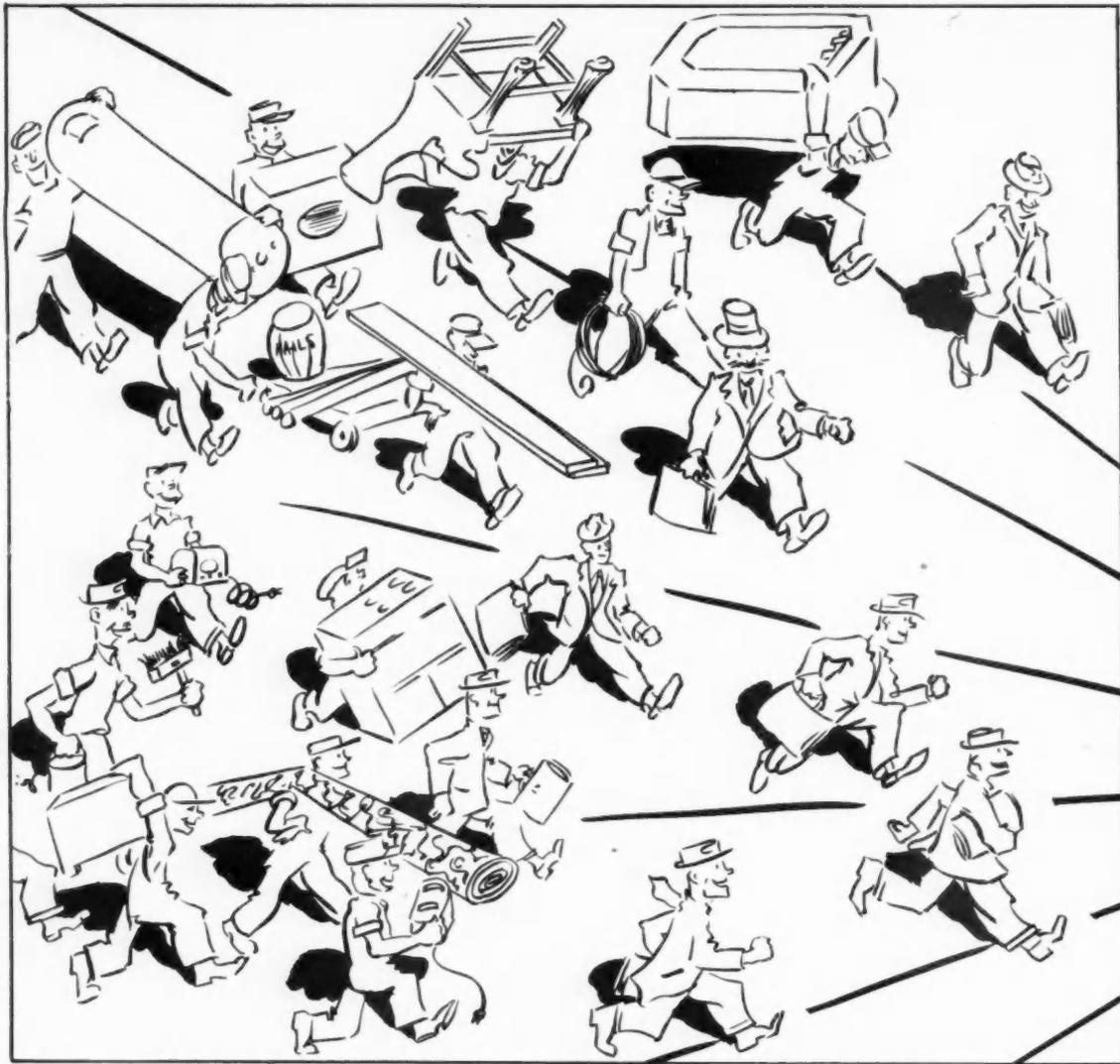
For years builders have erected and shown demonstration houses, furnished and unfurnished. Each builder opened his particular house in his own community whenever he had it completed for showing. There was no coordination between the various communities in this type of promotion. With the inauguration of National Home Week it is now possible for home builders in all sections of the nation, in large and small communities, to plan and erect demonstration houses ready for opening on the same date. For the first time the home building industry has the opportunity to exert a powerful impact by staging one huge, nation-wide home demonstration week, permitting the use of all the national and local publicity and promotional mediums with a single, well-coordinated program of public relations.

The demonstrations should cover all phases of home building. They should include projects under construction as well as completed homes. The public is always interested in building operations and National Home Week opens the door to telling Mr. and Mrs. Consumer the full story of how home building is done today.

Promotion and publicity for the industry starts in the spring with the announcement of the dates of National Home Week. Last year this was done in April and from then on, in all communities where the week was being staged, there were regular newspaper stories, radio programs, speeches and other types of consumer contact promotion carried on until the whole was climaxed with the actual opening and showing of the houses in the various communities early in September.

Although promotion on the 1948 Week was late in getting under way, reports from 40 cities and towns revealed that approximately 3,000 homes were exhibited in the communities reporting. These houses were visited by more than a million persons. About 19 per cent of the homes shown last year were furnished. A survey of newspaper publicity and advertising reveals that about 50,000 column inches were used in the Sunday editions preceding the opening of Home Week in 36 cities. This count does not include space devoted to National Home Week or the housing industry before the opening date or during the week itself. More than 60 radio broadcasts and at least two television shows were also tied in with National





NATIONAL Home Week focuses the public's attention on all products of the industry

Home Week in 1948.

Because National Home Week is co-ordinated public relations by thousands of large and small business establishments scattered in every nook and crossroad of the nation, it has the effect of spotlighting all these units as a unified industry with a single purpose—to build more and better houses more economically for the nation's citizens. The same general theme can be used in every area, thus permitting the issuance of releases and statements for the press and radio from NAHB's Washington offices for use in all localities. Bulk of the news and statements, however, should originate locally and did in the 1948 Home Week promotion. The program can be co-ordinated from the Washington office but actual promotion and activation of the Week must be done locally by each individual community or NAHB Chapter.

The outstanding success of the 1948 National Home Week has inspired many of the nation's leading advertising agencies and manufacturers to

contact NAHB to make certain they can theme their advertising and promotion in the coming months with the 1949 Week. Space buyers and advertising managers of firms manufacturing home building materials, equipment and furnishings are already deep in plans to use the Week as a means of better acquainting the public with their part in helping builders produce houses for Americans. This will be done in most cases by manufacturers contacting their local distributors and urging them to work closely with the local NAHB chapters or committees staging the week in their communities. Several manufacturers of home equipment and building materials are arranging special consultation facilities to furnish well-informed advice on National Home Week promotion tie-ins promptly to their distributors and dealers.

Several appliance manufacturers already have contacted local chapters and builders requesting installation of all-electric or all-gas equipment in National Home Week demonstration

houses in a number of communities. Some heating equipment manufacturers are likewise making arrangements to have their units featured during the Week. Producers of other equipment and a host of building materials have already recognized the wonderful potentialities for graphic and intensive demonstration of their products with the builders. Where local distributors have not been contacted by their manufacturers to tie in with National Home Week promotions in their communities, they should immediately ascertain what the policies of their firms are regarding National Home Week promotion and request participation. Information on any phase of this part of National Home Week promotion can be obtained by contacting Walton Onslow, public relations counsel for NAHB at 1028 Connecticut Ave., N.W., Washington, D.C.

Mats or glossy prints of the National Home Week insignia are available from Onslow's office. Advertisers can not only theme their ads to tie

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in with the industry's "progress report" which is climaxed with National Home Week, but can also use the insignia regularly between now and the close of the week. This same idea of featuring the Week can be carried out in folders, mailers, merchandising cards, window displays, traffic displays and billboards. If nothing more is done by some manufacturers, they can show how their production efforts are related to the home building industry and its accomplishments under the free enterprise system. They can indicate how they will continue to help builders achieve even better housing at economical prices.

All of the above deals with work at the national level—work done by the Washington headquarters offices of NAHB. Latest reports indicate that the national offices of associations akin to the home builders are making extensive plans to cooperate on the national level in the promotion of their particular phases of National Home Week. Bankers, real estate groups, retail building material dealers and others will find their national headquarters forwarding ideas and material for use in tie-ins with NHW promotions.

As stated earlier, however the real work and actual success of National Home Week depends on the activities of the local chapters and committees in charge of each community's observance. The degree of success of the national program hinges directly on the enthusiasm and quality of work done by the local chapter heads and membership. Members of a small chapter in a small community might feel that their little promotion on a small scale will not mean much in the national picture. This is a false assumption because if it had not been for the outstanding effort by each small builder in the nation, along with larger ones, the industry today would not have the fine record of postwar accomplishment in home building which has been recorded. Likewise in National Home Week, it is the cumulative efforts of a host of small demonstrations, along with large ones, which in the aggregate will leave a lasting impression of accomplishment and ability to produce in the minds of the public in all sections of the nation—in small communities as well as large cities. The power of mass demonstration must never be underestimated by any member of the industry and National Home Week is the one opportunity for mass demonstration of accomplishments of which the industry is justifiably proud.

Where there are duly constituted local chapters of the National Associ-

ation of Home Builders, the procedure in staging Home Week in those communities falls into a fairly general pattern. The general pattern recommended, however, is flexible and should be considered so by those staging the Week. Changes to fit local conditions should be anticipated wherever possible and included in the master local plan from the beginning. Aggressive newspapers, radio stations, local organizations and individuals vary in every community. Consequently, each local NAHB Chapter setup on National Home Week must necessarily vary some to properly integrate all these factors in a successful demonstration during the Week. Following is a suggested organizational setup:

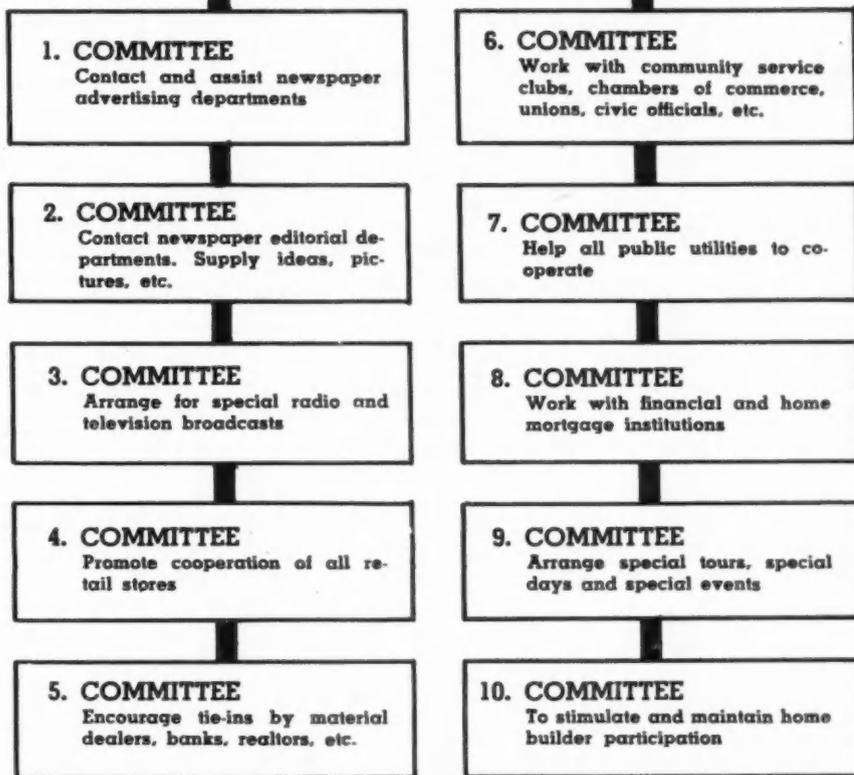
Appointment by the local chapter president of a small, but aggressive committee to plan and stage National Home Week is step number one. This should be a small committee made up of recognized leaders and workers in the industry locally, men with ability to work with other organizations

and businessmen. These committee members should also represent a good cross section of chapter membership, covering all segments — financial, architectural, operative and small builders, building material retailers and real estate operators. If the chapter is blessed with one or several members with especially good contacts in the newspaper or public relations fields, with other associations or those well-known favorably to the general public, such individuals should be able to help materially in the long range planning and staging of the Week. The chairman of this general committee should be an individual with persistence and ability for remembering and disposing of details. Of prime importance, however, is the chairman's ability to enlist the active support of others in the effort. The manner in which this general committee functions is all-important and its work is not easy.

First job of the local Home Week Committee is to get together with all the builders in the community and



**EXECUTIVE COMMITTEE**



ALTHOUGH this suggested committee setup is for large centers, it can be used as a pattern for small communities, eliminating some of the subcommittees and combining the duties of others. If the community is small enough probably the entire job of promoting National Home Week can be directed by those on the executive committee

obtain their support in staging the demonstration. A list of the builders who will participate and the types of houses they will have ready for showing should be completed as soon as possible. This list and the descriptions of the houses comprise one of the prime tools to use in enlisting support of other segments of the community in putting on the show. This



#### **TIE-UPS with newspapers are essential**

also gives all concerned an opportunity to visualize the scope and potential of the local Home week promotion.

The Home Week Committee should also appoint a number of subcommittees. These may be headed by individual members of the main committee or by other members of the local chapter. Between the main committee and the subcommittees a good portion of the local chapter membership should be given some representation, although it must be taken for granted that the actual work and worry of the project will fall on the shoulders of just a few individuals.

It takes about ten subcommittees to properly round out an organization for National Home Week in a large city. The number and duties of these committees change as the size of the communities change, but for purposes of showing the large and small setups, the suggested plan for the large city is offered here. These subcommittees are:

1. Promotion liaison between NHW headquarters and newspaper advertising departments. This committee will channel ideas to and cooperate with the advertising salesmen of the newspapers to help them develop special sections and advertisements themed to National Home Week. The successful newspaper advertising promotion usually culminates with a special section issued on the Sunday preceding the opening of NHW.

2. One individual or several, preferably one, whose sole committee assignment is to thoroughly acquaint newspaper editorial staffs, particularly real estate editors, with all phases of the Home Week promotion in the community. This contact for newspapers should have a wealth of source

material on hand—facts, figures and photographs or ideas for photographs which will help writers and reporters in preparing stories on the entire promotion or on any particular phases of it. The national public relations office will help materially in this respect by forwarding regular releases on National Home Week from the national viewpoint which can be supplemented with information on the local angles.

3. A committee should be placed in charge of all contact with local radio stations. This individual or group, like the one contacting newspapers, should arm itself with a wealth of source material and ideas for broadcasts, including television, which will help tell the story of National Home Week in the community. Advertisers in businesses allied with the home building industry can plug the Week in their programs and the special events departments of radio broadcasting firms can be supplied with ideas for special broadcasts. Here again the national offices will be of considerable help to the local committees by supplying suggestions and prepared manuscripts which can be adapted to local situations.

4. In cities there is usually an organization representing the leading retail stores. In smaller communities



#### **SPECIAL broadcasts publicize the Week**

there is a counterpart of such an organization. The committee in charge of Home Week should delegate the job of contacting this segment of the community to a special committee whose assignment is to solicit support and tie-in activities on behalf of National Home Week's observance in the community. Special window displays, special mention of the event in advertising and affairs planned around the observance of NHW are some of the accomplishments possible here. It is especially important to elicit support of the retailers who handle home furnishings and equipment where a number of the homes to be shown are to be completely furnished. This is the type of tie-up which was made in Chicago in 1948 with the Retail Furniture Dealers Federation which cooperated so well with builders in fur-

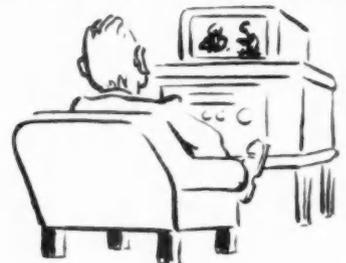
nishing many of the homes displayed.

5. Another committee assignment is to work with associations in fields closely allied with home building such as savings and loan groups, retail building material dealers, real estate boards and banks. All such firms have an interest in National Home Week and their interest can be activated locally by cooperation. The national organizations representing these groups are planning tie-in promotion material and ideas which will be available to local organizations.

6. An important subcommittee assignment includes contact with local service, lodge and church organizations. Veterans groups, women's clubs, Rotary, Kiwanis and other service clubs, labor unions, Chambers of Commerce and similar groups should be contacted and urged to plan program and activity tie-ins with National Home Week in the locality. A series of talks by some builder or member of the local chapter before such groups outlining the meaning of National Home Week and detailing what is being done locally should be of inestimable help in publicizing the program.

This committee, or some other committee or individual, should have the specific assignment of working with the mayor's office and with other municipal officials to obtain their wholehearted cooperation. County and state officials should also be contacted. Last year NHW was officially proclaimed by mayors in 25 large cities and the governors of nine states. A mayor's proclamation for the week is essential and the governors of the states will undoubtedly cooperate to the extent of issuing a proclamation for the week in 1949. A suggested proclamation is duplicated on these pages.

7. Public utilities play an important part in the home building industry. A subcommittee should be given the sole assignment of obtaining cooperation and helping the public rela-



#### **TELEVISION shows add interest**

tions departments of all the utility companies—telephone, gas and electric—in capitalizing on the promotion of National Home Week. Advertising and window displays can be themed to the local observance of NHW. Public utility firms can use the Week to

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STATE OF INDIANA  
EXECUTIVE DEPARTMENT  
INDIANAPOLIS

EXECUTIVE ORDER NO. PROCLAMATION

FOR: NATIONAL HOME WEEK in INDIANA SEPTEMBER 5TH to 11TH, 1948

TO ALL TO WHOM THESE PRESENTS MAY COME. GREETING:

- WHEREAS, National Home Week will be celebrated throughout the United States this year during the period of September 5th to 11th, and
- WHEREAS, Now, probably more than at any other period during our history, there is a dire need for housing and homes for our people, and
- WHEREAS, This shortage, caused by the turning of all labor and materials to the war effort during World War II, is beginning to improve steadily, with more and more materials becoming available and with more and more houses being built by private builders, and
- WHEREAS, The home is one of the foremost, if not the most, cherished institutions in the American way of life, and is so essential to our stability and progress as a Nation and as a people.

NOW, THEREFORE, I, Ralph F. Gates, Governor of the State of Indiana, do hereby officially proclaim the Week of

SEPTEMBER 5TH to 11TH, 1948

AS

NATIONAL HOME WEEK  
in Indiana

and I urge people of our State to visit the scores of homes that will be open for inspection in Marion County and throughout Indiana during this period--to view first hand the kinds of materials now available and being used under modern practices and to learn of the resulting efficiency, economy, and durability. One million new homes were built throughout the Nation during the last year, and Indiana was high in its participation. I know that by continued interest we will rank even higher and that ours will thus become a better State and Nation. Further, that all who participate will share pride in knowing that they helped whip the housing shortage in the American way.



IN TESTIMONY WHEREOF, I HAVE HEREUNTO SET MY HAND AND CAUSED TO BE AFFIXED THE GREAT SEAL OF THE STATE OF INDIANA, AT THE CAPITOL, IN THE CITY OF INDIANAPOLIS, THIS 20th DAY of July 1948

BY THE GOVERNOR

*Thomas J. Bates*  
SECRETARY OF STATE

*Ralph F. Gates*  
GOVERNOR OF INDIANA

or equipment in the house. For example: "Kitchen Day"; "Living Room Day"; "Laundry Room Day"; or the day could be named "Plumbing Day"; "Heating Day"; "Appliance Day"; et cetera.

10. Not the least important of the subcommittees is that assigned to the task of activating builder participation in the observance of NHW. This committee keeps tally on all the builders who have indicated their intention of having demonstration homes ready

*In many cities --*  
PROCLAMATIONS ARE ISSUED



to open for the Week and keeps the main committee advised of progress. At times it may be necessary to call special meetings of the builders participating in the Week for the sole purpose of obtaining progress reports and assurances that all will be in readiness for the opening dates. This committee also keeps participating builders advised of developments affecting their part in the Week, opportunities for individual promotion and special tie-ins offered by manufacturers or local establishments of various types.

The above ten subcommittees are, of course, necessary only in the larger cities and even then the setup may be changed materially to suit local conditions and the type of talent available for staging the week.



VARIED displays are themed to NHW

The National Home Week promotion and tie-ins should not by any means be thought of as limited to large population centers. The event lends itself to participation by even the smallest community with only one or two builders, a lumber dealer, a

stress the importance of installing adequate facilities for the use of their products or services in all new homes.

8. In addition to a subcommittee to work with the associations representing financial institutions, there should also be a special subcommittee to help coordinate the promotional efforts of banks and savings and loan associations in tying in with NHW. With the entire community focusing attention on homes and the home building industry preceding and during the Week, those responsible for the financing of the homes should not miss the opportunity to stress the value of home ownership and the services offered to make it easy for the average person to buy and pay for a home.

9. Another subcommittee should be charged with the job of arranging special tours of home building operations in the community preceding and during National Home Week.

These are especially valuable when arranged for clubs, lodges, various business establishment executives and other similar groups. Tours for newspaper and publicity people should be handled by the subcommittee assigned to work with those groups. This same subcommittee handling tours can also arrange other special events which may take the form of contests, competitions of various sorts, public relations stunts, band concerts or any number of unusual events to stimulate interest and get attention focused on the promotion of NHW.

In some localities it may be desirable to designate certain days of National Home Week as "special" days. If the local situation is adapted to it, this committee may set certain days aside for certain communities within a metropolitan area or within a county. For advertising and promotion purposes it may be desirable to designate the days according to various rooms

bank and a few other business houses. Where there is no local NAHB chapter, the promotion can be handled by a committee of builders, working with other groups in the community, appointing committees and soliciting the cooperation of newspapers and other publicity and advertising outlets. Although the committee setup outlined above is for large cities, it can be used as a pattern for setting up organizations in small communities, eliminating some of the subcommittees and combining the duties of others, or if the community is small enough, the entire job can be handled by the main committee.

In some small communities where builders are not organized and do not have any common interests except competition, the lumber dealer or dealers can often head the movement to stage National Home Week. When this is the case, the same ideas as to promotion and planning for the event hold true, except that everything will be done on a smaller scale. Even where the local newspaper is a weekly, it is still possible to plan special advertising and special issues built around National Home Week, and local builders, lumber dealers, bankers, and others interested in the home building industry can combine their promotional resources to help the local newspaper publicize and advertise the event. There may be but one house in a small community that can be opened and shown during National Home Week, but even where this is true, it can be done successfully to tell the story of the industry for all interests doing business in the community.

Individual home builders participating in the observance of National Home Week should not depend solely on local committees for ideas and direction in staging the week. There are a host of things to be done which no committee can do for any builder who desires to have a successful demonstration house open during the week.

First of all he must decide early in the year the type of house he will build for demonstration, where it will be located, and whether he wants it furnished. Where a builder can do it, it is desirable to have several houses in different stages of construction on display, one of them completed of course. The incomplete houses should be open for inspection by the public to show the potential buyers how a modern house is put together, what goes into it, and the skill it takes to complete it. Where skeletonized houses are shown it is highly desirable to put up small signs labeling the various house parts such as studding, sheathing, rafters, joists, subflooring, rough plumbing, wiring, or furnace ducts, to

make the showing more educational. There might even be an easily readable, briefly written description somewhere about the uncompleted house describing just what stage of construction has been reached and what remains to be done before the house



**ON-SITE building demonstrations are good**

can be made livable.

Regardless of the size of the community in which the builder is showing his house or houses during NHW, he should make the location easily accessible for visitors. This does not necessarily mean that it must be located on a main highway close to heavy traffic arteries, although that is an ideal place to erect demonstration houses when feasible. It does mean, however, that roads and walks to the house should be easily negotiated by drivers or pedestrians. First impressions are lasting impressions and if a builder forces individuals to drive over rough, dusty or muddy roads and then walk through rough dirt or



**PARTIALLY completed houses with the parts labeled make an interesting exhibit**

mud to get to a house, the reaction to the demonstration will not be as good as if no trouble is encountered traveling to or from the location of the house.

Easy access also means proper publicity and advertising carrying good directions to a model house. In large cities it is desirable to prepare a small map showing routes to the location of the project or model house to be used in advertising and publicity.

It is always desirable to prepare direction signs for model houses on display. They should be erected in strategic locations along the routes to the showing. These serve two purposes—to direct visitors to the houses and also to advertise the showing to all who happen to see the signs.

A few well-placed spotlights will prove economical but extremely ef-

fective in advertising any model home. The job of spotlighting should be done properly, however, or not at all. This type of promotion is especially valuable if the home is anywhere near arteries which carry heavy automobile traffic.

The routing of a large number of people through a model house, especially one which is furnished, is always a problem. The floor layouts of some houses make them especially well suited for demonstration purposes. Two such houses are included in the Blueprint Series in this issue of *American Builder*.

In showing houses during National Home Week, builders should keep in mind the basic purposes for the Week and what it is planned to accomplish. Each builder may have his own particular interpretation of the national problems as they are related to local situations, but basically the promotion is a "progress report" to the nation on what its home builders have been doing to house the nation's citizens; how builders are making it possible for more individuals to own better houses in better planned communities. It is an opportunity for the industry to show that it is made up of firms and individuals who are sincere in the pursuit of their chosen field; that

home builders as a group are not out to capitalize on the dreams and wishes of home seekers but are honest in trying to help them get the kind of a home they want and can afford to buy.

At the same time National Home Week provides a splendid opportunity to dramatize the technological side of home building—all the details involved in erecting a house, the materials used behind the walls, under the floors and in the attics which most persons, especially women, rarely have an opportunity to study. Builders should never discount an opportunity to demonstrate the skill and experience it requires to plan, build and sell houses acceptable to the public. Nor should they deny their tradesmen an opportunity to show how much skill and training they must have to put a house together with modern materials



using modern techniques. The carpenter, the mason, the plumber, the heating contractor, the electrician and others should be given a chance to show how important they are in the huge task of housing the nation.

National Home Week can be used to throw the spotlight on modern methods of financing home ownership. With the public's attention focused on homes and home ownership during National Home Week all stops should be pulled on the financial side of the proposition. It should be remembered that this is of prime interest and importance to every average prospective home buyer.

Modern home equipment can be highlighted during National Home Week. The new heating systems, the newest plumbing, wiring and lighting, laundry, and kitchen equipment of all types, and the host of other components that are required to complete a modern home can be emphasized.

By working closely with furniture stores, many of the demonstration homes can be attractively furnished throughout. When this is done, the furniture retailers usually help promote National Home Week in their locality with advertising, window displays, and publicity.

The excellent newspaper support rendered National Home Week promotions last year and the fine results achieved illustrate how well this program is geared to cooperate effort between the industry and newspapers with mutual benefits accruing to both. Through the efforts of National Home Week committees a large amount of material was supplied to real estate editors and a good variety of tie-in advertising was obtained. Both the advertising and editorial departments of newspapers were very active in some cities. As stated pre-

to small community newspapers.

Probably the largest job on a special newspaper section was done by the Chicago Tribune, which, working with the home builders and the retail furniture dealers, co-ordinated home building and home furnishings in a combined Festival. The special section included advertising by firms in every phase of the home building and home furnishing fields. Well balanced editorial material proved inter-



CONTESTS add zest and interest

esting reading. The volume of advertising in the Sunday issue carrying the National Home Week special section broke all records for the Chicago Tribune up to that time.

In Albany, N.Y., a substantial NHW section of the Times-Union was devoted to the big event and emphasized the model homes which were being opened to public inspection. His theme was well developed in the advertising. Gracious living and the benefits of home ownership were stressed in advertising copy.

An outstanding job was done in Indianapolis. In comprehensive NHW sections in the Star and the Times, the story of the great home building volume in Indianapolis and the nation was highlighted. The main theme of big production was co-ordinated with an extensive listing of model homes which the public was invited to visit. A novel feature was a full page map of the city showing the locations of model homes, keyed according to the firms which built them.

The Newark Sunday News brought out the story of home building progress in a large NHW section. Scenic views of a number of home developments with homes available to the middle income groups highlighted the section. Promotion of rental housing projects received prominent display.

A building boom was the keynote of the Salt Lake City Tribune's NHW section. In a broad frame of scenes on the cover page, streamlined production methods were shown and up-to-date techniques pointed out.

The Fort Wayne, Ind., Gazette took a note from the pages of the nation's leading community developers

and pointed up the advantages of modern land planning. Every major advertisement in the special section hammered hard on the land planning idea. The Fort Wayne News-Sentinel carried a similar section giving full play to the NHW story of progress.

The Dayton, Ohio Journal framed a beautiful two-page spread showing a map of the city with individual photographs of feature homes in the projects opened to the public. A main theme of the section was improvement of modern home equipment. The Dayton Herald carried a similar big section.

The Amarillo, Texas Globe-News featured the home as the most important possession of the average man. A well-balanced advertising section contained large displays by utility companies as well as home equipment dealers.

The Cleveland Press showed a strong appreciation of the merchandising aspects of National Home Week. Numerous advertisements carried references to model homes which had been supplied or equipped by the advertiser. Utility companies used extensive space and featured photographs of new homes.

The Sacramento Bee highlighted the home-of-tomorrow in its NHW section. Emphasis was placed on technological progress and the better items for homes which are being produced. Advertisements showed good use of the progress theme, pointing up the advantages of good design and the ways to build personality into the home.

These special newspaper sections



FOR the success of National Home Week

and editions, plus all the publicity preceding the official opening dates, created intense public interest in the communities where the week was observed in 1948. Radio, television and special events themed to the subject, along with all the advertising and publicity, brought record crowds to view the houses on display. The 1949 observance of National Home Week will undoubtedly be of more value from a merchandising standpoint. With the increased interest and greater number of communities participating, it should show record accomplishments in further educating the public on home planning, construction and financing as it is being done the best way in the world—the American way.



CONSUMER magazines feature NHW

viously, however, this does not mean that the Week's promotion should be considered as suitable only for large cities. It can be done in a community of any size on a scale geared to the potentialities and facilities of the local situation. A few examples of what was done in the way of NHW promotions in cooperation with newspapers are cited below. Many of the ideas used in the large metropolitan areas are equally adaptable

## Here's the Evidence—



**T**O PROVE that the private building industry can produce good low-cost homes within the budget of families of average or below average income, 34 home builders of Detroit are cooperating in an Association-sponsored low-cost housing project. Last summer officials of the Builders Association of Metropolitan Detroit decided that a lot of talk about what could or could not be done in the way of low-cost housing would never prove anything. It was then the decision was made that the best way to prove what could be done was to do it. At the same time the Association decided to demonstrate and dramatize all the problems inherent in efforts to complete good small houses in a good neighborhood at prices ranging from \$6,900 to \$8,500 including lots.

George A. Duke, president of the Detroit Association and a participant in the project appointed Arvid C. Petersen as project chairman. Petersen has directed the project from the beginning, assisted by committees in charge of land, finance, design and public relations.

There are 137 lots in the subdivision on which 90 houses are now completed or under construction. Thirty-five more houses are scheduled to start this month. No lots are less than 50 feet in width with

some as wide as 68 feet. Water, sewer and sidewalks are in. Streets are graveled and well drained.

The design committee selected six different floor plans and three front elevations on each floor plan, to produce 18 different houses. Designs are by the Petersen-Pollman-Palmquist architectural firm of Detroit.

After the land was assembled by the Association, the lots were assigned to the builders by drawing numbers. When a builder drew a lot number he was to build the house which the committee had designated for that lot.

A few of the participating builders have erected more than one house in the project. The extra houses have sold readily and are occupied. All are of conventional frame construction with good quality materials and workmanship throughout. Interiors are dry wall. Heat is supplied by oil-fired forced warm air units. Practically all of the houses are basementless and the crawl space under floors is being used as a plenum chamber for warm air, thus creating a certain amount of radiant heat plus that which enters and circulates through the rooms from registers located in outside walls at floor level. Cool air is returned to the heating unit from ceiling level. With this system there is less than three degrees

**That builders can produce housing for those in the low income brackets without sacrificing quality or style, provided financing is adequate and the requirements of codes and zoning do not unnecessarily force prices too high**

variation between the floor and ceiling levels.

The chamber under the floor is created by insulating the foundation walls with rigid board well below grade. In addition a mineral wool blanket is dropped down between the trimmer and joist. Floor of the plenum chamber is well above grade, built up with a bed of sand at least two inches thick and asphalt saturated felt above that. FHA approved the project for both Title I and Title II mortgage insurance.

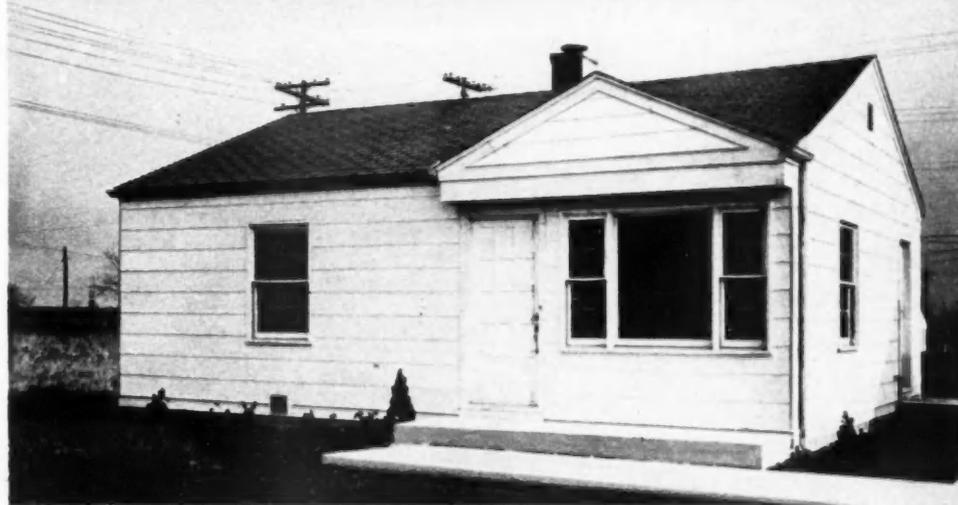
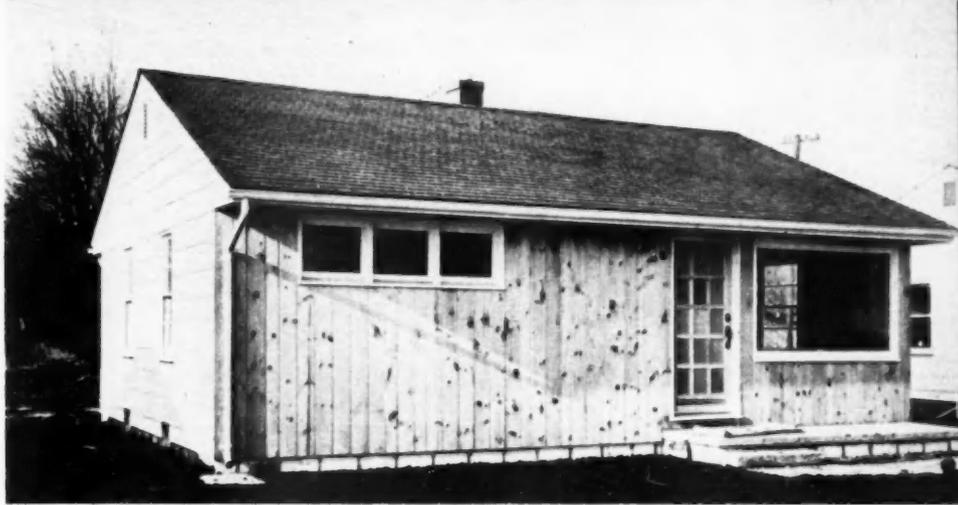
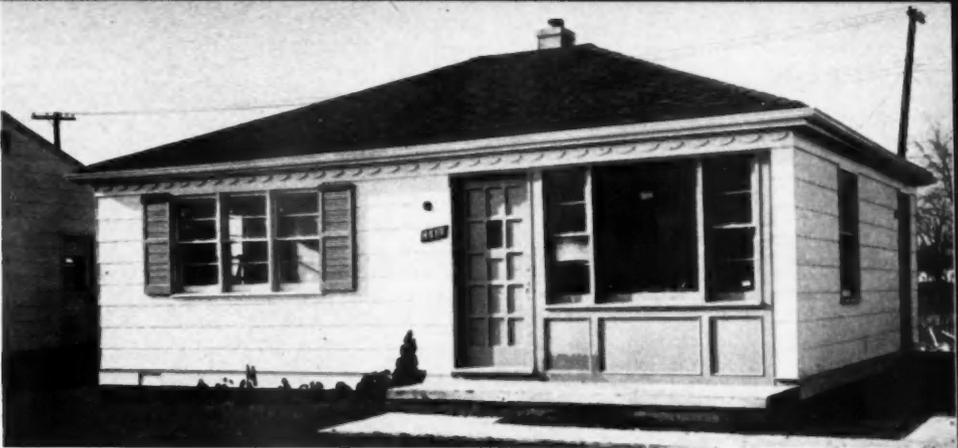
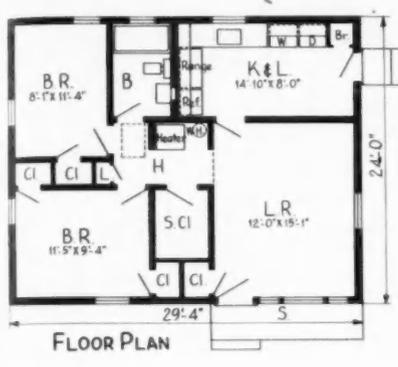
The project is located in Royal Oak, adjacent to Detroit, and was welcomed by that municipality although it took considerable negotiating between the committee and the city officials to iron out some code difficulties to hold costs down.

The undertaking was not sales promotion in itself. Many of the models could have been sold scores of times but they are being held open for visitors. Some builders are selling duplicates of the models in other locations but the houses in this location will be open indefinitely.

What the builders are proving, in addition to the fact they can and want to build good low-cost houses, is that present mortgage finance

**THE two street scenes below are in the Detroit Home Builders' low-cost house project**





arrangements are inadequate for this type of housing for the thrifty families of ambition; that local zoning ordinances in most localities in metropolitan areas stand in the way of providing such houses; that building codes generally in vogue either add unnecessarily to costs or put prohibitive barriers in the way of building low-cost homes of this type.

While the project was approved by FHA for Title I as well as Title II no mortgage finance has become available for the Title I type of partially-completed houses. Accordingly, few have been built and no more will be started. FHA has, however, insured mortgages on several Title II houses where the buyer is doing his own interior decorating.

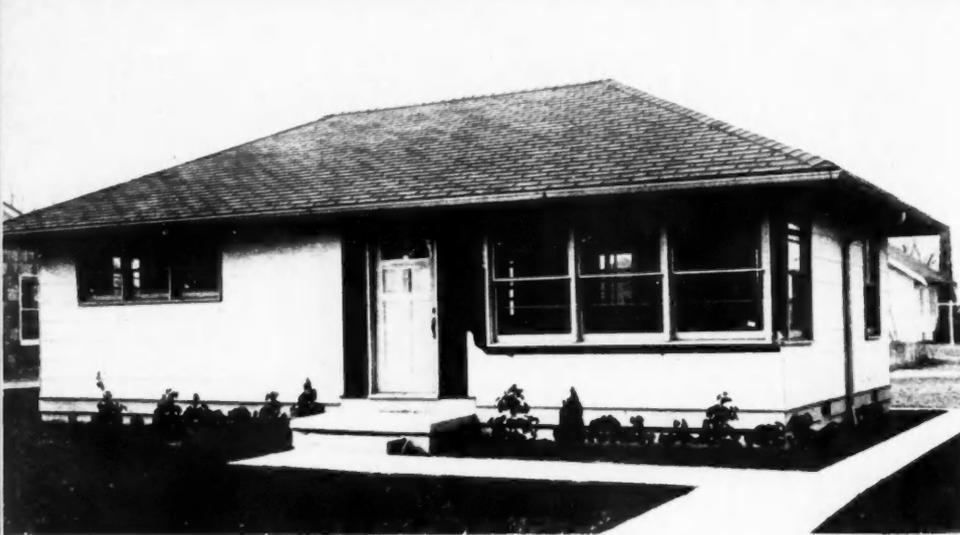
In discussing the financing problems, Arvid C. Petersen, project chairman says, "By raising the maximum amount to be included in the 95 per cent FHA insured loan to \$8,500 and making loan appraisals on the basis of actual current costs, a mortgage of \$8,075 could be made on an \$8,500 home. This would require a down payment of only \$425. By placing the amortization period on the same 35-year basis as afforded rental housing, monthly payments, including interest, would be \$34. The federal government should make

SIX floor plans were selected for the project by Detroit builders. Above left is the basic plan and photos right show three elevations of that plan





**PLAN "B"** with one of the three elevations used in the project. One builder's price on this house with a washer and dryer, but not including the lot is set at \$6,625



**THIS** is one of the three elevations on Plan "C". A price of \$6,750 without a lot, but including a washer and dryer, is being quoted by one builder. Average price of lots in the subdivision is about \$750. Plans of these houses may be obtained from Home Builders Association of Detroit



**PLAN "E"** is the only story-and-a-half house included in the six sets of plans. This is one of the elevations on this model, priced at \$7,300 without the lot, but including the automatic washer and dryer



**PLAN "F"** is popular with visitors to this usual homes demonstration project. Price on this model, set by one builder—\$6,700

possible home house, rental payers and the penalties houses have meet are no in sim, attrac sized The s good is not To cally vided proje which averag codes in Ro square basic expan In sociat demor



possible the same credit to the home buyer who wants a small house, as it does to the builders of rental property. This is the taxpayers' money which is being used and the home buyer should not be penalized or discouraged. The small houses, which sometimes do not have enough square footage to meet minimum code requirements, are nothing more than apartments in single buildings with the added attraction and livability of a good-sized lot in a good neighborhood. The small apartment is eligible for good loan insurance but the home is not."

To illustrate this point dramatically the Association itself provided an expansible house in the project. The basic unit, 24x24 feet, which has all the livability of an average apartment and would pass codes as such, could not be built in Royal Oak because minimum square footage there is 700 and the basic unit has only 576. It was built expanded.

In regard to this house, the Association says: "Again we have demonstrated how the home seeker

**THIS is one elevation of Plan "D", most expensive of the one-story houses. Like all the other floor plans, this model has three elevations. Price by one builder—\$6,800**

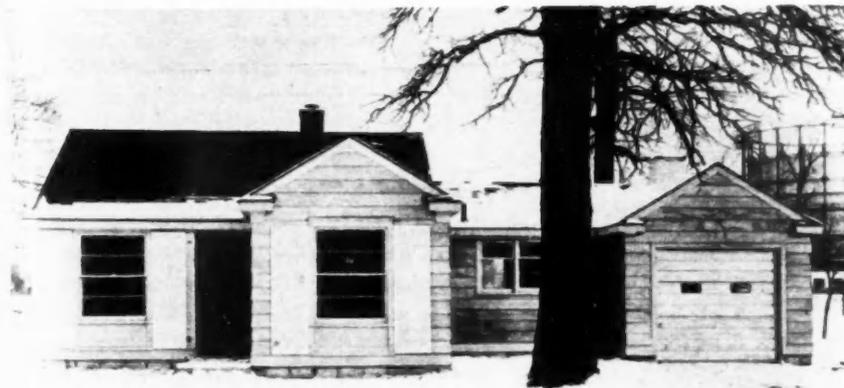


FLOOR PLAN

**FLOOR plan of the expansible house, with the basic 24x24-foot unit outlined. Addition of bedrooms, dining area and garage made it large enough to pass minimum municipal code**



FLOOR PLAN



**PHOTO of expanded expansible house about completed. This house was sponsored by the Association to demonstrate possibilities using plans for expansible houses**

is hampered and restricted. Local governments dictate to him the size of house he may have and tell him what he must have in it. This is in spite of the fact that many families like to pay as they go and to expand a home as occasion demands."

George A. Duke, president of the Association said, "Home seekers frequently ask us to duplicate these models on their own lots in the Detroit metropolitan area. This brings them, sometimes, face to face with the fact that they must build a \$10,000 or higher priced home rather than one priced between \$6,900 and \$8,500 because of building codes in force. Codes should be functional."

# PUBLICITY

## Important Aid to Selling

By Charley King

**Builders and land planners, now more than ever, need effective publicity, to add sales impetus. How to go about it is explained by this expert in the field**

**W**ITH the nation entering a buyer's market in virtually every category of business, effective publicity now is more vital for sales than during the plush postwar period.

Experience demonstrates that effective publicity will do a great deal to boost sales when it supplements paid advertising. Real estate editors are aware of this. During a sales campaign, of course, an advertising schedule is essential for obtaining news space.

In buying space, the advertiser is entitled to a certain amount of so-called free space. The operator who retains a press agent gets the amount of news space to which he is entitled and, frequently, more; whereas operators who do not have a press agent very often do not obtain their full share. Leaving the writing of publicity accompanying advertising to the real estate editor is not always best because editors are busy people.

Until now, too many land developers and builders have not indulged in sustained publicity because sales were on an order-taking basis and they did not think they needed it. The operators who maintained publicity and public

relations programs during the lush period, when it was easier to pay for, are just that much ahead of those now jumping on the publicity to help sales. One operative builder, who kept selling his houses virtually without advertising, and without salesmen, only escrow people, said he hired a press agent to get the maximum space because he wanted to be so well known that when the pinch arrived persons desiring to have a home built on contract would remember him.

Properly geared publicity can start selling homes ahead of the advertising campaign, a fact too frequently ignored by operators. The common practice of builders is to wait until the eve of starting an advertising schedule to start publicity. Properly prepared and published news releases can start selling houses far ahead of completion. Copy concerning subdivision plans, construction starting date, and construction progress reports can be used. Recently a news release schedule about construction progress of a large tract drew so many prospects ahead of completion that 100 homes were sold before the sales program started, for a publicity cost of less than \$3 per



CHARLEY KING

house, which is exceedingly low. To again use the foregoing tract as a typical example, this is a general picture of advance news releases:

1. Article on site purchase.
2. Reports on planning progress.
3. Construction start date.
4. Letting of subcontracts.
5. Ground-breaking.
6. Naming of tract.
7. Completion schedule, number of homes started per day.
8. First street roughed in.
9. Nearing completion stage of first street.
10. Appointment of sales manager.
11. Announcement of terms.

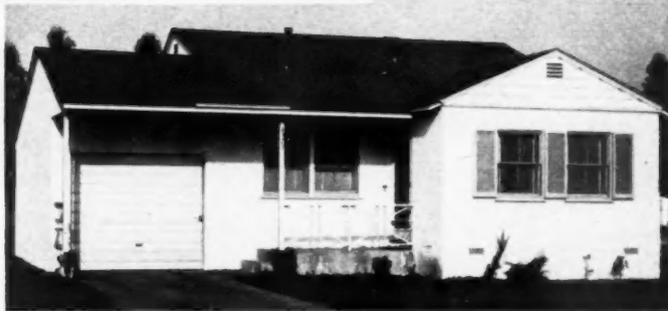
During this period, publicity material is prepared for the actual sales campaign to accompany advertising. This includes artist's renderings of front elevations, or rear elevations if garden living is a feature. Photographs showing front elevations of completed houses. When the advertising schedule breaks, publicity and art are planted with the real estate editors for use on the opening week-end. Such spreads help bring out the prospects.

Such spreads have brought out



Rated as one of the top press agents in the field, Charley King is currently handling publicity for tracts in West Covina, Baldwin Park, Arcadia, La Canada, Southwest Los Angeles, Hermosa Beach, Rolling Hills, South Torrance and Long Beach, Calif. A former reporter, feature writer and columnist, King was a Washington,

D. C., public relations sergeant in the U. S. Marine Corps during World War II. Since the war he has been senior publicist, Columbia Pictures, Hollywood; regional information specialist, Civilian Production Administration; public relations director, Home Builders Institute, Los Angeles. Mr. King is at present free lancing.



PHOTOGRAPH of house may be submitted to one paper, and rendering sent to another, but duplicate pictures of the same house should not be sent to different papers. Plans should be professionally drawn

from 9,000 to 12,500 persons on a week-end to tracts I have handled for GI sales. On more expensive stuff, as many as 3,000 in a day.

After the opening week-end, publicity stories are prepared with the objective of keeping the people coming, unless a sell-out has been registered at the outset.

At least one account retained me to get publicity primarily as a means of attracting deals to the office. They are happy over the results in this direction. Some of the best sites have come to their office as a result. They have had a wider selection of deals from which to pick and choose than they would have had otherwise. This account's next major project is traceable to publicity.

Publicity, properly handled, will enhance prestige and reputation. This everyone realizes. Material printed by real estate editors does this. Under this heading comes articles for or about clients in the various trade publications. Institutional publicity, which only indirectly concerns a project, does this. Institutional publicity is comment upon timely topics. Such a release for one client got him a telephone call from a lender who was a stranger with a mortgage commitment for 120 houses at a time when the mortgage pinch was tightening up fast!

#### Submitting Copy

The Los Angeles Sunday papers, to obtain the best break, should have all news copy and pictures on Tuesday before publication. This means that Monday becomes a rat race, especially with clients so scattered in sprawling Los Angeles County. It is necessary to contact each client to learn their sales experience over the week-end to guide

the angle for publicity releases for the next week-end.

It is my belief that the publicity which gets the best reception from editors is the one with the news peg. The publicity on behalf of a specific house or tract should be hung on this news angle.

After driving from 80 to 100 miles on Monday, I am home at my typewriter, preparing the basic release for each account. By 7:30 they are ready for my rewrite man to pick up. I hire him on a free lance basis. He is employed daytime by a local paper. He prepares a different version of each release for each Los Angeles paper (five of them in most cases). The copy is marked unduped (not duplicated) or lead unduped. The editors do not have to rewrite it themselves. This saves them time and, I believe, wins a better reception from editors than carbon copying. I do use carbons, however, sending them to suburban papers on the list for each client.

The practice of unduping also applies to art releases. Rarely do I duplicate photographs or drawings, and do not duplicate captions. Editors like exclusive pictures, and it makes their pages look better when they do not have to use the same picture that appears in all other papers. If but one house, or one building is involved, I have it photographed from different angles to prevent an appearance of duplication. Some clients have scale models made. These are photographed at different angles.

Rarely do I submit the actual drawing of a house or building. My practice is to have it copied professionally, using glossy 8 x 10 prints for releases. Otherwise, the newspapers must have the art work photo copied.

In having renderings made, I

use Qvale, of Los Angeles, who specializes in such drawings. He is set up to make photo copies. He makes renderings from blueprints. Newspaper editors like his stuff.

For photographs, I have commercial photographers spotted in every section of the County. I use them when operating in their particular areas. It is not entirely easy to locate commercial photographers who can make pretty pictures of houses. The better pictures are, the more artistic, the better the reception by editors.

My practice is to always be supplied with pictures. You never know when an editor might need one.

#### Prepare Adequate Volume

As for news releases, I make one a week on each client on the belief that if an editor wants to use a story, he has one on his desk. If he wants to use it, and you don't leave one, you miss a printing. All editors have paper baskets handy for the rejects. The major reason for editors not using all professionally prepared copy every week is space limitation, or an old or a new client is breaking a new campaign.

Every Tuesday I visit all the downtown real estate editors to leave "my bundle." I check pictures with them, for art is important. You get more space in the papers with good pictures. A photograph that cost \$5 can get space that would cost, in advertising, \$200 or \$300.

It is important to know what each paper will use. Some, for example, will not use anything except front elevations. Some have a policy that will permit use of informal photographs, like ground-break-

(Continued to page 216)

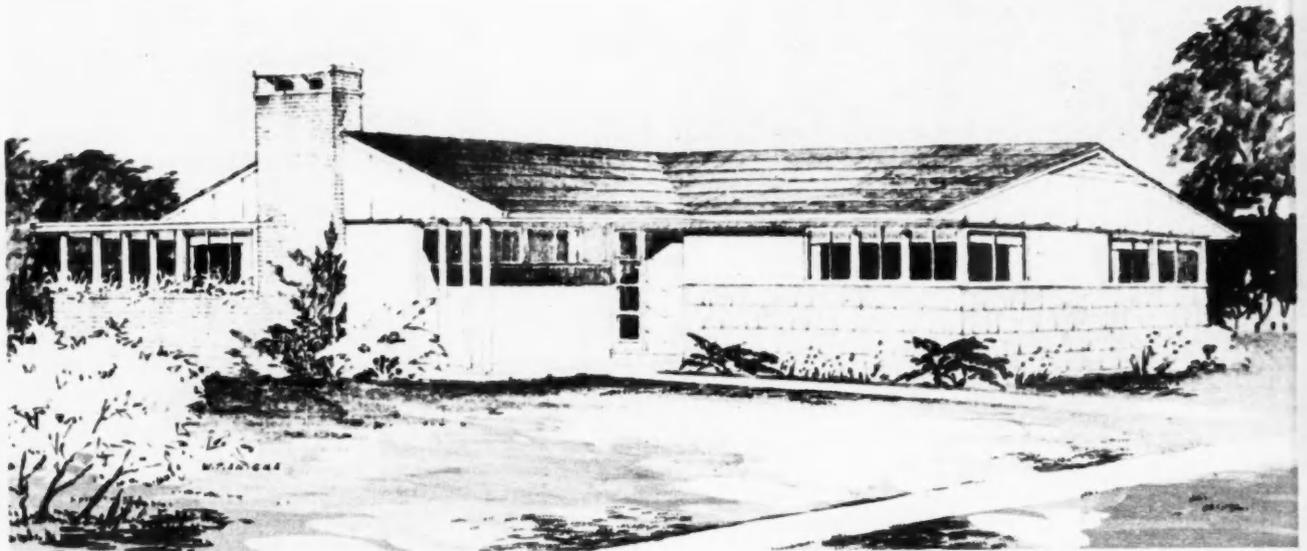
# AMERICAN BUILDER

## Blueprint House

Number 27

Walter T. Anicka, Architect

IN TODAY'S market the emphasis is placed on the two bedroom house. The L-shaped design shown below with its interesting facade meets all the needs of a small family



## Conforming to Demand Adaptable for Demonstration



**T**HE TWO houses that comprise this month's *American Builder* blueprint series are designed with the forthcoming National Home Week in mind.

During this event, which is to be held the week of September 11-17, 1949, model homes will be open to the nation's buyers, and on-site demonstrations of building techniques will be held—from coast-to-coast.

In the above house, which has 1018 square feet exclusive of porches, Walter Anicka has incorporated features that make it adaptable for demonstration purposes. The plan is laid out so that a fixed line of travel can be maintained after entering the front door. Thus, the Home Show visitor may view or enter every room of the house without becoming embroiled in a traffic snarl. The control of traffic in the plan adapts favorably to normal household activities. Ease of cir-

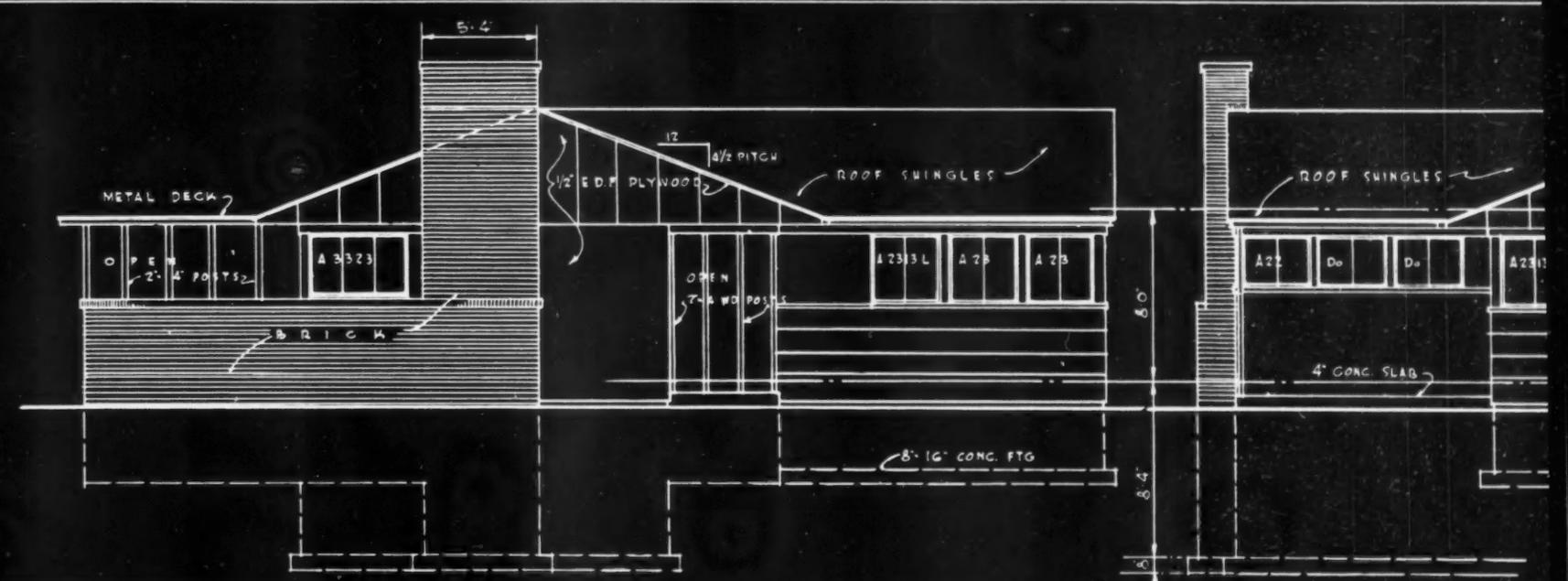
ulation is established without using any one room as an artery. The respective zones of the house such as living, service and quiet are accessible from the front hall.

The use of exposed vertical 2x4 posts in the design treatment, both on the exterior and the interior, is an Anicka feature. This is an inexpensive, yet effective method for treating the open areas of entrance and porch. The area above the china cabinets between living and dining rooms is handled in a similar manner.

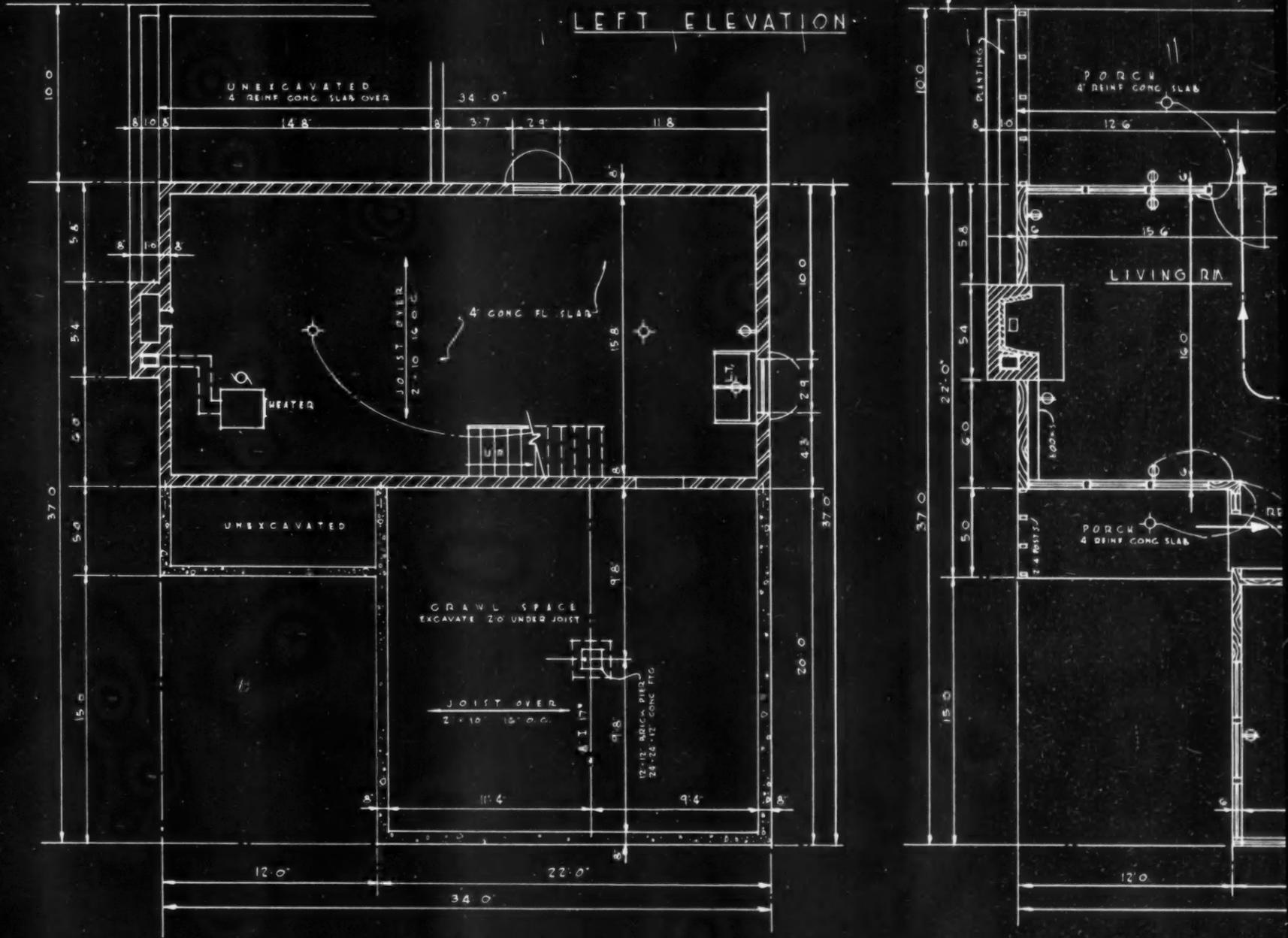
Storage walls extending full height, from floor to ceiling, separate the two bedrooms. The bathroom is of minimum size to permit entry to the kitchen from the hallway. Ample space is provided in kitchen as well as dining room for eating purposes. All service facilities are located in excavated portion of basement.

Estimated cost of house, \$10,000.

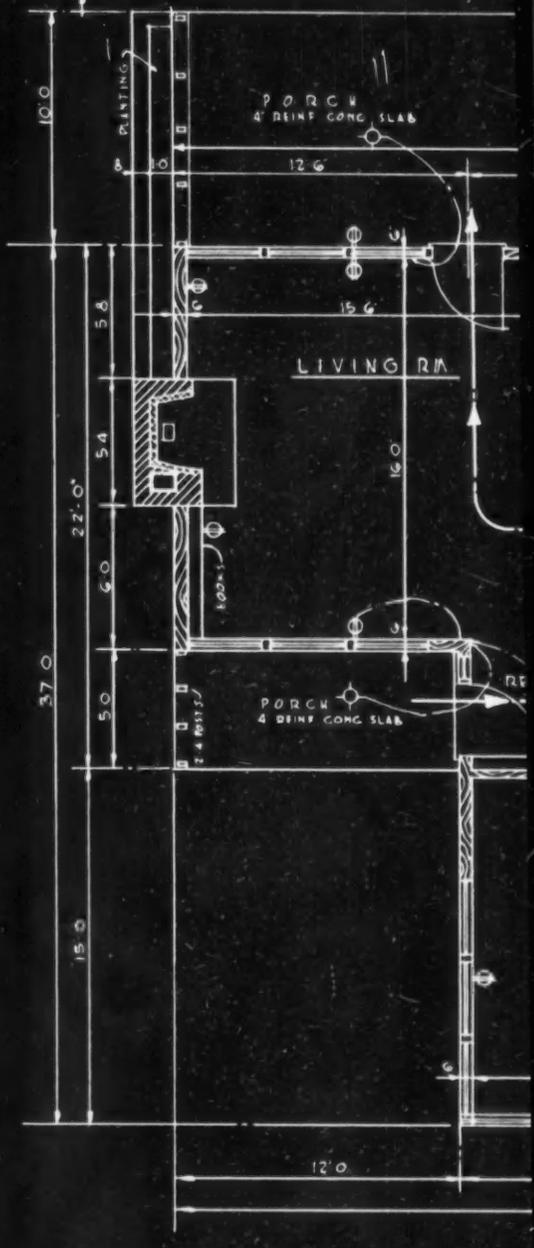
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LEFT ELEVATION



BASEMENT PLAN



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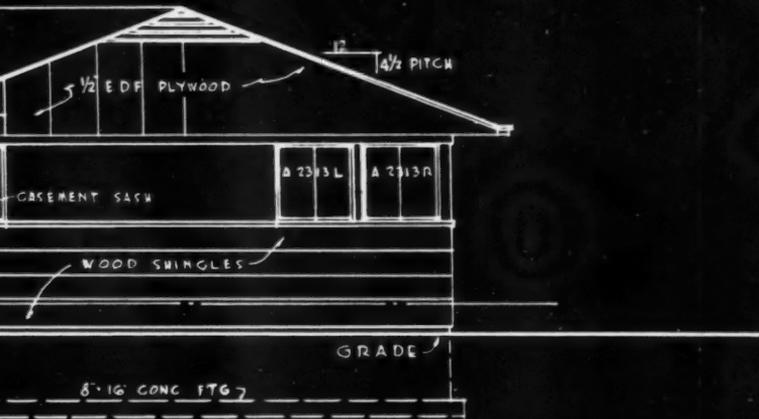
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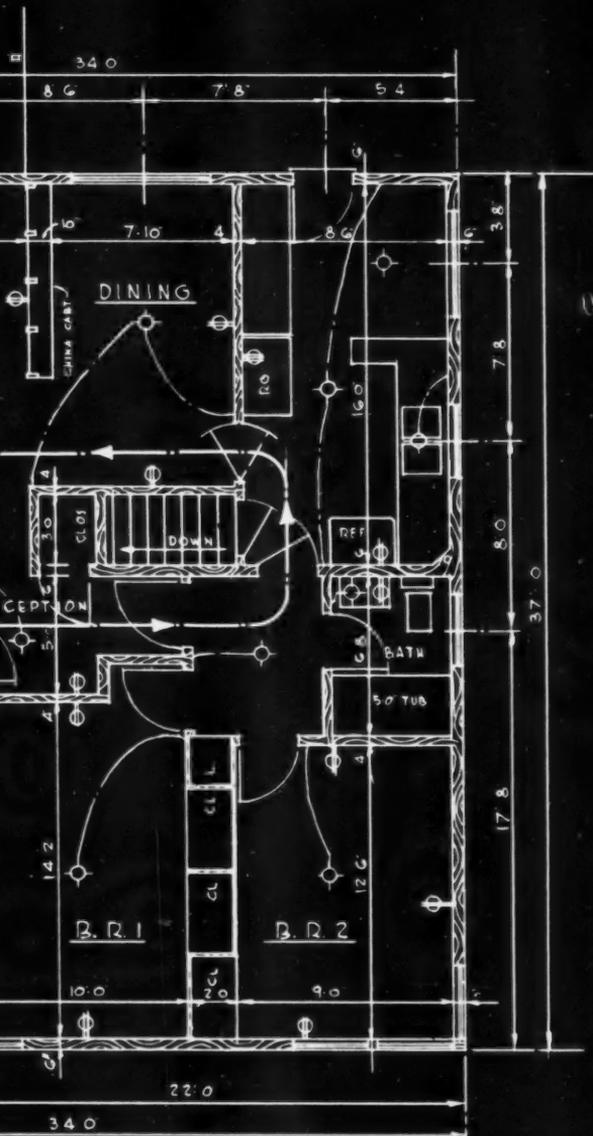
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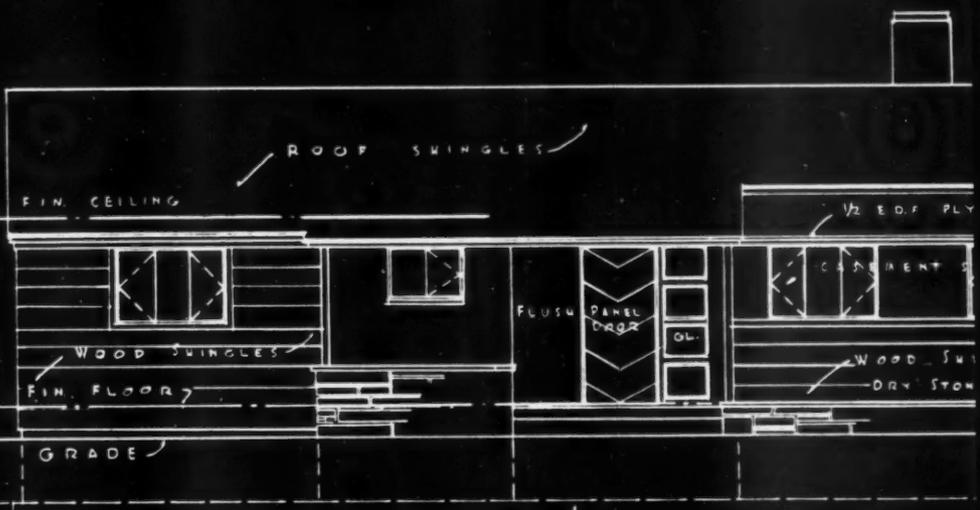
FRONT ELEVATION.



FIRST FLOOR PLAN.

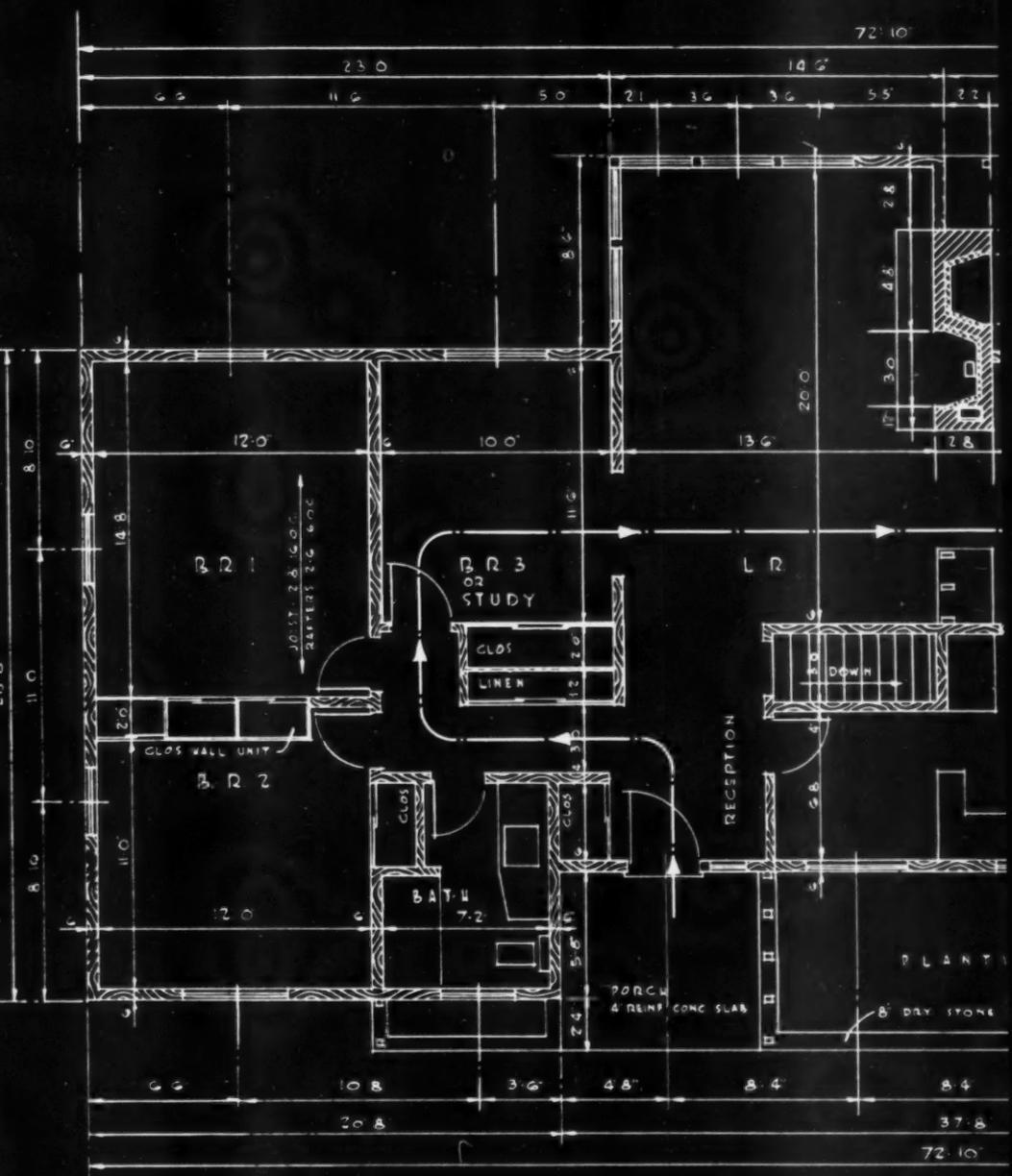
<b>DESIGN NO. AB 140</b>	
<b>AMERICAN BUILDER BLUE PRINT SERIES</b>	
<i>Designed By</i>	
<b>WALTER T. ANICKA,</b>	<b>ARCHITECT.</b>
<b>Ann Arbor,</b>	<b>Michigan.</b>
<small>Simmons Boardman Pub. Corp. 105 W. Adams St. Chicago, Ill.</small>	



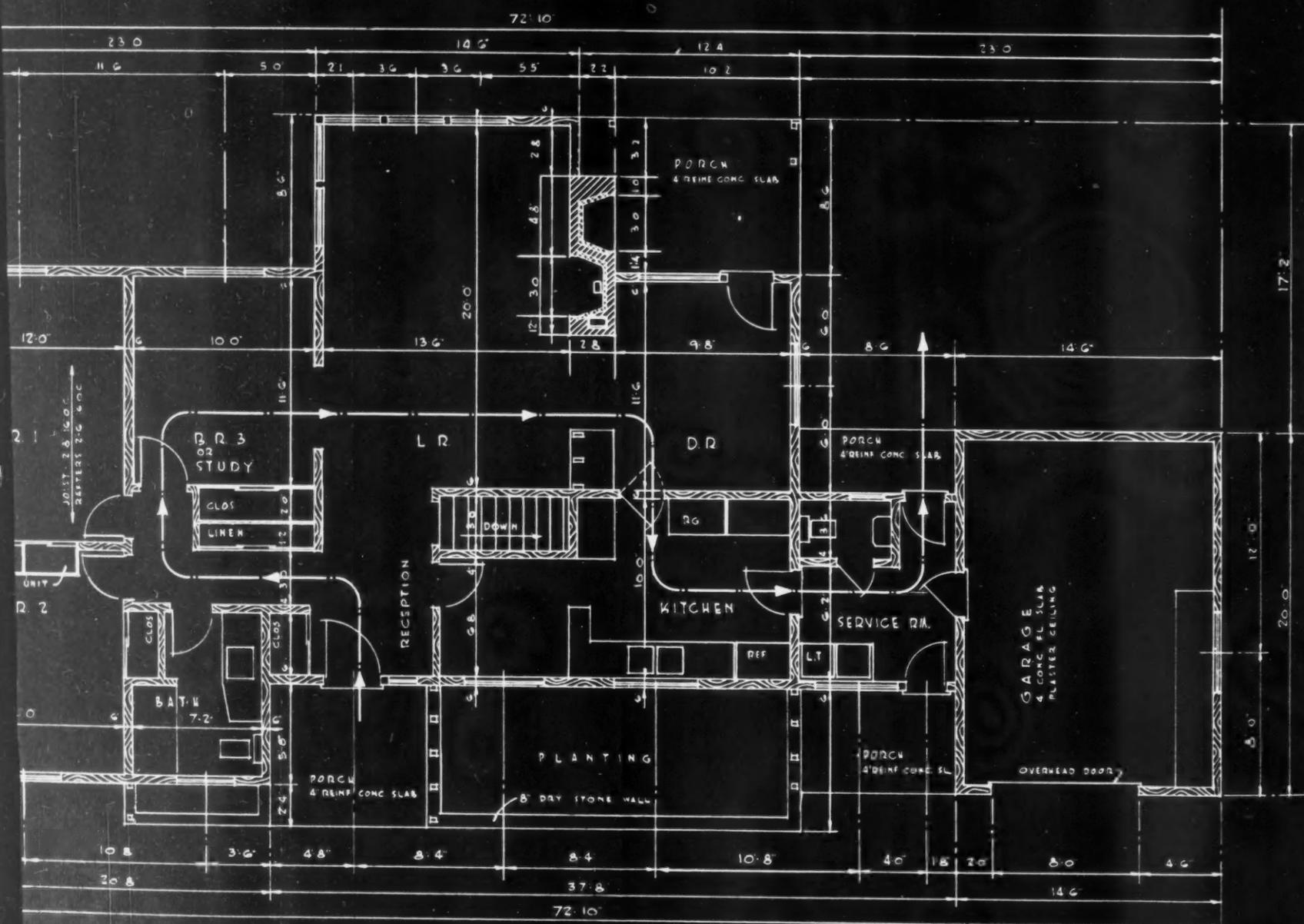
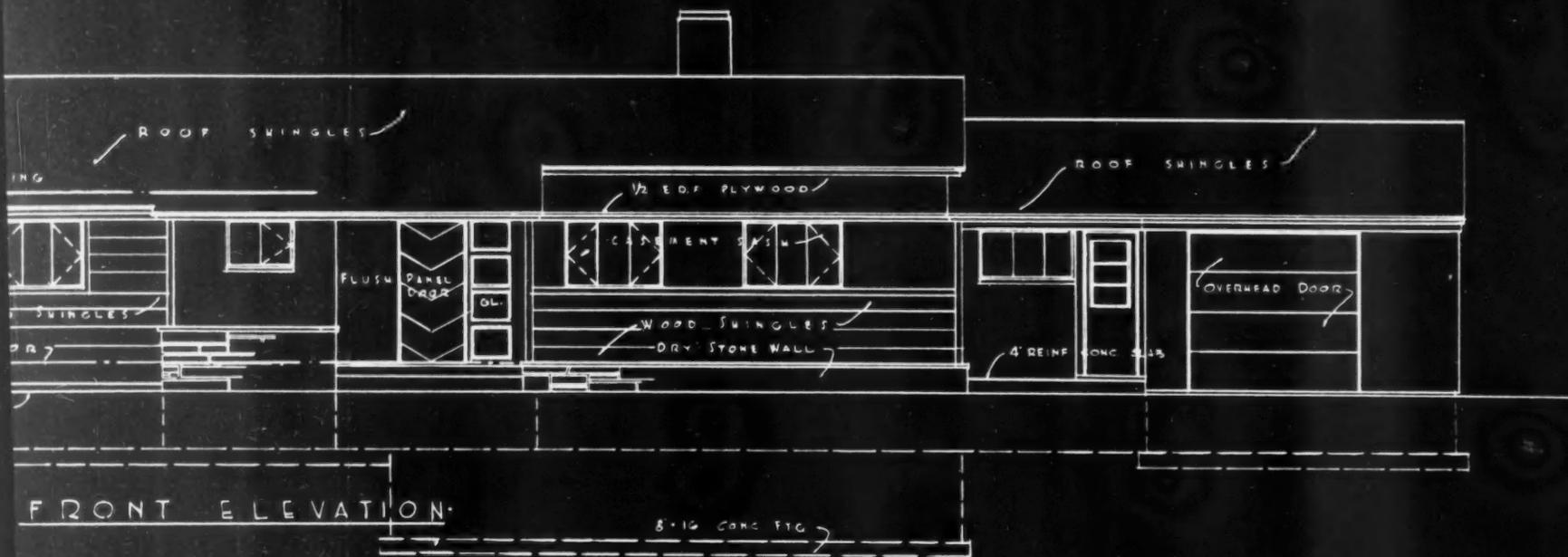


FRONT ELEVATION

8' 10" CAR



FIRST FLOOR  
SCALE 1/8" = 1'



FIRST FLOOR PLAN  
SCALE 1/8" = 1'-0"

A HOUSE  
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## AMERICAN BUILDER

### Blueprint House

Number 28

Walter T. Anicka, Architect

A HOUSE with ample space for all facilities, shown below. This design with its low-pitched roof, in combination with various wall surfaces, can be adapted to any part of the country



## Designed for Good Living Ideal for Demonstration

**T**YPICAL of the rambling type homes of the Southwest, is the second of the current blueprint houses.

Emphasis in the plan of this house, like its companion, is placed on circulation. In the event that the house is considered for use as a model during National Home Week, this feature will assure an unbroken line of travel for visitors through the various rooms. The suggested route is indicated on the floor plan by dotted lines.

A number of features characterize this house. Three bedrooms indicate its use for a growing family. Rooms are of generous size assuring comfortable living. Ceiling height storage closets serve as separators between bedrooms and halls.

The living room is well laid out. The circulation is all at one end, leaving the fireplace and window portion of the room confined to undisturbed assembly. This makes an ideal ar-

rangement. Kitchen is large with facilities for informal dining.

Service room adjoining kitchen and garage provides space for laundry tubs and powder room. Single garage with large work bench completes arrangement. The dual fireplace for living room and porch invites participation in outdoor living.

The exterior design conforms in general to the contemporary style that has been consistently featured by Walter T. Anicka, architect. The outside walls are of frame placed upon a concrete block foundation. Walls are covered with a combination of wood shingles, plywood and Lannon stone in an effective pattern, maintaining a horizontal sweep to the house proper, and reverting to a vertical effect on the garage. A partial basement is provided under living, dining room and kitchen. Estimated cost of this house is approximately \$18,000.



# Cedar Shingle Demonstration House



Promoted by national advertising campaign the house presents both dealers and builders with cooperative merchandising opportunities

**S**UPPORTED by a large-scale program of national advertising and promotion, an attractive 5-room model home design is being given country-wide prominence in an ambitious and comprehensive project being launched by the Red Cedar Shingle Bureau.

The program centers around a well-designed moderate cost resi-

dence known as the Certigrade National Home, plans for which are being channeled through retail lumber dealers. The initial announcement of the program appeared with a full-page color ad in the April 9th issue of the Saturday Evening Post, in the April issue of Farm Journal, and in the spring edition of Small Homes

Guide, with a combined circulation of more than seven million. A second message featuring this home is scheduled for a June issue of the Post, with a third advertisement being planned for an autumn issue.

Designed by National Plan Service, Chicago, the Certigrade National Home is a three-bedroom, single-story design, representative of modern home construction in the moderate cost home field. The exterior combines the graciousness and dignity of early Colonial architecture with the rambling spaciousness which is closely associated with the modern Western or Ranch-type home. Exterior walls are designed for double-coursed cedar shingle or shake construction, and the roof likewise is of cedar shingles.

The efficiency of the floor plan is apparent in the full utilization of available space and the spaciousness that is achieved by the large living room with its dining area, the efficient kitchen and snack space, as well as the three bedrooms, one of which is 11 x 14 feet.

Numerous other features command attention. An open porch at the side of the house, accessible from the living room, accentuates the appearance of size and spa-

*"Home of the Year"*  
20,000 RETAIL LUMBER DEALERS WILL FEATURE THIS HOME IN 1949

The "Certigrade National Home" Offers  
**Luxury, Beauty and Comfort at Low Cost**

You can build this outstanding 3-bedroom home of cedar shingles and shakes right now... at surprisingly low cost. Every feature has been carefully designed to keep quality up and hold price down. Years of research, expert architectural planning, and careful selection of materials all go toward making this "Certigrade National" the kind of home most families want, need, and can afford.

The exterior walls and roof are covered with cedar shingles or shakes, traditional favorite of discriminating builders of America's finest homes. Interior plans are spacious, modern, and livable. Every family planning to build should see the more detailed plans offered in the coupon. Send for yours today.

**RED CEDAR SHINGLE BUREAU**  
8700 WHITE BUILDING - BEATTYER L, WASHINGTON  
INTERNATIONAL BUILDING - YORKWOOD, D. C. 20004

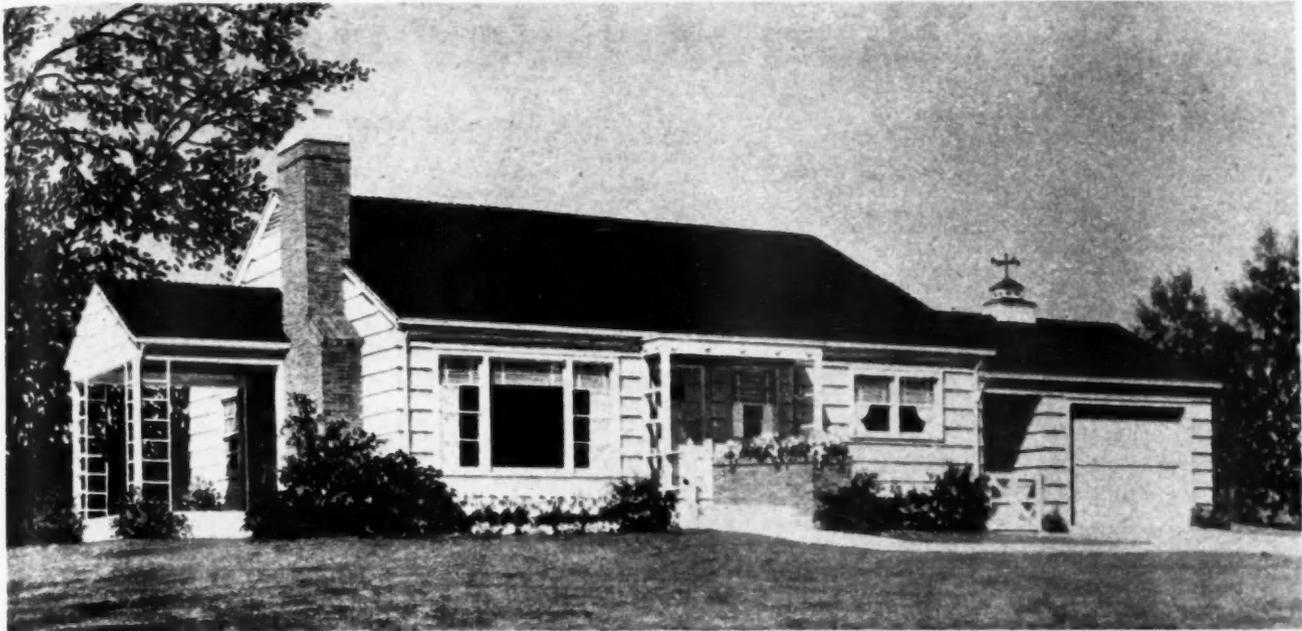
SEND!  
To help National Homes the View program show us receive Certigrade for you

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_

LEFT: Typical sample of promotional literature and advertising being used to acquaint public with features of the house

ROY WINTERS, vice president, National Plan Service, displays first promotional piece for Certigrade National Home to V. E. Whittall, P. W. Bailey and H. W. Neuman, Stained Shingle and Shake Association, and W. W. Woodbridge of the Red Cedar Shingle Bureau





...ousness. The service entry is at ground level. The hood protecting the front entry, the large picture window, ample windows providing sunlight and ventilation, are all modern notes that add considerably to the comfort, convenience and appearance of this model home. Included is a natural fireplace at one end of the living room and a stationary picture window with two side windows which open.

The kitchen is on the efficient "U" plan for arrangement of cabinets, range and other facilities. Each bedroom has a large closet with sliding doors, and in the connecting hall are guest closets.

A disappearing stairway leads from the hall to the attic, where a large space is available for storage.

Conventional construction methods are employed in building the house, and wood sash and wood framing are specified and detailed.

The house has been laid out in three different designs, to meet the requirements of builders in various sections of the country. One design includes a full basement. A second design, intended for southern construction, is without basement and has a utility room 8 feet by 10 feet 6 inches in size to contain laundry equipment and hot water heater. A floor furnace or heater is located in the hall. The third design of the Certigrade National Home also is without basement and is executed for northern construction. It has a utility room 8 feet by 14 feet 2 inches to contain both laundry equipment and a furnace or heating unit.

A single-car garage is a feature of all three designs. In the base-

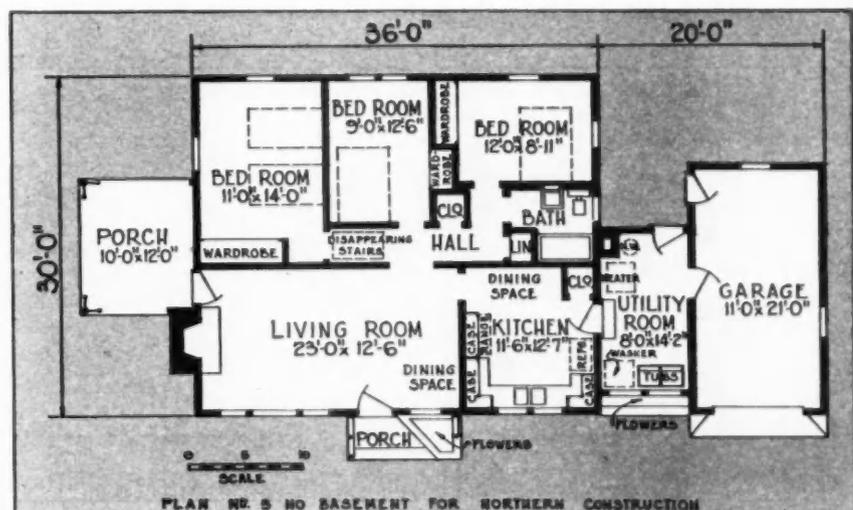
ment unit, the garage is connected to the house with an attractive breezeway. In the two basement-less layouts, the utility room is placed between the house proper and the garage.

In describing the Certigrade National Home program, W. W. Woodbridge, secretary-manager of the Red Cedar Shingle Bureau, stated that its primary purpose is to stimulate public interest in quality construction, yet to maintain standards of economy in order to reach a substantial segment of the available market. He emphasized that the program features the retail lumber dealer, pointing out that blueprint plans are available to dealers from the National Plan Service.

An effort will be made to interest a number of retail lumber dealers

to take the initiative in their respective communities, and work with some of their builder customers to have a representative showing of the Certigrade National Homes ready for exhibit during National Home Week. The Week, which will feature thousands of homes on exhibit for public inspection, will open on September 11. Several dealers in Illinois already have expressed an interest in a tie-in of the home with National Home Week. The Red Cedar Shingle Bureau is urging builders to contact dealers, particularly in small towns, with the idea of cooperating in the production of model homes.

Complete literature and point-of-sale helps are available to dealers free of charge from the Red Cedar Shingle Bureau, 5510 White Building, Seattle, Wash.



EFFICIENCY of floor plan is demonstrated by full utilization of available floor space

# Diamond Bar Homes — B



THE Diamond Bar brand, this Kansas home builder's family cattle brand for generations, is placed on each of the houses erected by his firm. Back of this trademark is a reputation for "building the best houses that can be built for the money"



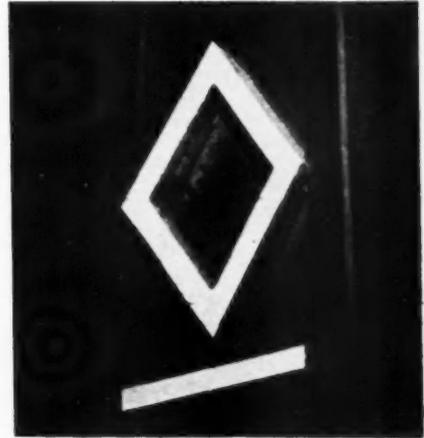
THE DIAMOND BAR brand marks every Gardner-built home. To those who are familiar with the firm and with the brand, this signifies the highest quality in design, material and workmanship plus many other practical features which distinguish these houses from others in the same size and price range.

L. E. (Roy) Gardner and his son, James L. Gardner, operating as L. E. Gardner, Inc., in Wichita, Kans., adopted the Diamond Bar as their trademark when they started building operations several years ago. The brand is the same as that used by L. E. Gardner's father on his Kansas ranch years ago. Rather than spend his time running the ranch and riding horses all his life, Roy Gardner took what finances he had and decided to go into the business of building houses in Wichita to help relieve the pressure there for new homes. At the same time he decided this, however, he also decided he would make a thorough study of houses as they are being built and attempt to improve on design and technique. His son, James, studied architecture and now does the designing and serves as construction superintendent. His daughter, Irene, studied interior decorating and handles this kind of work for the firm. Together, they have developed a number of ideas now being incorporated in the firm's houses

ABOVE left is standard large bedroom which may be used as one room or converted to two separate rooms, each with adequate wardrobe storage area, by simply closing the Modernfold door. Below is typical living room arrangement

# Branded for Better Living

**The houses planned and erected by this builder are trademarked by him. Back of his Diamond Bar brand is a well-established reputation for quality, dependability and individuality**



CLOSE-UP of brand, easily seen from street, placed on front of the houses

that demonstrate how additional livability and economy can be obtained by using today's equipment, materials and building techniques.

There are no swinging doors inside Diamond Bar houses. The Gardners soon discovered that the average swinging door requires a total of ten square feet and with 15 doors in the average house that meant a total of 150 square feet which could be added to livable area by installing sliding doors. In describing this to home buyers, it is pointed out that at \$10 a square foot this gives the house an immediate increased value of \$1,500 in additional usable floor area. The sliding door installations include all kitchen and storage cabinets also.

Although the houses are all of conventional framing with various exterior finishes including brick

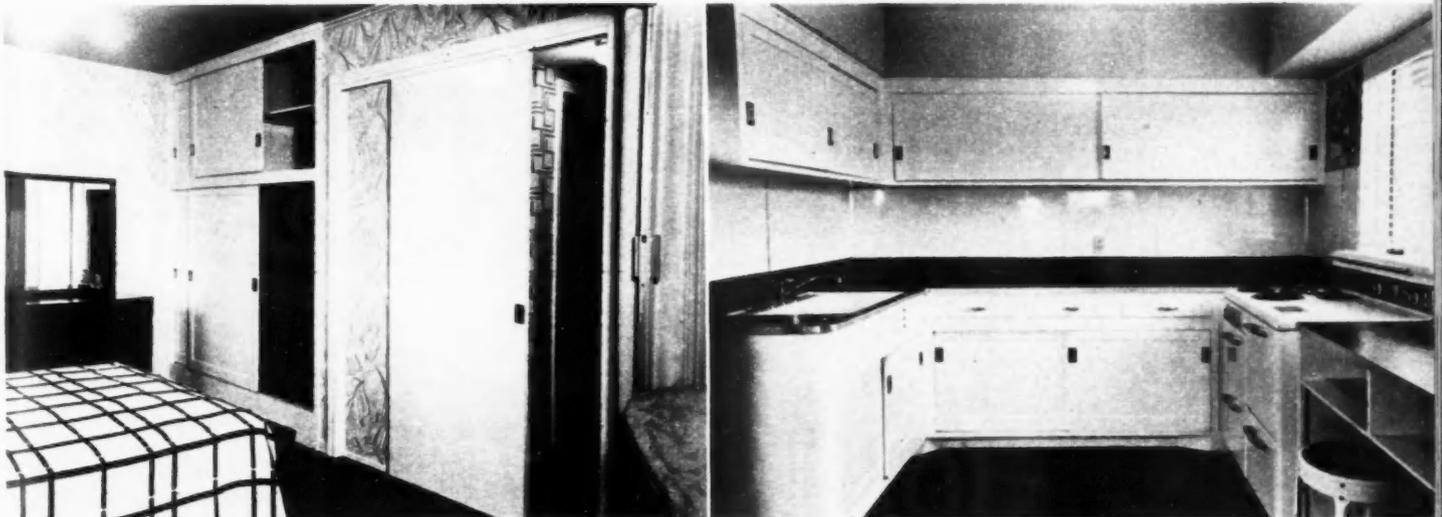
and stone veneer, the cardinal rule in design is to "build to eliminate future troubles, high maintenance costs, and to insure long life". Sturdy construction and well-planned convenience are not just figures of speech with the Gardners. When houses are built on slabs, and this is a popular type of construction with the firm, the 10x20-inch footings are placed 30 inches below grade. A heavy gravel fill is covered with a moisture seal; insulating material is placed around the inside perimeter of the foundation and then a heavy reinforced slab is poured. Heat ducts are built into the slabs.

All-metal window casements, sash and sills are installed and used as selling points. On the south and west windows Solex heat-absorbing glass is used and Twindow insulating windows are used on the

north exposures. Venetian blinds are standard equipment on all windows.

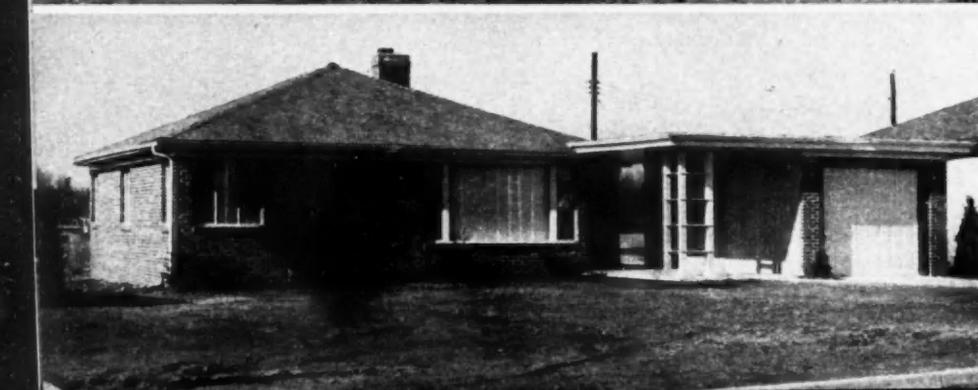
Another basic rule adhered to in planning these houses is to insure that every hall is designed so that no occupant of the house ever has to cross a room to get to another. No room is ever used as a hallway or passageway.

Most of the houses are designed so the occupants will have either two or three bedrooms. The creation of the extra bedroom is made very simple by closing a Modern-fold door which is standard equipment in one bedroom of every house. The bedroom equipped with the folding door is unusually large and has two large wardrobe closets placed so that when the folding door is closed, one closet is in each of the two rooms thus created. The additional room may also be set up



THERE are no swinging doors inside these houses. In addition to regular room openings, all doors on wardrobe and storage

closets as well as kitchen cabinets, are of the sliding type. Cabinets are fabricated in builder's own woodworking plant



as a den or study, depending on the requirements of the home purchaser.

To arrive at a basis for figuring room sizes and also the number and type of rooms to put in their houses, the Gardners made a study of family living habits. They discovered that basements, as a rule, are not used enough to justify their construction. Because so many families spend so much time eating in the kitchen, there is a snack bar in every Diamond Bar house kitchen. This is in addition to a small but adequate dining area adjacent to the living room.

Because of the popularity of fireplaces in that section of the country, every Gardner-built house has a large, well-built and attractively finished air-circulating fireplace. The survey also disclosed that women like to change the decorating in kitchens and utility rooms oftener than they do in the balance of the house. To make this easy for purchasers of Gardner-built houses, a Tylac wainscoting is built from the floor to within one wall-paper roll width of the bottom of the soffit. Thus, with one roll of trimmed wallpaper, the average housewife can have an entire change in wall motif in a jiffy. All kitchen plumbing is installed ready for attachment of food waste disposers.

The lack of adequate storage space in bathroom cabinets was noted by the Gardners. To supply this need, each bathroom lavatory has a specially-built cabinet under it, enclosing an area usually put to no good use in the average bathroom. In addition a lavatory-height small cabinet with linoleum top is built in next to the lavatory.

A careful study of storage space requirements for various rooms, especially bedrooms, permitted the Gardners to come up with the formula that each bedroom should have enough cubic footage of storage area to store everything in the room. As a result all wardrobe closets are large and at least 30 inches deep.

Heat in most of the houses is supplied by Janitrol forced warm air gas-fired 90,000 B.T.U. units. All the ducts and the furnaces

**THESE HOUSES** in Wichita, Kans., on lots 60 to 110 feet in width and of varying depths, are priced from \$13,000 to \$15,000. Although a standard floor layout is used, each house is individually oriented for the lot on which it is situated. The terrain in Gardner's beautiful Yale Heights subdivision is rolling hills, with the streets laid out in easy, graceful curves



TYPICAL standard plan of Diamond Bar houses. Each is laid out so it is not necessary to cross one room to get to another



LARGE windows are a feature of these houses. Solex glass is used in south and west windows and Twindows on north

themselves are installed so the system can be used for cooling in summer. Furnaces are raised six inches above the floor so that a refrigerating coil can be installed in the fan compartment. Gardner has worked out a system using a Freon gas coil and a three-ton compressor to satisfactorily cool the houses in hot weather.

Only the best quality plumbing is used and all piping is copper. All water pipes are installed on inside walls to guard against possible freezing in the extreme low winter temperatures reached in Wichita.

Interior walls are finished with gypsum board. In taping and sealing these seams, Gardner dis-

covered that the lime which dropped to concrete slabs during the process was extremely difficult to remove after it had dried. To counteract this difficulty, he now sprinkles a thin layer of sand over each floor slab before finishers come in to seal the dry wall joints. As a result, it is a simple matter to sweep up after they are through, leaving the slab clean and smooth. When a house is located on a hillside, the Gardners build basements, but only where there is an outside exposure on at least one full side.

No houses are regularly shown to prospective purchasers until they are completed. When they are shown, the interior decorator, Irene Gardner, hangs some sample drapes

on several of the windows, puts up a few pictures and has a rug or carpeting laid on the living room floor so the houses will present a more attractive appearance and suggest ideas for decoration to the prospects. All landscaping is done on each house by the Gardners, but lawns are neither seeded nor sodded.

The Gardners operate their own woodworking shop where millwork and cabinets for the Diamond Bar houses are fabricated. All kitchen cabinet and utility room cabinet doors are of the sliding type. Throughout these houses, especially in kitchens and utility rooms, corners are rounded to make cleaning easy and to avoid scuffing.



BATHROOM lavatory has cabinet built around it to provide additional storage



TYPICAL foundation of a Diamond Bar home. Moisture barrier has been laid over which steel reinforcing has been placed ready for concrete floor slab to be poured

# A House A Week To Sell

## For Less Than \$9,000



CHENEY & CASTLE house, above left, is 786 square feet. It sold before completion for \$7,995. House, above right, represents

basic plan. Slight variation of standardized floor plan with varied exterior materials made 52 houses distinctly different in this

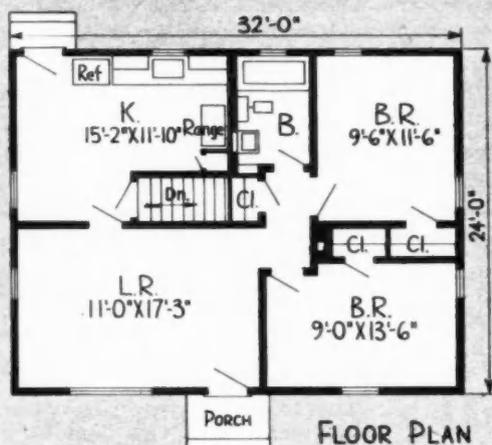
Spokane, Wash., development. Upstairs area in each story and a half house below is unfinished. Sales price, about \$7,950

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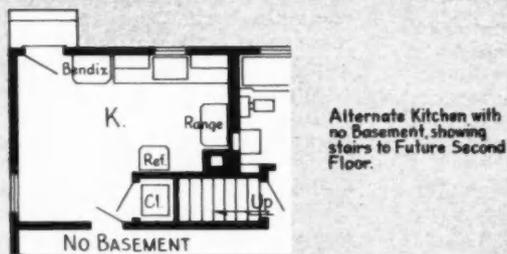
These builders show how to plan, build and sell homes to lower income groups by site prefabrication and materials handling methods



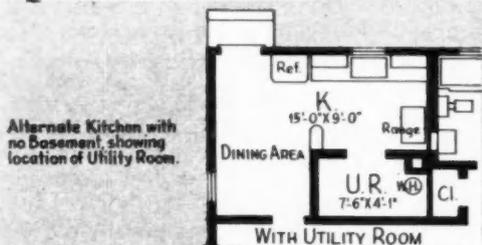
STREET of Cheney & Castle homes demonstrates variations achieved with a single floor plan that permits site prefabrication



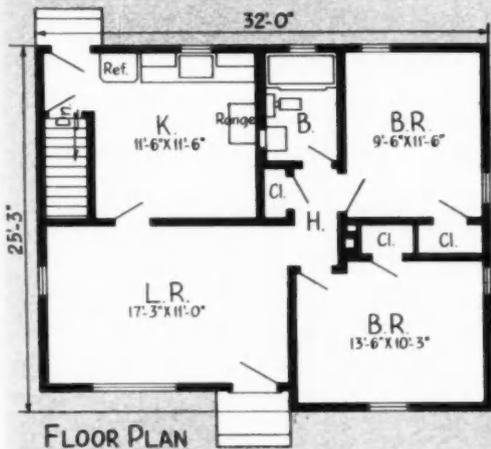
FLOOR PLAN



Alternate Kitchen with no Basement, showing stairs to Future Second Floor.



Alternate Kitchen with no Basement, showing location of Utility Room.



FLOOR PLAN

FLOOR PLAN above is basic plan from which variations were made. Other plans show how varied interiors were achieved

EFFICIENT PLANNING and sound merchandising techniques enabled the firm of Cheney & Castle, Spokane, Wash., to build and sell a house a week in the \$7,200 to \$8,450 price range during 1948. Sales effort and costs were held to a minimum but purchasers were consistent in signing obligations for purchase before houses were completed. The 52 houses, on 52x124-foot lots, met all FHA and VA construction requirements.

Some of the things that attract clients to homes of this firm are explained in this statement by George A. Castle, secretary. "We feel that the customer should be delivered a finished product, with all street improvements in and paid for and all exterior yard work completed, so that he is not put to additional expense."

Before one of the firm's houses is delivered to the customer, it is completely cleaned, including the bathtub, windows, and all equipment. Floors are waxed and made ready to move onto with no additional effort required on the part of the buyer.

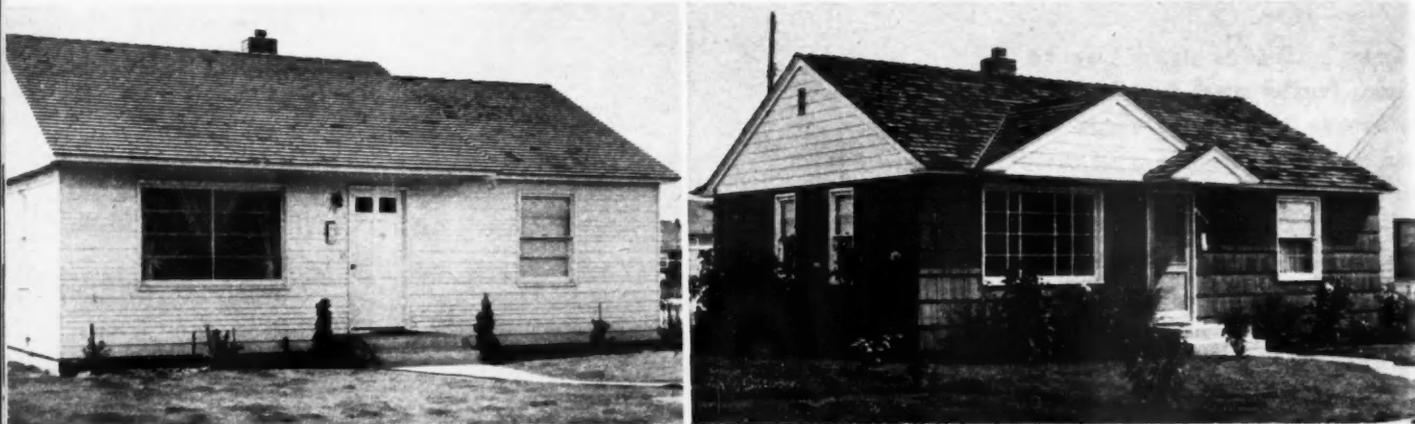
How Cheney & Castle achieve soundly constructed, appealing houses to sell for these prices can be explained in their methods of construction and materials handling.

On-site prefabrication is the great time and money saving phase of their operation. But behind this is skillful planning that permits prefabrication, and at the same time, adequate variation in finished homes. This firm uses a standardized floor plan, yet six completely different floor plans are achieved through slight variations of the basic floor. By applying six different exteriors, varied window styles and landscaping, each of the houses in the 52-house project is different.

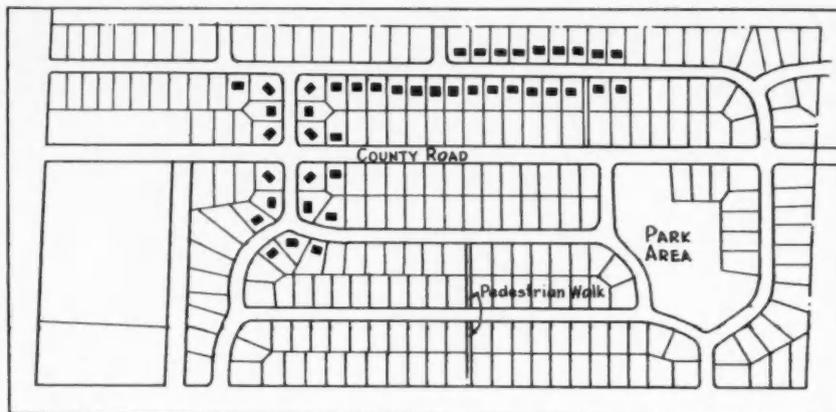
Site prefabrication in the Cheney & Castle operations begins with the construction of concrete forms. Since floor plans are standardized, new forms do not have to be made for each house. All new lumber is used in constructing the forms. The lumber is run through a cutting yard without danger to the operator of the saw of particles of concrete being on the boards, which would be the case if used forms had to be changed for each house. Each form is used for about 40 pourings.

Lumber for a complete house is pre-cut in the firm's cutting yard, rather than at the site of the house. Door and window bucks are nailed together at the cutting yard. Lumber is delivered directly to the saw line, and after it is cut it is piled on trucks for delivery to the house to be framed. Lumber that is to be used first is cut last, so that in loading the trucks lumber that will be needed first will be on top of the load.

"We have found that by pre-cutting our lumber, handling it as little as possible, and pouring concrete directly from trucks, a considerable savings in labor is possible," Castle explains. "Then, too, by standardizing our floor plans, our crews are literally able to frame a house in their sleep, rather than trying to figure out a blueprint each time they attack a new house."



THOUGH these houses were made from the same basic floor plan, varied exterior materials and landscaping add individualism



CHENEY & CASTLE'S 1949 project will be in 100-acre plat adjoining Spokane

The builders pour foundations directly from a transit pre-mix truck, and thus avoid considerable loss of time and unnecessary expense.

The firm's basic house is 768 square feet. Basementless, it sells for \$7,200. This price includes the 50x124 foot lot. Curbs and sidewalks are provided, as well as graded and graveled streets. Heat is provided by an automatic oil fired floor furnace and a supplemental electric built-in wall heater in the bathroom and kitchen. A deluxe Bendix washer and a 40-gallon au-

tomatic water heater are standard equipment.

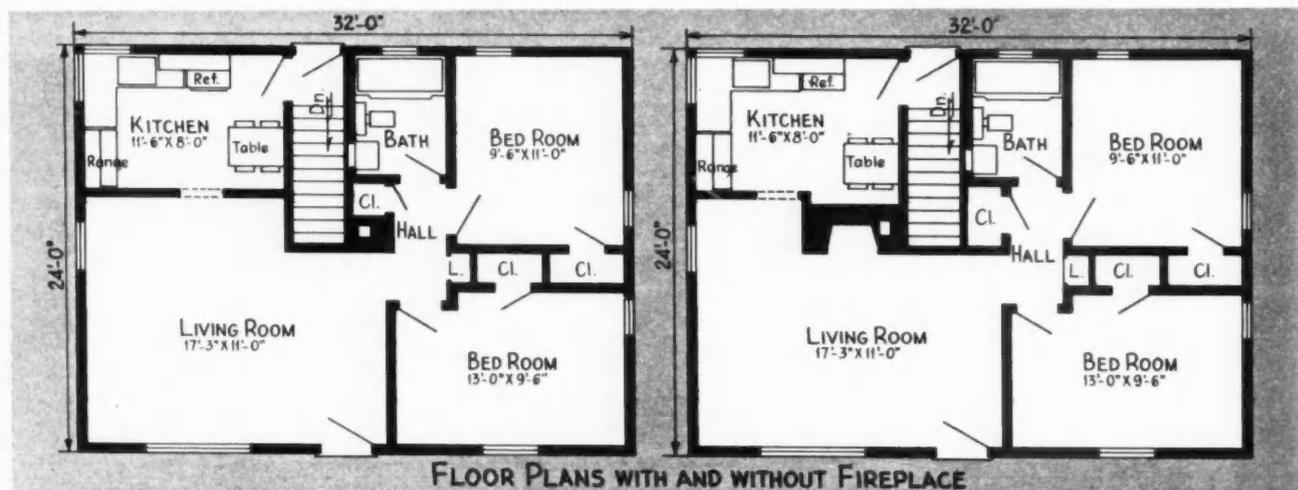
Dining area in the basic house is provided in the kitchen. By moving the wall between the living room and the kitchen back five feet so that it becomes a continuation of the utility room wall, an L-shaped dinette is provided in the living room. This variation involves no additional amount of materials, except hardwood flooring instead of linoleum.

"Variation 200" of this basic house design contains the same equipment and sells for \$7,950. This

is a story and a half house with plastered finish stairway to the unfinished upstairs area. The wall separating the living room and kitchen may be moved back so that it will continue with the stairway wall and thus create a dining nook in the living room.

"Variation B" is a full basement house, maintaining the same basic floor plan. The house is constructed with a bearing wall partition so that it is easy for the owner-occupant to add a third bedroom in the basement with two windows for cross ventilation, or convert the remaining free area in the basement into a recreation room. The house is heated with a forced air hand fired coal furnace. Extra equipment in the basement is a fuel storage room, double compartment laundry trays and a 40-gallon automatic hot water heater. This house sells for \$8,350, fully landscaped.

In Cheney & Castle's "1948 Model," a full basement is provided. The foundation, as in the basic house, is 32x24 feet. The front bedroom, however, extends 15 inches beyond the outer perimeter of the foundation, providing a bay effect, a larger house and a pleasing variation from the basic house. The stairway is changed from the



THESE plans will be used in some of the Cheney & Castle homes to be completed in 1949. Basic plan is retained, with variations



LEFT TO RIGHT, Harding Ward, vice-president in charge of material procurement; Bert M. Cheney, president; George A. Castle, secretary of the Cheney & Castle firm

center of the house to the outside wall, creating an entirely different kitchen. Sales price of this house is \$8,450.

Kitchen and bathroom floors in the Cheney & Castle houses are linoleum. Floors in the remainder of the houses are 13/16-inch oak, No. 1 common. Gypsum lath and plaster are used in wall construction, and exterior wall finishes are cedar siding and cedar shakes. Roof construction is conventional rafter, and covering is No. 1 cedar shingles.

R. O. W. wood windows are used, as well as windows with fixed sash and wood frame. Millwork and trim are of enameled pine. Interior doors are Fir, one panel, enameled. Side walls of the houses contain one-inch Kimsul blanket insulation, and ceilings are insulated with two inches of the same material.

After new owners of Cheney & Castle homes have been living in the house for a week or so, the firm sends around a superintendent to inspect the condition of the house. He explains the functions of various mechanical items in the house to the new owner, such as the Bendix washer, the air conditioning furnace, and the automatic hot water heater. He tests all lights, switches, outlets; checks all

doors and windows. At this time, any item that is not in first-class order is repaired. When everything is in order, the buyer notifies the lending institution that the house is entirely satisfactory.

In general, Cheney & Castle have solved two major problems. One, the problem of how to achieve good low cost housing. This they solved with site prefabrication and materials handling techniques. But prefabrication in itself posed the second problem: how to avoid monotony in design, with a certain amount of standardization that must necessarily accompany prefabrication. This problem they solved by six cleverly designed exteriors, adequate variation in landscaping, and slight variation of a standardized floor. The amount of sales is a good indication of how well the Cheney & Castle houses provide adequate individualism.

Cheney & Castle built the 52 houses in 1948 for the North Spokane, Wash., Construction Co.

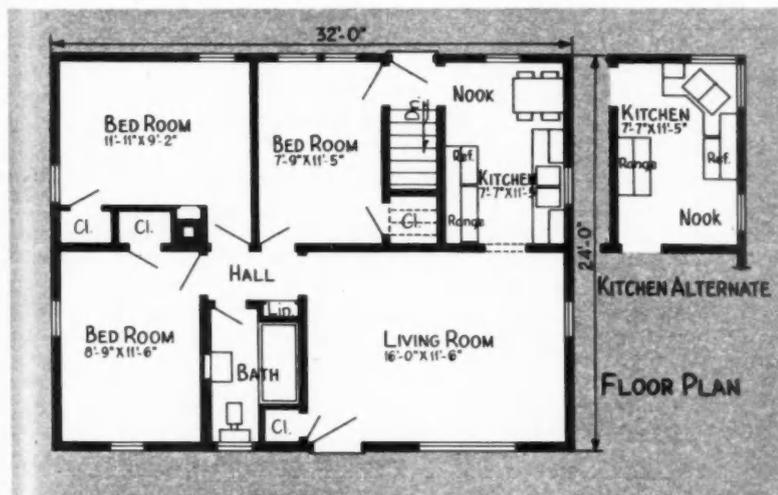
They were sold to veterans on 505 financing, FHA and G.I., with the FHA portion covered on a Title VI, 25-year loan. This kind of financing also attracted buyers. The homes, too, were well located in relation to a shopping district, transportation facilities, and schools. In speaking of the success of any project, Castle stated that first of all financing must be offered that can be handled by the average buyer in the low price field; and that the house should be well planned and well located in relation to transportation, stores, and schools.

The Cheney & Castle firm took full advantage of National Home week in 1948, and during that week more than 5,000 people visited their model home. The firm sold 22 houses during the week and 51 houses in the following four weeks.

The Cheney & Castle 1948 model home (see opposite page, top right), is from their basic one-story plan, built without a basement. Situated on a 50x124-foot lot, it was marked to sell for \$8,350. That price included a deluxe Bendix washer, two 40-gallon automatic water heaters, and a double-compartment laundry tray. On the exterior walls of this house, machine-grooved shakes were used. Gypsum board was used on the interiors. Ceiling insulation is three inches of mineral wool, and sidewalls are insulated with one inch of Kimsul.

The model home drew attention because of its neat, attractive design, and because of a good job of landscaping. Once inside the home, good construction with good materials offered a convincing sales argument.

This firm does not expect any difficulty in selling in 1949 if they can build homes to sell for \$7,500, as they plan on doing providing adequate financing is made available.

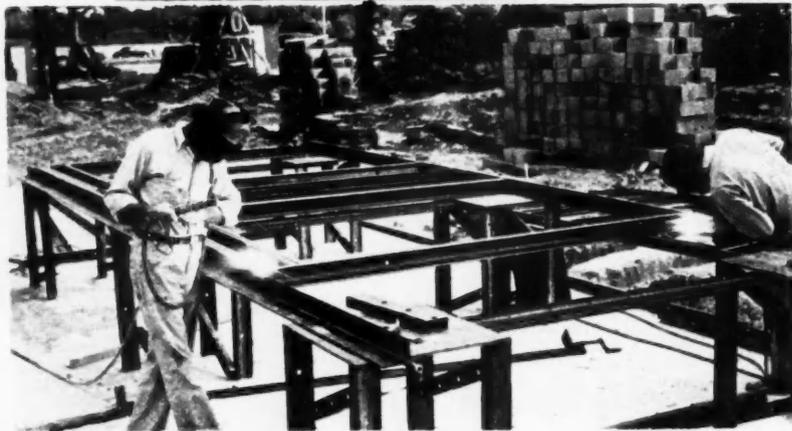
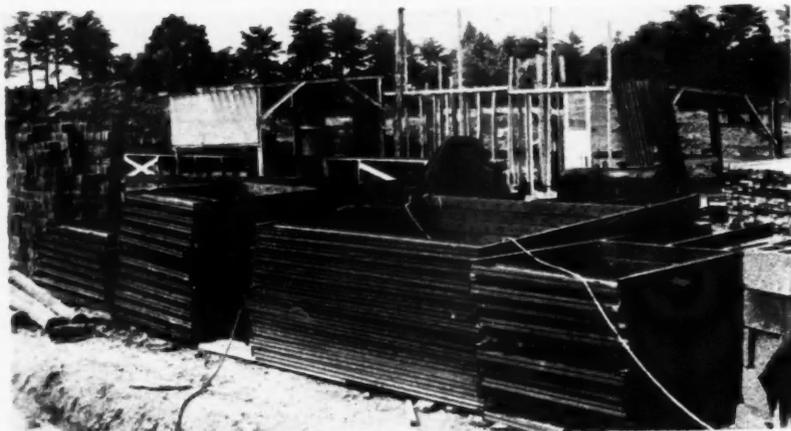


ANOTHER proposed plan for Cheney & Castle homes that will be used in 1949



WEST PORTION  
KENT VILLAGE  
BESLA & ABEL ARCHITECTS

KENT VILLAGE, a \$14,000,000 project, designed by Berla and Abel



COMPLETED WALL sections ready for site assembly are shown above. When necessary, power machine illustrated trims joists to length on site. Accurately sized nailable steel studs are welded into wall sections at project

## STEEL FRAMING For Multiple Housing

**Nailable material speeds up work on Kent Village project of 423 units**

**P**ANEL assemblies, with nailable steel framing members now available, may be partially prefabricated at the shop of the steel distributor. Shop prefabrication may then be supplemented by on-site cutting and final assembling. To assemble the nailable steel members on the site requires a power saw and portable welders.

This method of construction is being used in the \$14,000,000 multiple housing Kent Village project in Prince George County, Md., near Washington, D. C. The project includes 423 dwelling units.

In Kent Village, the framing members are welded. The nailable feature of the members makes it possible to apply other conventional materials to the studs, joists and rafters with eight-penny nails.

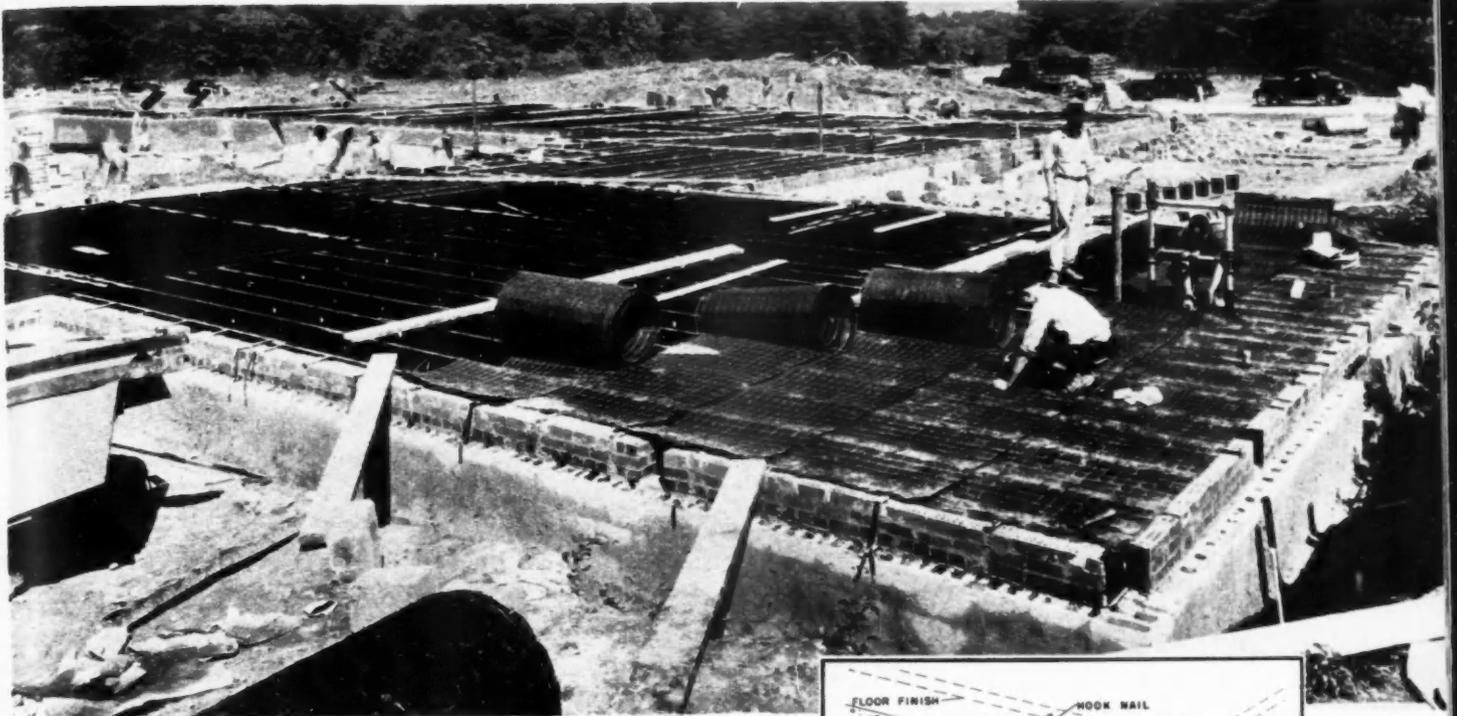
Insulating board sheathing is applied directly to the studs for the exterior wall, and brick veneer is used outside. Corrugated metal ties are used to bond the brick wall to the framing. Ties are nailed directly to studs also.

Other panels are welded on the site from standard length members. Lengths which are cut to fit at the factory, or which need minor trimming, are shipped direct to the site, placed on jig tables with the necessary sub-assemblies, and welded into panels which form a complete sidewall, partition or other section. As completed, the panels are raised into place and joined by welding.

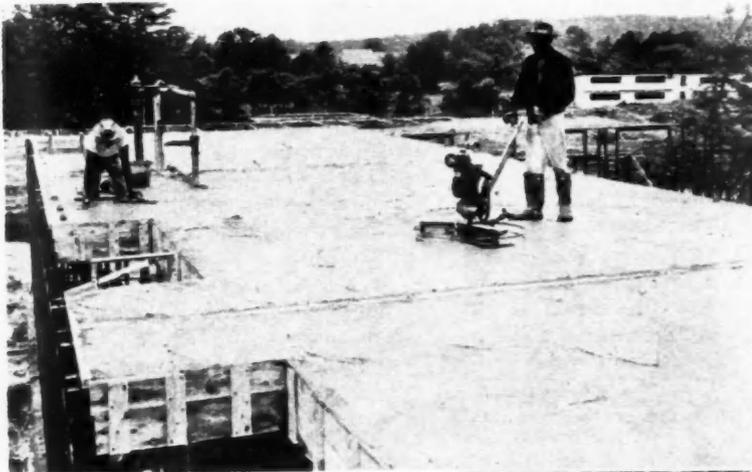
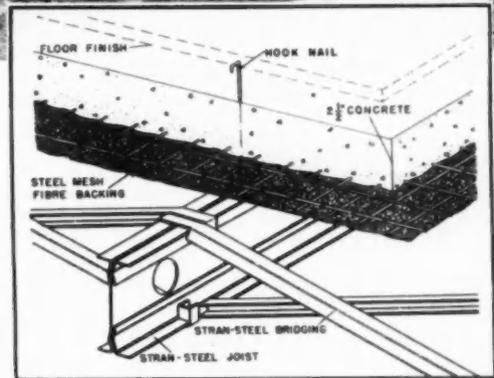
After framing, concrete floor slabs are poured over fiber backed steel mesh which is nailed directly to the joists. Holes are precut in the steel members to accommodate pipe and conduit.

Dry-wall construction inside is possible without furring because of the nailable feature of the studs. Insulation can be applied in the same manner, with a vapor seal.

The general contractor for the project is the Eugene B. Roberts Co. The nailable steel framing is supplied by United Clay Products Co. The A. J. Laut Co. shop fabricates the more intricate panels.

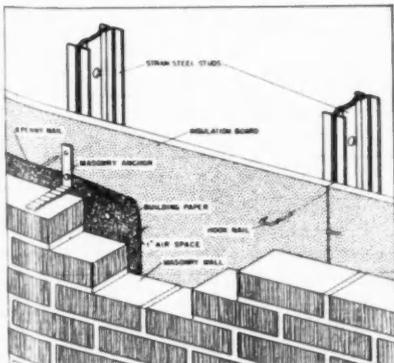


WHEN JOISTS are in place they are connected with steel bridging strips. Fiber backed steel mesh is nailed to steel joists as base for the concrete slab

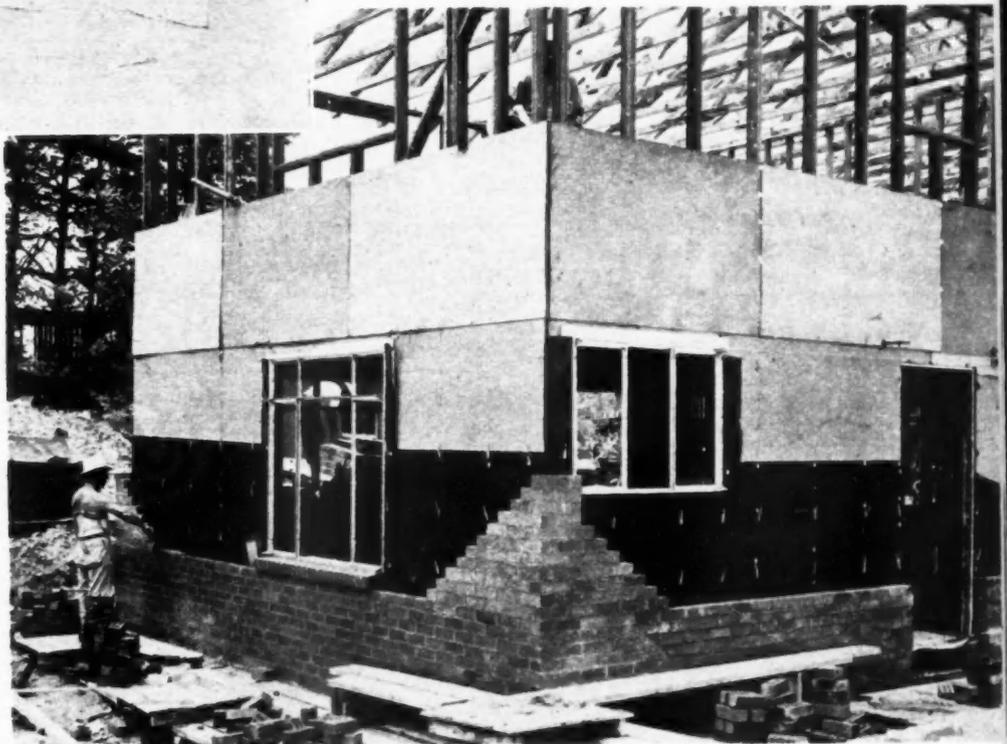


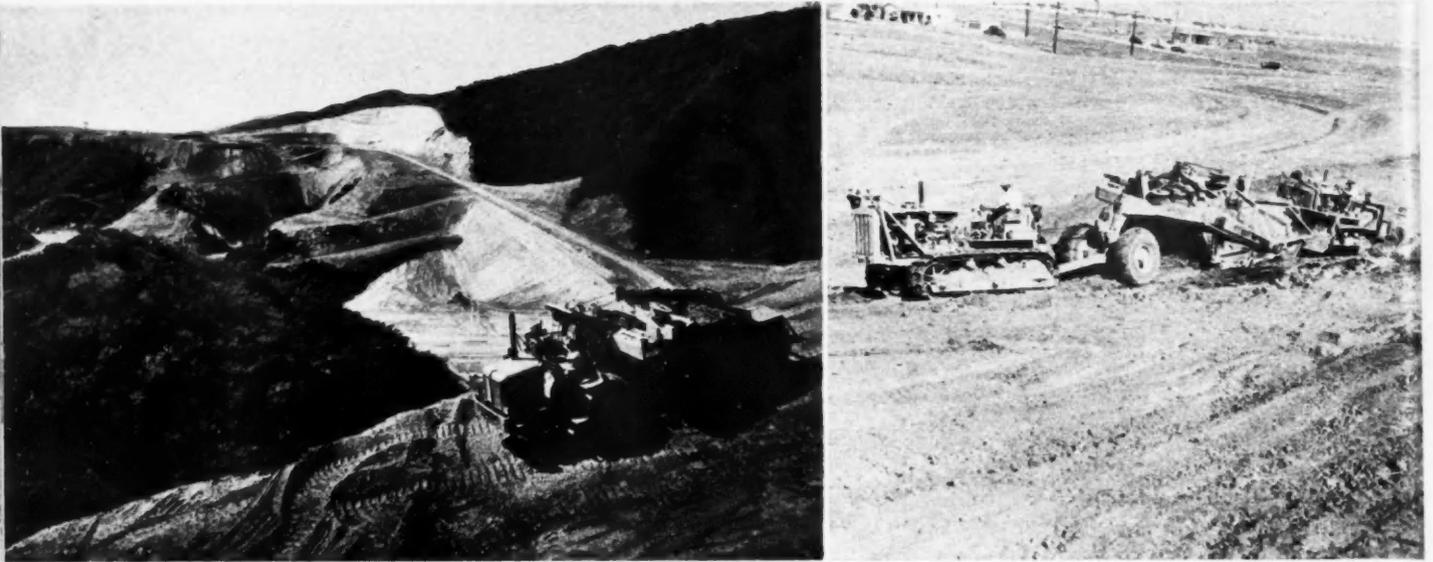
CONCRETE FLOOR, 2½ inches thick has been poured and is being finished with power machine. Construction detail above

BELOW, conventional material is nailed to this type of steel framing. Insulating sheathing is nailed to studs. Brick veneer is then applied



DETAILS show insulation installation with nailable steel studs. Masonry anchor is nailed to studs with eight-penny nail. Hook nails hold insulation securely in place





LARGE earth-moving equipment of J. A. Thompson, excavating contractor, clears way for Steinkamp subdivisions

## CUSTOM BUILT QUALITY

### *Achieved With Mass*

**A large volume of work permits development of specialized carpenter crews, more standardization of methods, and lower cost per unit for accounting, selling and supervision**



THE AIM of this builder is to provide the individuality, charm and quality of custom-built homes, while at the same time using mass production methods to reduce costs. This is a big order. At first thought it might seem that mass production could play only a small part in the building of homes so totally different from each other as those shown. But actually, many important economies are achieved.

To begin with, Elwain Steinkamp, the Bel-Air, Calif. builder, has an earth moving job large enough to warrant the use of heavy equipment. Hilly ground characterizes most of the 3,000-acre tract that comprises the Steinkamp subdivisions, and without heavy equipment it would be im-

possible to prepare the sites at a reasonable cost. Not only the rough grading but as much of the finish grading as possible is done while this equipment is on the job.

In Bel-Air, swankiest of all subdivisions in the Los Angeles area, Steinkamp is proceeding with the building of 25 large homes for sale, the lowest priced one being \$29,500 and the highest, \$59,000, including lots. He hopes to attain a volume of 20 new starts each month.

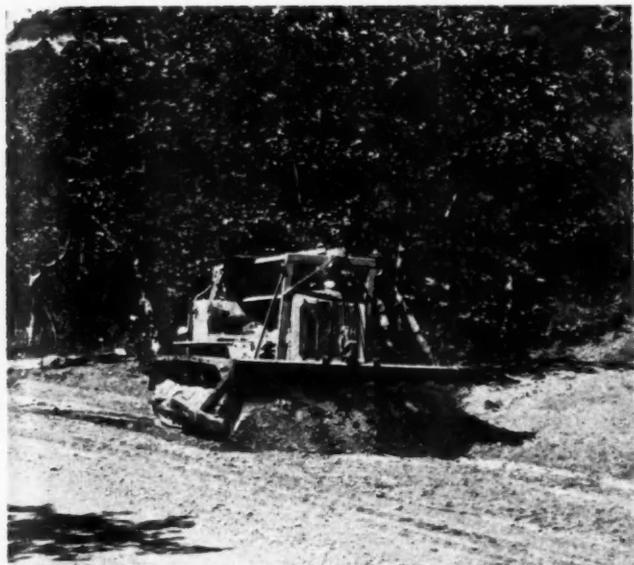
This large volume of work permits the development of specialized crews of carpenters, both on rough and finish work. Some do nothing but hang doors and windows; others do finer finish carpentry work on mantels and stairways. This of course in-



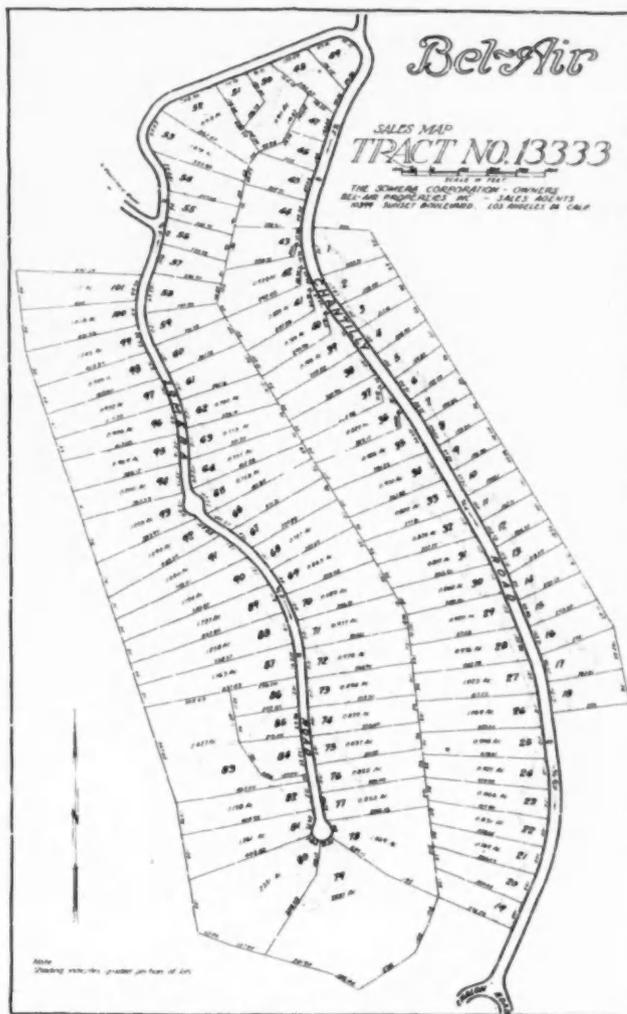
#### ELWAIN STEINKAMP

*An Horatio Alger in the Building Field*

Elwain Steinkamp, the largest builder of fine homes in Southern California, came up the building ladder from the bottom rung. He began as a plasterer; in 1923 became a plastering contractor. In 1932 he defied the depression by selling his plastering equipment and devoting his time to building large homes—specializing in seven-room houses with two baths. His insight into peoples' wants and his ability to fulfill them are partial answers to his success



MOST finish grading is done before large equipment leaves site



PLOT of Bel-Air conforms to rugged terrain

## Production Methods

creases efficiency and cuts down need for supervision and help.

Steinkamp deals with all sub-contractors on the basis of volume work. The contractor knows that if he can move in a crew of men to work continuously on 15 to 25 jobs without any lost days in between jobs that he can figure more closely.

In addition to the above economies achieved, there are the natural economies which accrue to all large operations such as wholesale buying of some items, standardization of building methods, lower costs per unit for supervision, accounting and selling.

The houses are all designed by qualified architects. Most of the houses shown in the accompanying perspectives were designed by Earl C. Rahn, A.I.A. Hiram J. Hamer, A.I.A., and Frederick Hageman, A.I.A., are drawing plans for future houses. Also associated with Steinkamp is George V. Whisenand, A.I.A., who is also a civil engineer. Whisenand supervises the development of subdivisions as well as the construction of the houses.

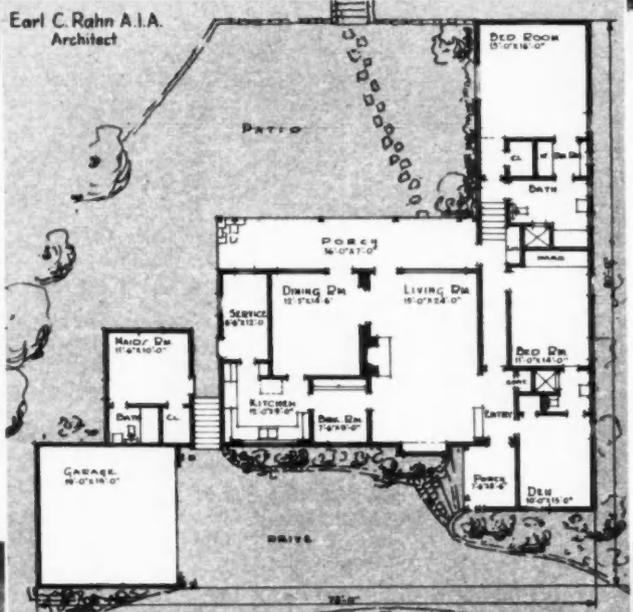
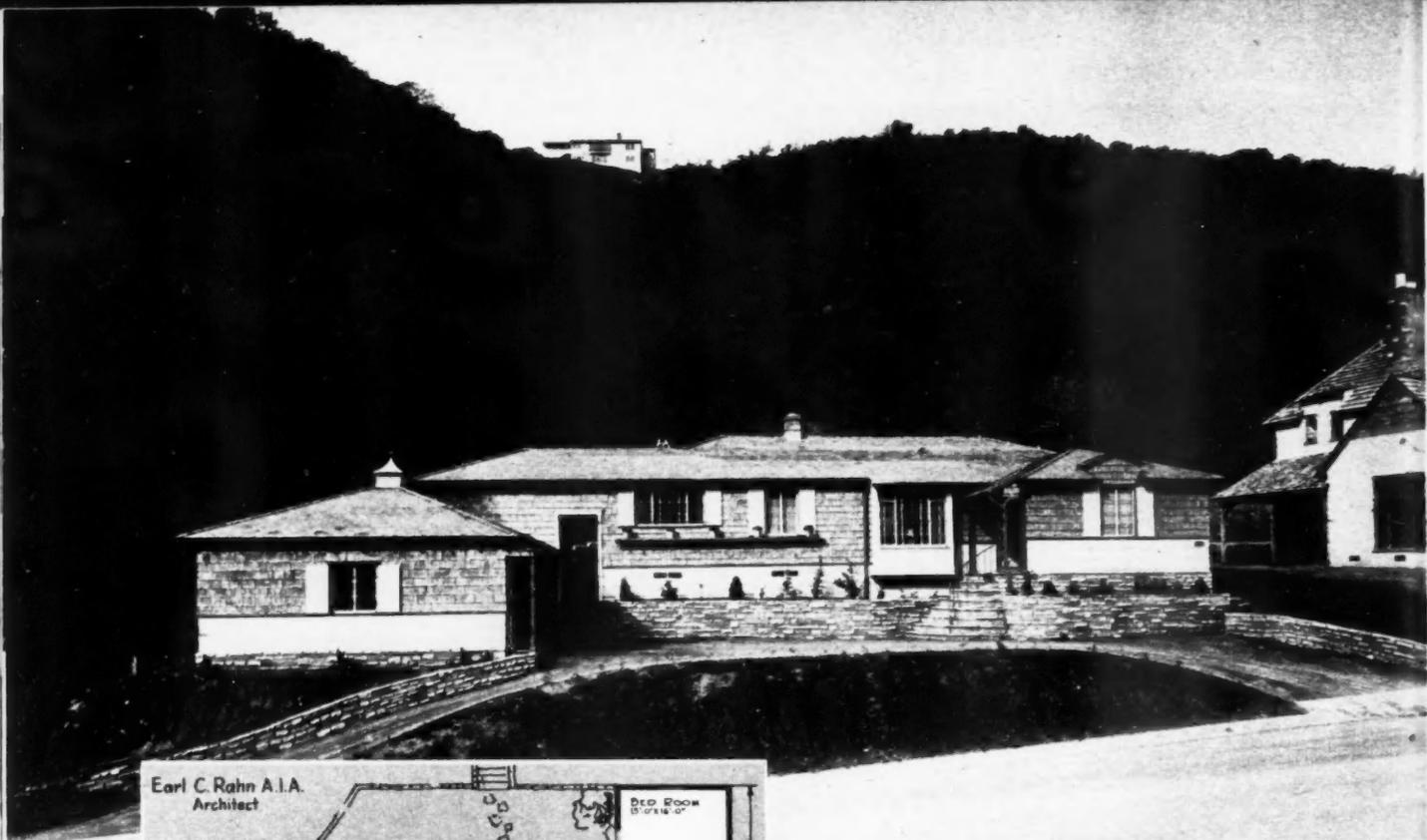
Thus all jobs have the benefit of full architectural supervision by an experienced certified architect.

The California Colonial house shown was designed by Rahn. It features the extensive use of stone masonry, Arizona flagstone and redwood siding. The lot on which it is placed is 110x350 feet. The rear portion of the lot is considerably higher than the site of the house and patio, and is densely wooded with a pathway up the center. The price was about midway between the upper and lower figures for houses in the Bel-Air tract.

The house has about 2,200 square feet, including the maid's room in back of the garage. The master suite, consisting of large bedroom, dressing room and bath is six steps up from the hallway. The second bath is accessible from the den and smaller bedroom. The kitchen is at the



AS IN ALL Steinkamp houses, these in Bel-Air are designed to blend with terrain and appeal to select clientele

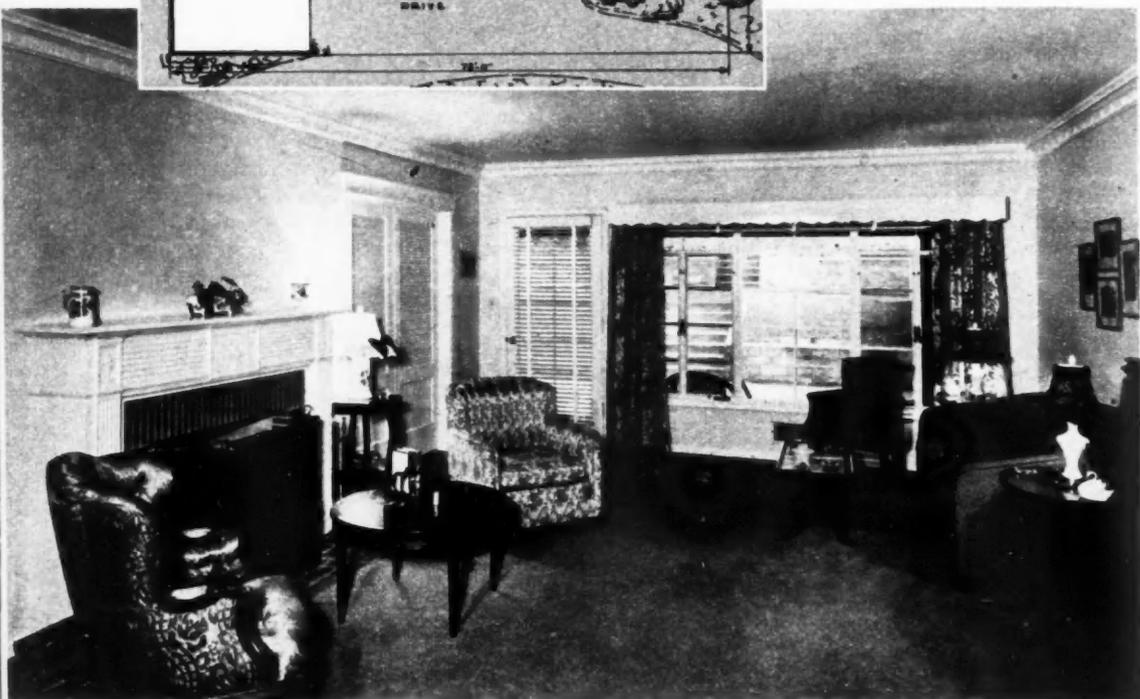


CALIFORNIA Colonial house in Bel-Air is on 110x350-foot lot

front of the house, easily accessible to the garage.

As is the case with all Steinkamp houses, 2x10 and 2x12 floor joists rest on solid concrete foundation walls, thereby insuring a level floor and avoiding the plaster cracks frequently caused by settlement of interior piers. Copper water piping, solid brass Schlage hardware, clear oak floors, steel casement sash, Payne forced warm air furnace, Waste King Disposal unit and colored plumbing fixtures are some of the features of the house.

The interior decorating in all the houses is completely integrated, featuring the use of scenic and other imported wallpapers, special paint finishes and ornamental plastering.



**INTERIOR** of California Colonial house, as in all houses in Bel-Air, offers complete decorating job. Scenic and imported wallpapers, special paint finishes and ornamental plastering are used

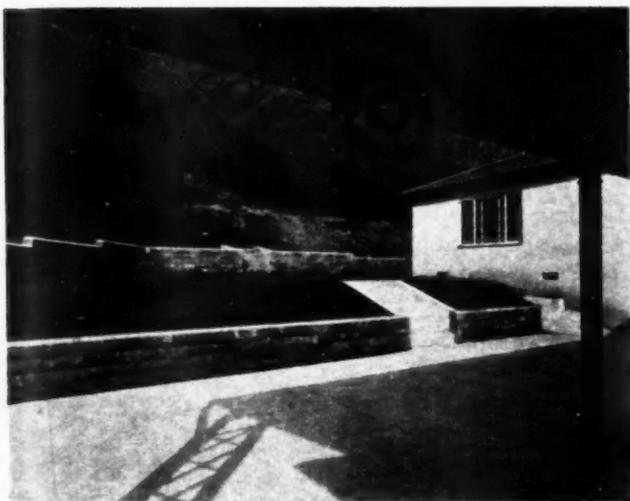
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THIS house was built by Steinkamp outside the Bel-Air settlement. Here an interesting combination of wrought iron and Arizona flagstone was achieved

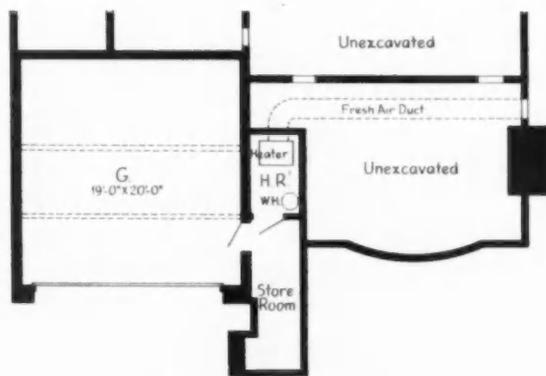
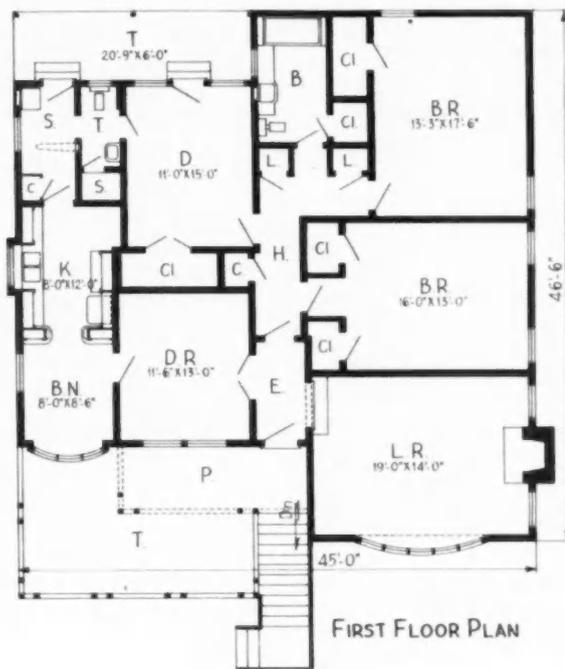


PATIO in rear of spacious California colonial house in Bel-Air development is situated to take advantage of scenic outdoor living

tor works with the buyer and decorates to his specifications. Landscaping, including lawns, shrubs and sprinkling systems are included.

Steinkamp heads several other developments in the Southern California area where he is the largest builder of fine homes. His sales organization is decentralized—that is there is a separate organization for each tract, the head of which reports to Steinkamp. In Bel-Air Steinkamp recently joined forces with the only other company building homes for sale on an extensive basis there, and formed Bel-Air Properties, Inc. Members of this organization act as sales agents for both home building companies. The sales force consists of ten salesmen and a sales manager. They get their leads by advertising in the local papers and from people who drop in at the Bel-Air Properties offices.

Bel-Air is one of the show places in Southern California. Magnificent estates, the famed Bel-Air golf course and the Bel-Air hotel are visited by thousands of people annually, some of whom decide to come back and live there. Years of experience have taught Elwain Steinkamp how to suitably adapt a house to its environment so that it will have maximum appeal to prospective clients.



DETAILS and floor plan of house above. No excavation was required for garage, situated to take advantage of uneven terrain



C. G. GIBSON, Shreveport, La., heads 75 duplex apartment project



ONE AND TWO story duplexes are carefully interspersed throughout Barksdale Annex. Colors for sidewalls and trim are selected to harmonize or contrast with the roofs

## Achieving Privacy In Low Rental Units Requires Careful Planning

**B**ARKSDALE FIELD is a permanent army air base on the outskirts of Shreveport, La. Barksdale Annex is the name of a new housing development adjacent to the field. Here, on a 23-acre site, C. G. Gibson, a builder in Shreveport for the past 15 years, has erected 75 duplex apartments (150 residential units), primarily intended for rental to personnel stationed at the base.

The houses were built under the provisions of FHA-603. They are the first rental units to be built in or

near Shreveport since before the war.

Of the 75 duplexes, 50 are one-story in height, and 25 are two-story. The one-and-two-story units are carefully interspersed throughout the development. Construction costs, including the land, range from \$14,000 to \$16,000 per duplex, and the rents, varying from \$65.00 to \$80.00 per month, will amortize the investment in ten years.

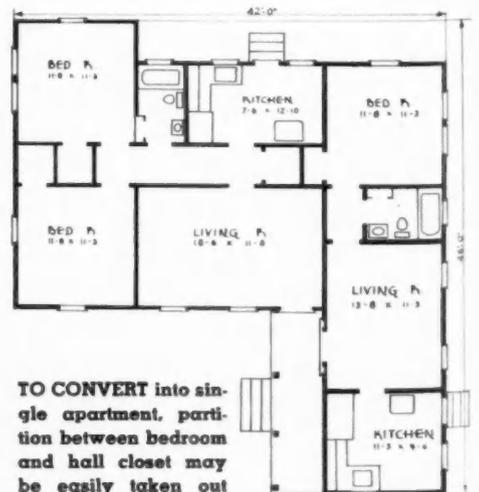
Each one-story duplex consists of two apartments, one with two bedrooms, and the other with one bed-

room. Otherwise, the units are identical, and include a living room, dining room, kitchen, and bath, plus a garage. Each unit in the two-story duplex includes a living room, dining room, and kitchen on the first floor, with two bedrooms and bath on the second floor. As shown in the plan, the one-story duplex can be converted into one apartment simply by knocking out the partition wall between the bedroom and the hall closet.

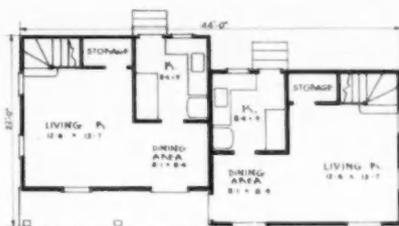
"A great deal of time and effort went into the planning of Barksdale



THIS one-story duplex in Barksdale Annex can easily be converted to single unit



TO CONVERT into single apartment, partition between bedroom and hall closet may be easily taken out



FIRST FLOOR PLAN



SECOND FLOOR PLAN

**KEEPING** two families living under one roof as far apart as possible is the essence of Gibson's plan for privacy

Annex," Mr. Gibson stated. "I could not be satisfied to merely build economical shelter, even though the demand for homes is so great that people will rent anything. After all, I expect to own these homes for a great many years, and it was vital to plan a community in which people would like to live permanently, and not something they would rent simply because they were desperate for shelter.

"In the apartments, we have tried to give our tenants as much privacy as possible," Mr. Gibson continued. "I think you will find, if you study the plans, that we are doing our best to keep two families living under one roof, as far apart as possible. People's living, eating, and sleeping habits are pretty much the same, at least as far as hours are concerned, so while economical planning was essential to keep costs down and to assure reasonable rentals, we have not placed kitchens, living rooms, and bedrooms back-to-back. People want privacy in their domestic lives and we are giving it to them to the limit of our ability."

The same careful planning went into the selection of materials and into the construction. Just as sound community and architectural planning was vital, so was construction which would assure low maintenance cost. As is customary in the south, foundations are concrete beams under brick piers, protected by termite shields. Modular construction permits use of standard lengths of lumber. Exterior walls are clapboard and interior walls are cement plaster over rock lath. Steel trim is used around windows and doors. Window frames and screening are aluminum.

Double partition walls between apartments with a two inch dead air space effectively limit sound transmis-

sion. Where bathrooms are back-to-back, the partition is filled with rock wool. Select oak flooring is used throughout except in the kitchen which is asphalt tile, and in the bathroom, which is ceramic tile.

Particular attention was paid to roof construction due to the climatic extremes in the south. Roofs, Mr. Gibson points out, are a source of high maintenance and give trouble if they are not properly applied. "Here, in Louisiana, a roof alternately is subjected to hot suns and heavy rains, frequently several times in the same day, and we are always faced with high humidity and often with high winds. Roofs have to be built to take it, so we use nothing but No. 1 grade shiplap in the deck, and lay no more decking in one day than can be protected with saturated felt that day.

"We use asphalt shingles because of their long life, ease and economy of application, and the many colors in which they are available.

"As a matter of fact, we begin the color planning of our homes and the

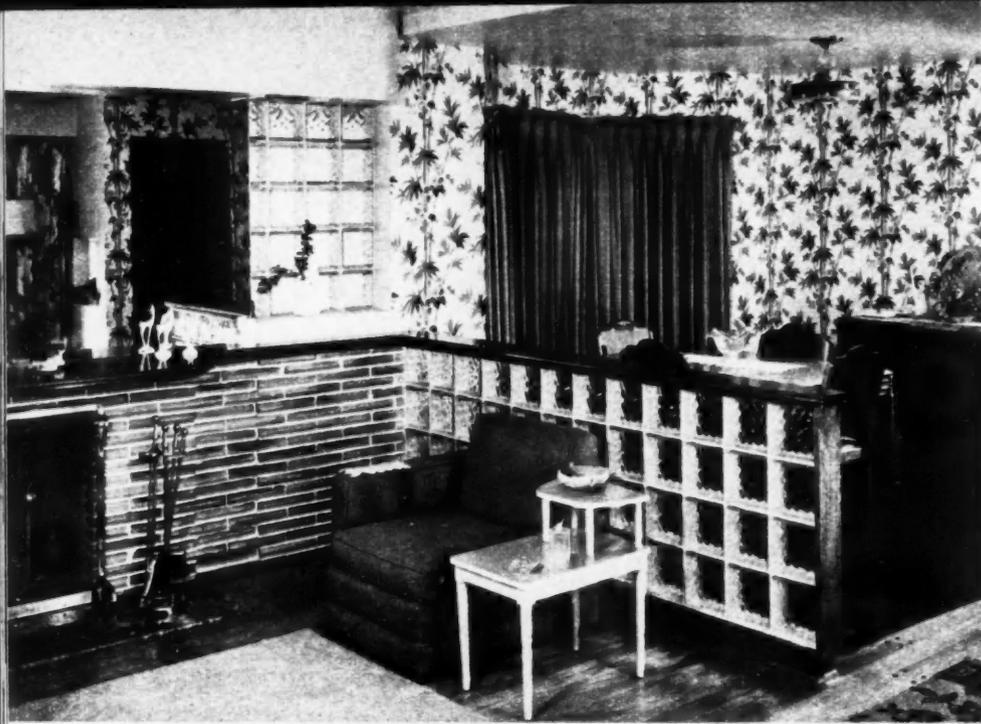
development with the roof. We give the job of color selection to our dealer and the manufacturer. Then we decide on the colors in the sidewalls and the trim. Variation in colors of shingles adds a great deal to the appearance of the development as a whole, and helps materially in individualizing each house.

"We have made every effort to build with quality materials and equipment. For example, heating is provided by a Coleman gas-fired floor furnace, with Minneapolis-Honeywell controls. A Dixie-air attic fan in each apartment provides adequate ventilation. Our kitchens are completely equipped with a Magic Chef range and a General Electric refrigerator. We provide plenty of kitchen cabinets, which we fabricate ourselves."

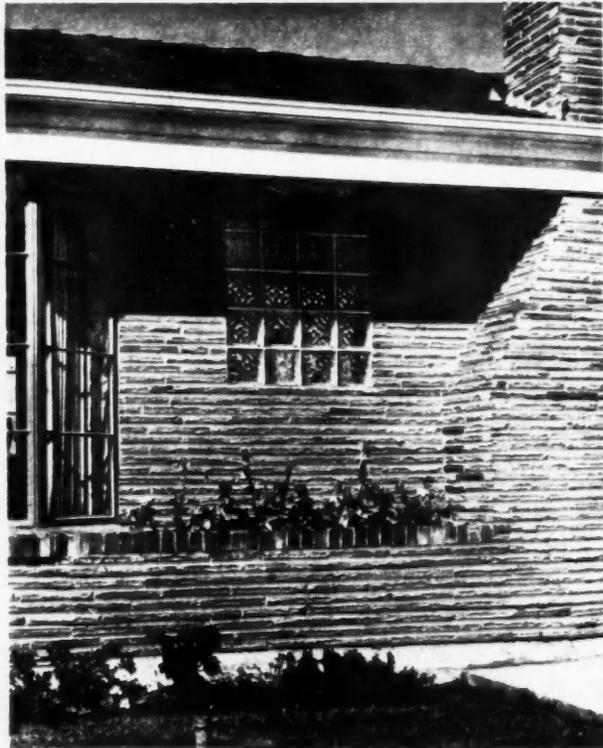
Perhaps the best testimony to Mr. Gibson is registered in this fact—homes were occupied as fast as they were completed and the number of applicants for apartments is many times the number of homes available.



THE 23-acre site development is adjacent to permanent Army air base



**"Give people what they want and they will buy" is the theory of this builder who employs no publicity or sales promotion. He sells as fast as he builds**



## ***Building Homes That Sell Themselves***

**A** BUILDING contractor since he was 19, Oluf Heggen, Seattle home builder, has succeeded by giving people what they want in a house.

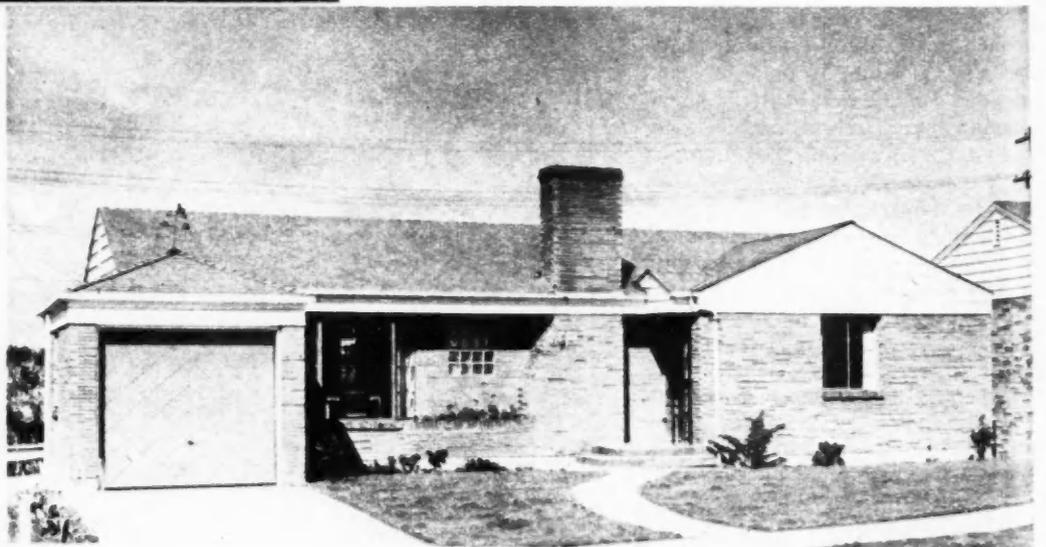
And in fast-expanding Seattle, the gateway for air and water traffic to Alaska and the Orient, Heggen feels that his theory will continue to bring him business for many years to come.

"My houses sell themselves so I have no publicity or sales promotion crew," he said. "However, I don't object to any real estate man bringing me a buyer.

"Houses sell themselves if they have what people want. They should have a central entry hall, making it easy to get anywhere in the house without going through the living room and dining room. Rooms should not be too small. A large living room is best with an offset dining room. I

**EXTERIOR** Kenneth Heggen house is of Roman brick veneer. Interior spaciousness is created by dividing living and dining areas with a half-partition of glass block

**LOW LINES** of this home give it the appearance of a ranch type dwelling. Steep ground slope permits two bedrooms and a recreation room in the lower level, all accessible to the patio



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avoid dining rooms walled in, but rather like them to add space to the living room."

Teamed with his three sons, who are graduates of the University of Washington, Heggen has been building in Seattle since 1924. One son, Kenneth, is outside foreman; the others, Vernon and Ed, handle the paper work.

Heggen's houses range in price from \$8,800 to \$40,000. Those in the upper price level offer more floor space and service equipment than those in the moderate price bracket. The quality of workmanship and of materials in all Heggen houses is constant.

The low-cost homes are basementless; their heating equipment is housed in a small utility room. All floors are of hardwood. Tile is used generously in the bathrooms and kitchens. Windows are ample in area.

In the homes that sell from \$15,000 to \$40,000, the basements have recreation rooms finished in knotty pine; laundry rooms with trays, hot water heaters, and, in some instances, washing machines. In the top price homes, there are two finished bedrooms and a bathroom in the basements and fireplaces in the recreation rooms. A combination air conditioner and oil furnace is provided in some of the homes while others are equipped with radiant type heating.

Average building time per unit is three to four months. Time is saved by constructing the walls flat on the ground, and then raising them into position without the need of expensive scaffolding. Rough and finished work is handled by separate crews.

In the Heggen \$20,000 home, bedrooms are situated in a wing which can be isolated from the general living area by a Modernfold door. The master bedroom in the front of the house has a recessed vanity unit in one corner and a wardrobe closet with sliding doors in one wall.

A similar closet is provided in the other bedroom which normally serves as a nursery. Both bedrooms are fitted with steel casement sash, except a side window in the nursery. Here glass block is used to provide a quiet atmosphere for children.

Kitchens of the houses in the upper price range are planned carefully, and offer a complement of convenient equipment. Counter tops are of clay tile in matching colors and cabinets are steel with chrome hardware. Standard equipment in these kitchens includes automatic dishwashers, electric ranges, refrigerators and garbage disposing units. Breakfast nooks are combined with most of these kitchens, some having circular tables and cushioned seats.

When possible, the spacious living rooms are situated to take full advantage of the scenic location. The living area



KITCHEN in Heggen upper-price home has latest equipment

in the Kenneth Heggen home serves to illustrate this orientation.

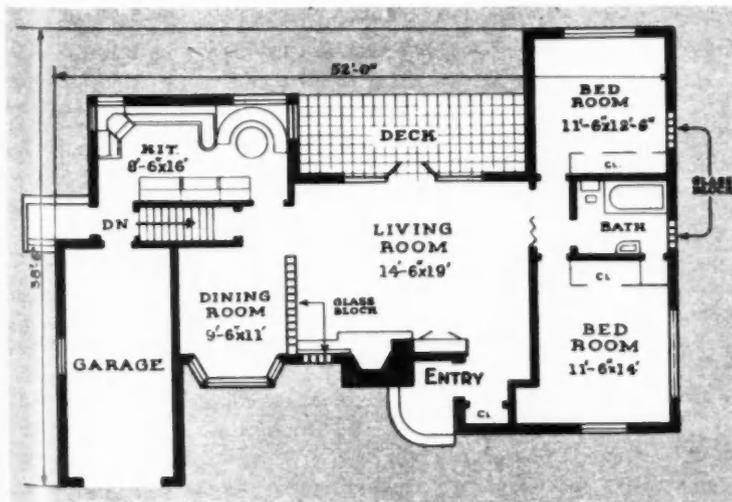
The front entrance flanks a spacious fireplace, and is directly opposite a bank of casement windows equipped with glass doors leading to a tiled roof deck.

Exterior of the house illustrated here is Roman brick veneer. Heggen occasionally uses hollow tile over frame studding. Landscaping is included in the purchase price of houses in the upper price range.

"I don't use a master plan," the builder said. "My houses are custom built to suit the public, and I guess they do because the homes have been selling as fast as they are finished."

Aware that good location helps sell houses, Heggen selects construction sites that take advantage of the area's famous scenery and are convenient to shopping centers and transportation. Another selling factor is choosing a site, especially for homes in the higher price levels, in a residential neighborhood where property values are steady and not likely to decline.

And Heggen advises that time and free building service to persons just looking pays dividends for any builder. Through the years this attention to "window shoppers" has contributed to eventual sales and contracts, he reports.



THIS street level floor arrangement is typical of Heggen homes

#### MATERIALS AND EQUIPMENT USED

- Zonolite insulation
- U. S. Gypsum Rocklath
- Insulux glass block
- Curtis millwork
- Schlage hardware
- Crane bathroom fixtures
- St. Charles metal kitchen cabinets
- Westinghouse refrigerator
- Westinghouse electric range
- GE dishwasher and Disposall
- Bendix washer, drier and ironer
- Katzenbach & Warren wallpaper
- Modernfold door



**OPEN FENESTRATION,** with spotlights accenting displays, permits client to view entire interior of this floor from outside



**A** HOMELIKE atmosphere prevails in the Nat Greene dress shop in Detroit, Mich. Here, a client may relax and enjoy shopping, and find restful privacy. This client-inducing atmosphere is achieved through skillful planning on the part of Detroit Architect Louis G. Redstone, A.I.A., and the careful selection and application of materials.

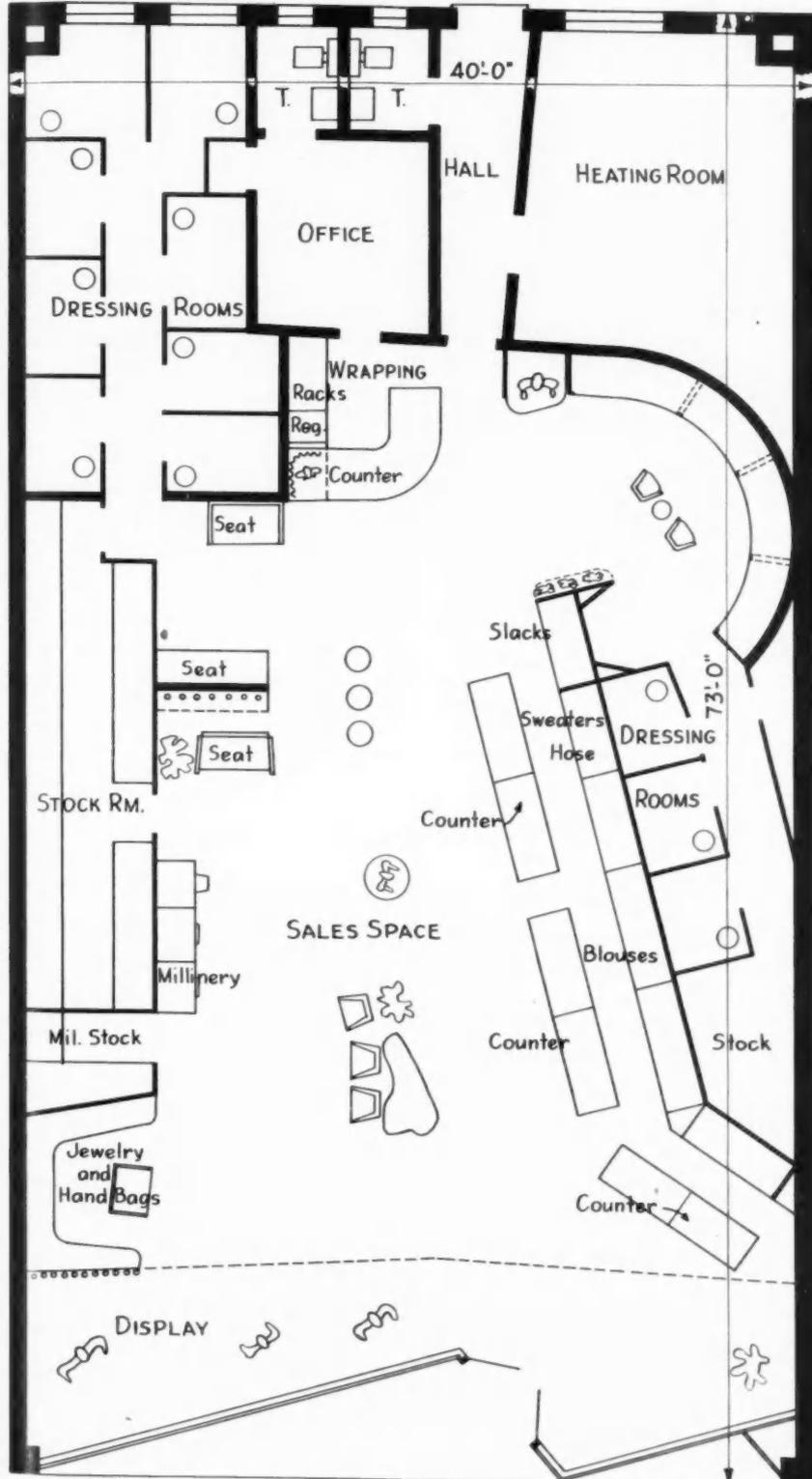
No confusion of merchandise lines the counters in this modern shop; instead, merchandise is stocked in convenient compartments behind the counters. Neither are there any glaring lights to distract customers. Inside lighting is a combination of recessed fluorescent and adjustable recessed spotlights, with the line of the spotlights directed effectively along the edge of the display counters.

Exterior finish is of Macotta facing. Doors are of Herculite glass and the front of Pittsburgh Plate Glass material. Corrugated material around the display niche is of Kawneer aluminum sections. The interior wall finish is partly plaster and partly wallpaper, in colors which blend harmoniously with the carpeted floors. Decorative touches and lighting treatment accent the rear of the store. Throughout materials used aid design.

**UPPER** half of interior walls are plaster, while lower half is paper carefully selected to blend with the character of the store

# Materials Aid Design

**Spaciousness . . . restfulness . . . privacy.**  
**These qualities achieved through modern**  
**store planning pay dividends to proprietors**



DRESSING rooms are amply large to provide comfort, and are planned for privacy

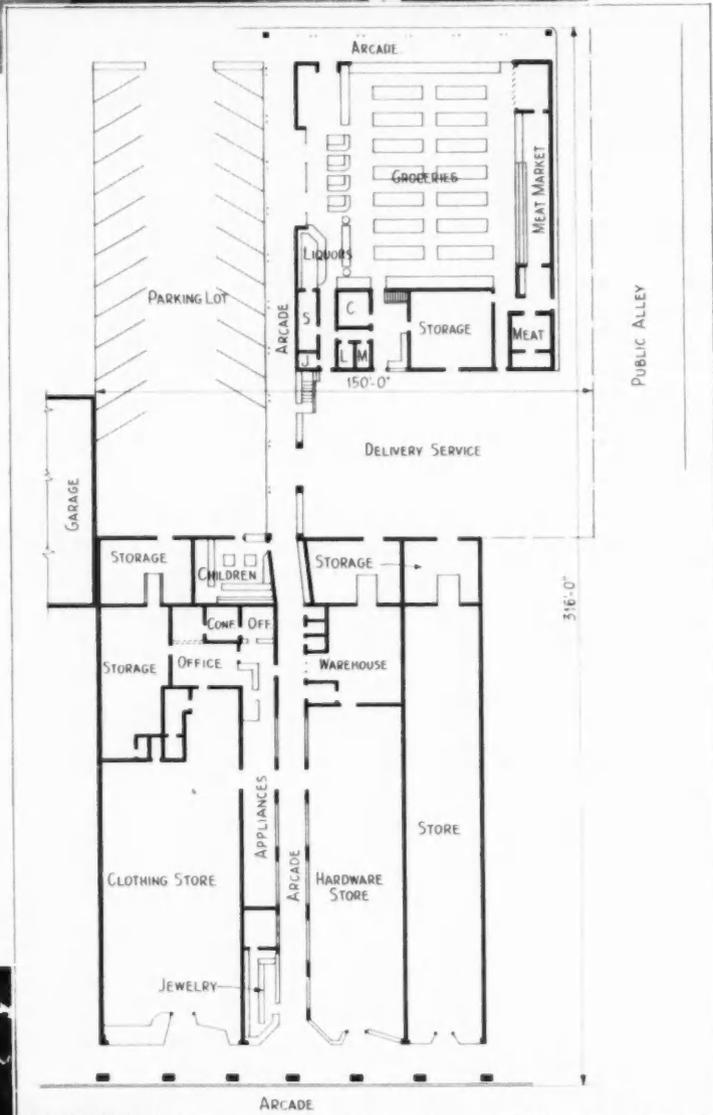


**ABSENCE** of suspended light fixtures from ceiling and elimination of old-fashioned display counters permits more simplicity in interior design. Color, here, is important. Ceiling is dark gray. Walls above recessed fluorescent lighting fixtures are chartreuse. Store fixtures also are gray

**ADJUSTABLE** recessed spotlights emphasize modern display counters and display niche. Continuous light trough around interior of store accents simplicity of design of wall and ceiling above the trough in contrast to the complex design below



## Skillful Planning



**T**HIRTY years ago, Ojai Avenue of Ojai Calif. was famous for its shopping center arcade. A show place of Southern California, it was the mecca of all local trade. Times changed when Ventura, fifteen miles away, began attracting buyers with newer, larger and better equipped stores. Its shops offered a better display of merchandise, more variety, and lower prices.

In Ojai, the Hickey Brothers management, which operated a clothing store and a hardware store on Ojai Avenue, decided the answer to Ventura's challenge was modernization of their stores and expansion of their facilities. The owners of Van's market, located between the Hickey clothing and hardware stores, agreed with them. Van's had long realized that to compete with the supermarkets in Ventura, they would have to convert to modern self-service equipment and provide parking space.

To accomplish this expansion was a problem. All three businesses had grown up in the arcade, and the arcade was the main shopping center in town. Since moving an old established store frequently wrecks its business, this factor seemed to preclude moving to another location. Finally, with the aid of Austin Pierpont, architect of Ojai, a solution was worked out which provided room for expansion without leaving the arcade.

The idea was to cut a passage-way or arcade from Ojai Avenue through to the next street



CENTRALLY located arcade in Ojai, Cal., is again a mecca for local trade since its recent modernization

# Regains Local Trade

**Buyer traffic detoured Ojai, Calif., when a nearby town modernized its stores. Now the buyers are coming back—for a good reason**

and to have attractive shops in this secondary arcade. The frontage occupied by the three stores was 125 feet. The plan was to take out the market, which was 24 feet wide, and to use part of this space for the passageway and part for the expansion of the other two stores. The passageway would extend from Ojai Avenue to Matilija Street, and a new greatly enlarged market would be built there.

The plan was not without its hazards to Van's because their new market would be a block from their present store, on a street devoid of retail businesses. Furthermore the project would be costly and all concerned would have to count on a greatly increased volume of business to make it worth while. The success of the plan depended entirely upon diverting consumer traffic from Ojai Avenue into the new arcade.

The planners shrewdly decided that the best way to divert this traffic would be to provide the finest and most attractive stores in town in and off this arcade; and to design them with show windows which would be filled with the kind of merchandise that attracts customers.

The first step was to build the new market, which had to be completed

before the old one could be torn down to make way for the arcade. Located on Matilija Street, it now has two great advantages over the former store, aside from its appearance. First, its area is three times as large, affording plenty of room for modern merchandising equipment and display; and second, there is adequate room for parking. Although it has been in operation only a short time, the volume of business in the new store is running almost three times that of the old store.

After the market was completed, work was begun on tearing down the old market, creating the passageway and enlarging and modernizing the stores on both sides of it. Wide panes of heavy plate glass reaching to the ceiling were used in the store fronts facing the arcade. Mr. Haas, merchandise manager for Hickey Brothers' stores said, "People standing in the arcade can see practically every item in the hardware and appliance stores. This is a great asset because many people like to make their selections undisturbed by clerks hovering around."

By examining the architect's plot plan it can be seen that passageway from Ojai Avenue to Matilija Street



**WIDE windows in arcade permit buyers to shop without interference from clerks.**

is nine feet wide between the stores and 12 feet where the parking begins. The windows of the hardware extend back 106 feet on one side; on the other side are an attractive jewelry shop, an appliance store, and a children's wear shop. To the right, about midway in the arcade, is an attractive entrance to three offices and shops built over the rear portion of the market.

Trade is drawn into the arcade not only by its attractive frontage on Ojai Avenue, but because it is interesting and attractive all along its entire length from Ojai Avenue to Matilija Street. The greatly improved market, the second floor offices and shops, and the well decorated show windows on both sides all play their individual parts in attracting passersby.

Great credit for the success of the venture is due Austen Pierpont, the architect, and Martin Davidson, the general contractor who handled the construction work. Beauty and economy were important factors and both were achieved.

The new structures in the rear were built of concrete blocks and painted a pastel green. The canopy which extends ten feet in front and on the side of the market is painted a salmon color to blend with the walls. Planting spaces do much to enhance the attractiveness of the arcade.

Walls of the arcade are faced with roman brick. The floor is concrete with drains set in so it can be hosed. Lighting is by fluorescent tubes recessed in the ceiling and covered with frosted glass. Skylights provide natural light during the day; egg-crate frameworks set under the skylights hide their glass and give them an attractive appearance.

Summed up, the benefits which accrued to the merchants concerned with this modernization were first, the creation of a new shopping center; second, modernization and expansion of the three stores was accomplished.

Ojai Avenue has again become the mecca for local trade.



**STRUCTURES** in rear of arcade are of concrete block. Attractive canopy extends out 10 feet



ASSEMBLED in the auditorium of Illinois' Davenport Hall, builders await opening of two-day Residential Construction school

## Research Pays Off in New Techniques

**Builders study and inspect results of housing experiments at University of Illinois and hear lectures on business phases of construction**

**E**NTHUSIASM for the work being conducted by the University of Illinois as an aid to the building industry marked the Fourth Annual Short Course in Residential Construction for builders and contractors, presented by the Small Homes Council of the University at Urbana in February.

More than 160 builders and persons in related industries attended the two day meeting. A predominance of young men attested to an increasing interest on the part of progressive builders in the research work of the Council, which, although only in its fifth year, is coming to be recognized as filling a definite need of the industry.

Most of the discussion panels in

the comprehensive program were conducted by the staff of the Small Homes Council and members of the University faculty in contrast to previous programs when panels were comprised principally of outside speakers. All phases of home building—planning, construction methods, mechanical problems, record-keeping and advertising—were covered in detail.

The visiting group was welcomed at the first session by W. H. Scheick, professor of architecture and co-ordinator of the Small Homes Council. An address by W. H. Kapple of the Council laboratory, research assistant professor of architecture, established the theme of the meeting—a challenge

to builders to make technical progress a necessary aid to the building industry in order to continue the record housing accomplishments of 1948.

A feature of this year's educational program was a substantially increased use of movies and slides to illustrate lecture points. A study of a group of experimental homes showing the method of construction from foundation to roof and the discussion on ceiling-panel heating versus conventional warm-air heating, based on data from another research house were of particular interest. J. T. Lendrum, associate Council co-ordinator, led the former and R. W. Roose, special research associate in mechan-



LINE of cars occupied by short course students, enroute from lecture hall to site of research projects

ical engineering, the latter. Both lectures were accompanied by slide films. Other movies included "Dry Wall Construction" by the U.S. Gypsum Company and "Plumbing Tests, Bureau of Standards."

Considerable discussion followed a talk on liberalized FHA minimum requirements by C. T. Morrisett, chief FHA architect, Springfield, and on record-keeping for the builder, by Edwin L. Theiss, University associate professor of accounting. Richard N. Jones, vice president in charge of sales of the Lustron Corp., Columbus, Ohio, spoke at a dinner meeting about the company's long-range plans in the field of engineered houses.

The Small Homes Council was organized to work on the premise that improvement in housing must depend upon the general advancement of knowledge in every type of problem. A unique organization in educational and research circles, the Council has compiled all information gathered at the University through years of research in various aspects of home construction, equipment, and maintenance. At the same time that it is making this assembled information available to the public, it is also undertaking new research.

By concentrating on low-cost, single-family housing units and assembling in one place all facilities necessary for intensive research and education, the University hopes to make a valuable contribution to the national effort for better housing. The success of this effort is being demonstrated by the fact that other universities have adopted similar programs, with the national research movement gradually gaining greater impetus.

The Small Homes Council is a pool of all the departments of the University whose work is related to housing—architecture, home economics, mechanical and electrical engineering, and economics. The Council acts as the co-ordinating agency for all of these departments.

William H. Scheick, professor of architecture, who directs the Council, has held the position of coordinator since its organization in 1944. The associate co-ordinator is James T. Lendrum, associate professor of engineering drawing. Maxine Kennedy, assistant professor, is editor; and William H. Kapple, assistant professor, is research architect.

More than 1,700,000 non-technical circulars on 22 subjects of home planning and building have been distributed by the Council.



**AN UNCOMPLETED** experimental house is visited on tour of campus



**SMALL Homes Council office**, where research plans are originated



**GROUP** inspects unfinished interior of another experimental house

# Giving Service

**By adhering to this motto enterprising Mohawk Lumber Co. has successfully developed one of the largest and most efficient building material services in Michigan**



**HARRY SMITH,**  
President



**FRANK P. GALLAGHER,**  
General Manager

**W**HEN Harry Smith, president of Mohawk Lumber Co., Detroit, Mich. officiated at the opening of their new office building and fireproof warehouse, October 20, 1948, one of his most cherished ambitions was realized.

Five years before this time, the site contained an abandoned lumber yard and five acres of vacant land. Today, due to the energy and vision of Smith and key members of his organization, the site is occupied by the new office buildings, a complete lumber yard, a large mill, a number of warehouses and a parking area for 100 cars.

The tremendous growth attained in the last five years by this company, is due in part to the fact that all materials, tools and equipment used in the building of a house, can be obtained in one place.

This "one stop" idea has been re-

sponsible for a great acceleration in sales. Customers like the idea of being able to purchase all the things pertaining to the house in one place.

In the organization's newly established "House Clinic" division, which is headed by Guy Lancaster, a veteran building expert, this "one stop" idea has been carried out to its fullest extent. The Lancaster staff cooperate with customers on any subject relative to new construction, modernization or alteration of existing buildings. The functions of this staff include everything from the idea, to the supply of materials for the job—sketches, blueprints, specifications and estimating.

As an example—a customer comes in who wishes to renovate his house to bring it up to present day standards. A staff member takes notes of his requirements and obtains all pertinent information. A Mohawk repre-



**PARKING** lot side of new sales and office building. This structure is a good example of modern commercial design

# Makes Friends and Sales

representative then goes to the site where measurements and other data are gathered. This information is turned over to the plan department where drawings are prepared. An estimate is made and submitted by builders who are retained by Mohawk on a subcontract basis. Competitive bids are always obtained. This company has a group of builders available for this type work, thus assuring the owner fair dealing on the part of subcontractors.

After the contract has been let and the work started, periodic inspection is carried on by the company's superintendent to insure the owners complete satisfaction. All materials required in the remodeling are obtained at Mohawk. In the event a loan is required to carry on the work, the necessary financing is arranged for the owner by Mohawk. All legal papers required in the awarding and completion of the work are handled by the staff. Thus from the time that the owner comes in to the lumber yard with his problem, up to the point where the house is turned over to him in a completely renovated state, all the work and materials required are supplied by the Mohawk Lumber Co. No extra charge is made for these services. They are all included in the "one stop" selling method. Many of the headaches incurred by owners when dealing with a number of individuals and firms are eliminated by this all inclusive service.

In this type of setup the Mohawk Lumber Co. is responsible to the client for the proper completion of all work, and any complaints that may arise are handled by the company.

Another factor that has had much to do with Mohawk's rapid expansion is the liberal attitude of the company toward publicity and promotional work. Smith recognizes the tremendous possibilities in a sustained and constantly accelerated program. This is evidenced by the fact that several years ago, the budget for advertising amounted to \$4,000. This has now been increased to the point where \$50,000 is being expended for promotional work this past year.

Mohawk serves the entire metropolitan area of Detroit, and within this range carries on an effective pro-



ENTRANCE to one of the large warehouses used for the storage of finished lumber, gypsum, insulation, plywood, wallboard, 200-car parking lot in foreground



A GLASS enclosed illuminated display unit located extreme corner of parking lot



**GUY LANCASTER** heads new "Home Clinic" division. Its function is to provide everything from the idea to the complete remodeled house



**TWO views in the large, light sales room indicating the division of departments. Top view shows a portion of the hardware display. Lower view is in paint department**

gram of advertising which includes newspapers, street car and bus advertisements, window displays, signs, and billboards. This planned program is carried on through a recognized advertising agency.

Smith is a great believer in slogans to carry the message of progress. "We'll do the whole job,"—"Modernize the Mohawk way,"—"We sell everything except the wife and furniture." He is not above injecting a bit of humor if it will draw the attention of the public. All displays carry the slogans with a constantly changing application.

Smith has an organization which totals approximately 175 employees. Personnel include inside salesmen that confine their activities to the yard and outside men who keep in constant touch with all builders advising them as to the availability of the material in the yard and to its quality. Balance of employees are mechanics, yard men, clerks, and stenographers. The company employs a service man who is attached to the

**ARTIST birdseye view of the entire five acre tract as it now appears to the public**

"House Clinic" for the purpose of inspecting the construction work that is in progress. This man spends 75 per cent of his time in the field.

The company operates 34 roller-bed trucks for the delivery of material. These trucks carry a load free of charge within a 30 mile radius of the yard. This type of truck permits the delivery of twice the amount of material to the site in a day than would be possible otherwise. The safety factor for the load is much greater with less possibility for breakage. Ease of unloading is also considered.

Material for an entire house, including frames can be delivered in two loads. When trucks are loaded at the yard, material is arranged in proper sequence, so that when it is delivered to the site, the framing lumber will be on top of the other material in convenient order for the builder's use.

The welfare of the local builder is Mohawk's first consideration. A file of current plans are kept on hand for his use. A conference room is available for builders at any time for discussion purposes or for closing a contract. The "House Clinic" operated by Mohawk will not consider new construction other than in the preparation of plans when requested. Their





LEFT: One of the enclosed lumber sheds in yard. Center: Partial view of large mill. Right: A Ross lumber-carrier for use in yard

construction work is confined entirely to remodeling and repair. The friendly relationship that prevails between the builders of this area and the lumber yard, is due to a complete understanding of their mutual problems.

The present five acre site occupied by the Mohawk Lumber and Supply Co., is a model of efficient planning. The recently completed sales, office and display building constructed from the plans by Giffels and Vallet, Inc., architects, Detroit, Mich., is a splendid example of modern commercial architecture. Extensive show windows on two sides of the sales room bathe this area in complete daylight. The use of the large display sign as an integral part of the exterior design is extremely effective.

Departments for the sale of paints, builders hardware, mechanic's tools, power equipment, small motors, oil burning equipment, garden tools, Coleman furnaces, aluminum sash, Anderson sash, plumbing fixtures and

supplies, finished hardware, doors, and kitchen equipment are all arranged for effective display in the large sales room. The rear portion of the store contains offices and rest rooms. Additional offices are placed in the second floor portion of the sales building.

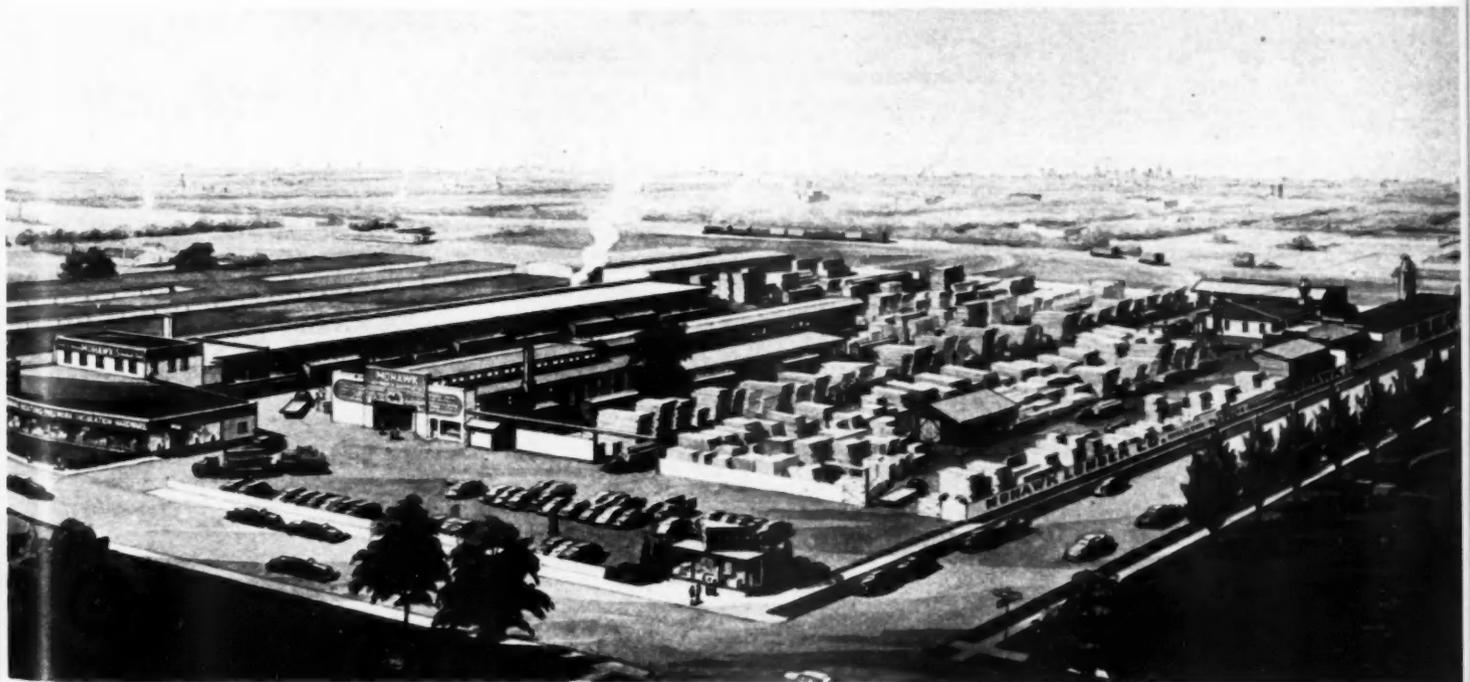
The cost of the sales building, including a fireproof warehouse which is directly to the rear amounted to \$250,000.

To celebrate the opening of the new sales and office building, 500 invitations, printed on full size cedar shingles, were sent out to suppliers, builders and friends. The party was such a success that it was then decided to make it an annual affair.

Officers of the company are, Harry Smith, president, Harry Jaffe, vice president, and Frank Gallagher, general manager. Josh P. Sarasohn handles promotion for the company.



STREET view of new sales building. Entrance to store is from the parking lot





**MORTALITY** rate was high in this old, half-monitor type hog house

**A**CCORDING to U.S. Department of Agriculture figures, 14 per cent more sows will farrow pigs this spring than a year ago—7 per cent above the 1937-46 average. But three out of every ten of these pigs will die, if past experience is any index; many of them because of poor housing.

On a large number of farms, the hog house is the one that Grandfather built when he homesteaded the farm. These ancient structures can be streamlined, however; and the accompanying pictures show what was done with a 35-year-old hog house in Hancock County, Iowa.

This old half-monitor hog house is typical of hundreds now in use that represent a good volume of business for the builder and lumber dealer. It was actually only a wooden shell, un-lined and un-insulated. The foundation and floor had crumbled badly, due to a weak mix of concrete. Portions of the side-walls had rotted or been damaged by the hogs. There was no ventilating system; no place to store bedding; no running water or electricity. In winter, the house was cold and damp, due in part to the open waste-space in the ceiling area. On cold days, an inch of frost would gather on the walls, and melt off and drip when the day warmed up, making the entire floor wet and sloppy. The house had to be cleaned out three times a week, and little pig mortality was high.

The transformation to the present streamlined structure was comparatively simple. The building was jacked up, and footings and foundation replaced. Windows in the top portion were removed, the roof was extended to form a gable, and re-shingled with cedar shingles. New posts were put in to support the roof. The drop siding was repaired where necessary, and a

## SAVE THE PIGS

**Hog houses on many farms are the same as Grandfather built when he homesteaded. These ancient structures need streamlining to lower an unnecessary death rate**

vapor barrier was tacked to the inside studs. The lower portion of the interior was lined with lumber, where the hogs could damage the wall. The upper part and ceiling were lined with insulation board. Vermiculite insulating fill, 3 $\frac{5}{8}$  inches thick, was poured into the side-walls; and a 3 inch thickness was placed over the ceiling. The present ceiling is 7 feet 6 inches high, with a 5 foot high loft. A year's supply of bedding can now be stored in this space, which formerly was wasted.

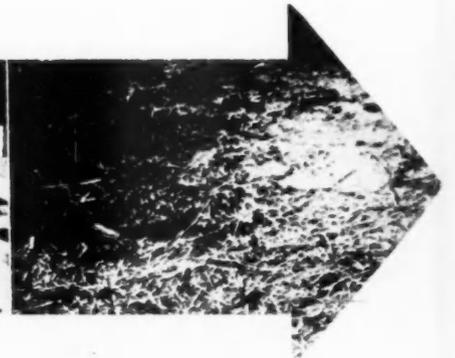
The most badly disintegrated portions of the old concrete floor were knocked out. A vapor barrier was placed over it, and then a three inch slab of vermiculite insulating concrete. A two inch topping of ordinary concrete over the vermiculite concrete provides a wearing surface.

A mechanically-controlled ventilating system was installed. New pen partitions, running water, and electricity were added; and a coat of red paint with white trim on the exterior completed the transformation.

The list of materials used in the remodeling represents a nice volume of business for the lumber dealer:

- 12 squares of 5X wood shingles
- 4 gallons of paint
- 200 board feet of drop siding
- 10 9/12 4-light windows
- 10 9/12 4-light storm sash
- 144 bags of Portland cement
- 20 cubic yards of gravel
- 54 bags of vermiculite stabilized concrete aggregate
- 40 linear feet of ridge roll
- 1,400 square feet of 25/32 insulation sheathing board
- 480 board feet of 1 x 12

**BECAUSE** of an improper concrete mix, floor in old hog house began to disintegrate. The damp condition of bedding that developed during farrowing time is illustrated at right. This type of structure is not too unusual, and it is time to encourage farmers to remedy an unnecessary condition



HOG

2,000

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250

130

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HOG house after remodeling. Bedding is now stored in loft space

- 2,000 square feet of vapor barrier paper
- 2 10 inch x 12 inch louvers
- 50 linear feet of 4 x 4
- 250 linear feet of 1 x 6
- 130 bags of vermiculite insulating fill
- 1 thermostatically-controlled fan ventilating system
- 2 automatic hog waterers
- nails

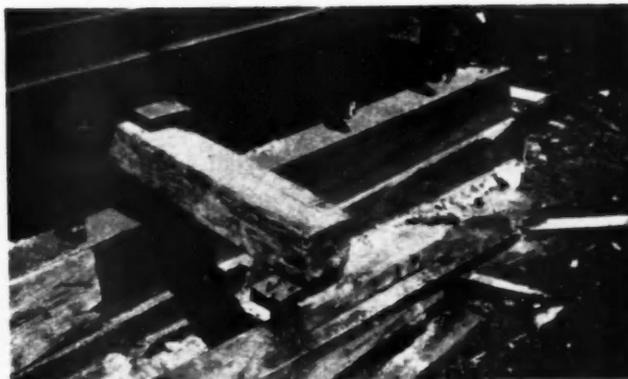
Feeding, breeding, management, and housing are the prime factors in efficient hog production; but housing today is on a much lower plane than the first three. With the building materials necessary for such a remodeling job now available, contractors and lumber dealers can be very influential in raising the standard of farm buildings in their communities.



HERE is the interior of the old hog house after remodeling. Note dry condition of floor, ventilating duct and adequate insulation



DEAD PIGS—result of improper housing—are graphically shown here. Small cost of remodeling pays dividends



REMODELING of old hog house shown here was very simple. Building was jacked up, footings and foundation replaced

# Houses for Nothing!

by R. E. Saberson

**M**AGAZINES and newspapers still carry frequent accounts of the great housing shortage despite the fact that a nation-wide survey, conducted not long ago by the *Wall Street Journal*, pointed out, according to *Life* magazine, that "new houses are standing vacant in many cities, some of them still unsold after months of completion."

Significantly the same article, the report of *Life's* Round Table on Housing, has this to say about the much maligned industry:

"Considering all the difficult obstacles against which they have had to work, it may be conceded that the builders of the United States have done a good job in the last two years. They have built, that is to say, about 1,800,000 houses."

Then, too, this flattering tribute to the far flung housing industry from the same source is worth pondering:

"... America has become a nation of home owners. Something like 53 per cent of the people who live in towns and 65 per cent of the people who live in the country own their own homes. And non-farm ownership has increased in the U.S. by a fabulous seven million since 1941. No other nation can match these figures."

## Accusation Refuted

*Life's* panel not only brought out some highly interesting and extremely encouraging facts but in our opinion refuted completely the oft-repeated accusation of uninformed critics that "nothing is being done about housing." Any one who studied the 13-page article could not help but realize that the industry can boast of great achievements. If such were not the case the United States would not surpass all other nations in home ownership.

By bringing together such residential construction experts as Fritz Burns, president, Kaiser Community Homes, Los Angeles; Philip Klutznick, president, American Community Builders, Inc., Chicago; William Levitt, president, Levitt and Sons, Inc., Manhasset, N.Y., nation's largest home builder; Alfred Gross of Gross-Morton Corporation, Jamaica, N.Y., Carl

G. Strandlund, president, Lustron Corporation, Columbus, Ohio; and Alfred Barten, president of Small Homes Development Corporation, Wilmington, Del., *Life* was able to present to its millions of readers an inspiring story of what actually is being done under exceedingly difficult circumstances, to produce more and better houses cheaper.

Such a presentation should end, once and for all, the erroneous impression that the housing industry has been weighed in the balance and found completely wanting, as so many of our bureaucratic friends would have us believe.

In addition to the big names included in the list of those who sat in on the Round Table there are many others, who have immediate and long range ideas for bringing the price of houses down . . . men in practically every metropolitan area who are working night and day, not only to improve the product, but to reduce its cost.

## The Small Builder's Role

Then out and beyond these mass builders in the larger cities are the countless small operators who carry on throughout the length and breadth of the land. Mrs. Samuel I. Rosenman, former chairman, National Committee on Housing, called attention to the importance of this vast group when she said:

"The small builder starts with the advantage of low overhead—perhaps an office in his hat or in his front parlor with his wife taking the phone messages. Experience has shown that these little builders can usually undercut the cost of big builders. Since the vast majority of homes are built in small communities, which cannot absorb large building operations, the small builder is a strategic fellow to help in this drive to cut housing costs."

**We will have an oversupply of homes almost before we know it—at the current rate of production—yet our Administration does not recognize this**

It need not be pointed out that such builders are constantly getting more and more help in the way of prefabricated housing parts and ready-to-use materials which extend to practically every part of the house. Great progress already has been made in this direction but the surface has hardly been scratched. Streamlined factories are turning out more, and larger, parts which can be assembled quickly on the building site with labor-saving machinery and equipment.

Then, as we were penning these lines, we picked up the Sunday supplement of our home town newspaper where we came across a lengthy, well illustrated article entitled "The Race to Build Houses."

It was an account of what is being done in New York, California, Pennsylvania, Illinois, Connecticut and other states to speed up, and improve, house construction. It told how Architect Carl Lans, formerly with FHA but now with NAHB, has an economy house committee going in every state. It was replete with well known names in the housing industry—Nick Molnar of Cleveland, economy-house chairman NAHB; Alex Bruscano, of the same city; Sharp of Houston; Gerholz of Flint; Boggs and L'Engle of Atlanta; Price Brothers, National Homes Corporation, Indiana.

It was a long article but it made no attempt to cover the waterfront. It merely hit a few high spots in telling what is being done to get more and better houses cheaper and it included, of course, Levitt, Burns, and Strandlund. There was ample proof, it seemed to us, that plenty is being done about housing, and, that it is being done by the right people.

All of which convinces us, as we have often said before, that we will

have an ample supply of houses almost before we know it and that the great far flung industry is geared up to the point where it won't be able to stop when demand and supply are in balance. In houses, as in everything else, great shortages are always followed by oversupply. At least this has always been the case in the past and we know of no economic law that has been repealed which will change the situation in the future.

All of which was pretty much on our mind when we read in an association bulletin that "there are between fifty and sixty housing bills introduced in the House of Representatives and a like number in the Senate . . . that Administrator Foley is telling the world how many million houses we need in the next several years . . . that President Truman is repeatedly saying private industry cannot produce all the homes that are needed."

Obviously the present Administration is anxious and willing to get into the housing business up to its ears. This zeal is all the more alarming when one stops to consider that no one in Washington appears to be able to make an in-

telligent estimate concerning the number of residential units that are needed! It would appear that determining "how many" conceivably should be the first order of business.

**People In Glass Houses . . .**

Hearings on the subject reveal clearly that there are as many opinions as there are witnesses. The natural result is complete chaos . . . chaos built on top of chaos as revealed in the report of the Hoover Commission.

Just how the Government can expect to solve the housing problem when it is unable to operate its own business efficiently is a question that is of grave concern to the taxpayers of the nation. It has been proved by highly efficient concerns that the building of homes is an exceedingly complex operation. Such being the case, what may be expected in the way of "relief" from a Government bogged down with so many overlapping agencies that it costs more than \$11.00 to acquire a \$1.25 box of paper clips!

But the zeal to turn out millions of homes, regardless of how many

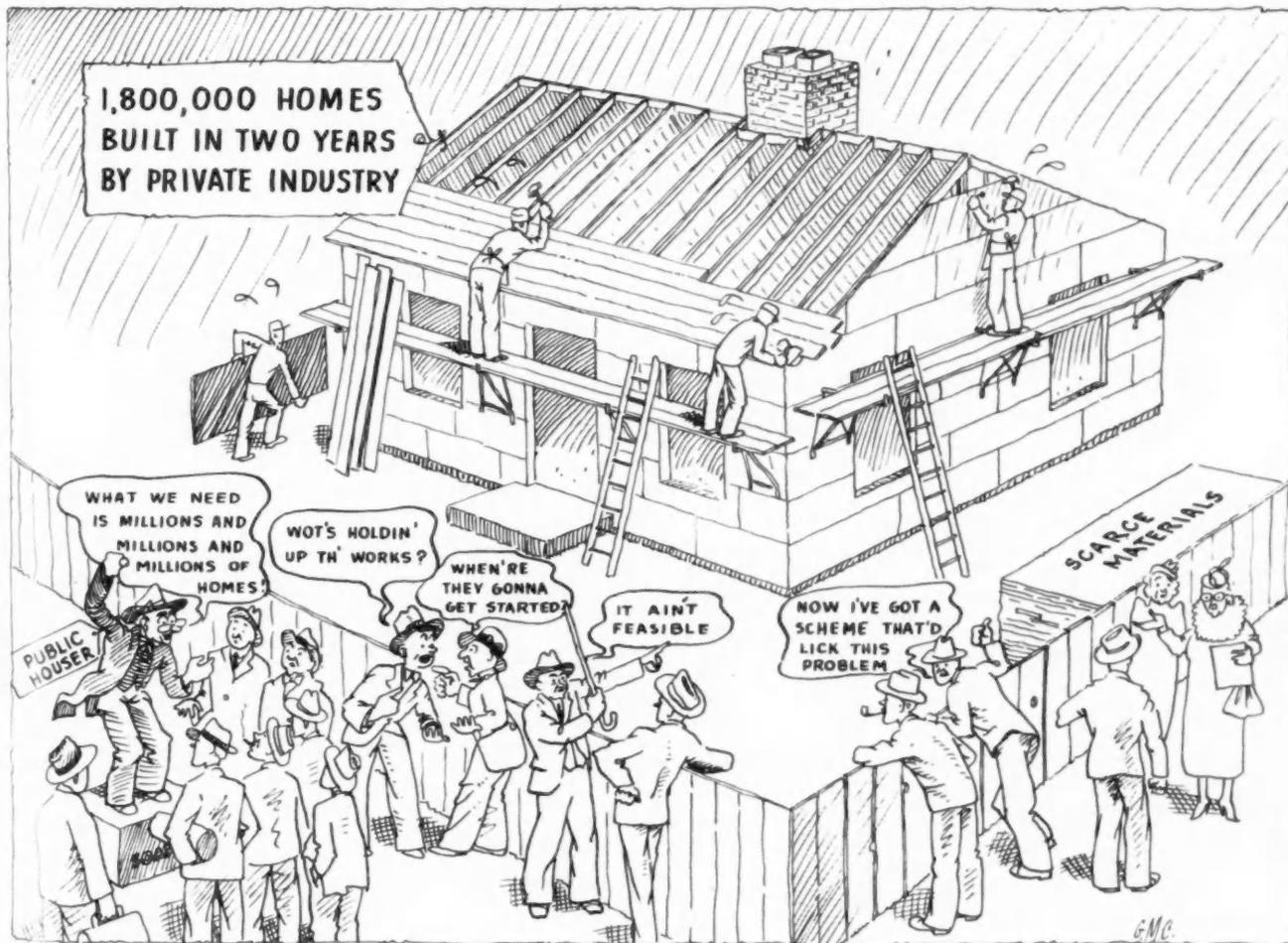
may be needed, does not end with our bureaucratic do-gooders. Walter Reuther, president, CIO United Auto Workers, recently proposed that America's surplus aircraft plants be converted to the mass production of 20,000,000 homes and that the CIO was going to press for federal action to put it over! It was Mr. Reuther's theory that a two-bedroom home could be produced for less than \$6,000.

Where would the money come from? Very simple, Watson. A purely elemental question. Borrow 13½ billion dollars from the social security reserve fund and pay it back in ten years. The Government would take care of the down payment through a loan.

And so it goes. As the great housing shortage becomes less acute the plans for its "solution" become more and more fantastic. Billions for this, billions for that; with little thought being given to where the dollars will come from.

In the meantime, competitive free enterprise will continue to build more and better homes, cheaper. The race to outdo the other fellow will become faster as the size of the market decreases.

**THE SIDEWALK SUPERINTENDENTS**

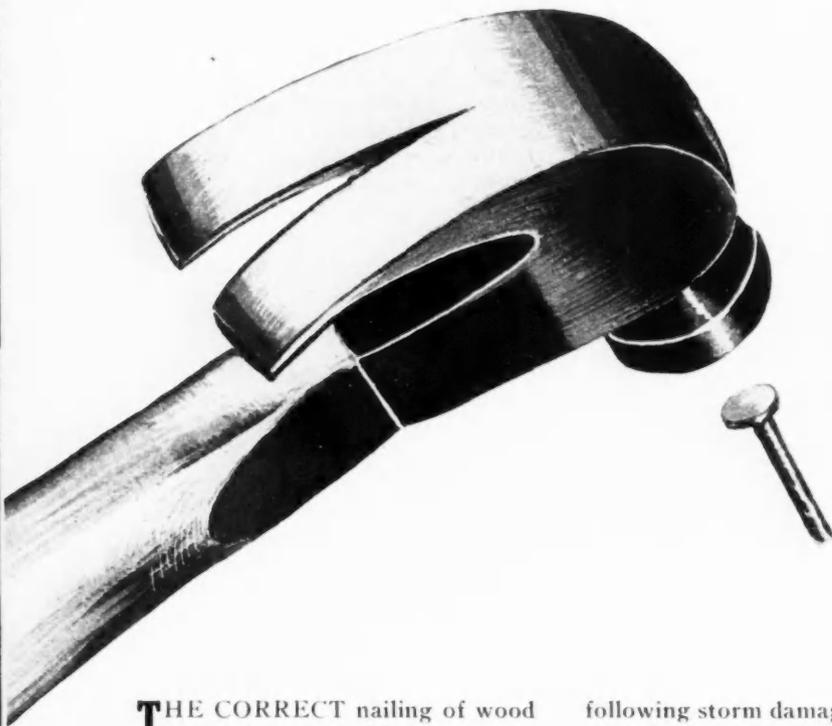


# Engineered House Construction

## Part V

### NAILING

**Many failures occur in structures because of poor nailing practices. In this additional article in the American Builder series on Engineered House Construction, a few hints are given on nailing technique**



**T**HE CORRECT nailing of wood and other materials that comprise a modern house is too frequently taken for granted. Anyone can drive nails, but to place them in the right places to obtain maximum efficiency, permanence and good appearance requires some study and training.

In framing any wood structure the strength of the building is dependent on how well the parts and elements are nailed together. It is important to know the size of the nails to use, the number to use and where they should be placed to fortify the structure to withstand the forces that the parts must resist to keep the whole rigid and plumb.

The action of high winds and storms illustrate dramatically the importance of correct nailing for frame structures, especially houses. Many well-nailed and well-constructed wood buildings have survived for decades the severe weather cycles and the occasional storms of hurricane proportions that occur in many parts of the country. On the other hand, under severe storm conditions, houses with inadequate nailing often separate into parts or even into individual pieces of framing, few of which are actually broken. This demonstrates that the weakness was in the nailing rather than in the wood parts themselves. Surveys

following storm damage areas show that houses standing intact and plumb amid broken trees and the wreckage of neighboring houses are invariably those which, in addition to other features of good construction, are adequately nailed.

There is considerable variation in nailing practices because of the difference in opinion as to what constitutes correct nailing on frame houses, even within limited areas.

The species of wood used in framing will require no change in nailing except at the more critical joints. In those places, if woods of comparatively low density such as Engelmann spruce, northern cedar, and cottonwood are used, an increase in the number or size of nails is necessary to compensate for their lower nail-holding power.

In most joints in house construction, one piece tends to slide on an adjacent one because of the loads or forces met. Resistance of nails to such forces is termed "lateral resistance". Nails through

trimmer joists into the ends of headers, nails through headers into the ends of tail beams, nails attaching ledger strips to girders, are subjected to such loads or forces. Lateral resistance of nails attaching wall sheathing or interior wall coverings of sheet materials to the frame comes into action in resisting forces that tend to rack the wall and in carrying the weights of such materials. Lateral resistance of nails also works against the horizontal thrust of rafters attached to ceiling joists or to plates.

The other manner in which nails are stressed or loaded, is in "direct pull" or withdrawal. Nails attaching covering materials to the lower edges of joists or rafters are stressed in direct pull by the weights of those materials. Similar stress is induced by warping, by vibration, and by wind suction. Ordinarily, when sufficient lateral resistance has been provided, ample resistance to direct pull will be present.

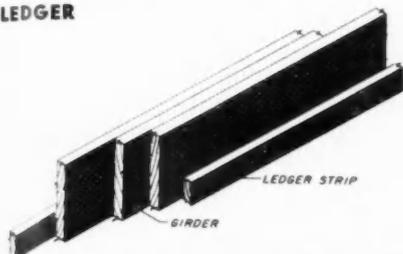
No matter how well a house is nailed, it is not adequately protected against storm, earthquake or flood unless it is firmly attached to the foundation. A commonly specified requirement is that sills be connected to the foundation by bolts not less than one-half inch in diameter, spaced not farther than six feet apart. The bolts should extend at least ten inches into the

**Nailing is such a broad subject and embraces so many of the materials used in construction today that it is not feasible to attempt complete coverage of the subject in one issue. This is the first of several articles to be published in American Builder on correct nailing practices.**

concrete foundation.

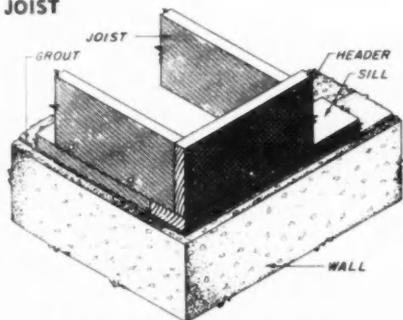
On this page are a few drawings illustrating nailing technique for some house parts. The recommendations made are based on data from numerous sources but principally on the results of tests conducted at the U. S. Forest Products Laboratory, Madison, Wis., and outlined in a booklet, "Tech-

**LEDGER**



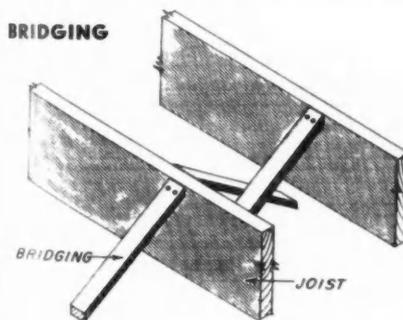
LEDGER is nailed to girder with three 20-penny nails near each joist position. This nailing will safely support a concentrated load of 300 pounds at any point on the floor, or a uniformly distributed load of 50 pounds per square foot over any joist span and spacing ordinarily used in houses

**JOIST**



HEADER joists nailed to other joists with 20-penny nails, three to end joist and two to others. End header joist is toe-nailed to sill with 10-penny nails 16 inches on centers. If diagonal or plywood sheathing is used toe-nailing to sill is not needed except to hold joist during construction

**BRIDGING**



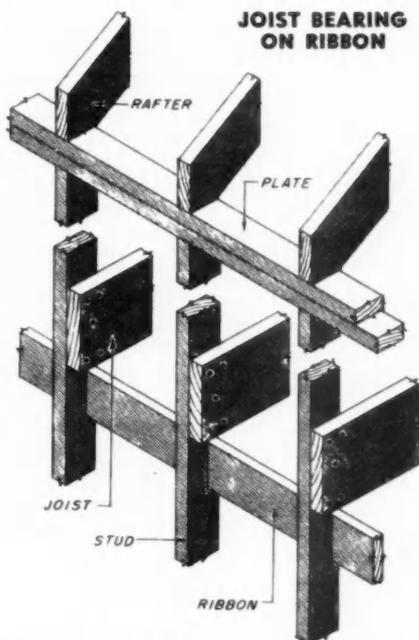
EACH piece of bridging is nailed at each end with two 8-penny nails. Nailing of bottom ends is deferred until after subflooring is put down. If possible bridging should not be nailed at lower ends until the finished floor has been nailed in

technique of House Nailing", available from the Superintendent of Documents, Washington, D. C.

Each drawing, with the description, shows the number and size

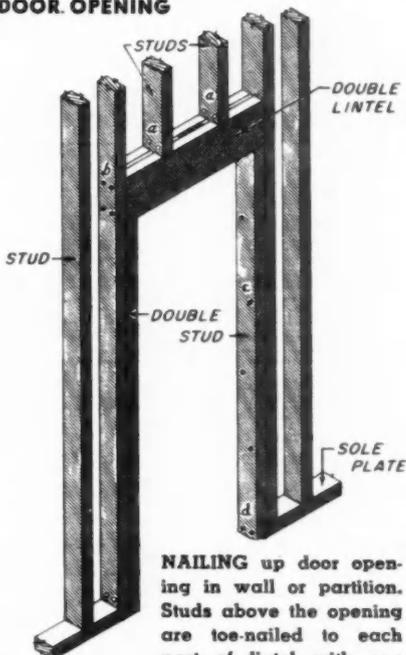
of nails recommended as well as the placement and direction in which they are to be driven. The sizes of nails indicated are the minimum considered suitable for the particular purpose outlined.

**JOIST BEARING ON RIBBON**



WHEN a joist bears on a ribbon it is nailed to each stud with five 10-penny nails. When there is a full story above the ribbon, two instead of five nails will be sufficient because ceiling joists will then work against the thrust from the rafters. The ribbon is nailed to the studs with two 8-penny nails at each of the bearing points

**DOOR OPENING**



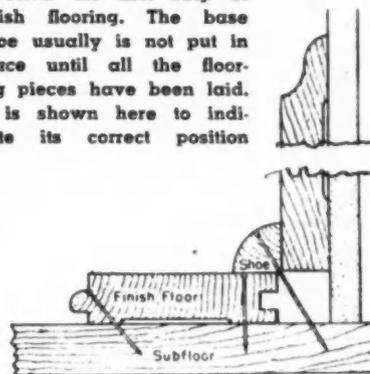
NAILING up door opening in wall or partition. Studs above the opening are toe-nailed to each part of lintel with one 10-penny nail. The long studs are nailed to ends of each part of the lintel with two 10-penny nails. The double studs are nailed together with 10-penny nails spaced 16 inches and staggered as shown. The studs alongside the opening are nailed into the end of the sole plate.

**Nailing Oak Flooring**

Proper nailing is a prime requisite for construction of sturdy hardwood floors that will provide the lifetime satisfaction and serviceability for which they long have been noted.

Inadequate nailing can result in annoying floor squeaks. These tend to detract from the natural advantages of hardwood which have helped establish its almost universal use as flooring in American homes. They also give rise to subsequent maintenance problems which would never exist were the flooring nailed properly at the outset.

LAYING the first strip of finish flooring. The base shoe usually is not put in place until all the flooring pieces have been laid. It is shown here to indicate its correct position

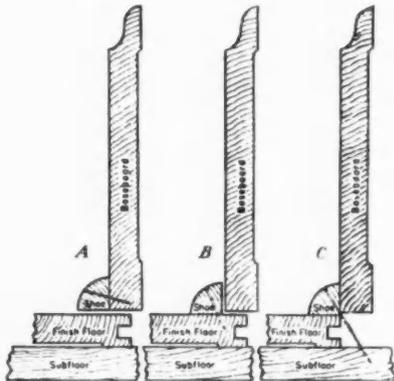


Emphasis on adequate nailing is as important in the subflooring as in the finish flooring itself. Frequently floor squeaks seemingly originating in the finish floor are due to loose subflooring boards. In many cases it is difficult to remedy such squeaks without ripping up sections of finish flooring.

The following nailing procedures recommended by the National Oak Flooring Manufacturers' Association have been found through experience to produce a sound, squeakless strip hardwood floor, provided properly dried subflooring and finish flooring are used.

Square-edge subfloor boards of either 4-inch or 6-inch width generally are preferred. The boards, spaced about 1/4 inch apart to allow for normal expansion, should be face-nailed solidly at each bearing point with two 10d wire nails. All butt joints should rest on bearings. Boards wider than 6 inches usually are not recommended. When employed, they require extra nailing. Three 10d nails, for example, should be used at each bearing in 8-inch boards and four in 10-inch boards. These nailing procedures apply both to boards laid over joists and those installed over sleepers. In the latter type of installation, however, 1/2-inch spacing between boards is recommended.

Tongued and grooved finish flooring always should be toe-nailed and blind-nailed. In toe-nailing the nail is started through the flooring piece where the tongue leaves the shoulder and is driven in at an angle of 45 to 55 degrees to



**THREE methods of placing the first strip of finish flooring and nailing the shoe; (a) shoe nailed to baseboard; (b) shoe nailed to finish floor; (c) shoe nailed to sub-floor. The latter method is generally recommended. The danger in (a) is that a crack might develop between the shoe and the finish floor; in (b) a crack may occur between shoe and baseboard; (c) virtually eliminates those dangers**

the floor. Blind-nailing consists of countersinking the nail with a nail set or a nail. Additionally, the groove edge of each piece of flooring along sidewalls should be face-nailed so that the nails later will be concealed by the shoe base or quarter round. Each succeeding piece in the first course nearest a wall should be toe-nailed and blind-nailed at the tongue end in the direction of the preceding piece. Square-edge flooring, of course, is face-nailed throughout.

For finish flooring 25/32-inch thick, 8d light flooring nails should be used. These preferably should be steel cut casing nails, although wire nails are suitable. Recommended spacing of nails is one every 10 inches in flooring 3 1/4-inch or 2 1/4-inch wide in that thickness. Twelve-inch spacing is adequate for 25/32 x 1 1/2-inch flooring.

When 1/2 x 2-inch or 1/2 x 1 1/2-inch flooring is employed, 6d bright

wire casing nails are best. One nail every ten inches is sufficient. Flooring 3/8 x 2 or 3/8 x 1 1/2-inch takes 4d bright wire casing nails spaced eight inches apart.

The 5/16 x 2-inch and 5/16 x 1 1/2-inch flooring, which comes only in square-edge style, should be applied with 1 1/8-inch barbed wire flooring brads having No. 16 heads. The heads should be countersunk and puttied.

Avoid hammering each piece of tongued and grooved flooring into its final position as soon as it is nailed. After laying three or four pieces, place a short piece of hardwood against the tongue of the outside piece and drive the group up snugly. Repeat the operation after every three or four pieces have been laid.

Methods for nailing plank flooring vary. Generally, however, planks require the same types and sizes of nails as do strip flooring pieces in corresponding thicknesses. Tongued and grooved planks usually are toe-nailed and blind-nailed in the same manner as strips. A good practice is to additionally fasten each plank to the wood sub-floor with two countersunk screws at each end and other screws at intervals of about 30 inches along the length. Sometimes nails instead of screws are used for the lengthwise fastening, although screws generally are preferred because of their superior holding strength. If nails are used, they should be the small-headed type. Whether screws or nails are employed, they should be countersunk and covered with wood plugs glued into the holes. The plugs, usually of walnut, not only conceal the screw or nail heads, but lend decorative effect.

Procedures for applying parquetry, including pre-assembled blocks, vary even more than those for plank flooring. Nowadays nailing often is dispensed with and the parquetry is laid in mastic. When nailing is employed, the types and sizes of nails usually correspond to those used for similar thicknesses of strip flooring. Exact directions for nailing parquetry should be obtained from the manufacturer.

An important phase of installing floors is the nailing of the shoe base or quarter round after the flooring has been laid. It should be nailed to the subfloor at an angle through the crack between the baseboard and the finish floor. This method minimizes the danger of cracks developing as a result of seasonal moisture changes. If the moulding trim is nailed to the baseboard, shrinkage of the wood may cause a crack between the moulding and the finish floor. If nailed to the finish floor, a crack may develop between the moulding and the baseboard.

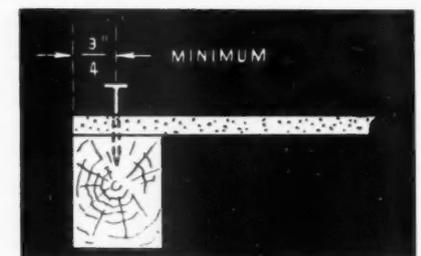
Hardwood flooring nailed in accordance with approved methods can be expected to provide the home owner with sturdy, squeakless floors which will last the life of his house without major repair.

**Asbestos Cement Products**

When a building material is practically everlasting and is capable of outlasting the nails that fasten it, the use of the correct type and size of nails takes on added significance. This is true of asbestos cement products: building board, siding and roofing shingles.

**Asbestos Cement Siding**

Manufacturers of asbestos cement siding find nailing of such



**KEEP nails at least 3/4-inch from the edge**

importance that they supply the nails which will be exposed to the weather. With each square of asbestos cement siding, corrosion resistant face nails are provided in sufficient quantity to fasten 100 square feet.

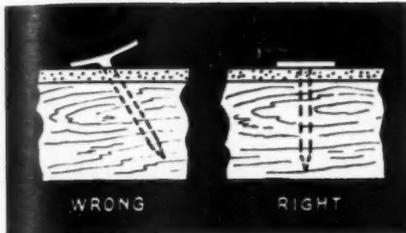
Head nails, which are covered when the upper course of siding units is applied, must be purchased separately by the user. When re-

**NAIL SCHEDULE—Tongue-and-Groove Flooring Must Be Blind Nailed**

Flooring Dimension, in.	Size of Nails	Spacing of Nails	Following flooring must always be laid on a sub-floor, blind nailed:	
25/32 x 3 1/4	8d light flooring nail—wire nail or steel cut casing nail—(use cut nails when possible)	10 in. apart	1/2 x 2 or 1/2 x 1 1/2	6d bright wire casing nails 10 in. apart
			3/8 x 2 or 3/8 x 1 1/2	4d bright wire casing nails 8 in. apart
25/32 x 2 1/4	Same nails as above	10 in. apart	Square-edge flooring, as follows, face-nailed—through top face	
			5/16 x 2 or 5/16 x 1 1/2	1 1/8-in. barbed wire flooring brad 2 nails every 7 in.
25/32 x 1 1/2	Same nails as above	12 in. apart	No. 16 heads countersunk and puttied	

siding, one pound of 2-inch galvanized needle-point nails per square is required for head nailing; over new work, 3/4 pound of 1 1/4 inch nails.

When siding shingles are applied over insulating board sheathing or gypsum sheathing, 1-inch by 3-inch



**NAIL vertical to asbestos cement board**

wood furring strips should be nailed over the sheathing in a horizontal position on 10 1/2-inch centers. The nails which hold the siding should be of sufficient length to pass through the sheathing and extend into the framing members not less than one inch.

Each siding shingle should be secured with two face nails and two head nails. Be sure that at least one nail penetrates each felt backer



USE these nails for asbestos cement board strip. The center head-nail hole is only for unusual conditions.

**Asbestos Cement Roofing Shingles**

Although asbestos cement roofing shingles come in several types—the American method, multiple unit, hexagonal and Dutch lap—the same type of nail, a flat-headed galvanized needle-point one, is used.

For new roofs the 1 1/4-inch size is recommended. These nail heads must be driven down and any high spots or edges drawn down. All tubbish, nails, or chips should be removed before application is started.

When re-roofing over old shingles, 2-inch galvanized needle-point nails are required. All old shingles which are badly curled or warped should be nailed down before the new shingles are put on.

The quantity of nails per square needed for asbestos roofing shingles will vary according to the type of shingle used. Two nails are re-

quired for each shingle. Dutch lap and hexagonal shingles require storm anchors in addition to nails.

**Asbestos Cement Board**

Conditions under which asbestos cement board is used determine the type and size of nails needed for this product. For exterior service, or for inside work where dampness or condensation is likely to occur, a non-corrodible metal or rustproof hot dipped galvanized nail should be used. All nail heads which are exposed to the weather should also be covered with a generous mound

of gray asbestos putty or a high grade caulking compound.

Barbed or ring shanked nails ordinarily hold asbestos board better than other types. When asbestos board is applied to a sidewall or other vertical surface, it hangs on the nail. In such cases medium sized heads are satisfactory. Large headed nails should be used for ceiling applications.

For nailing against sheathing or studding—ordinary interior work—use what is called a hot galvanized asbestos shingle nail. They come, 1, 1 1/4, 1 1/2, 1 3/4 and 2 inches long.

**TABLE NO. 18 — NAILS**

Size and kind of Material	Board measure in ft.	Trade name	Lbs. of Nails Required			Length of nails	No. of nails to sq. bearing
			12" centers	16" centers	24" centers		
1 x 4 Boards and Shiplap	1000	8d common	60	48	30	2 1/2"	2
1 x 6 Boards and Shiplap	1000	8d common	40	32	20	2 1/2"	2
1 x 8 Boards and Shiplap	1000	8d common	31	27	16	2 1/2"	2
1 x 10 Boards and Shiplap	1000	8d common	25	20	13	2 1/2"	2
1 x 12 Boards and Shiplap	1000	8d common	31	24	16	2 1/2"	3
1 x 4 D & M Blind Nailed	1000	8d common	30	24	15	2 1/2"	1
1 x 6 D & M Blind Nailed	1000	8d common	20	16	10	2 1/2"	1
1 x 8 D & M Blind Nailed and 1 Face Nail	1000	8d common	31	27	16	2 1/2"	2
1 x 10 D & M Blind Nailed and 1 Face Nail	1000	8d common	25	20	13	2 1/2"	2
1 x 12 D & M Blind Nailed and 1 Face Nail	1000	8d common	21	16	11	2 1/2"	2
2 x 4 to 2 x 16 Framing	1000	20d common	20	16	10	4"	—
		16d common	10	10	6	3 1/2"	—
		10d common	8	6	4	3"	—
3 x 4 to 3 x 14 Framing	1000	60d common	30	25	15	6"	—
2 x 6 D & M Flooring	1000	20d common	35	27	18	4"	1
2 x 8 D & M Flooring	1000	20d common	27	20	14	4"	1
1 x 4 Drop Siding	1000	7d siding	45	35	—	2 1/4"	2
1 x 6 Drop Siding	1000	7d siding	30	25	—	2 1/4"	2
1 x 8 Drop Siding	1000	7d siding	23	18	—	2 1/4"	2
1/2 x 4 Bev. Siding	1000	6d siding	23	18	—	2"	1
1/2 x 6 Bev. Siding	1000	6d siding	15	13	—	2"	1
1/2 x 8 Bev. Siding	1000	6d siding	12	10	—	2"	1
1/4 x 10 Bev. Siding	1000	7d siding	45	35	—	2 1/4"	2
1/4 x 12 Bev. Siding	1000	7d siding	60	50	—	2 1/4"	3
1/4 x 4 Ceiling	1000	8d Finish	18	14	9	2 1/2"	1
1/2 to 3/4" Ceiling	1000	6d Finish	11	8	6	2"	1
1/4" Finish Lumber	1000	8d Finish	25	12	13	2 1/2"	2
1 1/4" Finish Lumber	1000	10d Finish	12	10	6	3"	2
1 x 3 Flooring, soft wood	1000	8d Floor Brads	42	32	21	2 1/2"	1
1 x 4 Flooring, soft wood	1000	8d Floor Brads	32	26	16	2 1/2"	1
1 x 6 Flooring, soft wood	1000	8d Floor Brads	22	18	11	2 1/2"	1
1/2 x 1 1/2" Flooring, hard wood	1000	4d Casing	13	10	—	1 1/4"	1
1/2 x 2" Flooring, hard wood	1000	4d Casing	11	8	—	1 1/4"	1
1 1/2 x 1 1/2" Flooring, hard wood	1000	7d Casing	27	20	—	2 1/4"	1
1 1/2 x 2 1/4" Flooring, hard wood	1000	7d Casing	20	14	—	2 1/4"	1

1 x 2" Furring on Brick Walls — 100 Lineal Ft. — 20d Cut Nails, Requires 5 1/4 Lbs.	
Base, per 100 Lineal Ft.	8d Finish Requires 1 lb. 16" on Centers.
Sides of Trim, per side of inside trim	{ 4d Finish 6d Finish 8d Finish } Requires about 1/2 lb. Total
48" WOOD LATH, per 1000 lath.	3d Fine Requires 7 lbs.
METAL LATH, per 100 Sq. Yds.	1" Staples, Requires 12 lbs.
or METAL LATH, per 100 Sq. Yds.	1 1/2" No. 12 Hook Head Nails, Requires 15 lbs.
1/2" GYPSUM LATH, per 100 Sq. Yds.	{ 1 1/2" x 13 Gauge — 5/16" Heads Smooth Diamond Points. } Requires 10 lbs.
1/4" PLASTER BOARD, per 100 Sq. Yds.	{ 1" x 13 Gauge — 5/16" Heads Smooth Diamond Points. } Requires 10 lbs.
1/2" WALL BOARD, per 1000 Sq. Ft.	3d Flat Head Nail, Requires 5 lbs.
1/4" WALL BOARD, per 1000 Sq. Ft.	4d Flat Head Nail, Requires 9 lbs.
3/8" WALL BOARD, per 1000 Sq. Ft.	4d Flat Head Nail, Requires 9 lbs.
BATTENS will require 1/2 lbs. 4d Finish nails per 100 lineal feet.	
For various styles of wallboards, see manufacturer's directions for nailing.	

Table above from National Handbook



# TECHNICAL GUIDE for Builders and Craftsmen

## Insulation of Concrete Floors in Dwellings

**A study of concrete slabs showing satisfactory results of proper insulation**

**T**HE Housing and Home Finance Agency sponsored a series of tests conducted by the National Bureau of Standards, Washington, D.C., to ascertain some of the characteristics of concrete floors and to determine what could be done to make them more satisfactory. In brief, their findings indicate that:

At the same temperatures, concrete floors feel colder to the touch than do most other materials used for floor finishes or coverings.

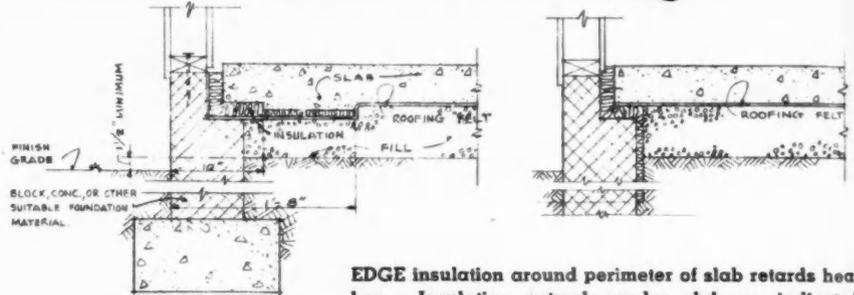
The actual temperature of a concrete floor can be just as satisfactory as that of a floor of any other material.

The actual temperature of a concrete slab on the ground is, or will become in time, somewhat higher than the temperature of an inadequately insulated floor over an unheated crawl space.

The heat loss of slab floors laid on the ground is primarily through the edge; the heat loss through the center of such floors is relatively small.

The heat loss of concrete floors laid over a crawl space is principally through the edge, but the heat loss through the center of such floors is relatively higher than with floors laid on the ground.

Insulating the concrete floor slab at the edge protects it from heat loss to the outside. Since the greatest rate of heat loss is at the perimeter of the slab, the provision of insulation, at the edge and for a



distance under the slab, will retard this loss. This will produce a higher temperature on the upper surface of the slab, and thus increase comfort and decrease fuel consumption in the most efficient manner. Such insulation produces a more even surface temperature over the entire floor.

Insulation at the edge is much more important with concrete floors than with floors of other materials, because concrete conducts heat more readily than other building materials.

Aside from purely structural factors, the important items for consideration are the floor temperature which can be maintained, and the method of insulation to achieve the desired results.

For comfort, the floor temperature should not fall below 60 degrees F. at approximately one foot from the outside wall when the room temperature is maintained at 70 degrees F. The temperature of the floor farther from the outside walls will, of course, be higher. This condition may be accomplished by one or a combination of the following:

(1) By insulating the edges of the concrete slab laid on the

ground and extending the insulation for a distance under the slab around its perimeter.

(2) By insulating the slab edge of concrete floors laid over crawl spaces and insulating the exposed wall of the crawl space.

Insulating materials placed in or near the ground will probably be subject to attack by moisture, mildew, or termites. This, together with pressure from the earth or structural loading will compress or otherwise destroy the effectiveness of the insulating material.

Where a material depends upon coating with asphalt or coal tar pitch for protection, it is necessary to select the coating carefully.

The following table contains information about several materials which might be used to insulate the perimeter of concrete slabs and crawl space walls. The materials are not subject to destruction by termites or insects, nor will exposure to moisture have any appreciable effect upon them, except in the case of the cane or wood fiber boards.

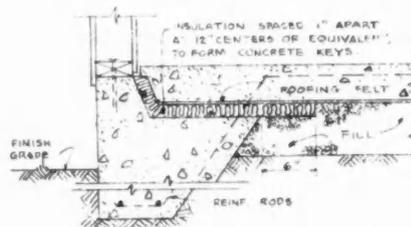
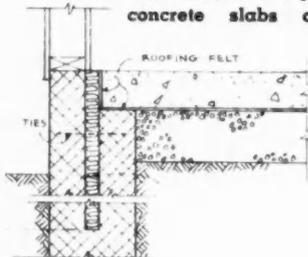
1. Cellular glass enclosing sealed-in gas, such as "Foamglas." Thickness: 2 inches, 3 inches, 4 inches, 5 inches.

2. Glass fibres with plastic binder, such as "Fiberglas," coated or uncoated. Thickness:  $\frac{3}{4}$  inch, 1 inch,  $1\frac{1}{2}$  inches, 2 inches.

3. Cane or wood fibre boards, such as "Celotex." Thickness:  $\frac{1}{2}$  inch,  $\frac{25}{32}$  inch, 1 inch.

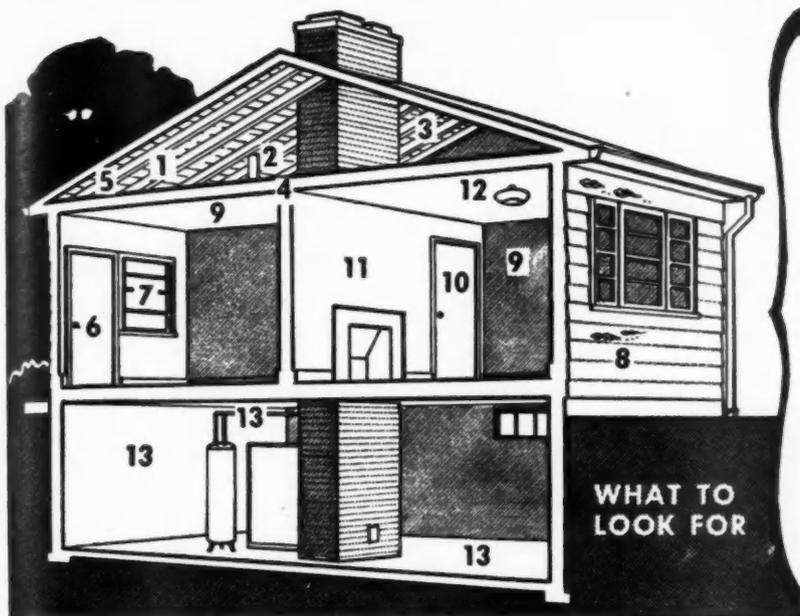
4. Hard cellular rubber enclosing sealed-in gas, such as "Hard Rubber Board" or "Rubatex." Thickness:  $\frac{1}{2}$  inch,  $\frac{3}{4}$  inch, 1 inch,  $1\frac{1}{4}$  inch,  $1\frac{1}{2}$  inch, 2 inches.

**INSULATING the perimeter of concrete slabs on ground**



**FLOATING slab foundation in basement-less houses. See drawing for insulation.**

# Condensation in Homes—Where, Why and What to Do



## ATTIC UNHEATED

1. Frost on underside of roof boards
2. Frost or water on soil pipes
3. Frost or water on nails in roof boards
4. Frost on underside of attic floors over an interior partition
5. Frost on cold surfaces over cornice

## FIRST FLOOR

6. Frost on door handles and hinges
7. Water or ice on windows
8. Paint-peeling
9. Damp spots on walls and ceilings
10. Damp spot in closet
11. Condensation from flue products
12. Damp spots around light fixtures

## BASEMENT

13. Water on cold water pipes, walls and floors in summer

**C**ONDENSATION is most likely to occur in the home at two specific times—within six months after a house is built (excessive moisture is caused by new plaster and fresh concrete), and in excessively cold weather when interior humidity is high.

At the time a home is built, the humidity can be controlled to suit individual preferences. In small, tightly-built homes, the moisture from normal living processes usually provides sufficient humidity for average comfort.

Uncontrolled humidity is likely to cause trouble with any type of construction. Control of excessive humidities varies with the type of structure and the parts of a house, but there are three principal cures which, singly or in combination, may correct condensation troubles. These are: (1) Reduction of interior humidity by: controlling water vapor at source, ventilating, or eliminating deliberately added moisture. (2) Use of membrane vapor barriers to stop flow of moisture through building materials. These include metal foils, certain building papers and paints. (3) Raising inner surface temperatures by insulating (this eliminates visible condensation).

In attics, ceilings and walls, condensation can be avoided by use of vapor resistant building paper, which is applied to the warm side of wall or ceiling (under the finish) when it is constructed. The several types of vapor resistant papers are Duplex, or laminated, consisting of a continuous sheet of asphalt between two sheets of paper; surface-

coated and glazed asphalt-saturated roofing paper; and aluminum or other metal foil (usually paper-backed). Ordinary asphalt roofing felt (paper) and building papers are not good vapor barriers.

The tendency to blame insulation for paint troubles caused by condensation is not fair, since neither the insulation nor the paint is at fault; the blame lies in the lack of control of water vapor.

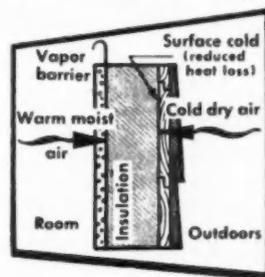
Paint peeling and paint-blistering may result from condensation of moisture within the house, such moisture penetrating the walls until it reaches the underside of the exterior paint. The building materials through which the moisture has passed are porous; the paint is not.

As a result, the moisture gathers under the paint and forms blisters. A membrane vapor barrier will eliminate such difficulties.

Excessive humidities in the house which cannot be controlled at their source can usually be most effectively reduced by ventilation. There is no fixed rule for the amount of air to be used.

A controlled source of ventilation is more satisfactory than uncontrolled ventilation from cracks

around windows and doors. Air brought into the house by ventilation should preferably be heated (except in unheated attics) and the

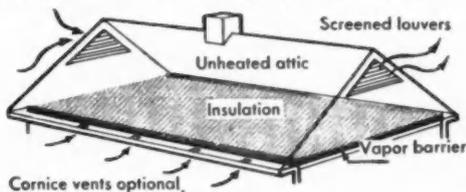


amount controlled and properly distributed.

If insulation is placed on the upper floor ceiling and efficient vapor barriers are installed, attic ventilation is not necessary, except to remove summer heat.

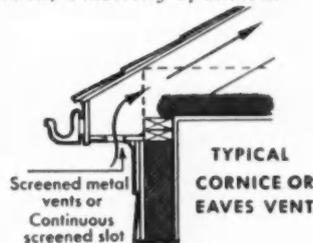
When an attic is to be ventilated, the air change requirements are: For vents—total area of openings should be at least one-fourth square inch per square foot of attic floor space. (Vents should be well distributed.) For mechanical ventilation, one to one-and-one-fourth air changes an hour; or at least six cubic feet per hour per square foot of attic floor space.

*Drawings and data courtesy of Small Homes Council, University of Illinois.*



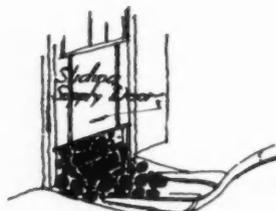
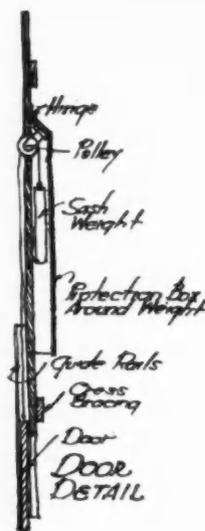
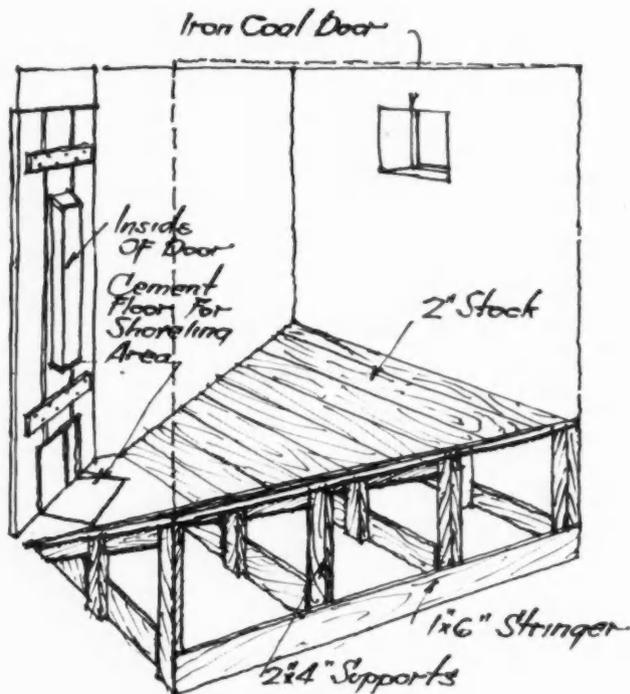
### LOUVERS ON GABLE ROOF

Screened louvers should be at high point of roof.



**TECHNICAL GUIDE**  
for Builders and Craftsmen

Designed for Coal



**T**HIS practical coal bin has a double-inclined wood floor of two inch planking supported on a 2 x 4 framework. This floor slopes at an angle of 30 degrees from the concrete floor level. Thus, gravity keeps coal always available at the supply door. The door is a 15-inch square sliding panel with wood guides. Supply door is held at open position by a simple pulley and sash weight arrangement, with the weight riding in a wood housing on the inside of the main door.

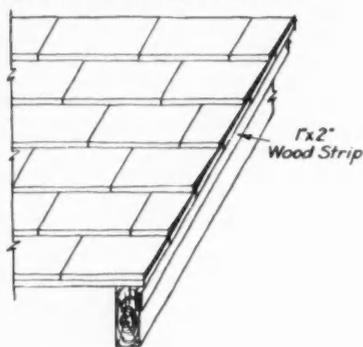
As shown in the detail drawing, the supply door drops into closed position in the sloping chamfered trough that is formed in the cement floor. This trough makes it easy to scoop up full shovels of coal, with no scattering and with less effort.

The coal bin described here is designed by American Standard for use in new or remodeled houses. Through the use of the sliding door it is practically dirt- and dust-proof.

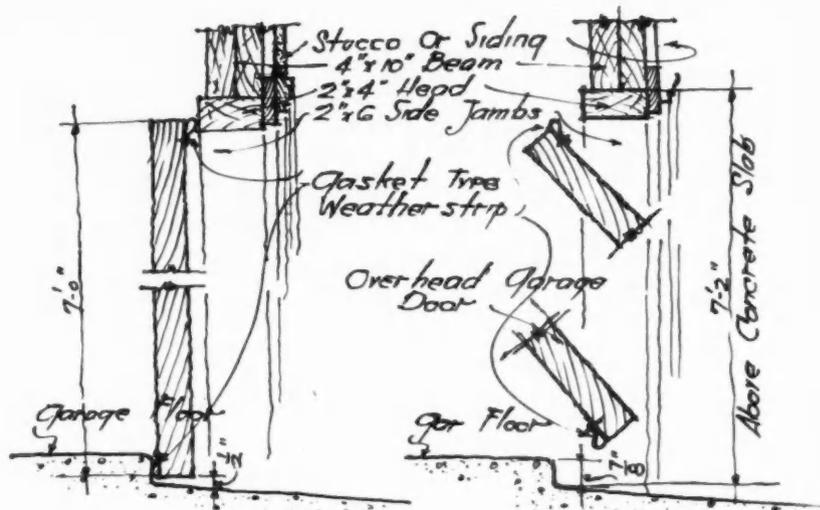
HOW TO DO IT • HOW TO DO IT

**Gauge for Use in Applying Shingles**

A SIMPLE and effective method is used herewith to keep the outer edge of roof shingles uniform.



A 1 x 2 inch strip of reasonable length is temporarily secured to the upper edge of fascia board with small finish nails. Shingles are placed flush with the outer edge of strip. The strip can be easily removed and moved to a new position as the shingling progresses.—A. N. Nelson, Kansas City, Mo.



**How to Weatherstrip an Overhead Door**

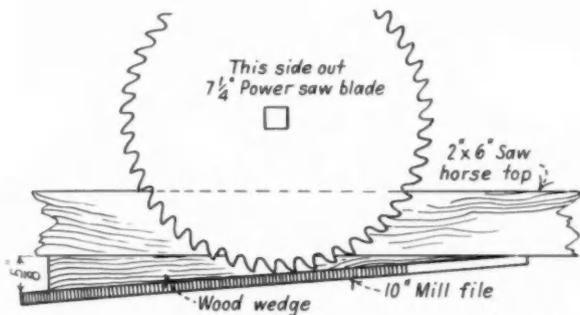
**T**HE weatherstripping of an overhead door is often a problem, since nearly all overhead door hardware sets have metal weatherstripping on the sides only.

To stop the draft at top and

bottom, hang the door before the concrete floor is placed. Make a 3/8-inch rabbet for door to strike against at bottom. Tack weatherstrip on top and bottom.—J. G. Caldwell, San Mateo, Calif.

HOW TO DO IT • HOW TO DO IT

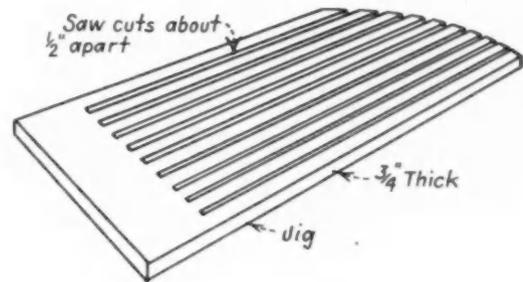
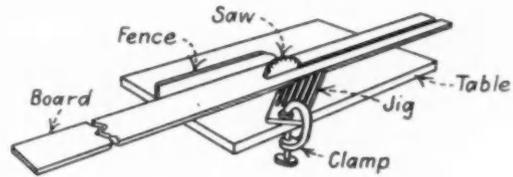
HOW TO DO IT \* HOW TO DO IT



**How to Make a Power Saw Jointer**

**I**N SHARPENING a saw blade, the most important consideration is to be sure that the blade is kept perfectly round.

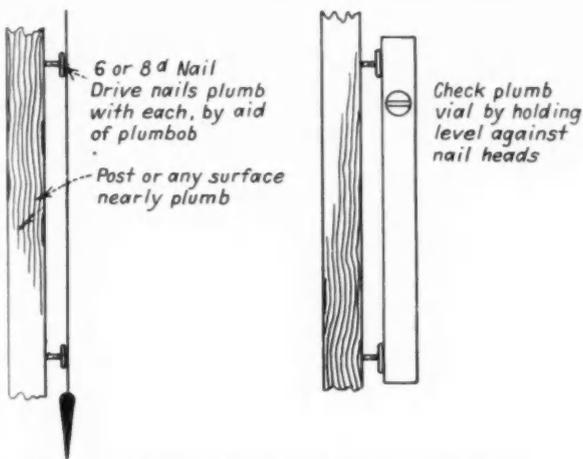
The following method has proved very effective: Fasten an old mill file under a saw horse. Force saw to cut through the horse, carefully sliding it ahead until saw establishes a very slight contact with the file.—Submitted by J. G. Caldwell, San Mateo, Cal.



**How to Secure Board to Saw Table**

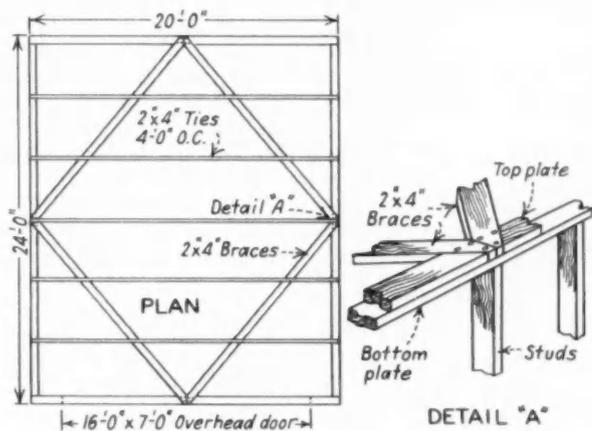
**H**ERE is an idea for a jig which can be used on a circular saw table when the length of the boards or lattice strips being cut prevents the operator from getting close to the table. When clamped to the table the jig acts as a third hand, squeezing together and holding the stock tightly against the fence.—Submitted by Warren Heartquist, Malden 48, Mass.

HOW TO DO IT \* HOW TO DO IT



**Method of Checking Vial on Level**

**A** SIMPLE method of checking the plumb vial in a spirit level: Drive two 6d or 8d nails into any nearly plumb wall or post, at a distance apart of about two inches less than the length of the level. Set nail heads plumb with each other by use of plumb bob. Then check plumb in level on the nail heads.—Submitted by Claude O. Campbell, Jacksonville, Fla.



**How to Brace Front of Two Car Garage**

**H**ERE is an easy way to brace the front of a garage: After the walls of the garage have been raised, plumb corners and straighten walls. Do not double plates. Cut four braces as shown and spike securely. After sheathing is on walls, remove temporary braces.—Submitted by J. G. Caldwell, San Mateo, Cal.

HOW TO DO IT \* HOW TO DO IT



## TECHNICAL GUIDE for Builders and Craftsmen

### Short Cut for Estimating Cement Blocks

**H**EREWITH a simple and practical method of estimating the number of concrete blocks required for a foundation. Example: Basic block size is 8 x 8 x 16 inches. Building is 24 x 26 feet at foundation. The perimeter of house totals 100 feet. One hundred divided by 4, a unit of measurement, equals 25.

Twenty-five by three, the number of blocks to each four feet of wall, or unit of measurement equals 75—this is the number of blocks required for one perimeter course.

Seventy-five by ten, the number of rows required, equals 750 blocks—the total number required for a seven foot high basement. From this total deductions should be made for door and window openings.—Walter A. Styles, Collingswood, N.J.

### How to Make an Effective Anchor Bolt

**T**HE PROBLEM of anchoring applied members to a concrete wall can be solved by driving a bolt with wedge into a hole drilled in the concrete. The method is as follows:

Saw the end of the bolt opposite the head a depth of about two inches. Start the edge of metal wedge into the groove. Insert bolt with wedge into the drilled hole. Then drive bolt into hole, forcing wedge into groove, thus spreading the shanks of the split bolt. This secures bolt rigidly to concrete wall, holding applied members in position. Rich mortar should then

be forced around bolt.—D. C. Robinson, Altamont, N.Y.

### How to Clean the Steel Square

**A** CARPENTER'S steel square which has become rusty from use in damp or wet weather can be effectively cleaned by rubbing the entire square with dry cement.—Samuel J. Bartuck, Scranton, Pa.

### How to Score Walls for Tile

**A** TROWEL is recommended by manufacturers for roughening the paste in the application of tile board. If a trowel is not on hand, the feather-edge of a common wood shingle serves the same purpose. The feather-edge of a wood shingle has all teeth.—Samuel J. Bartuck, Scranton, Pa.

### How to Apply a Level to Old Buildings

**I**NSTEAD of the use of the straight edge and level in straightening old buildings such as barns, and sheds, the following method is recommended:

Place two posts approximately four feet high six feet apart at about three rods from the building, depending upon the size and height of the building. On these posts fasten a board with the top edge straight and level. It will then be possible to look over this board and scan the entire side of the building. This system saves much time required for leveling and is entirely satisfactory for most jobs of this kind.—H. B. Johnson, Rochelle, Ill.

### How to Drive a Nail in Knotty Wood

**A** SUGGESTION for driving nail in hard or knotty wood when no soap or wax is handy: Rub the nail in your hair. This will spread enough oil on the nail to make it drive much more easily.—H. B. Johnson, Rochelle, Ill.

HOW TO DO IT • HOW TO DO IT

## Built-in Features for the Kitchen

By R. J. Alexander

**I**N THE PLANNING of a new home the needs of the kitchen are given first consideration. This is a room around which all household activities revolve; therefore, if the completed house is to be judged as being successful, all the basic requirements of this room, plus features that add to its livability and attractiveness, need to be incorporated.

In designing today's kitchen the architect, owner or builder have at their disposal a large selection of products that add color and interest to this room. Linoleum in either solid color or gay patterns are used for floors, counter tops and walls. Rubber and cork tiles used for the same area are equally effective and durable. Tiles of metal, clay and plastic in a large assortment of colors are also used for floors and splash-boards. Various types of wall boards finished or unfinished can also be obtained. In the case of some of the wall surfaces, bright metal mouldings, or metal with colored linoleum inserts for edgings, bindings, corners and caps are used.

If the space permits, a number of special built-in features may be included in the kitchen, such as a

broom or utility closet, cabinet or storage space for toasters, mixers, serving trays, storage for soaps and other cleaning supplies.

Cabinets for storage of the basic items may be made on the job or bought from the manufacturer. They come in a variety of sizes, and can be arranged to fit nearly any space or requirement. Cabinets may be obtained either finished or unfinished in metal or wood. Most of the manufactured cabinets include special compartments for trays, metal lined drawers, silver and cutlery drawers and spice racks. If the cabinets are made on the job, materials should be kiln dried, parts should be glued together, hardwood drawer guides and stops installed, and the workmanship should be the best available.

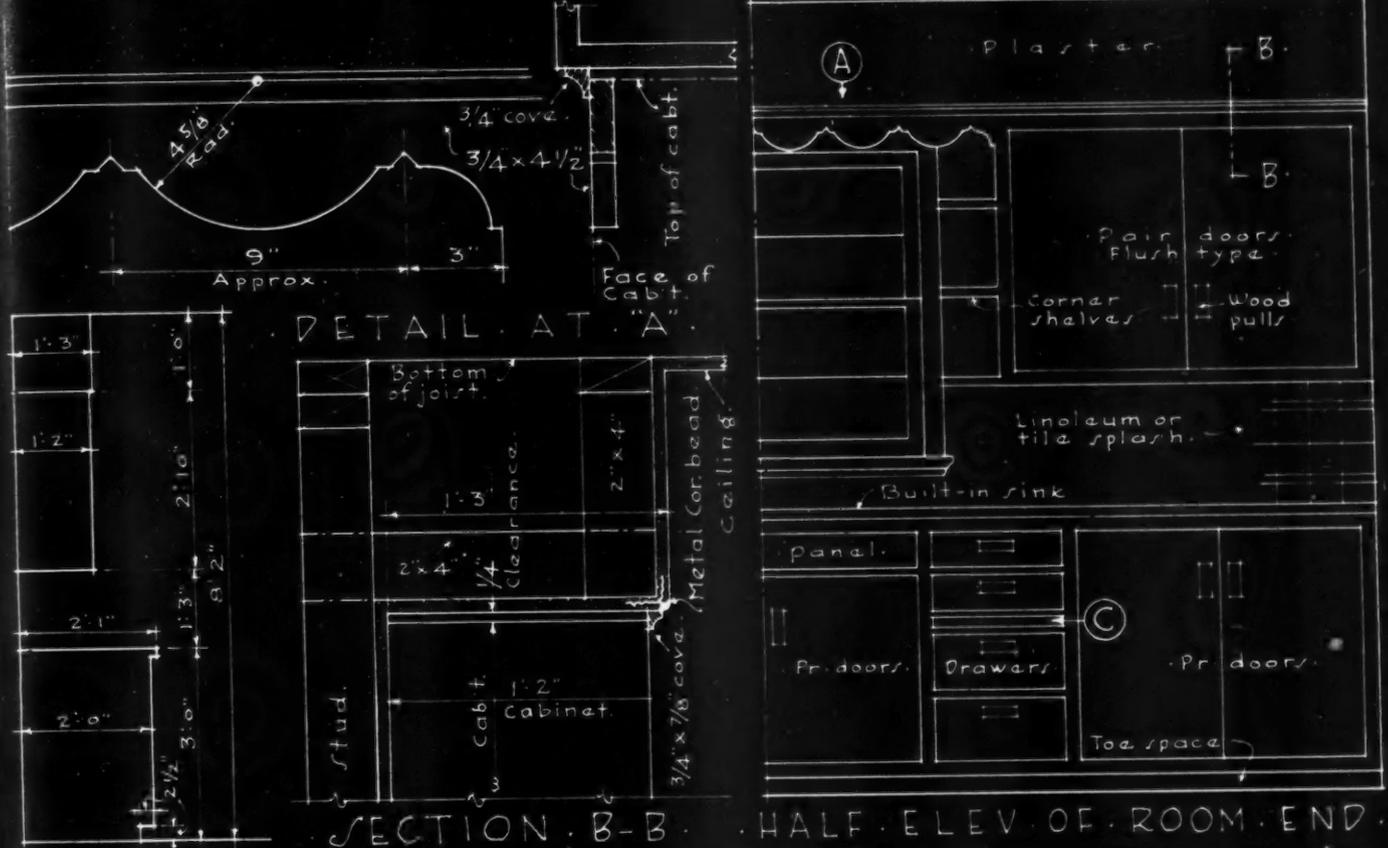
Other features to be considered in the layout of a kitchen are electric dishwasher and garbage disposal units. Location of the sink and refrigerator must also be considered in planning this room.

The severe "operating room" look in kitchens is no longer popular; women prefer a colorful, homelike room, expressive of their taste and individuality.

HOW TO DO IT • HOW TO DO IT

# AMERICAN BUILDER'S BETTER DETAIL PLATE

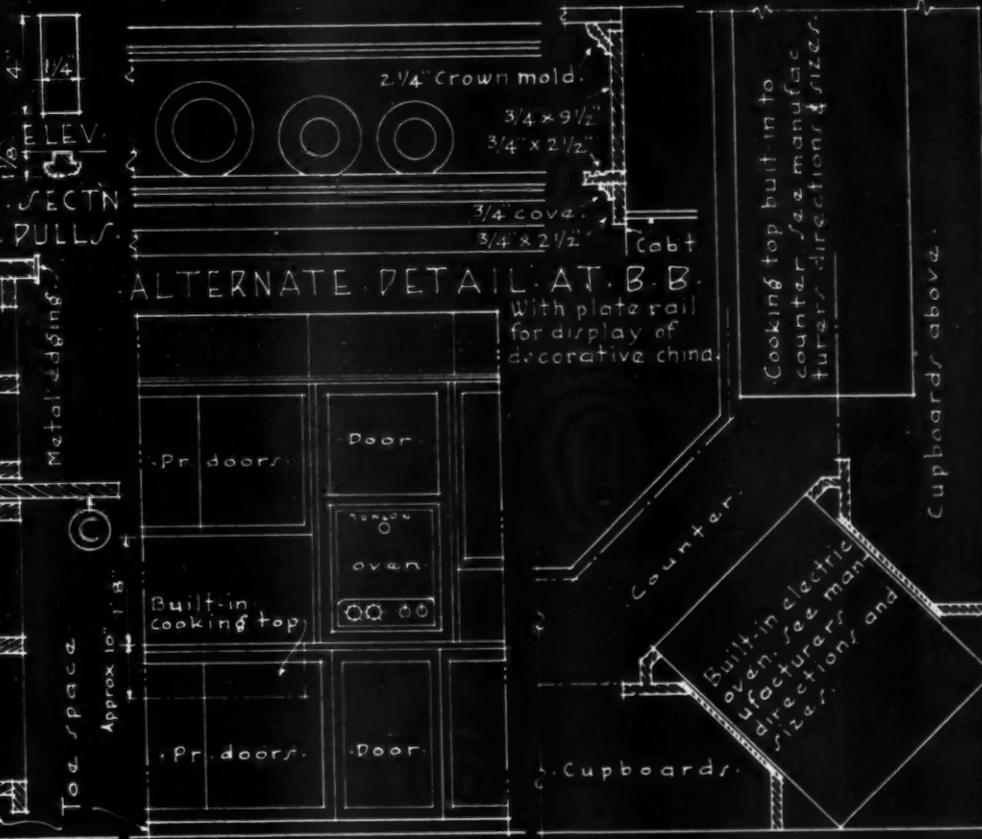
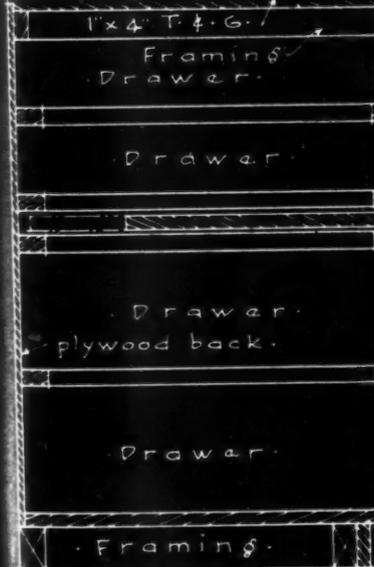
## NO. D-53. DETAILS OF KITCHEN FEATURES. R. J. A. 1949



### SUGGESTED DIMENSIONS.

Note: Pull-out board "C" to be at proper height for seated worker.

Linoleum or tile splash. Coved. Linoleum top.



SECTION THRU DRAWER UNIT. ELEVATION OF CORNER UNITS. PLAN OF CORNER UNITS.

# DEALER REVIEW



## NEWS OF NRLDA AND STATE AND REGIONAL ASSOCIATIONS

### Dealer State and Regional Conventions Continue to Draw Record Attendance

**D**EALER state and regional associations throughout the United States continued their series of annual meetings during February and March. Attendance trends are upward and a marked increase in interest in both the business sessions and exhibits is apparent.

Discussions of merchandising techniques, methods of cutting expenses in business conduct and in building operations and federal and state legislation are especially interesting to dealers this year. The threat of public housing legislation by the federal government invariably draws lengthy resolutions from the committees and the resolutions are adopted enthusiastically by the membership.

Secretaries and other executive officers of the dealer associations who stage these conventions with the help of dealer committees all find each year's job entails more detail and hard work preceding the meetings. When the conventions opened this year they also found themselves, in many instances, faced with record attendance which crowded every facility. Frequently many attending conventions were unable to attend annual banquets and entertainments because of a sellout of tickets long before all those who wanted to attend were able to obtain reservations.

Highlights of the meetings conducted during the latter part of February and early part of March follow:

#### Middle Atlantic

A clinic for management under the direction of Pennsylvania State College was combined for the first time with a convention of the Middle Atlantic Lumbermen's Association at the association's 57th annual meeting February 9-11 at Philadelphia.

Claude G. Ryan of the John D. Bogar Lumber Co., Lancaster, Pa., was elected president of the association for 1949. G. Hunter Bowers, William D. Bowers Lumber Co., Frederick, Md., is the new

vice president and Ray E. Latshaw, Royersford, Pa., was named secretary-treasurer.



CLAUDE G. RYAN

Moderators for the dealer-management clinic were Joseph F. O'Brien, professor of public speaking and Paul R. Beall, associate professor, department of speech, both of Pennsylvania State College. They were assisted by a panel of experienced lumbermen and representatives from allied industries.

Directors installed at the convention for the current year were Robert A. Jones, Philadelphia, executive director; Elias W. Nuttle, Nuttle Lumber and Coal Co., Denton, Md., dealer director to the National Retail Lumber Dealers Association; and Charles D. Hummer, Hummer and Green Co., Chester, Pa., dealer director to the U.S. Chamber of Commerce.

Total registration at the meeting of the Middle Atlantic group—which is comprised of Pennsylvania, New Jersey, Maryland, Delaware and the District of Columbia—was 1,360, of which 475 were Association members. There were 92 exhibit booths.

#### Mountain States

Members of the Mountain States Lumber Dealers Association re-elected the entire slate of 1948 officers at their 56th Annual Convention and Building Materials Ex-

### The President's Column



By C. B. SWEET  
President, NRLDA

The Washington pot continues to boil. The bureaucratic cooks are attempting to come up with a dish for the American people, in which they have thrown everything but the kitchen sink. There has been a dash of public housing with its proposed expenditure of some 20 billion dollars, a pinch of socialized medicine to cost additional billions, and a sprinkling of continued farm support at an unknown cost. The poor misguided souls are still under the impression that they have a mandate, although it hardly seems fair to consider the wishes of only 25 per cent of the eligible voters as a mandate.

The race continues to see who can take the most away from the haves to give to the have-nots. Surely sometime, someone in government will discover that neither an individual nor a government can continue to spend beyond his or its income. It should be a sobering thought to realize that the present tax take by Federal, State and Local governments is now more than 25 per cent of the national income; and that one out of eight workers, instead of being productive, is on the public's payroll.

Sooner or later, someone other than capital must start giving. Labor must give more in productivity; it must give up its rocking chair money while out on strike. The farmers must take less in the way of parity. Management and business in general must give more of its time and "know how"

(Continued to page 248)

position February 9-11 at the Shirley-Savoy hotel, Denver, Colo. Despite the almost impassible condition of roads in certain areas, the attendance was almost 1,000, only slightly under the all time high of 1948.

The officers retained for 1949 are W. P. Harley, J. C. Baldrige Lumber Co., Albuquerque, N.M., president; and C. A. Wangberg, Crissley and Fowler Lumber Co., Colorado Springs, Colo., vice president.

Re-elected as directors are R. B. Allen, Home Lumber Co., Portales, N.M.; A. W. Edwards, Cheyenne Lumber Co., Cheyenne, Wyo.; R. E. Nutting, Littleton Lumber Co., Littleton, Colo.; C. C. Phillippe, Thompson Lumber and Hardware Co., Basin, Wyo.; J. F. Scott, East Denver Lumber Co., Denver, Colo.; W. J. Truitt, Platte Valley Lumber Co., Sterling, Colo.; and H. I. Williams, Durango Lumber Co., Durango, Colo. J. V. Smith of Denver is secretary-manager.

The convention committee consisted of J. F. Scott, chairman, H. H. Hast, W. E. Kellogg, Jr., G. C. Sullivan, S. R. Trythall and C. A. Wangberg. Mrs. R. F. Frantz was chairman of the hostess committee.

### Virginia

With a registration of 450 the Virginia Building Material Association chalked up a new record in attendance at the 23rd annual convention in the John Marshall Hotel, Richmond, February 17 and 18.

S. Lester Burrough, Tappahannock Supply Co., Tappahannock, was elected president. Other officers are: Maurice R. Large, Farmville Manufacturing Co., Farmville; Wm. N. Neff, Vance Supply Company, Abingdon; L. R. O'Hara, Yorktown Ice & Cold Storage Co., Yorktown; Ernest L. Whitehurst, Whitehurst-Wilbur Co., Norfolk, all vice presidents; Craig Ruffin, Ruffin & Payne, Inc., Richmond, treasurer. Earl R. Hunt, Arrington Lumber Co., Norfolk, was named dealer-director to the National. Harris Mitchell is the secretary.

### Nebraska

Attendance at the 1949 convention of the Nebraska Lumber Merchants Association set a new record when approximately 1,400 persons attended the 58th annual event at the Omaha city auditorium, February 23-25.

Carl Johnson of the Home Lumber Co., Shubert, was elected president and Paul Ely, Ely-Hoppe Lumber Co., North Platte, vice

president. Directors are elected at annual spring meetings held throughout the state.

One hundred and one firms exhibited products and, because of lack of space, it was necessary to turn down 46 others.

### Wisconsin

Ralph E. Nuzum of the Nuzum Lumber Co., Viroqua, Wis., was elected president of the Wisconsin Retail Lumbermen's Association at the group's 59th annual convention held in Milwaukee in February. He succeeds C. K. Arp of Elkhorn, who served two terms in the office.

New directors for 1949 are Kneale Lindsay, Little Wolf Lumber Co., Manawa; J. C. Hamilton, Crossett Lumber Co., Tomah; and



RALPH E. NUZUM

A. D. Krause, American Lumber and Manufacturing Co., Green Bay. B. H. Roderick of the Roderick Lumber Co., Brodhead was re-elected a director.

Registration at the 1949 convention reached 3,018. One hundred and sixty-five exhibitors occupied 172 booths. All business sessions in the auditorium were filled to capacity and 900 attended the convention banquet at the Schroeder hotel.

### Indiana

Delegates to the annual convention of the Indiana Lumber and Builders Supply Association at the Murat Temple in Indianapolis in March elected Charles Pease of Terre Haute as president for 1949. W. I. Brunton, Scottsburg, was named vice president and R. W. Slagle, Indianapolis, secretary-treasurer.

Registration at the meeting reached the all time high of 3,692. There were 179 exhibits. Two floors were used, providing wider aisles and larger booths than in previous displays.

A new feature of the convention

was an exhibitor-dealer theater party at the Murat theater, which



CHARLES PEASE

was attended by 1,500. The meeting closed with a banquet and dance at the Claypool hotel.

### North Dakota

J. P. Smith, Valley City, was elected president of the North Dakota Retail Lumbermen's Association at the final session of the 41st annual convention March 2 at Fargo. He succeeds John Roethlisberger of Bismarck, the 1948 leader.

The new vice president is A. E. Tuftendahl of Crosby. Walter Will, of Stanley, was named to the board of directors.

Roethlisberger opened the convention with the annual president's address, reviewing the work of the Association in 1948. He predicted that the building industry would continue its present production rate of one million homes a year for the next decade, and that 1949 would break all records for the construction of farm and rural buildings.

Fargo was again selected as the site of the 1950 convention.

### NRLDA Prepares Pamphlets For Use By Dealers

Three pamphlets for use in local public relations programs against public housing have been published by the National Retail Lumber Dealers Association and are being made available to associations and dealers at a nominal cost.

"No Vacancies," a four page reprint from *Reader's Digest*, is a condensation of a story about the effect of rent control in France, where construction of rental homes has been at almost a standstill since World War I.

A veteran's viewpoint on "getting something for nothing" from the government is expressed in the

(Continued to page 248)



# New Products

## Offered by Manufacturers

### ALUMINUM SCREEN AB4944

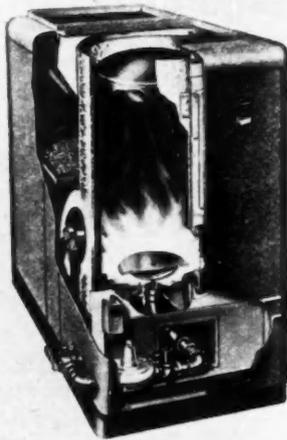
All aluminum "frameless tension" screen for double hung windows can be quickly installed by home owner without tedious fitting. Screens are snapped on upper



blind stop and drawn taut at sill with thumb screw. Tension is maintained on sides by five strand salvage edge, and "free floating" sill bar at bottom corrects out-of-square sills. Keystone Wire Cloth Co., Hanover, Pa.

### GAS FURNACE AB4942

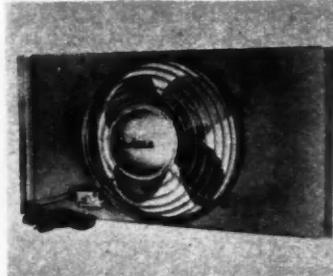
Available in three sizes for small and medium-sized homes, Timken Silent Automatic gas-fired winter air conditioning furnaces have output ratings of 60,000, 80,000 and 107,000 B.T.U. at plenum. Each unit consists of clog-proof monopart burner,



furnace and radiator assembler, blower, air filter and automatic humidifier (extra optional). Furnace and radiator are of heavy hot-rolled steel. Cabinet construction is auto-body steel, finished in silvertan baked enamel. Timken Silent Automatic Div., The Timken-Detroit Axle Co., Jackson, Mich.

### WINDOW FAN AB4943

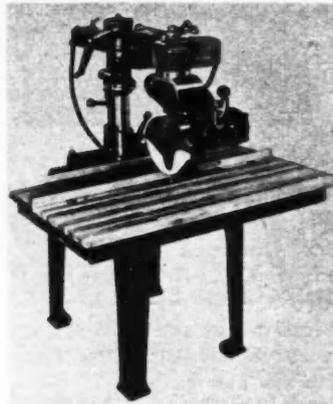
Chelsea Type WPJ fan is portable, direct drive window fan for ventilating small areas. For use in homes, apartments, offices, hotels, hospitals and conference rooms. Fan fits into upper panel of standard window and permits the raising and lowering of the upper sash at will. Adjustable from 25 to 36 inches, it is furnished complete with



pull-chain switch and plug-in extension cord. Finished in baked enamel. Air delivery, 1,000 C.F.M. with 1/25-H.P. motor operating at 1550 R.P.M. Chelsea Fan & Blower Co., Inc., 1206 Grove St., Irvington 11, N. J.

### RADIAL SAW AB4945

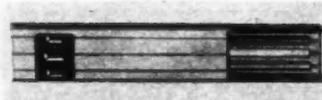
Walker-Turner "900" series radial saw features Centr-Pivot offset yoke that permits all cuts to be made in convenient table area. For cutting wood, plastic, and similar materials, capacity is 3/8-inches, with



9-inch blade. Motor has two and one-half times overload capacity. Saw rips to center of 48-inch panel. Table is 46x24 inches, of laminated hard maple. Two models are RA901 and RA902, both 1 1/2 H.P. single phase. Walker-Turner Div., Kearney & Trecker Corp., Plainfield, N. J.

### RECEPTICAL STRIP AB4940

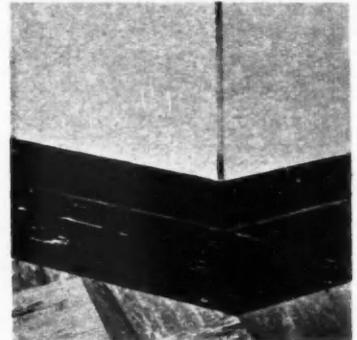
Floor and table lamps can be turned on or off from a wall switch with new multi-outlet plug-in strip. With assembly, mounted on baseboard or as chair-rail molding, electrical equipment can be selectively con-



trolled at either wall or equipment. Three No. 12 AWG copper conductors are factory-wired into strip. Conductors serve three-slot receptacles spaced at 18-inch intervals along 24-gauge steel assembly. Eliminates major amount of behind-the-wall wiring. National Electric Products Corp., Chamber of Commerce Building, Pittsburgh 19, Pa.

### PLASTIC COVING AB4946

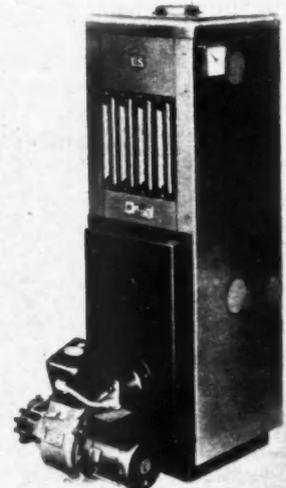
Vinyl plastic set-on-base coving is in one-piece lengths of 100 feet. Average installations can be made with no dirt-catching seams. Pre-formed corners are unnecessary. High gloss finish does not catch dirt readily and can be dusted off easily. Four inches high, it is usable with all types of hard



surface flooring, such as rubber and asphalt tile linoleum. It can be applied to any type of wall with ordinary floor covering adhesives. Fremont Rubber Co., 164 McPherson Highway, Fremont, Ohio.

### AUTOMATIC WATER HEATERS AB4947

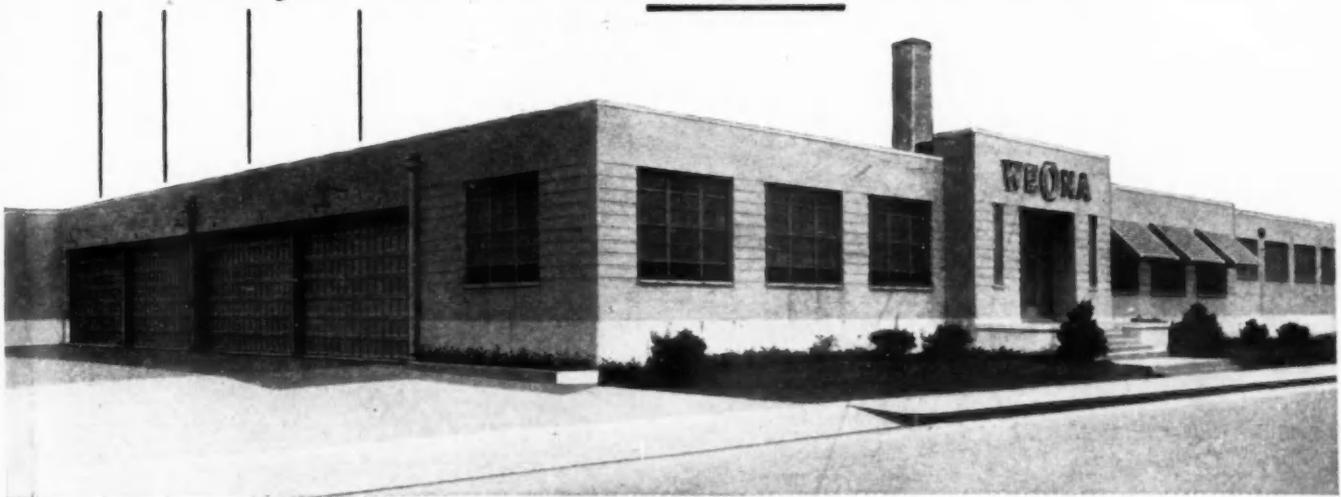
U. S. Automatic Gas-Fired Water Heaters and U. S. Automatic Oil-Fired Water Heaters are available in commercial sizes for supplying the hot water requirements of hotels, apartments, restaurants and stores. Can be used alone, or connected with hot water storage tanks. Oil-fired unit has heat



output of 93,000 B.T.U.'s per hour. Capacity of gas-fired units range from 36,000 to 126,000 B.T.U.'s per hour. Oil-fired unit requires no more floor space than a chair, and includes automatic operation, matched U.S. boiler-burner unit, air-cooled base, glass wool insulation and maroon baked enamel covering jacket. Oil-fired unit is illustrated here. United States Radiator Corp., 300 Buhl Building, Detroit, Mich.

(Continued to page 168)

# If the job calls for Rugged Service



## You're right with Ro-Way

• Many a commercial or industrial installation of overhead type doors calls for *extra* strength, *extra* power for smooth, easy operation under heavy duty service.

That's why Ro-Way Doors are built with an extra margin of sturdiness and power.

In sizes of 200 square feet or more, for instance, bottom rails are made from 8-inch stock—with meeting rails, end stiles and muntin bars proportionately heavy. Sections are reinforced with U-Bar stiffener or U-Bar truss. Friction-reducing track is extra heavy—3 inches wide and  $\frac{1}{8}$  inch thick. Ball bearing rollers are husky  $2\frac{3}{4}$  inchers with double-thick tread. Two—or four—spring hookup is power-metered to the weight of the door.



And every door is every inch a Ro-Way—completely designed, engineered, and built by Ro-Way. Even the hardware is fabricated in Ro-Way's own plant, and Parkerized and painted *after* fabrication.



That's why we say—You're Right with Ro-Way for every overhead type door requirement—commercial, industrial or residential.

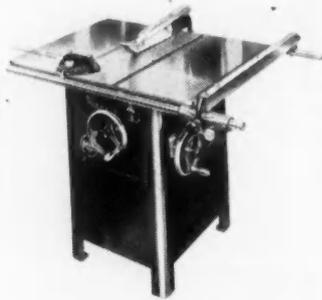
*There's a RoWay for every Doorway!*

ROWE MANUFACTURING COMPANY • 750 Holton Street, Galesburg, Illinois, U. S. A.

(Continued from page 166)

**TILTING ARBOR CIRCULAR SAW****AB4917**

The compact Delta-Milwaukee 8-inch tilting arbor saw, fully adjustable, has 2-5/16-inch deep cutting capacity. Maximum cut at 45 degrees is 1 5/8 inches. Dado cuts up to 13/16 inches wide can be made. In operation, doing 3,800 RPM with a 1,725 RPM motor, 8-inch blade provides a total of 7,800 surface feet per minute. Table is 25 inches deep, 33 inches wide. Table in-



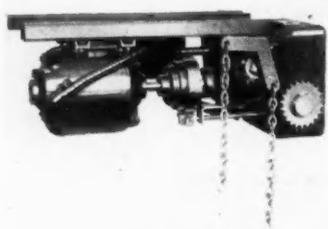
sert provides full support to work. From front edge of table to center of blade, distance is 15 5/8 inches. Blade guard rides with work. Can be run by any standard 3/4 or 1/2-H.P., three phase, single phase or DC motor, for all common voltages and frequencies. Delta Manufacturing Div., Rockwell Manufacturing Co., American Building, Chicago, Ill.

**ASBESTOS-CEMENT BOARD****AB4907**

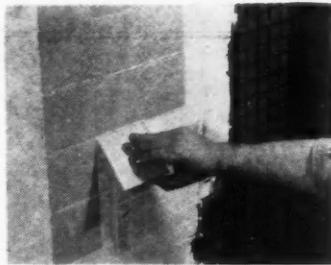
Asbestos Flexboard is now available in 4x4 foot size. Each package contains two sheets, weighing approximately 40 pounds per package for 1/8-inch thickness and 56 pounds for 3/16-inch thickness. J-M asbestos-cement board is applicable to either curved or straight surfaces, and may be used on exteriors or interiors. Fire, weather and wear-resistant. Also available in plain sheets, 4x8 feet by 1/8-inch, or 3/16-inch, and in tile scored sheets 4x4 feet by 1/8-inch thick. Johns-Manville, 22 E. 40th St., New York, N. Y.

**ELECTRIC GARAGE DOOR OPERATORS****AB4915**

Model MR Barcol Overdoor operators are designed for commercial, industrial, public and residential doors where momentary contact control is desired. Motors are of the "instantaneously" reversing type. They can be furnished in 110 volt, 60 or 50 cycle, single phase AC, and in 220 or 440



volt, 60 cycle, three phase AC. Motor size furnished depends on door to be handled. A centrifugal clutch allows motor to come up to speed before starting load, and clutch will slip when normal driving load is exceeded by more than a reasonable amount. This affords protection to door, automobile and persons. Handles door sizes up to 400 square feet. Barber-Coleman Co., Rockford, Ill.

**WALL TILE INSTALLATION MATERIAL****AB4904**

Grout-adhesive, for installing Veos wall tile, allows the tile to be installed with one material and in one operation. Material is spread on foundation board base, and when tile is applied it forces enough of the material between the joints for pointing. Provides strong adhesive qualities. Low in shrinkage, it eliminates hairline cracks, reduces water absorption. Grout lines can be pointed by using the finger. Armstrong Cork Co., Lancaster, Pa.

**BUILDING PAPER****AB4916**

Skufpruf building paper roll weighs 60 pounds, is 10 feet wide and 100 feet long. Easy to handle, it is made of an unbroken sheet of Richkraft Skufpruf, heavy duty paper. Strong, waterproof, scuffproof, shrink-resistant. Material is lightweight. The Richkraft Co., Builders Building, Chicago I, Ill.

**STEEL CASEMENT WINDOWS****AB4927**

Steelcraft steel casement window incorporates sections 1/4-inches-deep that permit double glazing with Thermopane, Twin-dow, or other types of insulating glass. Sections are made of cold rolled steel,



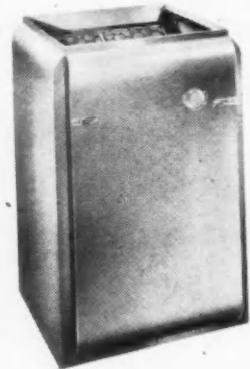
offering smooth base for finishes. Double weathering contact all around frame and ventilator. Corners mitered and butt welded. Sections designed with ample room at jamb for attaching screens and storm windows. The Steelcraft Manufacturing Co., Rossmyrne, Ohio.

**SMALL PAINT MIXER****AB4909**

Red Devil No. 31 Junior paint mixer may be conveniently carried to the job in tool box or kit. Useful in handling cans of one gallon or less. Driven by electric fractional horse power motor which operates on 110 volt, AC current. Mixing parts removable. Splash plate prevents material in can from getting out of hand. Red Devil Tools, 130 Coit St., Irvington 11, N. J.

**GRAVITY TYPE WARM AIR FURNACE****AB4929**

Lau Package Blower-Filter unit circulates warm, dust-free air and maintains evenly balanced temperatures throughout the home. Center-suspension blower wheel provides air delivery. Made of heavy gauge steel. Large access door permits



easy servicing of motor, belt or filters. Door may be left off during summer operation. Cold air return can easily be fitted to top of unit. Casing finished in surf green baked enamel. The Lau Blower Co., Dayton 7, Ohio.

**ELECTRIC DRILL****AB4938**

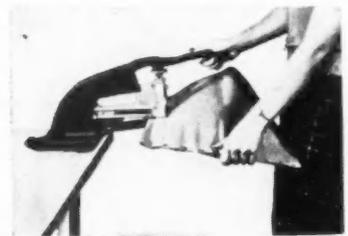
General purpose 1/2-inch capacity Stanley electric drill, No. 112, is compact and light-weight. Chuck spindle offset permits operator to drill in close quarters without removing pipe or spade handles. Other features include alloy steel gears, thrust ball bearing on spindle, strong aluminum alloy housing, automatic release safety switch with locking device and Jacobs three-jaw chuck. Bench stand No. 524, on which No. 112 can be mounted to make convenient drill press, is available. Stanley Electric Tools, New Britain, Conn.

**UTILITY STANDS****AB4926**

For masons and plasterers as mortar board stands. Same design available in two sizes. Larger stand is ideal as a portable table for mixing paints and holding paint pots, brushes and tools. Smaller stand collapses to 30x30x1 1/2 inches; the larger to 30x45x 1 1/2 inches. Adjustable to various heights by changing lengths of the two chains extended between the two sides. Wilson-Albreicht Co., Inc., 3565 Wooddale Ave., Minneapolis 16, Minn.

**HEAVY DUTY STAPLER****AB4935**

Heller engineered hand-side stitcher uses wide or extra wide staples in several leg lengths from 1/4 to 9/16-inch. May be



bolted in any convenient position to bench, work table or packing table. Long actuating arm for strong leverage. The Heller Co., 2149-M Superior Ave., Cleveland 14, Ohio.

(Continued to page 170)

# STRONGER, MORE DURABLE GARAGE DOORS AT LOW COST

**... Installed by Thousands of Builders Every Month**



## Save Money 3 Ways!



- 1. LOW FIRST COST**—the result of standardization on 3 models—and large scale production concentrated in one plant. Strand is America's greatest garage door value!
- 2. LOW INSTALLATION COST**—one piece construction and packaged hardware make this the easiest of all doors to install. No "factory-trained expert" needed.
- 3. LOW MAINTENANCE COST**—as the result of rugged all-steel construction, galvannealing, and Strand dependability. Your customers will be happy with their Strand Doors!

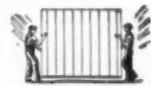
Your customers are quick to appreciate the advantages of this "best seller" among garage doors:

The strength and durability of steel—that can't sag, warp, rot or shrink. Uniform steel sheets are milled to exact specifications—there's no absorption of moisture as with some other materials; the weight remains the same in wet or dry weather; this assures uniformly easy operation.

Strand Doors are sturdily built to meet conditions of shipping, delivery and handling. Welded construction is a feature—no screws or bolts to work loose.

These doors are galvannealed for rust resistance with a heavy galvanized zinc coat, plus high-temperature heat-treating that assures an excellent base for paint, without special priming coat.

There are 2 types of Strand Doors for 8' x 7' opening—Receding (track) and Canopy. Also a Double-Garage Door (Receding type only) that fits 16' x 7' opening, unobstructed by center post. Order from your dealer, or



Welded All-Steel 1-Piece Leaf



Welded All-Steel Braces



Welded All-Steel Frame



Galvannealed-Rust Protected



**MAIL COUPON FOR INFORMATION AND DEALER'S NAME**

ALL-STEEL • GALVANNEALED • OVERHEAD

# STRAND

## GARAGE DOORS

FOR SINGLE AND DOUBLE GARAGES

STRAND GARAGE DOOR DIVISION  
Detroit Steel Products Company  
Dept. AB-4, 2250 E. Grand Blvd.  
Detroit 11, Michigan

Please rush detailed description of Strand all-steel Garage Doors, for 8' x 7' and 16' x 7' garage openings.

I am a  Builder  Dealer  Prospective Owner  Other

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

(Continued from page 168)

**UTILITY UNITS AB4918**

Panel unit consists of complete kitchen and bathroom fixtures and fittings built around a new, narrow, low wall core which contains a complete soil and waste stack assembly ready for easy connection with underground stuo lines. For use in low-



cost homes with or without basements, and for installation in multi-story apartment buildings. This Ingersoll panel utility unit can be used in connection with warm-air radiant heating installations. Also adaptable where fireplaces or space heaters provide heat. Ingersoll Utility Unit Div., Borg-Warner Corp., 321 Plymouth Court, Chicago 4, Ill.

**CABINET SINKS AB4910**

Kitchenaid cabinet sink, 54-inch model, has two drawers and three large compartments for undersink storage. Two drainboards, single bowl, and impressed soap dish are incorporated in porcelain enamel



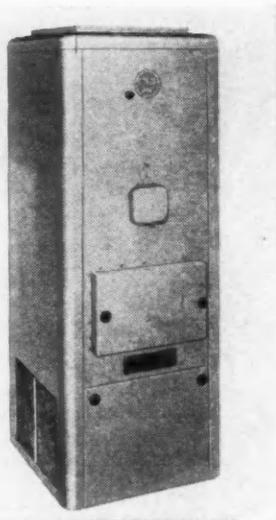
on steel sink top. Equipped with faucet assembly; spray may be easily attached. Deluxe models of this unit includes five drawers, two compartments and spray. The cabinet sink is recent addition to Youngstown kitchen line. Mullins Manufacturing Corp., Warren, Ohio.

**DECORATED PANELS AB4930**

Celochrome and Lustertile, additions to Celotex line, are four foot wide tempered hardboard to which are fused hard, colorful, plastic finishes, giving the effect of ceramic wall surfaces. Used either to cover existing walls or in new construction. Three surface designs are Tile, Plain and Streamline. Five colors are peach, ivory, light green, light blue and white. Other colors available on special order. Surface of panels permanently integrated with hardboard base. Not affected by heat or cold. The Celotex Corp., 120 S. LaSalle St., Chicago 3, Ill.

**WINTER AIR CONDITIONER AB4911**

Conco VU-1 winter air conditioner requires 25x26-inch floor space. May be easily installed in alcove, hall, closet, utility room, recreation room, service porch,



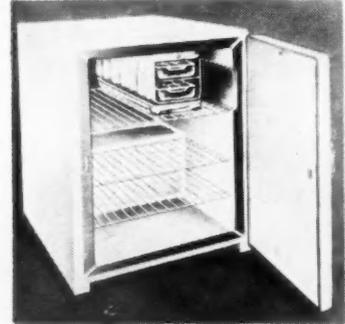
kitchen or basement. Baffling keeps casing cool, permitting unit to be installed on wood floors. Moving parts enclosed. Oil-fired with Conco stainless steel burner or vaporizing type. Conco Engineering Works, Mendota, Ill.

**ASPHALT TILE FLOORING AB4922**

Two new colors added to line of Hako factory-waxed asphalt tile flooring are "Coronation," a bright Chinese red marbled with white, and "Morocco," a tan marbled with white and black. Firm offers choice of 22 colors, four plain and 18 marbled, with feature strip in five different colors. Hachmeister, Inc., 2332 Forbes St., Pittsburgh, Pa.

**REFRIGERATOR UNIT AB4923**

"Lo Boy" refrigerator unit is 24 inches wide, 34 inches high and 24 inches deep. Fits neatly into area of two square feet. Capacity, five cubic feet. Can be fitted into standard kitchen appliance combination consisting of stove, sink and refrigerator



to form one continuous working surface. Removable formica top can be fitted on to unit to make usable kitchen table of approximately four square feet. Two aluminum ice trays provide 56 cubes at a time. Moss Atlas Corp., 244 Herkimer St., Brooklyn, N. Y.

**SMALL AIR CONDITIONING UNIT AB4937**

Ko-Z-Aire conditioning unit, with output capacity of 83,200 B.T.U., has a shipping weight of 250 pounds. Assembled and ready to install, it is 36 1/2 inches high, 23 inches wide, and 39 inches long. Blower assembly is surrounded by circular steel heat exchangers. Equipped with oversize filters. Automatically gas fired. AGA approved. Jones & Brown, Inc., 439 Sixth Ave., Pittsburgh 19, Pa.

**LIGHT WEIGHT ROLLER AB4902**

The Wayer Impactor is a 10-ton roller that weighs 230 pounds. For patching pavement and laying new drives and floors. In one minute one man can tamp and finish 60 to 80 square feet of bituminous surface or dry concrete base, working flush



to curbs, rails, manholes, buildings or fences. Requires no water. Impactor plate heated by engine exhaust. Travels under its own power when working. Powered by 2 1/2-H.P. Wisconsin Model AB air cooled engine. Working speed on level ground is 35 to 42 F.P.M., depending on type of material and thickness of mat. Wayer Impactor, Inc., 12, North Third St., Columbus 15, Ohio.

(Continued to page 186)

**CHECK NUMBERS AND MAIL COUPON FOR INFORMATION**

American Builder, 105 West Adams Street, Chicago 3, Illinois

NAME ..... ADDRESS .....

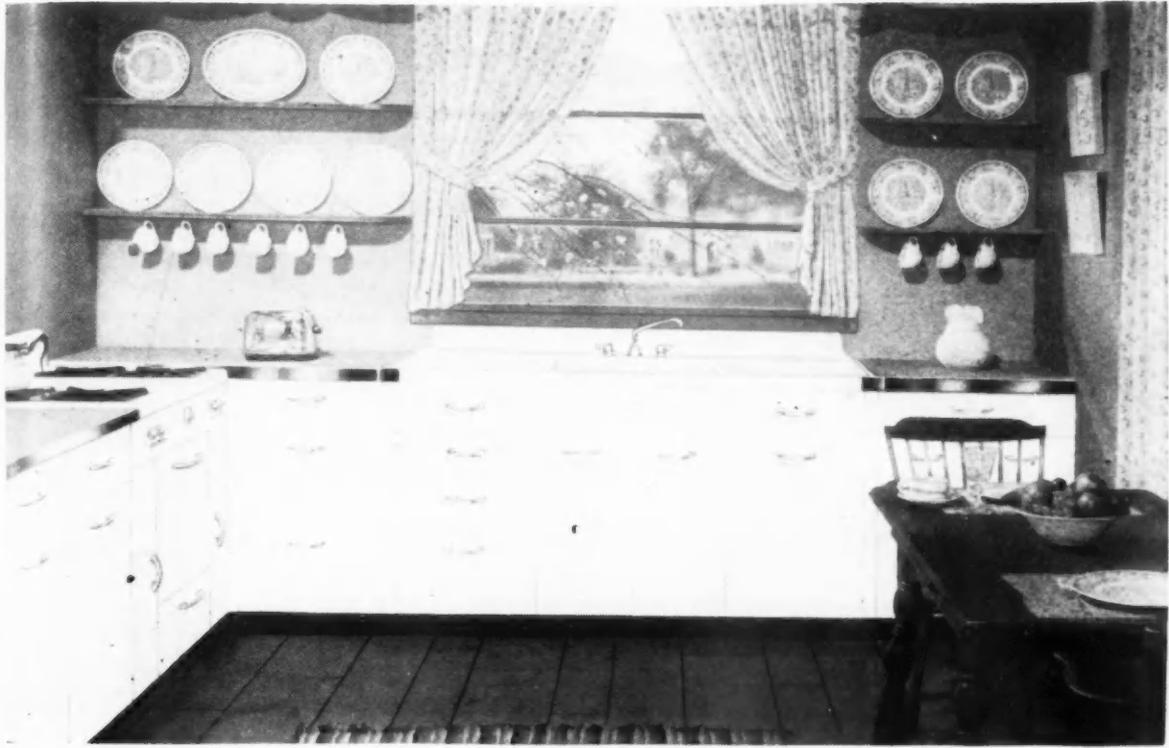
CITY ..... STATE .....

AB4901	AB4908	AB4915	AB4922	AB4929	AB4936	AB4943
AB4902	AB4909	AB4916	AB4923	AB4930	AB4937	AB4944
AB4903	AB4910	AB4917	AB4924	AB4931	AB4938	AB4945
AB4904	AB4911	AB4918	AB4925	AB4932	AB4939	AB4946
AB4905	AB4912	AB4919	AB4926	AB4933	AB4940	AB4947
AB4906	AB4913	AB4920	AB4927	AB4934	AB4941	
AB4907	AB4914	AB4921	AB4928	AB4935	AB4942	

When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder.

**ANY SIZE**

# Kitchen



The Crane Sunnycrest Sink, single basin, double drainboard

## ...IS A CRANE SIZE KITCHEN

Crane sets no limitations on size or style. There is a Crane sink for the modest kitchenette as for the elegant living-kitchen—a truly complete line.

No doubt that it's the *preferred* line . . . home owners have testified to this year after year.

That's true, of course, of Crane bathrooms, too—and here again you'll find a style for every taste, a price for every budget. In home heating, Crane supplies everything required for any system, any fuel.

See Sweet's Builders' File for selections from the Crane line—and be sure to check your plans early with your Crane Branch or Crane Wholesaler.

**THE ALL AMERICA**—America's finest counter-top sink, 38" x 21". Has all the features of Crane cabinet sinks—8" deep basins . . . retractable base spray . . . 4" high shelf back . . . exclusive Crane Dial-ese controls.



**THE KITCHEN QUEEN**—and fit for a queen! Double basin, double drainboard, all gleaming white porcelain enamel, 72" x 25 1/4". Retractable hose spray. Crane supplies automatic dishwasher, disposal unit if desired.



**THE HOMEMAKER**—just right for space-saving! Only 42" x 25 1/4", it boasts a deep, full basin and plenty of cabinet space below. Also from Crane: wall and base cabinets to complement the sink.

# CRANE

CRANE CO., GENERAL OFFICES:  
836 S. MICHIGAN AVE., CHICAGO 5  
PLUMBING AND HEATING  
VALVES • FITTINGS • PIPE

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

A PROFITABLE  
REMINDER  
from  
**NATIONAL LOCK**  
2  
FAST-MOVING LINES FOR SPRING SELLING

**Chromium Plated  
CABINET HARDWARE**

Get it from your jobber. Feature this distinctively-styled, Deluxe cabinet hardware that will sell FAST at an excellent profit. All items envelope packaged. FREE counter display board. Open stock if you desire.

**Authentic  
PERIOD FURNITURE TRIM**

Authentically faithful furniture trim, ideal for use on furniture, old or new. French Gilt and Antique English finishes. Easy to apply. Popular. Profitable. Items individually packaged. Display board offered FREE.

**DISTINCTIVE HARDWARE**

ALL FROM / SOURCE

**NATIONAL LOCK COMPANY**  
ROCKFORD • ILLINOIS  
MERCHANT SALES DIVISION

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

**532—HOW TO MAKE GALVANIZED ROOFING AND SIDING LAST LONGER**—is title of a new repair manual issue by the American Zinc Institute, Inc., 60 E. 42nd St., New York, N.Y. The 12-page manual contains an abundance of valuable illustrations, drawings and information.

**533—"BETTER FARM BUILDINGS**—with Insulux Glass Block" is the title of a new folder issued by the American Structural Products Co., Toledo 1, Ohio. Sizes of Insulux glass block, designs and installation information are given, as well as numerous illustrations.

**534—SUSPENDED CEILING CONSTRUCTION**—the Nailock method of installing ceilings with or without acoustical materials is discussed in Catalog No. 1 issued by the Nailock Steel Div., The Sanymetal Products Co., Inc., 1705 Urbana Rd., Cleveland 12, Ohio. Recent developments described include Zipper splice lock clip and the metal end lock strip. Specifications are included.

**535 DECORATIVE INSULATING BOARD**—A new brochure published by Johns-Manville, 22 East 40th St., New York 16, N.Y., describes ceiling panels, wall plank and building board. The text is profusely illustrated and provides information on sizes, application and special features of the products. Ideas for commercial and institutional as well as residential interiors are included.

**536 "STORES MODERNIZE WITH MARBLE"**—Pictures of attractive store fronts, floors and interiors are included in this booklet by the Marble Institute of America, 108 Foster Ave., Mount Vernon, N.Y. Also given are details about marble characteristics, selection, installation, and maintenance.

**537 STEEL CEILINGS**—A folder prepared by the Edwards Manufacturing Co., Cincinnati 2, Ohio, gives illustrations of modernistic steel ceilings, emphasizing unusual color effects obtained from patterns stamped from steel sheets painted.

**538 HYDROCRANE MODEL H-3**—This booklet, published by Bucyrus-Erie, 7923 W. Greenfield ave., Milwaukee, Wis., describes and illustrates the uses of the firm's truck-mounted, hydraulic crane-excavator. The manufacturer stresses the machine's unusual simplicity, based on the use of hydraulic power for every operation.

**539 BATHROOM CABINETS**—A detailed catalog by the Grote Manufacturing Co., Inc., Bellevue, Ky. A complete line of cabinets is included, as well as descriptions of methods used in production and the construction features of the finished products.

**540 "HOW YOU CAN PROTECT . . . WITH COPPER"**—gives numerous illustrations of the uses of a copper-armored sheeting for the protection of buildings. The folder is published by the Sisalkraft Co., Chicago 6, Ill.

**541 AIR CONDITIONING, HEATING AND REFRIGERATION**—Equipment manufactured by the Chrysler Airtemp division of Chrysler Corp., Dayton

(Continued to page 175)

WHEELER OSGOOD *Tru-sized*®  
*Doors set the stage*  
 for better home design



**You Can't Afford to Cut Quality...**  
**But You Can Cut Installation Time Up to 80%!**

**LIKE MONEY IN THE BANK!** You save up to 55 minutes on every installation when you specify TRU-SIZED doors. Here is a product with a quality pedigree of 60 years—manufactured under an exacting system of laboratory control by craftsmen who know their trade. It's a first class door every inch of the way—guaranteed to fit and to look its best for many years to come.

**NO SAWING, NO PLANING!** TRU-SIZED doors are

precision machined to standard book opening sizes. You simply install hardware and hang. Even priming is eliminated for TRU-SIZED doors are resin coated before they leave the mill . . . protected from scuffing and weathering and ready for staining, painting or waxing.

**SPECIFY TRU-SIZED!** It's your assurance of a quality door that will back up your reputation in the industry, save you time and money, too.



**Wheeler Osgood COMPANY**

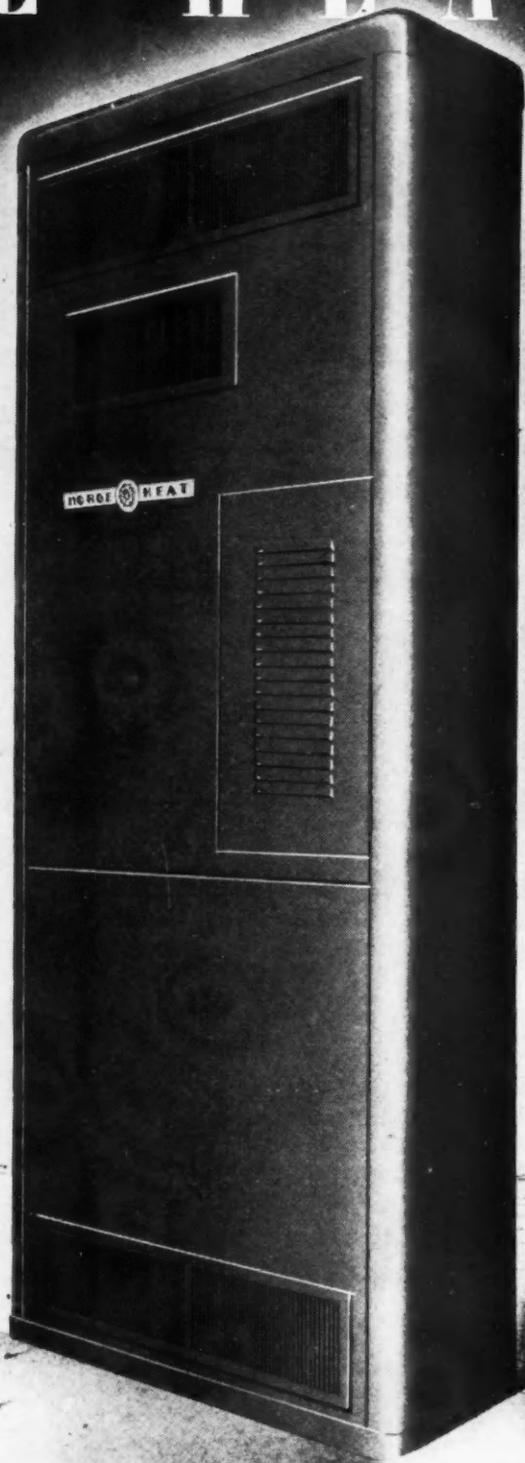
*Plants and General Offices: Tacoma 1, Washington*

1216 St. Paul Ave. • Broadway 9221 • Teletype TA 77

NEW YORK OFFICE . . . . .	1226 Empire State Building, New York 1 . . . . .	Longacre 4-6520
CHICAGO OFFICE . . . . .	134 South La Salle Street, Chicago 3, Illinois . . . . .	State 7-5335-6-7
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# NORGE HEAT

*Gas-Fired*  
WINTER AIR CONDITIONER



NORGE HEAT DIVISION BORG-WARNER CORPORATION

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# NORGE HEAT

*Gas-Fired*

## WINTER AIR CONDITIONER

● Here at last is a highly styled finely engineered furnace specially designed to meet the specifications of today's architects and builders. Lowest installed cost . . . no service worries . . . nationally recognized name. Think of it! Fits between studding practically flush to the wall . . . only 12¼ inches deep, 32 inches wide, and 88 inches high . . . yet has 62,500 B. T. U. input capacity. Great flexibility . . . can be safely installed anywhere with little or no duct work . . . in wall, closet, utility room or basement. Complete factory tested package . . . built-in plenum chamber and draft diverter . . . 100% safety shut-off controls and automatic thermostat. Provides filtered summer ventilation. Fully approved by A. G. A. for natural, manufactured and L. P. gases. Nothing like it on the market.

*Norge Heat has a complete line of great products!*



*Send for Complete Information*

**NORGE HEAT Division, 672 E. Woodbridge, Detroit 26**

AB-1

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_

## Catalogs

*(Continued from page 172)*

1, Ohio, is shown in this catalog, along with specifications and performance features. A wide range of products in all three of the above classifications are included.

**542—ALI BABA AND HIS TWENTY THIEVES**—A cartoon style consumer booklet on fuel savings, which combines humor with helpful hints on how the home owner can stretch his fuel supply. It is a Chronotherm publication of the Minneapolis-Honeywell Regulator Co., Minneapolis 8, Minn.

**543—END-MATCHED LUMBER**—Weyerhaeuser Sales Co., St. Paul 1, Minn., points out in an illustrated pamphlet the advantage of using end-matched lumber in general construction, stressing the saving of time and effort since joints are not required to break on joists, studs and rafters.

**544—FLOOR SANDING, EDGING AND MAINTENANCE EQUIPMENT**—An assembled catalog of the Clarke Sanding Machine Co., Muskegon, Mich., gives illustrated information about performance features of machines designed by the manufacturer for a variety of uses.

**545—"LUX-RIGHT" AREA WALLS**—Galvanized steel one-piece area walls for basement window wells are shown in a pamphlet issued by the St. Paul Corrugating Co., St. Paul 1, Minn. Intended for all types of buildings, the walls are described as adding beauty to the foundation line as well as affording more basement light.

**546—CONVECTOR-RADIATOR**—Four types of radiators in modern design are features of Folder 4048 of Young Radiator Co., Racine, Wis. Listed among the units' advantages are simplified installation, heat adjustment and cleaning; and space-saving.

**547—BETTER PAINTING**—is the title of a pamphlet issued by Archer-Daniels-Midland Co., Minneapolis, Minn., describing qualities of Pol-mer-ik linseed oil. The specially treated product is packed "raw" or "boiled" in sealed cans.

**548—"METALMASTER" ELECTRICAL TOOLS**—The Bradford Machine Tool Co., Cincinnati, Ohio, has published its Catalog 52 on electrical tools. Illustrations of a variety of drills, grinders, buffers and other tools include specifications and performance features.

**549—METAL LATHS**—are featured in a booklet by the Alabama Metal Lath Co., Inc., Box 992, Birmingham, Ala., with the theme, "No Plastering Can Be Better than the Lath Beneath It." Diagrams with specifications are given of metal lath, corner beads and lathing accessories.

**550—"AMERICAN KITCHENS STYLED IN STEEL"**—a publication of the American Central Division of Avco Manufacturing Co., Connersville, Ind., outlines the steps in installing different types of new kitchens, sketches the advantages of modern planning, and catalogs a number of the firm's sinks and cabinets.

**551—"FLOATING DOORS FOR YOUR MODERN HOME"**—A "floating action" door which moves in and out of a pocket but has neither track at the floor nor hangers above is described in a pamphlet published by the Dorflo Manufacturing Corp., Hibbing, Minn.

*(Continued to page 176)*

# 8 GOOD REASONS Why

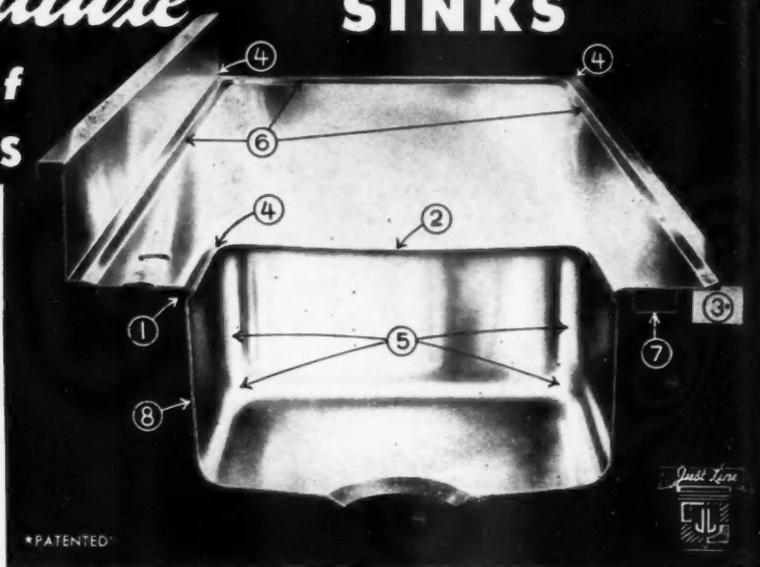
## Just Line Radiiluxe

### STAINLESS STEEL SINKS

are **FIRST CHOICE** of  
**Architects and Builders**

- 1 \*Patented Anti-splash Rim around entire perimeter of the bowl at point where bowl joins the drainboards, seamless welded and polished.
- 2 \*Patented Double Pitched Drainboards, gradually sloping lengthwise to the bowl and sidewise to center of drainboard.
- 3 Wood Frame around front and ends, facilitates fastening to the cabinets.
- 4 Seamless Construction, all joints welded and polished.
- 5 Radius corners in bowl—vertical radius 1½" at top tapering to 15/16" at bottom, all bottom horizontal radii are 15/16".
- 6 All corners of raised edge are die drawn.
- 7 U-type structural channel extending the full length of the drainboard.
- 8 Sound Deadened on the underside to prevent undesirable metallic sound.

*Radiiluxe Sinks can be supplied in any size and shape and with either one, two, or more sink bowls—to meet individual requirements.*



Write today for literature 8-4 and send us your specifications; We will gladly submit details and estimates.

# JUST Manufacturing Co.

4610-20 W. 21st Street, Chicago 50, Illinois

## Catalogs

(Continued from page 175)

552—"LEIGH" PRODUCTS—manufactured by Air Control Products, Inc., are listed and illustrated in the Coopersville, Mich., firm's Catalog 47-L. Included are ornamental shutters, dust chutes, clothes chute doors, ventilators, built-in mail boxes and milk and package receivers.

553—"WINDOWALLS"—Specifications for complete wood window units are given in the Unit catalog 491 of the Andersen Corp., Bayport, Minn. Other descriptive literature includes photographic reproductions of actual Windowall installations.

### SERVICE COUPON—CLIP and MAIL to CHICAGO

Readers Service Department (April, 1949)  
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:

Numbers .....

Name .....

Street .....

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

OCCUPATION\* .....

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

554—"MODERNFOLD" DOORS—An improved type of folding wall which is adaptable to both large and small openings is featured in the catalog of New Castle Products, New Castle, Ind. Descriptive material and illustrations show the varied uses of the doors; and the catalog contains drawings explaining installation under different conditions.

555—"ELECTRIC PLANTS"—Catalog A-138A, recently published by D. W. Onan and Sons Inc., Minneapolis 5, Minn., includes a number of new models in covering the full line of the firm's plants. The catalog points out the difference between AC, DC and battery charging models and provides statistics on watts required by electric appliances and motors.

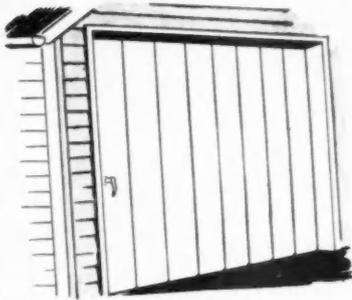
556—"THE PLUGMOLD STORY"—A booklet about a metal molding wired with electrical outlets spaced at regular intervals with optional frequency. Published by the Wiremold Co., Hartford 10, Conn., it illustrates use of the molding in various rooms and emphasizes provision for as many outlets as will ever be needed.

557—"HARDBOARD WOOD PRODUCTS"—Masonite Presdwood, a hardboard manufactured entirely from wood but without resins, oils and other wood characteristics, is the subject of a booklet by the Masonite Corp., 111 W. Washington St., Chicago 2, Ill. The booklet gives details and specifications of the product, which is described as being suitable for interior and exterior use in new construction or remodeling of residential, farm, or industrial buildings.

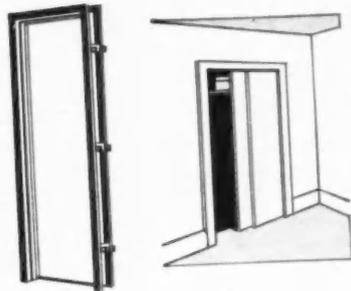
# WHY GALVANITE IS THE BUILDER'S STEEL



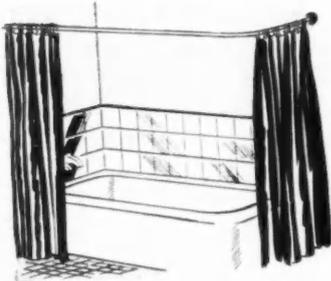
**ZINC COATED** — Galvanite is a special zinc coated product. The protective Galvanite coating is perfectly bonded with the quality Sharon strip steel that forms the base.



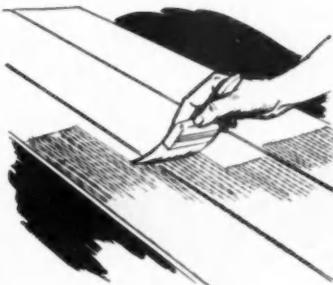
**GALVANITE LIKES THE WEATHER TOUGH** — Rain, snow — sleet and slush cannot penetrate the bonded zinc coating — and the strong steel base offers a lifetime of wear even under the hardest usage.



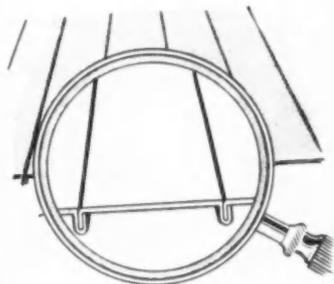
**APPROVED BY LEADING CODES** — Galvanite has been given the green light under the strictest of building codes. A recent test in an area plagued with oceanic salt spray proved Galvanite resistant to salt corrosion.



**WHERE DAMPNESS PREVAILS** — Where water and dampness are an every hour occasion Galvanite can't be beat. And products made of Galvanite can be produced at lower costs — because Galvanite — for all its advantages — is truly inexpensive.



**IDEAL FOR PAINTING** — Galvanite provides an ideal "mat" base for painting, and baked enameling. It withstands temperatures up to 750° without deteriorating.



**SEVERE FORMING and DRAWING** — Galvanite will not peel, flake or powder during difficult fabrication. It is especially suitable where a coated strip must withstand severe forming and drawing.

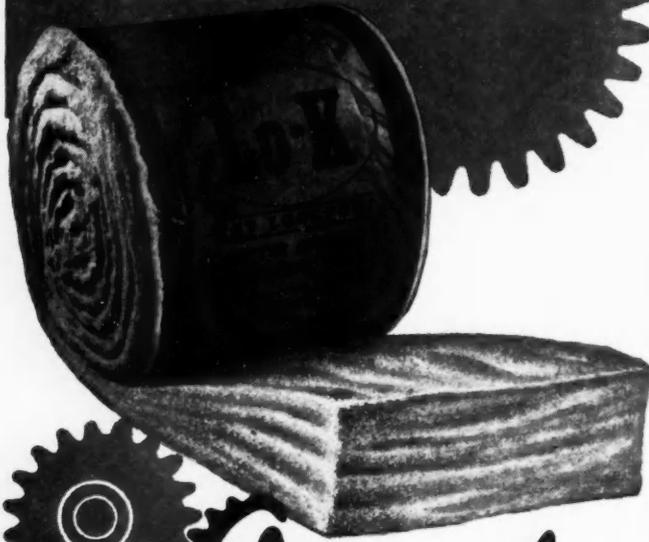


**SHARON STEEL CORPORATION**  
*Sharon, Pennsylvania*

PRODUCTS OF SHARON STEEL CORPORATION AND SUBSIDIARIES: THE NILES ROLLING MILL COMPANY, NILES, OHIO; DETROIT TUBE AND STEEL COMPANY, DETROIT, MICHIGAN; BRANARD STEEL COMPANY, WARREN, OHIO; SHARONSTEEL PRODUCTS COMPANY, DETROIT, MICHIGAN, AND FARRELL, PENNA.; CARPENTERTOWN COAL & COKE CO., MT. PLEASANT, PENNA.; FAIRMONT COKE WORKS, FAIRMONT, W. VA.; MORRANTOWN COKE WORKS, MORRANTOWN, W. VA. Hot and Cold Rolled Stainless Strip Steel—Alloy Strip Steel—High Carbon Strip Steel—Galvanite Special Coated Products—Copperage Hoop—Electrical Steel Sheets—Hot Rolled Annealed and Decarburized Sheets—Galvanized Sheets—Enameling Grade Steel—Welded Tubing—Galvanized and Fabricated Steel Strip—Steel Strapping, Tools and Accessories.

DISTRICT SALES OFFICES: Chicago, Ill., Cincinnati, O., Cleveland, O., Dayton, O., Detroit, Mich., Indianapolis, Ind., Milwaukee, Wis., New York, N. Y., Philadelphia, Penna., Rochester, N. Y., Los Angeles, Calif., San Francisco, Calif., St. Louis, Mo., Montreal, Que., Toronto, Ont.

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It's easier to sell Lo-"K" because it's geared to the times. Lo-"K" has an amazingly high efficiency factor that pays off handsomely in fuel savings and year 'round comfort—yet it costs less than most insulations. It's among the lightest insulations made—it installs easily at low cost—it repels moisture and insects—stays fluffy after installation (never packs or settles)—lasts a lifetime.

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 Established 1870

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Joseph T. Ryerson & Son, Inc., Plants at: New York, Boston, Philadelphia, Detroit, Cincinnati, Cleveland, Pittsburgh, Buffalo, Chicago, Milwaukee, St. Louis, Los Angeles, San Francisco.

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**SYMONS FORMING SYSTEM**



"Seven men set-up the forms for a 26' x 27' basement in one hour and fifteen minutes."—Harry G. Dehring, Carpenter Foreman, Taylor Brothers, South Bend, Indiana.



"We have used these forms 60 times without appreciable wear. We expect to get at least 60 more reuses."—Homer L. Short, Supt. Reed Construction Company, Mishawaka, Indiana.

**SAVES TIME**

There are only three essential pieces of hardware . . . bolt, wedge and form tie. The tie remains in the concrete . . . bolt and wedge are used again and again.

Bolt holds forms together and also holds tie both ways. No nails or spreaders are used.

To remove forms, tap out wedges, remove bolts, then easily pull forms up or out without tools. The ties will break back inside the wall, 1" from the surface by twisting loop 1/2 turn.

**SAVES LABOR**

The Symons System speeds erection and stripping of forms. Forming labor is cut 50%.

**SAVES COSTS**

With Time and Labor cut in two . . . Plus savings in nails, spreaders, walers and bracing . . . Plus far greater reuse of forms . . . Costs drop to new low.

Symons Forms can be rented with purchase option or you may purchase the hardware with free blueprints to make your own forms.

WRITE TODAY for your free copy of our 36 page catalog. If you will enclose dimensions of your next form job you will receive a free form layout and estimate.

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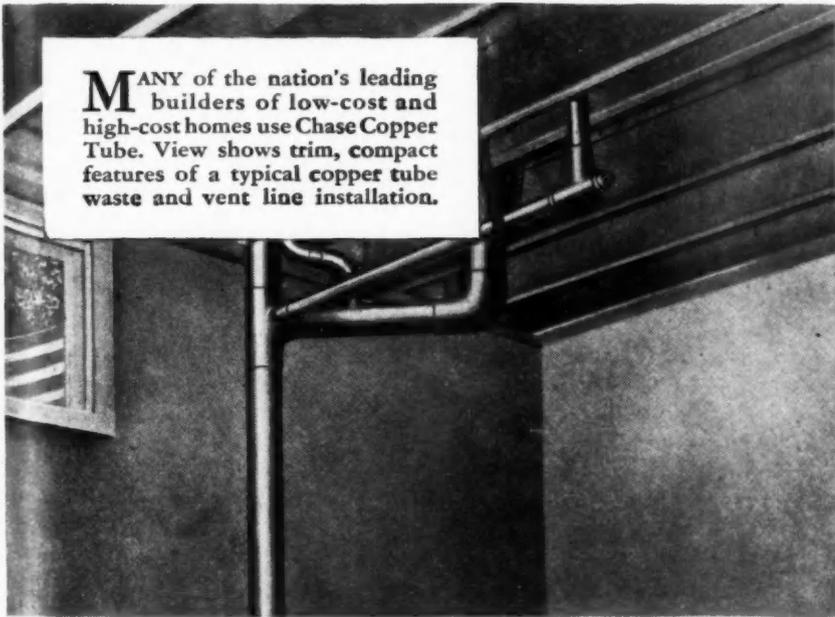


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**M**ANY of the nation's leading builders of low-cost and high-cost homes use Chase Copper Tube. View shows trim, compact features of a typical copper tube waste and vent line installation.

**F**AST . . . economical installation has made Chase Copper Tube for soil, waste and vent lines a favorite with builders coast-to-coast! Here's why: You reduce many connections because Chase tube is available in 20 foot lengths. Its light weight makes pre-cutting and pre-assembly possible . . . makes maneuvering and handling quicker!

Find out more about the quality features . . . the economy features—the *availability*—of Chase Copper Tube for soil, waste and vent lines. Send for literature. Write Dept. AB49.

**FREE!** Booklet illustrating actual installations of Chase Copper Tube in homes across the country.



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NEWARK NEW ORLEANS NEW YORK PHILADELPHIA PITTSBURGH PROVIDENCE ROCHESTER† SAN FRANCISCO SEATTLE ST. LOUIS WATERBURY (†Indicates Sales Office Only)

# CONNOR

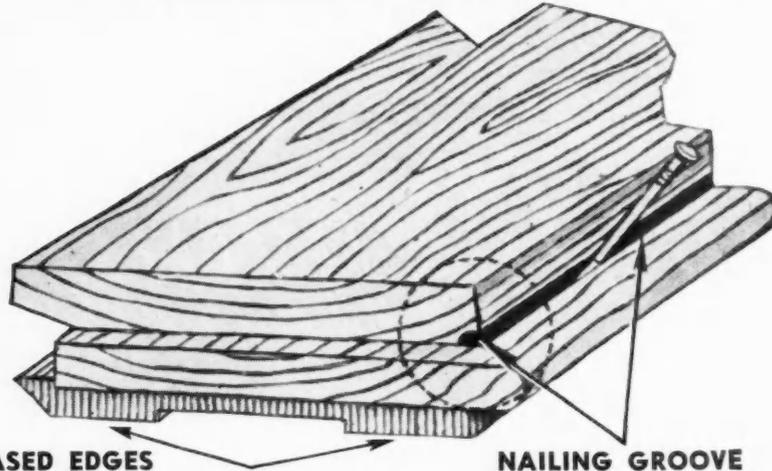
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Maple and Birch FLOORING

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Mills: Laona, Wisconsin and Connorville, Michigan

Behind The Mills—The Connor Timber Stands

## Aluminum Solves Roofing Problem

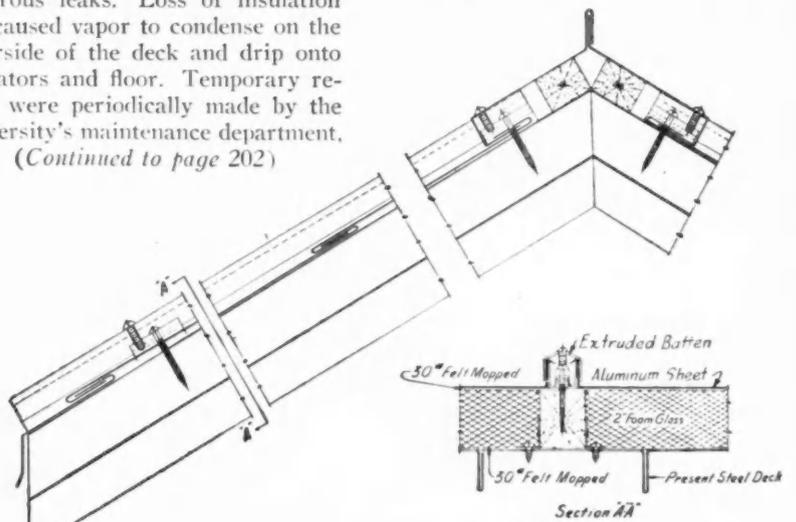
UNIVERSITY of Minnesota's mammoth Field House, one of the country's largest and most completely equipped gymnasiums, has a new roof. Designed, fabricated and installed by the Overly Manufacturing Company, Greensburg, Pa., last year, the new roof for the 22-year-old structure involved the use of 85,000 pounds of aluminum for extruded battens, pre-formed sheet panels, wood screws, nails and accessories.

Located adjacent to Memorial Stadium on the campus of the University in Minneapolis, the building measures 444 feet long by 236 feet wide by 100 feet high at its crest. It has a seating capacity of 20,000 and is the scene of the University's track, basketball and boxing program. Design of the immense hall permits simultaneous playing of two or more basketball games.

Almost continuous use of the building since 1927 has required a careful maintenance check by school authorities. High humidities generated by capacity audiences at sporting events frequently caused vapor clouds to form beneath the structure's arched

roof. Original insulation on the building's steel roof deck gradually deteriorated and no longer supported the built up roofing properly, resulting in numerous leaks. Loss of insulation also caused vapor to condense on the underside of the deck and drip onto spectators and floor. Temporary repairs were periodically made by the University's maintenance department.

(Continued to page 202)



APPLICATION of new aluminum roof over present steel deck of University of Minnesota fieldhouse.—Foamglass insulation, placed between treated wood nailers, with impregnated felt mopped on top and bottom of insulation, provides the necessary vapor barrier. Applied aluminum sheets are rendered weather-tight by cross seams and extruded battens.

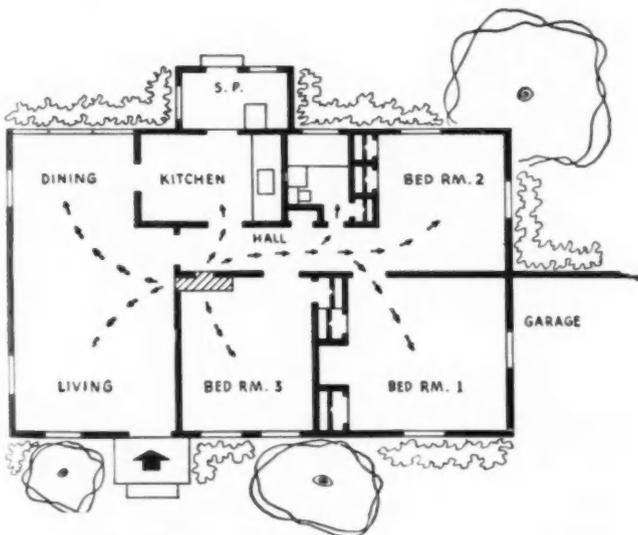


## WORLD'S LARGEST RESIDENTIAL DEVELOPMENT USES NEW TYPE HEATING

WHEN Fritz Burns, President of Kaiser Homes, developed his first post-war home, the Royal Jet-Flow was just coming off the production lines. It was tested and found to give heating performance equaled only by forced air units costing three times as much. Since that time over 6000 Jet-Flow heating

units have been installed in Kaiser Homes alone.

With its fine performance, its minimum upkeep, and high owner satisfaction it was natural that the new model Jet-Flow was selected for the 2000 1949 Model Kaiser Homes (illustrated above) now being built in Panorama City, California.



The gas-fired unit is placed near the center of the floor plan, and distributes heat in three directions from registers located 6" below ceiling level. Through the use of the jet principle heat is circulated at a velocity of 300 feet per minute to all parts of the house. Test showed a room-to-room temperature differential of less than 2°.



Walter Wurdeman and  
Welton Becket, Collaborating  
Architects

Royal Heaters, Inc., Manufacturer  
1024 Westminster Ave., Alhambra, Calif.

We suggest you write for literature and specifications. Royal Jet-Flow is distributed nationally.

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WHEN YOU BUILD  
OUR HOUSE . . .



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***Hidalift***  
the 100% concealed sash balance

**THEY BALANCE THE SASH**

The housewife is always pleased when she discovers how easily — how effortlessly her windows glide up and down with Hidalift sash balances. She is even happier to see that there are no sharp edges for her curtains to catch on — no unsightly parts of balances showing to mar the beauty of her windows. Hidalift will please you, too. Its many superior mechanical features plus fast, easy installation are worth investigating. On your next job, install Hidalift, the smooth-acting 100% concealed sash balance . . . and you'll see what we mean.

WRITE FOR our illustrated folder which includes all installation details and lists sizes and specifications on Hidalift for all standard sash. Use coupon below or your own letterhead.



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Increased manufacturing facilities and greatly improved shipping conditions enable us to serve our dealers more promptly than ever with the top quality finishing limes all plasterers like to use and all architects and builders will gladly accept.

They are made with laboratory precision from hand picked, kiln burned rock quarried at the heart of the world's purest deposit of dolomitic limestone, and make a pure white, easy and cool working, far spreading putty.

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**OHIO WHITE AUTOCLAVED** Finishing Lime is equally good quality. It needs no soaking. For fine white coat plaster, brick mortar and other uses.

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# SISALATION & SISALKRAFT

for insulated DRY WALL construction  
at very low cost

VAPOR  
SEALED

FROM THE  
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*This modern insulated*

## DRY WALL CONSTRUCTION

meets FHA Vapor-Barrier Requirements

(Class A, Federal Specifications UU-P-147)

This new insulated DRY WALL construction (SISALATION plus SISALKRAFT) combines insulation and vapor-barrier advantages at very low cost . . . helps stop passage of harmful moisture into walls! SISALATION, bowed in between studs, provides TWO insulating air spaces, and its reflective surface helps keep homes warmer in winter, cooler in summer. Heavily reinforced by cross-laid sisal fibres, tough and strong, SISALATION and SISALKRAFT remain in place, permanently and effectively, for the life of the building. Here is quality construction with true economy!

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Please send samples of SISALKRAFT and SISALATION for modern DRY WALL construction.

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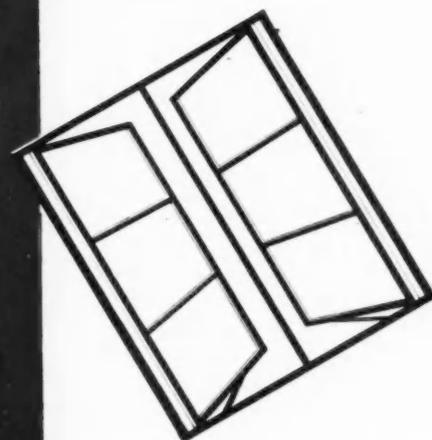
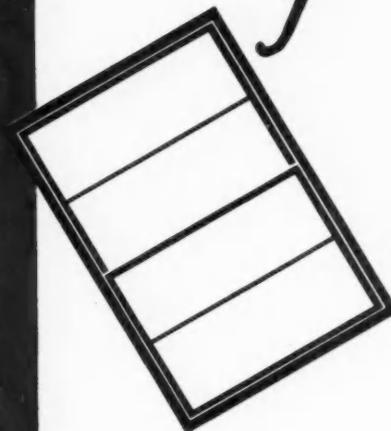
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*Modern* DRY WALL CONSTRUCTION

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*For real  
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These fine windows are really economical, even for the most modest low cost homes.

Features that save expensive field labor are built in at the factory by precision high production methods—and

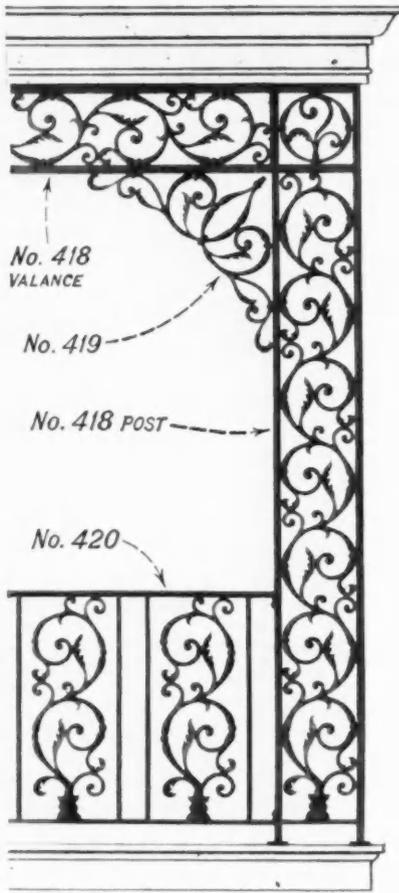
*You never need to paint aluminum.*

## J. S. THORN COMPANY

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**ORNAMENTAL IRON**  
BY *Coffman*

Here Is the First  
New Creation in Years!



**Coffman Cast Design for '49  
"New Orleans Style"**

This original Coffman creation brings all the charm of Old New Orleans to add extra beauty to your home. And it is so simple to install! Coffman cast ornamental iron is available in posts, panels, brackets, rails and valances for easy application. Whether for porch, balcony, or simple entrance stoop, there are Coffman designs to fit the needs of home owners, builders, architects. Standard sizes and stock designs allow accurate cost estimating, fast installation.

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With the aid of Coffman's Air Mail Blue Print Service, you know exactly—before you start—the cost, size, installation details. This is a complete and comprehensive service—featured only by Coffman.

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You buy with assurance when you buy Coffman Porch Posts. Careful testing under professional laboratory control gives accurate load carrying statistics; proves Coffman load carrying factors amazingly high.

Write Department AB, P. O. Box 259, for free catalog of designs, sizes and prices.

Manufacturers of the Original  
"Complete Builders Line"  
of Hand-Wrought Ornamental Iron

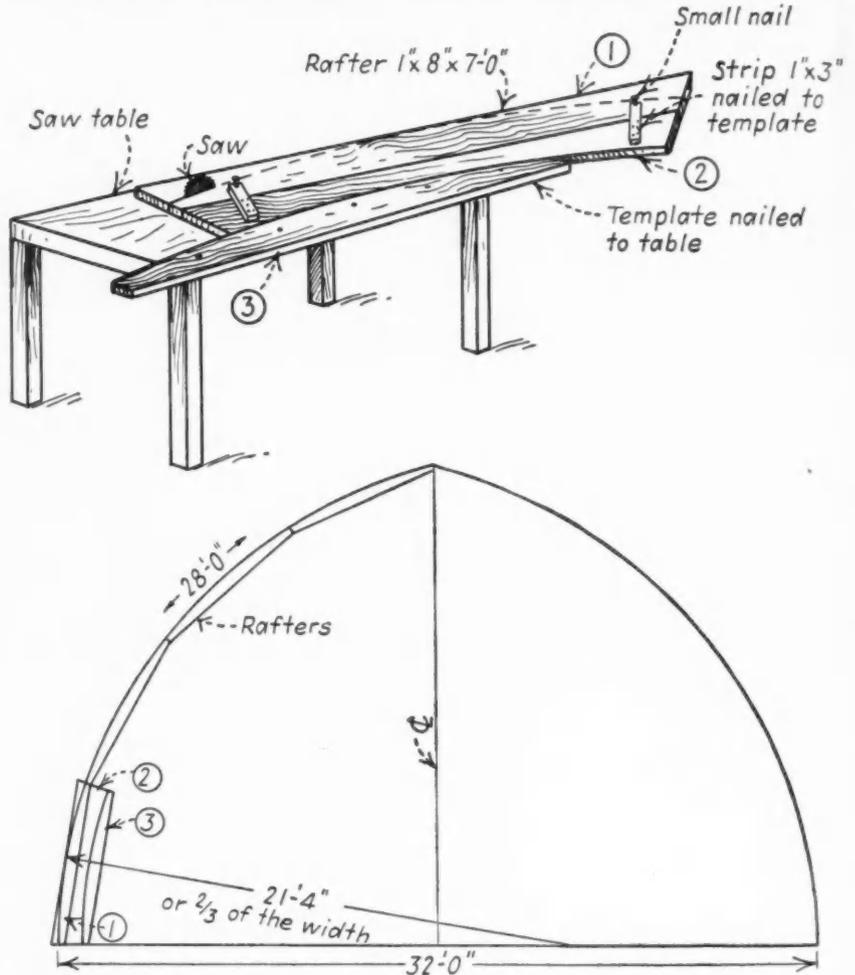
The *R. J. Coffman Co. Inc.*  
ORLANDO, FLORIDA  
ESTABLISHED 1925



**TECHNICAL GUIDE  
for Builders and Craftsmen**

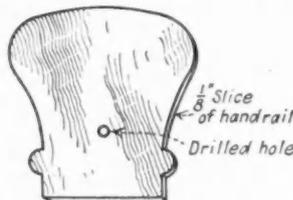
(Continued from page 163)

**How to Cut Rafters for an Arched Roof**



**Template Assures  
Perfect Joining  
of Stair Rail**

A SUGGESTION for use in bolting stair rails to goose necks or volutes. Saw off in

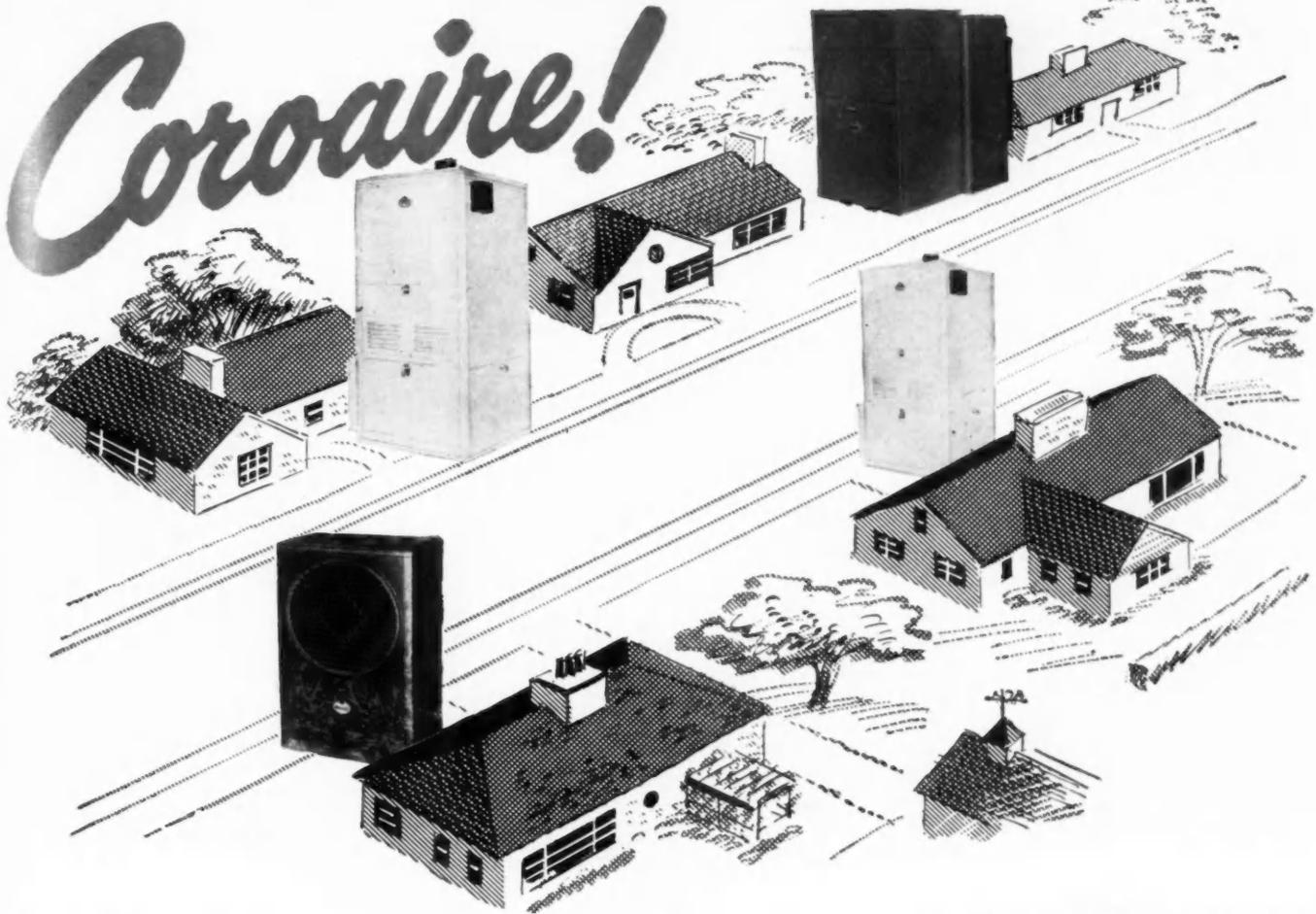


mitre-box a piece of hand rail 1/8 inch thick. Drill a small hole in the center (as shown in illustration) and use this for template on both pieces to be bolted.—John Menkveld, Grand Rapids, Mich.

TO CUT rafters for an arched roof barn 32 feet wide and 150 feet long with a 28 foot arc, first set up a jig, then secure jig to saw table, see top drawing. This jig or template will enable you to make an arched roof without the use of a pencil. Top drawing indicates position of wood template. Template is formed of two separate pieces of wood. One piece is secured to saw table, the other secured by temporary cleats to board to be cut. The board is then placed over circular saw and moved along line of template, cutting out rafter of the desired radius. The length of each rafter is seven feet. This process is repeated and the rafters when assembled on ground are doubled or tripled to take the load that will be superimposed on finished roof.—Joseph J. Waldner, Jr., Plum Coulee, Manitoba, Can.

# PROFIT-MINDED BUILDERS SPECIFY...

# Coroaire!



- POSTWAR DEVELOPMENT
- REVOLUTIONARY PATENTED VENTURI TUBE
- SPECTACULAR OPERATING ECONOMY
- UNUSUAL HOME OWNER AND TENANT SATISFACTION
- FACTORY ASSEMBLED—ECONOMICAL INSTALLATION
- CAST IRON HEAT EXCHANGER
- PRICED FOR NEW CONSTRUCTION MARKET
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The Coroaire Console is engineered and designed to completely and automatically winter air condition average-size, one-floor, basementless homes and individual apartment suites—WITHOUT THE USE OF DUCTS. Installation at minimum cost—means more profit for you. **LESS MONEY WHEN YOU BUY—LESS MONEY TO INSTALL.**

The Coroaire Hi-Boy winter air conditioning furnace, outstanding in efficiency and design, is factory assembled with all Coroaire exclusive patented features—complete with controls and safety equipment. For basement, utility and closet installations in connection with a duct system, build Coroaire profit into your profit plans.

**WRITE TODAY:** For complete information on Coroaire advantages for builders. Address inquiries to:

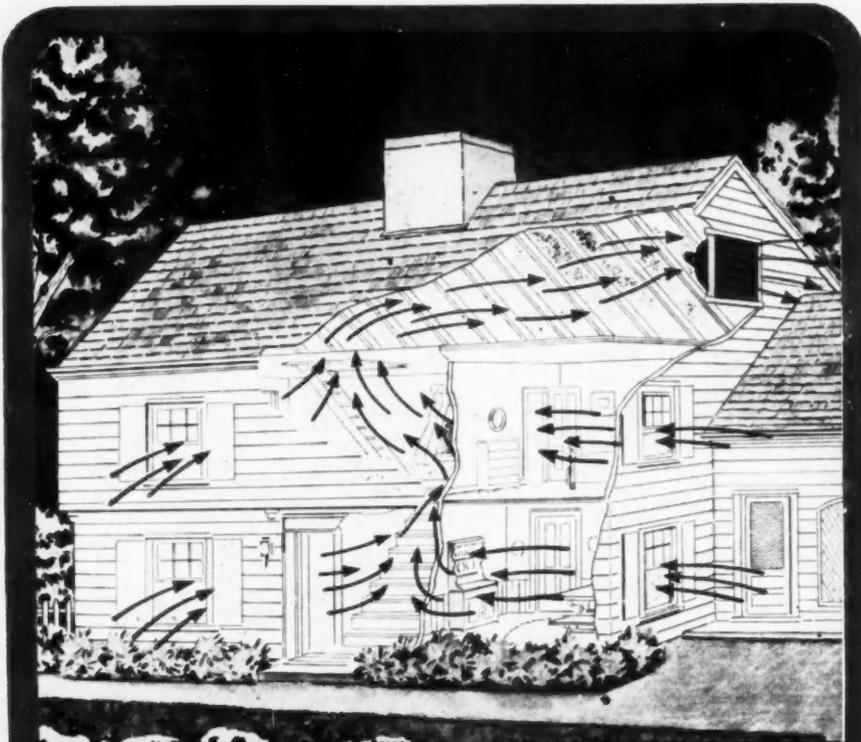
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**FIRST** *in the Industry*



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*The Hottest Line for '49*

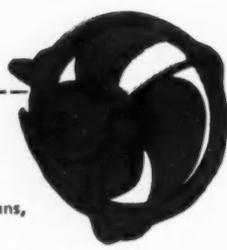


**HOUSES SELL FASTER  
WHEN OWNERS SLEEP COOL**



**VENTILATION**

Put ILG Night Cooling Fans in the attics of the homes you build . . . then watch prospects "go for" your houses. When they learn that inside temperature can be dropped as much as 20° on hot summer nights . . . when they hear how quietly the fan operates . . . when they see downstairs curtains fluttering in the breeze drawn in by the fan . . . sales resistance will crumble. Get the complete story—send coupon or phone nearby Branch Office (consult classified directory).



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Send latest data and prices on ILG Night Cooling Fans,  
also Kitchen Ventilators

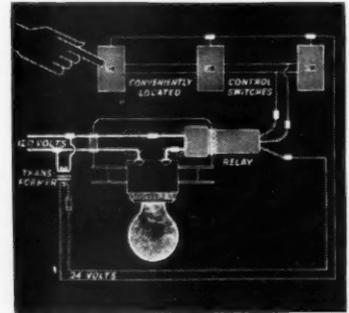
Firm Name.....  
 Individual.....Title.....  
 Address.....Zone.....  
 City.....State.....

**NEW PRODUCTS**

(Continued from page 170)

**LOW VOLTAGE CONTROL AB4947**

Square D low voltage control system provides adequate switching of lighting and appliance circuits with great convenience, safety and comfort. Small remote control relays handle load, and are installed in knockout of nearest outlet box. Individual relays controlled by any number of switches operating on 24 volt system. One relay operated from any number of control switches located at several convenient points, or several relays operated from one point. Square D Co., 6060 Rivard St., Detroit 11, Mich.

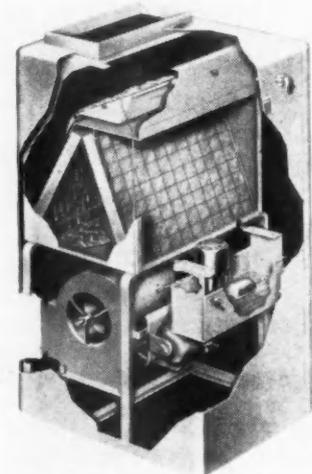


**STEEL SCAFFOLDS AB4925**

Gold Medal Tubelox Steel Rolling scaffolds incorporate four basic parts—inter-locking steel tubes of various lengths, two types of couplers, and heavy-duty 6-inch brake casters. Entire scaffold may be rolled as job progresses. Brakes on casters hold scaffold firmly in place during work. Scaffold height and height of working levels are adjustable to clear obstructions. The Patent Scaffolding Co., Inc., 38-21—12th St., Long Island City, New York, N. Y.

**AIR TREATING UNIT AB4936**

Self-contained, air treating unit for the home, cleans, freshens, humidifies and controls relative humidity of air passing through it. The unit, "TEG" Conditioner, vaporizes triethylene glycol into its air-stream to destroy airborne bacteria. Motor-



driven blower draws air through unit over permanent glass fiber filter-cell. Enclosed in French gray baked enamel jacket that has crinkle finish. Operates with warm air heating, steam or hot water heating system. May be used as air cooling device in summer. Conditioner is 5 1/4 inches high, 26 inches wide and 35 inches deep. Weight, 400 pounds. National Air Conditioning, Inc., Johnstown, Pa.

(Continued to page 188)



Architect: Sewall Smith, Lafayette, California

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You're sowing the seeds of quicker sales when you include larger windows . . . and more of them . . . in the homes you build. Prospects aren't snapping up anything with a roof on it any more. They're beginning to pick and choose . . . look for the features they want. And they do want more and bigger windows. You can give them what they desire so easily . . . glass costs so little and adds so much to any house.

Be sure you select glass that is clear and

undistorted . . . the finest available. That kind of glass is L·O·F Quality Window Glass . . . manufactured by methods you can rely on for better vision and less internal stress and strain.

The familiar L·O·F label on your windows acts as a silent salesman for you, too. It is a recognized emblem of quality and quickly assures your prospects that you use only top-grade materials. Libbey·Owens·Ford Glass Company, 4349 Nicholas Building, Toledo 3, Ohio.



L·O·F also makes polished plate glass, safety glass, colorful *Vitrolite*\* glass facing, *Tuf-flex*\* tempered plate glass and other flat glasses. Only Libbey·Owens·Ford makes *Thermopane*\*—the first mass-produced insulating windowpane. \*®



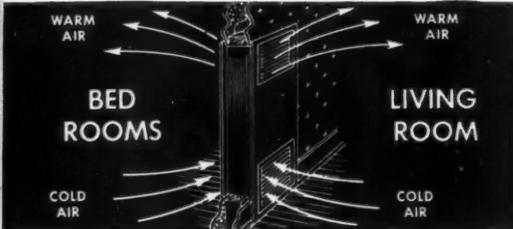
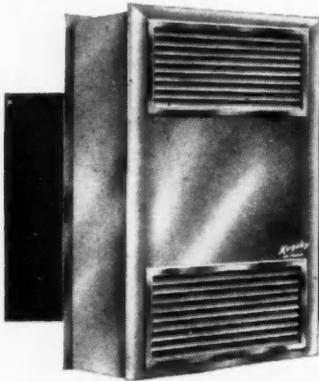
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*a Great Name in* **GLASS**

**A NEW WAY TO  
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**The new KRESKY  
OIL WALL FURNACE**

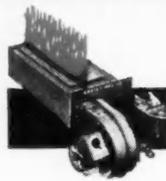


A cost-cutting achievement to meet your modern needs by Kresky, the most famous name in oil heating since 1910.



**HERE ARE THE FACTS**

You can install a Kresky Oil Wall Furnace and get the advantages of a central heating plant of high capacity — 62,500 BTU per hour, fully automatic or manually controlled.



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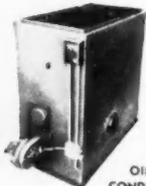
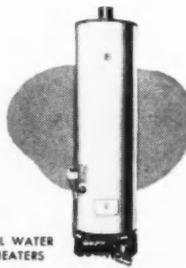
- ✓ Low first cost
- ✓ No basement required
- ✓ More floor space as furnace is installed in wall
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SINCE 1910



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**NEW PRODUCTS**

(Continued from page 186)

**ELECTRIC PAVING BREAKER AB4903**

Homelite paving breaker operates on electricity supplied by 129-pound dual-voltage gasoline-engine-driven generator which can be used for operating other types of high-cycle tools as well as standard 110-



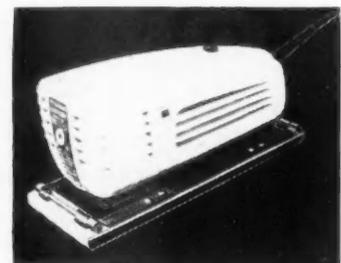
volt tools and floodlights. Breaker and generator make compact combination that can fit in trunk of car and can be put into operation quickly by one man. Breaker is unaffected by dust or abrasive particles. Motor has no brushes or commutator. The Homelite Corp., Port Chester, N. Y.

**MITRE CUTTERS AB4934**

Markwell bench Model No. 2 mitre cutter is made of all metal. Entire top plate is of 1/8-inch steel. Tool steel, adjustable blades. Capacity, 1 3/4 x 3/4 inches. Cuts up to 2 3/8-inch widths. Foot operated Markwell No. 8 is equipped with gauge stops. Markwell Industrial Products Div., New York 13, N. Y.

**PORTABLE ELECTRIC SANDER AB4931**

The "Century" portable electric weighs 4 3/4 pounds. Non-stalling high speed motor incased in streamlined die-cast aluminum alloy housing. Compact, easy to handle, this Model 1000 Sterling operates on



orbital motion. Unit is four inches high. Can sand up to corners and trim or under low obstacles without risk of damage. Standard size abrasive sheets cut in thirds are used, and as many as four or five sheets can be loaded on the pad at one time. Sterling Tool Products Co., 1340 N. Milwaukee Ave., Chicago 22, Ill.

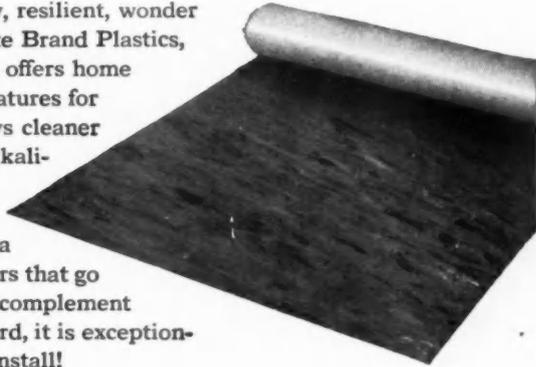
**STAPLE TACKER AB4924**

Bostitch Model T-5, trigger-action tacker for driving staples into wood and other materials, is adapted to work in restricted places where there is not room enough to swing a hammer. Places and drives staple without danger of marring material. Drives within 1/16-inch of inside corners, rabbets, or moldings. Weighs three pounds. Bostitch, 639 Mechanic St., Westerly, R. I.

(Continued to page 190)

# The floor news of a lifetime!

Beautiful FLOR-EVER, the new, resilient, wonder floor covering made of Vinylite Brand Plastics, is the only floor covering that offers home builders such revolutionary features for more wear and less care! Stays cleaner longer—it's spot-, stain- and alkali-resistant, grease- and water-proof. Quiet and resilient to the step, FLOR-EVER comes in a galaxy of clearer, brighter colors that go right through to the backing—complement all decors. Available by the yard, it is exceptionally easy and inexpensive to install!



★ FLOR-EVER is being nationally advertised in Better Homes and Gardens, American Home, House Beautiful, House and Garden, McCall's AND Good Housekeeping. Why not capitalize on FLOR-EVER's advantages in the homes you are building!

*Smooth non-porous surface won't absorb dirt*

*"once over lightly" cleans it*



**DELAWARE FLOOR PRODUCTS, INC., WILMINGTON 99, DELAWARE**

New York Showrooms: 295 Fifth Avenue

Also manufacturers of "Wall-Ever" Vinylite Plastic Wall Covering and "Duralin" Enamel Floor Covering.



Berkshire Greens, Inc., Penn-  
side and Reading, Pennsylvania, 207 Houses. Architect,  
Mr. A. Mayer. Builder and  
Owner, Byron W. Whitman.  
Kitchen Maid Kitchens by  
Merritt Lumber Yards, Inc.

## STAND-OUT *Cabinet Value* FOR ALL TYPES OF DWELLINGS

The outstanding value of Kitchen Maid Cabinets is emphasized by their frequent selection for private housing developments. Architects and builders everywhere are recognizing the many important advantages of factory finished hardwood cabinets, soundly constructed and pleasingly styled. Buyers appreciate too, the warmth and friendliness that only Wood Cabinets provide.



Inserts for bread, sugar, flour, etc., add to utility of aluminum drawers.



Ventilated, bright metal, sliding towel drier, one of many accessories.

**DISTINCTIVE FEATURES**  
In addition to these basic advantages, Kitchen Maid offers many distinctive features: modern Flo-Line styling, composite construction, quiet, non-chipping aluminum drawers, resinite doors with cushioned action, solid, permanent shelves, many work-saving accessories.

Your Kitchen Maid representative will be glad to work with you on any kitchen problem. Call him soon. In the meantime write for valuable planning guide "Kitchen Hints", free to architects and builders.



**THE KITCHEN MAID CORPORATION**  
594 Snowden Street, Andrews, Ind.  
Please send new booklet containing 10 practical kitchens with floor plans and details. I am an  Architect  Builder  Dealer.

Name \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

## NEW PRODUCTS

(Continued from page 188)

**PRE-CUT PLYWOOD DOORS AB4932**  
General Flush Doors of stress-skin construction are pre-cut to exact standard sizes, but allow for trimming. Simple to install, easy to handle. Core consists of treated rigid cylinders three inches in diameter, spaced in staggered pattern, giving uniform support to door faces throughout. Select poplar rails, 3/4-inches wide and stiles 1 1/2-inches wide are joined together with dowel construction. Width of rails sufficient to permit cutting down two inches in height. Faces of three-ply Southern Hardwood gum plywood. General Plywood Corp., Louisville 2, Ky.

**WALL HEATER AB4933**  
"Dual 25" wall heater, 25,000 B.T.U. input, is adaptable to natural, manufactured or liquefied petroleum gas. Rough-in dimensions are 14x50 1/2 inches. Fits in standard four-inch wall with studs of 16-inch centers.



Offers vented operation, coupled with circulating-type heat. Heater mounts off floor; provides return air inlet in hidden duct under wall panel which draws cool air off the floor. Heating element enclosed behind wall panel which always remains safely cool. Holly Manufacturing Co., 875 S. Arroyo Parkway, Pasadena 2, Calif.

**GAS AND OIL FURNACES AB4920**  
Mor-Sun pressed steel forced warm air furnaces are assembled at factory and shipped as package units. Sizes up to 175,000 B.T.U. If tight basement entrance is



encountered, casing sides can be quickly removed, leaving narrow assembly that can be handled easily. Heat exchangers are of 12-gauge steel. Morrison Steel Products, Inc., Buffalo 7, N. Y.

(Continued to page 192)

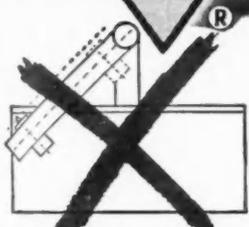
**A Whole Shopful of Tools — Right at the Job!**

That's what you have with a Delta Multiplex Radial-Arm Saw. It's easy to take along: Two men can carry a cabinet model and quickly load it on your truck.

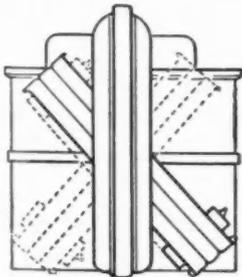


Shown is Delta Multiplex Model 40A with cabinet base. It has a rip capacity up to 3 1/4". Also available is Delta Multiplex Model 30A with cabinet base — and a rip capacity up to 2 1/4". Both models are widely used for cutting foundation forms, sheathing, roofing, cabinets, doors, frames, drawers, sills, stair treads, etc.

**DELTA MILWAUKEE**



**The Old, Conventional Principle**  
This shows how conventional radial-arm saws pivot from the column. They have practically no mitering capacity at 45°, not much usable capacity at 30°, and almost none beyond 45° on left-hand miters.



**The Modern Delta Multiplex Principle**  
This shows how center-pivoted saw arm permits Delta Multiplex to be set quickly to cut any miter — right- or left-hand — at full capacity up to 90°. The saw rotates through 360°. Permits unlimited number of saw positions, greater capacity and ease of operation.

## You get more capacity with a DELTA® Multiplex Radial-Arm Saw

Cutting arm rotates 360°. You can put it at any angle — and get 100% mitering capacity

You cut job time and costs, with a Delta Multiplex — because it's quick and easy to make almost any cut you want. The patented "Versatile Elbow" sees to that. It's a center-pivoted track that carries the cutting head and lets you put the blade in any position.

There is no lost travel of the cutting head on the track. With a Delta Multiplex, you cut the *full length* of the sliding arm on both right-hand—and left-hand—miters from 0° to 90°! The blade moves through practically the center of the table. Your work rests on the full table and you get full-capacity cuts.

Your nearby Delta distributor has Multiplex models on his sales-floor now. Inspect them here. See for yourself the Delta Mul-

tiplex features that assure you of safety, speed, convenience, capacity, and economy. And ask about buying the Delta Multiplex on easy credit terms.

Look for the name of your Delta distributor under "Tools" in the classified section of your telephone directory.

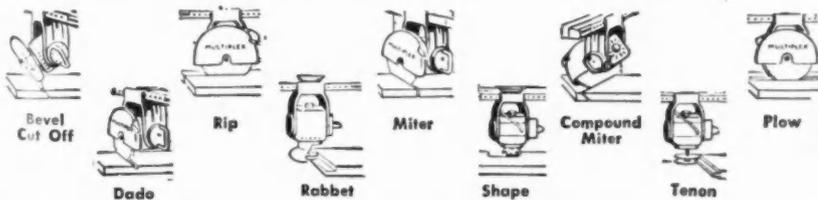
Send coupon for descriptive literature on Delta Multiplex Radial-Arm Saws having rip capacities up to 6".

**DELTA MANUFACTURING DIVISION**  
ROCKWELL MANUFACTURING COMPANY  
MILWAUKEE 1, WISCONSIN



**Model 20A — for cutting interior trim**  
Exceptionally low in cost. Portable — can be carried easily in the back of your car. Has rip capacity up to 2".

**One Multiplex does all this — and more!**



**TEAR OUT COUPON AND MAIL TODAY!** RS-10

**DELTA MANUFACTURING DIVISION**  
3802 N. Pierce St., Milwaukee 1, Wis.

Send me descriptive literature on the complete line of Delta Multiplex Radial-Arm Saws.

Name.....  
Company..... Title.....  
Address.....  
City.....  
..... State.....



WROUGHT STEEL  
**TEE  
 HINGES**  
 QUALITY  
 HARDWARE  
 SINCE  
 1865

**McKINNEY**

MANUFACTURING COMPANY

PITTSBURGH 12, PENNSYLVANIA

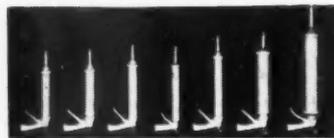


**NEW PRODUCTS**

(Continued from page 190)

**FEATHERWEIGHT CAULKING GUNS AB4921**

Vital caulking guns in seven sizes range from one pint to 2 1/2 quarts capacity. Made of steel, bronze and aluminum. Finished in hard gunmetal, or cadmium plate on special order. All models except A-1, B and C are supplied with standard No. 12, 3/8-inch oval nozzles. Model A-1 supplied with



No. 16 nozzle; B and C with No. 5. All nozzles are interchangeable with Vital Caulk-Stop nozzle which incorporates 3/8-inch stop-cock. All guns, except Model A, are equipped with finger-form trigger and contour handle. Vital Products Manufacturing Co., 7500 Quincy Ave., Cleveland 4, Ohio.

**ELECTRIC ADDING MACHINE AB4913**

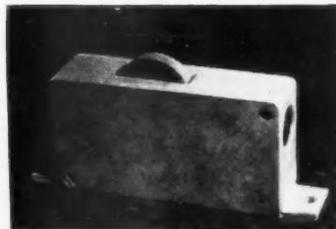
Model 93100-5 Electric adding machine embodies cushioned construction for quiet operation, streamlined keyboard for fast action, and new type value gauge for figure



evaluation. Incorporates lengthened add-total and correction bars and electrified sub-total, non-add, repeat and direct subtraction keys. Available with 5-inch stationary carriage and 13-inch movable carriage. Remington Rand, Inc., 315 Fourth Ave., New York 10, N. Y.

**SMALL CONTACT SWITCH AB4906**

Sedgwick "CBN" contact switch. Used in operation of lights, buzzers, alarms, signals, indicators or other applications requiring contact making or breaking devices of small dimensions. Simple design, rugged



in operation, it is made as single pole double throw, slow make and break, for use on either AC or DC, at maximum voltage of 250. Current rating is two amperes AC; one ampere, DC. Contacts are silver to silver. Entire contact assembly readily removable as a unit. Sedgwick Machine Works, 80 Eighth Ave., New York, N. Y.

(Continued to page 194)

Announcing the **NEW**

# ALDRICH

## Bantam

### Designed, Built and Priced for the Modern Small Home

Here is a compact boiler-burner unit designed and built specifically to heat the modern 4 to 5 room home economically and to supply domestic hot water to meet FHA requirements, with quick recovery, on a year around basis, at low cost.

Only 45 in. high, the Bantam occupies only 20 x 33 inches floor space. Clean, attractive, quiet, it requires no separate room — cuts building costs as well as heating costs. Ratings: 100,000 BTU per hour; 440 sq. ft. hot water standing radiation; 285 sq. ft. steam standing radiation. Recommended firing rate: 0.75 GPH.



**Aldrich CX  
Oil Burner**

**Firing Range  
0.75 to 2.00 GPH**

Designed especially for the Bantam Boiler-Burner, the Aldrich CX with Aldrich-built motor and transformer makes an ideal replacement burner for other small heating plants. Available with either flange or base mounting. Quiet. No radio interference. Other Aldrich burners have capacities to 19 GPH. Write for specifications.

*"A Quality PACKAGE DEAL"*

*Crated, Fully Erected for Quick, Easy  
Installation and Cleaner, Faster Profits*

Buyer and seller both make a good deal on the Bantam. It's a factory-planned package, with fair price based on high quality construction and volume production.

Boiler is vertical steel fire-tube type, designed for hot water or steam heating or hot water supply. Main boiler shell is heavy welded steel with 2 in. insulation blanket and an outer dress shell of Hammerloid-finished steel. Features include quick recovery, quiet operation, low stack

temperature, completely submerged fire tubes, spiral turbulator, and easily replaced combustion chamber.

Supplied as a "package" complete with Aldrich Burner, with or without optional equipment—wiring, circulator, valves, draft stabilizer, manifold, special controls.

It's the easiest boiler-burner to buy . . . to sell . . . to install . . . and the most economical heating source for a modern 4 to 5 room home!

# ALDRICH

**ALDRICH COMPANY, 111 Williams Street, Wyoming, Illinois**

A SUBSIDIARY OF BREEZE CORPORATIONS, INC.



*Get the Facts About  
Aldrich FIRST!*

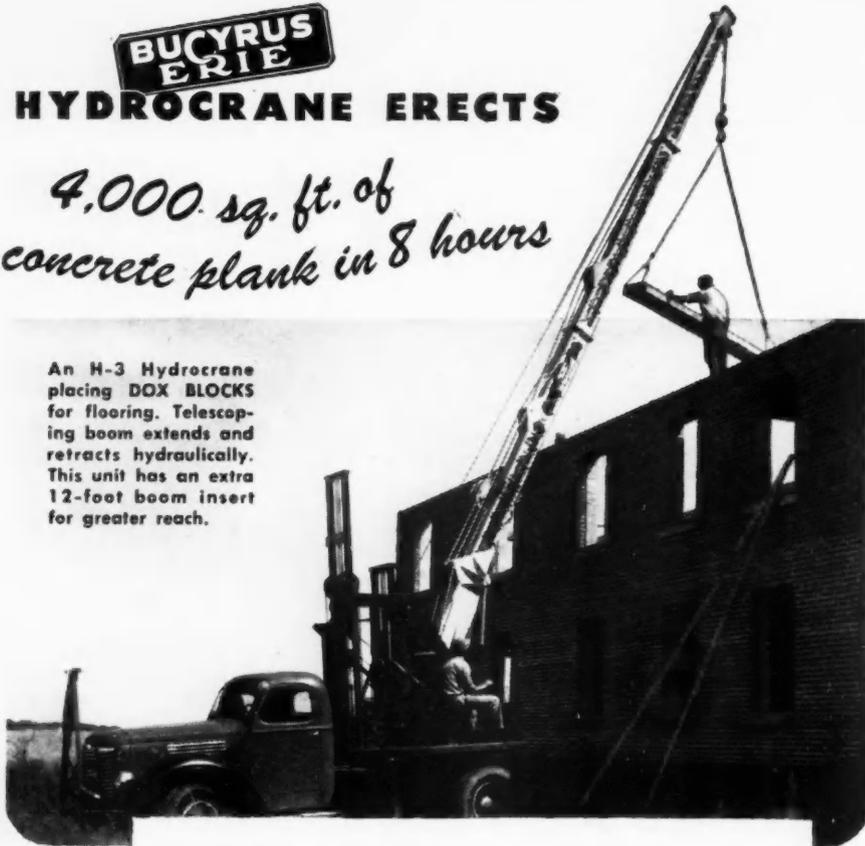
Write, wire, or telephone for details about the Bantam and 6 larger Aldrich Boiler-Burner Units for steam heating, hot water heating, and hot water supply. Units 118,000 to 808,000 BTU an hour have identical ratings with interchangeable oil and gas burners.



**HYDROCRANE ERECTS**

*4,000 sq. ft. of concrete plank in 8 hours*

An H-3 Hydrocrane placing DOX BLOCKS for flooring. Telescoping boom extends and retracts hydraulically. This unit has an extra 12-foot boom insert for greater reach.



**BY USING** a Bucyrus-Erie Hydrocrane, Vander Heyden, Inc., Milwaukee, Wis., building contractors, erected 4000 sq. ft. of their prefabricated DOX BLOCKS concrete planking in 8 hours. On average jobs they place from 2000 to 3000 sq. ft. per day, mostly floors and ceilings for housing and commercial building.

Because of the mobility of the truck-mounted Hydrocrane, it handles jobs no ordinary crane can touch. On a recent Vander Heyden job, the Hydrocrane traveled to a point 225 miles from Milwaukee, erected 4600 sq. ft. of concrete plank and returned to Milwaukee — all in two days.

Every Hydrocrane function is fully hydraulic. Power is furnished by the truck engine to a dependable hydraulic system. Simple control, hand action — no foot levers.

2 Sizes — 2-ton, 1/4 yard and 3-ton, 3/8 yard.

18H49



**HYDROCRANE DIVISION**

7923 W. Greenfield Avenue, Milwaukee 14, Wisconsin

*mail this coupon today*

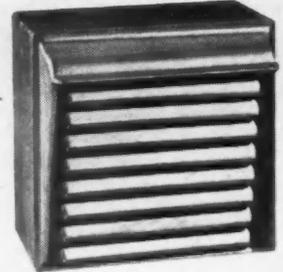
**BUCYRUS-ERIE HYDROCRANE DIVISION**  
7923 West Greenfield Avenue, Milwaukee 14, Wisconsin  
I want the full story on the Hydrocrane

Name.....  
Company or Dept.....  
Address.....  
City..... State.....

**NEW PRODUCTS**

(Continued from page 192)

**GLASS BLOCK VENTILATOR AB4912**  
Westeco Blokvent, louver Type 3L glass block ventilator, of cast aluminum, features a removable louver and screen. Held in place by interlocking arrangement and one screw louver and screen are



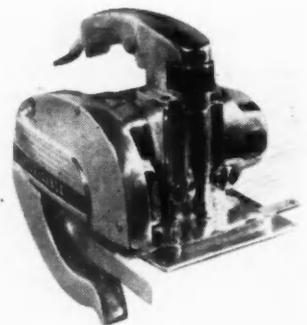
removable for cleaning from interior of room. Easily cleaned with damp cloth. Each unit takes the place of one glass block. Provides adjustable, insect-proof ventilation for bathroom windows, shower rooms, and other rooms in the home or office. Westwood Engineering Co., 3118 W. Lake St., Chicago 12, Ill.

**BLUEPRINT CABINET AB4914**

Cole blueprint cabinet, of heavy gauge furniture steel, features smooth gliding drawers on ballbearing rollers. Equipped with lift compressor in front of drawer and hood in the rear to prevent material filed from curling, creasing or tearing. Available in olive green or Cole gray crinkle finish. Two sizes, one with inside drawer dimensions, 37 inches wide, 25 inches deep and 2 1/4 inches high; the other, 43 inches wide, 32 inches deep and 2 1/4 inches high. Cole Steel Equipment Co., Inc., 285 Madison Ave., New York 17, N. Y.

**ALL-PURPOSE SAW AB4939**

Guild A-6 all-purpose saw is recommended for general carpentry, building and contracting, maintenance, crating, floor installation and repair, cabinet work and home use. Featuring perfect balance, the saw has 6 1/4-inch diameter blade with



5/8-inch standard round hole. Depth adjustment can be regulated for depths from 1/8-inch to two inches. Trigger switch located in handle. Turbine fan draws air through motor and discharges it at front, blowing dust off line of work. Motor, 115 volt AC/DC. Speed (Idle) 5,500 r.p.m. Length, 10 inches; width, 8 1/8-inches. The Porter-Cable Machine Co., Syracuse 8, N.Y.

(Continued to page 196)

# The PROFESSIONAL BUILDERS' BULLETIN

An "Idea Department" from the Engineers of Ingersoll

BW  
PRODUCT OF  
BORG-  
WARNER

## INGERSOLL LEADS WAY TO LOWER PRICES!

### Expanded Distribution, Increased Volume Result in Revised Price Schedule



Continuing its rapid expansion in the small-home utility field, the Ingersoll Utility Unit Division of the Borg-Warner Corporation this month announces a new and lower price schedule for the Ingersoll Utility Unit and the Ingersoll Panel Core. Price reductions follow acceptance of the "Ingersoll Idea" by more than 150 of the nation's largest plumbing and heating wholesale outlets in the last six months alone, with corresponding increase in sales volume.

Now the Ingersoll Utility Units are more advantageous than ever for professional builders who already had shown enthusiastic acceptance of the Ingersoll "one purchase—one installation" idea. The Ingersoll line is more complete

and more flexible with the addition of two new furnaces, kitchen cabinets and work tops. Eight stack, vent and underground combinations enable the Ingersoll Units to meet 98 per cent of all building codes. This gives small home designers the widest latitude in individualized planning. It also results in the economies, convenience and simplicity of securing all components from a single, reliable source.

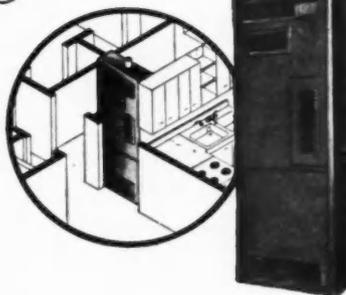
Assembled exclusively by A. F. of L. journeymen plumbers, Ingersoll Utility Units open up a wide new field for builders and architects eager to benefit from the small-home building boom anticipated under proposed new federal government legislation.

## NEW CABINET LINE ADDS VERSATILITY TO KITCHEN PLANS



Individually-tailored kitchens are made more feasible than ever by the complete new line of Ingersoll steel kitchen cabinets. They harmonize in quality and design with other Ingersoll Utility Unit components. Line includes a wide variety of attractive under-sink and wall cabinets, with linoleum or plastic work tops.

Kitchen cabinets, in any combination, can be ordered along with basic Utility Unit, for arrangement as space available and architect's ideas indicate.



## New Ductless Heating With Ingersoll "88"

Economical ductless heating in mild winter areas has been solved in a new way by the introduction of the Ingersoll "88" gas-fired utility furnace. Also ideal for multiple installations in ranch-type houses in any climate.

Ingersoll "88's" with 50,000 B.T.U. capacity occupy only 3 sq. feet of floor space. They can be used three ways—as space-heaters, mounted flush in walls or in closets, or with plenum chambers and short ducts where several rooms are to be heated by one furnace. Approved by the A. G. A.

## SEND FOR NEW INGERSOLL CATALOGUE

Displaying Complete Line of Ingersoll Items!

One letter gets you the catalogue—free of course—plus the current issue of the Ingersoll "House Plan of the Month" which offers suggestions for interesting small-home designs and features.

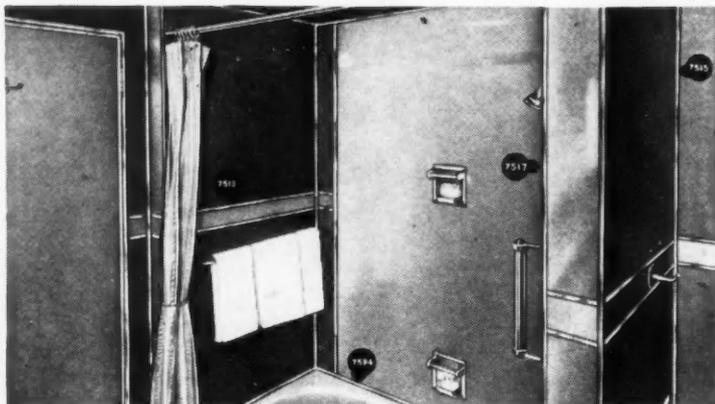


Write today to:

**INGERSOLL UTILITY UNIT DIVISION**  
Borg-Warner Corporation  
Dept. B4, 321 Plymouth Court  
Chicago 4, Illinois

**THIS JOB SURE CALLS FOR**  
**Chromtrim**  
**METAL MOULDINGS**

"In the building business we face this one every day: "Keep costs down—but maintain quality!" (A challenge we invariably meet.) That's why we always specify CHROMTRIM. We know that CHROMTRIM metal mouldings are available in all popular shapes . . . easy to install . . . perpetually beautiful. Best of all their low cost is matched by their high quality. Yes, that's all we need to put the finishing touch to any job!"

**METAL MOULDINGS  
 ARE MONEY-MAKERS!**

Just watch YOUR sales soar and profits pile up with CHROMTRIM metal mouldings. Here's the ECONOMY LINE, completely fabricated and produced under one roof, using modern assembly line methods. Cut to convenient lengths and individually wrapped to preserve its lustrous finish, easy to handle—easy to sell . . . here's complete, lasting satisfaction for you and your customers. No wonder CHROMTRIM is the first choice with contractor, dealers and mechanics from coast to coast!

Sold through a nation-wide distribution organization.



**R. D. Werner Co., Inc.**  
 295 FIFTH AVE. NEW YORK 16, N. Y.  
 In Canada: R. D. WERNER COMPANY LTD.  
 PORT DALHOUSIE, ONT.

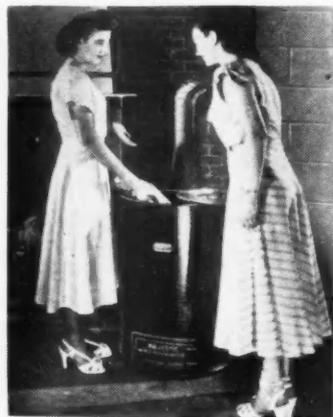
Write Dept. AB-4  
 Please reserve my copy of the CHROMTRIM 1949 catalog.

NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_

**NEW PRODUCTS**

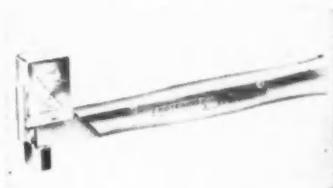
(Continued from page 194)

**INDOOR HOME INCINERATOR AB4928**  
 Model No. 2 incinerator is double-walled cylindrical metal unit fitted with welded steel rod inner grating and cast iron swinging top and ash clean-out door. Taps to



any furnace flue six inches or larger. By means of grate baffle, draft is induced through top causing down-draft which dries and super-charges the burning of the contents. Finished in brown bronze, unit measures 23 inches in diameter, 32 inches in height. Burns wet or dry garbage. Majestic Co., Huntington, Ind.

**HAMMER STAPLER AB4908**  
 Stapl-On hammer stapler weighs one pound, 14 ounces. Staples are fed automatically, and one tap drives a staple in hardwood or light metal. Hammer-shaped handle



conforms to shape of hand. Handy for installing insulation, or for other construction. Requires ten seconds to load. Will drive 20 staples in five seconds. E. H. Hotchkiss Co., Norwalk, Conn.

**ELECTRICALLY OPERATED WINDOW AB4905**

Vita automatic window disappears into wall at flip of a switch, carrying a screen into place as it moves. Double glazed, it



is raised into and lowered from "closed" position by rolling or unrolling of screen from which it is hung. Can be used in any room. Adaptable to any style of architecture. Guaranteed against mechanical defect. Run by small electric motor. Automatic Windows, Smithtown Branch, Long Island, N. Y.

(Continued to page 198)

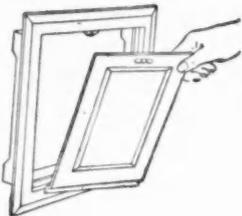
**BENNETT  
"DEEP-SEAT"  
ASH DUMP**

100% Heavier for Permanent, trouble-free service — 9 x 4½ inches. Cat. No. C-203.



**SCRU-TITE  
CLEANOUT DOOR**

Offered in cast iron with steel door (C-211) and in solid aluminum (C-212) for superior corrosion resistance. Both have airtight closure with convenient thumb screw. Sizes 8" x 8" and 12" x 8".



**GRATES & LOG DOGS**



Cat. No. A-501 Heavy Duty. Extra Deep, Removable Ends. Ash dumping trap. For Coal or Wood.



Cat. No. A-503 Cradle Grate. Sturdy Coal or Wood Basket.



Cat. No. A-515 Wood Grate. Use with or without andirons. Good outdoor fireplace grate.



Cat. No. A-1451 Heavy Log Dogs for Heavy Logs. Protect valuable andirons. Ideal for camp or outdoor fireplace.



**BENNETT  
Warm-Aire  
FIREPLACE UNITS**

The post war recirculating Unit. Leak-seal flange around firebox. Tight-seal base. Longer baffles increase heating efficiency. Interchangeable Rotary or Ratchet control on Damper. Cat. No. C-131.

**THE BENNETT LINE  
OF SALES PROVEN  
FIREPLACE SUPPLIES**

The Bennett Dealer enjoys steady demand for our line through our continuous National Advertising. Bennett Fireplace Supplies are a complete line of profitable quality products. It pays to sell Bennett.



**BENNETT  
\*Fresh-Aire  
FIREPLACE UNITS**

The very best for the modern weather-tight house. Draws fresh air from out of doors, heats and circulates it throughout the house. Cat. No. C-121.



**BENNETT  
\*Expanslip  
STEEL DAMPERS**

Exclusive "Slip-Joint" avoids damage to masonry from heat expansion. The only damper with 60° Steep-Slope. High dome. Lays up easily. Competitively priced. Cat. No. C-101.



**BENNETT  
Steep-Slope  
CAST DAMPERS**

High dome, steep slope (50°). Steel valve. Broad, strong front flange may be used as lintel bar. Sharp clean lines. Most up-to-date cast damper on today's market. Cat. No. C-103.



**Flexscreen**  
REG. U. S. & CANADA PAT. OFF.

**SAFETY FIREPLACE CURTAINS**

The only Nationally Advertised curtain screen. Every fireplace owner is a prospect for Flexscreen. Its own best salesman, a display on your floor will increase your volume on this "quality" product.

Write now to 449 Market St. for

Catalog and Full Information on the

**COMPLETE POST-WAR BENNETT LINE**

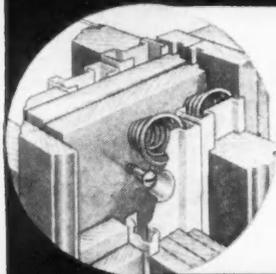
\*Trade Marks Reg. U. S. Pat. Off.

**BENNETT - IRELAND INC.**

*Chartered in 1906*

NORWICH, NEW YORK

# 5 FACTS *you may already know about* The REMOVABLE Window

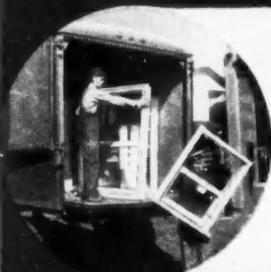
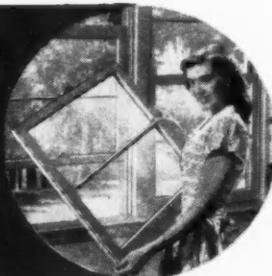


## 1. It is the Wood-and-Metal Window

Never sticks, never rattles. In opening or closing, wood slides against metal. Spring pressure acts as a cushion, compensating for swelling or shrinking due to weather conditions.

## 2. It is REMOVABLE . . . To Wash Both Sides INDOORS!

Move lower sash up, upper sash down, press each window to the left, and REMOVE. The whole operation takes only a few seconds.



## 3. Delivered COMPLETE...No Assembly Work On-the-Job.

R-O-W Windows can be shipped to your construction job as pre-fit, weather-stripped units. One of 47 R-O-W manufacturer-distributors is near you. This insures prompt delivery, efficient service, and low freight costs.

## 4. Millions in Use (since 1938) . . . Nationally Advertised

Consumer acceptance is steadily growing. Advertising is appearing in BETTER HOMES AND GARDENS, AMERICAN HOME, SMALL HOMES GUIDE, and GOOD HOUSEKEEPING.



## 5. R-O-W Means: Removable Opens Easily Weatherstripped

For the name of the R-O-W manufacturer or distributor nearest you, write R-O-W Sales Company, Royal Oak, Michigan.

## NEW PRODUCTS

(Continued from page 196)

### FLOOR SANDER AB4941

American "Super Eight" high speed floor sander operates at normal walking pace, powered by 2 H.P. American motor with motor speed of 1,750 R.P.M. When motor



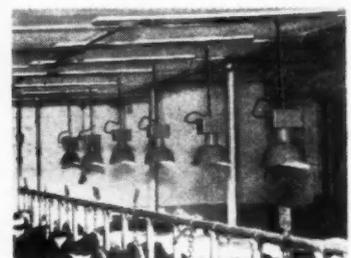
is turned on, it starts under "no-load" condition, due to automatic V-belt take-up. As motor gains speed, pulley squeezes V-belt from side and belt then turns drum. Simple push-button speed control in ranges from 1,600 to 2,800 R.P.M. in 200 R.P.M. gradations. When dial is turned, diameter of drum pulley is changed, varying speed. Easy servicing. Variable drum pressure from 52 to 103 pounds. American Floor Surfacing Machine Co., Toledo, Ohio.

### METAL CLOSET DOORS AB4901

Installing time is half an hour for the Orange Metal Bi-Passing doors. In three, four, five and six-foot dimensions, of standard five-foot six-inch height, the doors provide total accessibility to closets. Feather touch control slides doors back and forth on ball-bearing rollers. Rubber bumpers cushion sliding panels at door jambs. Each panel has two felt sound-deadening pads at top. Exposed butt-joints are welded smoothly. Frame matches standard Orange door frame and is painted with red oxide primer. Panels are primed in pastel shades. Virginia Metal Products Corp., Orange, Va.

### NON-METALLIC SHEATHED CABLE AB4919

Ne-o-Prene Loomwire, a non-metallic sheathed cable for barn, stable, milk-house and other farm building wiring, resists moisture, fire and rot. Under-



writers' Laboratories, Inc., seal of approval for use up to 600 volts. Available in No. 14 and No. 12 wire sizes, in 2-conductor type, and in standard coil lengths. Two insulated conductors spaced by rubber separator which has within it twisted Fiberglas cords. Rubber spacer adds tensile strength, acts as cushion against hammer blows. National Electric Products Corp., Chamber of Commerce Bldg., Pittsburgh 19, Pa.

# Grote LEADS AGAIN!

New and Sensational Improvement  
In Bathroom Cabinets



## Stor-in-door\*

# BATHROOM AND ALL-PURPOSE WALL CABINETS



Recessed models with deep drawn, seamless bodies — plate glass mirrors — adjustable glass shelves. Lighted and unlighted models.



Surface models with choice of plate glass and window glass mirrors or without mirrors for all-purpose storage.

Grote makes a full line of recessed and surface model cabinets—with and without Stor-In-Door.

Also Made in Lighted and Recessed Models.

There are many needs for these new and practical Stor-In-Door cabinets . . . The extra cabinet in the busy bathroom . . . in the shower room, the wash room — spice and extract cabinets in the kitchen and pantry —

the back porch for outside wash-up — for the orderly clothes closet — convenient storage in home, shop or office.

Write today for complete information.

Write today for complete information.

THE



## MANUFACTURING CO., INC.

Grote Square - BELLEVUE, KENTUCKY

Opposite Cincinnati

Established 1901



\* Only Grote makes the Stor-In-Door. Patent pending.

Here's the fastest selling feature ever introduced in bathroom cabinets. Extra shelves are recessed inside the door to allow more useable shelf space. Every article in the cabinet plainly visible — every item conveniently within finger-tip reach. Made in surface types and in recessed models, with all the distinctive Grote quality features. Customers recognize this high quality construction — they like this new Stor-In-Door feature. They'll compare — and they'll BUY — the Grote Stor-In-Door Cabinet.

# Quality ALUMINUM

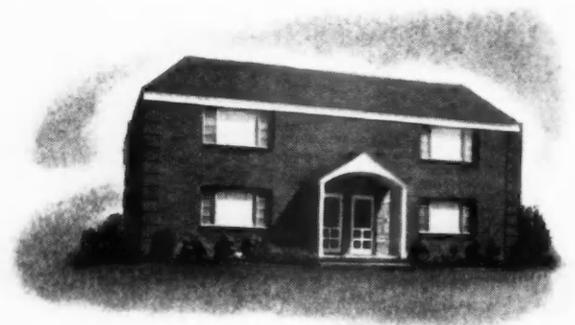
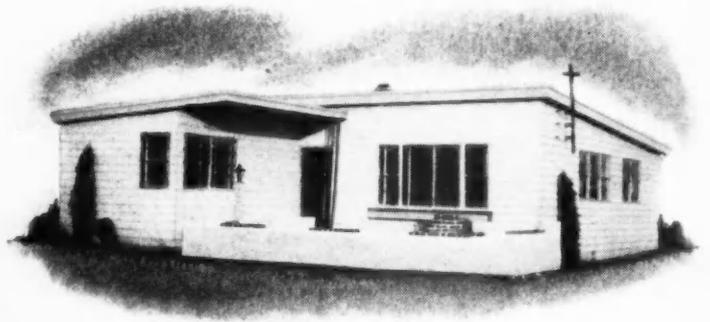
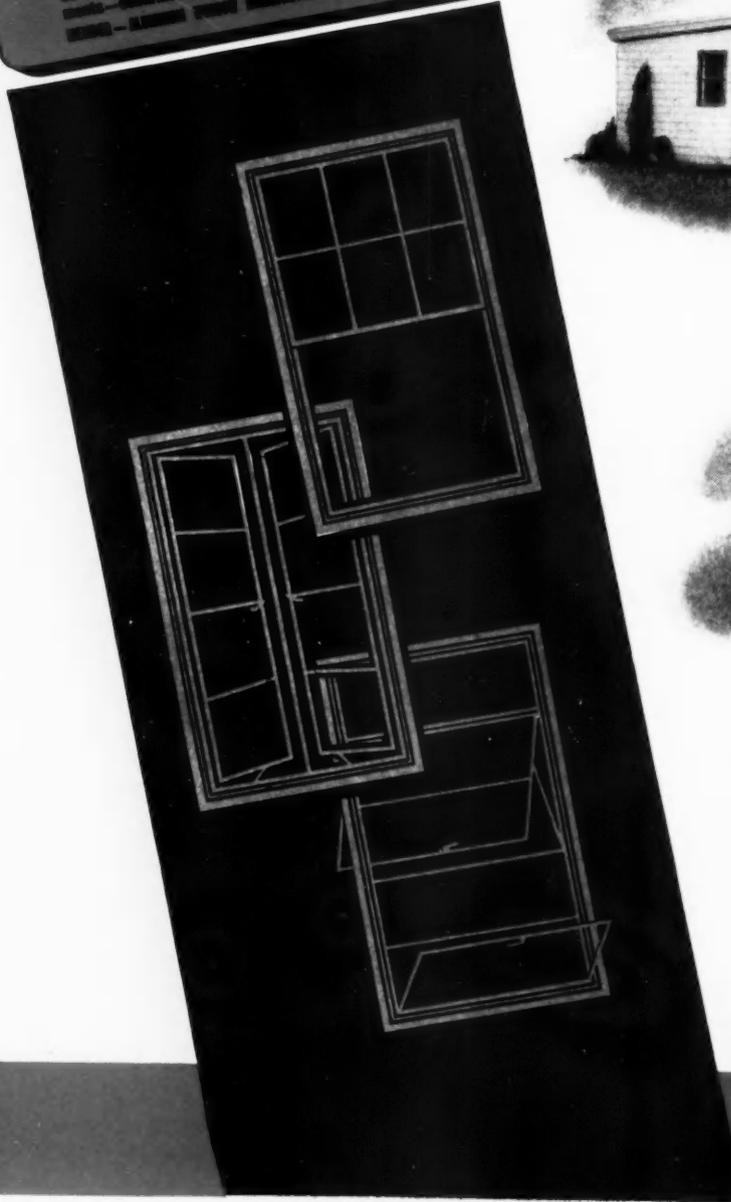
PUT "EXTRA SELL"

**QUALITY APPROVED**  
(TYPE)

AWMA QUALITY SPECIFICATIONS—Materials, Construction, Strength of members and Air Infiltration requirements—verified by Permanent Section Laboratory.

ALUMINUM WINDOW MANUFACTURERS ASSOCIATION





# Approved WINDOWS INTO YOUR HOUSES!

---

● It's a fact! *The bright, red "Quality-Approved" Seal will actually help you sell houses!*

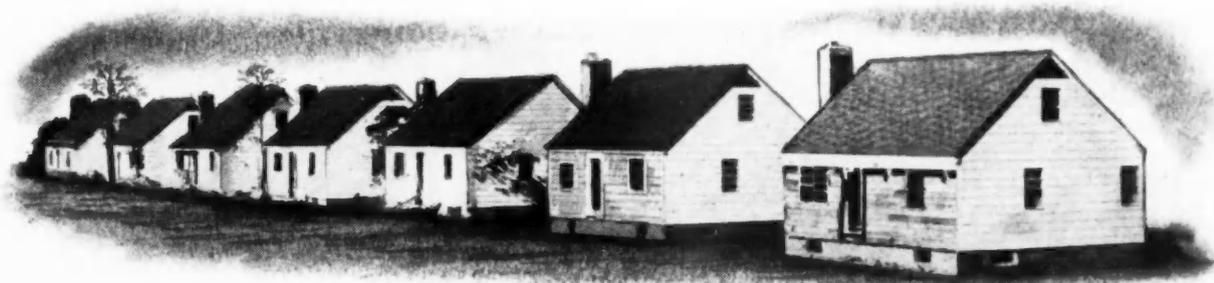
It tells your customers that the windows you use are of finest quality—tested by the independent Pittsburgh Testing Laboratory for quality materials, strength of sections, sound construction, and low air infiltration.

These windows will give your customers the advantages they are looking for—neat appearance, easy cleaning, easy operation, freedom from periodic painting.

Your customers will recognize, too, that you are a quality builder—one who selects materials carefully, with no "short cuts" in quality.

"Quality-Approved" aluminum windows will also help you *build*—faster and more profitably. They come completely assembled, ready to install! No extras to buy, no finish to apply.

It's easy to get all these advantages. Simply insist on aluminum windows bearing the "Quality-Approved" Seal. They're available in all standard types—double-hung, casement and projected. For the names of manufacturers who can supply you, write Dept. A.



*Aluminum Window Manufacturers Association*  
209 CEDAR AVENUE, TAKOMA PARK, WASHINGTON 12, D. C.

# G. E.'s New Electric Heater is easily built right into wall!

For Old Houses . . . for New Houses!

Here's one of those extra, inexpensive luxury features that people look for when they're buying a house.

It's a Built-in Electric Wall Heater, manufactured by the General Electric Company—a wonderful selling feature for any house, old or new.

It was designed with the bathroom in mind, but is installed easily in any room in the house.

Complete, this heater makes any bathroom, any room look more modern. With the snap of a switch, it circulates heat throughout the room by the radiant-convection principle.

And for a very little bit extra, a remote control switch can be attached,



so that the heater can be turned on from the bedside or from another room.

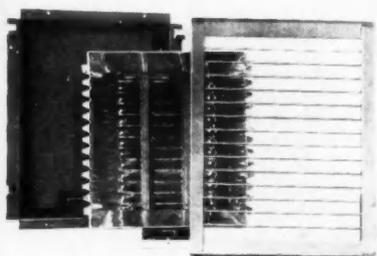
## Specifications for General Electric Built-in Wall Heater

1. Comes completely equipped with tumbler switch as integral part.
2. Beautiful Hammertone gray finish—can easily be painted another color.
3. Fits flush with wall—guard projects only  $\frac{3}{8}$  of an inch.
4. Highly polished corrugated-aluminum reflector that radiates heat in wide zone.
5. Protective grille of high-quality-steel wire—easily removed for cleaning.
6. Two long-life heating elements of nichrome wire—ceramic cords.
7. Rating—1320 watts, 115 volts, a-c/d-c, 1507 Btu.
8. Size: 17 $\frac{1}{8}$  inches high by 13 $\frac{1}{8}$  inches wide by 4 inches deep. Wall opening, 14 $\frac{3}{4}$  by 11 $\frac{1}{2}$  inches.
9. Shipping weight, 10 pounds.

Amazingly low-priced



## BUILT-IN ELECTRIC WALL HEATER



Heater consists of only three separate pieces: a wall box, heating assembly, and guard. Easy to install—instructions attached to each heater.

General Electric Co., Section 281-11  
1285 Boston Avenue  
Bridgeport 2, Connecticut

Please send me complete information on General Electric's Built-in Wall Heaters.

NAME.....

ADDRESS.....

CITY.....

STATE.....

GENERAL  ELECTRIC

## Aluminum Roofing

(Continued from page 180)

which consisted of applying sheet metal strips to the weakened sections and fastening them by screws that penetrated the metal roof deck. On several occasions it was necessary to halt athletic events while water was removed from the playing area.

Last year, Minnesota officials called in representatives of Overly Manufacturing Company and Aluminum Company of America, after the University's engineering department had completed a study of all practical types of new roofs which might be used on the field house. A special type of aluminum roofing, known to the building trades as Goodwin Batten-Type aluminum roofing, was finally specified.

Re-roofing of the field house was completed in less than two months. Old roofing and insulation materials were removed in progressive stages and the steel deck was repaired and cleaned. A vapor seal, consisting of a layer of 15 pound and 30 pound asphalt felt was laid to weather, spot mopped and sealed with steep asphalt. Treated wood nailers, 1 $\frac{5}{8}$  inches by 2 inches thick, were laid vertically



VIEW of vapor seal before application of aluminum sheets on the roof of the University of Minnesota fieldhouse. Eighty-five thousand pounds of sheets, cross seams and extruded battens were used to re-roof this 22-year-old structure.

and horizontally under the seams and fastened to the steel deck by metal screws through clips on the sides of the nailers. Then a 2 inch sheet of foaming glass insulation was laid between, and flush with the top of the wood strips. Finally, a seal of 30 pound asphalt-impregnated asbestos felt was applied to the entire area with hot asphalt.

With these preparatory steps completed, the roof was ready to receive the formed and pre-curved aluminum roof panels and extruded battens. Aluminum battens were laid vertically on the wood nailer strips and fastened by aluminum screws on 20-inch centers.

(Continued to page 204)

# CONCO Means

# LOW COST HEAT

for the  
*Mass Housing Market*



- Fine quality combined with lowest possible cost.
- Models for closet, utility room or basement installation.
- Both oil-fired and gas-fired heating units.  
(Series F oil/gas burners and controls interchangeable.)
- Economical to install, units factory wired, assembled, tested.
- Compact construction, require minimum floor space.
- Ample output capacity for the modern home.

## CONCO Series F WINTER AIR CONDITIONERS

The CONCO series F in one unit, 25" wide, 43" deep and 57<sup>5</sup>/<sub>8</sub>" high, engineered for oil or gas. No structural changes necessary to change a VF unit to either TF or GF—just change burner and controls.



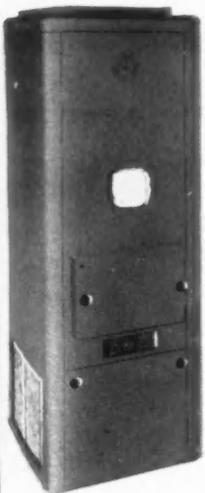
Model VF

The thrifty CONCO-BREESE vaporizing oil burner. Bonnet output, 100,000 B.T.U.



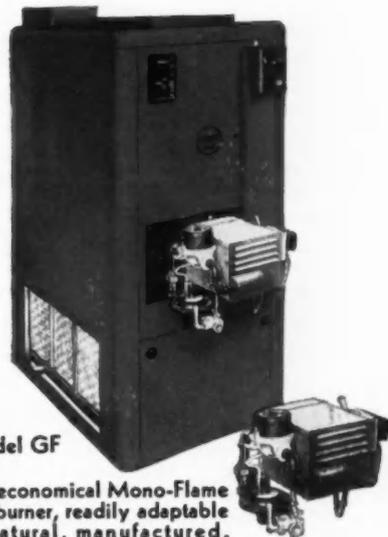
Model TF

The exclusive Magic Spray oil burner uses less costly No. 3 oil Bonnet output, 100,000 B.T.U.



Model VU-1

Designed for utility room, closet, hall or basement installations. Cabinet is 25" wide, 26" deep, 69" high.



Model GF

The economical Mono-Flame gas burner, readily adaptable to natural, manufactured, mixed or L. P. gases.

The CONCO Stainless Steel vaporizing oil burner. Bonnet output, 73,000 B.T.U.



**CONCO ENGINEERING WORKS**  
HEATING DIVISION • MENDOTA, ILLINOIS

**AFFILIATES:**  
CONCO MATERIALS HANDLING DIVISION CRANES—HOISTS  
CONCO BUILDING PRODUCTS, INC. BRICK—TILE—STONE



Here's new, breathtaking beauty for bathrooms

# Crystalchrome

Accessories by

**HALL-MACK**

TRADE MARK REG. U. S. PAT. OFF.

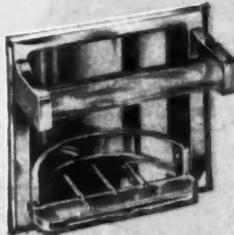


No. 170  
PAPER HOLDER

**NEW in design...NEW in appearance...NEW in its conception of modern accessories for bathrooms—that is Hall-Mack Crystalchrome!**

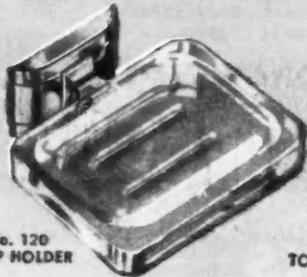
Crystalchrome combines the lasting brilliance of polished chrome on solid forged brass with the added beauty of crystal that is perfectly clear, jewel-like, and easy to clean.

Whatever your designs or building requirements may be, Crystalchrome will bring new beauty to bathroom decoration. Moderately priced to cover a wide range of building needs, Crystalchrome is quickly and easily installed. It is an important new addition to the complete Hall-Mack line of bathroom accessories for every application from millionaire's mansion to modest cottage.

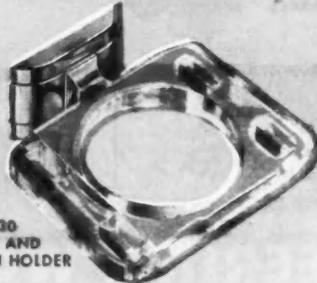


No. 165  
RECESSED  
SOAP AND GRAB

Crystalchrome is available in towel bars, soap dishes, paper holders, toothbrush and tumbler holders and other accessories—in designs never before achieved in bathroom equipment. *Your copy of the Crystalchrome Catalog will be mailed without obligation on request—write for it today!*



No. 120  
SOAP HOLDER



No. 130  
TUMBLER AND  
TOOTHBRUSH HOLDER

**HALL-MACK COMPANY**

1344 WEST WASHINGTON BOULEVARD, LOS ANGELES 7, CALIFORNIA  
7455 EXCHANGE AVENUE, CHICAGO 49, ILLINOIS

## NAREB Leaflet Hits Rent Control as Unfair

A NEW leaflet published by the National Association of Real Estate Boards titled *Rent Control is Unfair*, refers to owners of rental housing units as the only people in the country today whose income is frozen at the 1941-42 level while their living and maintenance expenses have kept pace with the nation-wide increase in living costs.

Pointing out that about 80 per cent of U.S. rental units are owned by "little" people, the leaflet says, "It is unfair by American standards to put a ceiling on the earnings of any group, while that of all other labor, business, and industry is free to rise with the trend of the times."

## Aluminum Roofing

(Continued from page 202)

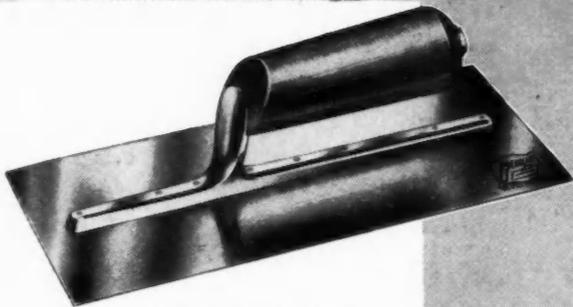
Pre-curved 20 gauge (.032 inch) aluminum panels were then laid over the battens. Cross seams were loose locked.

All were secured by an extruded aluminum cover cap, which was fastened to the metal batten with aluminum screws. Design of the extruded battens formed a highly effective weathertight, sleeve, ensuring maximum protection against leakage.

Final assembly of sheet and extrusions provided an aluminum roof running from gutter to gutter over the ridge. Included in the 85,000 pounds of aluminum employed in the project are: almost 40,000 lineal feet of extruded batten; another 40,000 lineal feet of batten cover; 4,100 roof panels of sheet measuring 39 inches by 120 inches, which were cut, formed and pre-curved to specifications at the plant; 16,000 nails; and more than 50,000 wood and machine screws employed to secure the frame for interlocking roof sections.

This ingenious method of application by Overly engineers permits these 4,100 metal roof panels to expand and contract within the prevailing range of temperatures without buckling from unusual stresses. Yet the whole roof will remain weather tight. Insulation will prevent vapor from condensing on the underside of the roof. The vapor barrier will also prevent vapor from condensing in the insulation and lowering its efficiency. Parapet walls of the field house were also covered with aluminum panels which extended to the aluminum coping, applied to both of the walls and turned down on face and back about four inches. This wall backing will eliminate frost damage to the parapets and requires no welding or use of mastic compounds.

# Whatever the job...



See bottom of ad for description and prices

Ask your mechanics about

**LIGHTER**

**FASTER**

**LONGER WEARING**

## Goldblatt MASONRY TOOLS

Goldblatt masonry tools save time, work, money. For 64 years, skilled craftsmen have chosen Goldblatt, because Goldblatt tools are forged stronger, balanced better, more comfortable, non-corrosive, more flexible. Every Goldblatt tool is guaranteed for materials and workmanship.

WRITE FOR **FREE CATALOG**

Send today for 64-page illustrated catalog describing largest line of tools for your trade, including Steel Mortar Boxes and Transit Levels. Goldblatt offers a complete line of bricklayer, mason, and plasterer tools and supplies for every masonry need—and for Road Paving and General Building Contractors, Trade Schools, Institutions, and Municipalities. Goldblatt can re-blade plastering trowels; can make up special tools to your specifications.

**PLASTERING TROWEL NO. 2S**—aluminum mounting; 10½ or 11 inch lengths. Each \$3.35

**CEMENTERS' TROWEL NO. 4S**—aluminum mounting; 10, 11, 12-inch, each \$3.35—14-inch \$3.60—16-inch \$3.85—18-inch \$4.10.

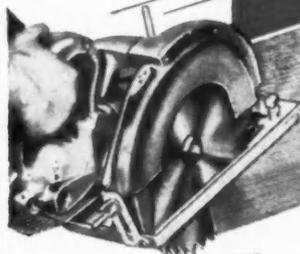
**Goldblatt Tool Co.**

1515 Walnut St.

Kansas City 8, Mo.



FIRST CHOICE OF THE TRADE FOR 64 YEARS



This low-cost electric hand saw saves time... stands up under steady use, on the toughest cutting jobs!

*Fred W. Wappat*

**ELECTRIC HAND SAWS make all the cuts you need FAST and ACCURATELY!**

... cut tough materials, from wood to steel  
... operate simply, safely, easily  
... require minimum maintenance.

Model A-8"  
25/8" cut  
**\$115.00**

Model A-9"  
37/16" cut  
**\$135.00**

### FREE TRIAL OFFER

It doesn't cost a penny to try a Fred W. Wappat Saw. If your dealer can't supply you, write direct. If you don't agree it's the best saw you can buy, simply return it—there's absolutely no charge!

### PROOF of Fred W. Wappat EFFICIENCY

Best recommendations for Fred W. Wappat Saws come from our thousands of users. For example—the E. H. Latham Co. says, "On Puerto Rico drydock job, one Fred W. Wappat Saw saved \$1,100.00 in labor costs alone!"

Powerful Fred W. Wappat Electric Hand Saws are low in cost—high on quality—they're the product of over a quarter century's experience in making fine electric hand saws. Fred W. Wappat-designed gears, turbine-cooled motors, simple, single-point lubrication increase efficiency and minimize off-the-job repair time and general maintenance. Hundreds of thousands of feet can be cut before a Fred W. Wappat Saw needs attention other than lubrication and blade sharpening.

You make all angle and grooving cuts—fast, with predetermined accuracy. Thanks to practical, field-proven balance, you get easy, fatigue-free operation, saving time and money on awkward, hard-to-reach cutting jobs. And, you cut a wide variety of materials—wood, transite, concrete, light gauge metals, etc.

Fred W. Wappat Electric Hand Saws are known as the saws that give a full day's work, even with inexperienced operators. They're versatile, fast, and dependable—ask anyone who uses one!

*Fred W. Wappat, Inc.*

135 Valley St., Mayville, N. Y.

(on Chautauqua Lake)



**YOU DEMANDED THIS MASSIVE SHINGLE**



For a long time architects and builders have been demanding an asphalt shingle with these features: Greater thickness, greater rigidity, greater protection through increased headlap and a longer life span.

**HERE IT IS . . . "The Architect",** a new shingle designed especially by Bird & Son to meet the most exacting specifications:

- *Thick massive butts . . . approximating slate or wood shingles in caliper . . . heavy shadowlines.*
- *Weight 290 pounds per square . . . the perfect balance of greater saturation and heavier coating of life-giving asphalt.*
- *Triple coverage, 5" headlap . . . Major factors in long-lived protection against standing snow and driving winds and rains.*
- *Surfaced with larger mineral granules . . . outstanding appearance, better adhesion, longer surface protection.*
- *Greater rigidity because of the heavier felt base, more asphalt and heavy, coarse mineral granules.*
- *Cost of "The Architect" is in the asphalt shingle price range . . . a prime selling feature for this rich, luxurious shingle.*



*The Architect shingle is presently available only in areas served by our East Walpole plant. Write Bird & Son, inc., Dept. AB-1 1472 West 76th St., Chicago 20, Ill. for information about our #27 Master-Bilt Shingle with similar quality features.*

# Avoid **COSTLY ERRORS**

**Save Time and Money**



You'll find

## **THE DAVID WHITE UNIVERSAL LEVEL-TRANSIT**

**IS THE MOST PRACTICAL ALL-AROUND  
BUILDER'S INSTRUMENT YOU'VE EVER HANDLED**

**Y**ES, you'll be time and money ahead if you use a David White Universal Level Transit in connection with all your survey and checking operations — your building and road construction. The David White Universal Level Transit is an extremely accurate, amazingly rugged instrument. It quickly converts from level to transit. It's designed to provide maximum strength and protection to all parts thus assuring you constant precision over long periods of use and handling.

Among its many features are: Full 12" telescope with 25 power coated optics, a patented ball-bearing race, lock and release lever system, easy perfect alignment adjustments, guarded horizontal circle, vernier accurate to 5', vertical arc 3" diameter.

Write today for complete information on this time and money saving instrument. Included will be helpful booklet — "How to Lay Out Building Lots."



Manufacturers of  
**INSTRUMENTS FOR ENGINEERS,  
SURVEYORS AND BUILDERS**  
311 West Court St., Milwaukee 12, Wis.

- Attractive dwelling roofed with K&M No. 5 Asbestos Cement Shingles, and showing perfect alignment.



**Fewer pieces  
to handle . . .  
cost less to  
apply**



- K&M "Century" No. 5 American Method Type Asbestos-Cement Roofing Shingle . . . 24 inches wide. Note cypress texture and thatched butt.

**K&M**

**"Century" No. 5  
American Method Type**

## ASBESTOS-CEMENT ROOFING SHINGLES

Here's the perfect roofing shingle for builders who want to speed up work and cut their costs. Units are large . . . only 90 required per square . . . and only 2 nails per shingle. They're self-aligning . . . punched and notched for fast, even application. And the results: a good-looking, neatly-finished job plus important savings of time and money.

"Century" No. 5 Roofing Shingles are ideal for new and low cost housing. Can also be applied over old wood shingle or composition roofs.

Made of asbestos and cement, they are fireproof, rotproof, time and weather resisting. Supplied in White, Spanish Red, Black and Surf Green colors . . . each with weathered cypress texture and random width thatched butt.

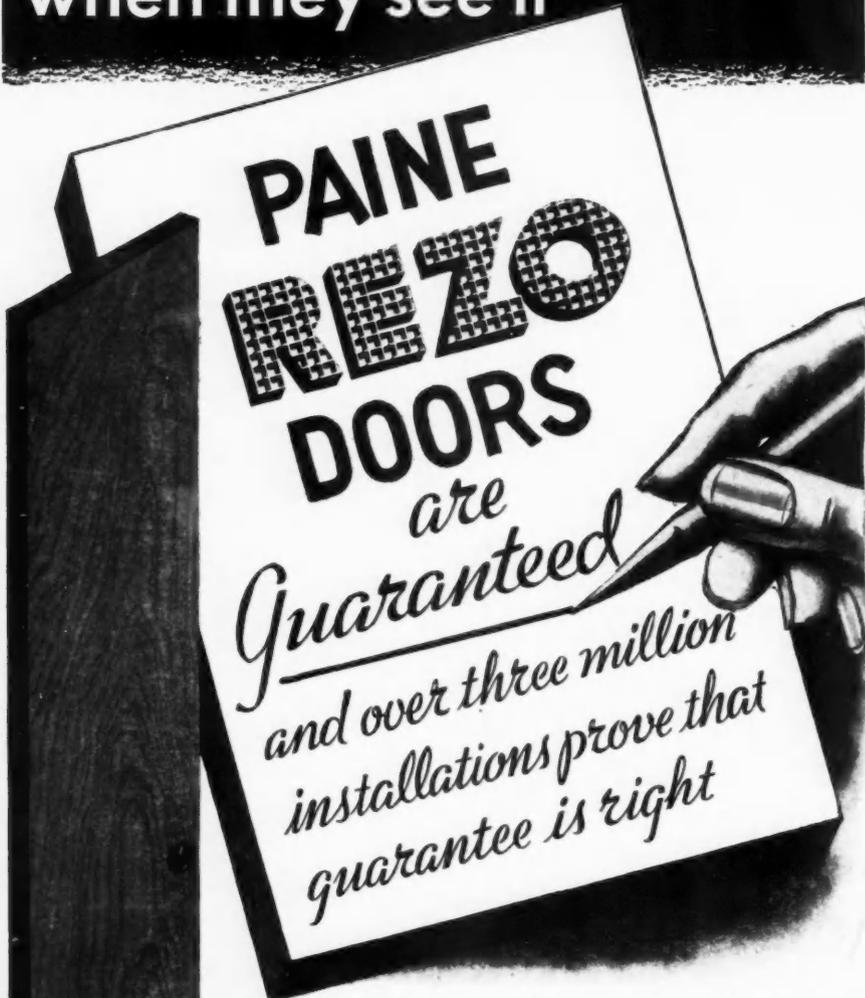
Get full information about "Century" No. 5 Roofing Shingles from your K&M Dealer, or write direct to us. We'll attend to your inquiry promptly.

*Original manufacturers of  
Asbestos-Cement Shingles in this country*

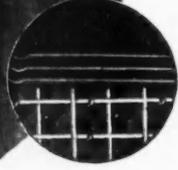
**KEASBEY & MATTISON  
COMPANY • AMBLER • PENNSYLVANIA**



**A note to builders  
who know a good thing  
when they see it**



The record of Paine Rezo doors is countrywide — in buildings of every type, everywhere. From the arid plains to the humid sea shore, these 1 3/4" flush doors perform . . . perform because their patented, ventilated interlocking air cells check warping and shrinking, while they add great strength to lightness in weight. Back of this best-engineered construction is a guarantee of trouble-free service by America's largest exclusive producers of flush doors — a company that has over three million installations to prove that these time-tested doors are the best flush doors of all.



U.S. Pat. 1,887,814  
The exclusive interlocking grid core within the Rezo door allows constant air circulation, adds extra strength, and provides greater rigidity.

Your dealer is now getting more Paine Rezo doors. Order from him, and write for an informative engineering bulletin.

*Manufactured by the*  
**PAINE LUMBER CO., LTD.** *Oshkosh Wisconsin*  
ESTABLISHED 1853

**WINDOW GLASS**

**In Colonial America**

*By G. P. MacNichol, Jr.*

GLASSMAKING is the oldest of American manufactures. Started at Jamestown in 1608, it was the earliest industry in which the colonists in America engaged. Glass, too, according to the records, formed part of the first cargo exported to England to show what could be produced on this side of the Atlantic.

From the Jamestown beginning down to the amazing accomplishments of today, the American story of flat glass production is filled with romance, enterprise, failure and achievement. The story begins with a few rude colored beads, fashioned to trade with the Indians, and ends with factories organized with scientific and mechanical equipment, directed with the utmost technical skill, that are putting forth many products on which our health, comfort, and happiness depend. Glass making touches the story of American life and progress at every point since the beginnings of colonization in Virginia, more than three hundred years ago.

The first venture at Jamestown was soon abandoned. About 1640, a small plant at Salem in Massachusetts began to make window glass, rude bottles, roundels or bull's-eyes, coarse bowls, pitchers and other articles much needed by the colonists. This enterprise continued intermittently for two or three years. The next attempt at glass manufacture was made in New York and, so far as we know, the factory or factories there established remained in operation until 1767 or thereabouts. Apparently no domestic glass was made in 1700 or in the following four decades. In 1739, Caspar Wistar founded glass works in Salem County, N.J. Connecticut entered the industry next, in 1747. Boston followed in 1749. In 1750 there arose a glass factory at Quincy, Mass., which lasted for about ten years. In 1753, another glass house started at New Windsor, N.Y., and kept in business until after 1780. In 1754, Loderwyck Bamber began operations in Brooklyn. Between 1763 and 1765 that extraordinary man, "Baron" Stiegel, was starting his glassworks at Manheim, Pa.

In the latter part of the 18th century, other glass factories sprang up and were successfully

*(Continued to page 212)*

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**“\$83<sup>67</sup> on 10 squares—  
that’s what ES-NAILS saved me  
... good money in the bank!”**

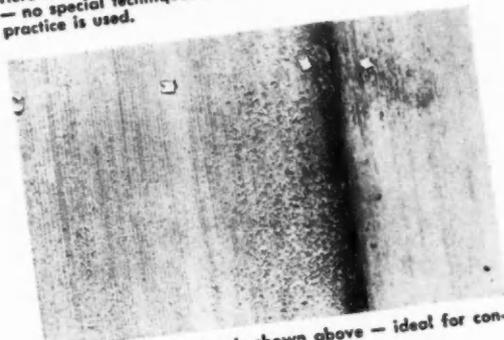
— says a prominent New Jersey builder



A 4 1/2-room ranch-type house built with ES-nails in a New Jersey development. This shows the house after the sheathing was applied, but before shingling.



Here is a close-up of the actual constructional operation — no special techniques are required. Standard building practice is used.



See the flat, even heads shown above — ideal for concealed nailing of wood shingles.

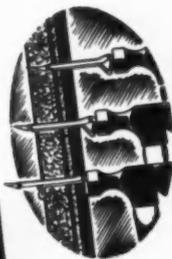
In full, he stated: “During construction of a recent development, I used ES-nails to attach wood shingles directly to gypsum sheathing — and let me tell you they really do a job. “I feel ES-nails give better results than other types of construction . . . we are highly pleased with their locking ability, and will use them exclusively in the future.” — High praise for the NEW ES-nail.

Other practical reasons for using ES-nails include: their ease of application — no special tools are required, use a regular shingling hatchet or carpenter’s hammer . . . they are self-locking, attaching wood or asbestos shingles directly to gypsum or insulation sheathing . . . and they can be driven at any convenient point — no need to locate studs.

Use this modern construction method on your next job — a method that enables you to take full advantage of the inherent economies and valuable construction characteristics of non-wood sheathing: lower unit cost; faster applications; less waste; weather tightness. Substantial savings result.

For more information about the value of ES-nail construction — and the savings it will mean to you, call your supplier, or write: Elastic Stop Nut Corporation, Union, New Jersey.

Accepted on F.H.A.-Insured Houses



**ES nail**  
A Product of

**ELASTIC STOP NUT CORPORATION OF AMERICA**



# CANVAS AWNINGS

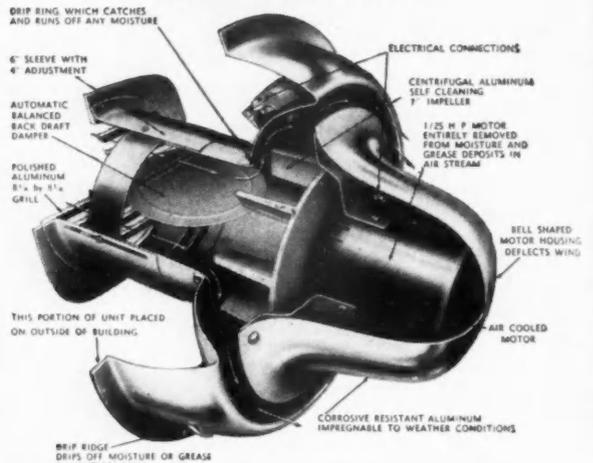
You sell the sunny side of the street with Canvas Awnings. You create shade just where it's needed, when it's needed—and you add gay, colorful beauty unattainable by any other method. Canvas Awnings are positive assets with a plus cash value well in excess of the moderate costs involved.

Avail yourself of the complete service and wide selection of designs and fabrics offered by Canvas Awning dealers in your community.

**THE CANVAS AWNING INSTITUTE, INC.  
AND NATIONAL COTTON COUNCIL**

*"There is No Substitute for Canvas Awnings"*

## THE KITCHEN-AIRE EXHAUST FAN Is Different . . . !



### Check these outstanding features . . .

- **MAXIMUM EFFICIENCY:**—exhaust grill may be mounted above cooking range, even on an inside wall.
- **FIRE-SAFE:**—grease laden air is NOT drawn over motor.
- **QUIET:**—operating mechanism is mounted OUTSIDE the wall!
- **WEATHERPROOF:**—back draft damper protects against heat loss; operating mechanism is housed in corrosion-free aluminum.
- **ECONOMICAL:**—low in cost; easy to install. Grease and moisture laden air is not deposited on kitchen walls—saves on cleaning and decorating.
- **WIDE USEFULNESS:**—electrically operated, can be installed anywhere, in new or old houses—keeps kitchens cool and odorless, bathrooms and recreation rooms fresh, and basements dry.

Here are features that the conventional exhaust units can't offer . . . Kitchen-aire units are actually SUPERIOR, and they're selling fast!

Underwriters  
Approved

As Advertised in  
Better Homes and Gardens

**STEWART MANUFACTURING COMPANY**  
3204 E. Washington Street Indianapolis, Indiana

## A NATURAL VAN-PACKER CHIMNEY for TITLE II ECONOMY HOUSE

**CEILING  
SUSPENDED  
for SPACE HEATER**

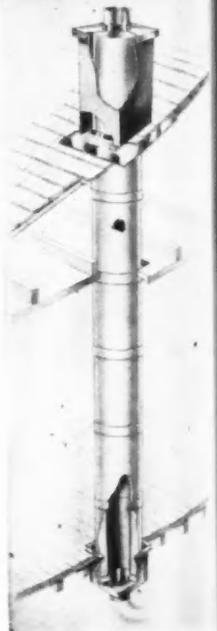
**FLOOR  
SUSPENDED  
for FLOOR FURNACE  
and  
BASEMENT HEATER**

- FHA and Underwriters approved for gas, oil, coal, wood, etc.
- SHIPPED complete—all parts for the entire installation—packaged and illustrated installation instructions.
- CEILING or floor suspended—no foundation.
- INSTALLED in 4 man hours or less—summer or winter.
- IMMEDIATE shipment—one or a carload.
- 20% to 50% less than brick.
- LIBERAL discounts to project builders.

**VAN-PACKER CORPORATION**

136 S. Clark St., Chicago 3, Ill.

Phone: Randolph 6-1840



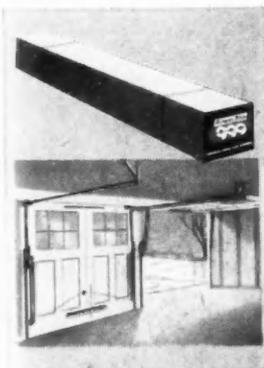


**SWINGING DOORS ARE "OUT"**

For garage doors that give trouble-free service... specify **RICHARDS-WILCOX 999 Garage Door Hardware**

For many years, leading architects and builders have agreed that Richards-Wilcox Door Hardware is the world's finest. Now, with the new line of R-W 999 Garage Door Hardware, out-dated, troublesome swinging garage doors can be converted quickly and easily into the modern, overhead type.

Overhead garage doors hung with R-W 999 Hardware are weathertight, the easiest to operate, and they "stay put." And R-W 999 Hardware comes *complete*—in one convenient kit—with everything needed for installation and operation.



For further information, simply call or write the nearest Richards-Wilcox office. Ask for free folder with complete facts about R-W 999 Hardware—your surest cure for garage door grief.

1880 LEADERS IN DOOR HARDWARE OVER 69 YEARS 1949

**Richards-Wilcox Mfg. Co.**

"A HANGER FOR ANY DOOR THAT ELIBES"  
AURORA, ILLINOIS, U.S.A.

Branches: New York, Chicago, Boston, Philadelphia, Cleveland, Cincinnati, Washington, D.C., Indianapolis, St. Louis, New Orleans, Des Moines, Minneapolis, Kansas City, Los Angeles, San Francisco, Denver, Seattle, Detroit, Atlanta, Pittsburgh



Reg. U. S. Pat. Off.

*Yes, you can get lumber like this!*



Just ask your lumber dealer for

**CROSSETT LUMBER PRODUCTS**

- ✓ They're well manufactured
- ✓ They're seasoned right
- ✓ They're big mill quality
- ✓ They're dependable

NOW AVAILABLE TO YOU IN:



**ARKANSAS SOFT PINE**

*Satin-like Interior Trim  
Soft Textured Sheathing  
Nail-holding Dimension*



**ROYAL OAK FLOORING**

*See them at your dealer's*

**CROSSETT LUMBER CO. CROSSETT ARKANSAS**



Without  
enough  
circuits,  
*you can  
starve!*

Without enough electric circuits, the lights and appliances in your houses will suffer from "electrical starvation"—and you may starve for sales! People don't want electrically undernourished houses.

An adequately wired home sells readily at a good price, because home buyers nowadays have learned to look for Adequate Wiring.

An Adequate Wiring Certificate is your proof that each house you design and build has:

- ▶ Enough outlets, fixed lights and switches.
- ▶ Adequate electric service entrance equipment, fed by three ample size wires.
- ▶ Enough branch circuits and spares for present and future electrical needs.

**The Sign  
of  
the Times**

Use the services of the local Adequate Wiring Bureau in preparing a complete Adequate Wiring layout and specification, *before* you put the electrical job out for bids. Get the wiring into the plans for better appraisal—a better loan!

If there is no Adequate Wiring Bureau in your community, write us or your local electric utility for information on how to take advantage of Adequate Wiring in the homes you build.



**USE THIS COUPON if there is no Adequate Wiring Bureau in your area**

NATIONAL ADEQUATE WIRING BUREAU, Dept. AB-4  
155 E. 44th Street, New York 17, N. Y.

Please send me, without charge, information on how to take advantage of Adequate Wiring as a sales feature.

NAME .....

TITLE .....

STREET ADDRESS .....

CITY ..... STATE .....

**Publish Third Edition of  
Timber Engineering Book**

A 147 page book on timber design, "Modern Timber Engineering," has recently been published in its third edition by the Southern Pine Association, New Orleans, La.

Co-authors of the book, which was originally released in 1942 as "A Course in Modern Timber Engineering" and revised in 1946, are W. Fleming Scofield, associate professor of Civil Engineering, University of Alabama, and W. H. O'Brien, engineer, Southern Pine Association.

Basic information on timber design is presented in the book, which has 55 pages of examples in addition to an appendix of design data covering various species of wood

Earlier editions of the publication were used as a textbook in more than 80 engineering and architectural colleges, Association officials said. It is being made available to practicing architects and engineers for the first time. The cost per copy is \$1.50.

**Window Glass**

*(Continued from page 208)*

operated for various periods of time. There was one at Temple, N.H. (1779) and another at Keene, in the same state; at Boston (1787), Albany (1792), Glassboro, N.J. (1775) Kensington in Philadelphia (1771) and Baltimore (1790). Glass-making began in Pittsburgh in 1795. This list might be considerably lengthened. Most of the glass factories of these days had only one small furnace and about a dozen workmen.

The Pittsburgh plant was the first to use coal as fuel. The nearness of coal and the excellent sand in the adjoining rivers resulted in the rise of Pittsburgh as a glass center.

Window glass was made principally in sizes 10 x 12, 9 x 11, 8 x 10, 7 x 9, 6 x 8, 5 x 7, and 4 x 6 inches. We know something of the glass products and incidentally of the temper of the times from newspaper advertisements. For instance, in the Pennsylvania Chronicle, July 31, 1769, Wistar advertised as follows:

"... window glass, consisting of the common sizes, viz: 10 x 12, 9 x 11, 8 x 10, 7 x 9, 6 x 8, etc. Lamp glasses or any uncommon sizes under 16 x 18, are cut on a short notice: where also may be had most sorts of bottles, gallon, half gallon, and quart, full measure, half gallon case bottles, snuff and mustard bottles, receivers and retorts of various sizes, also electerising globes and tubes."

# SAND FLOORS *Twice as Fast!*...

## *Cut Building Costs!*

### *New*

# AMERICAN SUPER EIGHT



This sensational new AMERICAN Super Eight Floor Sander *cuts twice as fast* as Standard Sander... *saves hours* on floor surfacing jobs... *cuts costs!* It's all new—with a big powerful 2 H.P. motor for high speed sanding... 8" drum... quickly adjustable drum speeds, 1600 to 2800 r.p.m....

Cleaner operation made possible by new design dust pick-up and double volume bag... compactly built with no waste space... new low center of gravity... perfect balance for easy handling. See the Super Eight *now*—the Sander that helps you increase your production and reduce costs! Send coupon for more details.

### *Big Power- 2 H.P.*

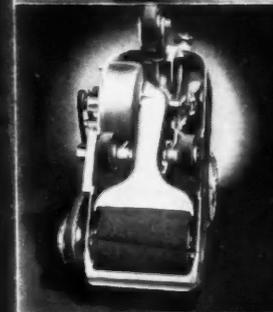
A full 2 H.P. motor gives you super speed and power to get the job done fast—and save money!

### *Adjustable Speeds*

Single adjustment quickly changes the drum speed... range 1600 to 2800 r.p.m.

### *Double Volume Dust Pick-Up*

New design with greater capacity for cleaner operation at high speeds.



## AMERICAN FLOOR MACHINES

THE AMERICAN FLOOR SURFACING MACHINE CO.  
511 SO. ST. CLAIR ST., TOLEDO 3, OHIO

Please send free description and prices on the new American Super Eight Floor Sander, without obligation.

**SEND COUPON TODAY!**

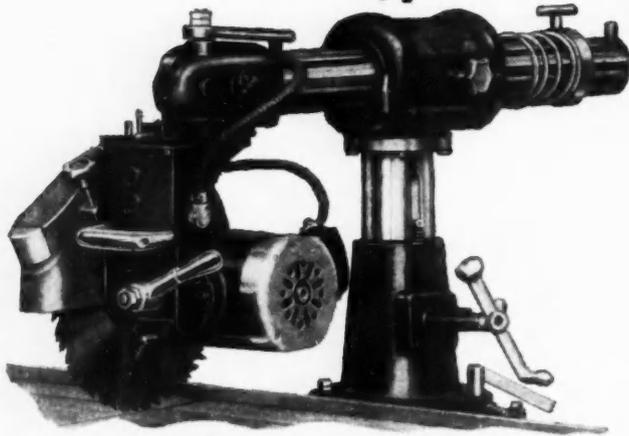
Name.....

Street.....

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

# COMETS

FOR Profits 



## THE *Versatile* SAW

Anything radial power saws can do, Comets do best! Thousands are proving this fact every day, everywhere, for every Comet owner. It makes sense to buy Comets! They give "more cuts per dollar," which means more profit! Contact your nearest Comet dealer—or write direct.

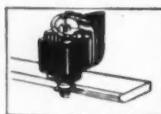
### MAKES ALL THE CUTS



BEVEL CROSS CUTTING



DADOING



SHAPING



BEVEL RIPPING



RIPPING

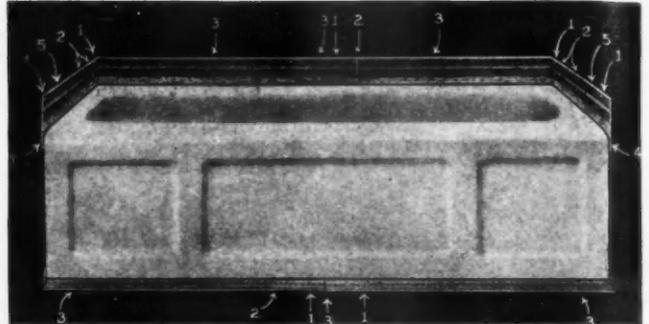


COMPOUND MITERING

Distributors of Davis and Wells Woodworking Machines  
**CONSOLIDATED MACHINERY & SUPPLY CO., LTD.**  
 2029-33 Santa Fe Avenue, Los Angeles 21, California



For Trouble-Free Bath Tub Edges } **Specify LUCKE**  
**Leak-Proof Bath-Tub Hangers**  
 No Leaks • No Cracks • No Repair Expenses



### The Modern Way to Prevent Leaks

There is no excuse for cracks or leaks or repair expense in good building. Leading architects specify LUCKE to overcome this problem. Lucke Hangers build tubs into wall.

Sold by Leading Plumbing Supply Houses

MANUFACTURED BY

**W. B. LUCKE, Inc.**  
 Wilmette, Illinois



## HOW TO GET RID OF EXHAUST GAS FUMES IN GARAGE BLDGS.

Solve this serious problem with a National approved underfloor system

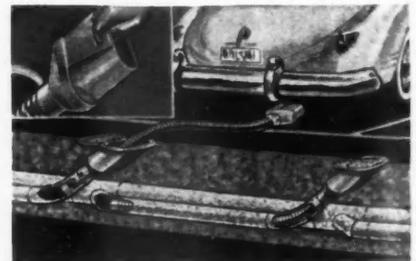
For the garage owner planning a new building or extensive remodeling, National has designed and engineered an underfloor system for effective removal of poisonous carbon monoxide exhaust gas and smoke. National Systems are completely fabricated at factory and shipped complete with motor and blower, in a packaged kit. Nothing else to buy. A proven system—National has installations in thousands of garages in every part of U. S. Send us your floor plans and specifications—we will promptly supply scaled drawings of our equipment. Literature on request.

### PHANTOM (DISAPPEARING TUBE) UNDERFLOOR SYSTEM

Standard kit, 2 floor inlets serving any 2 of 4 cars in a row.

**\$319.50** F.O.B. DECATUR

Complete packaged kit, including motor and blower—underfloor duct work (requires merely encasing in poured concrete). Additional car service extensions, \$45.00 each. Note in illustration that tube disappears without entering main trunk line—allows balanced flow of air through main duct and perfect exhaust gas removal.



National also makes underfloor (disappearing tube) systems for use with vitreous tile duct work.

COMPLETE INFORMATION AND LITERATURE ON REQUEST

**The National System of Garage Ventilation**  
 Dept. 916-W, 318-330 N. Church St., Decatur, Illinois  
 World's largest manufacturer of exclusive garage ventilation equipment.

# Modern Ideas FOR MORE PROFITS

with



FOR INTERIOR  
WALLS IN—

*Homes*

*Apartments*

*Stores*

*Offices*

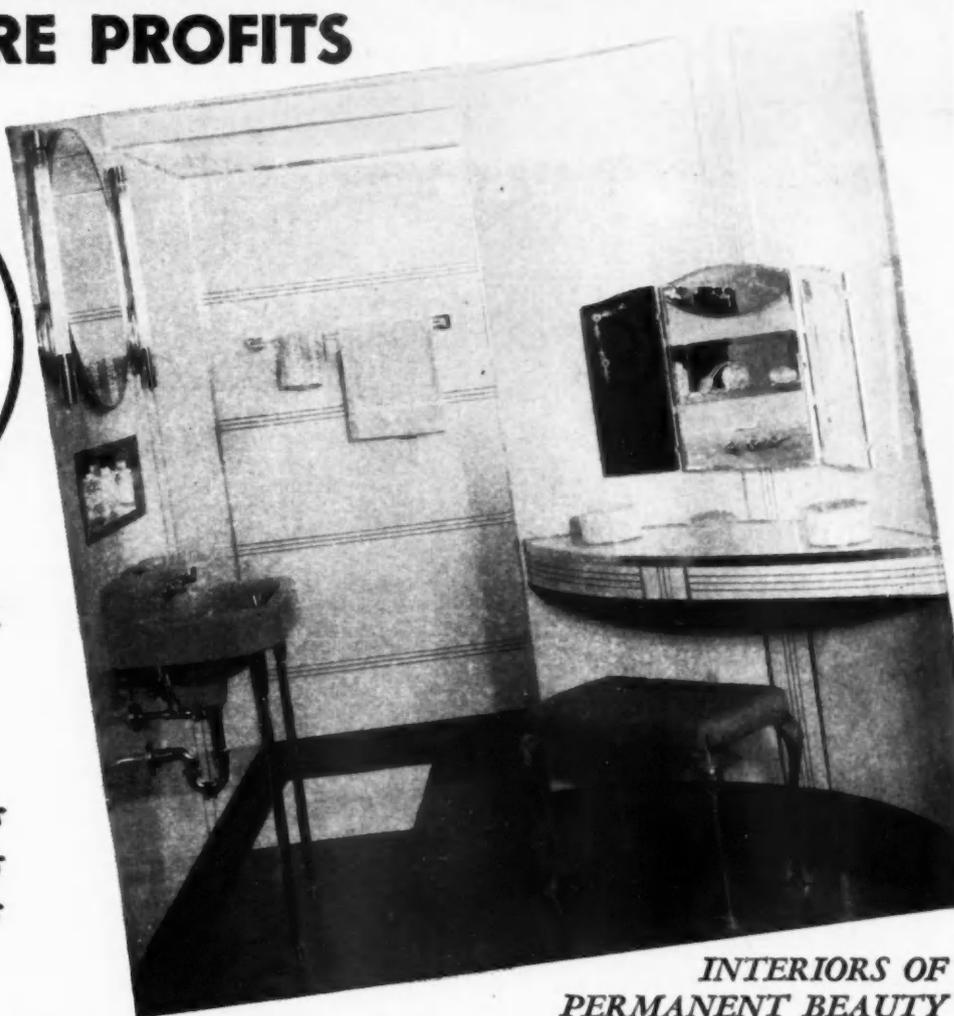
*Hospitals*

*Hotels*

*Factories*

*Schools*

*Institutions etc.*



**INTERIORS OF  
PERMANENT BEAUTY**

More distributors and dealers are switching to the New, Hi-Baked, Plastic Enamel Surface, Miracle Walls by TYLAC every day because they know that consistent demand builds consistent profits. And there are many good reasons why. Here are just a few of them:

**MODERN IDEAS!** — Eighteen beautiful colors and 4 modern patterns offer endless varieties of fascinating and delightful combinations to suit every need and taste.

**FLEXIBILITY!** — TYLAC is easily installed on flat or curved walls, ceilings, arches, recesses, etc. It's more resilient — more flexible and lends itself to many decorative schemes.

**BEAUTY!** — TYLAC has higher gloss — better color retention. Dull, drab walls are quickly converted into bright friendly walls of lustrous beauty — and retain that beauty throughout the years. Note the modern beauty of the "Powder Room" pictured above.

**PERMANENCE!** — TYLAC is a composite of every superior feature in pre-fabricated wall board manufacture. Installed in finished form, it does not crack, craze or chip as many ordinary walls do. Once installed it's permanent and lasts a lifetime.

**ECONOMY!** — TYLAC is luxurious, yet inexpensive — resists household acids and grime — never needs repainting or varnishing — occasional wiping with a soft, damp cloth restores its original freshness and lustre — and its newness.

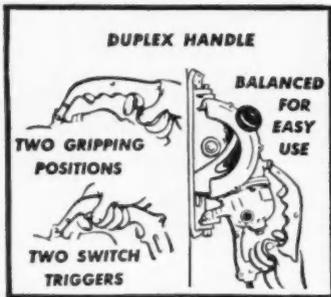
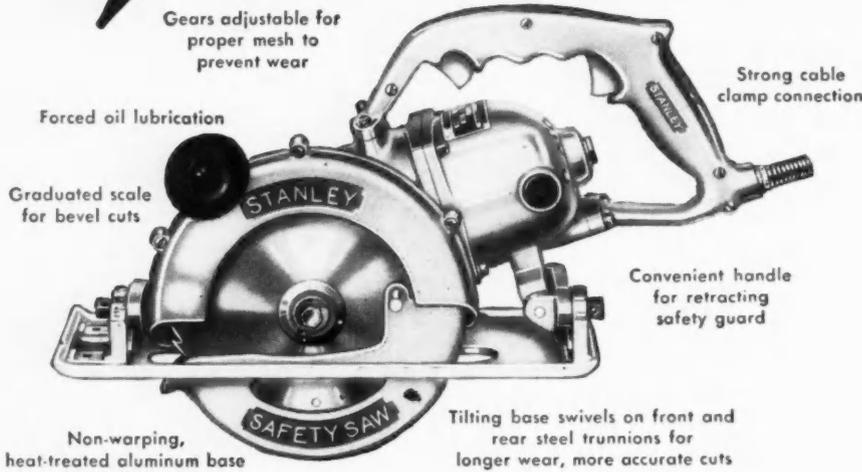
**GREATER SALES!** — Now you can supply your customers with the finest in wall board coverings — Miracle Walls by TYLAC. Write for our liberal sales, advertising and dealer helps program that really helps you sell more TYLAC — and build more profit.



**TYLAC COMPANY** MONTICELLO, ILLINOIS

PIONEERS IN THE PREFABRICATED WALL PANEL INDUSTRY

# Check these features OF STANLEY W8 SAW



These important features plus plenty of power and rugged construction make Stanley Saws a practical choice for on-the-job cutting. W8 Saw cuts any depth from 0 to 2 3/4", operating from any A.C.-D.C. outlet. Round arbor shaft permits using any standard saw blade. Each Saw is furnished with ripping gauge and packed in Stanley metal carrying case. More hours of profitable

work in this portable electric saw ... more jobs you can use it on, more power on every job, more years of usefulness.

See Stanley W8 Saw or W7 and W9 models at your dealer's, or write for circular. Stanley Electric Tools, 492 Myrtle St., New Britain, Conn.



Saw Track No. 158 changes the Stanley Saw into a bench saw for production work.

The greatest name in tools

# STANLEY

Reg. U.S. Pat. Off.

HARDWARE · HAND TOOLS · ELECTRIC TOOLS

## Publicity—

(Continued from page 113)

ings, interiors, single column pictures.

Some suburban papers will use pictures if you provide the mats, or pay for the cut. By knowing which, you can get the maximum of publicity space. In distribution of mats, it is important to buy the best. Once, to save time, I used a mat service close to my headquarters instead of using the best, and got such poor mats that the papers would not use them.

In publicity, it is important to go first class for the most and best results. Fees may seem high, but actually they are not if the results are obtained. Free space obtained in one paper, if translated into advertising rates, more than pays for a press agent's fee for a month.

Along with maintaining contacts with real estate editors, I also contact regularly the advertising departments, even if the account is not advertising.

All publicity, during sales campaigns, should be correlated with advertising. Once an advertising campaign is started, publicity releases must be keyed to it. News releases are not given to papers not included on the schedule, as a general practice.

## Good Newspaper Relations

As for the point on how to treat newspaper personnel, the best way is to be nice to them. Buy them a luncheon or dinner occasionally, and a press party when appropriate. They are trying to get along, the same as you.

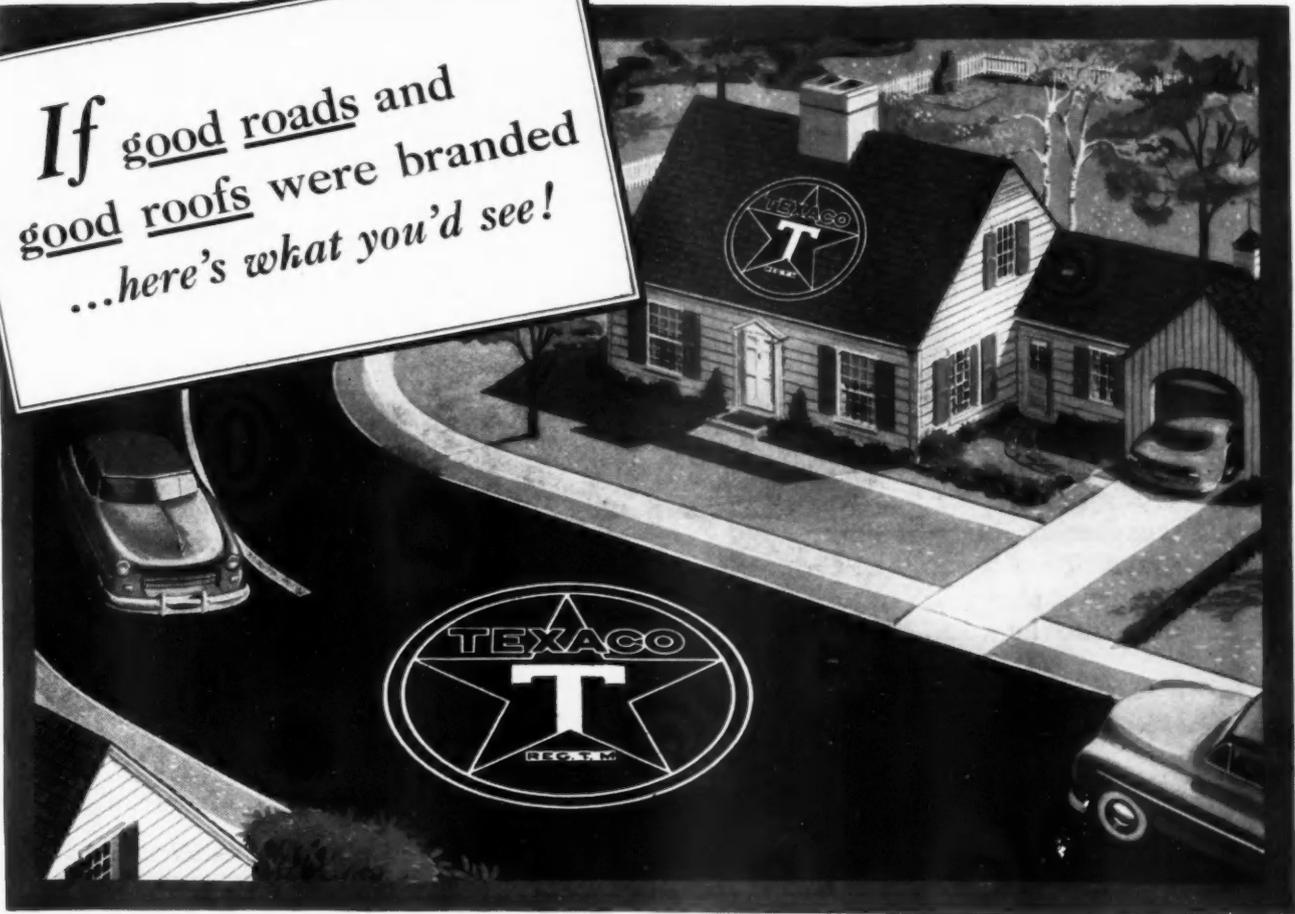
Not much is done here in radio, although I do have a radio contact man who lines up broadcasts when something adaptable develops. Every radio station devotes some time to public service. Housing being a hot subject can, on occasion, be included.

For clients who wish, articles are prepared for various trade publications. Some tie-ins were made last year in connection with National Home Week, with copy for clients slanted to take advantage of attention focused upon the week.

Some adept operators can handle their own publicity, public relations, and advertising. The smaller operator can do it better than a large operator. So many problems confront construction these days that it is difficult for a builder who has not practiced being in the public eye to get the most out of publicity. Hometown papers staffs

(Continued to page 220)

*If good roads and good roofs were branded  
...here's what you'd see!*



*—because both are high quality asphalt— and **TEXACO** is one of the world's largest producers of high quality asphalt!*

**T**HOUSANDS of miles of highways are paved with *high quality* Texaco asphalt. And thousands of homes, farm and business buildings are roofed with *high quality* Texaco asphalt.

In a good road, crushed stone, carefully selected and graded, is combined with *high quality* asphalt—to produce a resilient, weather-, water- and wear-resistant surface. In a good roof, mineral granules, carefully selected, permanently colored, screened and graded, are imbedded in *high quality* asphalt—to produce a resilient, weather-, water- and wear-resistant surface.

Good roads and good roofs must take a lot of punishment. They can—when they are made with *high quality* asphalt, the greatest weather- and water-proofing element ever known.

And—Texaco, with its extensive petroleum producing and refining facilities, has available and can select the exact right grades of asphalt for every type of product. This asphalt *know-how* means mighty fine products for Texaco Roofing Dealers.



# TEXACO

## ASPHALT SHINGLES and ROOFING

**SOLID ROOFING ASPHALT**

MEMBER OF THE ASPHALT ROOFING INDUSTRY BUREAU

# Cabot's Creosote Stains

- INEXPENSIVE
- ATTRACTIVE
- LONG LASTING

Cabot's Creosote Stains will give outside wood-work long lasting beauty and protection, yet cost  $\frac{1}{3}$  as much as good paint. Available in a wide variety of non-fading colors . . . clear brilliant hues to weathering browns and grays.



The 60% to 90% proportion of pure creosote oil, the best wood preservative known, means years of protection from decay and termites. Cabot's Stains penetrate deep into the wood . . . bring out and retain all the natural beauty of grain and texture.

*Write today for complete information and color cards.*

## SAMUEL CABOT, INC.

424 Oliver Building

Boston 9, Massachusetts

*Take your choice:*

**NAILED-and-BOLTED or  
GLUED**



ARCHES • BEAMS • BOWSTRINGS

**AMERICAN** offers both

A wide selection of popular roof designs . . . The best in nailed-and-bolted bowstrings, crescents and belgians, plus glued beams, trusses, and arches. (Superior glue process—developed in our newest plant . . . Controlled temperature, uniform pressure, during setting period.)

*Write for literature that describes the most widely used trusses—AMERICAN!*



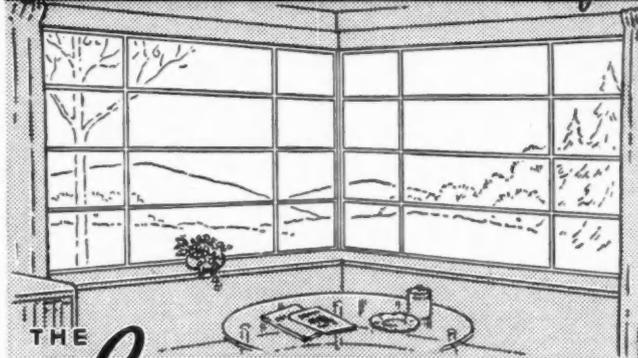
**AMERICAN Roof Truss Co.**

William and Raymond Waddington

6856 Stony Island Ave., Chicago 49, Illinois . . . PLaza 2-1772

ESTABLISHED 1922

*the NEW LOOK in window design*



THE **Lemco VMR WINDOW**

● To achieve the graceful horizontal lines so desirable in modern architectural style, choose **VISUALITE VMR windows**, exclusive with Lemco. Available in a variety of sizes in both **STEEL** and **ALUMINUM**; they can be combined in bays or corner treatments as shown.

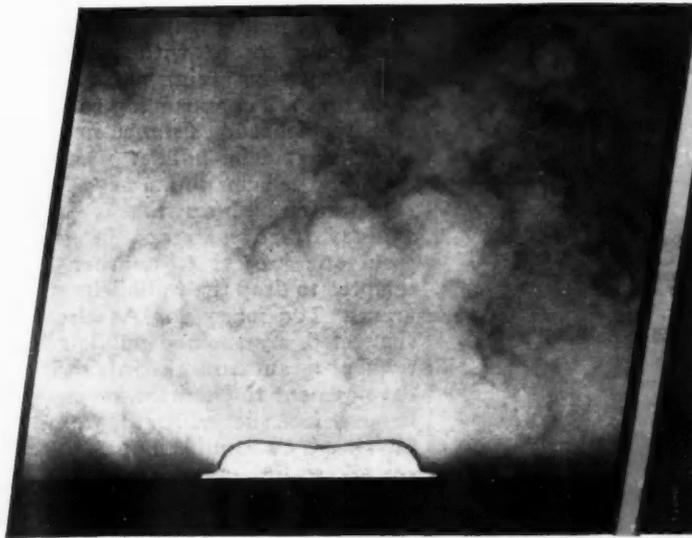
● Types available; all 5' 9 $\frac{3}{8}$ " wide: 44 VMR (shown above) 4' 2 $\frac{5}{8}$ " high; 43 VMR- 3' 2 $\frac{5}{8}$ " high; 4423 VMR- 4' 2 $\frac{5}{8}$ " high with two 3-light high vents.

WRITE TODAY for our new 1949 Catalog or see Sweets for further information on Steel and Aluminum Casements and Basement Windows, Aluminum Awning Windows and other LEMCO BUILDING Products.

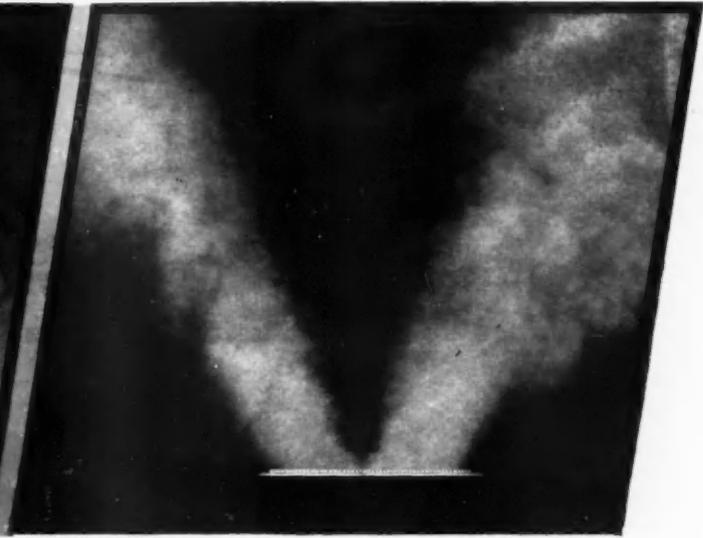
AMERICA'S OLDEST CASEMENT WINDOW MANUFACTURER

**CROFT STEEL PRODUCTS, INC.**  
JAMESTOWN, N. Y.

# WHICH IS TRUE DIFFUSION?



**HONEYWELL REGISTER**  
FACTORY SETTING—120°



**CONVENTIONAL REGISTER**  
FACTORY SETTING—22°—22°

**JUDGE THESE FACTS** These actual unretouched photographs (except for blacking in the base and pointing up the registers) were taken under average room conditions.

**COMFORT** Disturbing air streams cause drafts and cold spots. A gentle, even blanket of air is distributed to every part of the room with Honeywell Air Diffusion Registers (see photograph at left) which assures "Comfort Unlimited."

**CLEANLINESS** Wall and ceiling streaks cause countless numbers of complaints by home owners. They are eliminated with smooth, wide angle diffusion of the air within a room as shown in the photograph at the left of the Honeywell Air Diffusion Register.

**ECONOMY** Eliminate branch quadrants with Honeywell Air Diffusion Registers and save:

quadrant cost . . . . .	20c
dampener cost . . . . .	5c
shop labor (assembly) . . . . .	50c
job labor (mounting) . . . . .	50c

This saving will more than cover the slight extra cost of Honeywell Air Diffusion Register PLUS the added economy of one man, not two, for quick accurate balancing of the heating system.

AVERAGE SAVING PER REGISTER \$1.25



**YOU BE THE JUDGE OF WHICH TYPE REGISTER BOTH YOU AND YOUR CUSTOMERS PREFER**





**INSTALL *Pyrofax* GAS**  
TRADE MARK

**In Homes You Build Beyond the Gas Mains**

*Users like it!*

Hundreds of thousands of PYROFAX Gas users know that it is the cleanest, hottest, finest fuel obtainable. To the prospective buyer PYROFAX Gas means modern cooking, modern refrigeration, modern water heating at its best.

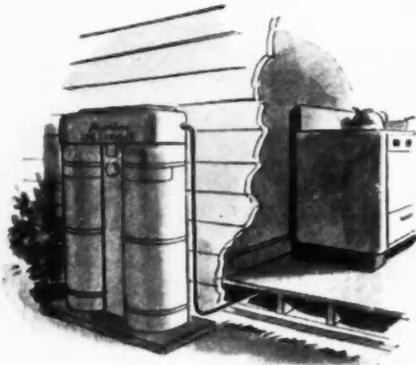
Home Buyers prefer gas — the choice of two out of three. Install PYROFAX Gas and speed the sale!



*You'll like it!*

PYROFAX Gas is the modern fuel for homes beyond the gas mains. It boosts their value. It's economical, efficient, convenient.

PYROFAX Gas can be installed quickly and easily. It is piped through the exterior wall from the twin steel cylinders directly to the range, water heater, refrigerator or other gas appliance.



*Nationally Advertised Appliances*

Magic Chef ranges, Servel refrigerators, Ruud and Bryant water heaters, and other gas appliances are available for use with PYROFAX Gas.



For full information see SWEET'S CATALOG, or address Dept. AB.

**PYROFAX GAS DIVISION**

Carbide and Carbon Chemicals Corporation **UCC** 30 East 42nd Street, New York 17, N. Y.  
The word "Pyrofax" is a registered trade-mark of Carbide and Carbon Chemicals Corporation.

**Publicity—**

(Continued from page 216)

often can do more to help a builder in publicity and public relations than metropolitan papers. Size has everything to do with it. With competition becoming more acute, operators are commencing to summon specialized assistance in merchandising. The builder who has a story to tell can obtain newspaper cooperation on his own.

Many tract operators, in going from one project to another, are tempted to drop their publicity programs. Too many do. As already suggested, a sustained public relations program from the sale of one development to the next keeps the name before the public, before new buyers. You cannot hope to get something in every paper every week, but legitimate news gets its break in print.

The disadvantage of not maintaining a sustained program, even on a curtailed basis, is that much more steam has to be built up for the start of each new program.

This creates familiarity of name, and reduces sales resistance.

**How to Write Leads**

In the box, below, is a typical news story as it was prepared to be submitted to one paper. The lead, included in the first two paragraphs, is "pegged" on something of current news interest.

More persons in all income groups could buy homes if longer term mortgages were available.

This is the belief of Spiros G. Ponty, immediate past president, Home Builders Institute, who praised the current thinking of lenders toward lengthening the loan repayment or amortization period to more than the current average of 20-year mortgages.

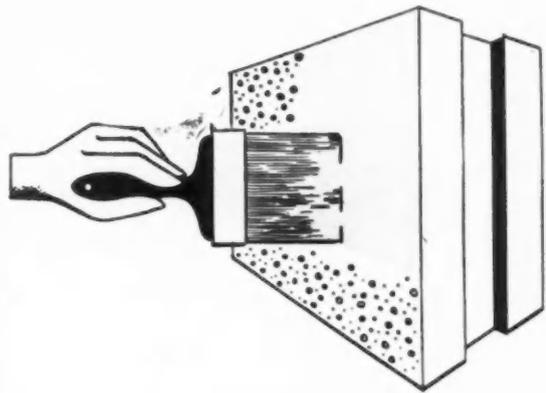
Best way to reduce monthly payments, Mr. Ponty declared, is to extend the amortization period to what is technically known as the maximum efficiency of the loan.

A staunch advocate of lower-priced homes, Mr. Ponty feels that the amortization period should be extended beyond the 25 year limits now permitted by FHA and GI financing methods.

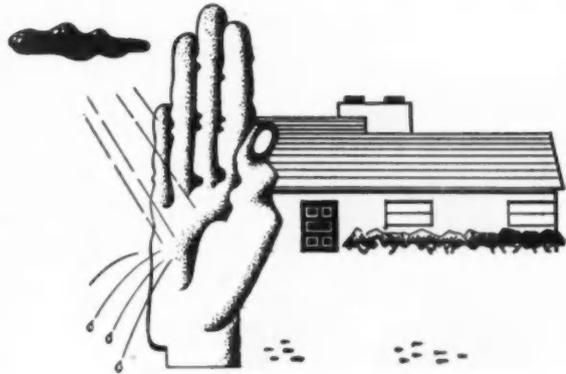
In support of his amortization extension plan, Mr. Ponty used as an example the various

(Continued to page 224)

**TO color-style  
concrete block,  
brick and stucco . . .**



**TO shield porous  
wall surfaces  
against dampness . . .**



**USE BONDEX . . .  
it's a NATURAL  
for masonry!**



When it's desirable to give a masonry home the distinction of color — when it's essential to seal exterior or basement walls against destructive moisture — call on Bondex.

From every viewpoint — performance, acceptance, economy — Bondex justifies your confidence.

**BONDEX OUTSELLS ALL OTHER  
CEMENT PAINTS COMBINED.**

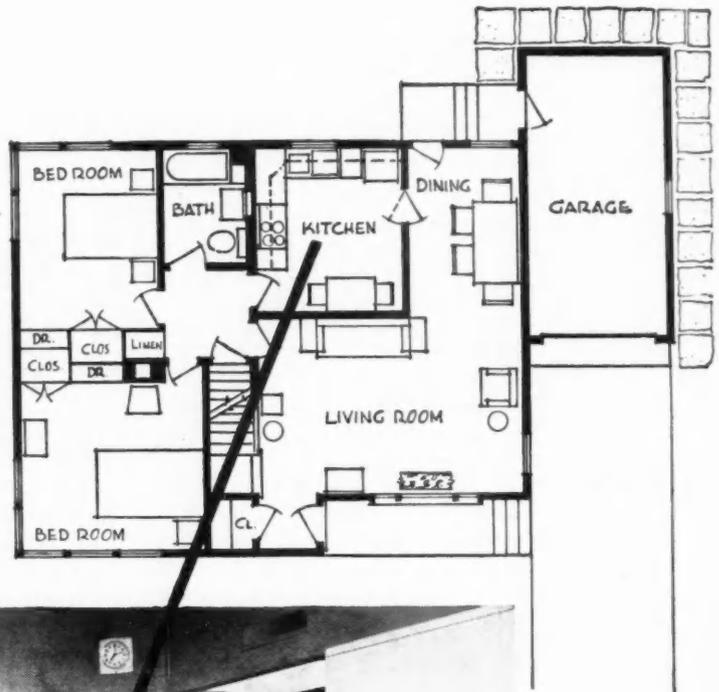
**SEND FOR NEW 12-SHADE COLOR  
CARD SHOWING INTERMIXES.**

THE REARDON COMPANY



ST. LOUIS 6 • CHICAGO 9 • LOS ANGELES 21  
BAYONNE, N. J. • MONTREAL 1

# Blueprint of the home everybody wants



● HOME BUREAU CAN HELP PUT THE G-E WAY OF LIVING IN YOUR HOMES!

A truly modern home is the home that turns the chores over to electrical servants. Millions of home buyers are learning that they can enjoy

the G-E Way of Living for only a few extra dollars a month. Let the G-E Home Bureau help with your plans for a G-E Dream House!

# ....because it features The G-E Way of Living!

**T**HOUSANDS of families are enjoying easy, electrical living in G-E Equipped homes. And thousands more insist on the G-E Way of Living whenever they go home-hunting.

It's their dream—and it's so easy to make it come true under the "packaged mortgage" plan. A complete modern kitchen is included as a basic part of the house for only \$4.80\*

extra a month. No costly installment charges. No waiting to enjoy the wonderful advantages of a complete modern kitchen.

And for you! Extra profits—but no extra cost! Faster sales! Greater prestige!

Let General Electric Home Bureau help you *plan* the G-E Way of Living into your homes, starting *now!*

\*When equipment is included in a long-term mortgage.

## GENERAL ELECTRIC HOME BUREAU SUCCESS STORY OF THE MONTH



**Russell Stapp**, big home builder of South Bend, Indiana, discovered that public acceptance of houses equipped with G-E equipment was "*definite and immediate.*"

The very first morning it was opened for inspection, the Stapps' "Blandings Dream House" was sold. Twenty-seven better-class Stapp houses, all

featuring the *G-E Way of Living*, were sold *before* construction. Coming: 25 to 30 more Stapp G-E Dream Houses!

Let General Electric Home Bureau help make *your* next project a success story! Write to Home Bureau, General Electric Company, Appliance and Merchandise Department, Bridgeport 2, Connecticut.

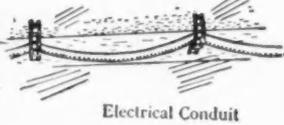
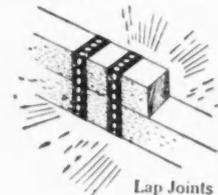
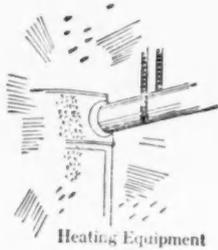
You can put your confidence in—

GENERAL  ELECTRIC

THE BEST CRAFTSMEN ALWAYS TAKE PAINE'S...



1001 USES ABOUT THE JOB



Everywhere you turn there's a job for Paine Hanger Iron that will help you to conserve labor and reduce your costs. This simple, yet amazingly versatile product can be bent or twisted to fit your exact needs. It can be used for hanging pipe, cable, conduit and numerous other items. It can be used for strengthening construction. Hanger Iron may be installed with nuts and bolts, screws or nails. It is 3/4" wide and 20 gauge in 10' zinc-plated coils. Perforated with holes for 1/4" bolts on 1/2" centers. Reduce your construction costs —ask for Paine Coiled Hanger Iron from your supplier today.

THE PAINE COMPANY

2959 Carroll Avenue

Chicago 12, Illinois



Spring Wing Toggle Bolts  
Expansion Anchors  
"Sudden Depth" Drills  
Wood Screw Anchors  
Pipe and Conduit Clamps and Straps

Hanger Iron, perforated  
Expansion Shells  
Star Drills  
Malleable Shields  
Special Hanging and Fastening Devices



WRITE FOR CATALOG

Publicity—

(Continued from page 220)  
monthly payments on a \$7,000 loan, typical of the greater Los Angeles area.  
A 25 year loan at 4 per cent, the maximum amortization under FHA and GI financing, requires a monthly payment of \$36.95, exclusive of taxes and insurance; at 30 years the payment would drop to \$33.42; at 35 years to \$30.99, and at 40 years to \$29.26.

The same story containing all the same facts, is easily prepared with different leads. The following three leads were used with the same story as the one in the box, but written differently to be submitted to different publications. Note how slight changes add individuality to each story.

First rewritten lead:

"Longer term mortgages than now available for GI and non-veteran home buyers was urged by Spiros G. Ponty, immediate past president, Home Builders Institute, to make it possible for more persons in all income groups to purchase a home of their own.

"Mr. Ponty, who is Institute treasurer for 1949 and a staunch advocate of lower-priced homes, praised the current thinking of lenders toward lengthening the loan repayment for amortization period to more than the current average of 20 year mortgages."

Second rewritten lead for the same story, prepared for a different newspaper:

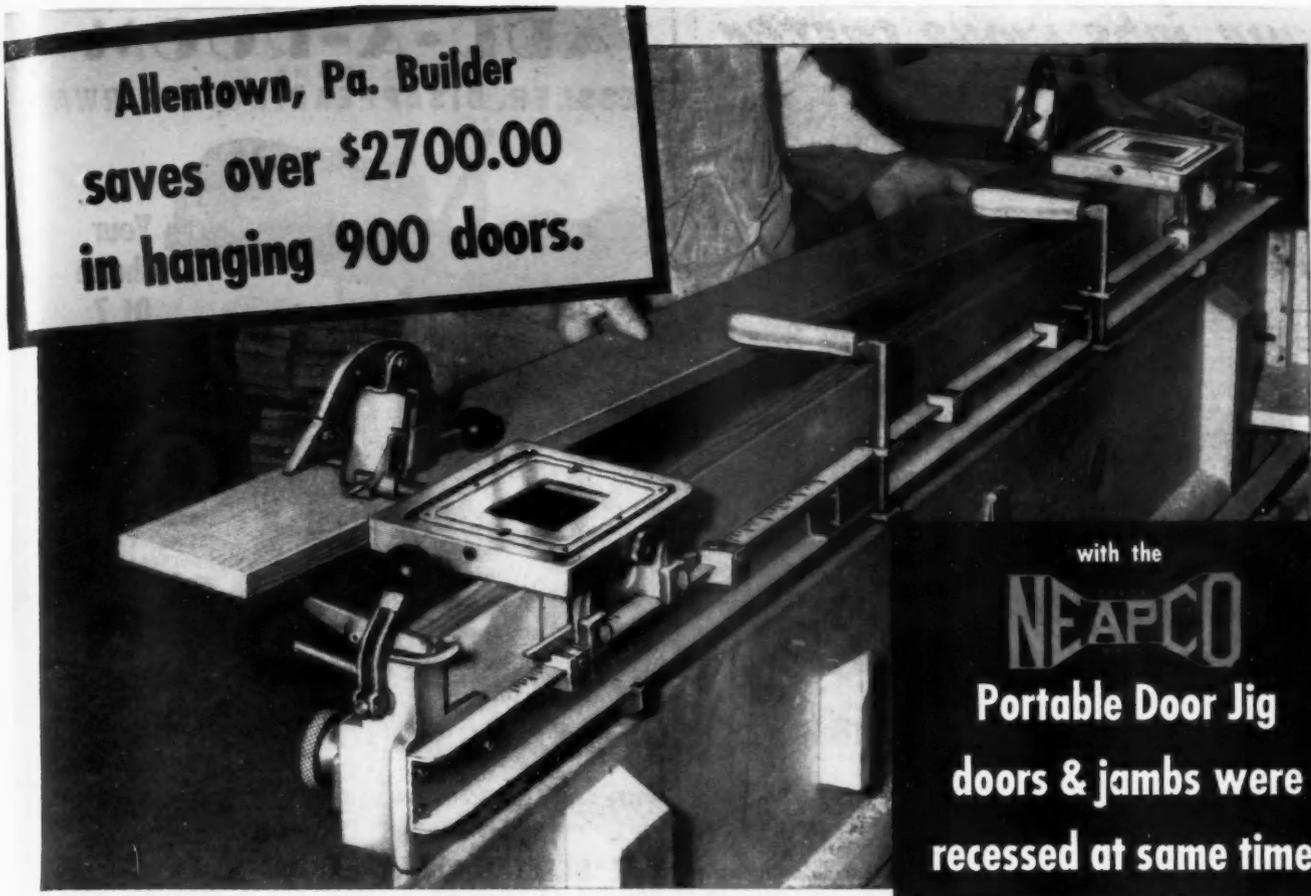
"Lower monthly payments through longer term mortgages should be keystone of the national home ownership program, believes Spiros G. Ponty, immediate past president, Home Builders Institute.

"Institute treasurer for 1949 and a staunch advocate for lower-priced homes, Mr. Ponty praised the current thinking of lenders toward lengthening the loan repayment or amortization period to more than the current average of 20-year mortgages."

Still a third lead was written for the same story:

"To provide homes for more persons in all income groups, longer term mortgages are needed than are now available under GI and FHA financing.

"So says Spiros G. Ponty, immediate past president, Home Builders Institute, a staunch advocate of lower-priced homes."



**Allentown, Pa. Builder  
saves over \$2700.00  
in hanging 900 doors.**

with the  
**NEAPCO**  
**Portable Door Jig**  
doors & jambs were  
recessed at same time.

**Read how Mr. Schneider made these savings on one job!**

He says:



Mr. Schneider inspecting a door.

"... here's my experience with your Door Jig . . . on my present project . . . we have completed 900 doors. According to records of cost, actual savings are more than \$3.00 per opening. My carpenters agree your device does an excellent job preparing doors and jambs for hardware. Hinges match perfectly, are in line. Have had no hinge-bound doors; refitting after hanging has been eliminated.

"I have been in the construction business for 40 years; have tried other devices, all of which I have discarded. The Neapco Door Jig is a practical device, proved to be a wise investment."

(Signed) **Gottlieb Schneider,**  
Gen. Contractor Allentown, Pa.

Copy of Mr. Schneider's letter on request.



View of the Tremont Apartments, Inc., #608 F. H. A. Rental Housing Project, Allentown, Pa. . . . the job on which Mr. Schneider has made these substantial savings.

**Features of the Neapco Portable Door Jig:**

- Speeds Installation.
- Easy to set up.
- Simple to use.
- Big savings with tubular locks.
- Left or right hand doors (7' long, 1 3/4" thick).
- Standard size hinge templates to 4 1/2".
- Eliminates costly cut and try.
- Prevents edge splitting.
- Precision, Speed, Economy on every job.

Send this coupon for details

NEAPCO PRODUCTS INC., DEPT. A, POTTSTOWN, PA.  
Send me without obligation, further information about  
the new Neapco Portable Door Jig.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

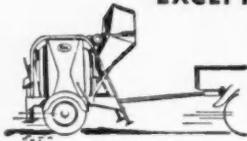
**NEAPCO PRODUCTS INC., POTTSTOWN, PA.**

*your jobs move faster*



with the *New*  
**REX 6-S MIXER**

**EXCEPTIONAL PORTABILITY**



for fast moving to fast spotting on the job. Perfect balance and low center of gravity assure fast, safe towing. Hitch is easily made. Tow pole is detached by simply removing a pin. One man can spot it.

**MAXIMUM OPERATING CONVENIENCE**



for fast operation at the end of the day as well as the start. Grouped controls swinging through short arcs cut operator fatigue. Skip clutch, brake, water valves and discharge controlled without moving from one spot.

**LOW OVER-ALL HEIGHT . . .**



only 87 inches with skip up and 72 1/2 inches with skip down . . . permits working in restricted areas and allows for plenty of headroom for parking in garage or other buildings.

**PLUS** rugged, long-lasting construction, accurate water system, fast, thorough mixing, streamlined "shimmy skip" that gets all the batch into the drum fast, chain drum drive, outside pivoted discharge chute and many other time-saving, profit-making features.

For all the facts, send for your free copy of Bulletin No. 480. Chain Belt Company, 1689 West Bruce Street, Milwaukee 4, Wis.

**REX CONSTRUCTION MACHINERY**  
CHAIN BELT COMPANY of Milwaukee

**ADD-A-ROOM**  
WITH THE  
**BESSLER DISAPPEARING STAIRWAY**



**Your Choice Of 7 Models**

Our stairways have been on the market for 35 years.

Install a Bessler Disappearing Stairway to provide a convenient means of gaining access to the upper story. Simplicity itself to operate and install, neat in appearance and strongly built. A practical and satisfactory modern space-saver.

Takes up no space in the room below. Folds up into the ceiling.

Write today for literature and details.

**THE BESSLER DISAPPEARING STAIRWAY CO.**  
1900 E. Market St. Akron 5, Ohio



**There's a Best Way to do Everything**

**30M**  
(30,000 G.P.H.)  
THIS PUMP COMPLIES WITH A.G.C. STANDARDS FOR SELF-PRIMING CENTRIFUGAL PUMPS

**WHAT?** Attempt to shoot billiards blindfolded? Not if you're "playing for keeps"! The same holds with buying a pump. Don't buy a pump blindly. Look for this familiar A. G. C. Rating Plate. It takes the guesswork from pump buying . . . assures that the pump meets these capacity standards for self-priming Centrifugals. And now more than ever this A. G. C. rating plate means new and higher performance at the same or even greater heads as formerly. And remember, only the pumps made by the following carry this Rating Plate.



**SEND FOR THIS USER'S MANUAL**  
Forty pages packed with useful information. Answers all questions on pump application. Write any of the companies listed below:



**CONTRACTORS PUMP BUREAU**  
(Established 1938)  
Affiliated with  
**THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, INC.**  
Munsey Building, Washington 4, D. C.

<b>BARNES MANUFACTURING CO.</b> Mansfield, Ohio	<b>CONSTRUCTION MACHINERY CO.</b> Waterloo, Iowa	<b>NOVO ENGINE CO.</b> Lansing, Michigan
<b>CARVER PUMP CO.</b> Muscatine, Iowa	<b>THE GORMAN-RUPP CO.</b> Mansfield, Ohio	<b>RICE PUMP &amp; MACHINE CO.</b> Milwaukee 4, Wisconsin
<b>C. H. &amp; E. MANUFACTURING CO.</b> Milwaukee, Wisconsin	<b>THE JAEGER MACHINE CO.</b> Columbus, Ohio	<b>STERLING MACHINERY CORP.</b> Kansas City, Mo.
<b>CHAIN BELT CO.</b> Milwaukee, Wisconsin	<b>MARLOW PUMPS</b> Ridgewood, N. J.	<b>WORTHINGTON PUMP &amp; MACH. CORP.</b> Holyoke, Mass.

# Here's the Low-Cost Flooring to give you a lifetime of wear...

Today when every dollar counts, you'll find MA-TI-CO asphalt tile the most economical of all applied types of floor coverings!

QUALITY CONTROLLED\*

**MA-TI-CO**  
ASPHALT TILE  
FLOORING

...it's factory-waxed!

### LONGER LASTING

Over 150 million square feet of MA-TI-CO installations the country over are proving their endurance to wear under the most rugged conditions.

### INSTALLS QUICKLY

Made to Federal specifications, MA-TI-CO is precision finished to make for a perfect-fitting job. Cuts down on installation time. Can be laid without disruption of normal store or plant operation.

### EASY TO CLEAN

Daily dusting and an occasional mopping and waxing is all you need to keep your MA-TI-CO floor clean and beautiful. MA-TI-CO is odorless, sanitary, safe... will not wear slippery with use.

### SAVES ON REPLACEMENTS

Should excessive abuse or accidents necessitate repairs, new MA-TI-CO tile units can easily be inserted. Expansion of a floor, as in remodeling, is just as simple with the addition of matching tiles.

### BEAUTIFUL . . . COLORFUL

A range of 27 MA-TI-CO colors . . . both plain and marbled . . . offer limitless design possibilities only possible in tile types of flooring. Thru-and-thru colors can't rub off.



**FREE!** Full-Color Literature Showing Complete Sample Tile Line and Design Patterns  
Write to: Mastic Tile Sales Corp., Dept. E, 153 W. 57th St., New York 19, N. Y.

**MA-TI-CO ADVERTISING NOW APPEARING IN LEADING MAGAZINES**  
TIME... AMERICAN DRUGGIST... INSTITUTIONS... AMERICAN BUILDER... THE SCHOOL EXECUTIVE...  
BURROUGHS CLEARING HOUSE... PROGRESSIVE GROCER... BUILDING SUPPLY NEWS... RETAILING... RUG PROFITS



**Bustling Baster  
Makes a Beeline  
to Better Business!**

By  
Your Local Dodge Man 

**NO MORE PIDDLING JOBS FOR ME!  
NOW I GO AFTER THE  
SWEET JOBS -  
AND MY BIDS ARE  
IN ON TIME!**

BUSTER JONES

**WATCH HOW DAILY CONSTRUCTION  
NEWS REPORTS LEAD BUSTER TO  
BETTER BUSINESS!**

**THAT'S A BEE-  
LINE IF I EVER  
SAW ONE!**

**YEP—A BEE-  
LINE TO  
PROFITS!**

B. JONES

**BUSTER USES DODGE REPORTS! HE SAVES  
TIME! SAVES MONEY! MAKES MONEY!**

**THESE SPECS ARE  
RIGHT DOWN MY  
ALLEY! DODGE RE-  
PORTS LEAD ME  
STRAIGHT TO THE  
JOBS I WANT.**

**BUSTER KNOWS WHO TO SEE AND WHEN! DAILY DODGE  
REPORTS BRING HIM NEWS OF PROFITABLE JOBS!**

**I PAY ONLY A FEW CENTS  
A DAY FOR MY DODGE  
REPORTS. NO HIT-AND-  
MISS LEADS  
FOR ME!**

**CONTRACTORS! SUPPLY MEN!  
MANUFACTURERS! DODGE CAN  
HELP YOU! MAIL THIS  
COUPON TODAY!**

**FREE...**

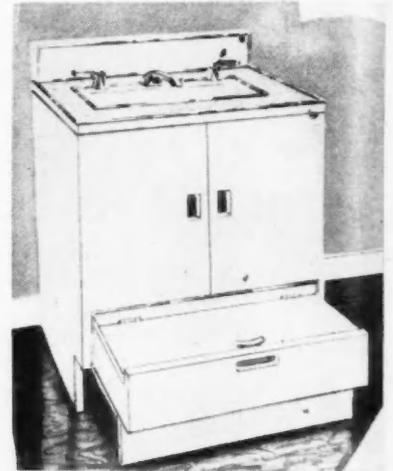
Without cost or obligation, let me  
see some current Dodge Reports.  
I do business east of the Rockies.

NAME \_\_\_\_\_  
FIRM \_\_\_\_\_  
ADDRESS \_\_\_\_\_

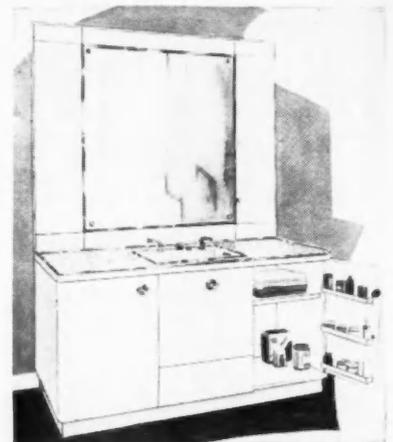
**F. W. DODGE**  
**DODGE REPORTS**  
CONSTRUCTION NEWS DIVISION  
F. W. DODGE CORPORATION  
119 W. 40th Street—New York 18, N.Y.

**New Designs Offered  
In Combination Units**

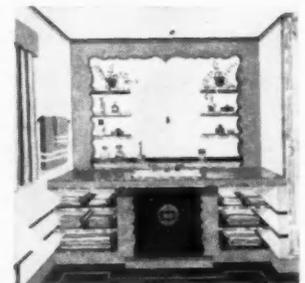
REFRESHING new designs in lavatory-vanity combinations are offered by the Formica Co., 4514 Spring Grove Ave., Cincinnati 32, Ohio. Under the trade mark, "Vanitory," these designs will be furnished to Formica fabricators who will offer



HANDY step-up is built into this Vanitory



VANITORY Design in five-in-one unit



ORIENTAL effect in new Formica unit

the units in their own designs as well as build custom units as specified by architects and builders.

These designs feature a rimless wash bowl surrounded by a dressing table surface of Formica. There are more than 40 color patterns suitable for this bathroom application.

Some of the designs include pic-  
(Continued to page 232)

# HOPE'S Lok'd Bar FACTORY SASH



Paper Art Company, Indianapolis, Indiana

Allen & Allen, Architects

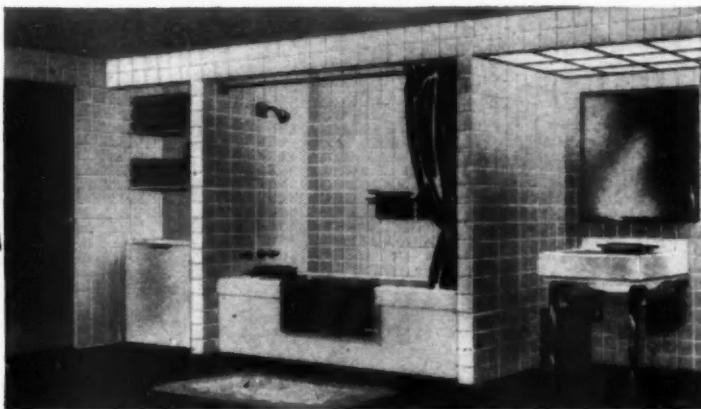
HOPE'S LOK'D BAR FACTORY SASH has weathering flanges rolled integral with the bar section, doing away entirely with riveted weathering strips which, inviting rust and corrosion, are the outstanding weakness in ordinary light factory sash.

The exclusive Lok'd Bar Joint unites vertical and horizontal muntins with twice the strength of common types of sash joints. These features assure lasting weathertightness, protection for workers and lower cost for upkeep for the life of the building.

Write for Hope's Lok'd Bar Factory Sash Catalog

## HOPE'S WINDOWS, INC., Jamestown, N. Y.

THE FINEST BUILDINGS THROUGHOUT THE WORLD ARE FITTED WITH HOPE'S WINDOWS



# 42,000,000

people are waiting to get into  
this **alumitile** bathroom!

Metal Tile Products, Inc.,  
Hastings, Michigan  
Please send me Architect's Kit and sample tile FREE:

Name \_\_\_\_\_  
Business \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

A homeowner's dream come true! A shining bathroom finished in a lastingly beautiful aluminum wall covering. Hastings Alumitile is making dreams come true all over the country, because it makes possible the easily cleaned surfaces and the permanent beauty of wall tiling at its best on any building budget. Made in a choice of 14 decorator colors, permanently baked onto aircraft aluminum, it can't rust, peel, or craze.

For complete information see Sweet's catalog or mail the coupon.



## HASTINGS alumitile

Metal Tile Products, Inc., Hastings, Michigan

# Eliminate

## COSTLY HAND SANDING

• Pays its way quickly on new or refinished work—**SANDS CLOSED CORNERS CLEAN**—fine on dry wall construction—plaster patches—treads and risers—cabinets—

**8750**

F.O.B.

A PENINSULA TOOL

**JITTERBUG SANDER COMPANY, INC.**  
MENOMINEE, MICH.

Write for 10-Day Free Trial Offer

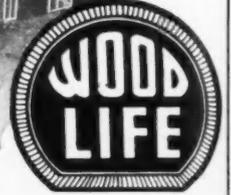


# Sell Quality!



with

**WOODLIFE** the original  
toxic water repellent



Give your customers the best. WOODLIFE means protection against decay, termites—and moisture absorption, the cause of warping, shrinking, swelling and checking. A few pennies spent for WOODLIFE treatment assures lifetime protection and customer satisfaction.

WOODLIFE is Time-Tested . . . used by leading woodwork mills since 1935.

as seen in  
**Better Homes**  
and Gardens

Specify **WOODLIFE**  
protection, **NOW!**

Write for literature and  
name of nearest Dealer.

**Protection Products Mfg. Co.**

Research Laboratory and Plant **KALAMAZOO, MICH.**

### Wallace F. Bennett New President of NAM

WALLACE F. BENNETT, Utah manufacturer, is the new president of the National Association of Manufacturers recently elected by the Association's board of directors. Ben-



WALLACE F. BENNETT

nett, a "small" manufacturer, is president of Bennett's Salt Lake City Paint and Varnish Company.

Educated in Salt Lake City public schools, Bennett attended the Latter Day Saints High School and the University of Utah, where he received a B.A. degree in 1919. His education was interrupted by World War I, in which he served as a 2nd lieutenant of infantry.

Bennett is a member and past president of the Salt Lake Rotary Club, and a regional vice president of the NAM. Also, he is a director of the Utah Manufacturers Association, and chairman of its public relations committee.

### Announce New Sales Head

R. S. KING, president, The Philip Carey Manufacturing Co., has announced that J. J. Smiley, Jr., has been appointed commodity manager for the sale of Miami Carey fans.

Smiley is a graduate of the University of Illinois and has had wide experience in the building materials field. He was formerly assistant advertising manager for Carey.

### E. S. McKay Named New Department Head of G.E.

E. S. McKAY of Schenectady, N.Y., has been named advertising and sales promotion manager of the General Electric Co.'s air conditioning department, with headquarters at Bloomfield, N. Y., it is announced by H. B. Donley, marketing manager of the department.

McKay was formerly assistant to the manager of employee and community relations in the G.E. apparatus department. A native of Platte, S. D., he joined G.E. in 1933.

### New Head of Materials Handling Institute

J. H. W. CONKLIN, sales manager of the Industrial Truck Div., Clark Equipment Co., Battle Creek, Mich., was elected president of the Materials



J. H. W. CONKLIN

Handling Institute at the annual election of officers held in Philadelphia at the Third National Materials Handling Exposition. He succeeded S. W. Gibb, Yale & Towne Manufacturing Co. sales manager.

Other officers elected for 1949 are: First vice-president, J. G. Bucuss, Acme Steel Co.; second vice-president, J. P. Lawrence, The American MonoRail Co.; secretary-treasurer, R. Kennedy Hanson.



*Marlite* ... for the "NEW LOOK"  
in **NEW HOMES** or **OLD**

plan on  
*Marlite*  
walls

Marlite, beautiful and practical, provides the extra value that makes a new home more appealing to the discriminating buyer, adds the modern touch that makes an older home more attractive, too. Plastic-finished Marlite wall and ceiling panels are easily installed, easy to clean and eliminate refinishing. In kitchens, bathrooms, in every room where colorful, practical interiors are needed, Marlite means extra value for your customers, added profits for you. Make the most of Marlite . . . in homes—and in commercial buildings, too!

**EASY TO INSTALL**—Measure it, cut it, spread Marsh Adhesive on it, and Marlite's ready to install. There's no trick at all, creating beautiful interiors with modern Marlite.

**EASY TO HANDLE**—Wall-size panels, big enough to cover a generous area, yet easy to handle, quickly and easily installed, using only regular carpenter's tools.

**EASY TO CUT AND FIT**—Marlite is durable, but you'll have no trouble cutting and fitting it to the most exacting specifications. Complete installation instructions included in every shipment.

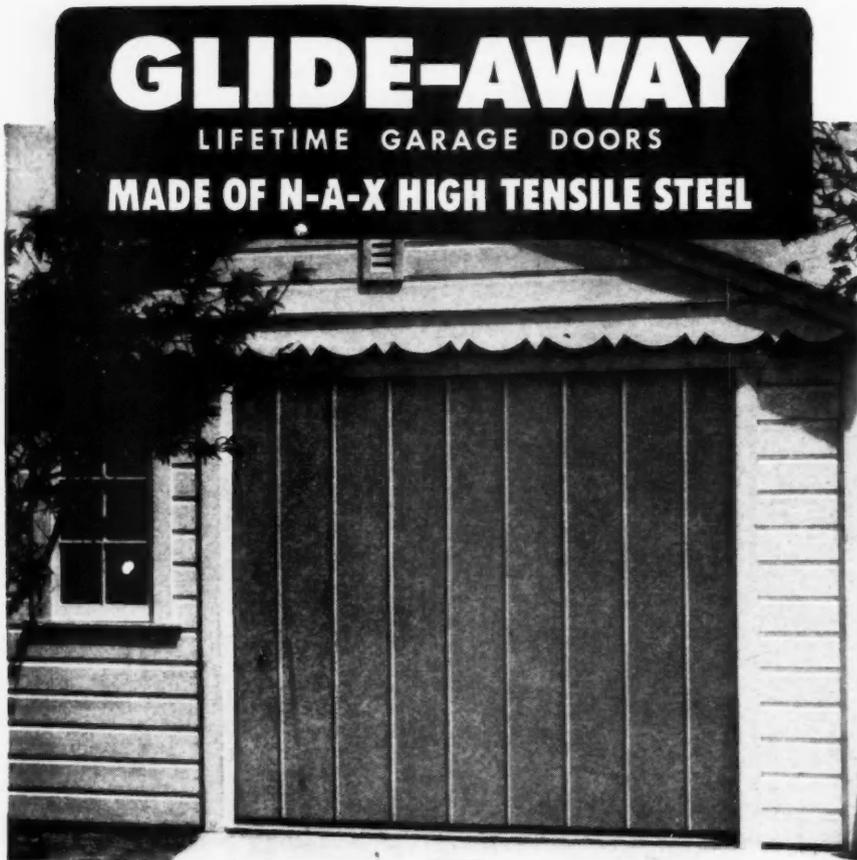
**AND ECONOMICAL, TOO!** The cost of materials for a complete Marlite installation has increased less than 10% since 1940. That's why Marlite means added value for your customers . . . added profits for you!



**BATHROOM**

**MARSH WALL PRODUCTS, INC.**  
403 MAIN STREET  
DOVER, OHIO

# It's Easy to Sell the Door Home Owners Want!



## THE ONLY DOOR WITH ALL THESE ADVANTAGES:

"Glide-Away" is the *only* overhead-type garage door made of N-A-X High Tensile Steel for 50% greater resistance to distortion and denting, and 4 to 5 times greater resistance to rust and corrosion. And look at the other features: One piece, all-welded construction for extreme rigidity. Edges are completely flanged to eliminate all sharp surfaces. Full recessing with only 2½" of headroom required. Space-saver, jamb-type hardware that provides smooth, gliding action without sacrificing interior space. Distinctive jamb-aligner and weather seal that assures perfect closure even for out-of-plumb openings; and easily-adjusted, spring-balanced mechanism that provides effortless operation. Yes, "Glide-Aways" are just what home owners want, because they're built for a lifetime of trouble-free service, good looks and utmost protection.

## DESIGNED FOR QUICK, FOOLPROOF INSTALLATION

"Glide-Aways" are so simple to install that anyone can do it quickly and without special tools. Standard sizes include the popular 8' 6" x 7' door for wide, late model cars, in addition to 8' x 7', 8' x 7' 6" and 8' x 8'. Double size is 16' x 7'. Special sizes available up to 16' wide by 8' high. Prices are competitive.

## STEEL DOOR DIVISION STAMPING PRODUCTS AND MFG. CO.

628 E. FOREST AVE. • DETROIT 1, MICH.

Stamping Products and Mfg. Co.  
Steel Door Division  
628 E. Forest Ave., Detroit 1, Mich.  
Please send detailed information on "Glide-Away"  
Garage Doors.

I am a  Builder,  Dealer,  Prospective Buyer

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_

## Dahlberg Heads Board Of Building Foundation

BROR G. DAHLBERG, chairman of the board of directors of the Celotex Corporation, Chicago, has been elected chairman of the board of gov-



BROR G. DAHLBERG

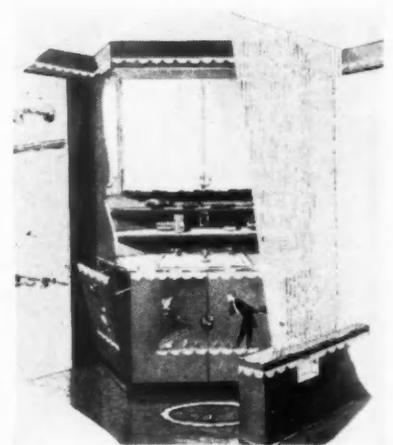
ernors of the Building Officials Foundation. He succeeds Joseph P. Wolff, commissioner of the department of buildings and safety engineering of the city of Detroit.

The foundation has also announced the election of Harold Boechenstein, president of Owens-Corning Fiberglas Corporation, Toledo, Ohio, and Henry Bohnsack, president of International Steel Company, Evansville, Ind., to the board of governors.

## New Designs Offered

(Continued from page 228)

ture mirrors, built-in laundry hampers, twin bowls, step-ups for children, towel storage, unique medicine chests, and concealed plumbing. One five-in-



EFFECTIVE use of small space is achieved

one unit contains a picture mirror, towel shelf, chest-sized drawer, wash stand, and dressing table.

At the floor level of one unit a handy step may be pulled out for the children to step up on. When the step (which also serves as storage space) is pushed in, it fits flush with the front of the unit.

**BILL THE BUILDER SAYS:**



*Sharpen your pencil—  
I'll show you why—*

**ALWINTITE'S YOUR WINDOW BUY!"**

"You can figure it out in a jiffy—the way I did.

"Just add up the *real cost* of your windows—not the first price, but the final, *installed cost*.

"You've got to figure on paint costs . . . weatherstripping . . . hardware . . . labor costs for applying all this and assembling the sash and frame.

"WITH ALWINTITE THE COST OF ALL THIS IS EXACTLY ZERO!

"That's why I say—*Alwintite's your window buy!*"



Bill's right, mister. Alwintite is the top quality aluminum window and the real cost is no more (frequently less) than for ordinary windows.

Alwintite is delivered ready to install . . . quickly, easily! It's completely pre-assembled with built-in, stainless steel weatherstripping all around. There are no "extras" to buy, no adjustments to make, no painting now, or ever.

Alwintite not only helps you build faster...build better... it also help you sell! Alwintite is the window that offers your customers the eye-appeal, durability and trouble-free maintenance they're looking for!

You can get Alwintite in 25 stock sizes, 8 styles, with screens and storm sash to fit. Also mullions for multiple window arrangement, picture and basement windows. For complete details write Dept. A-4, THE ALUMINUM WINDOW CORPORATION, a subsidiary of General Bronze Corp., 604 Stewart Avenue, Garden City, N. Y.



\*Reg. U. S. Pat. Off.

**ALWINTITE**  
DOUBLE-HUNG  
**ALUMINUM WINDOWS**

## CUT COSTS WITH WP-578 Knot Sealer and Economy Siding

For example, you can save up to 40% on siding costs by using WP-578 Knot Sealer and Western Pine Economy Siding. What's more, the life of the paint is lengthened.



BEFORE  
PAINTING

*Legend*—Knots don't show through painted surfaces when WP-578 is applied first. At left, above and below, "Before and After" pictures of a painted knot where WP-578 was used. At right, leaching of resins makes knot visible through paint where ordinary sealer was used. Three coats of paint were applied to each piece after respective sealers were used, and both pieces were then exposed to ultra violet light for 528 hours.



AFTER  
PAINTING

Sealed with WP-578

with ordinary sealer

With WP-578 Knot Sealer, building construction costs can be definitely lowered because this product makes sound tight-knotted lumber entirely suitable for many painted and enameled wood surfaces.

Today there are 68 paint and varnish manufacturers between the Atlantic and Pacific coasts which now mix and distribute prepared solutions of WP-578. If you are unable to purchase it, a list of approved manufacturers near you may be had by writing to the Western Pine Association, Department 41-B, Yeon Building, Portland 4, Oregon.



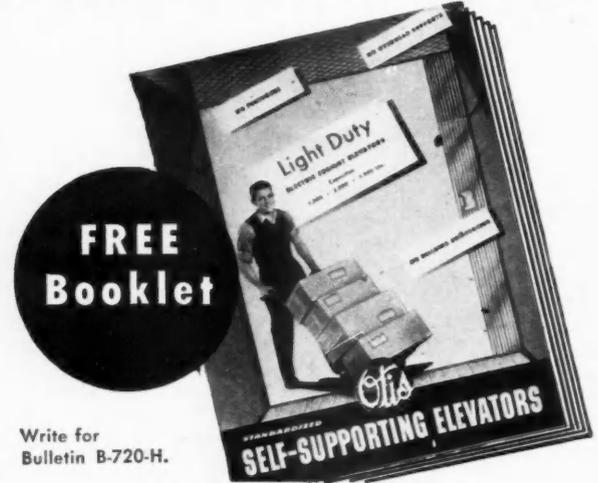
*These are the Western Pines*  
Idaho White Pine • Ponderosa Pine  
Sugar Pine

*These are Associated Woods*  
Larch • Douglas Fir • White Fir  
Engelmann Spruce • Incense Cedar  
and Red Cedar • Lodgepole Pine

*Well manufactured—thoroughly  
seasoned—carefully graded—  
by all Association member mills*

## NEW! Low Cost Light Duty ELECTRIC ELEVATORS

Why handle freight the slow, costly way — by hand! You can now handle light freight electrically in loads of 1,500, 2,000 and 2,500 pounds with the new Otis Self-Supporting Elevator. Designed for a maximum rise of 35'-0" it is suitable for any 2 or 3 story commercial or institutional building. It is inexpensive to install because its self-supporting design requires no penthouse, no overhead supports, no building reinforcing. OTIS ELEVATOR COMPANY, 260 11TH AVE., NEW YORK 1, N. Y.



FREE  
Booklet

Write for  
Bulletin B-720-H.



SIX, EIGHT or  
TEN FEET  
of MEASURING ACCURACY!

Mechanics and craftsmen will welcome Brite-Blade's accuracy as well as its flashing white blade which simplifies reading. The chrome plated, zinc alloy case will take the toughest punishment with ease. You can get a Brite-Blade at all good hardware stores or building supply houses—or if you prefer, use coupon.

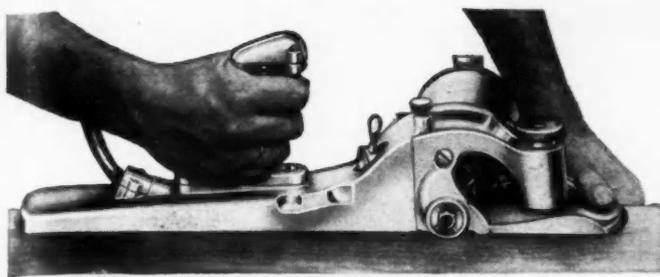
TRADE MARK  
**MASTER**  
REG. U.S. PAT. OFF.  
WOOD AND STEEL TAPE RULES

MASTER RULE MFG. CO., INC.  
201 Main Street, White Plains, New York

Please send me  
306W—6 ft. Brite-Blade—\$1.75  
308W—8 ft. Brite-Blade—\$1.90  
310W—10 ft. Brite-Blade—\$2.25

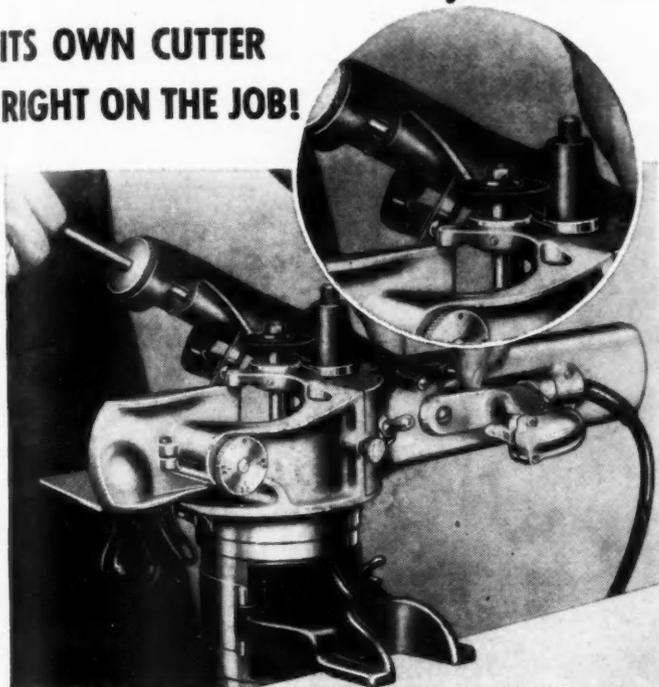
My check (or Money Order) is enclosed.

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_



## Power-Sharpens

**ITS OWN CUTTER  
RIGHT ON THE JOB!**



Keep your power plane cutter sharp on the job. You can resharpen the cutter in a matter of minutes, sharp as new. Just set the plane in the bench bracket, remove the cutter arbor and replace it with the grinding arbor and wheel. Mount the grinding attachment on the plane and switch on the power.

**3 to 5 times faster than hand planing . . .** Doors, screens, storm sash, transoms . . . any edge at all . . . can be planed faster than the best hand planing with a Stanley-Carter Power Plane. And better!

**Smoother, even against the grain . . .** The combination of real speed . . . 18,000 r.p.m. . . and patented spiral cutter gives perfectly smooth cuts at any depth setting, regardless of grain direction.

**Convenient adjustments . . .** Depth of cut is adjusted before or during work just by turning dial on front of plane. Fence can be adjusted in a second for any bevel cut up to 45 degrees.

\* \* \*

Here's the hurry-up tool you need to compete in costs, in time, in quality of work. Get the whole story on the J-5. Write for folder. Stanley Electric Tools, Stanley-Carter Sales Dept., 534 Myrtle St., New Britain, Conn.

THE GREATEST NAME IN TOOLS

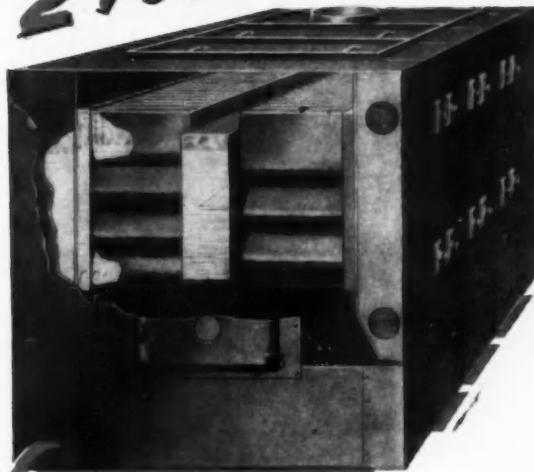
# STANLEY

Reg. U.S. Pat. Off.

HARDWARE • HAND TOOLS • ELECTRIC TOOLS • STEEL STRAPPING

**FOR THE LARGE INSTALLATION  
THE ONLY SECTIONAL  
STEEL BOILER THAT CAN BE**

*taken through a  
2 FOOT DOOR!*



## Koven WATERFILM BOILERS

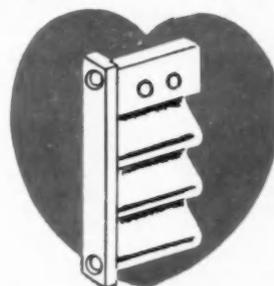
Throughout the country, many apartment houses, industrial plants and other large buildings have found vast savings were made possible by the Waterfilm Sectional Boiler because it could be installed with a minimum of time and labor. And its patented construction (incorporating the exclusive zig-zag water tube) insures quick heat and economy! Waterfilm, in models and sizes for small homes as well, is recommended by leading architects and builders. Write for free literature and newspaper mats. **NATIONALLY ADVERTISED.**

**NO EXPENSIVE  
RIGGING OR  
ALTERATION  
COSTS!**

**SEND FOR  
FREE BOOKLET**



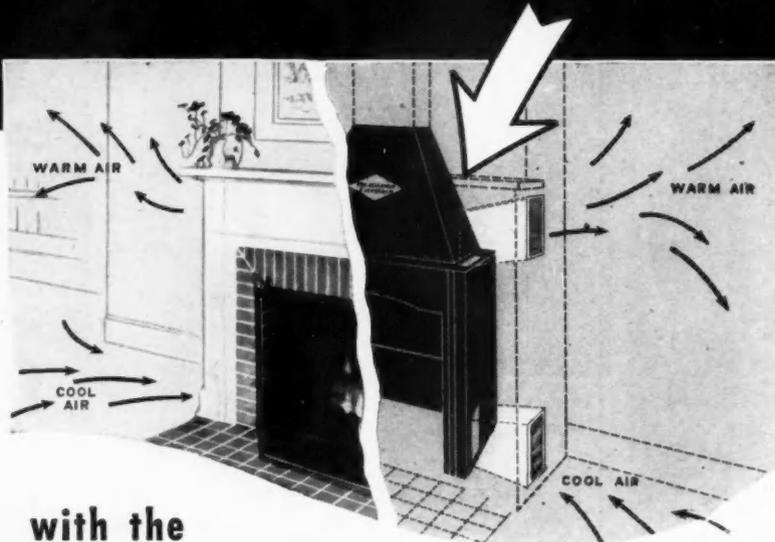
**MADE FOR  
AUTOMATIC FIRING WITH  
OIL, STOKER OR GAS**



The heart of the Waterfilm Boiler  
is the zig-zag shaped water tube.

**WATERFILM BOILERS, Inc.**  
A Division of L. O. Koven & Bro., Inc.  
154 Ogden Ave., Jersey City 7, N. J.

# ADD SALES APPEAL to the Houses You Build!



## with the HEATILATOR\* *Fireplace*

Builders and contractors all over America have found that a Heatilator Fireplace unit adds extra value to a house . . . makes it easier to sell. You have persuasive sales points when you tell the prospective home buyer that *this* fireplace gives extra comfort, extra utility, will not smoke . . . circulates heat.

You'll find, too, that a Heatilator Fireplace is easier to build. The unit is complete from floor to flue—smoke dome, throat, downdraft shelf and damper are built-in parts. This assures correct fireplace construction on every job, eliminates the possibility of costly repairs or rebuilding, guarantees owner satisfaction.

*Accept no substitute. See the Heatilator unit at your building materials dealer— or write for further details to . . .*

**HEATILATOR, INC.**

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

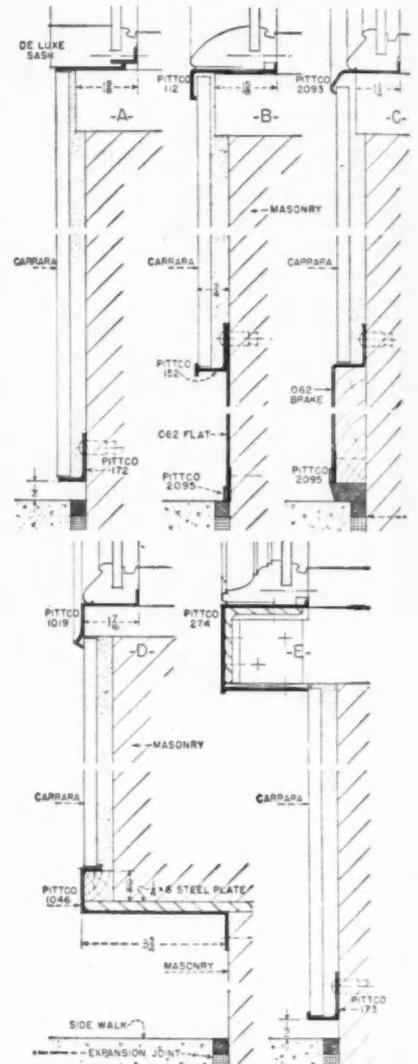


\*Heatilator is the registered trade mark of Heatilator, Inc.

### HEATILATOR FIREPLACE

#### Tips On Installing Structural Glass

THE MOST vulnerable area of an all-glass store front is the bulkhead. This base of the show window is the target for everything from children's roller skates to expanding sidewalks. There are no cure-all methods of eliminating the potential hazards in this area, but correct planning can minimize the actual damage that can be done. Engineers for Pittsburgh Plate Glass Co. have worked out five practical solutions for saving bulkheads and speeding installation.



**FIVE methods of installing bulkheads**

These solutions are shown in detail in the accompanying drawings, and have been made practical with the use of special metal members. In each the structural glass facing has been raised above the sidewalk, thus taking it out of the actual "danger zone." The basic construction lends additional protection to the glass.

In Sections "A" and "E," this has been accomplished by provid-

*(Continued to page 240)*

# THIS HOME IS ESPECIALLY DESIGNED FOR ... RETAIL LUMBER DEALER PARTICIPATION



## THE CERTIGRADE NATIONAL HOME IS YOUR PROFIT HOME FOR 1949

This "Home of the Year" featuring the retail lumber dealer is a nation-wide promotion. On April 9 a full page ad in color will appear in the Saturday Evening Post... another will appear in a June issue... and a third message in the Post is planned for early autumn. This home will also be publicized in Farm Journal, Small Homes Guide, and other magazines. Capitalize on this BIG retail lumber dealer campaign.

## ADVERTISED IN THE SATURDAY EVENING POST

This is a signal profit opportunity for you and your contractors! The Certigrade National Home is being built as a demonstration home in many areas, and plans are under way for many more of them in the next two or three months. Our national advertising is timed to support your local activity.

Blueprints are available with basement or without basement and with utility room for either northern or southern construction. Complete blueprint working drawings can be obtained by *retail lumber dealers only* from National Plan Service. Price \$7 per set. Material lists, \$2.

### FREE DISPLAY AND SALES HELPS

- FULL COLOR 21" x 26" POSTER (Home design, floor plan, interior sketches)
- ENLARGED FULL COLOR REPRODUCTION SUITABLE FOR FRAMING
- SKETCH PLAN SHOWING MANY DETAILS
- NEWSPAPER MATS

Write to Red Cedar Shingle Bureau for these today

Sponsored by  
**Red Cedar Shingle Bureau**  
5510 White Building, Seattle 1, Washington  
Metropolitan Bldg., Vancouver, B. C. Canada

Designed by  
**National Plan Service**  
1315 West Congress Street, Chicago 7, Illinois

# For Quality Construction Modern Reinforced

**It makes sense  
to Build with  
Stucco when  
you gain  
these selling  
advantages**

## GOOD CONSTRUCTION

Modern stucco consists of 3 layers of concrete reinforced with steel . . . a siding that adds structural strength and requires no maintenance for the life of the building. This is quality construction that enhances your reputation as a builder of good homes.

## LOW COST

Modern stucco is applied quickly and easily—saves labor. And, compare the price of Portland Cement with other siding materials. There's your answer to why stucco insures big savings. There's your answer, too, to the volume demand for low-cost, quality homes that sell quickly and profitably.



Actual section of stucco wall applied the Keystone way. Note how the use of this system deeply embeds the Keymesh Reinforcing in the scratch coat.

## See how the KEYSTONE SYSTEM

Yes, the Keystone System of Stucco Application means stronger, low-cost, modern stucco that helps sell homes.

The basic component of the Keystone System is Keymesh Reinforcing. Stucco siding applied to Keymesh is on to stay, to give lasting beauty, and to reduce construction costs.

Keymesh Open Mesh Reinforcing is made of tough cold drawn steel wire, heavily galvanized to resist rust. It is available from your dealer in easy-to-work-with 3' x 150' rolls.

For Stucco and Overcoating: Use Keymesh, 1½" hexagon mesh, 17 gauge wire, or 1" hexagon mesh, 18 gauge.

For Interior Plaster and Base for Tile: Use Keymesh 1" hexagon mesh, 20 gauge wire.

## KEYSTONE STEEL

PEORIA 7,

**Modern, Durable, Low-Cost Stucco calls for**

# at Lower Cost Build with CONCRETE STUCCO

## ATTRACTIVE TO BUYERS

Modern stucco gives you these important selling features:

- 1 *Lasting beauty—not only beautiful when new, but retains its attractiveness throughout the years.*
- 2 *Durability—modern stucco is strong, long lasting and crack-resistant.*
- 3 *Ease of maintenance—no periodic painting, unaffected by rot and termites.*
- 4 *Fire resistant for family protection.*
- 5 *Good insulation against dust and cold air.*
- 6 *Highly suitable for all extremes of weather.*
- 7 *Ideal for new homes as well as for overcoating older homes.*



## of Stucco Application Insures Durability and Economy

**The Keystone System Means Better, Stronger Stucco—**  
In the Keystone System of Stucco Application, Keymesh Reinforcing is deeply embedded in the scratch coat. Keymesh is furred out  $\frac{1}{4}$ " to  $\frac{3}{8}$ " away from the wall. This furring, plus the open mesh design of Keymesh wire, allows the plaster to flow through—and around—the steel reinforcing. As a result, stucco reinforced with Keymesh possesses greater strength and permanent crack-resistance. This has been proved on thousands of stucco homes built with Keymesh Reinforcing.

**The Keystone System Means Easier, Faster, Smoother Lathing—**Lathers who are using the Keystone System

of Stucco Application testify to the fact that it simplifies and speeds up their job—and also results in smoother lathing. Keymesh Reinforcing unrolls flat, goes into place flat, lays flat. It forms around corners easily. Besides, Keymesh has no rough surfaces that cut lathers' hands.

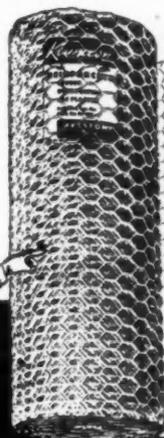
**The Keystone System Helps Insure a True Wall—**Plasterers find that it's easier to get a true wall when they apply stucco on Keymesh Reinforcing because Keymesh is furred out from the wall. Thus the thickness of the scratch coat is predetermined. Plasterers know that an even scratch coat makes succeeding coats go on smoother, quicker and easier.

Ask Your Dealer for More Information on the Keystone System of Stucco Application—he can supply you with complete details and specifications—and he has Keymesh Reinforcing in any quantity you need.

**& WIRE COMPANY**

ILLINOIS

**KEYMESH**



*Keymesh*

**REINFORCING FOR STUCCO  
AND OVERCOATING**



Two jobs finished for the work of one . . . and both done right. Perfect window operation and better weather protection in one piece of equipment. Entirely eliminates pulleys, cords, weights and box frames. Master No-Draft Sash Balance—permanent, unimpaired and trouble-free—saves labor, time and money. Can be installed quickly and easily. This is the modern way to counterbalance and weatherstrip all double hung windows—old or new.

Acting as a perfect weatherstripping for both sides of a window, Master No-Draft Sash Balance will automatically adjust itself to any amount of shrinkage or expansion in the wood.

The unit is made of highly tempered, rust-proof metal for long enduring service. Correctly tensioned springs give upper and lower sash perfect balance and easy fingertip operation.

Runways are completely metal covered and require no painting, (of course, cross members should be installed). Double contact prevents any rattle when windows are open.

The Master No-Draft Sash Balance gives a neater appearance to all windows and makes a more weather-tight window. Nothing to wear out or cause trouble.

SEE OUR CATALOG IN SWEET'S <sup>17</sup>/<sub>5</sub> a

MASTER METAL STRIP, INC.  
1720 N. Kilbourn Avenue  
Chicago 39, Illinois

MASTER NO-DRAFT SASH BALANCE

Please send me, without obligation, complete information about Master No-Draft Sash Balance.

Please send detailed literature at once.

Name .....

Title .....

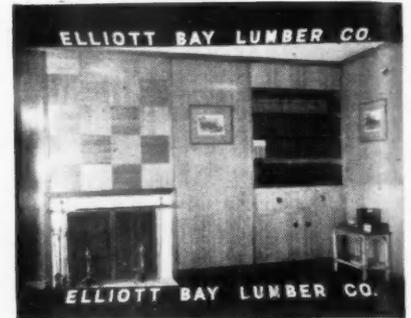
Address .....

City ..... Zone ..... State .....

### Effective Display Booth Utilizes Mahogany Panels

TO EFFECTIVELY display its wares, the Elliott Bay Lumber Co. integrated its product in a cleverly planned booth. Builders, when viewing the booth, can see just how this firm's mahogany panel can be used in home interiors.

Panels in the booth are of Sliced Ribbon Grain Baylaun White Lauan Philippine mahogany.



Panels in matched squares applied over a fireplace in the booth were cut from one 4 x 8 panel of Sliced White Lauan. Different colors are obtained by the difference in light reflection as the grain is turned.

All mouldings in the booth are of Baylaun Tanguile. The finish is natural, consisting of one coat of sanding sealer and two coats of clear lacquer. No filler was used. An appealing effect was achieved by using a Bennett-Ireland Flexscreen, complemented by the use of polished brass knobs on the cupboard doors and drawers.

### Installing Structural Glass

(Continued from page 236)

ing a 1/2-inch clearance and supporting the glass on continuous metal mouldings. This takes the uncertainty out of fiber expansion strips commonly used between the structural glass and sidewalk.

Sections "B" and "D" provide toe room, a feature that is gaining in popularity. The toe space can vary to meet requirements. Section "C" involves a metal water table or base. Even here, the wood core has been raised to reduce rotting and swelling from exposure to moisture.

Of the five sections shown, "E" and "D" should prove most effective. In "E," the glass is recessed, thereby removing it from direct exposure. The recess can be increased by extending under side of sill with sheet metal. The jutting moulding in "D," reinforced with steel plate which, incidentally, should be laid with the masonry, will serve as a guard by absorbing shocks which otherwise would be inflicted on the edge of the glass.

# Roddiscraft

## QUALITY FEATURES IN THE NEW HOUSEMART LIGHTWEIGHT DOOR

Top and bottom rails — 2 1/2" aspen — ample for trimming.

Core — accordion type "bent-stressed" veneers — "solid core" strength with 50% less weight.

Spacer Strip for Extra Strength

1/8" three-ply face panels — urea resin hot press bonded for lifetime service.

Two 7/8" hardwood edge strips glued together before final assembly — firm anchors for hardware.

Lock Blocks — 3 1/2" x 24" aspen both sides — inner edge 5" from outer edge of door after factory trimming.

Faces — belt sanded to satin smoothness — ready for finish.

Identify by the **RED DOWEL**

True corners for easy hanging.

The new **Roddiscraft** Housemart Lightweight Door shows the same craftsmanship and attention to detail that has made Roddis a symbol of quality for over half-

a-century. The Housemart Door with the accordion veneer combines solid core strength with 50% less weight. Priced for the residential market.

### NATIONWIDE Roddiscraft WAREHOUSE SERVICE

Cambridge 39, Mass. . . . . 229 Vassar St.	Kansas City 3, Kan. . . . . 35-53 Southwest Blvd.	Milwaukee 8, Wis. . . . . 4601 W. State St.
Charlotte, N. C. . . . . 123 E. 27th St.	L. I. City, N. Y. . . . . Review & Greenpoint Ave.	New York 55, N. Y. . . . . 920 E. 149th St.
Chicago 8, Ill. . . . . 1440 W. Cermak Rd.	Los Angeles 11, Calif. . . . . 2860 E. 54th St.	Port Newark 5, N. J. . . . . 103 Marsh St.
Cincinnati 2, Ohio . . . . . 457 E. Sixth St.	Louisville 10, Ky. . . . . 1201-5 S. 15th St.	St. Louis, Mo. . . . . 4453 Duncan Ave.
Dallas 10, Texas . . . . . 2800 Medill St.	Marshfield 10, Wis. . . . . 115 S. Palmetto St.	San Antonio, Texas . . . . . 727 N. Cherry St.
Detroit 14, Mich. . . . . 11855 E. Jefferson St.		San Francisco 24, Cal. . . . . 345 Williams Ave.

DEALERS IN ALL PRINCIPAL CITIES

## Roddiscraft

RODDIS PLYWOOD CORPORATION  
MARSHFIELD, WISCONSIN



WESTINGHOUSE NEW, IMPROVED

## *Poweraire*\* Home Ventilator

*Clean, cool kitchens  
sell homes Faster*

A clean, attractive, well-ventilated home is easier to sell. The new Westinghouse Home Ventilator Fan, with the amazing *Injector Grille*, can completely change the air in an average kitchen every **TWO MINUTES**. Now, alert builders everywhere are including the Westinghouse Home Ventilator in construction and remodeling plans.

\*T. M. Reg. U. S. Pat. Off.

### LOOK AT THESE FEATURES

- Modern Streamline Design
- Insulated Outside Door
- Easily Installed in Practically Any Wall Thickness
- White, Snap-on Air Injector Grille
- Easy to Clean
- Single Pull-chain Control
- Economical to Operate

FOR  
ADDITIONAL  
INFORMATION  
CLIP AND MAIL  
THIS COUPON

#### REQUEST FOR HOME VENTILATOR INFORMATION

Name \_\_\_\_\_

Address \_\_\_\_\_

WESTINGHOUSE ELECTRIC CORPORATION  
Fan Department • Springfield 2, Mass.  
4AB

# Westinghouse Fans

WESTINGHOUSE ELECTRIC CORPORATION  
Appliance Division • Springfield 2, Mass.

## Savings and Loan League Sees Good Building Year

LOWER CONSTRUCTION costs, increased labor productivity and a continued high rate of residential building were predicted for 1949 by the United States Savings and Loan League in a new quarterly review published for the first time March 18.

The review has been compiled and written by the League's economist, Dr. Arthur M. Weimer, dean of the Indiana University School of Business, and Norman Strunk, vice president. In its analysis of the housing outlook for 1949 the League asserted that the rising volume of savings assures an adequate supply of mortgage money and may ease the terms of home financing.

Weimer and Strunk maintained that recent declines in real estate activity have resulted in more conservative financing practices and in consumer resistance to high prices of houses, but they added that both declining construction costs and easier financing terms will stimulate housing demand.

The League said that continuation of rent controls will sustain a high demand for houses for sale, pointing out that controls have restricted the construction of new rental dwellings.

The publication said that if present trends continue, insurance companies and savings banks will play a larger part in home financing during 1949 than last year, while banks and trust companies will not participate quite so actively. Savings associations will continue to play an important role. In 1948 they accounted for 31 per cent of the home credit extended.

## Gerholz Reports Decline In Overcrowded Homes

DOUBLING UP by married couples in the same household is less than it was in 1940, according to Robert P. Gerholz, Flint, Mich., chairman of the Realtors' Washington Committee of the National Association of Real Estate Boards and a past president of NAHB.

Speaking before a subcommittee of the Senate Banking and Currency Committee, with Calvin K. Snyder, secretary of the Realtors' Washington Committee, Gerholz based his remarks on surveys by the Bureau of the Census.

"The proportion of married couples living doubled up—as extra families in other households—has actually declined more than seven per cent since 1940," Gerholz stated. "In other words, one of every 15.5 couples in 1940 did not have its own household, whereas, at the beginning of this year, only one of nearly 17 married couples did not have its own household."

This improvement is of much greater significance if we measure it from the peak of the housing shortage in April, 1947, he said, when one of every 12 couples was living in a home it could not call its own. "That represents a 26 per cent decline from the proportion of double-ups we had less than two years ago to the proportion we now have."

Gerholz cited this and other examples of the improved housing situation to refute the "dark and gloomy housing picture" painted earlier for the subcommittee by Raymond M. Foley, Housing and Home Finance Administrator, in his attempt to justify the need for a public housing bill.

YOU CAN BE SURE ..IF IT'S  
Westinghouse



## When a House Sale Hangs in the Balance THE WESTINGHOUSE WASTE-AWAY TIPS THE SCALE

Many a new home sale has been won or lost in the kitchen. Mrs. House-Hunter is a hard lady to please. One sure way to impress her with your house is to include a Westinghouse Waste-Away, electric garbage disposer. She'll appreciate the "living convenience" you are offering. And the Westinghouse name will reflect the quality of the whole house.

Installing a Waste-Away requires no more time or materials for the drain line than for the sink alone. Hooking it in is a quick, simple operation. And by installing one, you eliminate the need for a garbage chute, incinerator or garbage can enclosure.

The Westinghouse Waste-Away and other

quality appliances can be built into a house during construction more economically than they can be installed at a later date. When you point this out to prospects and explain that they will be included in an easy-to-pay-for packaged mortgage plan, the sale is in the bag.



Westinghouse Electric Corporation  
Appliance Division—Mansfield, Ohio

Please send me your booklet, "How to Sell Houses Faster" which also includes information on the Westinghouse Waste-Away.

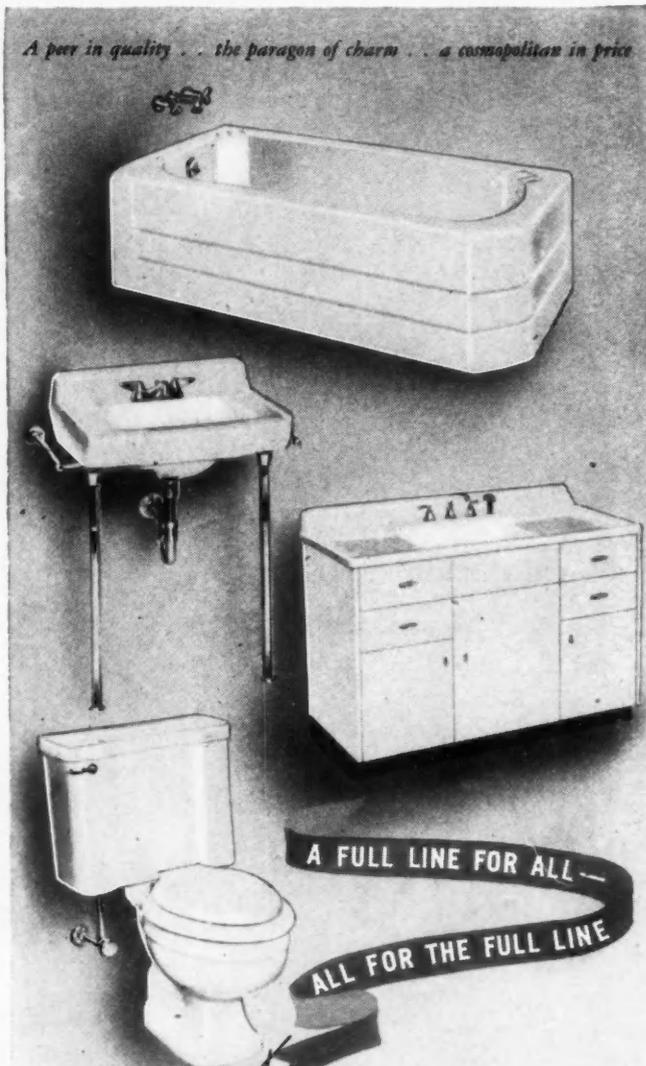
Name \_\_\_\_\_

Address \_\_\_\_\_

City & State \_\_\_\_\_

**WESTINGHOUSE ELECTRIC CORPORATION**  
Plants in 25 Cities • Offices Everywhere

*A peer in quality . . . the paragon of charm . . . a cosmopolitan in price*



**A FULL LINE FOR ALL —  
ALL FOR THE FULL LINE**



Alert Wholesale Distributors, handling the Universal-Rundle full line of bathroom fixtures and kitchen equipment, serve the increasing demand for a reasonable product of outstanding quality. Combining lines of the best in Vitreous China and Vitreous Enamelled Cast Iron, Distributors, sensing the trend, enjoy greater success marketing wares of a serviceability and charm that assure profitable operation.

**UNIVERSAL-RUNDLE CORPORATION**  
NEW CASTLE, PENNSYLVANIA  
*Plants in New Castle, Pa.;  
Camden, N. J.; Milwaukee, Wis.;  
Redlands, Calif.*

*Universal-Rundle*

**BATHROOM AND KITCHEN EQUIPMENT**  
*Uniting two great names, Universal Sanitary Mfg. Co. and Rundle Mfg. Co., and two quality lines, a century of experience is combined to provide an even greater service to the trade.*



**Henry W. Collins  
New Celotex Director**

HENRY W. COLLINS was elected a director of the Celotex Corp. at the company's annual meeting in Chicago in February. He fills a



**HENRY W. COLLINS**

position created by an increase in the size of the board.

Collins, whose home is in Glenview, Ill., joined Celotex in 1926 when he became a sales representative in the New York territory. He has served as manager of the Chicago Sales division and in the same capacity for the New York division. In April, 1948, he became executive vice president of the company.

**Recommendations For  
Eaves Trough, Conductor  
Pipe and Fittings Revised**

REVISION of the "Simplified Practice Recommendation for Eaves Trough, Conductor Pipe and Fittings" has been approved according to an announcement by the Commodity Standards Division of the National Bureau of Standards. The revision will bear the serial number and title R29-49, Eaves Trough, Conductor Pipe and Fittings.

The Recommendation concerning rain carrying equipment for buildings was first issued in 1925, and was re-affirmed ten times between 1925 and 1937. It was revised for the first time in 1939 and again in 1942. The current revision was first proposed in 1946.

Aluminum and stainless steel products have been added to the recommendations. The Recommendation now includes sizes and gauges of trough, pipe and fittings, and gutters made of galvanized steel, sheet, copper, aluminum and stainless steel.

Mimeographed copies of the revised Recommendation may be obtained from the Commodity Standards Div., National Bureau of Standards, Washington 25, D.C.

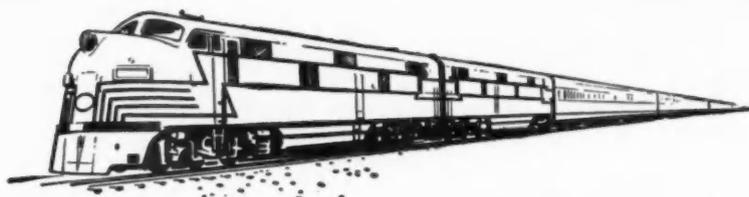
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HERE COMES THE NEW

# century

## SANDER by STERLING

Like the famous 20th Century Limited of the New York Central Railroad . . . the new Sterling Century Sander gives you speed, quality and dependable service.



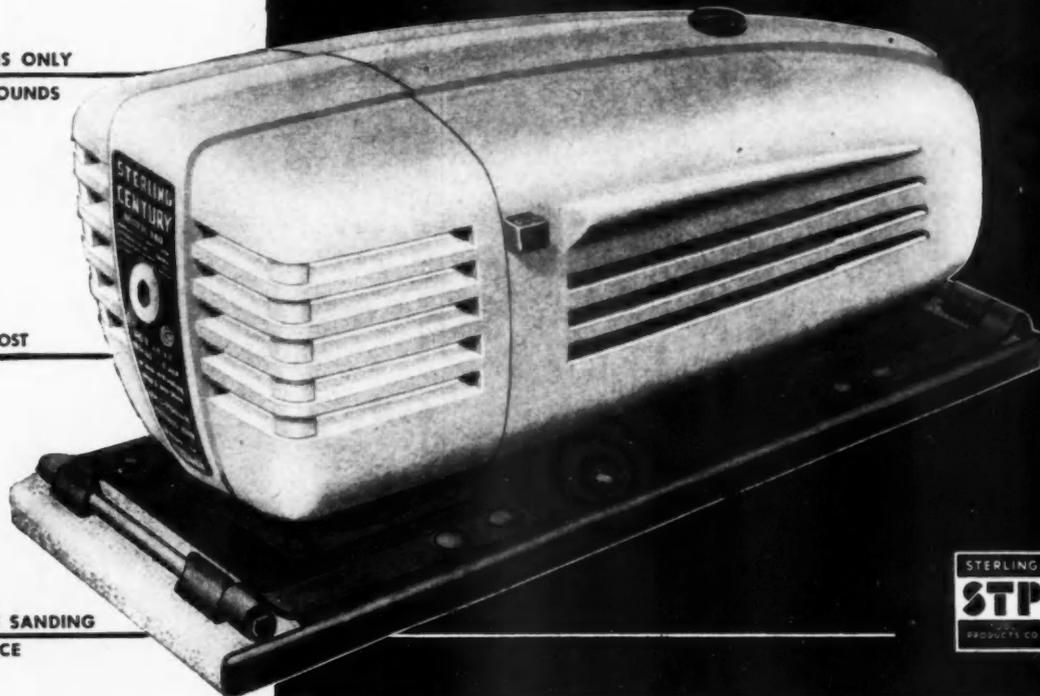
WEIGHS ONLY  
4 3/4 POUNDS



LOW COST



LARGE SANDING  
SURFACE



Here's the easiest-to-use, fastest and safest sander . . . the new low cost Sterling Century! With a pad speed of 5000 r.p.m. it uniformly sands cabinets, dry wall construction, window and door trim, undercoats, primers and finish coats. Only 4 inches high, it's ideal for sanding in small areas and narrow corners. Light in weight, it permits easy, one-hand operation. The pad quickly loads with 1/3 of standard abrasive sheet. A powerful (you cannot stall it), durable tool built for long, continuous use! Send coupon for new catalog.

**STERLING TOOL PRODUCTS CO.**  
1334-A Milwaukee Ave., Chicago 22, Ill.  
Canadian office: Terminal Warehouse, Dept. 10,  
Toronto, Ontario

Send me the new Century catalog.

Please let me see a demonstration of the new Century in my own shop.

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ATTENTION

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ADDRESS

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CITY                      ZONE                      STATE

**THE NEW century BY  
STERLING TOOL PRODUCTS CO.**

Manufacturers of the Model 1000 Portable Electric  
Sander and the Speed-Bloc Air-Driven Sander

A good man  
to know...



**H**e represents Associated Plywood Mills and sells the "wood of 1,000 uses" from coast to coast. In fact, he is more than one man. He (and others like him) is headquartered in major population and building areas. He knows your problems and our plywood. He is a good man to call for general information, for prices, for delivery schedules. He can be reached at any of the addresses below.

...a good plywood  
to use

Associated Plywood Mills is a pioneer manufacturer in a relatively young industry. Our experience extends over 28 years—long enough to acquire know-how and to accept the responsibility for quality production, fair prices, quick delivery.



# ASSOCIATED PLYWOOD MILLS, INC.

GENERAL OFFICE — EUGENE, OREGON

MILLS: Eugene, Oregon, and Willamina, Oregon

BRANCH SALES WAREHOUSES: Eugene and Willamina, Oregon; 925 Toland St., San Francisco 24, Calif.; 4814 Bengal St., Dallas 9, Tex.; 4268 Utah St., St. Louis 16, Mo.

SALES WAREHOUSES: Bessonette & Eckstrom, 2719 S. Compton, Los Angeles 11, Calif.; Pacific Mutual Door Co., 626 Tacoma Bldg. (Home Office), Tacoma, Wn.; 1407 Fleet St., Baltimore 31, Md.; 2141 Throop St., Chicago 8, Ill.; 516 South Ave., Garwood, N. J.; Adams and Shawnee Sts., Kansas City; 2235 Territorial Road., St. Paul 4, Minn.



for  
**Accurate  
Craftsmen...**  
**EMPIRE LEVELS**

**No. 151 ALUMINUM LEVEL  
WITH 3 SETS OF  
INTERCHANGEABLE  
VIAL CASES**

**EMPIRE LEVEL MFG. CO.**  
BOX 97, DEPT. 723, MILWAUKEE 13, WISCONSIN

**BUILDERS • CONTRACTORS**

**CUT COSTS**  
With **MULKEY'S**  
All-Steel  
**PORTABLE ELEVATOR**  
It's Balanced

★ For bricks, blocks, mortar in buckets, sand, roofing, lumber, boxes, dirt, sacks, etc.

★ One man can handle and operate...easily trailed up to 35 miles per hour.

★ Clutch and Brake Assembly *own* design (Extra)



Basic Length 24 ft. • 17½ ft. Maximum Lift  
8' and 14' Extensions Available  
Also Available: 16' Elevator (Same Design)

Write for **FREE Literature and Prices!**

**SAM MULKEY COMPANY**  
1621-KG Locust Kansas City 8, Mo.

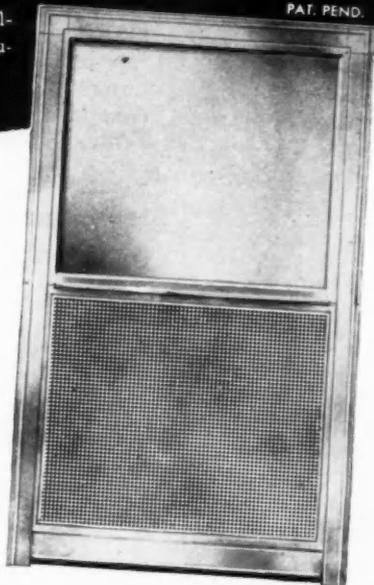
# Sell Alumatic

The ONLY complete combination storm and screen window on the market!

There's a reason why Alumatics are "storming" America — they're the only complete all-weather combination windows!

A few territories available for direct distributorships!

PAT. PEND.



Alumatic is recognized as the leader because only *Alumatic* can offer ALL of these important features!

- The only spring-action storm combination
- The least expensive window in the long run
- Complete automatic-mechanical weatherstripping
- Interlocking meeting rail-overlapping frame
- Heavy extruded aluminum, I and H beam construction
- Removable sill — aluminum screen wire
- Operates like house window for complete ventilation
- Complete self-storage features — no changing

## Alumatics

ARE BACKED BY NATIONAL ADVERTISING!  
 HOUSE & GARDEN  
 BETTER HOMES & GARDENS  
 AMERICAN HOME  
 GOOD HOUSEKEEPING



Alumatic products include a matching combination door and America's only all-aluminum screen door!



Write, Wire, or Phone!

**Alumatic CORPORATION OF AMERICA**

1229 S. 41ST STREET • MILWAUKEE 4, WISCONSIN  
 IN CANADA: ALUMINUM BLDG. PRODUCTS CO., LTD.  
 362 CHILVER ROAD • WINDSOR, ONTARIO



I'm no builder but I planned my bathroom for Comfort!



Yes, this housewife and thousands of other homemakers like the instant heat provided by the FA Quikheter. They like its penny-pinching economy, too . . . for the FA Quikheter costs but a few pennies per hour of continuous operation.

In bathrooms, bedrooms or nurseries, the FA Quikheter lets them wash, dress, or shower in warm cozy comfort. A simple flip of the wall switch spurs the FA Quikheter into action . . . quickly and efficiently.

Plan to include the FA Quikheter in your remodeling or building plans. Homemakers will thank you for giving them instant and healthful heating comfort in rooms that need supplemental heat.

You'll find the low-cost FA Quikheter easy to install and economical on everything but comfort. Talk it over with your electrical contractor, or write today for Bulletin No. 1102.

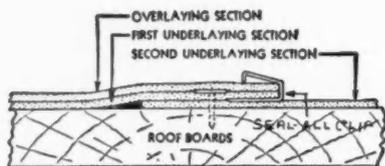


**Frank Adam Electric Co.**  
 ST. LOUIS 13, MO.

Makers of BUSDUCT • PANELBOARDS • SWITCHBOARDS • SERVICE EQUIPMENT • SAFETY SWITCHES • LOAD CENTERS • QUIKHETER

## SEAL-ALL CLIPS

**The Best  
Roof Insurance  
You Can Buy**



Seal-All Clips have a lower leg, a shoulder, an upper leg and an engaging point. Shoulder enfolds lower edges of overlaying & underlaying shingles. Lower leg inserted as shown in diagram. Engaging point set in place with slight hammer blow. Shingle is permanently secure.



Actual size of Seal-All Clip

A simple sturdy clip designed to interlock shingle sections and prevent raising of asphalt shingle tabs. The perfect clip for hexagonals, 3 in 1 strips and individuals laid up Dutch Lap method.

Seal-All clips are specified by contractors, builders and roofing men—and leading manufacturers of asphalt roofing materials—to avoid surface nailing which leads to leaks.

- Mode of solid copper wire—pliable yet strong enough to anchor single sections.
- Cannot rust out.
- Hammer is only tool necessary.
- Easy to handle.
- Beauty of roof unmarred.
- Perfect on repair jobs to correct leaky, unsightly roofs
- Millions in use since 1935.

*BUILDERS AND DEALERS! For complete information and free samples, write today.*

**SEAL-ALL CLIP COMPANY**  
BOX 302A FLINT 1, MICH.

## Dealer Review

### The President's Column

(Continued from page 164)

toward reducing costs. Inevitably, somehow, we as a nation, must go back to the theory of our forefathers: that a man must work for his living, and for the support and welfare of his family. In my humble opinion, this must be done by businessmen, working as individuals, and through our Associations. As businessmen we must quit just paying lip service to private enterprise and asserting our love of personal freedom. We must cease being dumb, we must become articulate, and start selling our story to other businessmen, to the nation, and to the world.

The siren song of the Marxists is lulling many into acquiescence and if we don't sell our system, we will be sold down the river.

### NRLDA Booklet

(Continued from page 165)

pamphlet, "Something for Nothing," reprinted from a *Saturday Evening Post* article by Dean Russell.

The third pamphlet, entitled "The Bill of Rights," recommended particularly for high school students and civic organizations, discusses the background of the first ten amendments of the U.S. Constitution, the original Bill of Rights.

This material may be obtained from National Building Material Dealers Service Corp., 302 Ring Building, Washington, D.C.

### Texas Meeting to be Filmed In Colored Pictures

A 20-minute motion picture in full color with sound will be produced at the Lumbermen's Association of Texas annual convention by Wm. Cameron & Co., it has been announced by Frank Stevens, manager of the wholesale and manufacturing operations. The meeting will be conducted in Dallas April 24, 25 and 26 in the Fair Park Agricultural Building.

This will be the fourth annual convention of Texas lumbermen recorded in sound motion pictures. Entitled "Convention Highlights of 1949" and produced in cooperation with the Association by Aylin Advertising Agency, the motion picture presents on-the-spot reporting of all major events of the convention.

## Moisture Destroys Insulation Values

"Moisture increases the rate of heat transfer through a material, because water, which fills the pores or voids, conducts heat more rapidly than air." . . . Third edition of "Insulation," by Paul D. Close as Technical Secretary of Insulation Board Institute and former Technical Secretary of the American Society of Heating and Ventilating Engineers.

### Infra Insulation is impermeable to water vapor

That is one reason why Infra—the multiple sheet aluminum insulation—is the best way to insulate even a basementless house. It is non-condensation-forming and easy to install. In crawl spaces, for example. Infra prevents heat from entering or escaping a building through ceiling, wall or floor. Observe, for instance, the remarkable results for DOWNWARD heat flow in the table of thermal factors below. These values are permanent. Infra will remain in place and not tear at the staples or elsewhere because of moistened paper and excessive weight.

#### Infra C Factors and Rockwool Equivalents

- C.052 Heat Flow Down, equals 6" Rockwool.
- C.083 Heat Flow Up, equals 4" Rockwool.
- C.10 Lateral Heat, equals 3-1/3" Rockwool.

#### Thermal Factors Printed on Every Infra Carton

**WRITE FOR FREE  
32-Page BOOKLET:  
"Simplified Physics of  
Thermal Insulation"  
Address Dept. AMB**

Multiple Accordion Aluminum and Triangular Reflective Air Cells

**Infra**  
INSULATION, INC.  
10 MURRAY ST.  
NEW YORK, N. Y.

WE'RE CERTAINLY PROUD OF THIS FINE LIST OF

# DISTRIBUTORS



- ★ FAST DELIVERY
  - ★ BETTER SERVICE
  - ★ CONSTANT UNIFORMITY
  - ★ ASSURED DEPENDABILITY
- when you sell*



## ASPHALT TILE FLOORING

*plus*

A PLANNED SALES PROGRAM THAT MAKES THE PROFIT LINE FOR '49

- All Tile Incorporated**  
13173 Merchandise Mart  
Chicago, Illinois
- Arco Linoleum Company**  
492 South High Street  
Columbus, Ohio
- Asbestos Insulating & Roofing Co.**  
312 South Harrison Street  
Fort Wayne, Indiana
- Avalon Mill & Lumber Company**  
2719 Westheimer Road  
Houston, Texas
- Bailes & Son**  
P. O. Box 694  
Anderson, South Carolina
- H. W. Baird Company**  
P. O. Box 3435  
Phoenix, Arizona
- R. S. Baumgardner**  
P. O. Box 91  
2327 Walnut Street  
Harrisburg, Pa.
- Border States Distributing Co.**  
P. O. Box 9906  
Houston, Texas
- Building Material Jobbers Co., Inc.**  
390 Front Street, P. O. Box 1023  
Lake Charles, Louisiana
- Don Casey, Inc.**  
207 S. E. Clay Street  
Portland, Oregon
- Central Roofing & Supply Co.**  
Seaboard Park  
Columbia, South Carolina
- Central States Steel, Inc.**  
1102 South Main Street  
Council Bluffs, Iowa
- Central States Steel, Inc.**  
637 Schmidt Road  
Davenport, Iowa
- Central States Steel, Inc.**  
515 East 5th Street  
Joplin, Missouri
- Central States Steel, Inc.**  
21st & Baltimore Streets  
Kansas City 6, Missouri
- Central States Steel, Inc.**  
510 North Indiana Street  
Oklahoma City, Oklahoma
- Central States Steel, Inc.**  
810 East First Place  
Tulsa, Oklahoma
- Central Warehouse Corp.**  
512-516 Scott Street  
Bristol, Virginia
- Davis Paint Company**  
1345 Iron Street  
North Kansas City, Missouri
- Thomas E. Dickerson Co.**  
Box 407  
Lexington, N. C.
- J. G. Doerr**  
223 South 23rd Street  
Boise, Idaho
- East Oakland Trading Co.**  
2946 East 14th Street  
Oakland, California
- Elm Supply Company, Inc.**  
Box 2069  
Greensboro, North Carolina

- Floorfoc Company**  
85 Lafayette Avenue N.  
White Plains, New York
- Forrest Lumber Company**  
Box 858  
Lubbock, Texas
- General Floor Coverings Co.**  
1900-1910 Washington St. N.  
Minneapolis, Minnesota
- Sanford Gold & Company**  
359 Pleasant Street  
Fall River, Massachusetts
- Harmel Floorfoc Company**  
332-334 Guilford Avenue  
Baltimore 2, Maryland
- Harris Supply Corporation**  
222 McPherson Street  
Knoxville, Tennessee
- Hillsman Company, Inc.**  
P. O. Box 2185  
Norfolk, Virginia
- Hillsman Company, Inc.**  
12 South 21st Street  
Richmond, Virginia
- Home Lumber Company**  
Cleveland Ave. at 18th St., S.W.  
Roanoke, Virginia
- Irvin Kahn & Son**  
525 West Main Street  
Louisville, Kentucky
- Kane Carpet Company**  
115 Patterson Street  
Harrison, New Jersey
- Karp Distributors, Inc.**  
140 Bradley Street  
New Haven, Connecticut
- Lawson Distributing Co.**  
3362 Kenwood Avenue  
Indianapolis, Indiana
- The Long-Bell Lumber Co.**  
4501 Asher Avenue  
Little Rock, Arkansas
- Lott & Geckler, Inc.**  
203 Ellicott Square Bldg.  
Buffalo 3, New York
- Lott & Geckler, Inc.**  
508 Traction Building  
Cincinnati, Ohio
- Lott & Geckler, Inc.**  
606 Huron Road  
Cleveland, Ohio
- Lott & Geckler, Inc.**  
225 North Front Street  
Columbus, Ohio
- Lott & Geckler, Inc.**  
577 East Larned Street  
Detroit, Michigan
- Lott & Geckler, Inc.**  
127 East 12th Street  
Erie, Pa.
- Lott & Geckler, Inc.**  
21 Ionia Street, S.W.  
Grand Rapids, Michigan
- M. S. & D. Sales and Service**  
471 North Union Street  
Olean, New York
- Mr. Louis Manevitch**  
233 Friend Street  
Boston, Massachusetts

- Mensur Materials**  
East 210 Riverside Avenue  
Spokane 8, Washington
- Meadow River Lumber Company**  
Rainelle, West Virginia
- Mike-Baker Brick Company**  
419 North Buchanan Avenue  
Lafayette, Louisiana
- The Munford Co., Inc.**  
961 Confederate Avenue  
Atlanta, Georgia
- National Floor & Supply Co.**  
1718 Chicago Avenue  
Orlando, Florida
- National Floors, Inc.**  
543 Dixon Street  
Homestead, Pa.
- Nevada Building Materials, Inc.**  
444 East Sixth Street  
Reno, Nevada
- O'Krent Floor Covering Company**  
411 N. St. Marys Street  
San Antonio 5, Texas
- Pioneer Wholesale Supply**  
830 South 4th West  
Salt Lake City 4, Utah
- Port Distributing Co.**  
P. O. Box 9026  
New Orleans, Louisiana
- Puget Supply Company**  
P. O. Box 1844  
Seattle, Washington
- Rabern-Nash Company**  
1812 DeKalb Avenue  
Atlanta, Georgia
- L. J. Ross Company**  
4168 Manchester Avenue  
St. Louis 10, Missouri
- S. & R. Tile & Marble Co.**  
339 W. Lucas Street  
Florence, South Carolina
- Selby Sales Company**  
5235 Whitby Avenue  
Philadelphia 43, Pa.
- Standard Floor Company**  
812 5th Avenue, North  
Birmingham 4, Alabama
- Standard Floor Company, Inc.**  
1168 Elm Street  
Manchester, New Hampshire
- Steward-Mellon Co. of Jacksonville**  
945 Liberty Street  
Jacksonville, Florida
- Union Roofing & Paper Co.**  
Zinn's Quarry Road  
York, Pennsylvania
- Universal Trading Company**  
24th and Boston St., Port Area  
Manila, Philippines
- Warr Caston Lumber Co.**  
4412 North Western Ave.  
Oklahoma City, Oklahoma
- Williamson Supply Co.**  
Williamson, W. Va.
- Claude M. Wilson Trading Co.**  
Suite 215  
Consolidated Investments Bldg.  
Manila, Philippines

*and more being added every day*

# HACHMEISTER, Incorporated

PITTSBURGH, PENNA.

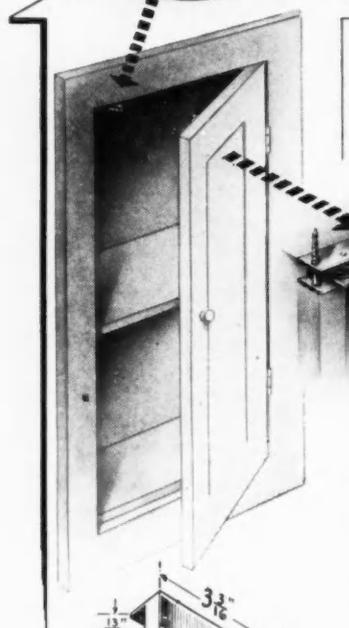
CABLE ADDRESS "HAKO"

See Our  
Insert  
in Sweet's  
Architectural File



HAKO DEALERS: Enter the HAKO PHOTO CONTEST—Get details from your Distributor.

**little..... BUT**  
**oh, what**  
**a**  
**BIG**  
**sales**  
**FEATURE**



Here is an "automatic hand" that actually reaches out and pulls doors shut. — Even warped doors... obviously a boon to every home owner.

**NO**  
**MORTISING**  
 •  
**SURFACE**  
**ATTACHMENT**  
**CONCEALED**  
**OPERATION**

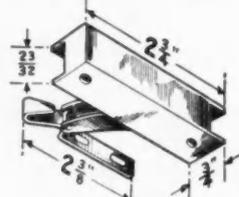
Win-Dor Snagger is a simple fool-proof spring-activated automatic closing device that works like magic on any size door. There is a properly tensioned spring housed for horizontal or vertical installation (at top, bottom or sides in cabinets and cupboards). This spring activates a keeper which projects out beyond the housing to engage a hook on the door. The two parts are easily adjusted at time of installation and require no future attention.

On small, light cabinet and cupboard doors with a "whip" there is no rebound — just smooth positive closing.

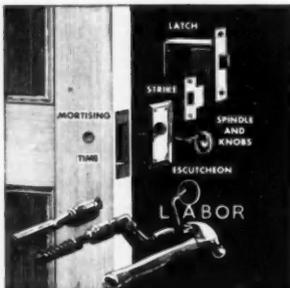
On larger doors there is Snagger with 6 lb. pull Snagger does the work of a latch so the economies as illustrated, add up in mighty worthwhile savings on large building projects. You save plenty of labor and hardware, for with the Snagger, only a knob and rose is required.

See Your Builder's  
 Hardware Dealer

Series 47 Snagger 4 lb. pull



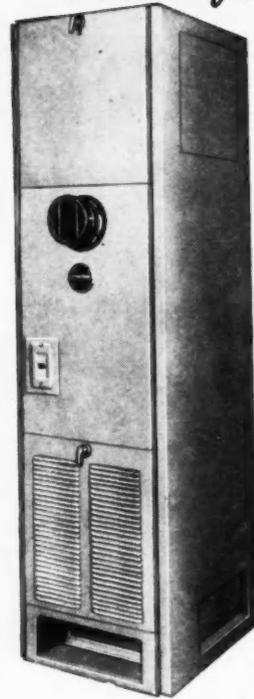
Series 48 Snagger 6 lb. pull



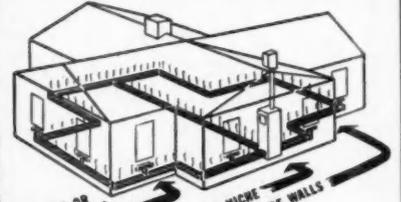
The Casement Hardware Co.  
 406 NO. WOOD ST., DEPT. A, CHICAGO 22, ILL.

**RADIANT FLOOR HEATING plus**  
**FILTERED CIRCULATING WARM-AIR**

*Both in one unit - At less than the cost of conventional heating!*



**The INTERNATIONAL**  
**WARM-AIR AUTOMATIC**  
**OIL or GAS FURNACE**



**FOR RANCH-TYPE**  
**or BASEMENTLESS**  
**HOMES...**

A truly great advance in modern heating engineering — that really overcomes the basic problems of home heating. Under-floor ducts eliminate cold floors and chilly walls... Base register banishes cold air cascading down windows... Elimination of air stratification assures uniform temperatures at all levels. Low cost installation — economical operation. Send for literature giving details and typical layouts.

**INTERNATIONAL**  
**OIL BURNER CO.**  
 3800 Park Ave. St. Louis 10, Mo.

**CHOOSE KEYSTONE**  
**INSECT WIRE CLOTH**



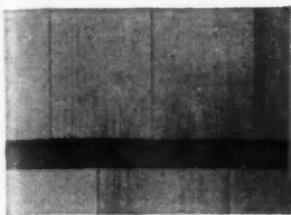
Write for free  
 catalog and estimating  
 tables  
 today.

● **KEYSTONE Alclad Aluminum Screen Cloth** can be sold by you with confidence. Will not stain or discolor woodwork or masonry. Red rust is eliminated, appearance improved... light, strong, durable and pleasing to the eye.

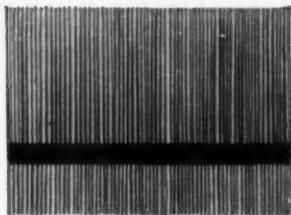
● **KEYSTONE Bronze Cloth**—both Bright and Antique finish, woven from highest quality commercial bronze wire of 90/10 analysis. Combines beauty, hardness, strength and resistance to atmospheric conditions.

● **KEYSTONE Galvanized Steel Wire Cloth**, made of specially selected analysis copper bearing steel, gives strength and rust resistant qualities. (Due to present critical steel situation, this type of cloth is woven only in limited quantities.)

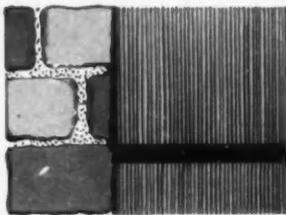
**Keystone Wire Cloth Co., Hanover, Pa.**



Customers have a choice of smooth-surfaced stained shingles with visible joints or



Grooved surfaced shakes which have invisible joints and resemble hand-splitts.

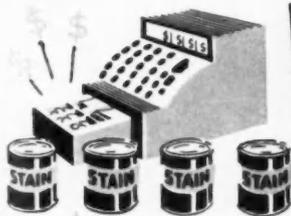


They are excellent for use with other building materials.



NAILING GUIDE

Application is easy as ABC. Ship-lap nailing guide is the only "extra" tool needed.



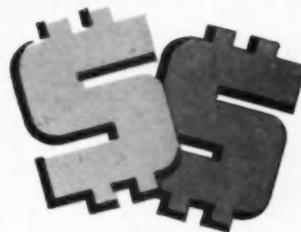
Prestaining assures the lumber dealer of his profit on color treatment as part of the sale.

## 14 reasons why STAINED SHINGLES and SHAKES are easy to sell

- ★ They are economical to buy and economical to apply.
- ★ They are pre-stained in a wide selection of colors to save on building cost.
- ★ They are available for fast delivery from any manufacturer listed below.
- ★ They build a home of long-lasting beauty and minimum upkeep cost.

Project home builders are enthusiastic about pre-staining because it eliminates the costly work of prime coat painting. This feature alone has accounted for the sale of thousands of squares of stained shakes to project builders. Note the other sales features shown on this page.

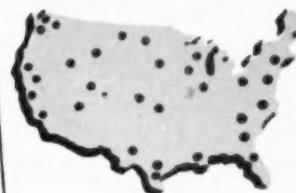
WRITE DIRECT TO ANY MANUFACTURER LISTED BELOW for full particulars regarding the vast market potential of this quality roof and sidewall material.



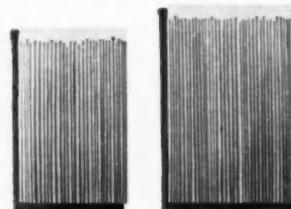
Homeowners get greater value, dollar for dollar, with stained shingle and shake sidewalls.



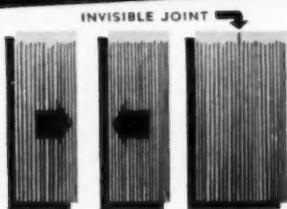
Carton packages make stained shingles and shakes easy to store, clean to handle, easy to deliver.



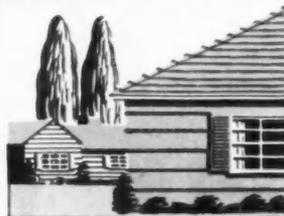
Distribution is convenient to dealers everywhere. Write to manufacturers listed below.



16" and 18" lengths provide wide choice of weather exposures to make project homes look different.



Edges of shakes are true parallel. Joints are tight and blend with the grooved texture.



Every shingle and shake home is an advertisement. One home will lead to the sale of another.



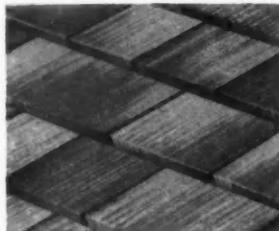
Architects approve and recommend cedar shingles and shakes. Sweet's file has 8 pages of data.



### STAINED SHINGLE & SHAKE ASSOCIATION

#### ASSURANCE OF QUALITY

Rigid grading requirements for the manufacture of stained shingles and shakes have been established by the Stained Shingle and Shake Association. Precision re-butting and jointing, proper drying and packing, minimum widths, and guaranteed coverage per square are maintained by the members of the Association. Address inquiries to the Association at 835 Central Building, Seattle 4, Washington, or write direct to any member listed below.



Stained shingles are excellent material for roofs as well as for sidewalls. A real roof value.



Cedar shingles and shakes have millions of microscopic insulating cells to resist heat transmission.

#### ASSOCIATED MANUFACTURERS

- Creo-Dipt Company, Inc., North Tonawanda, New York
- Everett Shingle & Shake Company, Everett, Washington
- Capilano Timber Company, Ltd., Vancouver, British Columbia
- Perma-Products Company, Cleveland, Ohio
- West Coast Stained Shingle Co., Seattle, Washington
- Portland Shingle Company, Portland, Oregon
- Wood Beautifiers, Seattle, Washington
- Colonial Cedar Co., Inc., Seattle, Washington
- M. R. Smith Lumber & Shingle Co., Seattle, Washington
- Canadian Forest Products, Ltd., Vancouver, British Columbia
- The Robert McNair Shingle Co., Ltd., Vancouver, British Columbia

*Big job or little job*

IT'S A BETTER JOB

WITH

**AZPHLEX**

ASPHALT TILE

**DUOTONE**

Yes, every job is better when you use AZPHLEX DUOTONE — because it gives every job the premium quality and premium looks that you want it to have, without running the flooring cost sky-high. Whether it's a multi-unit apartment, a shopping center, a public building or a private house, AZPHLEX DUOTONE gives you:

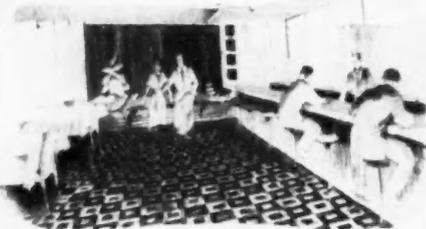
- EXCEPTIONAL BEAUTY — in your choice of 10 AZPHLEX colors.
- LIFETIME DURABILITY — 1/8" AZPHLEX equals 3/16" regular asphalt tile.
- CLEAR, SHARP COLORS — pigments and marbling through-and-through — won't wear off or become "muddy".
- FAST INSTALLATION — AZPHLEX DUOTONE is 1/8" or 3/16" by 12" x 12", with 6" x 6" die-cut centers. Dimensions are always uniform.
- LOW COST — Despite its premium quality, AZPHLEX DUOTONE costs very little more than regular asphalt tile — and is worth a great deal more!

Before you design your asphalt tile floors, get your AZPHLEX-AZROCK dealer to show you DUOTONE. In addition to its low-cost, long-lived good looks, this unique floor in AZPHLEX is extremely resistant to animal, mineral and vegetable greases, alcohol, alkalis and mild acid solutions... has a very smooth, highly polished surface that offers maximum resistance to indentation by foot traffic, rolling or standing loads. It's the tile that's tops on any floor!

DUOTONE IS SIMPLE TO INSTALL



COMES LIKE THIS — LAID LIKE THIS



For complete information about Duotone, see your Azphlex-Azrock dealer — or write direct to

**UVALDE ROCK ASPHALT CO.**  
Makers of AZROCK and AZPHLEX Asphalt Tile  
FROST BANK BLDG. SAN ANTONIO, TEXAS

## Are You Sure You Don't Owe Uncle Sam Withholding Tax

By Charles F. Mayer

"WHY SURE," most builders would reply if they were asked whether they owed the government any withholding or social security payment. "Why sure, I'm sure I don't owe anything. All the work on my houses is being done by contractors or subcontractors. If anyone owes these taxes, they do."

But is the matter as simple as that? Definitely, it is not.

The determination whether a worker is the builder's employee, or whether he is the employee of the contractor or the subcontractor is a very complicated affair under the present law. It is governed by regulations of the Bureau of Internal Revenue, which, in my opinion, are excellent examples of "doubletalk," if I ever saw any.

For instance, Section 402.204 of Regulations 106, relating to the taxes imposed by the Federal Insurance Contributions Act (Social Security), provides in part as follows:

Every individual is an employee if the relationship between him and

the person for whom he performs services is the legal relationship of employer and employee.

In other words, it begs the entire question. In effect, it says, "You are, if you are, if you are." A great help, that is to a conscientious builder who sincerely desires to do right by his Uncle Sam.

I doubt whether a Philadelphia lawyer could make anything of this noncommittal gibberish. Certainly a poor-country-boy, Texas lawyer can't get very far with it.

All of us know that if we are employers, we are liable for the federal tax, but how to determine whether we are really employers, or whether our contractors are the employers is what really drives us loco, or at least brings on stomach ulcers.

Section 402.204 of Regulations 106 goes on:

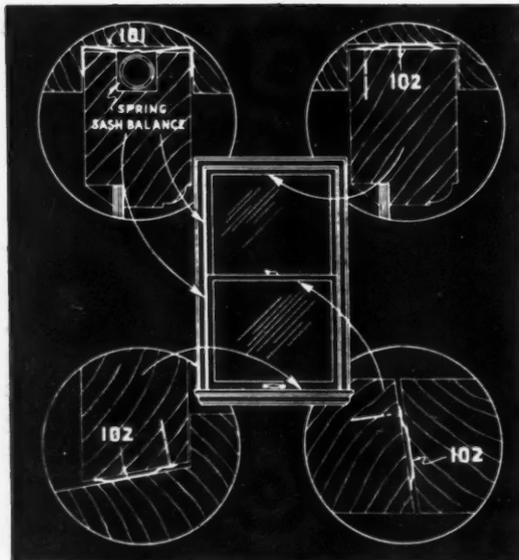
Generally such relationship exists when the person for whom services are performed has the right to con-

(Continued to page 256)

HETTINGER'S

**Triple Seal**

PATENT NO. 2,172,580  
WINDOW COMBINATION



Thousands of dealers are now getting their TRIPLE SEAL requirements from these jobbers and many others:

- American Sash & Door Co. Kansas City, Mo.
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- Builders Wholesale Supply Co. Sioux City, Iowa
- Carr & Moehl Co. Des Moines, Iowa
- W. P. Fuller Co. Portland, Oregon
- Houston Sash & Door Co. Houston, Texas
- Indiana Wholesalers, Inc. Evansville, Ind.
- Rock Island Lumber Co. Buffalo, N. Y.
- Scott Graff Co. Duluth, Minn.
- Texas Sash & Door Co. Fort Worth, Texas
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Many profitable trade areas still open. We welcome dealer and jobber inquiries.

SASH BALANCES AND SPRING BRONZE METAL WEATHERSTRIPPING

Complete Unit Carton Packaged — Any Size \$3.50

SEE YOUR LUMBER DEALER

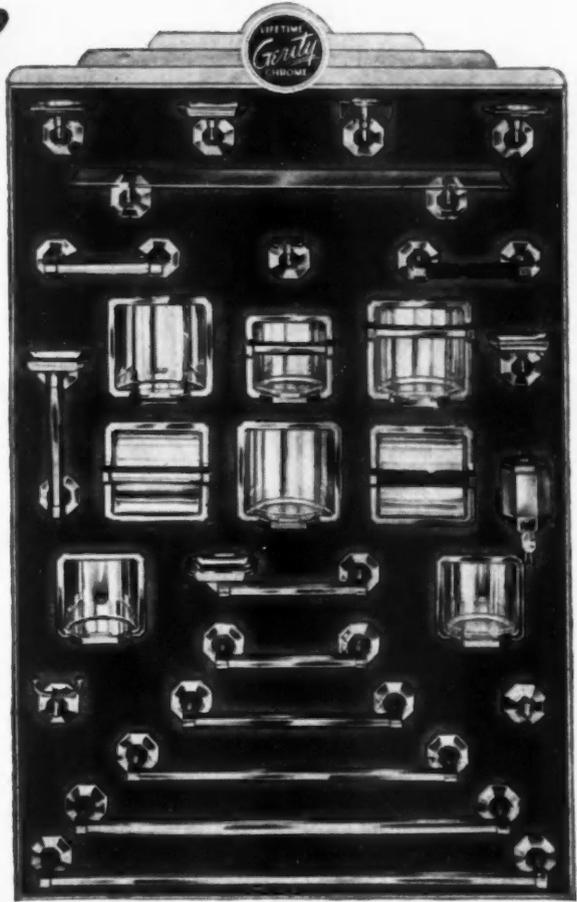
THE WEATHERPROOF PRODUCTS CORPORATION

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**She appeal** A woman wants the *right* accessory, whether it's a flower in her hair or a towel bar in her bathroom. Catch her eye with this brightly gleaming chrome that's so easy to keep clean. Point out the smartly modern design with all screws concealed.

**P.S. Builders can make good use of these sales points in selling new homes.**

**He appeal** A man wants to know how it works and who's behind it. Tell him how this chrome won't flake or wear off because it's tougher, heavier—backed by Gerity's reputation with big auto makers for the very best in chrome plating. Show him the self-centering backplate which gives a better installation in less time—an exclusive Gerity patent.

## Bigger Sales and Better Turnover with



Gerity Medicine Cabinets also turn eye-appeal into buy-appeal.

**EYE-CATCHING DISPLAYS, TOO!**

Write for complete catalog and price list.



# Gerity-Michigan CORPORATION

Adrian, Michigan

# MAKES EXTERIORS DAZZLING



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**N**O wonder Architects and Builders are swinging to Devoe One-Coat House Paint for exterior repainting. This new, but thoroughly use-tested Devoe paint is designed for its job—to give full protection and a better-appearing job at a substantial saving over conventional two-coat work. It has *twice* the hiding power of ordinary house paint—levels beautifully—and dries to an enamel-like gloss that is fume-resistant and self-cleansing.

**FHA Approved For 2-Coats on New Work**

### TRIAL OFFER TO ARCHITECTS AND BUILDERS ONLY

You or your painter can take this coupon to nearest Devoe Agent—buy one case, 4 one gallon cans, of Devoe One-Coat White House Paint, use according to directions, and if not entirely satisfied after applying first gallon return remaining 3 gallons and receive full credit for all 4.

**OFFER EXPIRES MAY 15, 1949**

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Now builders can simplify construction and save production costs on perfectly proportioned—perfectly performing—fireplaces! Masonry simply built around the all-metal Majestic Standard Circulator Fireplace—and the job is done! Because this unit is easy to install in new or remodeled structures, labor and material costs are reduced sharply. Enclosed heat chamber, built-in smoke shelf, firebox, dome-damper with easy-to-use poker control, all in one factory pre-built unit. Circulates warm air through grille openings, like a warm-air furnace. Cuts fuel bills. All sizes. Write!

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**TYPICAL MAJESTIC PRODUCTS EVERY HOME NEEDS**



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**THE SIMPLE TAMBLYN SYSTEM OF ESTIMATING REDUCES BUILDING MATERIALS and LABOR COSTS TO EASY-TO-USE FACTORS!**

Do you get that *creepy feeling* about your estimates? Why take a chance when you can be sure! Just multiply by our simple factors to determine your labor and material costs. The Tamblyn System is simple, fast, accurate, complete and dependable!

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Many of the largest and most successful contractors in the United States and Canada—thousands of them—have used the Tamblyn System of estimating. It is tried and tested—it has been used for more than 25 years. Forty years of experience in construction and building is behind it. And you can study the system for 10 days without cost.

**TEST THE TAMBLYN SYSTEM IN YOUR OWN OFFICE WITHOUT OBLIGATION**

Send the coupon below for your complete Tamblyn System. Examine it in the privacy of your own home or office for 10 days. Try it on new jobs—check it against completed jobs. There is no obligation unless you keep it.

**SEND NO MONEY—TRY IT FOR 10 DAYS FREE!  
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**THE TAMBLYN SYSTEM, 1115 So. Pearl St., A-28, DENVER, COLO.**  
Send me the complete Tamblyn System on free 10 days trial! If I like it I will pay \$8.75 when it comes up and \$7.50 per month until \$38.75 is paid. Otherwise I will return it.

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**Builder Dave Markham Discovers that  
New Homes Take on Greater Value When You Add  
HOTPOINT All-Electric Kitchens**



**DAVE MARKHAM**  
Seattle, Washington

"TODAY'S HIGH HOME prices look lower—when you install Hotpoint Kitchens," says Dave Markham, well-known builder in Seattle, Washington. "The entire new home appears a much greater value when equipped with a Hotpoint Kitchen. Home buyers are kitchen-conscious and Hotpoint's reputation as the pioneer of electric kitchens is a sales clincher!"

ENTHUSIASTIC REPORTS like that from Mr. Markham are coming in from builders and architects straight

across America! Everywhere, the building industry is finding that a Hotpoint Kitchen adds that extra measure of value which puts the sale over. Financing can be handled easily in most states by including cost of house and kitchen in a "package mortgage."

INVESTIGATE THIS PLAN for giving your new homes extra sales appeal. Consult your Hotpoint distributor or write to Hotpoint Inc., (A General Electric Affiliate) 5600 West Taylor Street, Chicago 44, Illinois.



Everybody's Pointing To

**Hotpoint**

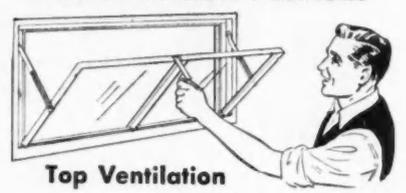
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ALL-ELECTRIC KITCHEN

RANGES • REFRIGERATORS • WATER HEATERS • FREEZERS • DISHWASHERS • DISPOSALLS® • CLOTHES WASHERS • DRYERS • IRONERS • CABINETS & SINKS

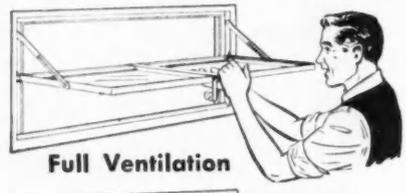
# FULL VENTILATION with Adjustable VENTO STEEL BASEMENT WINDOWS

**1** **Ventilation:** Well balanced ventilators insure effortless operation in obtaining the three positions of opening shown below. Can be fully opened from the bottom for coal delivery. Sash easily removed for washing or glazing.

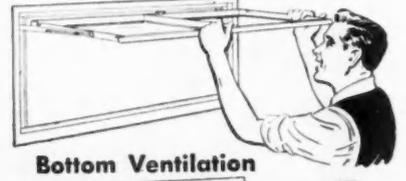
**Vento Window Positions**



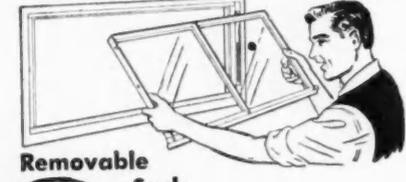
**Top Ventilation**



**Full Ventilation**



**Bottom Ventilation**



**Removable Sash**



**2** **Weathertight:** Double contact construction (shown at left) blocks wind or rain.

**3** **Heavy-duty Construction:** Sturdy channel frame provides maximum strength and rigidity. Available in three standard sizes for regular or putty-less glazing—screens and storm sash to fit.

Write or wire for full information



**VENTO STEEL PRODUCTS CORP.**  
247 COLORADO AVENUE  
BUFFALO 15, N. Y.

**Withholding Tax**

(Continued from page 252)

control and direct the individual who performs the services, not only as to the result to be accomplished by the work but also as to the details and means by which that result is accomplished. That is, an employee is subject to the will and control of the employer not only as to what shall be done but how it shall be done. In this connection, it is not necessary that the employer actually direct or control the manner in which the services are performed; it is sufficient if he has the right to do so. The right to discharge is also an important factor indicating that the person possessing that right is an employer.

Wait a moment. Maybe we're getting somewhere now. Let's see. If I get a contractor to hire the workmen, and if I have no control over how they work, and if I don't hire or fire any of them, then the contractor must be the employer, and I certainly cannot be liable for the tax.

Yet, in many cases governed by the above factors the builder has been held to be responsible!

This, in spite of the language of Regulations 106, which states:

Generally, physicians, lawyers, dentists, veterinarians, contractors, subcontractors, public stenographers, auctioneers, and others who follow an independent trade, business, or profession, in which they offer their services to the public, are independent contractors and not employees.

and, as a corollary, it adds:

An individual performing services as an independent contractor is not as to such services an employee.

Fair enough, we'll go along on that. And we like this also:

In general, if an individual is subject to the control of another merely as to the result to be accomplished by the work and not as to the means and methods for accomplishing the result, he is an independent contractor.

But here is the catch. It doesn't matter how honest and sincere you are about establishing the relationship of builder (in yourself) and independent contractor (in your contractor); it doesn't matter what you call each other—you can still be tripped up.

Put more formally, in the language of Regulations 106, we learn that:

If the relationship of employer and employee exists, the designation or description of the relationship by the parties as anything other than that of employer and employee is immaterial. Thus, if such relationship exists, it is of no consequence that the employee is designated as

(Continued to page 260)

# DO....

**ALL OVERHEAD WORK**  
*This easy, low-cost way!*

## "Trouble-Saver" Adjustable STEEL TRESTLES



**SAFE! STRONG! ECONOMICAL!**



• Details of the quickly-adjustable "Trouble-Saver" Steel Trestle.

Builders, contractors, maintenance men and others save time, labor and material with "Trouble-Saver" Adjustable Steel Trestles. They're unequalled as a safe, sure, low-cost method of handling all overhead work under a wide variety of conditions.

Write for new catalog and complete information.

**SIZES — SPECIFICATIONS, ETC.**

Size No.	Low Point	High Point	Number of Adjustments	For Working Heights
2	16"	22"	4	7½ to 7¾'
3	2'	3'	5	8 to 9'
3½	2½'	3½'	5	8½ to 9½'
4	3'	4¼'	6	9 to 10¼'
6	4'	6'	9	10 to 12'
8	5½'	8'	11	11½ to 14'
10	6½'	10'	15	12½ to 16'
12	7'	12'	19	13 to 18'

**THE STEEL SCAFFOLDING CO., INC.**  
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Telephone: EVergreen 3-5510

# For limited budgets ...unlimited satisfaction

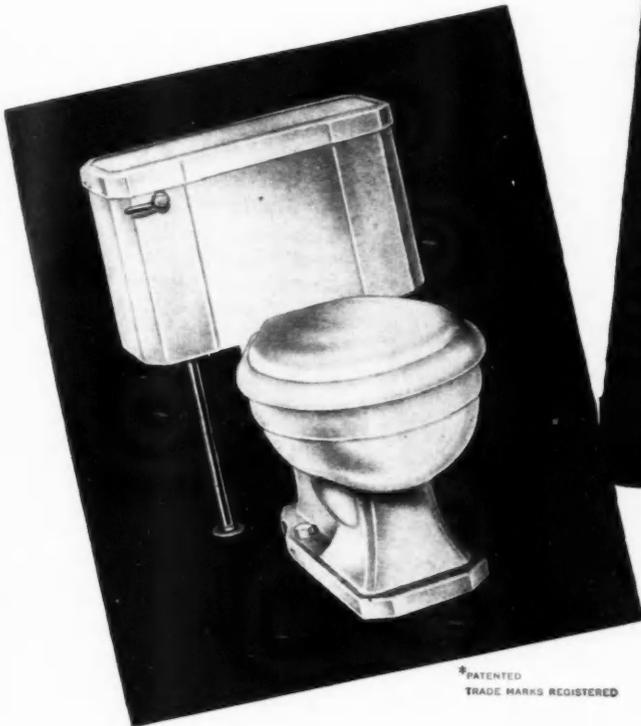


WHAT PEOPLE WANT and what you can give them at reasonable cost are one and the same... when you come to Case plumbing fixtures.

By installing Case you give them dependable operation, safeguard health, and prevent costly emergencies. You provide the newest in design—in fixtures that retain their gleaming surface beauty because they're *vitreous china*. No chipping, marring or cracking to fear—and almost no work preserves that wanted "new bathroom" look.

The cost of Case quality fixtures is entirely in line for moderate-priced homes today. They're *designed to hold down installation costs too*, and they fit easily into unusual layouts.

Why not refresh your acquaintance with Case designs at your nearest distributor's showroom? For name and address, see your Classified Telephone Directory. W. A. Case & Son Mfg. Co., Buffalo 3, New York. Founded 1853.



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### AQUA-CHROME LAVATORY

This popular square-basin Case fixture has ample shelf space, built-in soap dish, anti-splash rim, chromium-plated brass trim. Wall hung or with chrome legs or china pedestal.

# Case

## Vitreous China Plumbing Fixtures

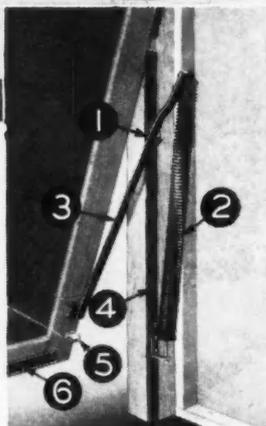
### CAMEL WATER-SAVER\* CLOSET

Neat, modern appearance and thorough, quiet flushing with minimum water consumption. Free standing, vitreous china construction and top-quality mechanical fittings make this a Case "luxury" closet at low cost.

**USE "OVER-THE-TOP" No. 80 Jr.**  
**TO HOLD COSTS DOWN**



Now light-weight garage doors can be fitted with low-cost equipment to bring "overhead" convenience to home owners everywhere. "Over-the-Top" Set No. 80 Jr. is designed specifically for doors under 150 pounds . . . accommodates openings up to 8' wide and 7' high. Special features include: 1. automatic opener; 2. powerful spring for self-lifting action; 3. rigid angle iron lifting arms; 4. steel weather stripping; 5. positive lock; 6. angle iron brace to prevent warpage. Write for free descriptive catalog.



Close-up showing simplicity of operating mechanism, which means less cost and easy installation.

**THERE'S AN "OVER-THE-TOP" SET FOR ANY SIZE GARAGE DOOR**

Type of Hdwe.	Stock No.	Width	Height	Pounds Wgt. of Door
Light Weight Series	80 Jr.	7' to 8'	6'6" to 7'0"	100 to 150
	74	7' to 8'	6'6" to 7'3"	100 to 150
	178	7' to 8'	6'8" to 7'3"	150 to 250
Medium Weight Series	75	7' to 8'	7'4" to 8'0"	100 to 150
	78	7' to 8'	7'4" to 8'0"	150 to 250
	781	7' to 8'	7'4" to 8'0"	200 to 300
	93	8' to 14'	6'8" to 7'3"	150 to 250
Heavy Series	94	8' to 14'	7'4" to 8'0"	150 to 250
	782	8' to 16'	6'8" to 7'3"	200 to 300
	783	8' to 16'	7'4" to 8'0"	200 to 300
	716	8' to 10'	9'1" to 10'0"	200 to 250
	716	8' to 13'	8'1" to 9'0"	200 to 275
Extra Heavy Series	716	8' to 16'	6'6" to 8'0"	200 to 300
	718	8' to 14'	9'1" to 10'0"	180 to 375
	718	8' to 16'	8'1" to 9'0"	210 to 425
Series	718	8' to 18'	6'6" to 8'0"	240 to 475
	912	9' to 14'	11'1" to 12'0"	300 to 600
	912	9' to 16'	10'1" to 11'0"	335 to 650
Series	912	9' to 18'	9'0" to 10'0"	375 to 720

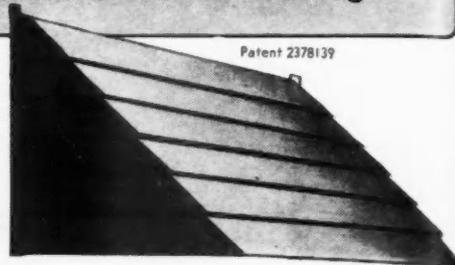
Write for free illustrated catalog on "Over-the-Top" Door Equipment and Complete Wood and Aluminum Door Units.

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GUARANTEED BUILDERS HARDWARE

FRANTZ MANUFACTURING CO., STERLING, ILLINOIS

*it's NEW it FOLDS it SELLS..*  
**the RON-DEL aluminum awning!**



Patent 2378139

- HEAVY-GAUGE ALUMINUM
- SOLID BRASS FITTINGS
- BAKED ENAMEL COLORS
- INSIDE CONTROL
- EASY INSTALLATION
- FITS ANY WINDOW
- F.H.A. APPROVED

At last, the awning homeowners have waited for—functional, beautiful, economical. Only the **RON-DEL** aluminum awning folds up—can be raised or lowered from inside or outside. **RON-DEL** gives you heavy-gauge all-aluminum construction, permanent baked enamel colors, solid brass fittings. Convenience and appeal add up to **SALES-APPEAL!**



Distributorships available in some territories



**RON-DEL, INC. BASTROP, TEXAS**

**LUX-RIGHT AREAWALLS**



The ORIGINAL and the ONLY Steel Window Well Wall HOT-Galvanized — HAND-Dipped AFTER Forming.

This good-looking, permanent steel wall will not rust, streak, corrode. All surfaces and edges are heavily galvanized by hand-dipping in molten zinc after all shearing, punching and forming is completed.

Lux-Right\* Areawalls last a lifetime. No expensive periodic replacements.

Speed of installation of one-piece units saves time and labor. Both Round and Straight Types. Made in wide range of standard sizes to fit any possible opening. Self-flange.

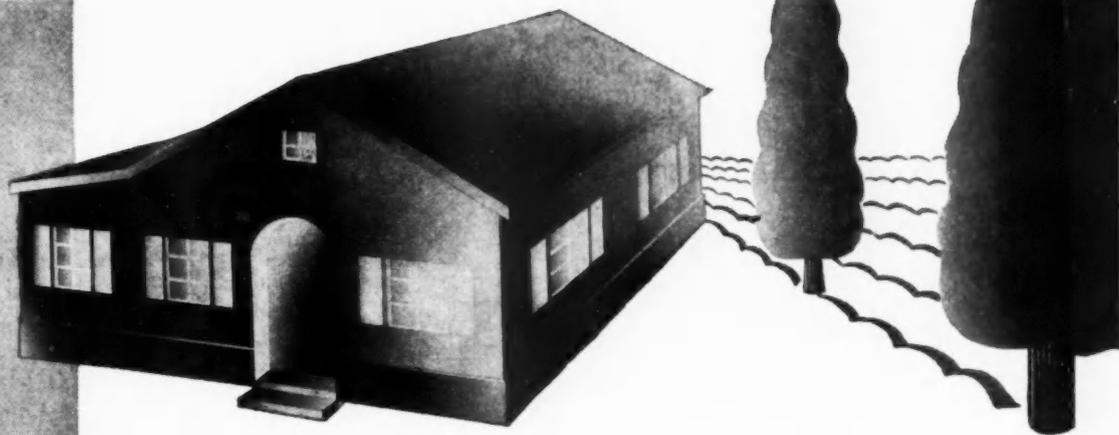
Ideal for side-hill jobs. Throw more light into basement.

Folder Free. See dealer or write. Buy the Nation's Best.

See national Arch. & Bldrs. catalogs \*TM Reg. U. S. Pat. Off.

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Manufacturers of Sheet Metal Products since 1885  
 South End Wabasha Bridge, AB2, Saint Paul 1, Minn.

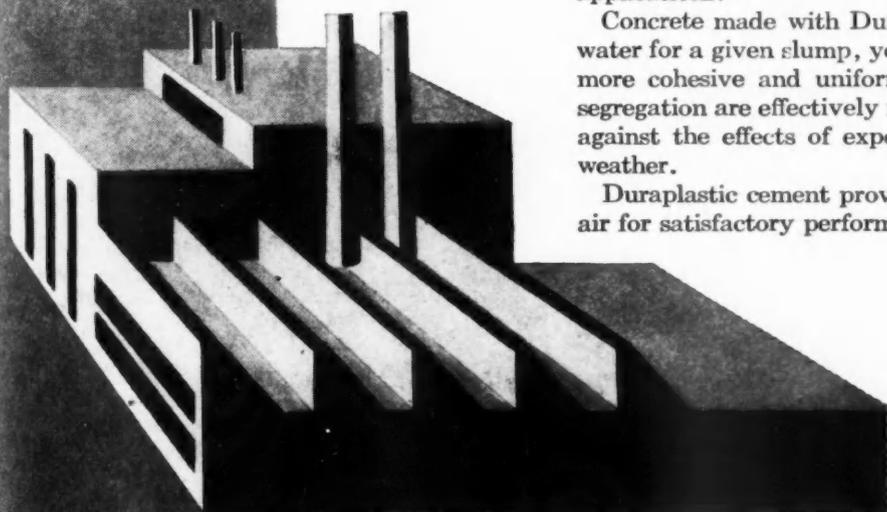


Suburban home...

Build it better  
with

**\*DURAPLASTIC**

...or Industrial Plant



For flexible building design, there's no material like concrete. And for added durability in concrete construction, more and more architects and contractors specify Atlas Duraplastic Air-Entraining Cement. At no extra cost, Duraplastic provides more durability to structural or mass concrete—in foundations, floors, walls, slip-form, gunite, stucco and many other building applications.

Concrete made with Duraplastic cement requires less mixing water for a given slump, yet, it is more plastic, more workable, more cohesive and uniform—easier to finish. Water-gain and segregation are effectively minimized. The concrete is protected against the effects of exposure, such as freezing and thawing weather.

Duraplastic cement provides the proper amount of entrained air for satisfactory performance and requires no added expense or unusual changes in methods or procedure. It complies with ASTM and Federal specifications. Send for further information to Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York 17, New York.

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

*\*\*Duraplastic\*\* is the registered trade mark of the air-entraining portland cement manufactured by Universal Atlas Cement Co.*

**ATLAS DURAPLASTIC**  
AIR-ENTRAINING PORTLAND CEMENT

**MAKES BETTER CONCRETE AT NO EXTRA COST**

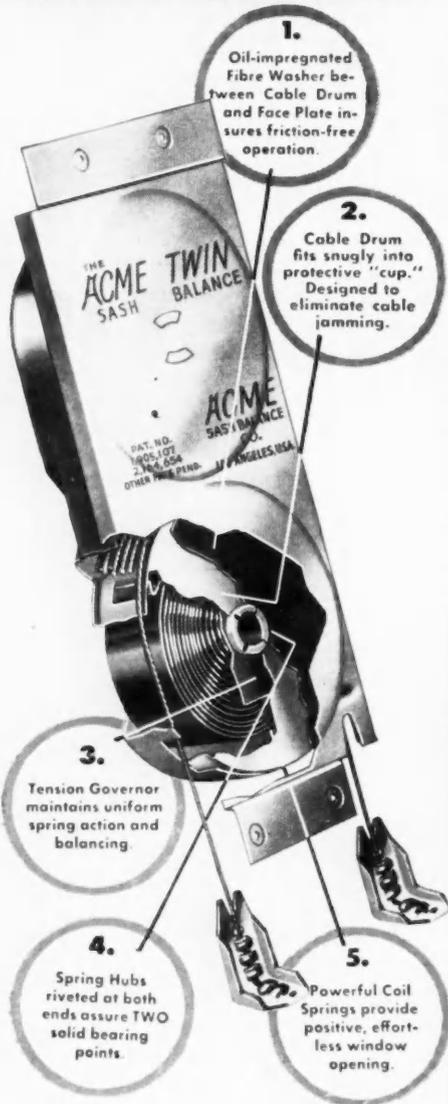
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"THE THEATRE GUILD ON THE AIR"—Sponsored by U. S. Steel Subsidiaries—Sunday Evenings—ABC Network

# ACME TWIN

is the ONLY sash  
balance with ALL  
of these quality  
FEATURES



Only 3/4" thick. Fits flush in pulley stile. Easily weatherstripped. For use with double-hung wooden windows. Single or double installation. Unconditionally guaranteed. Packed complete with fixtures. Sold only through leading jobbers and hardware and building supply dealers. Write for literature.

# ACME

SASH BALANCE COMPANY  
1626 Long Beach Ave.  
Los Angeles 21, Calif.

## Withholding Tax

(Continued from page 256)

a partner, coadventurer, agent, or independent contractor.

Thus, no matter how hard you try to do the right thing, you may still be wrong. It is true that the regulations say that:

Whether the relationship of employer and employee exists will in doubtful cases be determined upon an examination of the particular facts in each case.

In practice, however, every case is a "doubtful case." No matter how carefully you try to meet every generally accepted criterion of a builder in your relations with your contractor, you are always in the dark as to whether the contractor's employees are yours or his.

If he pays his withholding and social security taxes as he collects them, well and good. The Internal Revenue Department cannot collect twice. But, if your contractor fails to pay taxes for his employees, you may be liable, even though you had a bona fide contract with the contractor, and even though you had nothing to do with the hiring or firing of the contractor's employees, even though you had no control whatsoever as to how the contractor or his employees

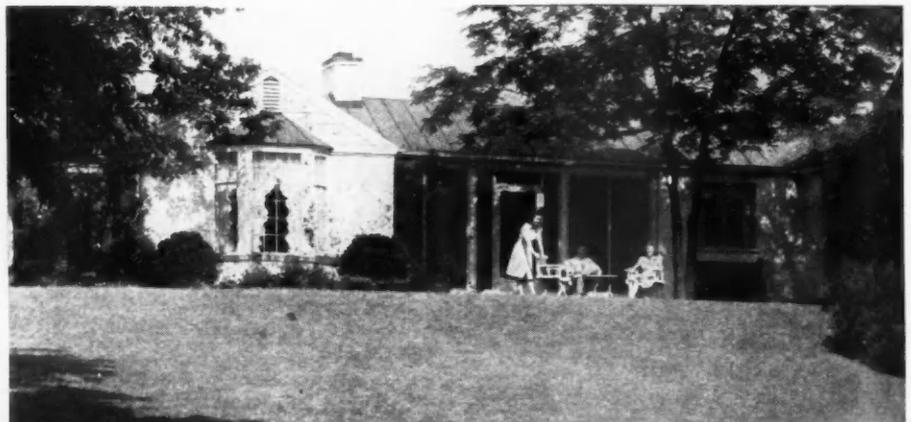
performed their work, and even though the contractor had collected the employees' share of the taxes!

And that goes for unemployment taxes also. Section 403.204 of Regulations 107, relating to the excise tax on employers of eight or more under the Federal Unemployment Tax Act, contains substantially the same provisions as those described for the withholding and social security taxes.

Suppose then, that you want to be sure how you stand. What does one do? For one thing, don't expect any real help from any of the local officials of Internal Revenue Department.

In Dallas, for instance, the head of the withholding tax division is an affable, courteous gentleman, named H. S. Davis. He has had many years experience, and I am sure he could glance at a contract and tell in an instant whether the contractor is a genuine independent contractor. But is Mr. Davis permitted to assist in clearing the atmosphere for builders, no matter how honest and sincere they may be? Ah, no. Only from Washington, the fount of all wisdom, may a ruling be given. Timidly, Mr. Davis will repeat over and over, "Remember, what I tell you is not official."

(Continued to page 264)



## Scott's T.M. REG. LAWN CARE PRODUCTS will help you make outstanding lawns

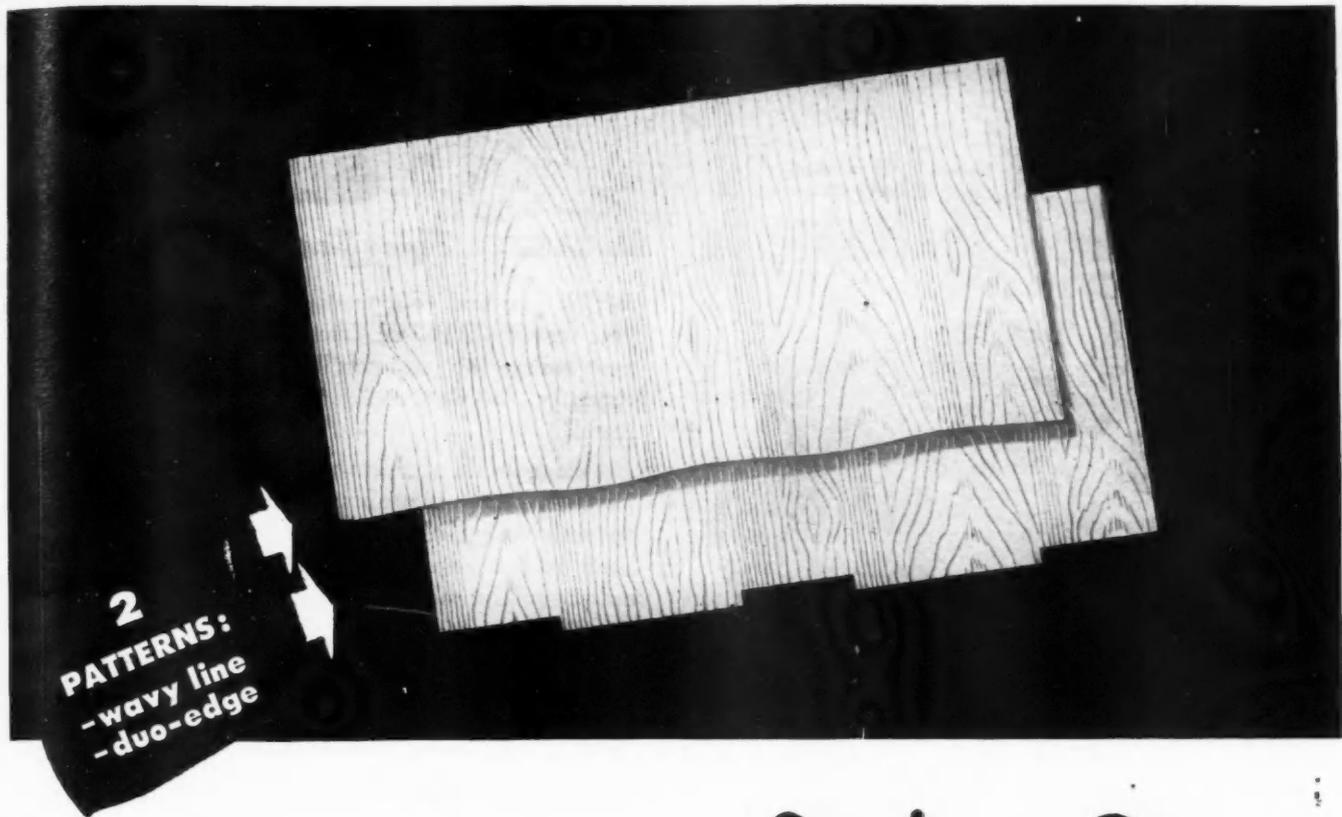
For easy and economical spreading of Scott's Lawn Care Products use a Scott's spreader



Every client who entrusts you with their lawn building project expects outstanding results . . . and to gain this end, you can always rely on Scott's LAWN CARE PRODUCTS. Get the habit of always using Scott's WEED & FEED, SEED and TURF BUILDER. Write today for professional prices and your FREE subscription to *Lawn Care*.

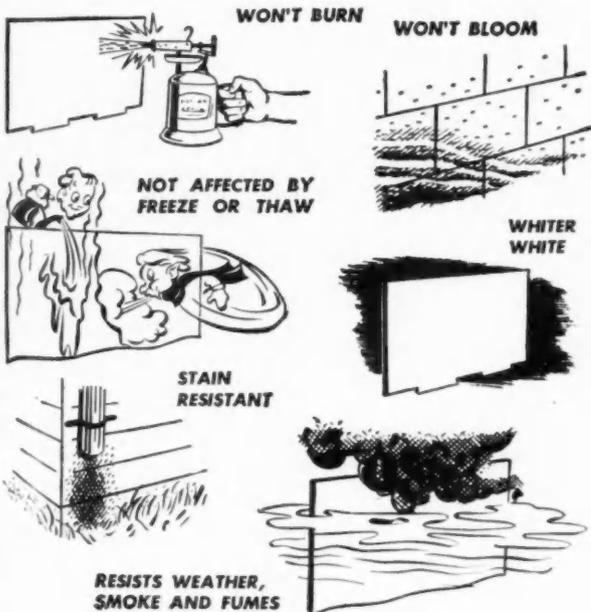
**O M Scott & SONS CO.**  
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"SCOTT'S", "LAWN CARE" AND "TURF BUILDER" ARE REGISTERED TRADEMARKS OF O M SCOTT & SONS CO.



**2**  
**PATTERNS:**  
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- duo-edge

# This Siding makes more Selling Sense



**CERAMO** — ceramic surfaced asbestos-cement siding—a famous Carey development is back again, back to help you make more sensible siding sales.

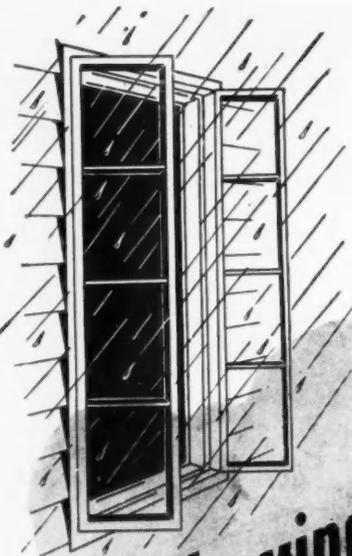
Ceramo is asbestos siding *a la mode!* It combines the long life and all-around protection of quality asbestos-cement, topped with a glazed surface like that applied to ageless pottery. This ceramic surface means continued beauty that weather won't affect. Maintenance is no problem because Ceramo's surface is hard and flint-like, resists penetration from acids, rusts and other stains.

Pre-war Carey dealers said, "Ceramo makes more Siding Sense." Today you'll say that *plus* "Ceramo makes more Selling Sense, too!"

Ask your Carey dealer for Ceramo, the ceramic surfaced siding. OR write Dept. AB-4, The Philip Carey Mfg. Company, Cincinnati 15, Ohio. In Canada: The Philip Carey Co., Ltd., 1557 MacKay Street, Montreal 25, P. Q.

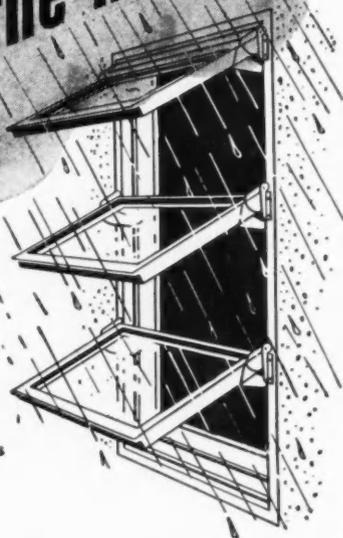
**CERAMO** ceramic surfaced asbestos siding

**Carey**



Risk of water damage with ordinary sash

Which window will sell the house?



Protected ventilation with Gate City Awning Windows

• Watch your homes sell faster . . . bring a better price . . . when you equip them with Gate City Awning Windows—the windows that ventilate safely on rainy days! Scientifically designed, they provide 100% ventilation, reach out and scoop in fresh air . . . make rooms cooler in hot weather.

Safe, too! Screens and storm sash are installed indoors. Design of window discourages trespassers. No push, no pull, no grunt. Just a simple turn of a small handle operates the sash.

The windows come to you all assembled. Hardware and sash installed. (Screens included!) You just set the unit in place, level it and nail it in.

Get the facts about this outstanding window! Write today to Gate City Sash & Door Co., Dept. B-4, Fort Lauderdale, Florida.

AWNING WINDOWS BY  
**Gate City**

**E-A-S-Y**

- installation
- operation
- maintenance
- on the purse

**CAPITOL DOORS TAPER SEAL**

*The* **CAPITOL Taper Seal GARAGE DOOR**

BOTH you and your customer will be satisfied if you install CAPITOL Taper Seal doors on that next garage job, and you'll recommend them consistently, for they're by far the easiest door to install.

Precision built of finest materials and hardware, parts fit perfectly with minimum labor — tracks automatically line up — four hinged sections and short radius require but minimum clearance — unique rabbet seals section joints.

**CUSTOMERS LIKE THESE TAPER SEAL FEATURES**

Modern Beauty - Balanced Action on Ball Bearing Rollers for "Feather Touch" operation - Complete Taper Seal Weather Protection - Long Trouble-free Service Life - Reasonable Price.

**SIZES AVAILABLE**

8'0x6'6,	8'0x 7'0
8'0x7'6,	8'0x 8'0
9'0x8'0,	10'0x 7'0
10'0x8'0,	10'0x10'0

See Your Lumber Dealer or Write Us For Prices

**CAPITOL PRODUCTS** 311 East Adams St. SPRINGFIELD, ILL.

**UNUSUAL OPPORTUNITY For Builders and Building Supply Dealers**

Due to a change in marketing plans a nationally-known manufacturer has available for immediate shipment, a large stock of

**SPRING TYPE OVERHEAD GARAGE DOOR HARDWARE SETS**

These high quality sets are designed for use in better class homes. Made to assure long, trouble-free operation. Easy to install.

Operating spring is of torsion type, mounted above door. No springs, levers or arms project inward from the jamb to interfere with passage.

Spring assembly is complete with drums and shaft made up as one unit. Ball-bearing guide rolls. Vertical rails have slotted holes to per-

mit easy lateral adjustment. Cable drum is tapered to compensate for change in tension as it unwinds.

Designed for one-piece garage doors with opening up to 8 ft. wide and 7 to 8 ft. high, weighing up to 150 lbs. Auxiliary spring available for heavier doors. Requires only 5½ in. headroom. Has chromium-plated handle with cylinder lock built in. Packed in wire-bound crate for easy storage and handling. Available in any quantity.

Don't miss this unusual opportunity. Write today for descriptive circular and prices.

**BOX 304**

**AMERICAN BUILDER**

105 W. ADAMS STREET, CHICAGO 3, ILL.

# CHROMEDGE<sup>®</sup> Metal Trims

REG. U. S. PAT. OFF.

For a Wider Choice

Over **680**  
shapes and sizes  
to choose from

## The B&T Metals Co.

COLUMBUS 16, OHIO

\*CHROMEDGE METAL TRIMS ARE MADE ONLY OF HIGH QUALITY ALUMINUM ALLOY, OR OF STAINLESS STEEL.

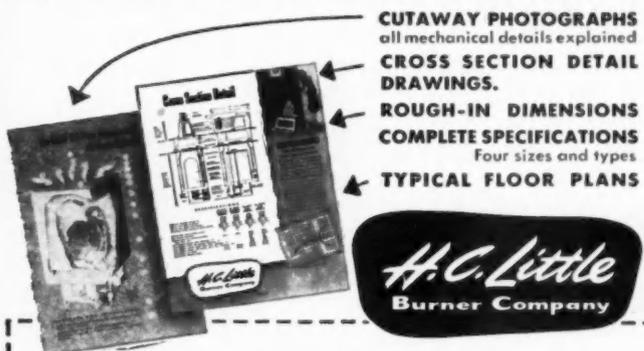
Get your  
**FREE COPY**  
of this NEW  
6-page, 4-color  
**FOLDER**



**LEARN HOW** the H. C. Little Oil Floor Furnace — the **ONLY** one that automatically **LIGHTS ITSELF**—fits into the compact, money saving floor plans of modern small homes—how it increases the **SALABILITY** of the house by providing **TRULY AUTOMATIC** oil heat with **NO PILOT LIGHT** to waste oil or go out.

*If You Build Houses TO SELL — H. C. Little Can Help You Sell Them!*

**This NEW H. C. Little Oil Floor Furnace Folder is Chock-Full of**



- CUTAWAY PHOTOGRAPHS**  
all mechanical details explained
- CROSS SECTION DETAIL DRAWINGS.**
- ROUGH-IN DIMENSIONS**
- COMPLETE SPECIFICATIONS**  
Four sizes and types
- TYPICAL FLOOR PLANS**

H. C. LITTLE  
BURNER CO.  
Dept. AB4,  
San Rafael, Calif.

Please send me **FREE** folder on the  
H. C. Little Oil Floor Furnaces.

Name \_\_\_\_\_  
\_\_\_\_\_  
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Our Business is \_\_\_\_\_

When t  
your pro  
don't sp  
job, you

Rilco  
job com  
shipped  
sion-dril

Rilco  
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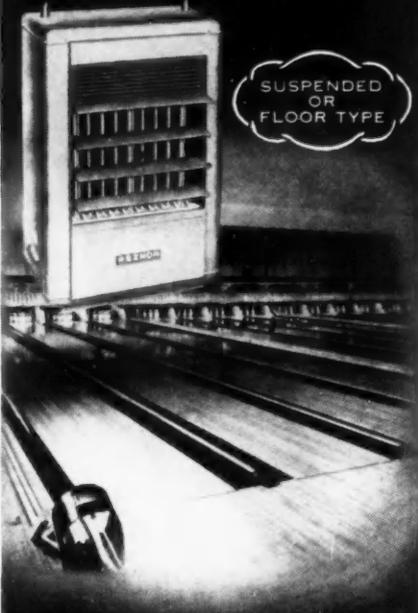
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Automatic  
**REZNOR**  
gas fired unit heaters



SUSPENDED  
OR  
FLOOR TYPE

**TIME TO PLAN  
IS "NOW"**

Every heating season comes sooner than you expected. The rush exceeds the demand for heaters and men to install them ... people are cold. Don't put off your selection when you can do it now and save. Do it now and have a summer ventilating system. Write for Catalog U-45 today. We'll see that you are taken care of.

- FULLY AUTOMATIC
- EXTRA LARGE FAN
- SPECIAL HEAT EXCHANGER
- STRONGER CONSTRUCTION
- MORE ECONOMICAL
- LOW COST INSTALLATION
- ALUMINIZED STEEL INTERIOR UNIT

**REZNOR MANUFACTURING CO.**

17 UNION ST. • MERCER, PENNA.

*Gas Heaters Since 1888*

### Withholding Tax

(Continued from page 260)

Only the Commissioner of Internal Revenue, at Washington, D.C., can tell you whether the contractor's employees are really his or yours.

Just more red tape. Mr. Davis or his subordinates, who are "on the ground" and closer to the situation, are helpless. The firm desiring the ruling must send the contract to Washington, and then just wait. By the time they get their ruling, the job may be finished and the ruling may already have become a moot issue.

What can the home builders do about this situation?

For one thing, we should foster legislation giving the local Heads of the Internal Revenue Bureau authority to give builders immediate and official rulings as to their tax liabilities on their contracts with contractors or subcontractors.

While this result is pending, we should submit all of our contracts to the Commissioner of Internal Revenue, Washington, D.C. The Bureau prefers the original of an actual signed and executed contract. However, they very rarely return the original; so it is suggested that you submit only photostatic copies.

But even while you are doing this, what general factors should you watch for?

Although not entirely conclusive, the Bureau has ruled in many cases that *he who furnishes the material is the employer!* That, of course, is quite arbitrary, and is contrary to the definition of an employer in most all other fields of law.

The Regulations, in one of the few places where they are specific, warn us:

Other factors characteristic of an employer, but not necessarily present in every case, are the furnishing of tools and the furnishing of a place to work, to the individual who performs the services.

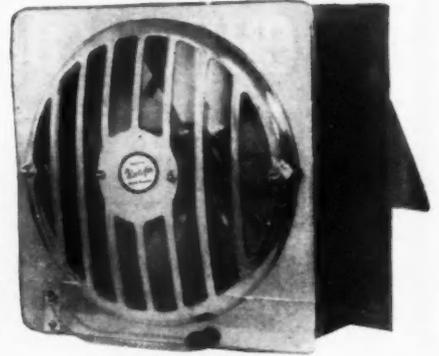
And here is something that most builders do not know. Suppose you or your contractor subcontract the roofing to be applied at so much per square. Is the subcontractor an employee or an independent contractor.

He is an employee, says the commissioner, even though you have no control over his employment or his work! Almost without exception, the government has ruled that where a subcontractor engages to do work at so much per square, he is an employee, and you are liable for his withholding and social security taxes, even though his share was never collected by you.

Well, if this situation is so unclear,

(Continued to page 268)

## WESTAIR KITCHEN VENTILATORS CEILING AND SIDE WALL



SIDEWALL MODEL

Highly polished cast aluminum grill, 10 inch Torrington blade, one piece cast aluminum shutter, wide overlapping, cast aluminum frame for simple installation in old and new homes, easy to clean, pull chain automatically starts fan and opens outside shutter. When ordering specify frame or brick.

### 5 YEAR GUARANTEE

**YOUR CUSTOMER  
DESERVES THE BEST**

WHOLESALE PRICE CEILING OR SIDEWALL

SINGLE UNIT . . . \$27.97

LOTS OF SIX . . . \$23.97

WESTERN APPLIANCE CO., INC.  
5650 Grand River, Detroit 8, Mich.

## NAILS

COMMON—FINISHING  
BOX—CASING—BLUE  
LATH—PLASTER-  
BOARD—ROOFING—  
CEMENT COATED—  
HOT GALVANIZED—  
ZINC COATED—SINK-  
ERS—COOLERS—  
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Immediate Delivery  
Warehouse Prices on Request

No Order Too Small—  
No Order Too Large

FOR NAILS OF QUALITY

**L. MARSH, INC.**

219 W. 14th St., NYC 11

CHelsea 3-3060

Warehouse: 11 Jane St., N.Y.C.

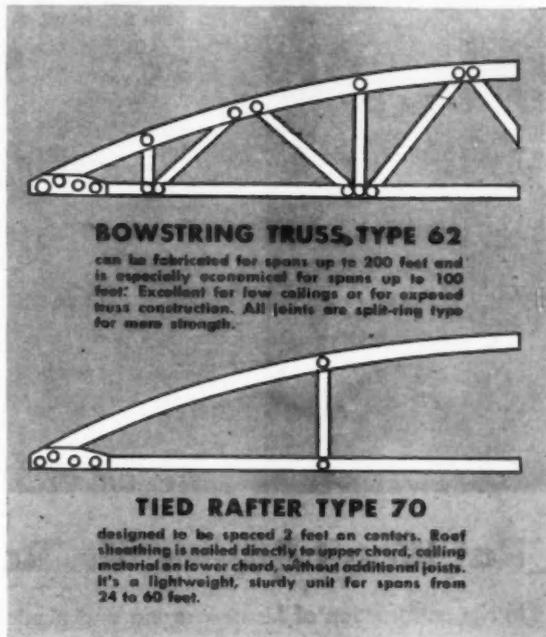
# Tough job...low bid...good profit

When the bidding gets close, you can get the job . . . and your profit, too . . . if you figure Rilco Trusses. Because you don't spend expensive man-hours *building* trusses on the job, you just put 'em up.

Rilco Laminated Trusses for shorter spans come to your job completely assembled. Trusses for larger spans are shipped in sections which are accurately cut to size, precision-drilled, with every bolt and connector furnished.

Rilco Trusses have load-bearing strength and rigidity that no on-the-job construction can touch. You need no special workers to put them up. Your regular carpentry crew can do the job in record time.

Next time you're bidding on a theater, warehouse, bowling alley or, in fact, any sort of commercial building, figure Rilco Laminated Trusses and get the job . . . and the profit. Write us for full details and for the name of your nearest Rilco representative.



**BOWSTRING TRUSS, TYPE 62**

can be fabricated for spans up to 200 feet and is especially economical for spans up to 100 feet. Excellent for low ceilings or for exposed truss construction. All joints are split-ring type for more strength.

**TIED RAFTER TYPE 70**

designed to be spaced 2 feet on centers. Roof sheathing is nailed directly to upper chord, ceiling material on lower chord, without additional joists. It's a lightweight, sturdy unit for spans from 24 to 60 feet.

# RILCO

**WORKS WONDERS  
WITH WOOD**

*Laminated* **PRODUCTS, INC.**

1667 First National Bank Building • St. Paul 1, Minnesota • Eastern Office: Wilkes-Barre, Pa.

## CONTRACTORS and BUILDERS

*Remember!*

every cellar, at one time or another, will spring a leak if it is not properly **THOROSEALED** on the inside at points which cannot be reached from the outside

**WATERPLUG . . . . to stop the leaks**  
**THOROSEAL . to fill & seal the surface**  
**QUICKSEAL . . . for a beautiful finish**

**Will take care of your water problems**

*Order through your Lumber and Builders' Supply Dealer*

WRITE FOR CIRCULAR NO. 144 ON HOW TO KEEP WATER OUT OF YOUR MASONRY WALL

## STANDARD DRY WALL PRODUCTS

Box X, New Eagle, Pennsylvania  
Telephone Monongahela 67

## Hearts Are Set on TEMCO Heat



*...yet it costs you LESS!*

Potential home buyers from coast to coast are being pounded with the great national Temco Advertising Program. From the pages of magazines like Saturday Evening Post, Good Housekeeping, and The American Home, on radio, and in newspapers they are hearing about the new Temco Gas Floor Furnace. As a result, they are **PRE-SOLD ON TEMCO.**

Temco saves you money in two ways. The lasting value of a Temco combined with its unusually low price gives you the smartest heating buy. And Temco's shallow construction—only 2 1/2 inches deep—saves you money on installation. Costly excavation is eliminated with the use of a Temco. From 35,000 to 75,000 BTU capacities

**Temco**  
**GAS HEATING APPLIANCES**

Approved by American Gas Association



TENNESSEE ENAMEL MFG. CO., DIV. B102  
4104 PARK AVE., NASHVILLE 9, TENN.

I would like to know how I can save money while getting more efficient heat with a Temco Gas Floor Furnace.

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_



# WARE



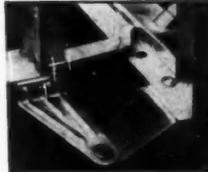
These smart modern windows never rust, never rot, never wear out . . . and they never need painting!

Made of heavier aluminum extrusions than most windows, with integrally flash-welded joints and corners, they are sturdy and storm-tight, yet operate easily and with finger-tip inside controls.

Write for details or consult SWEET'S.



Choice of sturdy Ware Butt Hinges or convenient Extension Hinges.



## WARE LABORATORIES, INC.

1827 Delaware Parkway, MIAMI 35, FLA.  
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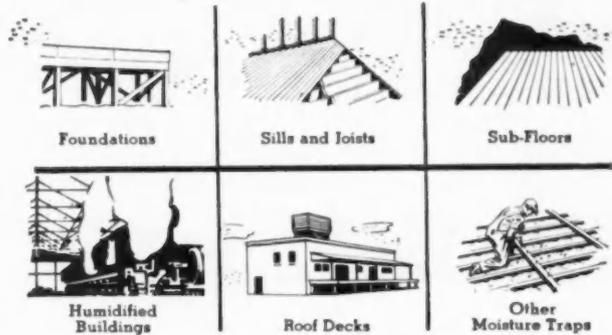


# Aluminum WINDOWS

Where Wood Needs Protection from DECAY and TERMITES

## WOLMANIZED PRESSURE TREATED LUMBER

Makes Lasting Customers for You



Here are six common, unsafe conditions where WOLMANIZED\* Pressure-Treated Lumber provides protection from wood decay and termites:

1. Where excessive ground moisture, rain or thaws cause early decay failures.
2. Where wood near the ground is open to termite attacks.
3. Where wood is in contact with concrete or masonry.
4. Where steam and vapor from industrial processes promote wood decay.
5. Where walls, floors, ceilings are subject to condensation from refrigeration.
6. Where wood is exposed to moisture in humidified buildings or farm buildings.

Investigations by qualified technologists prove that on installations where decay and termites ordinarily shorten lumber life, WOLMANIZED Pressure-Treated Lumber lasts THREE TO FIVE TIMES LONGER than untreated wood.

Such lasting protection is assured because penetrating preservative solutions are forced, by vacuum-pressure treatment, deeply into the wood fibres of WOLMANIZED Lumber. And, WOLMANIZED Lumber is clean, odorless, paintable, non-corrosive, non-leaching and glueable. Only WOLMANIZED Lumber offers all these extra advantages.

For Better Building—  
Read This Booklet

Get all the facts on how WOLMANIZED Pressure-Treated Lumber stops wood decay and termites. See how it can help you and your business. Write today for this valuable booklet.

\*Reg. U.S. Pat. Off.

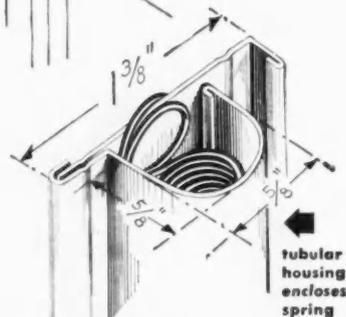
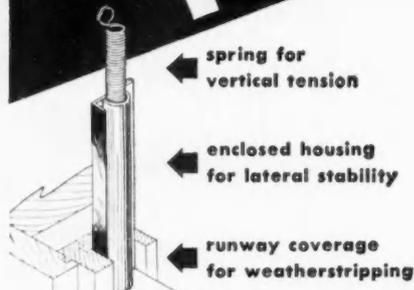


### AMERICAN LUMBER & TREATING COMPANY



General Offices: 332 South Michigan Avenue, Chicago 4, Illinois  
Branch Offices: Baltimore, Boston, Jacksonville, Fla., Los Angeles, New York, Philadelphia, Portland, Ore., San Francisco, Washington, D.C.

balance sash  
**2 WAYS**  
and weatherstrip  
with **1 ENCLOSED UNIT**



you have to do one . . .  
why not both at the same time!  
with the new

**ALL-METAL SASH BALANCE AND WEATHERSTRIP UNIT**

Make it easy for yourself . . . give your client a better installation . . . better control.

For the first time, new engineering principles have been applied to give true two-way balance action—making use of both spring tension and metal tension—gaining extreme sash stability. In raising and lowering sash, spring housing compresses against groove for sash stability yet does not hinder vertical movement. Flexible hemmed side ribbing against the stopway gives effective weatherstripping. *Spring never shows. It is completely enclosed in a metal housing designed for accurate installation of cross member weatherstrip at head, sill and meeting rail. Use coupon—Write today for complete details.*

ALLMETAL WEATHERSTRIP CO.  
2243 North Knox Avenue, Chicago 39, Illinois  
Gentlemen: Please send me complete information and prices.

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

THE ALLMETAL SASH BALANCE & WEATHERSTRIP UNIT

**Withholding Tax**

(Continued from page 264)

so beclouded, so mysterious, can we avoid any pitfalls at all, or must we always walk in darkness?

To a great extent, I regret to say, you will never be sure as to your actual status until you get a ruling from Washington, in writing, and about a definite, specific contract, which you will have submitted.

Yet there are a few factors we can watch for, on the basis of previous rulings.

For instance, the builder has been held liable for the taxes, as an employer, under the following circumstances:

1. *Where the builder furnished the material to his contractors.* As stated above, this is not 100 per cent conclusive, but it is one of the strongest factors in influencing the commissioner to decide that you are an employer.

2. *Where the builder controlled the hiring and firing of the contractor's employees.* Even though the builder never exercised this right, he was considered an employer as long as he had the power in the contract.

3. *Where the contractor submitted his payroll to the builder, and the builder issued separate checks made out to each employee, instead of a lump sum to the contractor.*

4. *Where the contract between the builder and the contractor contained reservations of implied control over not only what work shall be done but how it should be done—even though the reservations were never exercised.*

Those are some of the criteria which have been invoked to make a builder an employer. But here are some factors which negate this determination, and have influenced rulings making the contractor an independent contractor.

1. *Where the contractor furnished the material as well as the labor for a job.*

2. *Where the builder agreed to pay a specified sum for the completion of a specified contract—in other words, a "turnkey" job.*

3. *Where the contractor carried workmen's compensation insurance on his employees.*

4. *Where the contractor has held himself out to the general public as a contractor.* The fact that he advertised in the newspapers as a contractor, or that he was listed as such in the telephone directory, would add great weight to the contention that the contractor was really an independent contractor.

(Continued to page 272)

**Red Devil PUTTY KNIVES & WALL SCRAPERS**

**YES! THE MOST POPULAR!**

—because the RED DEVIL line of Putty Knives, Wall Scrapers, Linoleum Knives, Burn-off Knives, Putty Chisels, etc., represent the most complete range in size, shape and flexibility to fit every use and purse.

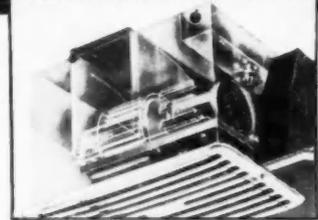


Order from your Jobber  
Send for Catalog

**Red Devil Tools.**  
IRVINGTON 11, NEW JERSEY, U. S. A.

**Only TRADE-WIND MAKES THE**

**CLIPPER CEILING VENTILATOR**



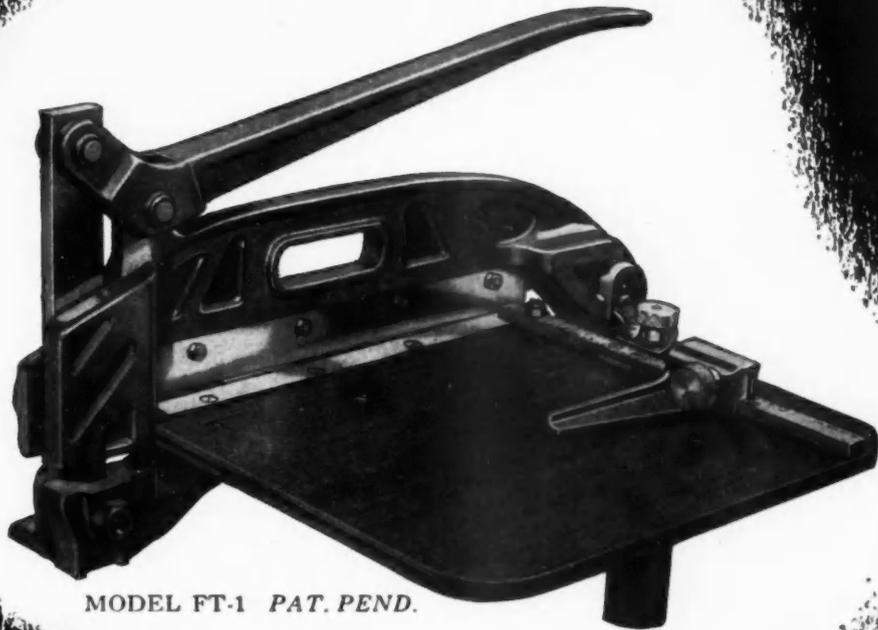
...better 5 ways because—

1. Mounts in ceiling directly above stove—instantly catches heat, grease and odors as they rise.
2. Only an inconspicuous "dripless" ceiling grille is visible, yet unit easily installed.
3. Powerful squirrel-cage blower (not a fan!) creates fast-moving stream of air to do job efficiently.
4. Because of patented construction which isolates motor from greasy air stream, unit guaranteed 5 years.
5. Available everywhere. Stacked by dealers coast to coast.

Ask your Electrical Dealer or mail coupon.

Trade-Wind Motors, Inc.  
5705 S. Main St., Los Angeles 37, Calif.

Name.....  
Address.....



MODEL FT-1 PAT. PEND.

*You Step Ahead* with a J. M. J. Combination  
**FLOOR TILE CUTTER**

At last! You need only one cutter  
for installing all leading types of floor  
tile, Asphalt, Rubber, Plastic,  
Cork and Linoleum. Your inquiry will  
bring a prompt reply and illustrated folder.

Weighs only 20 lbs.

*(For Plastic and Aluminum Wall Tile use our Model PT-91)*



**J.M.J. PRODUCTS CO.** ENGINEERS - MANUFACTURERS  
BELLEVILLE, ILLINOIS

NOW *the modern style*  
is **VIKON**  
**METAL TILE**



Home owners and builders alike, are discovering that Vikon Metal Tile offers undreamed of, lasting smartness for walls and ceilings wherever tiles are appropriate. This is true tile beauty at very modest cost, and Vikon tiles are so light in weight that no extra wall strengthening is needed. These are individual tiles made of steel or aluminum, with a face of durable, baked-on synthetic enamel in a choice of 27 fade-resistant colors. Simple as can be to maintain. An occasional coat of Vikon Cream Wax keeps them gleaming bright. Write today for full information regarding the wonders of Vikon Metal Tiles. See coupon below.

- 27 fade-resistant decorator colors and stainless steel
- will not warp, crack or craze
- resists heat and household chemicals
- fire-resistant, waterproof, seals out insects

See our catalog in Sweet's Files

**VIKON** **TILE**  
BEAUTY • ECONOMY **COLOR** **METAL** DURABILITY

**VIKON TILE CORPORATION** Dept. 18  
Washington, New Jersey

Please send me, without obligation or cost, a full-color brochure and "How to Install" booklet.

NAME \_\_\_\_\_ (Please Print)  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_



don't forget your cousin...  
**DOWN ON THE FARM!**

● THERE is no finer door for farm and rural use. Raynor Wood-Sectional Up and Over Door, equipped with Raynor weather-tite Graduated Seal, lends neat attractiveness to the completed installation. It is a door with a proven reputation for smooth, easy operation at a moderate cost.

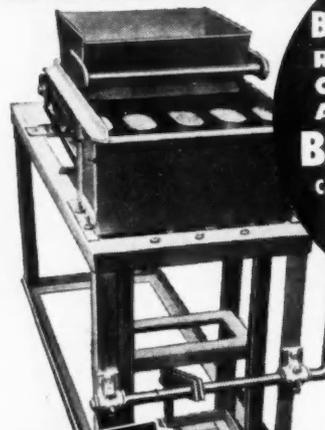
Contact your nearest Raynor representative or write direct for complete dealer and distributor franchise information.

**RAYNOR**  
THE UP AND OVER GARAGE DOOR  
Equipped with **GRADUATED Seal**

**RAYNOR MFG. CO.**  
DIXON, ILLINOIS.

SEE OUR CATALOG IN SWEETS

**CASH IN ON THE BUILDING BOOM!**



**MAKE BUILDING BLOCKS RIGHT IN YOUR OWN BACKYARD AMAZING GENERAL BLOCK MACHINE**

CAPACITY 1000 BLOCKS PER DAY

LESS MOTOR ONLY **\$199** F.O.B. PLANT SHIPPING WEIGHT 400 lbs.

Cinder and Concrete Blocks in big demand. Sell all you produce, to contractors and builder supply yards, at 15c to 25c each. Easy to start your own profitable business.

GENERAL BLOCK MACHINE can be operated indoors or out, in floor space 9 ft. x 10 ft. All steel construction. Vibrator mounted in sealed ball bearings. Simple to run. Powered by 1/2 H.P. electric motor or 1 H.P. gas engine. Produces up to 1,000 8x8x16 blocks in 8 hour day. Superior 3 core type, meeting all building code requirements. Produces 4x8x16, 8x8x16, 12x8x16 blocks. Material for blocks, cinders, cement, and sand; obtainable anywhere. Full instructions and mixing formulas with each machine. Immediate Delivery Mail coupon at once for full details, sent free without obligation.

**HOW TO BUILD YOUR OWN CONCRETE BLOCK HOME**  
Only \$1 Prepaid

Wonderful book written and illustrated by our staff of experts.

**GENERAL ENGINES CO.**  
DEPT. AB, - DREXEL BLDG., PHILA. 6, PA.

Shows you 8 ways to save money and how to make and lay blocks, laying out building lines, mixing your own concrete, building steps, porches and concrete floors, includes floor plans for 6 beautiful easy to construct concrete block bungalows. Mail coupon at once with \$1.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_



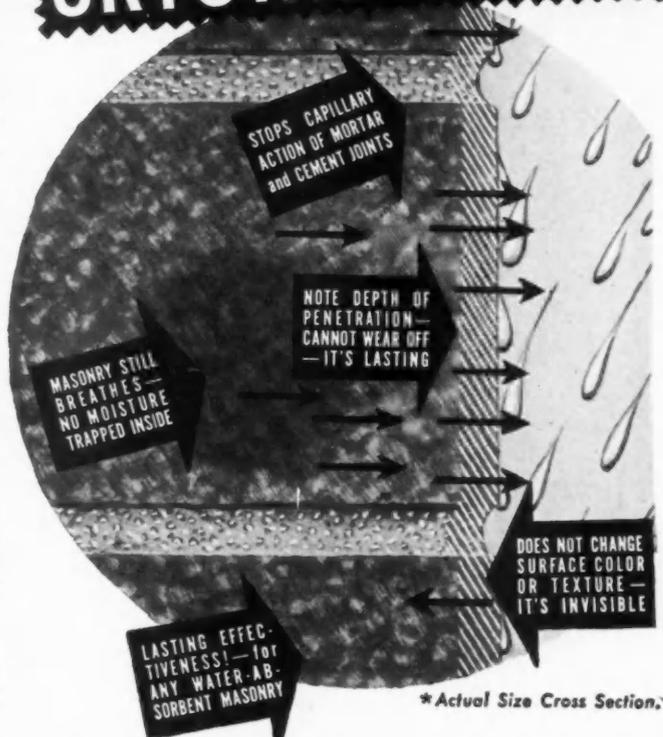
**BUILD** greater satisfaction and longer life into your jobs by installing ELKAY stainless steel for better kitchens. Unrivalled surface beauty, superior construction and unbeatable guarantee of ELKAY's Lustertone sink assure your clientele of complete satisfaction. Write for latest information.



\* Available custom-built or in 14 stock sizes—with or w/o cabinets

**ELKAY MANUFACTURING COMPANY**  
1872 South 54th Ave. Chicago 50, Ill.

# TO KEEP OUT WATER —THOSE WALLS NEED CRYSTAL *Silicone* WATER-REPELLENT



## ONE APPLICATION - NOT A COATING - IT PENETRATES

Brick, stucco, concrete blocks, pre-cast stone is rendered lastingly water-repellent by one application of Crystal. Low cost —

Quickly flushed on with "stucco" brush or with low pressure spray. One gallon covers 100 to 200 square feet.

*Send this convenient coupon for PROMPT ACTION*

WURDACK CHEMICAL CO., 4956 Fyler Ave., St. Louis, Mo.

Ship to me, one gallon can of CRYSTAL — for which I will pay \$5.35 if I am satisfied ... otherwise there will be no charge or obligation on my part.

Send me literature and prices on CRYSTAL.

Name .....

Firm .....

Address .....

City.....State.....Zone...

My supplier's name is:

.....



## TAILOR-MADE FOR YOUR HOME

The "True Economy" Home Uses a Vitroliner Chimney

The Vitroliner type "E" Flue is a time-tested, proven practical, complete chimney designed to take care of all home heating equipment—used by large national builders and small contractors. Available individually or in any quantity.

- COMPLETELY FABRICATED
- UNDERWRITERS' LISTED FOR ALL FUELS
- USED IN F.H.A. CONSTRUCTION
- LOW INITIAL COST
- QUALITY BUILT—LONG LIFE
- WEIGHT—10 LBS. PER FOOT
- IMPROVES HEATING PERFORMANCE
- SAVES FLOOR SPACE—2 HOUR INSTALLATION



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**CONDENSATION ENGINEERING CORPORATION**  
122 South Michigan Avenue, • Chicago 3, Illinois

It pays  
**3** ways  
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## TUBULAR LOCKS and LATCHES

Russwin quality is recognized by everyone. The very fact that you chose a Russwin Tubular Lock suggests, to the home buyer, a quality-built house throughout. You've started to close the sale before you open the door!

Installation is easy. You save construction time and money with Russwin Tubular Locks and Latches.

No costly call-backs for service or adjustment are necessary. Such features as the famous Russwin all-steel rack and pinion construction of the tubular latch assure a lifetime of smooth, trouble-free action.

See your nearby Russwin dealer. See the advantages of this new, improved tubular lockset which he has mounted in a Plexiglas display. Buy the builders' hardware backed by more than a century of experience, and let it build good will for you. Russell & Erwin Division, The American Hardware Corp., New Britain, Conn.



SINCE 1839  
DISTINCTIVE  
HARDWARE

### Withholding Tax

(Continued from page 268)

5. Where the contractor operated as a partnership, the fact that the name of the firm was registered at the county clerk's office, under the "Assumed Names Act," would also act in favor of relieving the builder of liability of an employer.

6. Where the contractor paid his employees by issuing his own checks to each individual.

Remember, neither some nor all of these factors can absolutely determine your liability. They are only guides as to what has been the basis for rulings in the past.

Whether they will affect future rulings in the same manner, only the Commissioner of Internal Revenue, at Washington, can say.

In the meantime, make sure that your contractors and sub-contractors not only collect the taxes they should, but that they actually pay them.

Otherwise, Uncle Sam may be coming around to see you. And you may have to pay tax bill which you were sure should have been paid by your contractor or sub-contractor.

### Third Annual Store Modernization Week Scheduled for June

THE THIRD ANNUAL International Store Modernization Show will be held the week of June 19 at Grand Central Palace in New York City, it has been announced by John W. H. Evans, managing director, who conceived and organized the first show in 1946. The dates coincide with Store Modernization Week for which the slogan, "Shop in a Modernized Store," has been given nation-wide emphasis.

Organized for the functions of bringing retailers into direct contact with modernization experts and assembling all the latest store equipment for one exhibition, the Show has become one of the nation's largest trade expositions. Thirteen thousand five hundred persons, representing 24 foreign countries and 45 states, attended in 1948, and fifteen thousand are expected this year. Admission will again be only by invitation, obtainable from exhibitors or Show headquarters, 40 East 49th St., New York 17, N.Y.

The Show will again hold a national competition among the Chambers of Commerce for the "Best Modernized Store of the Year."

## Shevlin-McCloud Lumber Company

Successors to Shevlin Pine Sales Co.  
\*Member of the Western Pine Association

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*Ponderosa Pine Woodwork*  
DISTRIBUTORS OF  
**SHEVLIN PINE**  
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SELLING THE PRODUCTS OF  
\*The McCloud River Lumber Co.  
McCloud, California  
\*The Shevlin-Hixon Company  
Bend, Oregon

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PONDEROSA PINE  
(PINUS PONDEROSA)  
SUGAR (Genuine White) PINE  
(PINUS LAMBERTIANA)

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900 First National Soo Line Building  
**MINNEAPOLIS 2, MINNESOTA**  
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*Build Treads  
and Risers*

NEW EASY WAY



**ETCO**  
AUTOMATIC TEMPLATE  
Saves time and money

Cut stair treads and risers in fraction of time formerly used for this type of work. ETCO Automatic Template measures each tread and riser quickly and accurately. Place template into space to be measured—turn locking handle and template automatically adjusts and locks to proper length and variation in angles. Use it as a pattern for cutting, and get a perfect fit every time. A money-saving tool carpenters and builders have always wanted—invaluable for apprentices. Adjusts from 30 to 42 inches. Postpaid, \$32.50.

*It's Automatic, Accurate,  
and Easy to Use  
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2117 East 56th Street, Minneapolis 17, Minn.  
Send complete information about the new ETCO Automatic Template.

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# IT'S NEW! IT'S NEWS!

The evolutionary new

## KO-Z-AIRE<sup>®</sup>

CONDITIONING UNIT



### Star of the 9th INTERNATIONAL HEATING AND VENTILATING EXPOSITION

It's a basic principle of design that makes this new KO-Z-AIRE the talk of the industry. The blower blade assembly is completely surrounded by circular heat exchangers—a bit of engineering wizardry that's amazing in action. The result is a more compact, more efficient winter conditioning unit that's easier to sell to your largest market.



**Factory-assembled . . .  
Quick 'n easy to install!**

Shipped as a self-contained package . . . shipping weight, approximately 250 lbs.

**Completely  
different in design!  
Amazing in action!**

**ONLY 36½ INCHES HIGH—  
YET GIVES 83,200 Btu**

You'll be surprised at how little space this new KO-Z-AIRE occupies. It's only 23" wide, 39" deep. Shipping weight is approximately 250 lbs. Automatically fired by gas, has oversize filters.

## JONES & BROWN, INC.

439 SIXTH AVENUE · PITTSBURGH 19, PA.

MAIL COUPON NOW FOR FULL FACTS!

Jones & Brown, Inc.  
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Yes, I want complete information on the evolutionary new KO-Z-AIRE.

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Address .....

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AB

# Profitable

for Building Jobs of All Sizes . . .



## All Steel SAFWAY SCAFFOLDING

- ⚡ Saves Time and Expense
- ⚡ Makes Work Easier
- ⚡ Provides Safer Work Platforms

● Versatile, re-usable Safway scaffolding permits more efficient work on every job, large or small, and affords maximum protection for the worker. Once erected, the scaffolding serves carpenters, masons and painters, working either separately or simultaneously on different parts of the building.

Safway structures are rigid and sturdy—distribute loads and strains evenly throughout the entire steel framework. Safway carries the approval of the Underwriters' Laboratories. The all steel construction eliminates fire hazards and other dangers inherent in wood scaffolding, and offers minimum wind resistance.

This tubular steel scaffolding comes in standard units of several types which are quickly assembled to fit the contours of any structure, and may be erected to any height required. Basic units include welded end frames, cross bracing, bridging members, guard rails, ladder sections, etc. No special tools are required—any man can easily handle the job, using the simple coupling pins and studs provided.

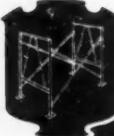
Dismantling is equally easy, and storage is simple. The interchangeable units can be re-used indefinitely in any desired form.

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Manufacturers of Tubular Steel Scaffolding and Equipment

MR. DEALER:

## When Selling Steel Kitchen Cabinets

Point to



## For your Protection

When you see this seal on a kitchen cabinet it means that the cabinet has successfully passed 21 different tests. It's good insurance for the dealer and makes his selling easier to the hard-to-please customers.

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### STEEL KITCHEN CABINET INSTITUTE

140 PUBLIC SQUARE • CLEVELAND 14, OHIO

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2 SIZES—Adapters available TO FIT ALL LANTERNS. The new 8 foot aluminum Lamp Post is easy to wire . . . easy to install. Lasts a lifetime. . . . LIGHT WEIGHT—in "over the counter" Packages. COMPACT—SHIPS PARCEL POST. DISTRIBUTORS: write for INFORMATION & PRICE LIST.

MANUFACTURED BY:

## Swain & Bridge

NEW BRITAIN, CONNECTICUT

## BASEMENT DAMP?

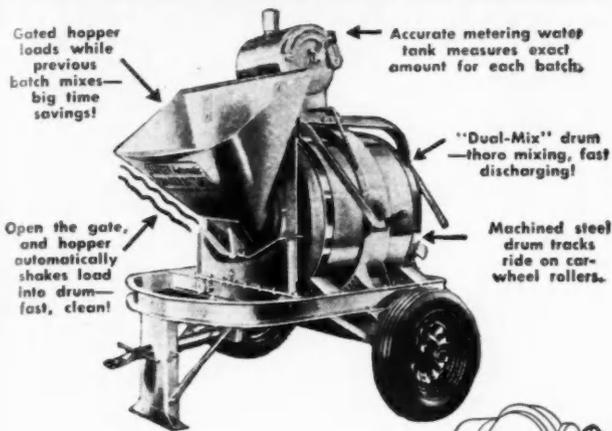
### NEW! IMPROVED! SOLVAY AIR-DRYETTE JR.

with SOLVAY CALCIUM CHLORIDE

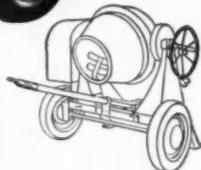
absorbs moisture—the cause of rust, warping, mildew in workshops, dark-rooms, closets, playrooms, storage rooms, vaults. New, improved design gives 50% greater capacity, simplifies filling and emptying. Compact, inexpensive, clean, safe, odorless, thousands in use. Write for booklet and name of your nearest dealer. DEPT. 34-4, SOLVAY SALES DIVISION, ALLIED CHEMICAL & DYE CORPORATION, 40 Rector St., New York 6, N. Y.



Mix 12 to 15 more yards a day with  
**JAEGER 3 1/2 S "AUTO-LOADER"**



You cut costs and boost profits when you mix 12 to 15 yards more concrete daily with no more manpower. And, you can do that with the Jaeger 3 1/2 S "Auto-Loader." It's the fastest half-bag mixer made. Catalog M-8 tells why—shows the complete Jaeger line. Write for it.



3 1/2 S End-Discharge Tilter. Also 6S, 11S and 16S Power Loaders.

**THE JAEGER MACHINE COMPANY.**

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Leading Distributors in 130 cities sell and service Jaeger equipment.

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**ORNAMENTAL WROUGHT IRON FOR THE INTERIOR & EXTERIOR**



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Send measurements with your inquiry requesting folder, as we do not issue a price list.

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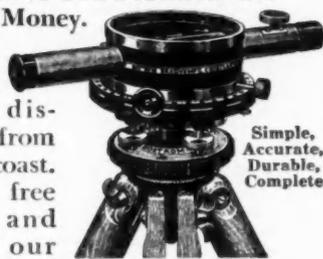
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Carried in stock by distributors from coast to coast. Write for free booklet and name of our distributor near you.

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**HOMASOTE PAYS YOU  
3  
BIG BONUSES**



• protection against  
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Because Homasote is permanently weatherproof, its use insures a dry house—no musty closets or mildewed walls.



• protection against  
**DRAFTS**

By a wide margin, the air infiltration through Homasote is the lowest of all fibre building boards.



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Homasote's sound-deadening qualities are instantly sensed. Both street noises and sounds from other rooms are reduced to the minimum.



When you use Homasote Insulating and Building Board... You expect high insulating value; lower fuel costs; a house that is warmer in winter and cooler in summer... You expect great structural strength. (As sheathing, for example, Homasote is 272% stronger than horizontal wood sheathing)... You know you have the perfect base for paint or wall paper.

No other building board gives you all these qualities plus the three big bonuses above. We invite architects and builders to send for illustrated booklet—giving physical characteristics, performance charts, specification data and application instructions.



... oldest and strongest insulating and building board on the market

**HOMASOTE COMPANY**  
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**No head-twisting!  
No mistakes!**

with the  
**NEW Stanley**  
**VERTICAL READING**  
**Pull-Push Rules**

Vertical marking on these rules makes measuring easier, surer in awkward spots . . . way overhead or down below, in narrow places, underneath or up through. Rigid for straight measurements, flexible for angles



and curves. Use for inside as well as outside measurements.

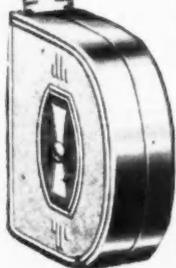
Choice of white blade models or nickel-plated models . . . all with large, clear, lasting numerals. Pocket size case, attractive and durable chromium-plated finish.



No more worry about broken blades—it takes just a few seconds to put in a brand new blade.

Two sizes, with either white or nickel blades, 6 ft. and 8 ft.

Save irritation and lost time. Stop mismeasurements. Buy a new Stanley Pull-Push Vertical Reading Rule for every tool box. Stanley Tools, New Britain, Conn.



**6-FT. RULES**  
White blade, No. 346W  
Nickel blade, No. 345

**8-FT. RULES**  
White blade, No. 348W  
Nickel blade, No. 348



Reg. U.S. Pat. Off.

HARDWARE • HAND TOOLS • ELECTRIC TOOLS • STEEL STRAPPING

**Asphalt Tile Institute Names New Officers**

J. P. STIGER of the Johns-Manville Corporation was elected president of the Asphalt Tile Institute at the organization's annual meeting in February at New York City. He succeeds



J. P. STIGER

Julian O. Heppes of the Tile-Tex Company.

Harry A. Hachmeister, president of Hachmeister, Inc., is the new vice president of the Institute, which is a trade and research association whose membership represents about 80 per cent of the asphalt tile flooring production of the country. The new secretary-treasurer is C. J. Christoverson of the Sloane-Blabon Corporation.

Production and shipments of asphalt tile during 1948 exceeded the 1947 output by a wide margin, it was reported at the meeting. The increase was attributed to enormously increased demand due to the high volume of new building, and renovation of all types of structures.

When final figures for the year are compiled they are expected to show that nearly 400,000,000 square feet of this flooring was produced by members of the Asphalt Tile Institute, as compared with 315,852,000 square feet in 1947 and 188,509,000 square feet in 1946.

**Eagle-Picher Division Gets New Manager**

CLYDE B. LYNDE has been appointed vice-president and general manager of the Insulation Div. of The Eagle-Picher Sales Co.

Lynde has had many years' experience in virtually all phases of the insulation business, including both home and industrial insulation. Widely recognized as an authority on thermal insulation and the merchandising policies of the building industries generally, Lynde was active during the war in the construction of high-octane gasoline refineries and synthetic rubber plants.

**TOMORROW'S  
AUTOMATIC  
CONTROLS  
TODAY.**

GENERAL CONTROLS  
MODERN, COMPACT  
SNAP-ACTION THERMOSTAT

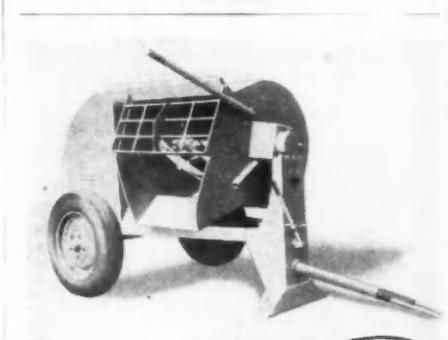
Sets a new standard of Functional Beauty and Accuracy in remote control of room temperatures. This graceful, streamlined instrument extending only 1" from wall, has a stainless housing mounted on an ivory plastic base and lends enhancement to any scheme of room decoration.

Can be used either with the famed GENERAL CONTROLS B-60 "All-Gas" or T-30 low voltage control systems, or any other standard low voltage control circuit.

REQUEST LITERATURE T-70

**GENERAL CONTROLS**  
801 ALLEN AVE. GLENDALE 1, CAL.

Manufacturers of Automatic Pressure, Temperature, Level and Flow Controls  
FACTORY BRANCHES AND DISTRIBUTORS IN PRINCIPAL CITIES



**6 cu. ft. capacity MULLER MIXER**  
**PLASTER and MORTAR MIXER . . .**

HERE is the job you have been looking for . . . a mixer that can really take it, equipped with a big 4½-hp. Briggs & Stratton air-cooled engine, and driven through quiet roller chains, cut-tooth sprockets and cut-tooth gears. It has 5.50 x 16 tires, disc wheels with Timken bearings, and a hinged safety grating with a time-saving bag splitter.

Write for prices and specifications

**MULLER MACHINERY CO., Inc.**  
700 Whitman Avenue  
METUCHEN, NEW JERSEY

Tilters, Non-Tilters, Plaster Mixers,  
Concrete Carts, Mortar Boxes

# Premium SHEET METAL for the Better Trade



FOR  
**GUTTERS  
DOWNSPOUTS  
VALLEYS  
FLASHING**  
and other Sheet Metal Work

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**ILLINOIS ZINC  
COMPANY**

2959 W. 47th Street, Chicago 32, Ill.  
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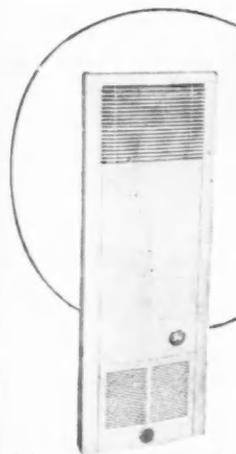
**ERAYDO ALLOY** is the ideal sheet metal for your customers who want a "better than average" job.

It is weather-resistant, won't red rust, won't stain, and is easily soldered. Yet, it is moderately priced . . . about midway between galvanized steel and copper.

The real answer to YOUR problem of high quality, quick delivery, and bigger profits is **ERAYDO ALLOY**.

### ERAYDO ALLOY JOBBERS

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**SINGLE WALL HEATER  
25,000 BTU**

- ABSOLUTELY SAFE** . . . Smartly designed panel hides internal parts—furniture, fingers and clothing can't be damaged!
- EXTRA SMALL** . . . Rough-in dimensions only 14" x 50 1/2" in standard 4" wall.
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ABB-4-49

# Here's **BUILT-IN** Sales Appeal

**Built-In Radio Installations in Kitchens, Bedrooms, Bath, Etc.**



**T**HE Flush Wall Radio fits in perfectly with today's popular trend to built-in appliances and appointments in the modern home. Architects and builders find it gives that touch of individuality and charm which means added sales appeal.

And homeowners are enthusiastic about the Flush Wall Radio for it enables them to enjoy the convenience of several fine quality radios throughout the house—in kitchen, bathroom, bedrooms, study, recreation room, children's rooms—in addition to their large conventional living room radio.

**FLUSH WALL RADIO FEATURES:**

1. 5-tube AC-DC Super-heterodyne Licensed by RCA and Hazeltine.
2. Easy Installation—Comes with Steel Box, 6 1/2" x 9 5/8" x 3 7/8" deep, which Goes Between Studding. As Easy to Install as an Electrical Receptacle Outlet.
3. Easy to Service—Chassis Swings Out On Patented Adjustable Slotted Hinges.
4. Attractive Instrument Panel 7-13/16" x 11-7/16". Plastic panels available in Wide Choice of Colors to Harmonize with Room Decoration.
5. Approved by Underwriters' Laboratories for Built-in Installation.

Retail Price, **\$34.95**  
Radio, Model 5P  
Panels Extra  
From \$2.45 to \$4.45



## **FLUSH WALL RADIO**

**BUILDERS AND DEALERS!** Write today for SPECIAL TRADE NET PRICES and complete information, etc., to **FLUSH WALL RADIO CO.**, Dept. 4A, 9 West Park Street, Newark 2, N. J.

### New Officers Named By Door Manufacturers

THE National Door Manufacturers Association re-elected E. W. Donahue, president of the Wabash Screen Door Co., Chicago, as president at their 22nd annual meeting held in Chicago in February.

Ross D. Scamehorn of the Morgan Co., Oshkosh, Wis., was named vice



**E. W. DONAHUE**

president; A. R. Tipton, Roach and Musser Co., Muscatine, Iowa, treasurer; and Ormie C. Lance, Chicago, secretary-manager.

Alvin F. Baal, Carr, Adams and Collier Co., Dubuque, Iowa, who retired as NDMA treasurer after holding that position since the organization of the association in 1927, was given a testimonial luncheon. Baal, who was secretary of Carr, Adams and Collier, recently retired from the company after 53 years of continuous service.

### LeTourneau Produces 75,000th Control Unit

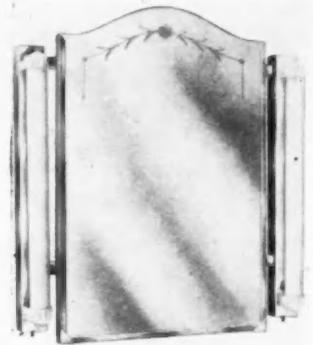
THE 75,000th power control unit was recently produced by the R. G. LeTourneau, Inc., at its Peoria, Ill., plant.

Aiding in completing the unit, a cable control for actuating earthmoving tools towed by or mounted on tractors, were three men who helped produce the 100th power control unit for the firm. Each of the trio joined the company shortly after the Peoria plant was opened in 1935.

### Frigidaire Div. Expects More Replacement Sales

REPLACEMENT SELLING may reach half the total sales volume of air conditioning and commercial refrigeration equipment in 1949, according to W. F. Switzer, commercial sales manager of Frigidaire Div. of General Motors.

Switzer, speaking at the Heating and Ventilating exposition, said that he based his opinion on trends which have developed since wartime.



## Attention DEALERS, BUILDERS, AND CONTRACTORS

The most beautiful all chrome finish fluorescent medicine cabinet with plate engraved Everlast mirror, all General Electric equipment, plastic caps, Underwriters' approved, retails at \$43.75. This medicine cabinet unit is built for the purpose of saving all wiring and fixtures necessary for the bathroom as it contains all the wiring and switches necessary and also a convenience outlet for electric razor or any other use. Each fixture has a separate switch so that you may light one or two lights as you desire and will provide sufficient light for any bathroom without any extra fixtures. The only thing necessary is to connect the cabinet with the main line.

The price of this cabinet is very reasonable and at the same time it covers all the cost of wiring and fixtures for the bathroom.

Manufacturers representatives and distributors invited.

Manufactured by  
**FLUORESCENT LIGHTING CO.**  
MONTICELLO, N. Y.

# Jiffy SAWHORSE BRACKETS



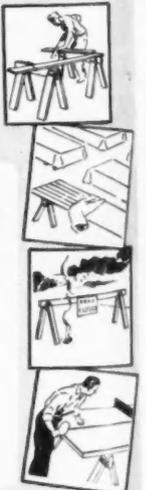
**BUILT STRONG FOR HEAVY JOBS!**

- Set 'em up or
- Take 'em down in a *Jiffy*

**NO NAILS—NO BOLTS—A strong, simple, bracket for making up Sawhorses!** Use ordinary 2" x 4" for legs and 2" x 4"-6"-8"-10" or 12" for the cross-bar.

Boxed, one pair in counter display.

Price . \$1.50  
West of the Rockies \$1.60



ORDER FROM YOUR JOBBER OR WRITE TO US:  
**GRAND HAVEN STAMPED PRODUCTS CO.**  
GRAND HAVEN, MICH.



## READYBUILT (Reg. U. S. Pat. Off.) FIREPLACES

Lends unsurpassed beauty and charm to homes—old and new. The modern fireplace that fulfills all modern day requirements—used with gas or electricity.

Large variety of attractive models in brick, stone, wood, etc., available.

Furnished complete—ready to be installed in hour's time of handy man—shipped anywhere.

DEALERS, BUILDERS and HOMEOWNERS write for catalog and full information.

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PRECISE MEASUREMENT

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FOR THE MAN WHO IS FUSSY ABOUT HIS TOOLS

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NEW YORK 59, N. Y.

## INCREASES PRODUCTION 100% AND CUTS COSTS 50% ON ALL BUILDING CORNERS KEN Corner LEVEL

NEWEST, greatest time and money saving level yet—12 ways better than ordinary levels—Cuts costly corners in masonry and carpentry building by reducing tedious hours required to plumb. Ken Corner Level plumbs and SQUARES 2 SIDES OF CORNER AT ONE TIME—on windows and doors also face of each brick placed on mortar joint. Plumbs 4 ways at once—the corner, 2 faces, and top surfaces—no need to tap brick on side, end or top. Two aluminum "Z" bars form "jig" for each brick and support both horizontal and vertical glass liquid vials containing usual bubbles. Adjustable for plumb, a Batter, or Incline, or tapering surface. Ken Corner Levels available in four sizes, 18", 24", 36" and 48" long. Priced to pay for itself in a few days—and continue savings for you every day thereafter; the Ken Corner Level saves 50% of the cost in building all corners.

WRITE TODAY for full details—Don't miss this opportunity to cut your masonry and carpentry in building costs!  
**SINGER-KENNEDY CORP.**  
Dept. L—21 E. Van Buren St., Chicago 5, Ill.

## WE SET YOU UP IN BUSINESS

Here's A Real Opportunity

Read what Elmer L. Warn wrote us: "I have operated a Foley Saw Filer and a Retooler for over two years, I am a carpenter. When it will be hard for me to throw a hammer and push a saw, I will have a shop that will make me an easy living. I call these machines my old age insurance, and they are paying for themselves as we go along."

FREE BOOK "Independence After 40"

shows how you can start at home, make up to \$2 or \$3 an hour in spare time. Send coupon today.

FOLEY MFG. CO., 424-9 Foley Bldg., Minneapolis 18, Minn. Send FREE BOOK—"Independence After 40"

Name \_\_\_\_\_  
Address \_\_\_\_\_



ONLY 3 INCHES OF  
*Certified*  
**INSL-COTTON**

GIVES AS MUCH INSULATION AS A  
**5 FOOT BRICK WALL!**

\*Reference: A.S.H.V.E., 1946 Guide, Pg. 117, Table II; Pg. 119, Table II.

That's right... Insul-Cotton's insulation qualities are so great that only 3 inches will give as much protection from heat or cold as a five-foot thickness of low density brick.

With a "K" value of 0.24 (lower than any other type of insulation on the market today) Insul-Cotton exceeds government specifications for FHA, FPHA, and HH-1-528 specifications. Add to this its extreme light weight, its ease of installation, its harmlessness in handling, its flame-proof and moisture-resisting qualities—and you have a natural to lead the insulation field. Let this superior insulation help you build greater insulation sales and profits!

*\*Certified*

No other insulation except flame-proof, fire-retarding cotton insulation made under Federal supervision can make this claim. Insul-Cotton contains no second-hand material. Every lot is tested and certified to the U.S. Government.

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



**INSL-COTTON DIVISION**  
**TAYLOR BEDDING MFG. CO.**  
TAYLOR, TEXAS

INSL-COTTON DIVISION  
Taylor Bedding Mfg. Co., Taylor, Texas

Gentlemen:

Please send specifications and full information on INSL-COTTON.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY AND STATE \_\_\_\_\_

Check Here:  Distributor  Architect  Contractor

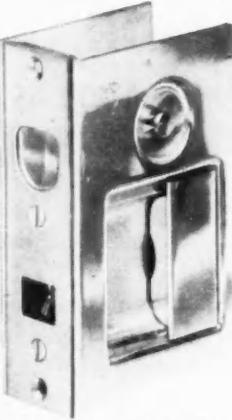
The Originators of Flame-Proof, Fire-Retarding Cotton Insulation

# QUALITY LOCKS

from ADAMS-RITE

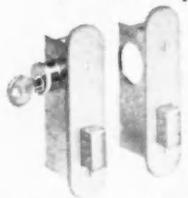
## THE ORIGINAL RITE-LOCK for SLIDING DOORS

Single assembly easily installed by simple cut-out, even in narrow stiles. No mortising. 3 types fit doors 1 1/8" — 1 5/16" thickness, with a 3/4" wardrobe type. Latch and thumb button types with emergency unlocking feature adaptable to either hand. Pin tumbler cylinder in escutcheon is optional. Exterior parts solid brass. Escutcheons measure 4 1/2" x 2 7/8".



## MINIMUM BACKSET DEADLOCKS FOR STANDARD CYLINDERS

Can Be Keyed to Any Job



For narrowest extruded aluminum, structural steel and wood stiles. Series 970 Deadlocks for standard cylinders have 1 3/16" backset, 1 7/16" depth. Fifteen other standard backsets to 1 3/4". Series 980 identical

except for 3/4" dia. pin tumbler cylinder and 1 5/16" backset. Rugged steel and brass construction, armored bolt with 5/8" throw, bronze or aluminum face and strike. Radius, flat and bevelled faces interchangeable.

## TEMPERED GLASS DOOR DEADLOCK

Takes the place of 2 locks. Has single or double bolts and 1 or 2 cylinders. Handle operates bolts in sequence, cylinder locks handle. Designed for and can be installed in any tempered glass door top or bottom channel. 4 sizes: 1-15/16" High x 1-13/32" Wide.



## CYLINDER SLIDING DOOR LOCK

Operates by cylinder from one or both sides. Fits all standard cylinders with adapter cams furnished, (specify when using Yale). Solid bronze face, strike & bolt. Heat treated aluminum alloy case. Use your own cylinders and trim. Also used as jimmy-proof lock.

Also—Adams-Rite Solid Brass Sliding Door Flush and Edge Pulls, Surface and Jam Bolts and Ball Latches



## Convactor Association Elects New President

E. A. CLINE of the Trane Co., La Crosse, Wis., was recently elected president of the Convactor Manufacturers Association at the group's annual meeting in the La Salle Hotel, Chicago.

Louis D. Mandell of C. A. Dunham



E. A. CLINE

Co., Chicago, was named vice-president, and J. H. Smart, Tuttle and Bailey, Inc., New Britain, Conn., was elected secretary.

The association is composed of several leading producers of non-ferrous convactor radiators. Members include Airtherm Manufacturing Co., St. Louis, Mo.; C. A. Dunham Co., Chicago, Ill.; Fedders-Quignan Corp., Buffalo, N.Y.; Modine Manufacturing Co., Racine, Wis.; John J. Nesbitt, Inc., Philadelphia, Pa.; Rome-Turney Co., Rome, N. Y.; The Trane Co., La Crosse, Wis.; Tuttle and Bailey, Inc., New Britain, Conn.; and Young Radiator Co., Racine, Wis.

## Newly Formed Corporation To Offer Protective Coating

MILTON P. SCHREYER, president of Prima Products, Inc., New York, N. Y., national distributors of Aquella, has announced the formation of the Lithogen Corporation, which will market a new protective coating, Lithogen.

The base of the new product is a specially processed synthetic rubber, compounded with fine mineral particles and plastic resins. A summary of the findings of the United States Testing Co. will appear on the label of each can of Lithogen in the form of a certification next to the seal of the United States Testing Co. This is the first time this research organization has authorized the use of its Seal on a paint product.

Lithogen will be marketed in three formulations—smooth finish, granular finish, and floor enamel.

## Art in Iron

NEW stock designs — lower prices!



Artcraft stock rails No. 395 in 4 lengths. Priced per pair.	
2'6"	\$12.00
3'6"	\$14.00
3'0"	13.00
4'0"	15.00
<b>STOCK PORCH COLUMNS</b>	
<b>Corner &amp; Single-panel</b>	
Height corners 12" panels	
7' 0"	\$25.00 ea. \$14.50 ea.
7' 6"	27.00 ea. 15.50 ea.
8' 0"	29.00 ea. 16.50 ea.
IMMEDIATE DELIVERY on all Artcraft stock items. Prices net F.O.B. Columbus, Ohio. Terms: Payment with order or C.O.D. Have ARTCRAFT do your most exacting custom iron work too. ORDER DIRECT! SATISFACTION GUARANTEED!	
No. 20	No. 14
Ohioans add 3% Sales Tax	

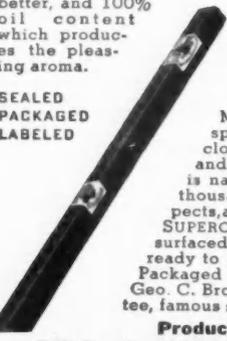
Write for our new 40 page catalogue  
**ARTCRAFT Ornamental Iron Co.**  
724 E. Hudson St. Columbus 11, Ohio

## Brown's SUPERCEDAR



## Red Cedar Closet Lining

**Guaranteed 90% Red Heart or Better 100% oil content**  
Only SUPERCEDAR is of the same uniform high quality standard that guarantees every package to contain 90% Red Heart or better, and 100% oil content which produces the pleasing aroma.  
Suggest Cedar Lined Closets to Every Home Builder. There is Nothing Better than



SEALED  
PACKAGED  
LABELED



More home builders are specifying cedar lined closets today than ever — and Brown's SUPERCEDAR is nationally advertised to thousands of new home prospects, architects and builders. SUPERCEDAR closet lining is surfaced, tongue and grooved, ready to put on with no waste. Packaged and sealed with the Geo. C. Brown label and guarantee, famous since 1886.

Product of  
**GEO. C. BROWN & CO.**  
GREENSBORO, N. C. ESTABLISHED 1886  
LARGEST MANUFACTURERS OF AROMATIC RED CEDAR IN THE WORLD

# IT "CONCENTRATES" ON GIVING SATISFACTION!

There are many outstanding features about the new Norge N-407 gas range—

The exclusive Concentrator burner, for instance, is the highest development in a top-of-range gas cooking unit. It promotes *quicker* cooking and *better* cooking, at the same time stretching the purchasing power of the owner's gas dollar.

These ranges are successfully used in housing projects everywhere. A special Specification Sheet for architects and engineers is available... write to Norge Division, Borg-Warner Corporation, Detroit 26, Michigan.

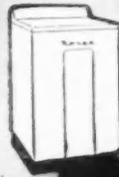


**MODEL B-649 REFRIGERATOR**—Designed to give 50% more refrigerated storage in the same floor space as prewar 4. Powered by famous Rollator.

**VERTICAL ELECTRIC WATER HEATER**—12- to 82-gallon capacities; equipped with exclusive Magnesium Rod; protected by 10-year guarantee.



**TABLE-TOP ELECTRIC WATER HEATER**—30-, 40-gal. capacities; same features as vertical models; ideal for kitchen, laundry room.



**MODEL FH-70-8 SPACE HEATER**—Oil burning; choice of models with heating capacity range of 32,000 to 65,000 BTU's.



**A BORG-WARNER INDUSTRY**  
REFRIGERATORS • ELECTRIC RANGES • GAS RANGES • ELECTRIC WATER HEATERS • OIL BURNING HOME HEATERS • HOME FREEZERS • WATER COOLERS • HOME LAUNDRY EQUIPMENT

SEE  
**NORGE**  
BEFORE YOU BUY

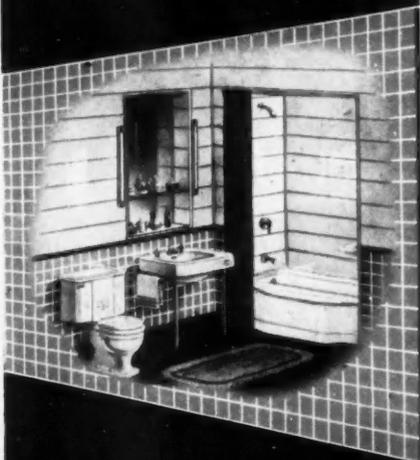
*here's how*  
**PRESTILE**  
*builds profits*

**CONSISTENT QUALITY**  
 baked in, long lasting beauty  
 . . . tougher, more durable  
 finishes . . . non-chipping . . .  
 permanent high gloss.

**COMPLETE LINE**  
 choice of 5 different patterns  
 and 9 color combinations.

**MERCHANDISE HELPS**  
 free trade samples . . . complete  
 ad mat service . . . dealer display  
 boards . . . smart packaging.

**NATIONAL ADVERTISING**  
 seen by millions in such mag-  
 azines as Better Homes &  
 Gardens, House & Garden  
 American Home.



**PRESTILE**  
*"No Lasting Beauty is Baked In"*

*Free* Clip this handy memo to your  
 letterhead and mail today!

Prestile Mfg. Co. • 2860 Lincoln Ave. • Chicago 13

Please send me free samples and Dealer's  
 Merchandising Kit—"How to Make More  
 Profits from Tileboard."

Your Name \_\_\_\_\_

**Announce Formation  
 Of New Gas Equipment  
 Corporation**

FORMATION of Affiliated Gas  
 Equipment, Inc., with headquarters in  
 Cleveland, Ohio, is announced by  
 Lyle C. Harvey, president and gen-  
 eral manager of the new corporation.



**LYLE C. HARVEY**

The organization represents the com-  
 bining of three manufacturing com-  
 panies, the Bryant Heater Co. of  
 Cleveland, the Day & Night Manu-  
 facturing Co. of Monrovia, Calif., and  
 the Payne Furnace Co. of Beverly  
 Hills, Calif.

Five plants are merged in this or-  
 ganization and will manufacture a  
 complete line of gas-fired equipment  
 for both heating and water heating in  
 the residential, commercial and in-  
 dustrial markets.

President Lyle Harvey, who is gen-  
 eral manager and a director of AGE,  
 is also general manager of the Bryant  
 Heater Division. He is a past di-  
 rector and executive committee mem-  
 ber of the American Gas Association,  
 and a director and past president of  
 the Gas Appliance Manufacturers As-  
 sociation.

**New Labor Laws Will Not  
 Affect New York Builders**

IN HIS annual report to the Build-  
 ing Trades Employers' Association,  
 William G. Wheeler, secretary, said  
 that in his opinion the building in-  
 dustry in metropolitan New York  
 will continue to be free of costly jur-  
 isdictional strikes, regardless of any  
 new legislation enacted by Congress.

Commenting on the lack of injunc-  
 tion provisions to prevent jurisdic-  
 tional strikes in the Administration-  
 supported bill now being debated,  
 Wheeler expressed confidence that  
 contractors and organized labor will  
 continue to recognize a formula for  
 the mediation or arbitration of trade  
 disputes without work stoppage which  
 has been in effect for many years.  
 This formula was initiated jointly by  
 the BTEA and the Building and Con-  
 struction Trades Council representing  
 200,000 AFL building craftsmen.

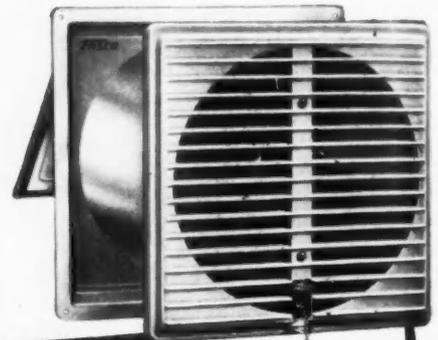
YOU can build

**MORE SALES  
 APPEAL**

In your homes

**FOR LESS  
 MONEY**

with the



**FASCO**  
**\* AUTOMATIC  
 KITCHEN  
 VENTILATOR**

● Profit from the big sales appeal of clean,  
 cool, comfortable kitchens . . . and still have  
 money left in your kitchen ventilator budget.  
 Install FASCO Automatic Kitchen Venti-  
 lators . . . the ventilator with all the top quality  
 features . . . at an amazing low price.

Changes air in average kitchen every three  
 minutes! Quickly, quietly whisks out heat,  
 odors, grease and dust . . . without drafts.  
 Attractive . . . easy to clean. Just one control  
 operates both outside door and fan.

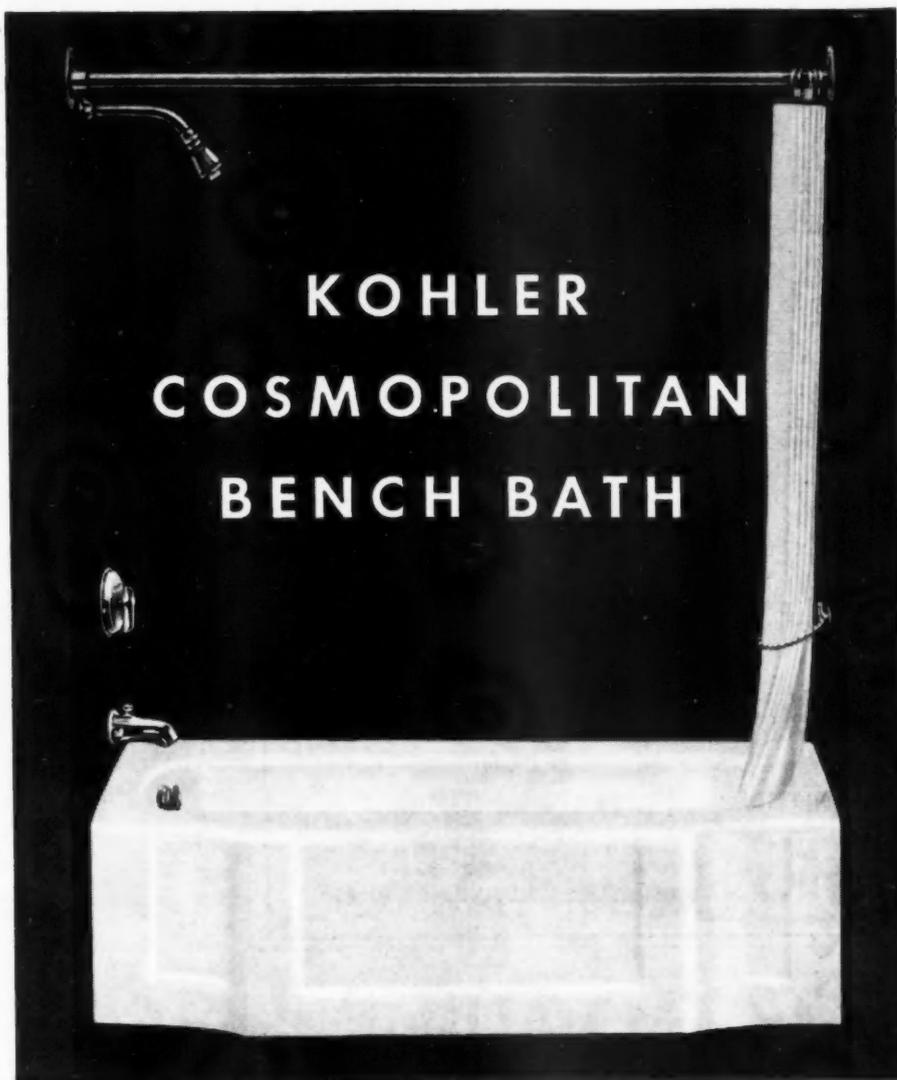
Models available for all size kitchens, all  
 wall thicknesses.

WRITE! Literature will be sent promptly.

\*Standard Equipment in 9000 LEVITT HOMES!  
 . . . and in many other developments by  
 America's leading builders.



Formerly F. A. Smith Manufacturing Co., Inc.  
**ROCHESTER 2, N. Y.**



## KOHLER COSMOPOLITAN BENCH BATH

### KOHLER ENAMEL OVER NON-FLEXING IRON . . . CAST FOR RUGGED STRENGTH AND RIGIDITY

The Kohler bath, with its time-tested base of iron, has the proper weight and solidity to assure a firm, tight installation. The Kohler enamel fuses securely to the iron surface, forming a smooth, lustrous coat that is acid-resisting, easy to clean and extremely durable. The fact that the iron base is non-flexing minimizes danger of cracking and crazing. Home owners appreciate the freedom



from noise and the sturdiness of Kohler baths. Kohler fixtures and fittings have a quality reputation confirmed by 76 years of outstanding satisfaction in American homes and institutions. Every Kohler product is made of thoroughly tested materials—and designed and manufactured to give practical, reliable service. Kohler Co., Dept. 5-H, Kohler, Wisconsin.

# KOHLER OF KOHLER

PLUMBING FIXTURES • HEATING EQUIPMENT • ELECTRIC PLANTS

**TRI-STATES announces . . . THE NEW  
27" BLADE BIG CHIEF KUTTER**

**NEW ANGLE GAUGE** can be easily attached or detached by the operator and enables him to quickly cut shingles with precision to desired degree of angle.

**FRONT END NOSE PUNCH** is part of upper main casting and is easily operated by the notcher handle. Rear punch is mounted 10½" back from shingle stop and is conveniently operated by main handle, giving the operator two sizes of nail holes.

**IMPROVED NOTCHER** is newly designed from high grade, heat treated steel and is hollow ground, with teeth that are milled to notch a much smoother and faster cut.



**WITH FRONT-END NOSE PUNCH AND ANGLE GAUGE**

**\$39<sup>50</sup>**

**THIS PRICE DOES NOT INCLUDE ANGLE GAUGE**

F.O.B. Factory

**LOOK FOR THE BRAND**



This Cutter is light in weight, weighing only 26 lbs.  
 • Castings are of high grade aluminum alloy •  
 • LENGTH overall—31" • HEIGHT—17" • Has two high grade tool steel heat-treated cutting blades, 27" long, capable of making a single cut up to 27 inches.  
**ALL INQUIRIES ANSWERED PROMPTLY**  
**TRI-STATES BUILDING MATERIALS CO.**  
 P.O. Box 1476 Fort Worth, Texas

**Farm Booklet Aids Lumber Promotion**

A publication of West Coast Woods Promotion *The Farm Book—A Guide to Better Farming with Better Buildings* continues to play an important part in the organization's promotional campaign in behalf of all grades of lumber, according to Paul E. Kendall, manager.

The book, prepared by the Doane Agricultural Service, St. Louis, has been distributed by retail dealers since its issuance last year. Priced at \$1.00, it is being furnished to retailers at special prices by West Coast Woods Promotion, 1410 S.W. Morrison St., Portland, Ore.

**Company Changes Name**

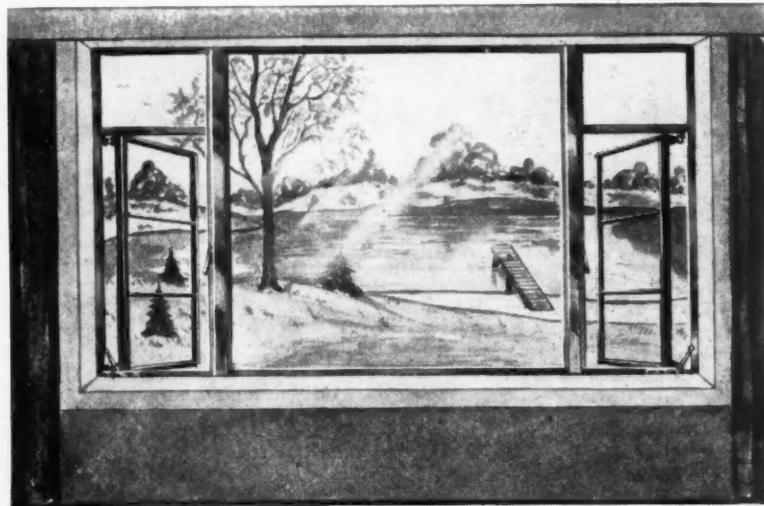
THE Taylor Manufacturing Co. of Milwaukee, Wis., is now the Wright Manufacturing Co. Change of the company name was announced by Thomas F. Millane, president, who also announced the appointment of Bertram R. Scheff as its general sales manager.

Change of the company name was in recognition of the company's product, Wright Rubber Tile, which has been on the market twenty-eight years.

**Alcasco ALUMINUM CASEMENTS**

**EASY OPERATION**

**LIFETIME QUALITY**



**ARCHITECTURAL BEAUTY**

**ECONOMICAL INSTALLATION**

Typical Alcasco Picture Window with Insulated Glass

Examine Alcasco Aluminum Window Casements. See their premium quality, beautiful appearance and fine construction features. Alcasco also meets FHA requirements. Aluminum casements are more and more in demand. . . . Assure your share of this profitable business with Alcasco

Aluminum Casements. Prompt shipments from warehouse stock.

Dealers! Here's a real sales opportunity!

Write now for literature on Alcasco Aluminum Casements and basement windows.

**Alcasco**

**PRODUCTS, INC.**

1144 NINTH ST., MUSKEGON HEIGHTS, MICH.



HERE'S A SPECIALLY-PRICED  
*Magic Chef*  
GAS RANGE



30" wide—Series 600

**FOR LIMITED SPACE, LIMITED BUDGETS**



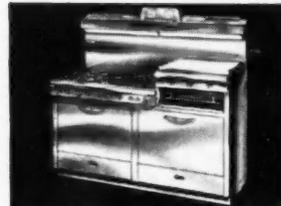
36" wide—Series 700



39" wide—Series 2400 & 1300



36" wide—Series 1200



62" wide—Series 1000



20" wide—Series 500



43" wide—Series 400 & 460

OTHER Products: combination, coal and wood ranges, oil stoves and heaters, oil furnaces.

Architects and builders have been asking for a range 30 inches wide. Here it is! Its smart styling will add to the appearance of any apartment or small home kitchen. The 600 Series Magic Chef range is low-priced; yet it has most of the features of deluxe Magic Chef models.

Magic Chef ranges have the advantages of quality and appearance *plus* these *helpful* selling factors:

- 1 More women cook on Magic Chef than on any other range.
- 2 Surveys show more women plan to buy Magic Chef than any other gas range.
- 3 Magic Chef is the most widely advertised gas range in America.
- 4 Magic Chef is the easiest range to sell.

• *For Finest Homes . . .*

The complete Magic Chef line includes ranges for large homes. For example, the 62-inch Series 1000 has six top burners, two large ovens, high-level broiler and a 23" x 24" griddle. Styled in satin-finish stainless steel.

• *Hotels and Restaurants, too!*

America's best hotels and restaurants have equipped their kitchens from Magic Chef's line of heavy duty gas cooking equipment.

**FOR COMPLETE DETAILS SEND FOR OUR ARCHITECTS AND BUILDERS FILE**

---

**WATCH CELOTEX IN '49...**

# **CELOTEX IS ON THE MARCH**

*with the greatest  
advertising drive in its history to increase  
business for builders and contractors  
and the entire building industry*

---

**1949** bids fair to be the year of decision for the building industry. Everyone knows there is a big job to be done if the high level of building activity is to be sustained and advanced.

*Celotex has made its decision!* As our contribution to the cause, we are going all out in '49 with the greatest advertising and sales promotion campaign in Celotex history.

*And you, Mr. Builder, are one of the key figures in the whole program.*

In a series of smashing 2-PAGE SPREADS that will appear in THE SATURDAY EVENING POST, BETTER HOMES AND GARDENS, SUCCESSFUL FARMING, PROGRESSIVE FARMER, and other leading magazines—

Celotex will tell millions of Americans that *they not only can but should build or remodel now!*

This compelling advertising is designed to stimulate building activity and directly benefit builders, contractors, and everyone else who is a part of the great building industry.

Yes, Celotex is on the march in full force in 1949. We feel certain that you, the builders and contractors of America, will join with us—and that together, we will forge ahead to a new level of achievement and prosperity for the building industry, and ourselves!

**The Celotex Corporation, Chicago 3, Illinois**

**Build Strong for the Future . . . Build with**

**CELOTEX**  
REG. U.S. PAT. OFF.

**BUILDING MATERIALS**

INSULATING BUILDING BOARDS • ASPHALT COATED INSULATING SHEATHING • INSULATING LATH  
INSULATING INTERIOR FINISHES • ROCK WOOL INSULATION PRODUCTS • TRIPLE-SEAL ROOFING  
GYPSUM WALLBOARD • GYPSUM LATH, PLASTER • CEMESTO • INSULATING SIDINGS  
ACOUSTI-CELOTEX • FLEXCELL EXPANSION JOINTS • HARD BOARD

**LOW-COST  
RADIANT PANEL  
HEATING  
IS HERE!**



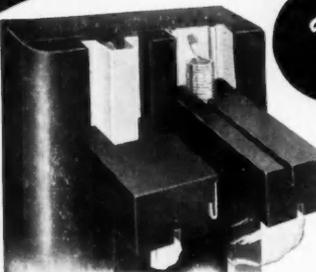
**B & G  
WARM-AIREA  
HEATING**

Today's biggest opportunity  
to sell Hot Water Boilers and  
Forced Circulation Equipment

**WATCH  
FOR  
ANNOUNCEMENT**

**BELL & GOSSETT COMPANY**  
Morton Grove, Illinois

*The Milwaukee Combination  
Sash Balance  
and Weatherstrip*



- ★ Efficient
- ★ Low Cost
- ★ For New Or Old Building

**WRITE FOR DETAILS TODAY!**

Simple installation slashes labor cost! One man easily installs 25 or more windows in 8 hours. NO high-priced, skilled labor needed. Get more satisfied customers at lower cost . . . higher profit!

Available with or without bronze covers that completely hide springs, as shown above.

Mail this coupon today!

**MILWAUKEE STRIP SERVICE INC.**  
4621-23 W. Lisbon Ave.  
Milwaukee 8, Wisconsin

Please rush me folder A-4 and price list on Milwaukee Combination Sash Balance Weatherstrip.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

**TESTED...  
APPROVED...  
ACCEPTED!**

Smooth, positive action,  
accurate balance plus seal  
against draft, dust, moisture.

*Don't take chances*



**USE THE  
PERF-A-TAPE  
JOINT SYSTEM**



It's the method perfected by the makers of famous SHEETROCK\* gypsum wallboard, thus is backed by years of dry-wall know-how. So, play safe—use PERF-A-TAPE\* reinforcement and cement . . . made exclusively by . . .

\*T. M. Reg. U. S. Pat. Off.



**United States Gypsum**

**For Building • For Industry**

Gypsum • Lime • Steel • Insulation • Roofing • Paint

**ZONOLITE\* Insulating Concrete**  
for RADIANT  
HEAT SYSTEMS



**OFFERS YOU**

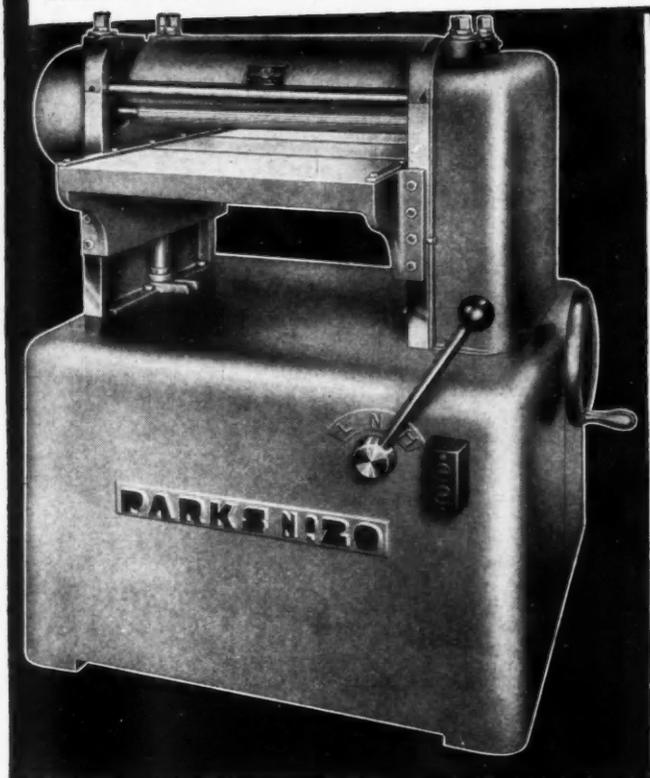
- ✓ Economical operation, less heat loss
  - ✓ Greater efficiency
  - ✓ Elimination of condensation
  - ✓ Quicker control of room temperature
  - ✓ Ability to heat with lower temperature in system
- \*Zonolite is a registered trademark of Zonolite Company



For FREE information about  
ZONOLITE INSULATING CONCRETE  
write to Dept. AB-49

**ZONOLITE COMPANY**  
135 S. La Salle Street  
Chicago 3, Illinois

The Sensationally **NEW** Low-Priced



# PARKS No. 20 20" PLANER

Here is a modernly designed, rugged, high-speed, low-priced planer that is ideally suited for every shop and industrial plant requiring a quality sur-  
facer. The Parks No. 20 Planer has a four-knife  
cutterhead with a speed of 3600 R.P.M. and offers  
two feed speeds — 20 and 40 F.P.M., and 40 and  
80 F.P.M. Write for  
complete descriptive  
literature.



## The PARKS Heavy-Duty 12" x 4" Planer

A compact, sturdy, thickness planer  
that offers mill planer precision and  
ruggedness at a sensationally low  
price. Write for descriptive catalog  
sheet.

The **PARKS WOODWORKING MACHINE CO.**, Dept. 30-T. 1546 Knowlton St., Cincinnati 23, O.

# ATLAS CONCRETE FORMS

WALLS • CYLINDERS • FLOORS • SEWERS

**Irvington**  
FORM & TANK CORP.  
IRVINGTON, N. Y.

## CONTRACTORS! BUILDERS! *Save* time, labor and expensive lumber

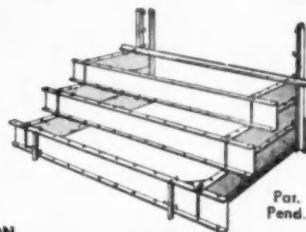
Steel wall forms for garages and houses. Steel  
forms for steps, sidewalks, footings, garage  
slabs and driveways.

AGENTS WANTED

### POLLMAN ADJUSTABLE STEEL FORMS

Speed-up concrete work . . . easy to  
set up and remove. Time saved means  
more profit to you.

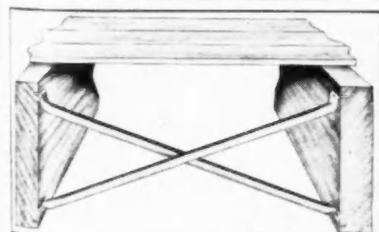
Pollman Adjustable Steel Forms are  
union made. Replacement parts are  
available.



Pat.  
Pend.

WRITE FOR DETAILED INFORMATION

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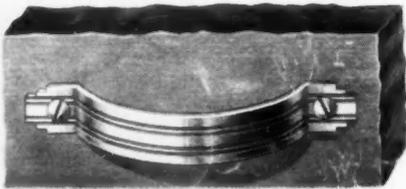


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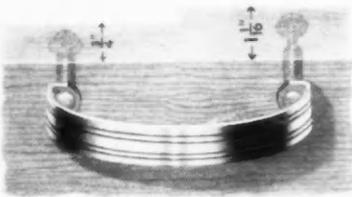
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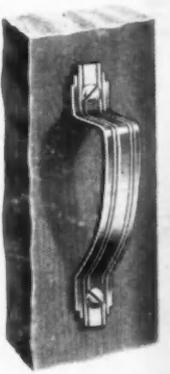
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