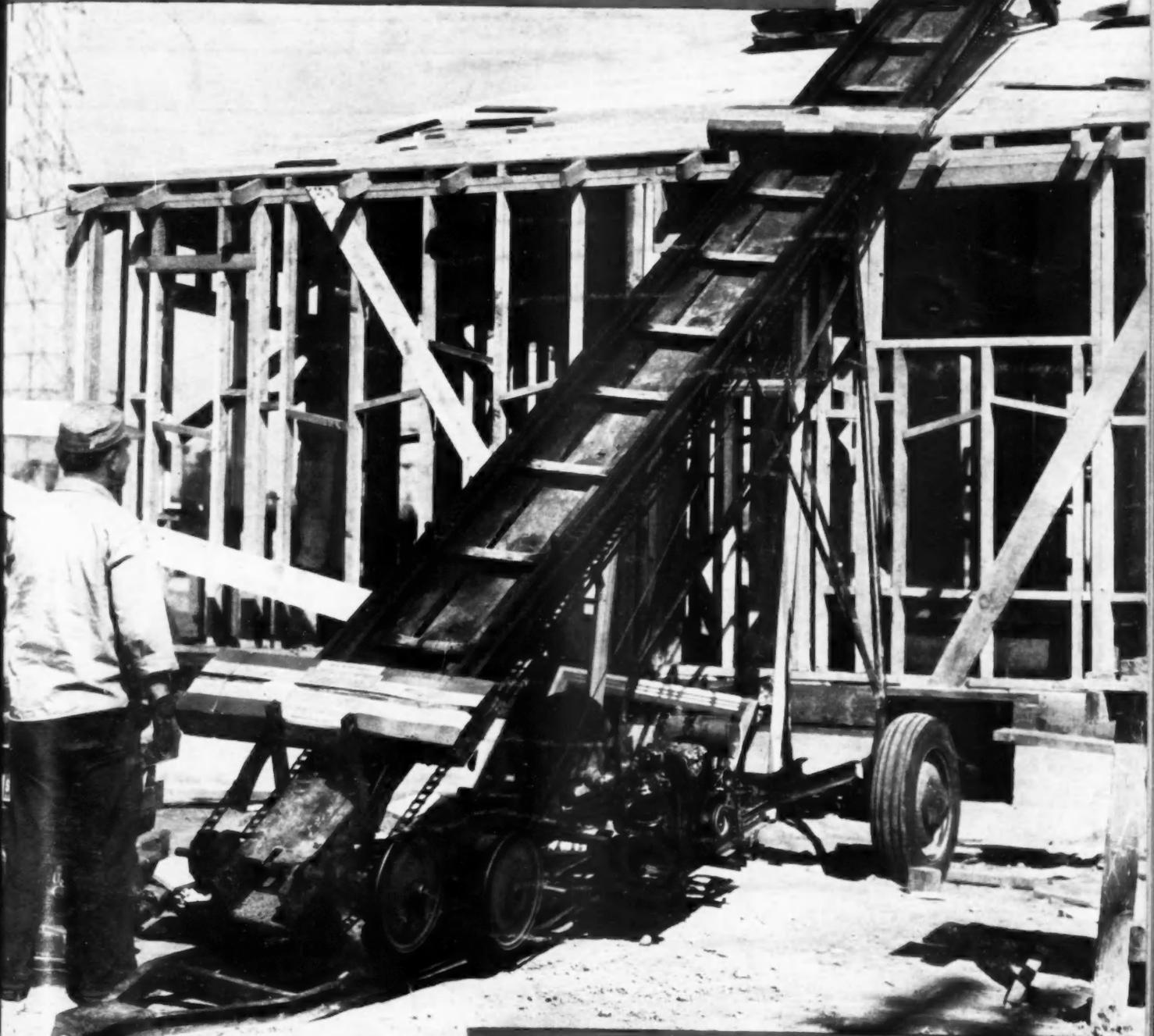


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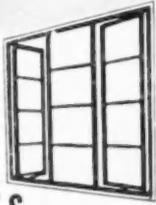
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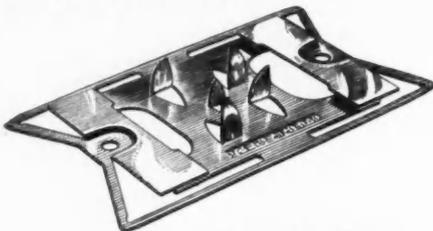
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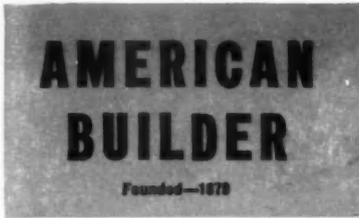
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Subscription price: United States and Possessions and Canada, 1 year, \$3; 3 years, \$5; foreign countries, 1 year, \$10; 3 years, \$20. Single copies, 50c each. Subscribers are requested to state company connection, nature of business, title or position. W. L. TAYLOR, Circulation Manager; Field Staff: C. L. Conley, W. J. Griffith, C. R. Hartung, Joe Sanders, R. J. Schnell, John Simonson.

Address all subscriptions and correspondence concerning them to: Subscription Department, American Builder, 30 Church St., New York 7, N.Y.

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AT LAST! A NEW WEATHER STRIP

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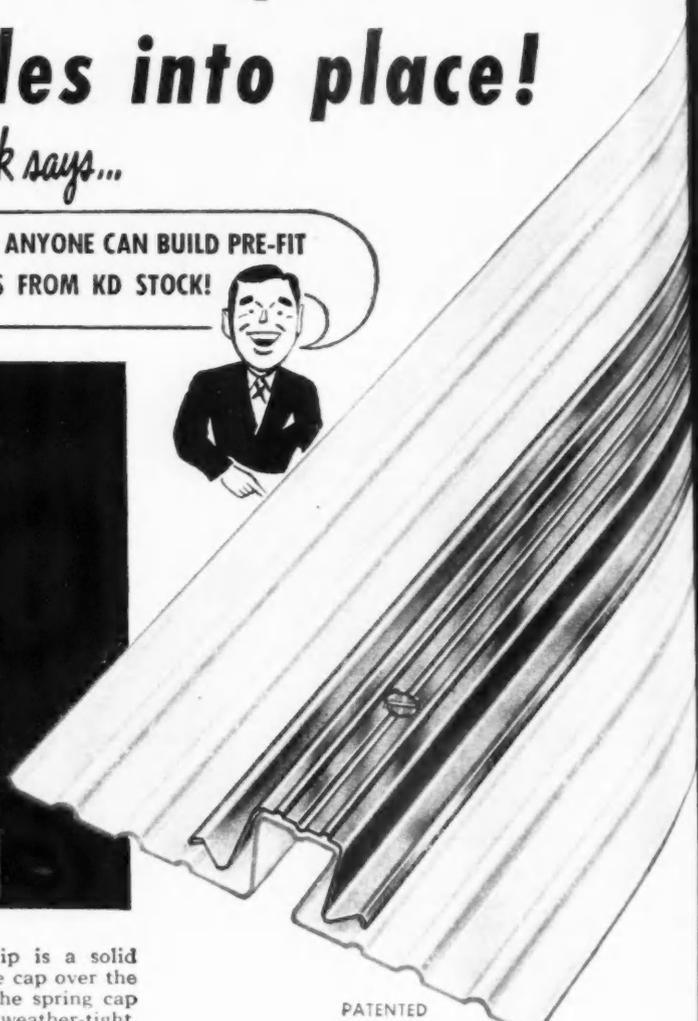
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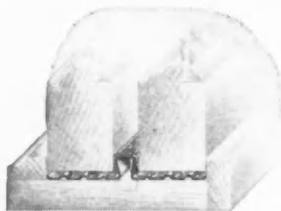
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Publisher's Page



Dishonest Price-Tags

BARBARA WARD, youthful and articulate foreign editor of the London "Economist"—a brilliant but perhaps not excessively profound observer—in the New York Times Magazine a few weeks ago fired a polite volley at the Achilles' heel of the "welfare state," where more and more services are "free" to the beneficiaries, but not to the taxpayers.

Miss Ward was not writing just about her native Albion either; she reminds us that "the most powerful democracy in the world, the United States, is also committed to a considerable degree to the same policy." The central idea of the "welfare state" is that a large proportion of the national income is taken away from those with the ability and the gumption to provide for their own necessities, and is passed around among the improvident, the unenterprising, and the unfortunate, so that nobody is denied a minimum of goods, shelter and services because of unwillingness or inability to turn a hand to the earning of an honest dollar.

The provision for a minimum income is supplemented in Britain by "free" medical care, a considerable extension of "free" education, and with food and housing bearing a price-tag representing only a fraction of the whole cost, the deficiency between the tag figure and the total being made up by the generosity of the taxpayers.

Miss Ward thinks all of this might be fine since Britons, reduced to sharing the poverty, have lost

much of their old feeling of class distinction and are pals with each other to a degree never before known—except for one thing. This slight difficulty is the uncooperative arithmetical fact that even so miraculous a discovery as the "welfare state" is unable to pass around more than its citizens produce. And, if there is so little difference between the incomes, after taxes, of efficient producers and those who do not produce at all, what is going to induce the efficient producers to extra effort?

The old-fashioned competitive market economy, in Britain as in the United States, had at least a couple of points in its favor which even some of the public-spenders may concede if caught off guard. One advantage of this much criticized "price system" is that it gives people a yardstick with which to measure the comparative worth to them of the large variety of things they want. A price on an article used to reflect about the amount of labor and materials that went into producing it—and the purchaser was thereby encouraged to choose liberally from the low-priced articles and more cautiously among those with the higher price-tags.

When the bureaucrats tear honest price-tags off subsidized or "free" goods and services—and put on tags which reflect only a fraction or less of the total cost—they simply invite people to clamor for things which use up a lot of labor and materials and turn away from things which might satisfy their wants *al-*

most as well, but which are less wasteful of labor and material.

Once let government step in and start subsidizing some product or service, adding the cost to taxes, and an end comes to using labor and material most efficiently—because the subsidized articles and services are made to look deceptively cheap to consumers, while the goods and services which are taxed to provide the subsidies have their price-tags arbitrarily marked up. Housing in this country has always been the sufferer from the practice of charging so large a part of the cost of state and local government to real estate taxes, combined with the successful effort of special interests to get sales taxes and other levies "earmarked" for some exclusive purpose, e.g., such as spending gasoline taxes solely on highways.

Subsidies work a double hardship on the people who do not get them (1) by making the products they produce and sell competitively unattractive compared to the goods that are subsidized, and (2) by making the whole community less well off than it would otherwise have been—since production and consumption of economical products is discouraged in favor of those which use up more labor and material.

The most encouraging sign of the times is the willingness more and more people are showing to think through such questions as these, and then to object vigorously when their study shows them how they and the country are being imposed upon by "welfare state" demagogues.

James G. Lyne

President, Simmons-Boardman Publishing Corp.

American Builder is published by the SIMMONS-BOARDMAN PUBLISHING CORPORATION, with editorial and executive offices at 105 W. Adams St., Chicago 3, Ill.; 30 Church St., New York 7, N.Y. Samuel O. Dunn, Chairman of the Board; James G. Lyne, President; Robert H. Morris, C. J. Wageman, F. A. Clark, Vice Presidents; J. S. Crane, Vice President and Secretary; John T. DeMott, Treasurer.

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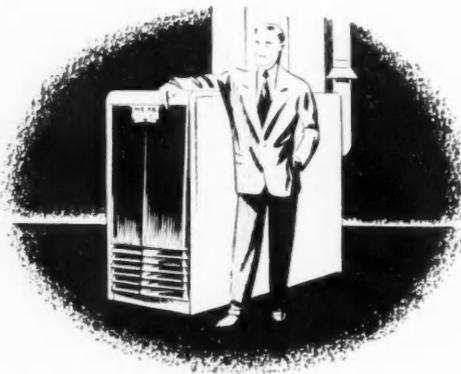


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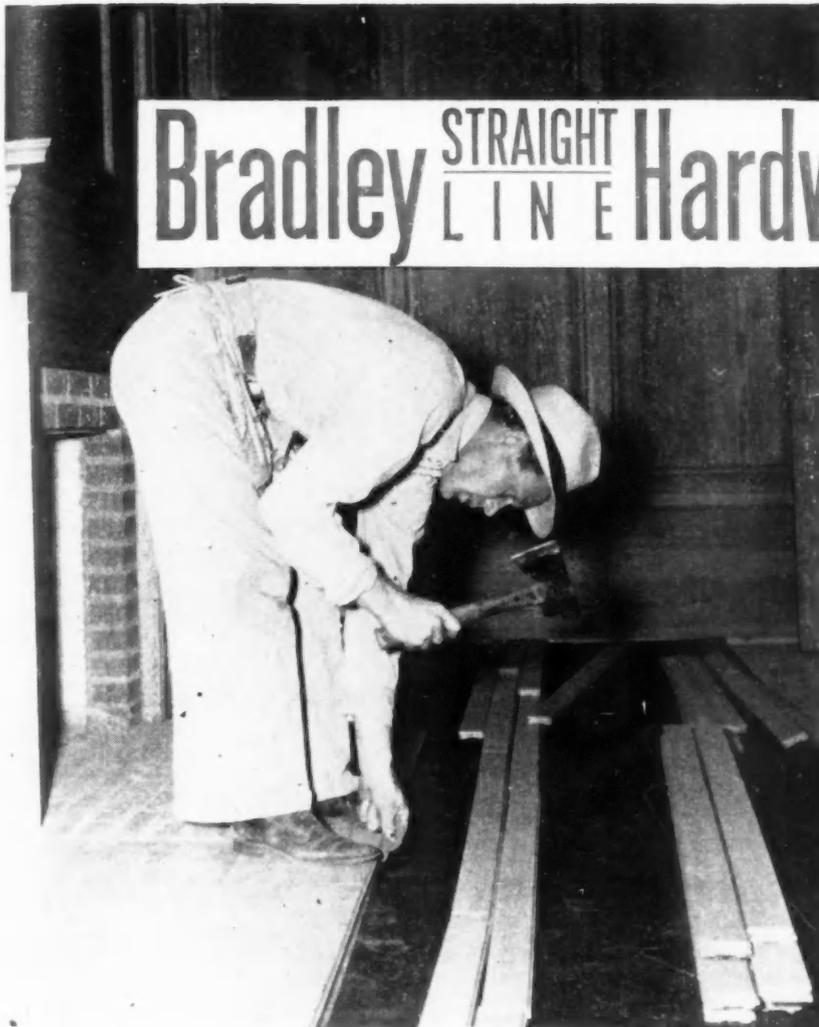


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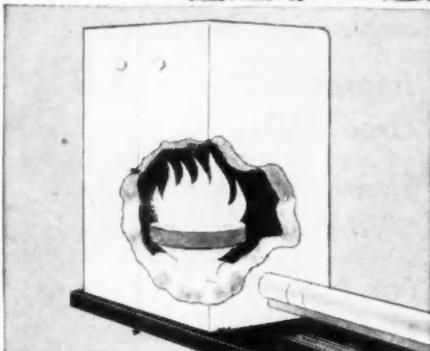
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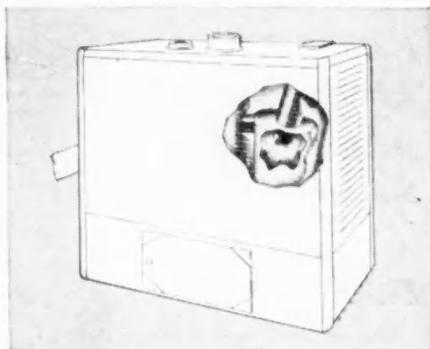
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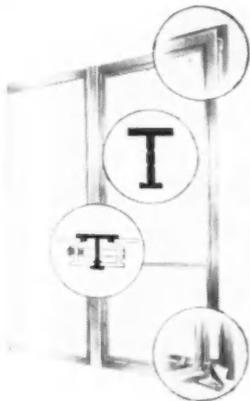


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THE COLUMBIA MILLS, INC. • 428 SOUTH WARREN STREET, SYRACUSE 2, N. Y.

Columbia's room-darkening window shades revolutionize light control. They're decorative and functional, too. Sturdy, long-wearing... with the additional special talent of shielding a room from light.

Look for room-darkening shades in Columbia's REGAL grade. Made of high-count cambric, with a truly beautiful "hand" and a smooth, dust-shedding surface. Economically priced... and easily washable for thrifty maintenance. In light as well as dark colors.

See Columbia's VELLMO, too, a super quality grade, so completely lightproof that it's standard for such uses as X-ray rooms. And here's the surprise... VELLMO boasts high-style pastels and dazzling white. Any size you need up to 150 inches wide!

PERFECT FOR

- hotel rooms.
- hospital rooms.
- housing projects.
- school rest rooms, auditoriums.
- recreation and convention rooms with television sets.



YOUR COSTS COME DOWN WITH EVEREADY BRIKSAW



EVEREADY BRIKSAW
EVEREADY BRIKSAW COMPANY
CHICAGO, ILL.

Cut WET or DRY

Now you can have *Dust-Free* masonry cutting whenever you want it! Take your choice of **EVEREADY BRIKSAW** completely equipped—Or reduce first costs by buying **BRIKSAW** for standard dry cutting only—Later install *inexpensive Wet Cutting Kit*.

WRITE FOR NAME OF NEAREST DISTRIBUTOR

LOW COST in FIRST COST in OPERATING COST

4 seconds to adjust Cutting Head height! Patented "Adjusta-Height" is that fast. Exclusive "Toe-Matic" Head angularity control lets you make any cut in any size material—**FAST!** One-piece Cutting Head removed in 21 seconds for portability anywhere.

ANY CUTTING POSITION

With *effortless speed* you shift the Cutting Head from one "Adjusta-Height" Notch to another to cut: Quarry Tile—Brick—Partition Tile—Concrete Block.

AUTOMATIC BLADE PRESSURE

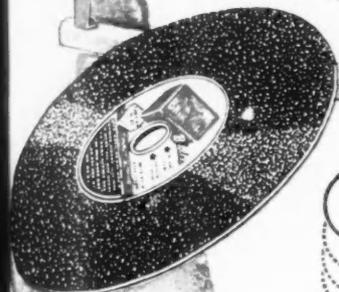
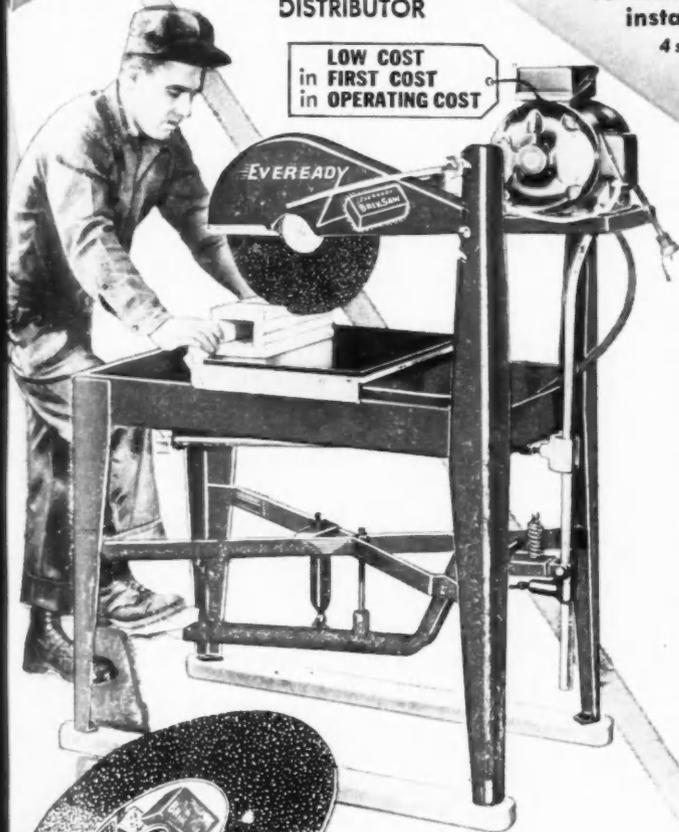
Longer blade life, faster cutting with patented Blade Pressure Equalizer Spring that *automatically adjusts* blade cutting pressure.

INSTANT "HEAD LOCK"

A few turns of the handle *locks head in a fixed position*.

EXCLUSIVE "TOE-MATIC"

A light upward tilt of the Foot Treadle—and you set Head to any desired angularity.



EVEREADY BRIKSAW BLADES

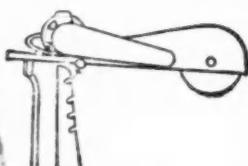
For every masonry material—from Bricks to Porcelain; from Glazed Tile to Concrete Blocks—there is an **EVEREADY BRIKSAW Blade** (Abrasive or Diamond) to give top cutting performance WET or DRY.

On almost every masonry material, operator has HIS choice of these different cutting actions:

1. Standard Cutting Speed—standard blade life. 2. *Faster Cutting Speed*—somewhat shorter blade life. 3. *Longer Blade Life*—somewhat slower cutting speed. Remember: There is an **EVEREADY BRIKSAW Blade** for any and every type of masonry cutting!

ADJUST-A-HITE CONTROL

In 4 seconds adjust Head-height for Quarry Tile—Brick—Glazed Tile—Concrete Block.

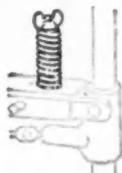


PORTABLE

In 21 seconds remove one-piece Cutting Head for ready portability.

TOE-MATIC FOOT TREADLE

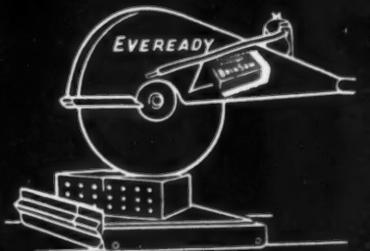
Lift up with tip of toe to adjust Head—Then press down to cut.



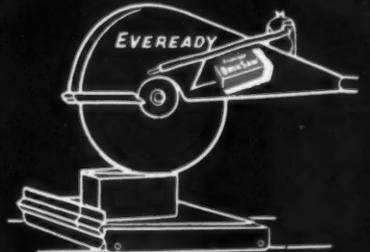
BLADE PRESSURE EQUALIZER SPRING

Automatically adjusts blade pressure—Longer blade life, faster cutting.

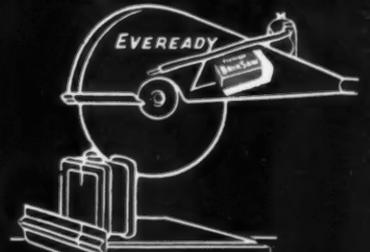
SIGN AND MAIL NOW



CUT GLAZED TILE IN 21 SECONDS



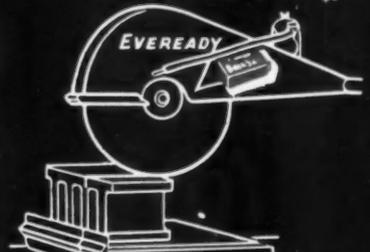
CUT FACE BRICK IN 11 SECONDS



CUT GLASS BLOCK IN 8 SECONDS



CUT FIRE BRICK IN 4 SECONDS



CUT CONCRETE BLOCK IN 19 SECONDS

EVEREADY BRIKSAW COMPANY

1505 S. MICHIGAN BLVD.

CHICAGO 5, ILLINOIS

Cable Address: BRIKSAW, Chicago, Ill.

EVEREADY BRIKSAW COMPANY
1505 S. Michigan Boulevard, Chicago 5, Illinois
Without obligation send information on **EVEREADY BRIKSAW** and Blades for cutting:

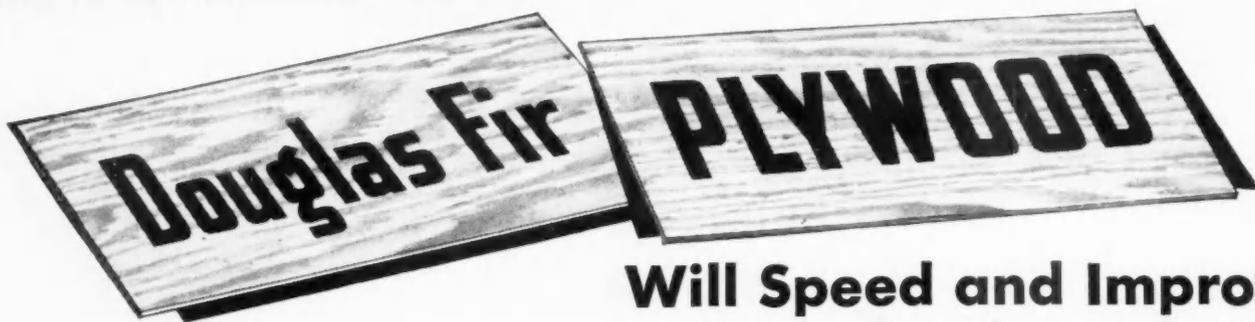
NAME _____

STREET _____

CITY _____

STATE _____

These Two* Grades of



* PlyScord and PlyBase are two appearance grades within Interior-type Douglas fir plywood. Other appearance grades of both Interior and Exterior-type are offered for specific building needs.

Will Speed and Improve Your Flooring Jobs!



Lay a better subfloor, faster, with PlyScord—the superior base for finish flooring.

PLYSCORD . . . for smooth, tight, rigid subfloors that are laid faster and provide a superior base for finish flooring.

For the perfect subfloor, use Douglas fir plywood PlyScord—identified by the “grade-trademark” shown above. The big panels of PlyScord cover joints quickly, provide a smooth, even surface that’s extra rigid, extra strong, tight and draft-free. PlyScord cuts application time and costs; contractors report that PlyScord can be laid in half the time required for other subflooring. It saves up to 50% on nailing, up to 60% on sawing and fitting. And the finished flooring job will be better because PlyScord won’t warp, cup, squeak or shrink. PlyScord should be specified, too, for wall and roof sheathing—to insure stronger, tighter, more rigid construction.



For a firm, rigid base under all types of modern wall-to-wall coverings—use PlyBase.



PLYBASE . . . a new grade, for a smooth, firm, rigid base under linoleum, asphalt tile and other wall-to-wall coverings.

Yes—floor coverings such as linoleum, tile, carpeting, and other wall-to-wall materials will look better and last longer when laid over PlyBase. The smooth, firm, solid panels reduce joints to a minimum, virtually eliminating ridges and uneven wear. In addition to new construction, PlyBase is ideal on remodeling jobs, as a smooth base over old, worn, uneven surfaces. And for walls, PlyBase presents a smooth, solid backing surface for tile and other coverings. Sanded smooth, PlyBase is readily identified by the “grade-trademark” shown above. Let it speed—and improve—your next job!

For the 1949 Basic Plywood Catalog, write the Douglas Fir Plywood Association office nearest you: Tacoma Building, Tacoma 2, Washington; Daily News Building, Chicago 6; Shoreham Building, Washington 5, D. C.; The 500 Fifth Avenue Bldg., New York City 18.

Douglas Fir PLYWOOD
LARGE, LIGHT, STRONG

Real Wood Panels



THERE'S A
**NATIONAL
 ELECTRIC**
 FLEXIBLE WIRING SYSTEM

*for
 every
 housing job*

—R— 600V — — — National DILEC SAFECOTE —

—14— TW — 600V — — — National —

NATIONAL FLEXSTEEL

—National DILEC

UNDERWRITERS
 INSPECTED
 NON-METALLIC
 SHEATHED CABLE

—

2 TYPES OF NE BUILDING WIRE

Dilec Safecote (Type R) Rubber insulation covered with a flame-resistant, saturated fibrous serving. The durable colored coating is marked and measured . . . Free stripping . . . Moisture resistant . . . Smooth finish for easy fishing . . . A quality-built wire for general building purposes.

NE Thermo-plastic (Type TW) High resistance to moisture, acids, alkalis, oil and grease . . . Wide range of permanent colors, marked and measured . . . Use NE Type TW where conditions are unusually moist or hot.

**2 TYPES OF GALVANIZED,
 FLEXIBLE-STEEL ARMOR PROTECTION**

Flexsteel—Flexible Steel Conduit. Used with either Dilec Safecote or NE Thermo-plastic wires, Flexsteel provides an approved, grounded pull-in and pull-out system. Rounded channel construction makes fishing easy. A conduit system with no waste.

A. B. C. (Armored Bushed Cable) Besides the grounding provided by the "bondhook" channel construction of A.B.C. Cable, sizes 14 and 12 also have a *low resistance* grounding strip. Anti-short bushing protects conductors against sharp cut edges of steel. A.B.C. is furnished *complete* with Dilec Safecote or NE Thermo-plastic wire.

2 TYPES OF NON-METALLIC SHEATHED CABLE

Canvas-Back Loomwire—A new, small diameter cable that eliminates paper stripping. (No kraft wrappings to strip back). Has a saturated, fire-resistant cotton braided sheath. Each conductor carries full insulation to the terminal screw.

NE-o-Prene Loomwire—The *first* Neoprene-sheathed Loomwire to be listed by Underwriters' Laboratories, Inc. Ideal for barns and other wet locations where rot, fungus, moisture, ammonia-laden air and drastic weather changes are destructive to other types of approved wiring. The toughest, most durable non-metallic sheathed cable available.

Complete Lines of Accessories for all wiring systems: Boxes, connectors, lugs and fittings.

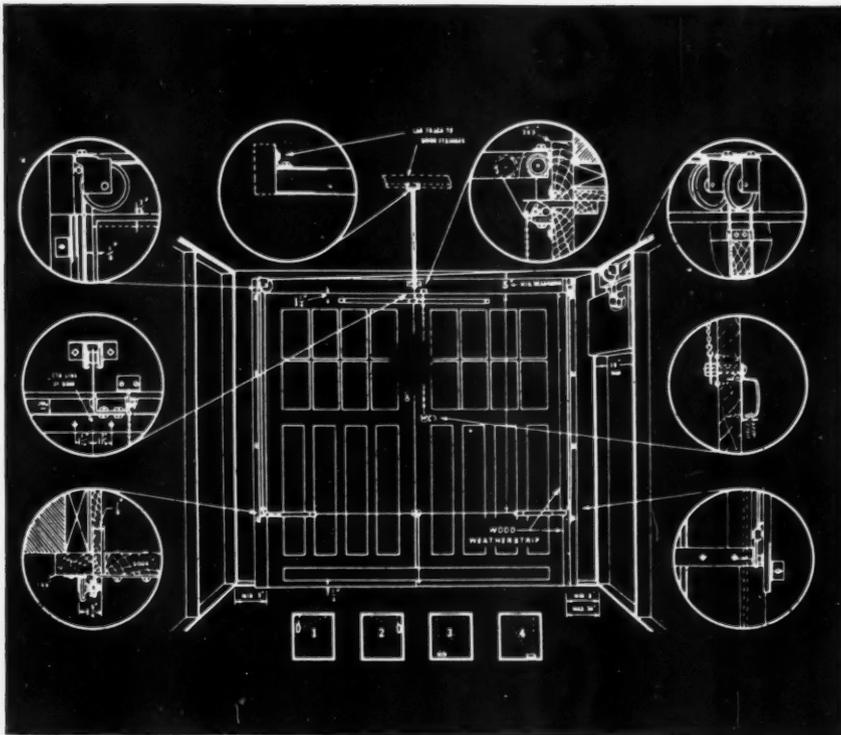
All National Electric wires, cables, conduits, raceways and accessories are listed by Underwriters' Laboratories, Inc.



*Sold through leading electrical wholesalers
 Installed according to National Electrical Code.*

**National Electric
 PRODUCTS CORPORATION**

1329 CHAMBER OF COMMERCE BUILDING, PITTSBURGH 19, PA.



FOR GARAGE DOOR REMODELING

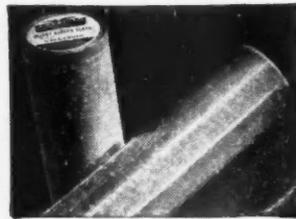
YOU CAN'T BEAT THE



NO. 500 SWING-OVER HARDWARE SET

- The popular, fast-selling No. 500 Hardware Set is adaptable to practically all types of garages.
- It is economical to use on remodeling jobs or new installations.
- It is easy to erect and to operate.
- It doesn't interfere with usable floor space.
- All hardware (except locking handle) is inside the garage. Send for catalog showing full line of hardware for numerous types of sliding doors—garage, barn, airport, wardrobe, cabinet. Other Coburn Products include fire door hardware, overhead trolleys and conveying systems for carrying loads up to 3,000 lbs.

WICKWIRE SPENCER HARDWARE PRODUCTS



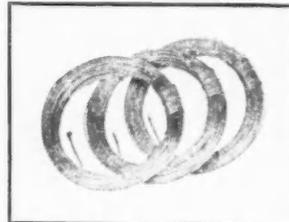
"American" Brand Insect Wire Screening

Made in standard mesh and in grades to suit every purse and purpose—bright or antique bronze, galvanoid, aluminum and other non-ferrous metals.



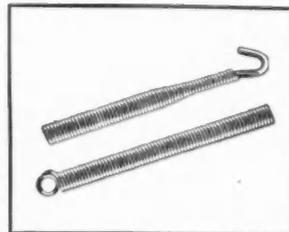
"Clinton" Brand Hardware Cloth

Made of cold-drawn carbon steel, heavily galvanized after weaving to give added strength at intersections. In all standard meshes and widths.



Wissco Flexible Clothes Line

Long-wearing, strong, flexible, rust-proof. Smooth, lustrous surface. In 50-, 75- and 100-ft. cut lengths.



Perfection Brand Door Springs

Unequaled for toughness, durability and resistance to rust. Looped or hooked ends. Packed in boxes, with hooks for installation in each box.

WICKWIRE SPENCER STEEL

A DIVISION OF

AMERICAN WIRE FABRICS CORPORATION

A SUBSIDIARY OF



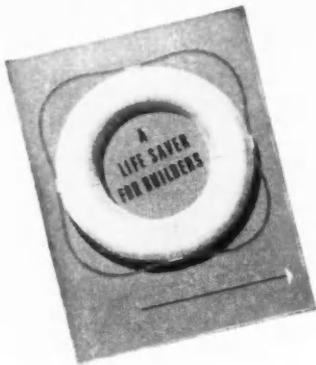
500 FIFTH AVENUE • NEW YORK 18, N. Y.

Boston • Buffalo • Chicago • Denver • Ft. Worth • Philadelphia • Pacific Coast Subsidiary—The California Wire Cloth Corp., Oakland 6, Cal.

QUALITY FLOORS
FOR ECONOMY
HOMES

Hold down floor costs

WITH BRUCE FINISHED FLOORS



Write for copy of
"A Life Saver for Builders"

Builders report savings up to \$100 and 3 working days per house

Everybody wants to hold down building costs to hold up building volume. One way to do this is to use Bruce Finished Flooring. Builders say it saves up to \$100 and 3 working days on every house they build . . . because there's no costly, time-consuming sanding or finishing on the job. Owners praise the quality of Bruce Finished Flooring, the beauty and durability of the wonderful new 1949 finish. For complete information, write E. L. BRUCE CO., MEMPHIS, TENN.



BRUCE *Finished* FLOORS

With the new improved 1949 finish

Product of E. L. Bruce Co., Memphis, Tenn., World's Largest Maker of Hardwood Floors

Bruce Also Makes Block Flooring, Strip Flooring, Random-width Planks, Hardwood Moulding and Trim, Pine and Hardwood Lumber, Furniture Parts, Ceda'line Closet Lining, Everbond X Mastic, Terminix, Floor Care Products.

You'll want to have this 1949 Kimsul* Technical Booklet!



Facts About Thermal Insulation... for Architects, Builders and Engineers!

Flexible—In any corner, racks be bend pipes, electrical wiring and other "tricky spots." No areas unprotected.

Clean—No sharp particles to irritate. Nothing to slip. Stretched ply construction prevents settling or sagging.

Compressible—one ply or many plies may be compressed to high density in nature of wide areas, sealing out cold air and sound. Kimsul, asphalt-treated wood fiber does not break up during caulking or tamping operation.

Continuous, no joints—understanding determines the effective efficiency of an insulating job. Proper installation, construction, and care makes Kimsul always a good job.



Fire-Resistant—Special permeant chemical treatment makes Kimsul non-combustible. No insulating material can make a wood frame building fire proof. The insulation should never exceed the height of fire.

Objective Comfort—in winter, due to warmest surrounding surfaces of walls, ceilings, and floors, in summer, due to protection from excessive heat.

Ample Benefit, Fuel Saving—as shown above for a one-story Chicago residence.



Small Storage Space—Easy Handling—Kimsul shipping package is as tough as 1 1/2" steel. Other packages are normally made of hard to carry and store, easily damaged.



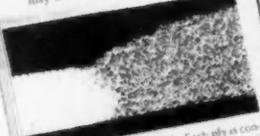
Insulated Fastening Edges—Kimsul blankets are extra wide to provide fully insulated fastening edges, and to insure completely filling spaces where fastening may be slightly off center.



Over-Framing Compressibility—Kimsul insulation, in Standard and Commercial thicknesses, may be easily compressed over framing members. Especially valuable for use over framing members.



PROBARD—Non-toxic cover—this glove finish, smooth, plastic film applied, insulates, seals, and protects continuously and is highly tear-resistant and completely a hazard, regardless of the material used for insulation.



Many-Layer, Stitched—Each ply is continuous and separate; all are held together at the density of maximum efficiency by strong stitching. No heat leaking thru spots, no moisture-wicking thick spots in the Kimsul blanket.

Light Weight—1 1/2" thick Kimsul weighs only 12 lbs. per 100 sq. ft. in 4' x 8' sheets.

Moisture Resistant—Kimsul is resistant to water vapor.

Resists Mold, Rot, Vermin—The use of Kimsul in any structure will insure that the material will not rot and will resist mold and vermin.

Acoustical Uses—See page 12.

*** FACTOR**—See page 12.



Any Width, Any Length—Kimsul can be cut exact lengths or more widths. Always moist and fast. Workers do a fast, neat job—with Kimsul.

Ventilation—Kimsul is a non-toxic, non-flammable, non-corrosive material. It does not contain any asbestos or other harmful substances. It is safe for use in all types of construction.

KIMSUL BUILDING INSULATION

THICKNESS	TYPICAL RESIDENTIAL APPLICATION	SQUARE FEET PER 100 LBS. STANDARD WEIGHT			APPROX. NET WEIGHT
		IN. 2 1/2	IN. 2	IN. 1 1/2	
1 1/2"	Commercial, Trade, Apartment, Single-Family Dwelling	150	100	75	150
2"	Commercial, Trade, Apartment, Single-Family Dwelling	100	75	50	100
2 1/2"	Commercial, Trade, Apartment, Single-Family Dwelling	75	50	37	75

KIMSUL VAPOR SEAL PAPER

For details see Application Data Sheet No. 11, published by Kimberly-Clark Corporation, P.O. Box 100, St. Louis, Mo. 63101.

For Your Free Copy, Mail This Coupon Today!



KIMBERLY-CLARK CORPORATION
NEENAH, WISCONSIN
Please send me my free copy of the 1949 Kimsul Technical Book.

I am an architect a builder an engineer

NAME.....

ADDRESS..... AB-549

CITY.....

ZONE..... STATE.....



*T. M. Reg. U. S. & Can. Pat. Off.

19.

Here it is!

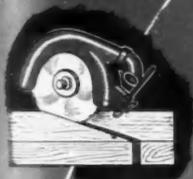
THE NEW,
LOW-COST



De WALT GW
1 H. P. 10" saw

PORTABLE SAW-SHOP

you've waited for!



It's a MITER saw!

This new, low-cost DeWalt is easy to carry from job to job. When you put it to work you actually have a "saw-shop" on the job, because every time you change the cutting tool, you have another machine.



It's a VARIETY saw!

Light in weight (about 200 lbs. net), this DeWalt is nevertheless perfectly balanced. It is equipped with the entirely new and exclusive DeWalt-built, voltage-relay capacitor motor which operates on either 110 or 220 volts—a motor which develops 2½ to 3 times the horsepower it's rated for. It is a motor you can depend on for continuous, trouble-free service.



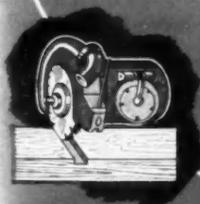
It's a RIP saw!

What's more, this DeWalt can be equipped with legs for inside shop use. With this DeWalt, your men will help you set new standards of performance and quality in building your houses better, faster and at lower costs.



It's a SNAPER!

Order one now for immediate delivery. Write for catalog. DeWalt, Inc., 15 Fountain Avenue, Lancaster, Penna.



It's a DADO machine!



It's a ROUTER!

ALL THESE AND MORE
IN ONE . . . and for
THE PRICE OF ONE!

DeWALT

THE SAW THAT'S FIRST WITH BUILDERS

SAVE TIME...SAVE MONEY...

with **READY-MADE SASH** for
Thermopane



No need to pay extra design and fabrication costs for specially constructed sash for individual projects. You can now get ready-made stock sash for *Thermopane**. It comes to the job complete, either glazed or ready for glazing with *Thermopane*, ready to install in the same way as regular single-glazed sash. In wood or metal:

**DOUBLE-HUNG
CASEMENT
PICTURE WINDOW
AND OTHER COMMON TYPES**

The availability of this sash makes it easier for you to fill the growing demand for *Thermopane* for windows of all types.

More than 60 manufacturers are now making standard sash for *Thermopane* in a wide range of stock sizes. More will be in production soon.

If your supplier does not yet have ready-made sash for *Thermopane*, urge him to stock it. Or write us for a list of sash manufacturers.

®



Thermopane

MADE ONLY BY LIBBEY-OWENS-FORD GLASS COMPANY

1559 Nicholas Building, Toledo 3, Ohio

DON'T C
T
PROFIT
IT
ORDE



Nu
SCREEN
Another s
screen door
can install
finished in fl
finish, fully
to install.



Nu-WAY
Here's an
for screen
sturdy and
push grille
finish is ma
doors. Pac
End caps a
with grille.

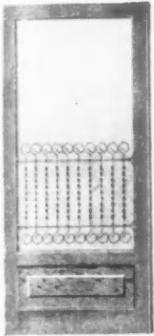


ATTRA
SHE
An attr
shelf bra
Beautiful
satin fini
corrode
uses only
firmly. N
6" stand
shelving.



**DON'T OVERLOOK
THESE
PROFIT-MAKING
ITEMS!**

ORDER NOW!



**Nu-WAY
SCREEN DOOR GRILLE**

Another sturdy, attractive screen door grille that anyone can install in 5 minutes. Furnished in flexible black enamel finish, fully assembled, ready to install.



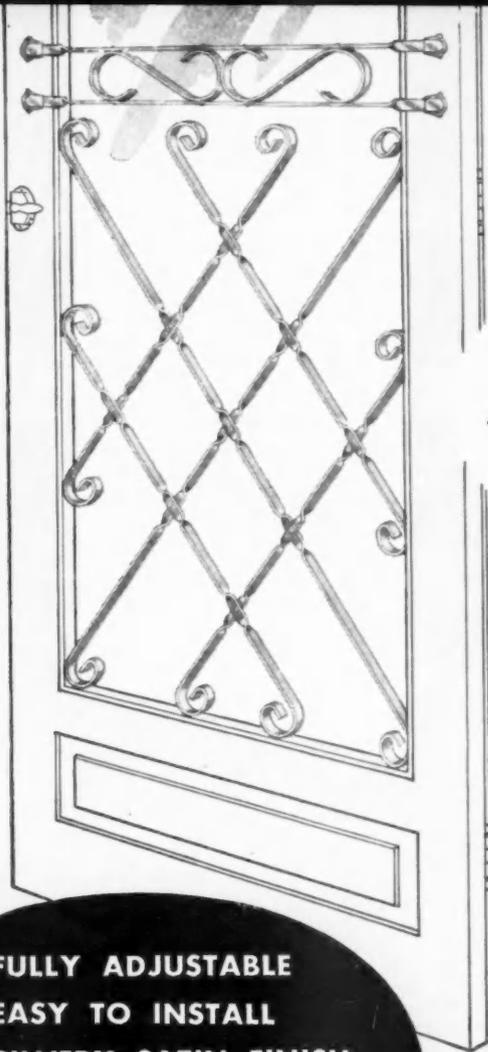
Nu-WAY PUSH GRILLE

Here's an easy companion sale for screen door grilles. This sturdy and very ornamental push grille in silvery satin finish is made for 32" and 36" doors. Packed 12 to carton. End caps and screws furnished with grille.



**ATTRACTIVE Nu-WAY
SHELF BRACKET**

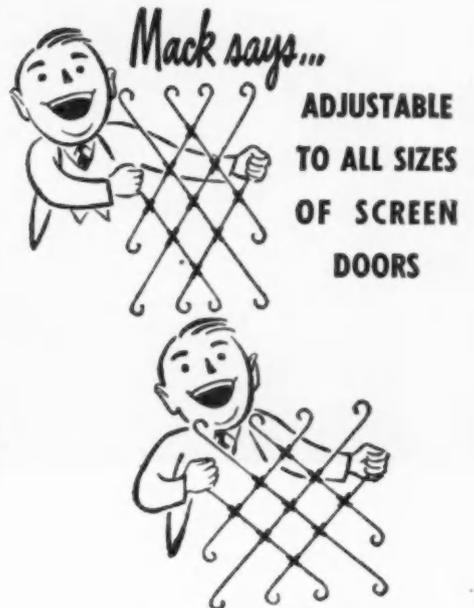
An attractive, yet durable shelf bracket for many uses. Beautiful, permanent silvery satin finish will not rust or corrode. Simple to install—uses only 2 screws—holds shelf firmly. Made for 4", 5" or 6" standard glass or wood shelving.



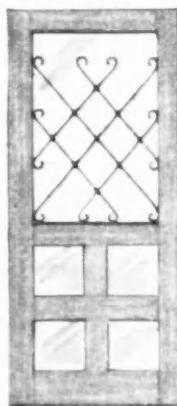
- FULLY ADJUSTABLE
- EASY TO INSTALL
- SILVERY SATIN FINISH
- STURDILY BUILT
- ARTISTIC DESIGN

**KEEP THOSE SCREEN DOOR
GRILLE PROFITS ROLLING
YOUR WAY WITH THE**

**FITS-ALL
ADJUSTABLE SCREEN DOOR
GRILLE**



These beautiful FITS-ALL Screen Door Grilles have a wide sales appeal. Made of Alacrome metal, with a silvery satin finish that enhances the beauty of a door. Will not rust or corrode. Sturdy construction not only protects screen, but acts as a rigid brace two ways. Packed 12 to a carton. Comes complete with screws ready for anyone to install.



**NO. 1 FITS-ALL
STANDARD GRILLE
FOR ALL DOORS**

The No. 1 FITS-ALL Grille will fit nearly any door. Can be adjusted from 18" to 37" between stiles as shown on door at left and door shown at top of ad.



NO. 2. Our No. 2 FITS-ALL is furnished in pairs for the lower panels of screen doors with divided lower sections such as the door at the left. Fits doors from 30" to 36" in width. Packed 12 to a carton.



NO. 3. Our No. 3 FITS-ALL is for the lower section of screen doors with a center crossbar like the one at the right. Fits doors from 30" to 36" in width. Packed 12 to a carton.

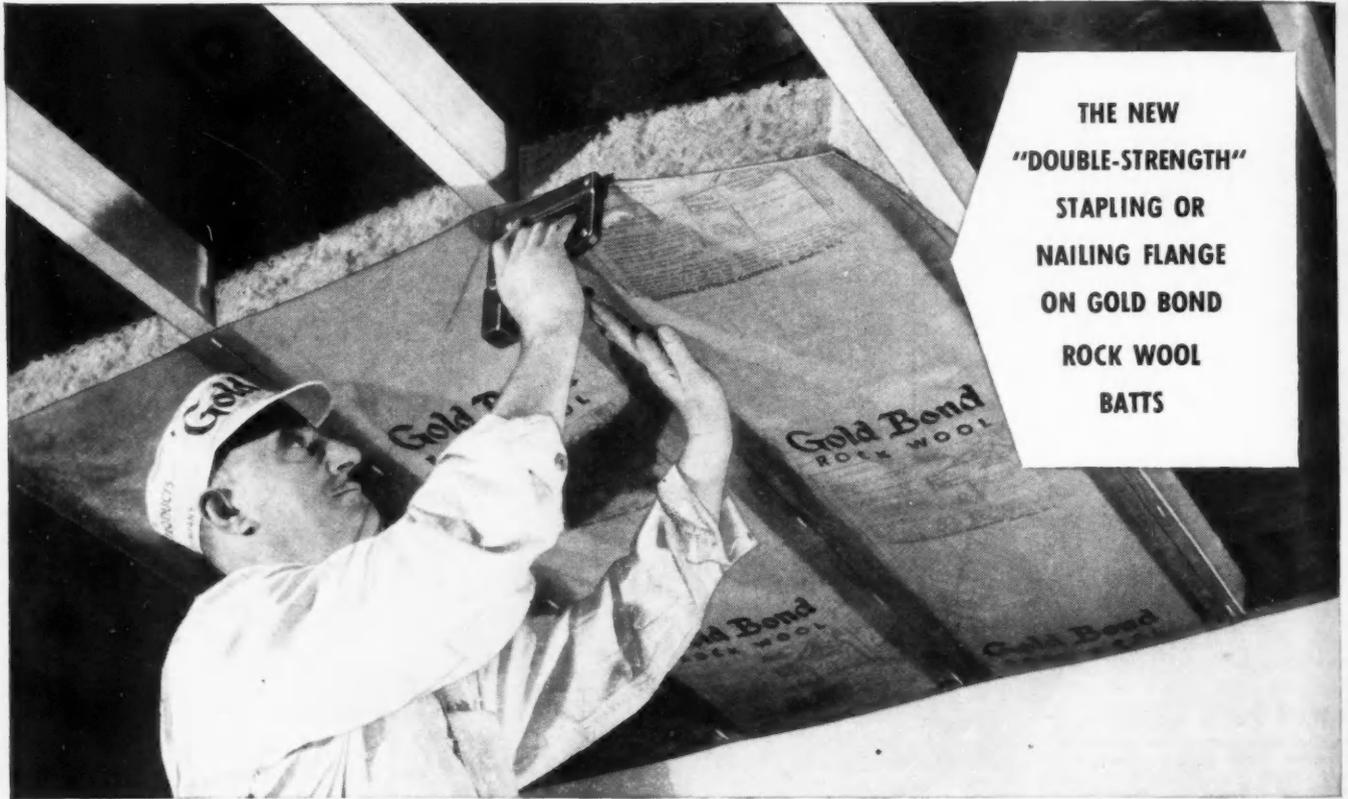
Your order will be shipped same day received!

MACKLANBURG-DUNCAN CO.

OKLAHOMA CITY 1, OKLAHOMA

Announcing

ANOTHER GOLD BOND FIRST!



THE NEW
"DOUBLE-STRENGTH"
STAPLING OR
NAILING FLANGE
ON GOLD BOND
ROCK WOOL
BATTS

WITH the rapid stapler application for insulation batts, the strength of the paper flange became an increasingly important factor—particularly for overhead application. So Gold Bond Research went to work!

Today, Gold Bond Rock Wool Batt's have a *double-thick* paper flange which will support *more* than the weight of the batt in any position. In addition, the flange can not be easily damaged by stapler or hammer during application. So once again, National Gypsum leads the way with another first in better building products!

Give your customers the best! Always use Gold Bond Rock Wool Batt's!

NATIONAL GYPSUM COMPANY
BUFFALO 2, NEW YORK

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

FIREPROOF
as the rock from which it's made!

FULL-THICK
for real firestop and efficiency!

VAPOR BARRIER
is part of the Batt!

You'll build or
remodel better with
Gold Bond

that's
SKIL S
tion v
cuts y
cally
use b
Sever
inche
comp
Ask
Saws

USE ONE HAND OR BOTH!

SKIL Saw

is easier to operate in any position!



Quick, one-hand operation on ordinary cuts.



Safe, sure control using both hands on all difficult cuts.

With SKIL Saw you make any cut in the way that's most convenient for you. On all ordinary cuts, SKIL Saw's perfect balance assures easy, one-hand operation with the rear handle. On overhead or other unusual cuts you get the safe, sure control of SKIL Saw's scientifically placed *extra* handle.

With one hand or both . . . SKIL Saw is easier to use because it's lighter, more compact, more powerful. Seven fast-cutting models with capacities up to 4 3/8 inches in wood. Ideal, too, for cutting metals, tile and compositions; for scoring stone, marble and concrete. Ask your SKIL Tool Distributor to demonstrate SKIL Saws today.

SKIL Tools

ELECTRIC
PNEUMATIC

TRADE-MARK

SKIL TOOLS ARE MADE ONLY BY SKILSAW, INC.

SKILSAW, INC.

3033 Elston Ave., Chicago 30, Ill.

Factory Branches in Principal Cities

In Canada: SKILTOOLS, LTD., 66 Portland St., Toronto, Ont.

THE MASON'S TROWEL TELLS HIM

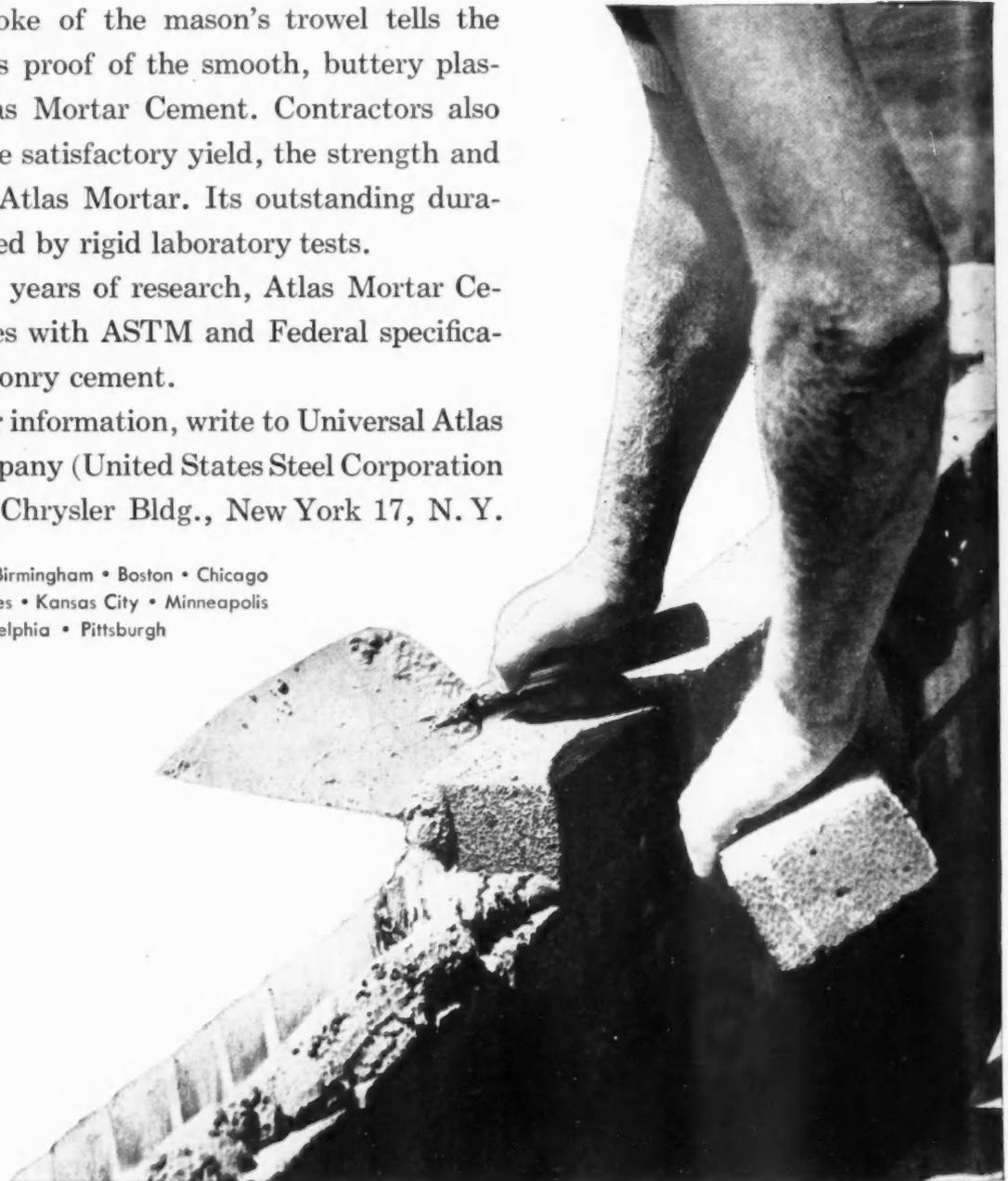
ATLAS MORTAR CEMENT IS SMOOTH

The first stroke of the mason's trowel tells the story . . . gives proof of the smooth, buttery plasticity of Atlas Mortar Cement. Contractors also appreciate the satisfactory yield, the strength and fine color of Atlas Mortar. Its outstanding durability is proved by rigid laboratory tests.

Backed by years of research, Atlas Mortar Cement complies with ASTM and Federal specifications for masonry cement.

For further information, write to Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Bldg., New York 17, N. Y.

OFFICES: Albany • Birmingham • Boston • Chicago
Dayton • Des Moines • Kansas City • Minneapolis
New York • Philadelphia • Pittsburgh
St. Louis • Waco



AB-MC-23

SKILLED HANDS PREFER

ATLAS MORTAR CEMENT

THE SATIN OF MASONRY CEMENTS



"THE THEATRE GUILD ON THE AIR" — Sponsored by U. S. Steel Subsidiaries — Sunday Evenings — ABC Network

M

AGAIN!



TIMKEN
Silent Automatic
 is **FIRST** with the **BEST!**
 Revolutionary new
KITCHEN-TYPE
OIL BOILER

—supplies automatic heat
 and hot water for
 four- and five-room homes
 and is so compact and quiet
 it may be installed
IN THE KITCHEN!

Here's the most important small-home heating news in years—the new Timken Silent Automatic Kitchen-Type Oil Boiler!

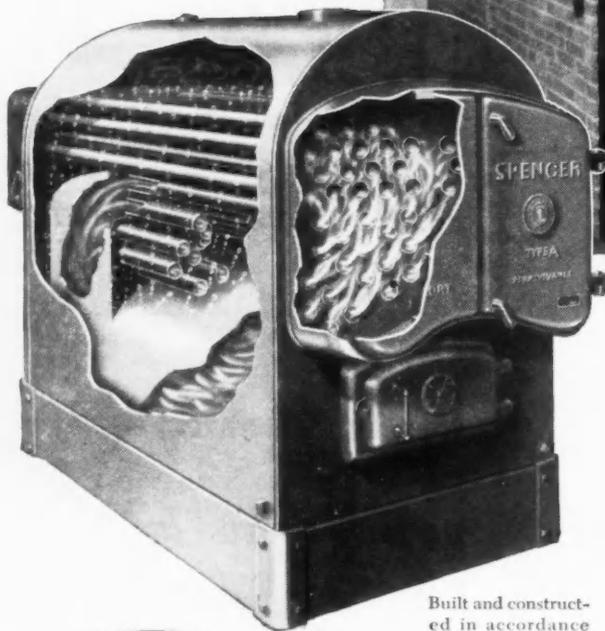
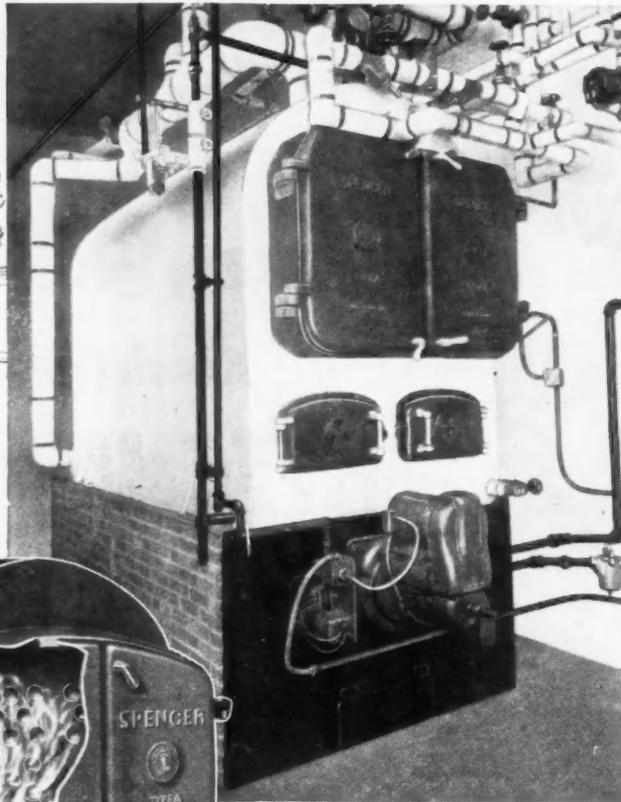
Finished in gleaming white—for kitchen installation—this extraordinary unit combines a house-heating boiler, fired by the famous Wall-Flame Oil Burner, an instantaneous water heater, an expansion tank, a motorized circulating pump, a tempering valve and complete automatic controls. It is completely enclosed in a beautiful counter-high cabinet topped by a stainless steel work surface. It covers a floor area of only 25 x 30 inches.

Think of the sales appeal this unique factory-assembled heating package will give your new small homes! Best of all, it's priced to help you cut costs and offer *better houses at lower costs*. Here's proof again that it pays to install Timken Silent Automatic!

Write today for complete information.

TIMKEN
Silent Automatic
HEAT
 OIL • GAS • COAL
 TIMKEN SILENT AUTOMATIC DIVISION
 The Timken-Detroit Axle Company • Jackson, Michigan





Here's one of the four efficient Spencer "A" Steel Heating Boilers supplying the fifteen buildings of the modern River Edge Apartments, River Edge, New Jersey. *Owner and general contractor:* Ercole Tamburelli. *Architect:* Edwin Gerber. *Heating Contractor:* James V. Naimo.

SPECIFY SPENCER FOR— all-weather comfort and security

What a grand and glorious feeling when you put the finishing touches on your new building by seeing that plans call for the finest in heating facilities. With Spencer "A" Steel Heating Boilers, you can assure clients of clean, effortless operation at low cost all year round.

Precision engineering and long experience have developed many outstanding features in Spencer "A" Steel Heating Boilers. To name just a few—

- Available in a complete range of capacities (from 1,800 to 42,500 square feet, steam)
- Patented Spencer service—water heating method
- New frame design, with heavy-duty, precision-ground doors
- Tube position staggered, to speed water circulation
- Larger sizes can be cut in half for traversing narrow openings
- Specially designed interchangeable grates

Built and constructed in accordance with ASME requirements. Fully approved by Steel Boiler Institute.



THE SPENCER MARK OF ENGINEERING SKILL

All Spencer Heaters are High Standard Avco Products—

- Backed by over fifty years of heating experience
- Manufactured under ASME, IBR, and SBI codes
- Precision-engineered—to meet rated specifications
- Individually tested and inspected
- Installed only by the heating trade
- Clean—Quiet—Economical—Effortless—Safe

THERE IS A SPENCER FOR EVERY BUILDING . . . FOR EVERY FUEL

COMMERCIAL SERIES:

"A" (steel)—for industry, schools, apartments
 "L-2", "L-3" (cast iron, magazine feed)—for large homes, churches, apartments

RESIDENTIAL SERIES:

"C" (steel) and "21" (all-purpose, cast iron)—for homes, small buildings
 "F" (cast iron, magazine feed) and "R" (steel)—for small homes



WILLIAMSPORT, PENNSYLVANIA



"Your mother and I couldn't have built like this"

WE BUILT about as well as we could... used the best materials that were available in those days but our old house just can't compare with what you and Steve are going to have here. Just take that Armstrong's Temlok. We had to use plain wood sheathing. There wasn't any choice in those days. Your house is stronger and it'll be a lot easier to heat. There's sure been a lot of progress in building methods in the last few years.

Yes, Armstrong's Temlok Sheathing represents a big advancement toward building better homes. Yes, it usually costs less than ordinary wood. In addition, Temlok saves a lot of money on labor costs. The big, lightweight fiberboard sheets are quickly cut and nailed in place. There's almost no waste of material.

Temlok Sheathing is a strong building material and a good insulation, too. It's made of millions of wood fibers, all tightly locked together to form a rigid board. When it's nailed to the framework of a house, it braces the whole structure. Keeps it firm and rigid for the lifetime of the house. Each tough fiber is encased in asphalt that helps bond it to its neighbors and gives Temlok unusually high resistance to moisture. Less moisture means more comfort inside the house and longer life for the walls.

Expensive heat can't leak away through walls of Temlok. Tiny air spaces between its fibers act as a barrier that won't let heat pass into or out of the house. That's why Temlok helps to cut your fuel bills every winter and helps to keep the house more comfortable in summer.

Before you build, be sure to ask your lumber dealer for the details about Armstrong's Temlok Sheathing. The material that adds extra strength and insulation, too.

Send for Free Booklet: "How to Build a More Comfortable New Home" It's full of good ideas. Armstrong Cork Company, Building Materials Division—4906 Erie St., Lancaster, Pennsylvania.

ARMSTRONG'S TEMLOK
One of the building materials made by the makers of Armstrong's Libbyon

A name with a future

PEOPLE have confidence in the builder or lumber dealer who handles products they know. This confidence makes a whole house, or a bill of materials, easier to sell. Armstrong's national advertising has helped sell Temlok® Sheathing and homes built with it. These full-color advertisements go regularly to more than 5,000,000 readers of The American Home and Better Homes and Gardens. They explain how Temlok makes homes strong and comfortable.

Most of these readers know very little about any kind of sheathing. Many of them don't even know what part it plays in home construction. But when

they read that Temlok Sheathing provides both strength and insulation, in one economical material, they want to know more about it. Sooner or later most of these people will be looking for a builder with the kind of home they want to buy.

That's why, last month, we increased the size of these Temlok Sheathing ads to full pages. Now, more than ever, a home built with Temlok will be easier to sell. For full details and samples of Temlok Sheathing, see your Armstrong lumber dealer. Or write Armstrong Cork Company, 1605 Ross St., Lancaster, Pennsylvania.



Armstrong's Temlok



They read
House Beautiful
 because
 they want the
 finest
 building
 materials
 and they get
 the finest because
 they read

House Beautiful

The magazine that
 creates more Sales Action

House Beautiful Retains Advertising Leadership

Active Home Market Continues to Produce Outstanding Results

Publication of total advertising figures for all magazines during 1948 revealed that, for the sixth consecutive year, *House Beautiful* again led all magazines in advertising space devoted to home furnishings. The figures for the eight leading magazines as reported by PIB are:

House Beautiful	557.3 pages
House & Garden	440.3 "
Better Homes & Gardens	276.2 "
Ladies' Home Journal	232.8 "
Life	203.7 "
Good Housekeeping	188.9 "
American Home	141.2 "
Saturday Evening Post	97.0 "

■ This continued leadership endorses the fact that the *active* market represented by *House Beautiful* is a primary source of sales for manufacturers of home furnishings and equipment. The unique editorial formula of *House Beautiful* is aimed directly at families who have a desire to improve their living conditions. The function of *House Beautiful* is to fan this urge into action at the point-of-sale for all types of home merchandise. Its ability to create this Sales Action is also borne out by the advertising leadership *House Beautiful* enjoys in subclassifications of home furnishings.

Here is the record for 1948:

	Pages 1948	Lead Over 2nd Mag.
China, Glass & Pottery	65.2	14.1%
Silverware & Metal- ware	62.7	27.2%
Furniture	184.9	17.9%
Floor Coverings	72.3	2.6%
Carpets & Rugs	56.3	17.3%
Draperies, Curtains & Upholstery Fabrics	70.7	34.8%
Beddings & Linens	75.2	16.3%



DON'T LET YOUR WIFE READ HOUSE BEAUTIFUL unless you want her to buy a house



He reads
House Beautiful
 because
 he builds
 houses
 and he
 builds more houses
 because he reads

House Beautiful

The magazine that
 sells both sides of the counter

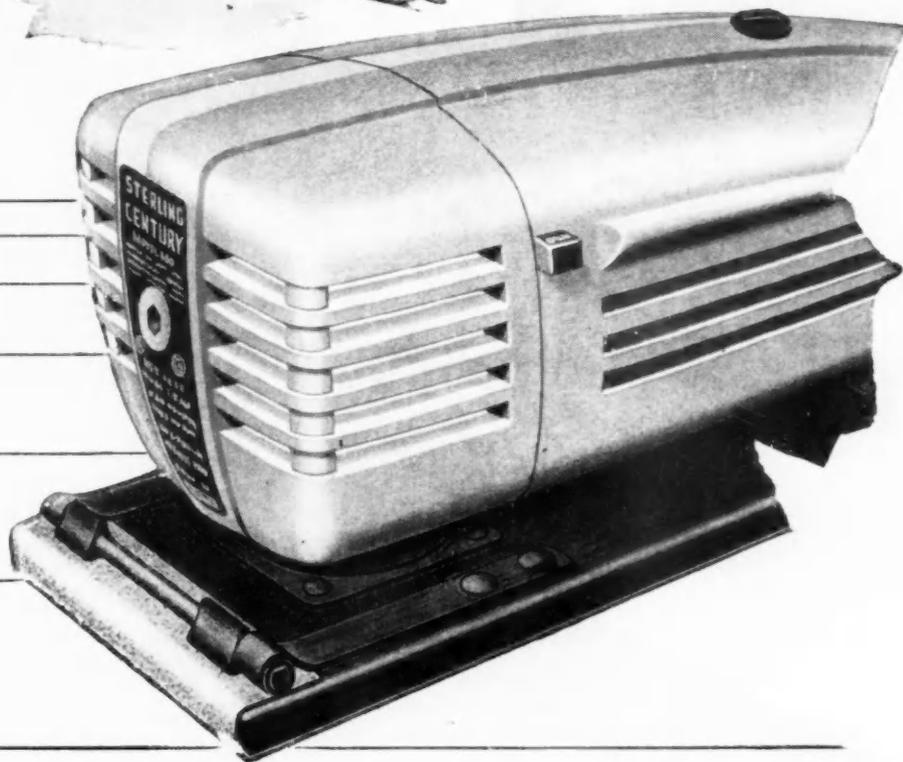


"SPEED, QUALITY, DEPENDABLE SERVICE"

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.



Sand cabinets, dry wall construction, window and door trim—all types of building work—with the new low cost Sterling Century. Weighing only 4¾ pounds it permits easy, one hand operation for vertical or horizontal sanding. Only 4 inches high, it get's into those hard-to-reach spots. A powerful, vibrationless tool, built for long, continuous use . . . Sterling performance and quality at low cost. Send coupon for new Century catalog now.

The Century's pad speed is 5000 r.p.m.—plenty of power to assure fastest, most uniform sanding. Pad quickly loads with 1/2 of standard abrasive sheet.



STERLING TOOL PRODUCTS CO.

1334-A Milwaukee Avenue, Chicago 22, Illinois
Canada: Terminal Warehouse Bldg., Dept. 10, Toronto, I

Send me the new Century catalog.

FIRM _____

ATTENTION _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

Sterling . . . Manufacturers of the Century and Model 1000 Portable Electric Sanders and the Speed-Blac Portable Air-Driven Sander



Builder Francis J. Schroedel Says...

**"HOTPOINT All-Electric Kitchens
are my best insurance against 'for rent' signs!"**



FRANCIS J. SCHROEDEL
Milwaukee, Wisconsin

"SURE, tenants are easy to get today," says Francis J. Schroedel, prominent Milwaukee, Wisconsin builder and apartment house owner. "But will they be tomorrow?"

TO ASSURE FUTURE DEMAND for his beautiful new Estabrook Estates, Mr. Schroedel is equipping each of its 200 apartments with a complete Hotpoint All-Electric Kitchen. For average rents of approximately \$100 a month, future residents will enjoy the advantages of a Hotpoint Automatic Electric Dishwasher, Hotpoint Electric Disposall® Unit, full-size

Hotpoint Automatic Range, brilliant Hotpoint Refrigerator and matching Hotpoint wall and base cabinets.

BUILDERS AND ARCHITECTS interested in making new homes most attractive to today's value-wise buyers are likewise taking advantage of the extra sales appeal of Hotpoint All-Electric Kitchens. Why not investigate this profit-making opportunity now? See your Hotpoint distributor or dealer... or write to Hotpoint Inc. (A General Electric Affiliate) 5600 West Taylor Street, Chicago 44, Illinois.



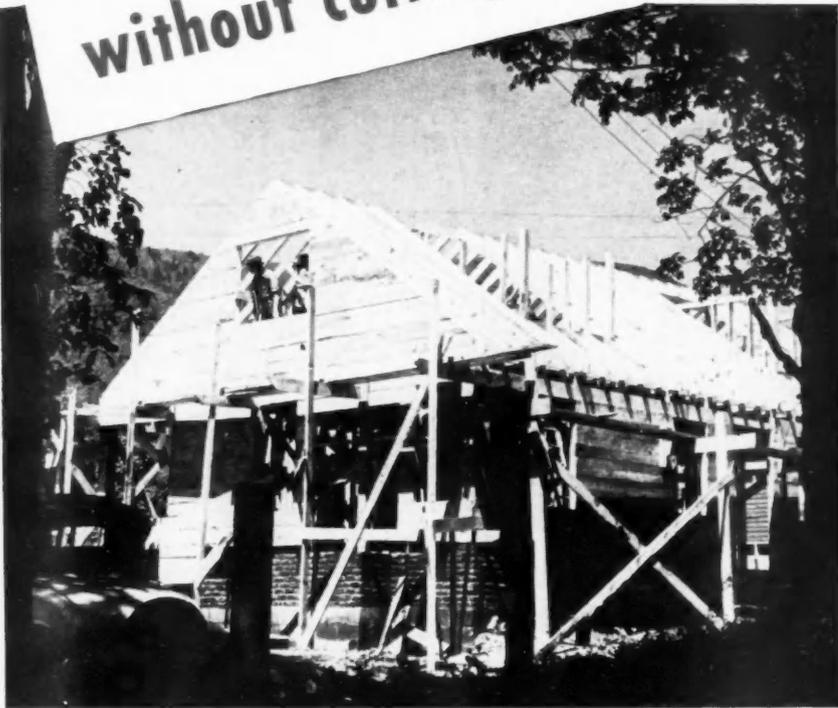
Everybody's Pointing To

Hotpoint

**PIONEER OF THE
ALL-ELECTRIC KITCHEN**

RANGES • REFRIGERATORS • WATER HEATERS • FREEZERS • DISHWASHERS • DISPOSALLS® • CLOTHES WASHERS • DRYERS • IRONERS • CABINETS & SINKS

CUTTING COSTS without cutting corners!



Now, there's a way to help stretch precious working hours and slash your wiring costs, without sacrificing quality—General Electric PVX® nonmetallic sheathed cable.

Look at these features and you can easily see why PVX has fast become standard almost everywhere for open and concealed work. More and more cost-conscious builders are discovering that General Electric PVX goes in fast—gives a neat, dependable job:

SPACE-SAVING—Easy to handle—requires small holes and little installation space.

LIGHTWEIGHT—Makes handling easy during installation.

EASY TO STRIP—Crushed-paper armor on individual conductors is easy to remove—thermoplastic insulation strips freely, leaves a clean conductor for connection.

To get the rest of the facts on PVX and the other products in the General Electric wire and cable line, send for a free copy of the 42-page booklet *Building Wires, Cables, and Cords for every purpose*. Address Section W21-52, Construction Materials Department, General Electric Company, Bridgeport 2, Connecticut.



GENERAL  **ELECTRIC**

AROUND THE CIRCUIT WITH YOUR **G-E** MERCHANDISE DISTRIBUTOR



LIGHTWEIGHT BX® armored cable, with bonding strip in sizes 12 and 14, speeds construction because of weight reduction and increased ease of installation. These

two new features added to the General Electric BX armored cable line maintain the standard for construction requiring this type of wiring protection.

EASY INSTALLATION

is one feature of Type SE-Style U service entrance cable. It can be installed directly on the outside of a building without conduit. You can even paint the flame-retardant, moisture-resistant cotton braid if you want to. Another convenience of this high-quality product is that, on short spans, you can run it from the pole right through to the meter equipment.



SUPER PVX nonmetallic-sheathed cable is the new G-E development that's creating a stir in the wiring field. The good-looking smooth, brown or ivory finish—to harmonize with surface wiring devices—

makes it right for exposed wiring anywhere. Its tough, thermoplastic sheath and rotproof thermoplastic insulation make it a natural for fighting fumes and moisture in barns and other troublesome locations. Ask your General Electric distributor about SUPER PVX.

THE FULL LINE of

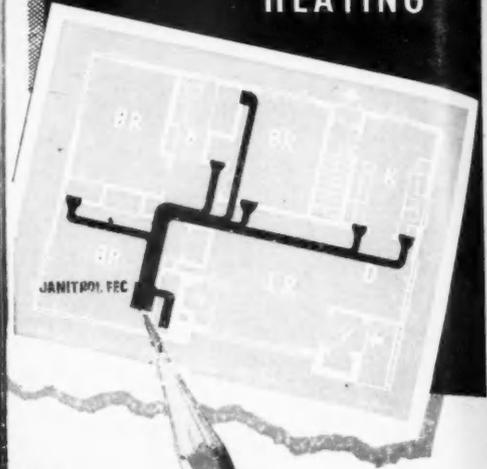
General Electric wires, cords, and cables gives you a wide range of materials to choose from. For information on any part of the line, why not contact your General Electric Construction Materials distributor? He'll be glad to straighten out your supply problems, or simply give you how-to-do-it wiring facts.



These plans call for
**WINTER AIR
CONDITIONING**



These plans call for
**RADIANT
HEATING**



**BOTH CALL FOR THE
NEW, IMPROVED, GAS-FIRED**

Janitrol

If your clients and prospects prefer winter air conditioning, you can provide them with a new kind of indoor comfort. For with Janitrol there need be no "cold intervals" as these new models can be installed for C-A-C operation and Time-Modulation control. This means constant, unvarying floor to ceiling temperatures more closely controlled than ever possible before. Yet, this great heating improvement costs no more to buy . . . no more to operate.

For certain types of house plans the features of radiant panel heating have many advantages. There are also many advantages to the use of Janitrol warm air heat for radiant systems. Installation can be simple . . . its practicability proved in hundreds of homes. Floor or ceilings

are used for radiation . . . there's nothing to get out-of-order in the heat distributing system.

Whether you use Janitrol Gas-Fired heating for winter air conditioning or for radiant panel heating you add more sales appeal to your homes. Prospects are well acquainted with the Janitrol name and the high quality it stands for . . . they will respect your choice of heating and will assume that other equipment in your house is also thoroughly dependable.

This finer winter comfort which you can readily merchandise to great advantage is only available with Janitrol . . . it costs no more than ordinary heating equipment . . . so get *all* the facts . . . see your local Janitrol dealer or write us today.

SURFACE COMBUSTION CORPORATION • TOLEDO 1, OHIO

Janitrol Winter Air Conditioners, Gravity Furnaces, Conversion Furnaces, Unit Heaters, Boilers and Triple Service Systems



for top *efficiency* and cleanliness
 walls and floors are . . .



This bottling plant—like countless other projects—has a competitive edge today, thanks to those sparkling walls and floor of genuine clay tile.

Walls like this keep their fresh, spic-and-span appearance for a lifetime . . . can be cleaned and kept clean as easily as a china dish. Colors won't fade or darken because they are fired in.

And there's never a worry about water on a clay tile floor—it rolls off without leaving stubborn, streaky blemishes. Soaps,

acids and greases leave clay tile's finish unimpaired.

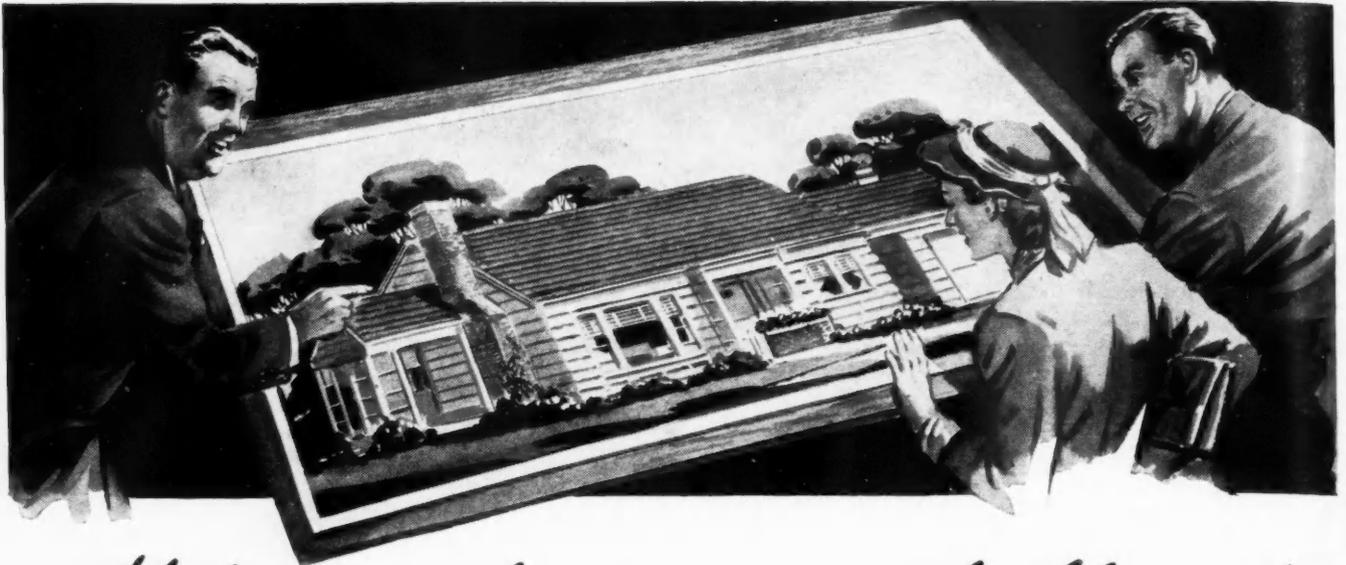
Best of all, clay tile eliminates painting, polishing and refinishing. With no recurring charges for maintenance or replacement, clay tile means long-range economy, lower overall costs.

For specific information regarding available types, sizes and colors, see *Sweets Architectural or A-E-C File*. THE TILE COUNCIL OF AMERICA, Room 3401: 10 East 40th Street, New York 16, New York. Room 433: 727 West Seventh Street, Los Angeles, California.

The Tile Council of America was formed in January, 1945 to provide a central source of information about floor and wall tile, and to sponsor research and development projects designed to increase the usefulness of tile in all types of private and public building.

PARTICIPATING COMPANIES: American Encaustic Tiling Co. • Architectural Tiling Co., Inc. • Atlantic Tile Manufacturing Co. • B. Mifflin Hood Co. • Cambridge Tile Manufacturing Co. • Carlyle Tile Co. • General Tile Corp. • Gladding, McBean & Co. • Mosaic Tile Co. • Murray Tile Co., Inc. • National Tile & Manufacturing Co. • Olean Tile Co. • Pacific Clay Products • Pacific Tile and Porcelain Co. • Pomona Tile Manufacturing Co. • Robertson Manufacturing Co. • Sparta Ceramic Co. • Summitville Face Brick Co. • United States Quarry Tile Co.

THE MODERN STYLE IS CLAY TILE



Make your homes more saleable with **CREO-DIPT Zephyr RED CEDAR Processed SHAKES**

No other siding material does as much as CREO-DIPT red cedar Processed Shakes to make new homes more saleable. They provide an interesting color variation between roof, sides and trim—make every home in a new row of houses look different.

Home owners like the rustic, hand-split look. No other siding material can duplicate the beauty and interest

imparted by their long exposure and heavy butt lines. And, when they are stained, as the light hits their processed grooves, it produces a pleasing gradation of different shades.

Unlike substitutes and imitations that deteriorate, crack, chip and fade, CREO-DIPT Zephyr Shakes can be stained every five or six years and will outlast the house they cover.

DOUBLE WALL METHOD provides greater INSULATION and an effective WINDBREAK



Double Wall method of Applying CREO-DIPT Zephyr Shakes over an underwall of special insulating board.

Although CREO-DIPT Zephyr Processed Shakes can be applied by the Double Coursing Method, i.e., over an undercoursing of low grade shingles, we recommend the DOUBLE WALL METHOD, i.e., applying them over an underwall of Zephyr asphalt-treated, weather-resisting insulating board. The Double Wall Method saves labor—usually costs no more than double coursing and, on new homes, over wood sheathing, will save so much in fuel and re-painting costs that it is *much more economical than clapboard per years of use*. Furthermore, the dense, unbroken surface of the insulating board prevents the infiltration of air—is an effective windbreak.

ANY CARPENTER CAN APPLY THEM

No cutting, fitting or painting on the job. Butts and edges are 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. A template inserted in every third carton of shakes makes it easy to get tight, clean corners.



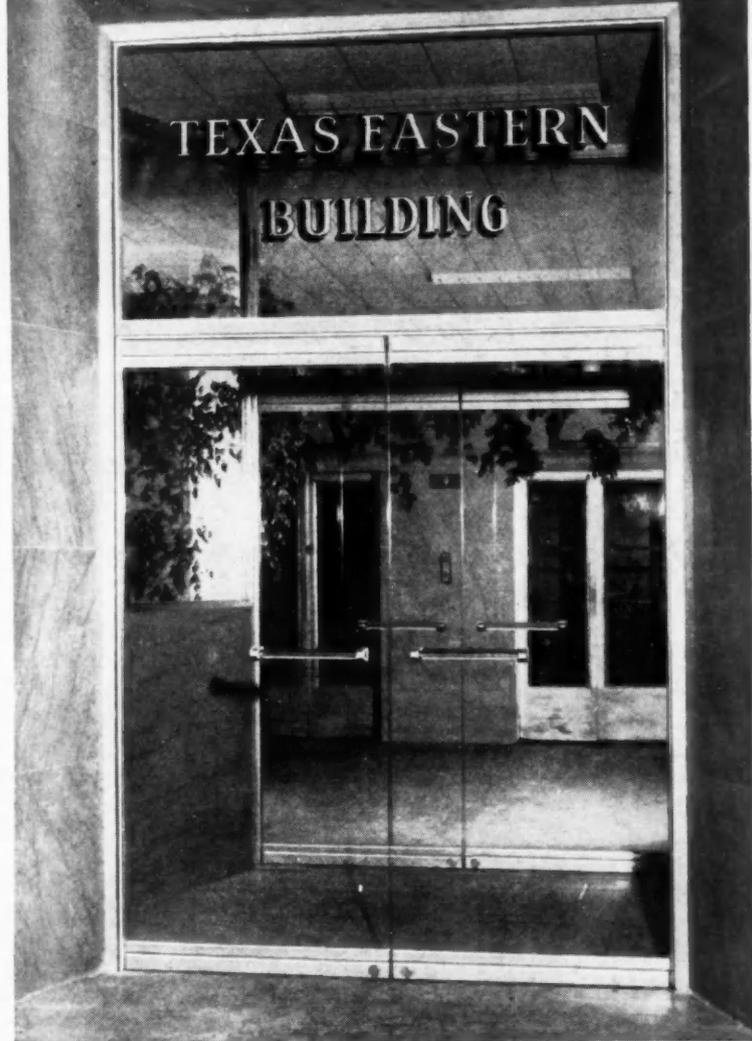
100 SQUARE FEET UNITS

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.

Let your CREO-DIPT dealer show you the attractive colors and explain how easy it is to build more saleable homes with CREO-DIPT Red Cedar Processed Shakes.

CREO-DIPT COMPANY, INC. • NORTH TONAWANDA, NEW YORK

EASY TO ORDER— EASY TO INSTALL



Architects: Neild & Somdal, Shreveport, La.

... that's why builders favor "Pittsburgh's" factory-assembled door-frame

UNTIRING research into ways and means of helping to solve building problems actually encountered in the field was responsible for the creation of this revolutionary prefabricated door-frame assembly. Its ease of ordering and installing — as well as its uniform excellence of performance in service — appeal to every builder. All you do is indicate the name—"Herculite Door-Frame Assembly"—and provide the style number and size. It reaches the job completely assembled and with everything needed for its immediate installation, including the famous Pittco Checking Floor Hinge, moldings for transom glass, supports for sidelights, strikes for locks, sockets for bolts.

"Pittsburgh's" Herculite Door-Frame Assembly is a handsome, simply designed and sturdily constructed unit. The frame is factory-built of special shapes and of heavy extruded aluminum, heavily reinforced with structural steel. It's built to high quality standards by expert craftsmen who use special checking gauges to make sure that all dimensions are absolutely accurate.

There's much more to the story. So why not fill in and return the coupon for our interesting and informative booklet? It's free and you're under no obligation. Do it now.

HERCULITE DOOR-FRAME ASSEMBLY



This Pittco Checking Floor Hinge is an engineering triumph. Only 6 3/4" x 6 3/4", it provides positive door speed control, separate checking control, built-in hold-open feature. It's sealed in oil for life. Case and cover are drop-forged. Main working parts are hardened and ground tool steel. Bearings are anti-friction precision-ground.

Handsome, rugged construction is indicated by this sectional view. Note extra-heavy extruded aluminum, highly polished and anodized; also steel channel and tie rod reinforcement.



Pittsburgh Plate Glass Company
2159-9 Grant Building, Pittsburgh 19, Pa.
Without obligation on my part, please send me a FREE copy of your booklet on "Pittsburgh's" factory-built Herculite Door-Frame Assembly.

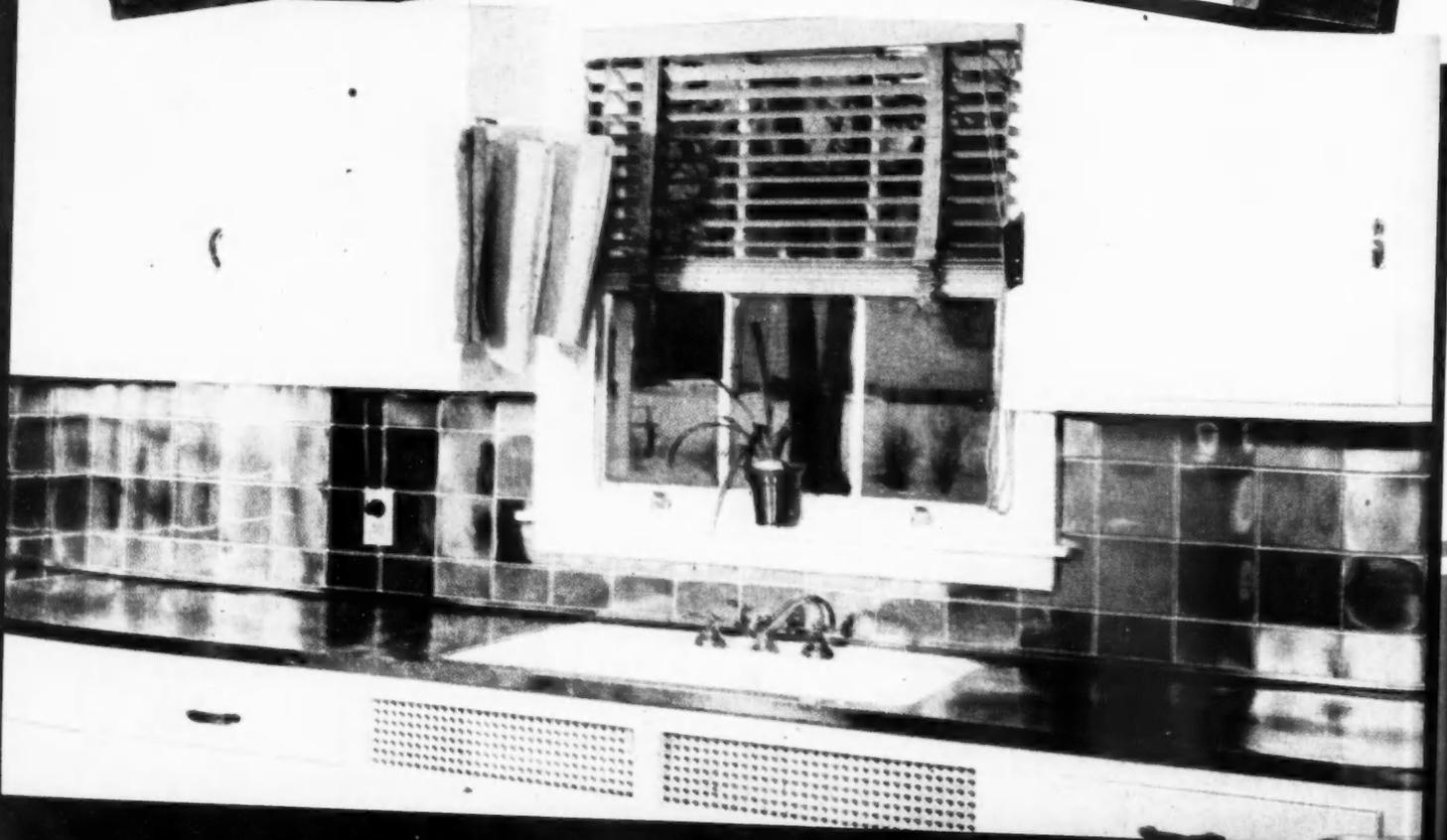
Name.....
Address.....
City..... State.....



PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS

PITTSBURGH PLATE GLASS COMPANY

FOR BETTER WALLS OF EVERLASTING BEAUTY CONSIDER
STAINLESS STEEL



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MILWAUKEE
ELES, CAL

NSID

Wall TILE

BRIGHT OR SATIN FINISH . . . OR BOTH



STAINLESS — for Service and Long Life

Stainless Steel Tile has a natural finish that will withstand the hardest usage. It will never rust, discolor or stain—in fact, will outlive the house itself.

STAINLESS — for Beauty and Smarter Styling

Stainless Steel has a clean, fresh inherent beauty obtainable in no other metal. It reflects soft contrasting colors in the room—imparting a vitality which no other type wall covering can duplicate.

STAINLESS — for Design Flexibility

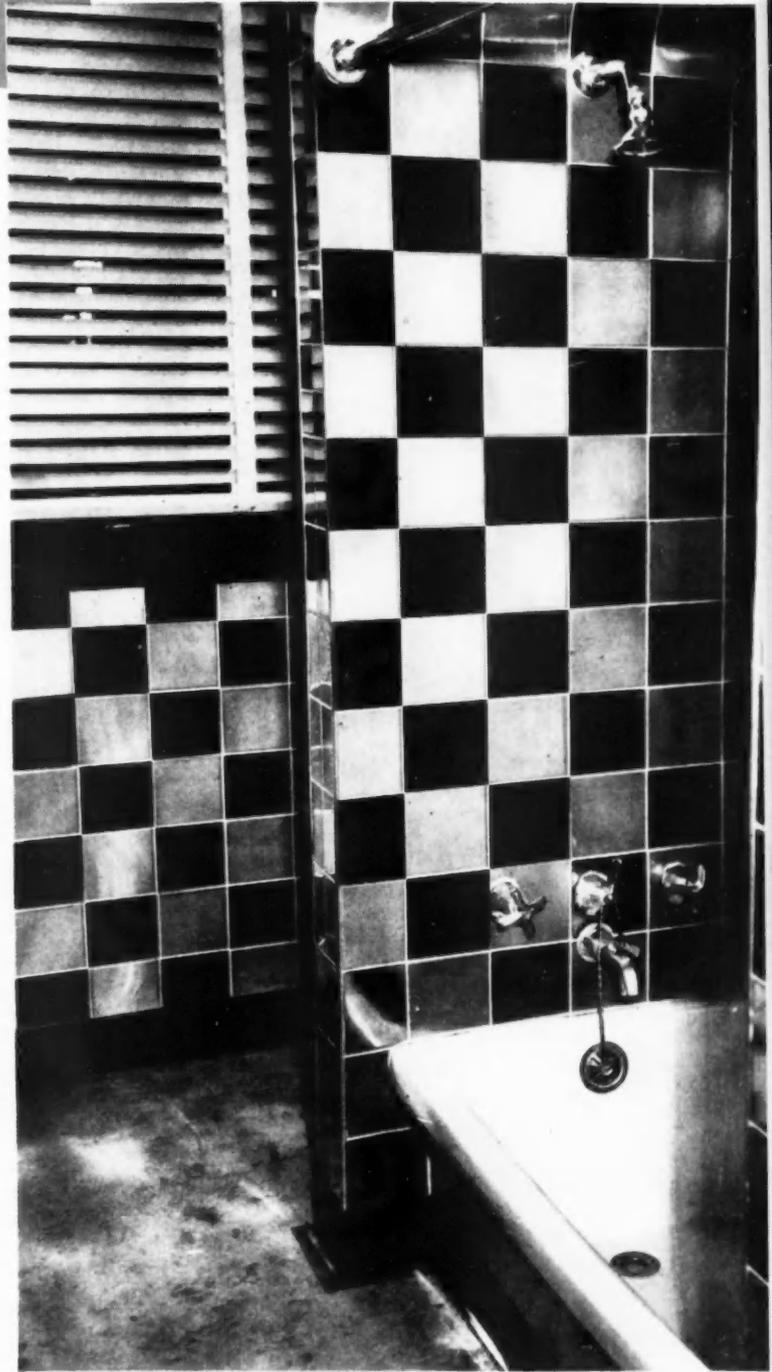
Stainless Steel Tile of standard sizes and shapes can be used in either the bright or satin finish or in combination with any color metal tile.

STAINLESS — for Easier Cleaning

Stainless Steel Tile is at its best behind ranges or over the sink where frequent cleanings are necessary. A damp cloth will remove the most stubborn grease and grime from the smooth, non-porous surface.

STAINLESS — for Any Installation

Kitchens, baths, game rooms, theaters, cocktail lounges, restaurants, tea rooms, yacht or boat galleys or interiors, club rooms, gas stations, creameries, hotel lobbies, bakeries, hospitals, soda or snack bars, beauty shops, etc.



SHARON STEEL CORPORATION

Sharon, Pennsylvania

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.

SHARON STEEL CORPORATION
DEPT. AB-549, SHARON, PA.

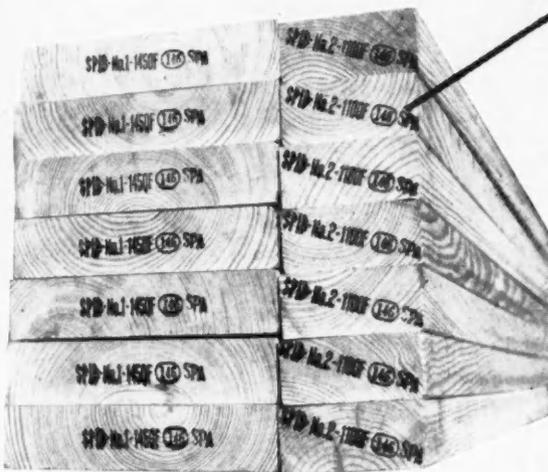
Please send further information on Sharon Stainless Steel Tile to:

NAME _____
COMPANY _____
STREET _____
CITY _____ ZONE _____ STATE _____

for Dimension You Can Depend on
Buy Trade-marked
ARKANSAS SOFT PINE

Here's what you get:

- Big-Mill Manufacture — Uniform Sizes
- SPIB Revised Grades — New Stress Values
- Kiln-Dried Stock — Correct Moisture Content
- No Shrinking — No Swelling — Stays Put
- Soft Texture — Works Fast
- Holds Nails — Doesn't Split
- 50 Year Record of Better Value



WHERE TO GET IT

Trade-marked Arkansas Soft Pine is produced exclusively by big modern mills. It is well manufactured to standard sizes, scientifically kiln dried and seasoned to specified moisture content. Available to you at local lumber dealers and planing mills east of the Rockies. For complete information, data and how to specify, write for your copy of this useful handbook.

Write for
 Your
 FREE COPY



ARKANSAS SOFT PINE BUREAU 549 BOYLE BUILDING
 LITTLE ROCK, ARKANSAS

Chicago's most modern apartments
choose the only
refrigerator that—

Stays Silent
Lasts Longer!



For example, in every one of the 82 apartments in this modern building now being completed at 4900 Marine Drive, tenants will enjoy the silent, efficient service of new Servel Gas Refrigerators in all-gas kitchens. Frank A. McNally & Associates are the architects and Samuels Construction Co., the builders.

**Tenants enjoy noiseless, worry-free service
year after year— Owners benefit
from low operating and maintenance costs**

In Chicago there's a trend among smart apartments to the Gas Refrigerator. And that's true of the trend all over the country. As residential building continues to boom, Servel preference among both tenants and owners increases.

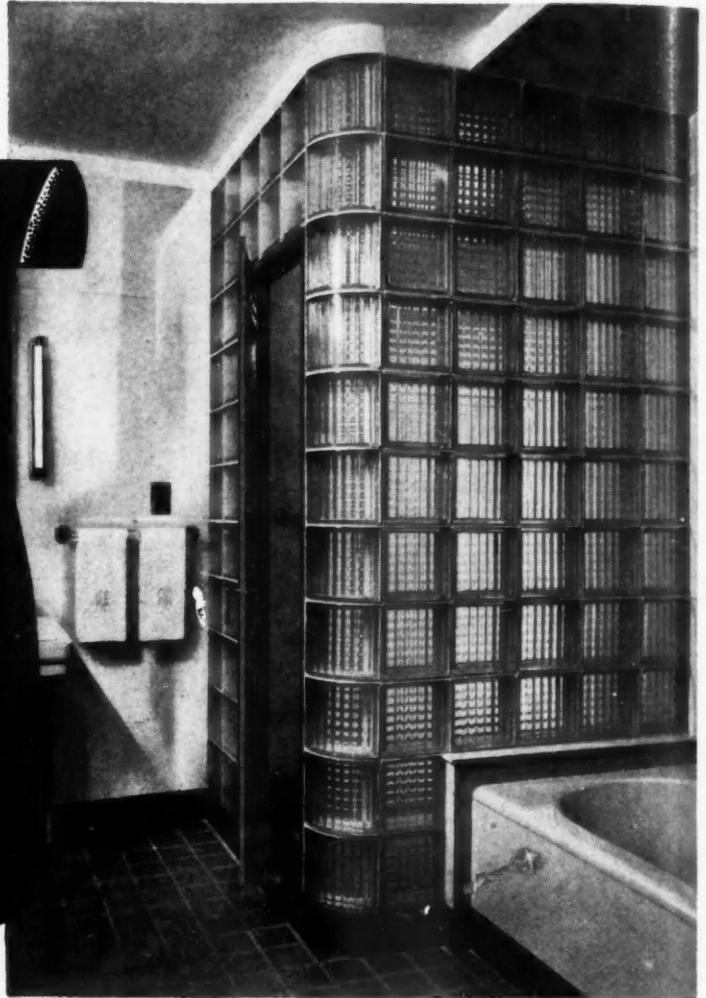
It's easy to understand why. Servel simply *offers* more. Not only does Servel have a cabinet full of modern conveniences like other refrigerators, but *different* from all others, Servel offers the operating advantages of a freezing system without moving parts. There's no machinery to wear, cause noise, and lose efficiency . . . none to break down and need repair. A tiny gas flame does all the work. Thus, operating and maintenance costs are held to a minimum, and years of service are added.

Every up-to-date convenience. Of course, tenants are mostly interested in what a refrigerator has to offer once the door is opened. And here Servel offers plenty of features . . . including a big frozen food compartment, large ice cube trays, two roomy dew-action fresheners, and adjustable Plastic-Coated shelves. Servel is made in four sizes—ranging from 4 to 8 cu. ft. capacities. For complete information, see your Sweets' Catalog . . . or write to Servel, Inc., Evansville 20, Ind.



STAYS SILENT . . . LASTS LONGER
Servel
The GAS Refrigerator

A SMART AND CONVENIENT shower stall like this does a lot to impress prospective home buyers. It spells quality.



How PC Glass Blocks help you put up more signs

When you include PC Glass Blocks in the homes you build, you attract more buyers . . . your homes are sold much more easily. For PC Glass Blocks are truly "The mark of a modern home." They are one of the "plus values" that prospective homeowners look for.

The shower stall illustrated here is only one of the many ways in which PC Glass Blocks can be utilized to give the homes you build this added "buy appeal." Countless other applications are possible with these versatile products . . . to add more light, more beauty, more comfort. Around entrances; at stairwells; in bathrooms, kitchens, too, they admit daylight in abundance—keep out prying eyes.

And PC Glass Blocks perform other valuable functions.

Being hollow, with a partial vacuum inside, they give twice the insulating value of ordinary single-glazed windows. Heat loss is reduced; they save on air conditioning. Besides there is no replacement, repair or painting problem with PC Glass Blocks. Storm sash isn't needed. And these panels are as easily cleaned as a single pane.

So, include PC Glass Blocks in the homes you build. They'll help you put up more "sold" signs. Right now, why not send for our free booklet? Just fill in and return the coupon. There's no obligation.

PITTSBURGH

PC

CORNING

GLASS BLOCKS

The mark of a modern building

Pittsburgh Corning Corporation
 Dept. A-59, 307 Fourth Avenue
 Pittsburgh 22, Pa.
 Without obligation on my part, please send me your FREE booklet on PC Glass Blocks in all kinds of homes.

Name _____

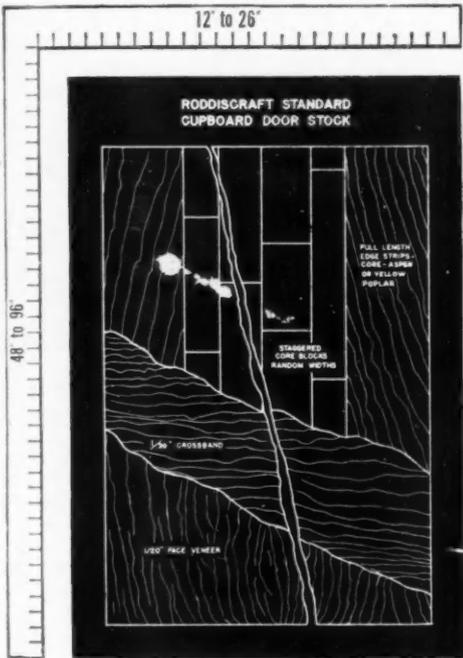
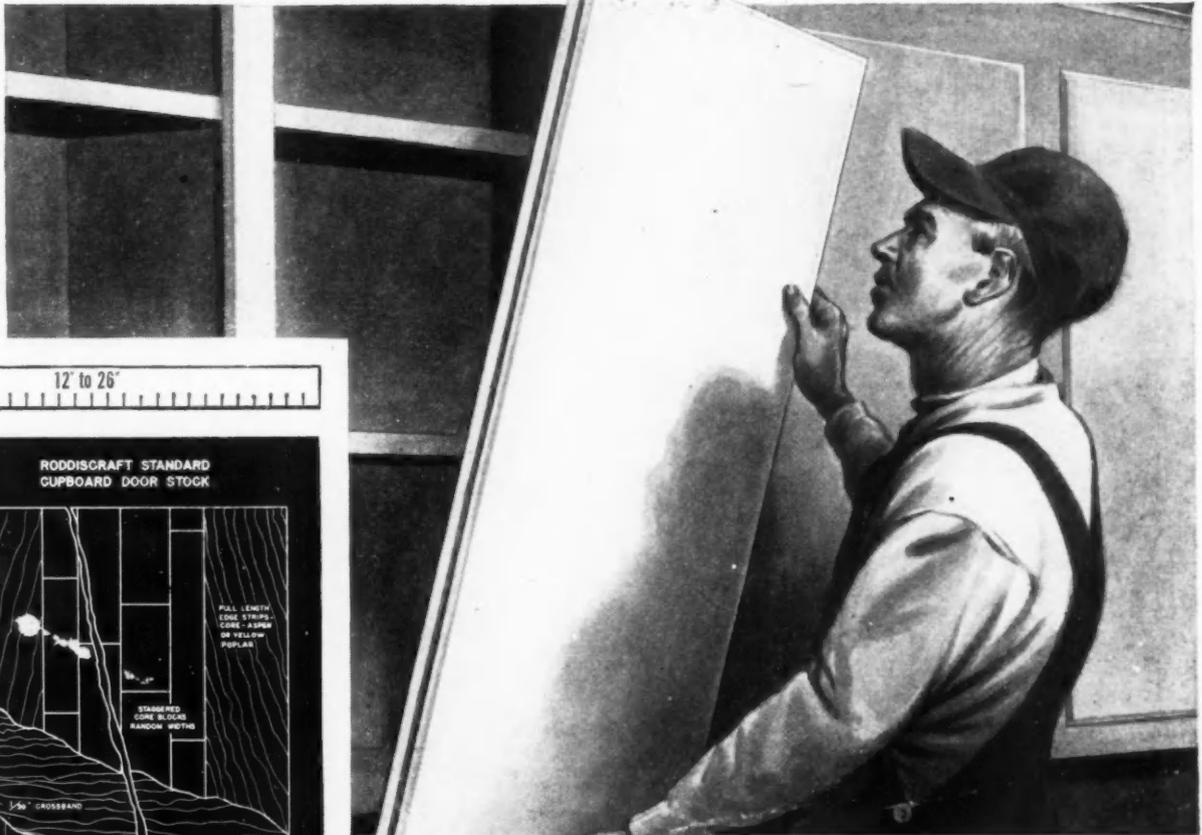
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City _____ State _____

Distributed by Pittsburgh Plate Glass Company; by W. P. Fuller & Co. on the Pacific Coast, and by Hobbs Glass L. in Canada

Roddiscraft Cupboard Door Stock

made in sizes to fit every need...



DON'T pay for waste!

Roddiscraft cupboard door stock is designed especially to eliminate wasteful cutting. This sturdy $\frac{3}{4}$ " panel is manufactured in widths of 12", 14", 16", 18", 20", 22", 24" and 26"; and in lengths of 48", 54", 60", 66", 72", 78", 84" and 96". All Roddiscraft warehouses carry a complete line of cupboard door stock. Order the sizes which will cut most economically for your installations. Prompt delivery to any location.

Roddiscraft cupboard door stock is a quality product in the well-known Roddiscraft tradition. Full length edge strips of Aspen or Yellow Poplar are bonded to a well-seasoned staved Aspen core. Hardwood $\frac{1}{20}$ " crossbands and sound Birch $\frac{1}{20}$ " faces complete the five-ply assembly which is bonded with water resistant resin glue by the most modern hot plate press methods. All stock is belt sanded to a smooth finish at the factory.

Roddiscraft
Warehouses From Coast to Coast

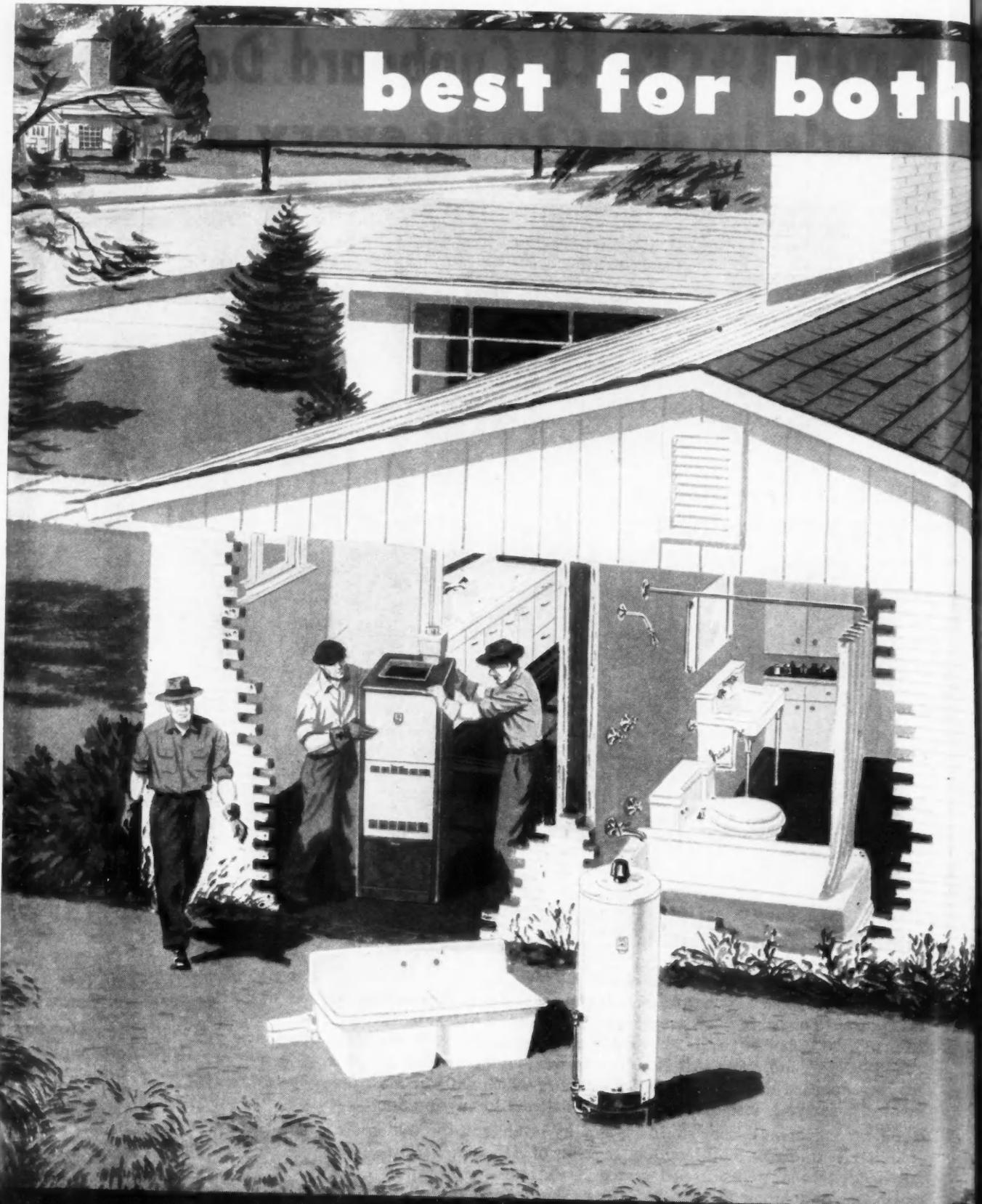
Quality Economy
Dependable Service

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- Kansas City 3, Kan. 35-53 Southwest Blvd.
- L. I. City, N. Y. Review & Greenpoint Ave.
- Los Angeles 11, Calif. 2860 E. 54th St.
- Louisville 10, Ky. . 1201-5 S. 15th St.
- Marshfield, Wis. . 115 S. Palmetto St.
- Milwaukee 8, Wis. . 4601 W. State St.
- New York 55, N. Y. . 920 E. 149th St.
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RODDIS PLYWOOD CORPORATION
MARSHFIELD, WISCONSIN

best for both



AMERICAN-Standard

First in heating . . . first in plumbing

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When it comes to heating and plumbing make it **AMERICAN-Standard** all the way!

■ You will find that American-Standard is your most dependable source for both heating equipment and plumbing fixtures . . . for every product American-Standard makes is backed by research, engineering and manufacturing facilities that are second to none. Not only does American-Standard give you the widest choice of styles, types, models, and sizes, but it also is your assurance of the finest quality in both heating equipment and plumbing fixtures. That's why more American homes have heating and plumbing by American-Standard than by any other single company. Yes, you'll find that it pays to "make it American-Standard all the way"! For detailed information about the complete range of products, contact your Heating and Plumbing Contractor. **American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pennsylvania.**

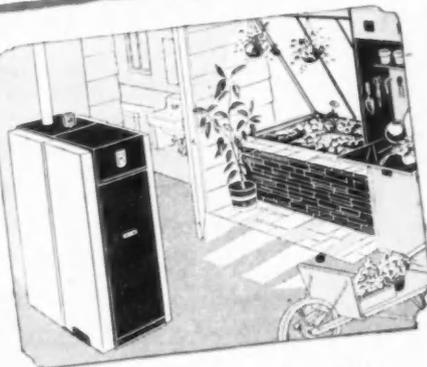
BASEBOARD RADIANT PANELS

Baseboard Radiant Panels by American-Standard represent an advanced form of radiant heating. Replacing the regular baseboard, they become an integral part of the room. They take up little more than an inch of floor space when recessed.



The MASTER PEMBROKE Bath

and the **COMRADE** Lavatory and **COMPACT** Water Closet shown here are but three of the many fixtures available for your selection when you specify American-Standard. They're styled to stand out . . . and constructed to stand up!



The ARCOLINER Wet Base Boiler

Designed exclusively for oil burning, the **ARCOLINER** provides the best in oil heating for smaller sized homes. Ideal for installation in utility rooms or other first floor locations, as well as in small basements.

The SIGN of a GOOD HOME



An American-Standard "Installed Here" sign on the job tells everyone who passes that only the best is good enough for the homes you build or remodel. Be sure your Contractor puts up this sign when he begins the installation.



Look for this Mark of Merit

Serving home and industry

AMERICAN-STANDARD • AMERICAN BLOWER • CHURCH SEATS • DETROIT LUBRICATOR • KEWANEE BOILER • ROSS HEATER • TONAWANDA IRON

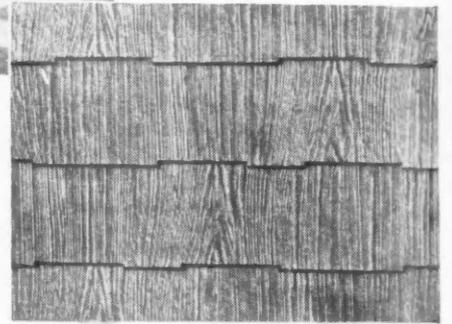
Easy application SAVES you time and work...cuts costs



Large roof areas or small, practically any architectural style, can be made more attractive with "Century" No. 5 Shingles.

K&M "Century" NO. 5 AMERICAN METHOD TYPE

ASBESTOS-CEMENT ROOFING SHINGLES



Section of "Century" No. 5 Shingles, snug-fitting, perfectly aligned.

You save all along the line when you use K&M "Century" No. 5 Asbestos-Cement Roofing Shingles. You save work because they're so easy to apply. You save time and cut costs because units are large (24" wide), only two nails per shingle are required, and they're self-aligning . . . punched and notched for fast, accurate placing.

*Original manufacturers
of Asbestos-Cement Shingles
in this country*



Being made of asbestos-cement, the shingles resist fire, are weatherproof and rotproof, never require protective paint and maintenance is at a minimum, in fact they grow tougher with age. They're attractive, too, with their weathered cypress texture, random thatched butts, and pleasing colors—white, black, Spanish red, surf green.

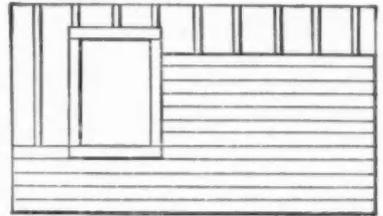
Use "Century" No. 5 Roofing Shingles for new and low cost housing . . . can also be applied over old wood shingle or composition roofs. See your K&M Dealer for further particulars, or write direct to us. We'll attend to your inquiry promptly.

KEASBEY & MATTISON
COMPANY • AMBLER • PENNSYLVANIA

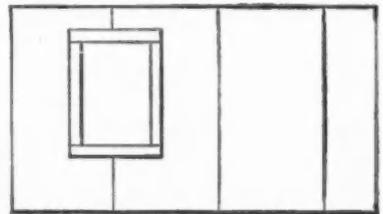


FOR APPEARANCE...Homasote Big Sheets insulate and cover the average wall in one piece, ceilings in two pieces. You have no batten strips, fewer wall joints...and the ideal base for paint or wallpaper . . . FOR STRUCTURAL ADVANTAGES . . . Homasote Big Sheets mean greater strength...As sheathing, for example, Homasote Big Sheets are 272% stronger than conventional horizontal wood sheathing . . . And with many fewer joints, the insulating value is far higher.

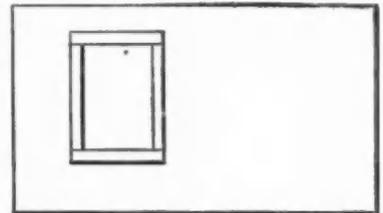
How many operations to sheathe one wall?



With 6" material—16 pieces in 8' of wall height



With 4' x 8' material—3½ pieces in 14' of wall length



With 8' x 14' material—one piece covers 112 sq. ft. You handle many fewer pieces of material and drive several hundred fewer nails.



up to 8' x 14'

We invite architects and builders to send for illustrated booklet—giving physical characteristics, performance charts, specification data and application instructions.



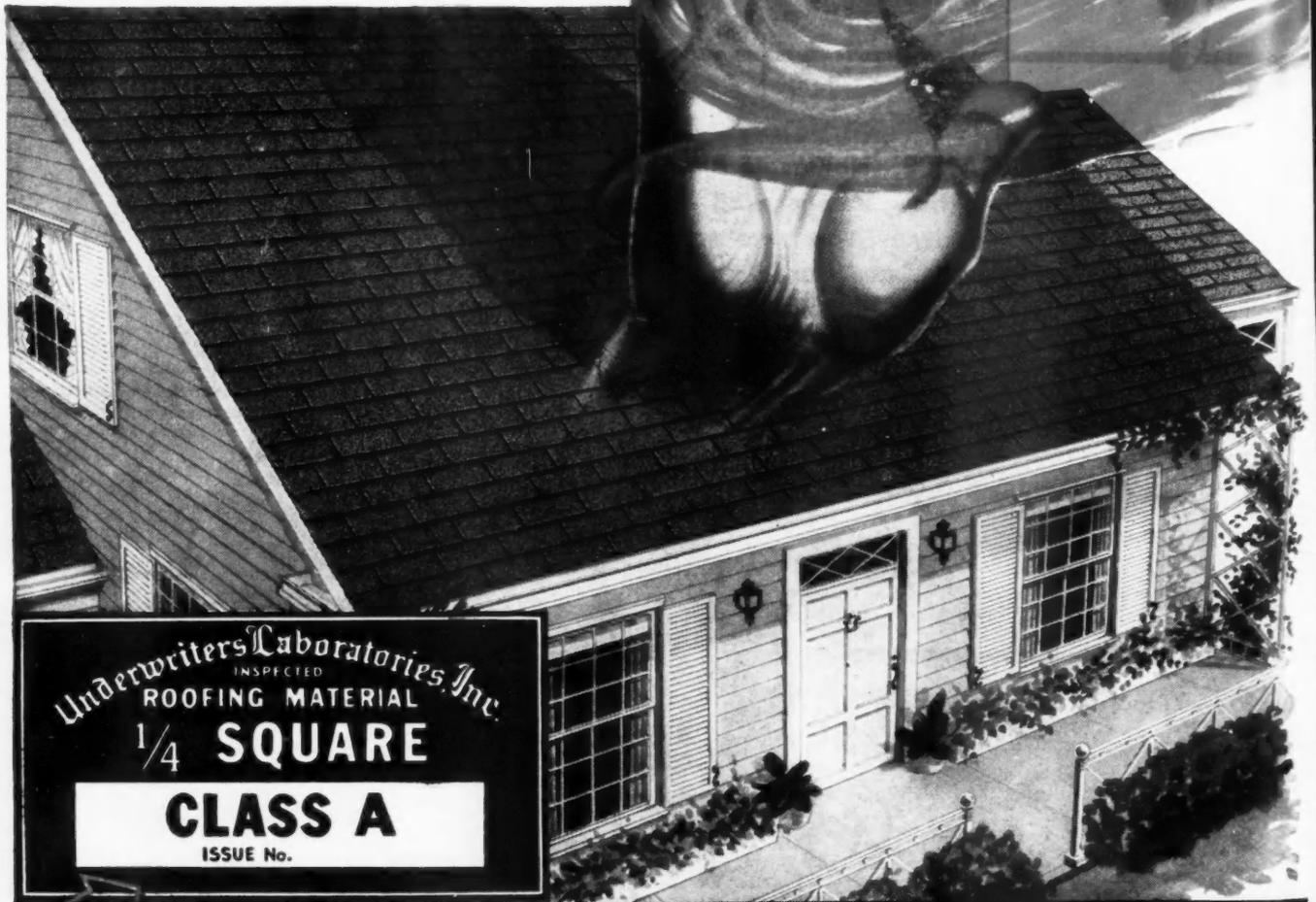
Weatherproof

HOMASOTE
INSULATING AND BUILDING BOARD

HOMASOTE COMPANY, TRENTON 3, NEW JERSEY

NOW! An asphalt shingle with

FIRE-CHEX



Underwriters Laboratories, Inc.
 INSPECTED
 ROOFING MATERIAL
 1/4 SQUARE
CLASS A
 ISSUE No.

THIS LABEL HAS
Selling Power

**Be sure it is on the
 shingles you sell!**

SPECIFICATIONS

12" x 36" • Square Butt 3 Tab • 2" Headlap
 5" Exposure • Weight 325# per Square; 80 Shingles
 per Square—4 Bundles • Colors Available; Blue-
 Black and Chocolate Brown—Blends Available Shortly

highest fire-protective rating!

BY CAREY!

**Carey FIRE-CHEX First and Only Asphalt Shingle
ever awarded Underwriters' Laboratories, Inc.**

Highest fire-protective rating — "Class A"!

YOU'LL be seeing a lot of FIRE-CHEX on homes everywhere. And for good reasons. FIRE-CHEX, made only by Carey, offer fire-resistance, beauty and durability never before available in any asphalt composition shingle. For dealers, FIRE-CHEX mean easier selling, better profits, greater customer satisfaction. For architects and builders, a material of greater permanence and "eye appealing" beauty. For owners, priceless fire-protection for families and investments—as well as fresh new beauty and housetime durability.

NEW COLOR-STYLED BEAUTY



Carey FIRE-CHEX are *color-styled* to blend harmoniously with any architectural plan. They are at home with modern or classical designs; come in a wide variety of pleasing colors and blends that are the last word in smartness and beauty. And an exclusive new manufacturing process, developed by Carey, gives these superb new shingles the desirable "deep shadow line" and thick appearance of costlier slate or tile—at a fraction of their cost.



ACCLAIMED BY FIRE PREVENTION OFFICIALS

Yes—fire prevention officials cheer Carey FIRE-CHEX! And no wonder! Many residential fires start when flying embers ignite the roof. *But even a four-pound flaming brand can't burn through Carey FIRE-CHEX Shingles!* No other asphalt shingle gives this amazing protection. That's why Carey FIRE-CHEX can be used even in areas requiring a rigid "Class A" fire-protective rating.

SEE AMAZING NEW FIRE-CHEX SHINGLES AT YOUR CAREY DEALER'S!

Get an eyeful of their fresh, new, lasting colors and extra overall-thick construction. See them at your Carey Dealer's today—or write direct to Carey for full information. Address:

Dept. AB-5B The Philip Carey Manufacturing Co.,
Cincinnati 15, Ohio.

Carey

Fire-Chex Shingles

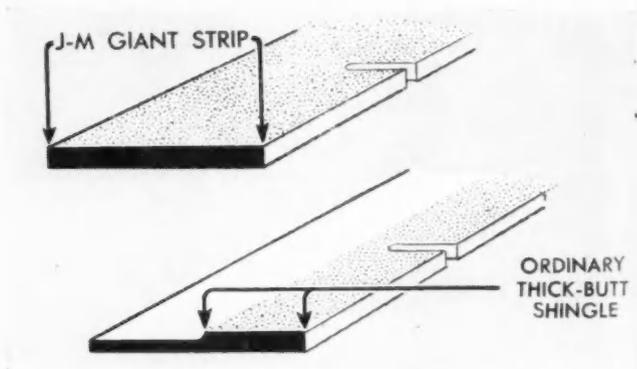
Johns-Manville GIANT STRIP

... 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.



Only HONEYWELL
ELECTRONIC MODUFLOW
 can properly control
radiant panel heating

HONEYWELL Electronic Moduflow is simple and inexpensive, and because of its sensitivity and extreme dependability, is the only control system that will insure proper results from radiant panel heating.

You'll learn why when you read these 3 Honeywell books pictured at the right that give you factual information about Electronic Moduflow, Electronic Moduflow for Radiant Panel Heating, Zone Control and Individual Room Control for domestic applications.

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Electronic Moduflow is the Answer



SEND FOR THESE THREE BOOKS **FREE**



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Please send me the 3 free books: Electronic Moduflow; Electronic Moduflow for Radiant Panel Heating; Zone Control and Individual Room Control.

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73 BRANCHES FROM COAST TO COAST WITH SUBSIDIARY COMPANIES IN: TORONTO • LONDON • STOCKHOLM • AMSTERDAM • BRUSSELS • ZURICH • MEXICO CITY

Announcing...

THE NEW

Double Duty **INSULITE**

TILEBOARD

BEAUTIFUL NEW INTERIOR FINISH

Here's a bright new interior finish that will give every room modern beauty and added insulation. The textured surface adds richness to its soft colors of buff and oyster white.

The **NEW INSULITE** Tileboard and Plank are not only decorative, but practical and durable. It is highly resistant to scuffing and rubbing... is easily cleaned... easily painted. You get finished jobs that build new business and a reputation for perfection.

NEW IMPROVED METHOD OF APPLICATION

The ingenious new **INSULITE** Clip is easy to use... speeds up application... and helps give you an accurately aligned, level ceiling or wall surface. The joint and Clip are designed so that their use results in a more uniformly level surface. The design also provides ample clearance for the nail head. This, too, aids you in getting better results.

The long nailing slot accommodates a practical variation in the position of the nailing member. This variation also makes nailing easier and faster. Any position of the nail within the slot will hold the Clip securely.

The practical design of the Clip and joint combine to make it easy to work from either the tongue or groove side of the board. This

makes it possible to start an application in the center of a ceiling or wall and come out even at the ends.

Besides being versatile and strong, the **NEW INSULITE** Clip is easy to handle. It is always grasped in the same manner whether being placed in either the tongue or groove side.

APPLIED JOB STAYS RIGID AND LEVEL

The new deep tongue and groove joint plus the rigid strength of the Clip add years to the appearance of a finished job. Its close, tight, interlocking joint stays trim and neat.

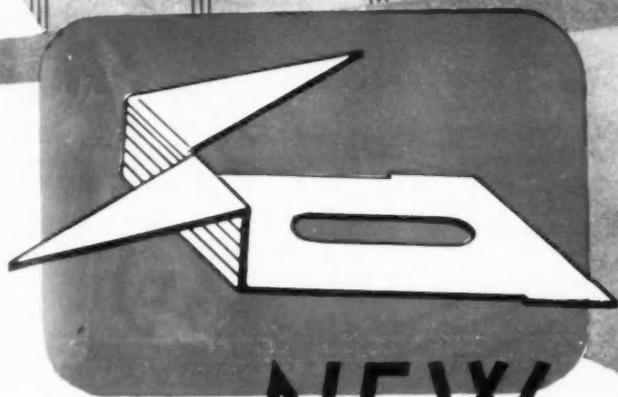
MANY USES — MANY VARIATIONS

Ideal for restaurants, taverns, lounges, stores, display rooms, and all the rooms in the house. For modernizing or new construction, use this new **INSULITE** Tileboard and Plank to save time, reduce finishing costs, produce a better job.

Both Tileboard and Plank are now readily available. **PLANKS** come in four widths: 8", 10", 12" and 16". Lengths: 8', 10' and 12' for interesting pattern arrangement. **TILE** in sizes 16" x 32", 16" x 16", 12" x 12" and 12" x 24" provides ample adaptability for ceiling treatment. **INSULITE** CLIPS are packed in cartons of 1,000.



and **PLANK**



WITH THE **NEW CLIP**
INSULITE **CLIP**

THAT SPEEDS UP APPLICATION
AND PROVIDES A MORE
UNIFORM LEVEL SURFACE

Double Duty
✓ BUILDS ✓ INSULATES



INSULITE DIVISION
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MINNEAPOLIS 2, MINNESOTA

MINNESOTA & ONTARIO
COMPANY



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"Insulite" is a registered
Trade mark, U.S. Pat. Off.

5-9

Everybody's talking about the Beautiful *Modine* CONVECTOR

NEW . . . Convenient Air Venting that's out of sight, yet instantly accessible.

NEW . . . Dual-Purpose Damper — for finger-touch temperature control — conceals outlet grille.

NEW . . . 5-Second Removable Front for faster installation . . . easier cleaning.

NEW . . . Snap-in Lower Grille conceals piping, simplifies floor and carpeting treatment. Optional.

ALL-COPPER Heating Unit gives you high capacity, great durability.

CUTAWAY VIEW OF MODINE TYPE F CONVECTOR.

Design and Mechanical Patents Pending

BIGGEST NEWS IN CONVECTOR RADIATION HISTORY!

THAT'S the new Modine Convector. For new construction or remodeling, its entirely new features make it the *better* way to heat apartments, homes, schools, offices or hospitals. Choose from three types, many sizes, for one- and two-pipe steam and hot water systems. For the full story, call your Modine Representative. He's listed in the "Where-to-Buy-it" section of your phone book. Ask to see a sample, or write direct. Modine Mfg. Co., 1501 Dekoven Avenue, Racine, Wisconsin.

Send for New Modine Convector Catalog Today!
Special 1-Pipe Steam Convector Bulletin Also Available.



Modine CONVECTORS

R-1025

TRENDS

BUILDING MATERIAL — EQUIPMENT — APPLIANCES

Easy Financing Will Do It

CONTINUATION of residential building at the present high level depends on the extent to which favorable financing terms are available. For the last seven months starts of new houses have been under the corresponding period of a year ago. Latest official data shows a moderate decrease in January and February. A total of 50,000 units was started in January as compared with 52,600 a year ago, a decrease of 5 per cent. In February, 46,000 units were started, 3,600 units or 8 per cent under a year ago. Undoubtedly excessively high down payments limit the sale of houses in all price ranges.

During and immediately after the war, veterans who planned to buy new houses had expected as favorable or more favorable terms than prevailed prior to the war when down payments of 10 per cent could be made and interest rates were $4\frac{1}{2}$ per cent. A spot check of 46 areas on mortgage financing terms has just been made by *American Builder*. In answer to the question—"What terms are available to good credit risks for housing at about \$10,000"—it was found that in more than half the areas a down payment of 25 per cent or more is required. In only seven of the 46 areas (6 per cent) could a down payment of 10 per cent or less be made.

The interest rate in about half the areas was $4\frac{1}{2}$ per cent or less. In the other areas the rate ranged from 5 per cent to 8 per cent. As it has turned out, the easy financing terms that had been expected developed to only a small extent. Builders in localities where high down-payments are required, and where interest rates are high, find their market severely limited.

Franklin D. Richards, Federal Housing Administrator, says that "the greatest demand and capacity to pay for housing lies in the \$6,000 price range." He states that "from every section of the country it has been possible to obtain examples of economy houses in this price range" and that the monthly carrying charges including payments to mortgage

principal, interest, mortgage insurance premium, hazard insurance, and taxes run under \$45 in each instance.

Not only that but he shows pictures of well-designed houses in this price range. For example: Evansville, Ind., \$6,500; Baltimore, Md., \$6,000; Jackson, Tenn., \$4,150; South Whittier, Calif., \$4,500; Smithtown, L.I., N.Y., \$4,300. He also shows multi-family rental units at from \$47.50 to \$75.00. Similar low-cost houses have appeared in *American Builder* from time to time.

The single family houses are the modern counterparts of the frame workingmen's cottages built in the last century, or in the early 1900's in all parts of the country—but better designed and better equipped. In the rush of apartment building in the Twenties and the building of picturesque suburbs this market was largely overlooked. In the late Thirties this type of small house began to be built in quantity again and a big housing market developed.

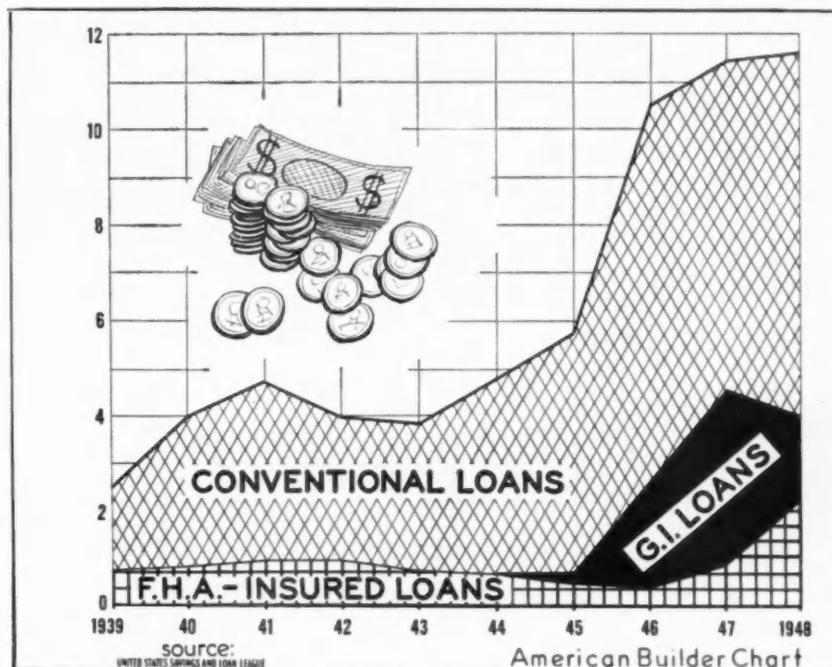
For continuation of big building volume, houses in every price range

should be available in every community. If quantities of houses are built in the low-cost range, there will be a good market for new houses among the six or seven million families in the country who have incomes of \$5,000 or more, because their prosperity depends on the maintenance of peak production in all segments of the economy.

A vast amount of savings are available for investment. Since the value of housing at present represents the largest single item in our national resources it is the logical outlet for future savings. The amount of individual savings, including bank and postal savings deposits, investments in savings and loan associations, United States Savings bonds, outstanding and life insurance reserves is almost three times the 1940 level. The total was 60 billion dollars in 1940 and 172 billion dollars in 1948.

With new houses available in all price brackets in a community and realistic mortgage financing terms, a high rate of construction activity should result.

ANNUAL VOLUME OF HOME MORTGAGE FINANCING
(In Billions of Dollars)



Announcing the New Shake Design in



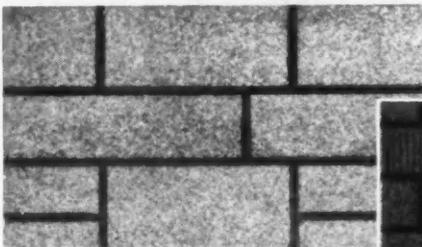
Take advantage of this new product's STRIKING ARCHITECTURAL BEAUTY. It opens up a whole new market for increased siding business.

Here's another in the long list of *Flintkote Firsts!* Now you can get more siding business than ever. For here's a double-barreled value with a plus.

Call customers' attention to the well-known two-way value of Insulated Sidings: long-life protection by combining time-tested Insulation Board, durable weather-resistant asphalt and mineral granules.

Then point out the plus... the SHAKE DESIGN! You'll find that the new beauty and the new style bring new architectural beauty to the modernization market, expand its appeal. The SHAKE DESIGN panels are beautifully textured to simulate natural graining. They're in complete good taste, and add a neat, trim appearance to any house.

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

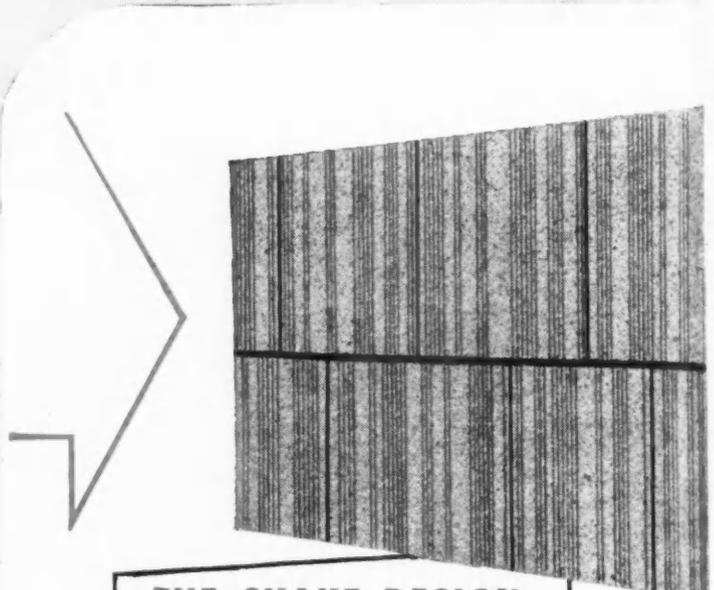


▲ **STONE DESIGN**... available in... Graystone • Fieldstone Blend** • Silver Gray**

*Available in East only.
**Available in South & West only



▲ **SHINGLE DESIGN**... available in... Cottage White • Colonial Cream • Rustic Brown • Leaf Green
◀ **BRICK DESIGN**... available in... Red* • Buff • Tapestry Blend • Russet Blend • Silver Gray • Coral Blend • Coral**

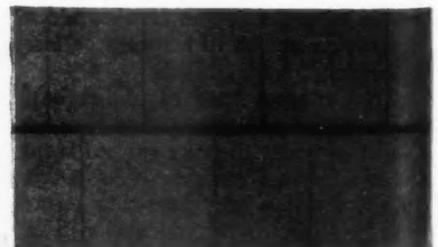


THE SHAKE DESIGN EXPANDS THE LINE!

Now you can offer a Flintkote Insulated Siding to blend perfectly with any architectural style. With the addition of the new SHAKE DESIGN, there are four different designs available in a wide variety of beautiful colors.

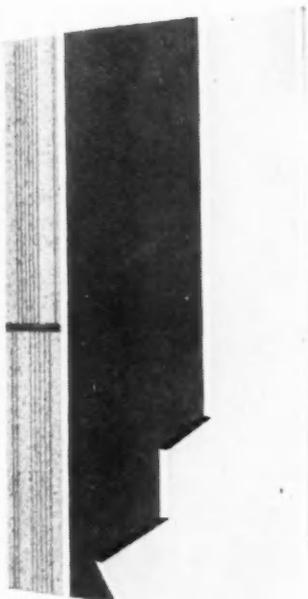
Let your customers take their choice from:

SHAKE DESIGN ▶
... available in...
Colonial Cream
Cottage White**
Silver Gray • Rustic
Brown • Leaf Green



Flintkote
direction
building
material

Insulated Sidings *by* **FLINTKOTE**



THESE BUSINESS BUILDERS WERE DESIGNED FOR YOU
...TO HELP YOU MAKE MORE PROFITABLE SALES

Here's a kit-bag full of hard-hitting, hard-selling material for *you* to use in *your* community. Every item upholds the traditions of quality and effectiveness that won Flintkote's sales promotional material the Direct Mail Advertising Association's "Best in Industry" awards in 1936, 1937, 1938, 1946, 1947, 1948.

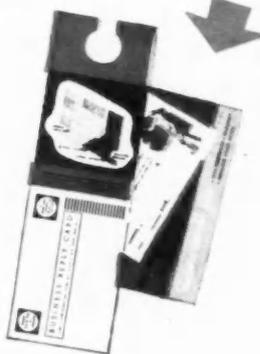
Here's *outstanding* help toward doing an *outstanding*, profitable job selling Flintkote's complete line of Insulated Sidings. Get in touch, *today*, with your local Flintkote Sales Representative. He's fully equipped to help you plan how best to use this material in your community.



This new easel manual is printed throughout in four colors. 24 pages contain 16 true-to-life product cuts and profuse "before-and-after" illustrations. Blank pages are provided so that you can paste in photos of your own jobs.



Flintkote newspaper mats supplied free! So, too, are Flintkote's famous direct-mail sales letters . . . custom built to meet your individual selling needs.



Pepper selected prospects with these hard-selling door knob and standard return cards. You can select product as well as prospect for most efficient distribution.



For steady reminders to your customers that you're the source for Flintkote Insulated Sidings . . . use these brilliant four-color envelope stuffers. Each one features a different Flintkote Siding.

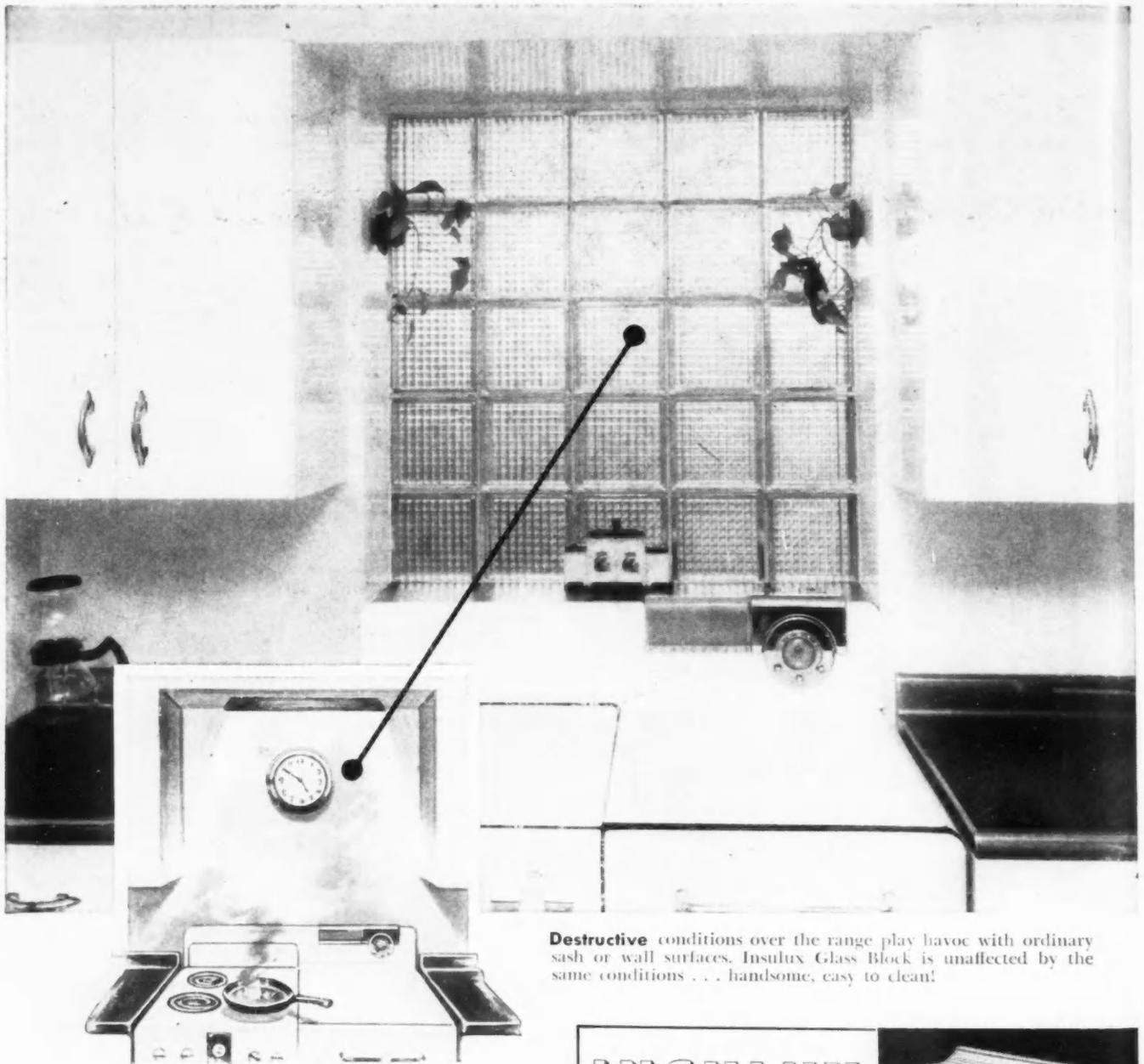


Cash in on the new SHAKE DESIGN and other Flintkote Insulated Sidings with the help of this multi-page 8 1/2" x 11" four-color folder. Large, color-true product pictures plus "before-and-after" illustrations give you potent selling help.

FLINTKOTE



...the extra years of service cost no more!



Destructive conditions over the range play havoc with ordinary sash or wall surfaces. Insulux Glass Block is unaffected by the same conditions . . . handsome, easy to clean!

Put kitchen light anywhere with Insulux

ANY PART of the kitchen is a good place for Insulux Glass Block . . . especially over the range, where unusual conditions make it tough on either walls or windows.

Insulux is unaffected by grease, cooking fumes or moisture, and does not rot, rust or corrode. No painting is needed. Thermal insulation value of Insulux Glass Block is approximately equal to an 8-inch brick wall.

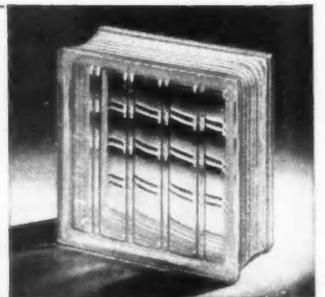
At the same time, Insulux transmits plentiful daylight. Investigate the advantages of Insulux Glass Block for home construction. Send coupon today!

INSULUX

GLASS BLOCK ®

AMERICAN STRUCTURAL PRODUCTS COMPANY

Subsidiary of
OWENS-ILLINOIS GLASS COMPANY



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Please send additional data on Insulux Glass Block for use in home construction.

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News, Views
and Comments

On and Off the Record

PUBLIC RELATIONS—Paul W. Watson, director of public relations, National Retail Lumber Dealers Assn., has prepared and mailed to the association's 20,000 or more members sample speeches for delivery before local church, civic and veterans' organizations. There are also newspaper advertisements and material for use on radio stations. Subject: Public housing and what it really means. The material is excellent, and it is reported to be getting widespread and effective use.

GEORGE MILLER—He recently wrote to all members of Congress pointing out that government intervention in the building business is rapidly leading to complete chaos. Urged elimination of rent control and removal of the threat of government competition to save the country from a disastrous depression.

NEW HORIZON—A new horizon for American colleges has been established by Harding College at Searcy, Ark. The college held a seminar early this spring for business men. It was entitled, "How to Sell the American Free Enterprise Story to Americans." One hundred and nine top men in 55 major corporations from 21 states boosted the college's normal enrollment of 700 for the four-day seminar.

ANOTHER ONE—Next seminar was held April 25-29. Father of the idea is Dr. George S. Benson, president of Harding. Refreshing, to say the least, after the recent leveling of charges of communism at several major universities.

DR. BENSON—Once shocked a Congressional committee by appearing uninvited, and representing no one but himself as a private citizen, to give evidence.

HARDING COLLEGE—Under Dr. Benson the college fights a continuous and relenting battle for private enterprise. Forty thousand people receive Dr. Benson's newsletter each week. About 25,000,000

Americans get his messages each week over 225 radio stations in 43 states, and through his column which is used by 3,600 publications.

REAL AMERICANISM—It is reported that Dr. Benson turns over all of his radio and writing earnings to the college, and keeps only a modest salary as college president.

RADIO STATIONS—Dick Hughes, Borger, Texas builder, owns two of them, one in Amarillo, the other in Borger. Currently, he is busying himself with a plan to do an extended public relations job in behalf of private enterprise via radio, and far beyond the limits of his own stations.

SIGNS—Now that builders have resolved the most critical part of the housing shortage in many areas, they should take time to inform people in their communities about the real implications of public housing. There are signs of an awakening to the danger. There is need for this all-out effort to thwart socialism before it is too late to do anything effective.

PUBLIC SPEAKING—Without being an orator practically any dealer or builder can marshal a few facts, put them in order on a note pad, and stand before a local organization to give an informal factual talk. If the necessary facts are not available try Paul Watson. He has them.

EASTER—With the cost of clothing what it is, thousands found it difficult if not impossible to provide themselves with new Easter outfits, and did not join Easter parades, so they stayed home. What this country needs is a Public Wardrobe Bill, or at least a Public Slacks Bill, and preferably before summer. How can a man feel secure in a pair of pants with a shiny seat? If he has a new free house, he should have a new free pair of pants, and why not a new free coat, new free shoes and a selection of new free ties.

CABOT'S PAINTS

give you
2 added
selling
points

- 32 colors, many available from no other source, mean that you can give every house, even in a very large development, its own individual color combination.
- Collopakes produce a durable, porcelain-smooth surface which sheds dirt and resists the elements for years! Because no adulterants are used, the colors stay fresh . . . stay bright! This long run economy will appeal to the home buyer!

Write today for complete information about Cabot's Collopakes, including a color card suggesting possible color combinations.

Samuel Cabot, Inc.
524 Oliver Building, Boston 9, Mass.
New York Minneapolis Chicago





WHY SOME BUILDERS ARE BUSY AS BEAVERS!



...of course, it's Electric!

Many builders sell houses as fast as they can build them. One reason is that they realize home buyers want the most modern type of kitchen equipment—and that includes Electric Ranges. Proof is found in the actual sales figures. Another million American families switched to Electric Cooking last year. Conservative estimates indicate that the same thing will happen again this year.

To you, this means just one thing. To build houses that are modern today and will stay modern for years to come, you must include wiring for an Electric Range, leading to a range outlet in the kitchen. The time to do this economically and efficiently is during construction. 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 • FRIGIDAIRE • GENERAL ELECTRIC • GIBSON • HOTPOINT
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Follow the trend...

WIRE YOUR HOUSES FOR ELECTRIC RANGES

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

A SYMBOL OF ADEQUATE WIRING



EDITORS'

Round Table

MAIL ADDRESSED to the editors in the past month has been particularly heavy. As usual, most of it consisted of inquiries, with commendatory letters second. Usually there are some mild protests, but this time there were a couple of letters containing loud howls.

ONE OF THESE flatly stated that the writer, an irate subscriber, knew that the editors were hired solely to dream up a lot of guff designed to protect the greedy vested interests. What he had reference to, of course, was *American Builder's* traditional stand for private enterprise. The answer to that, and the irate subscriber was answered at length, was that the editors are paid to dig up facts and print them. Disagreeing with the facts does not alter them.

ANOTHER JAB taken at the editors accused them of having no idea of what it means to be an underpaid teacher, preacher, or doctor giving generously of spare time for community betterment.

THAT OPENED an interesting opportunity for a reply. Editors on business papers have to work at least 10 years familiarizing themselves with the publication business and the industry a given business magazine serves before they begin to make anything like attractive salaries. In that respect, editors are no different than members of the professions the reader named. Or, for that matter, they are no different than men in any walk of life who are reasonably successful.

GIVING TIME to community work is part of the stock in trade of any good editor. He cannot understand his readers unless he understands their counterparts in his own community. And the only way he can get that understanding is to give generously of his time in church, youth, and other civic work.

THE PARTING SHOT was one which amounted to an accusation that editors are economic royalists. That was really funny. Editors do not retire. They die in their editorial chairs for economic reasons.

WHAT RIGHT, asks another reader, have you to say that this country shall not go socialist if a majority of people want it to go that way?

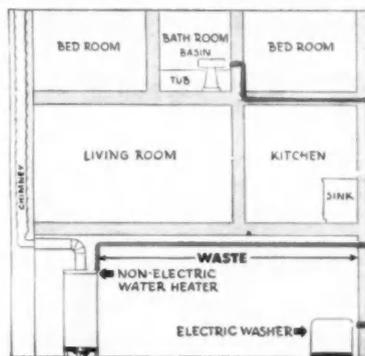
(Continued to page 63)

EAGER AS BEAVERS!



Sales and survey figures both show that more people are eager for Electric Water Heaters than ever before. The only way to satisfy them is to install in the homes you build the kind of water heater that will serve your customers best, both now and years from now — OF COURSE, IT'S ELECTRIC!

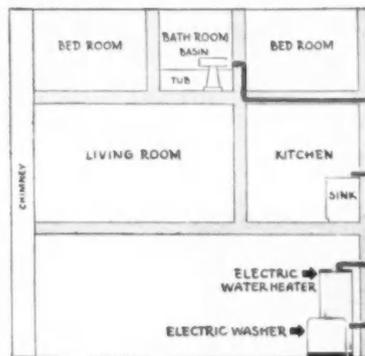
How to reduce construction costs and add customer features . . .



NON-ELECTRIC INSTALLATION

Electric Water Heaters can save you money on construction costs. Installation can be made anywhere—in the kitchen, in the bathroom, or the utility room—even in a closet. This keeps hot water lines short, cuts piping cost.

Customers like Electric Water Heaters because they are: (1) AUTO-



ELECTRIC INSTALLATION

MATIC (continuous hot water, no attention); (2) CLEAN (smokeless, sootless); (3) DEPENDABLE AND TROUBLE-FREE (as electric light); (4) ECONOMICAL (fully insulated storage, short hot water lines); (5) SAFE (all electric, dependable temperature control); (6) FLEXIBLE (can be installed anywhere, even in living quarters; no flue or vent).

ELECTRIC WATER HEATER SECTION, National Electrical Manufacturers Association
155 East 44th Street, New York 17, N Y

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- JOHN WOOD • KELVINATOR • LAWSON • MERTLAND • MONARCH • NORGE • PEMCO • REX
- RHEEM • SELECTRIC • SEPCO • SMITHWAY • THERMOGRAY • TOASTMASTER
- UNIVERSAL • WESIX • WESTINGHOUSE

It's EASY to INSTALL an

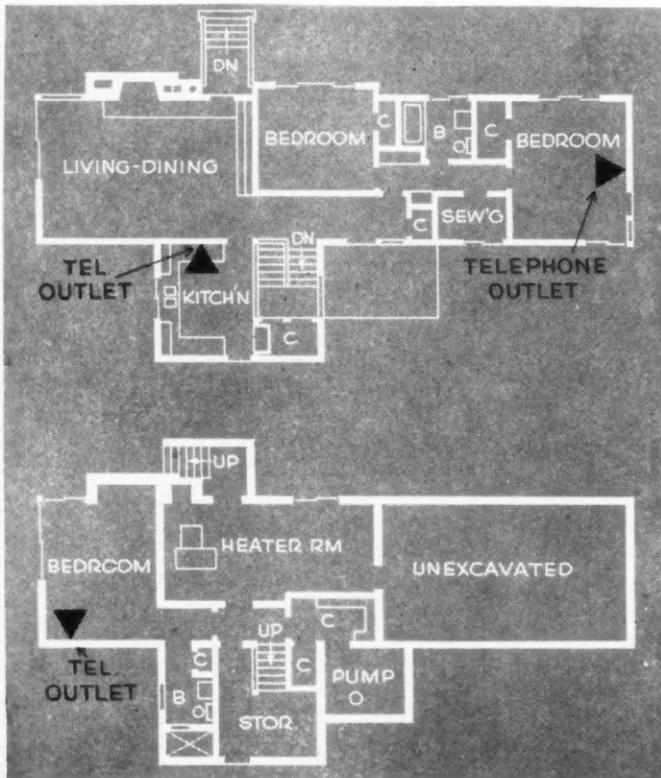
electric WATER HEATER!

... in a house wired for an Electric Range!



Perkins & Will and Edwin H. Mittelbush, Architects

TELEPHONE RACEWAYS FIT INTO THE SCHEME OF THINGS



Most new homes today are a blend of beauty and utility — everything in its proper place. And the proper place for telephone wires is out of sight.

It's a simple job to conceal telephone wires within walls. A few lengths of pipe or tubing, installed during construction, will keep them from being exposed on walls and woodwork. All that shows are neat telephone outlets, located where they will be most convenient for the owner.

For homes of any size, your Bell Telephone Company will be glad to help you plan modern telephone arrangements. Just call your Telephone Business Office and ask for "Architects and Builders Service."



BELL TELEPHONE SYSTEM

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EDITORS'

Round Table

(Continued from page 61)

THE SAME RIGHT, say we, that a handful of aroused colonists had in 1776 to declare independence from England. The fact that an un-informed majority drifts placidly toward destruction or misery is the best reason why an informed minority should sound a warning. There is not only a right to warn against the perils of the drift toward socialism—there is a patriotic obligation.

A SEATTLE READER reports that practically none of the home builders in his city are getting GI loans. Reason given is that VA is not appraising houses at figures for which the builders can afford to sell them. One house was appraised by FHA at \$10,500. The VA field man appraised it at \$10,400. But the VA office cut the field man's appraisal to \$9,950. This is typical, says the Seattle builder, and that is the reason why Seattle vets have to have considerably more money with which to buy houses than vets in most other parts of the country.

RENT CONTROL, observes a builder in Portland, Ore., is causing run-down rental properties. Under controls, owners cannot afford to make repairs or to remodel. During business recessions when apartments are vacant, owners have no reason to remodel or make repairs.

IN HIS OWN CASE, continues the builder, when rent schedules on the apartments he owns were set, he purchased oil for 95 cents a barrel. Now, oil costs \$2.95 a barrel. Renters, he adds, know this condition, and are about as unhappy as the owners. A recent newspaper poll in Portland, he said, revealed a big majority of renters stating that owners were entitled to higher rents.

ANOTHER READER says, "If the vets were getting the benefits of the low rents I wouldn't bother, but I have tenants getting \$10,000 to \$15,000 a year, and paying \$70 a month, while vets in nearby apartments hardly as good as mine are paying \$90. Why don't the veterans' organizations fight rent control?"

C. W. CHAPMAN, retail lumber dealer with headquarters in Waterloo, Iowa, senses a growing spirit among business men to refuse com-

(Continued to page 65)



If you want
EASY LAYING get—

BERMICO® SEWER PIPE

YOU GET LIGHTNESS. Faster-laying BERMICO Sewer Pipe is 2/3 lighter than other types. Economical 8-foot lengths are easy to handle on the truck and at the job.

YOU GET SPEED. BERMICO joins tight—for keeps—with a few quick hammer blows. No joining compound needed. And you can back-fill immediately.

YOU GET TOUGHNESS. BERMICO is corrosion-resistant, built for a lifetime of trouble-free service. Stays tight, leak-proof, root-proof. Stands up under temperature shifts and soil settlements.

FOR HOUSE-TO-SEWER OR SEPTIC TANK Specify BERMICO. Made in a full range of sizes, connections, bends, reducers, adaptors, etc. Nationally advertised. Use BERMICO Perforated pipe for drainage purposes. For further information write Brown Company, Dept. A-15, 500 Fifth Avenue New York, N. Y.

EASY TO INSTALL



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

EASY TO JOIN



Root-proof, machine tapered joints require no packing.

EASY TO HANDLE



2/3rds lighter than other types of sewer pipe.

BERMICO meets with an ample margin all requirements of Commercial Standards CS 116-44 as issued by National Bureau of Standards, U. S. Department of Commerce.



BERMICO—A PRODUCT OF BROWN COMPANY

PADLOCK PROTECTION STARTS WITH THE HASP

Build client confidence--provide Stanley

SAFETY HASPS



On store, service station, stockroom, tool shed, garage or barn doors—wherever a padlock is likely to be used—the new Stanley Safety Hasp No. 917, with Click-Lock Staple, can be a good will builder for you. A padlock is only as *safe* as the hasp that holds it. And this hasp is designed for *real* protection, and built to endure.

The new 917 has three points that will appeal to your customers.

1. *The staple clicks into position against spring action on each quarter turn (can't be rattled open). Can be used as a catch.*
2. *When hasp is in locked position, screws are completely covered and cannot be removed.*
3. *When hasp is closed, padlock lies flat.*

The name Stanley on hardware, moreover, suggests quality construction clear through. So take advantage of every opportunity to use the Stanley 917 Safety Hasp—it builds client confidence in you. The Stanley Works, New Britain, Conn.

THE GREATEST NAME IN HARDWARE

makes it easier to make the sale!

STANLEY

Reg. U. S. Pat. Off.

HARDWARE • HAND TOOLS • ELECTRIC TOOLS • STEEL STRAPPING

EDITORS'

Round Table

(Continued from page 63)

promise and stand on principle. Mr. Chapman is no compromiser with socialism. He has fought consistently and unrelentingly for free enterprise, and at times has been a target for abuse.

AT A LUNCH TABLE the other day with the owner of a radio station, the radioman observed that it is no wonder the public thinks of successful business men as greedy tycoons. The movies, he points out, invariably portray business success with a heavy jowled, ugly tempered, broad-beamed gent that not even a tolerant audience could like.

WHAT, SOMEONE ASKED, can or should be done about it? Ask school teachers, replied the radioman. There was a time when the movies always represented school teachers with an ugly, bun-haired, outlandishly clad female. Currently, they cast only glamor girls as school teachers.

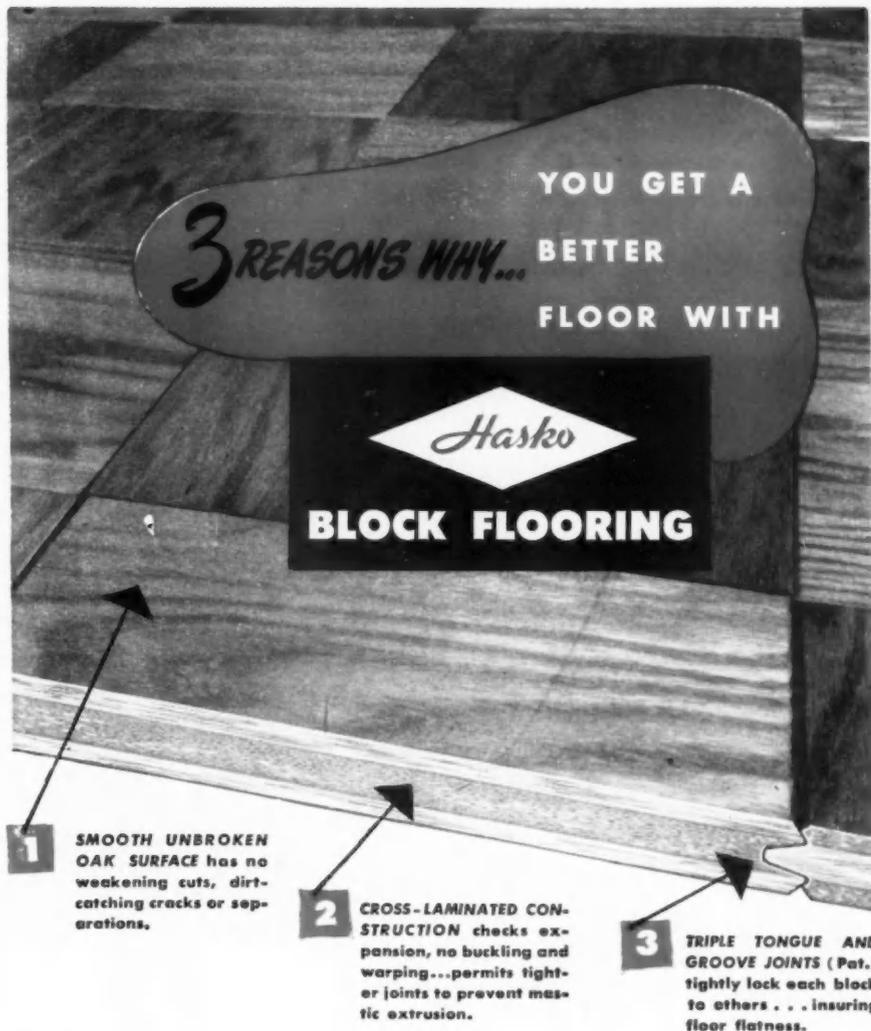
A STRIKING EXAMPLE of local level cooperation and co-ordination was afforded recently at Amarillo, Texas, when a dinner was served at the country club to 300 builders, dealers and members of the International Concatenated Order of Hoo-Hoo. In the audience were the heads of banks, public utilities, and newspapers. Three radio stations recorded the principal speech for re-broadcast.

THE SPEECH had to do with the threat to our entire economy if the disease of public housing takes root.

AMARILLO, without a doubt, is overwhelmingly anti-public housing, and to the meeting of builders, dealers, and Hoo-Hoo goes no small share of the credit for crystallizing sentiment.

BUILDING is a local business, and the only effective way found thus far to offer a united front against socialistic encroachments is through local meetings, like the one held in Amarillo, in which the local groups get together to fight for the common good.

DURING MARCH, our editors ranged the entire Gulf, East and West Coasts, and stopped in dozens of cities between. Their impressions, added to those gleaned from the mail, indicate a general feeling of confidence in the future of home building.



Right! Three construction features that mean a permanently beautiful floor . . . a better floor . . . one that is easy to lay . . . safe to specify. These features are yours exclusively with Hasko block flooring. First: The smooth, unbroken surface. There are no crevices, separations, or cuts to weaken the block, catch dirt, or admit damaging moisture. Plies are permanently laminated — cannot separate. Second: Hasko blocks are built with cross-laminated construction which keeps expansion and contraction, and resultant buckling and warping, to a negligible minimum. The patented Hasko triple-locking tongue and groove is the third feature. Notice how even the lips of the groove are locked in to positively prevent raised or curled edges . . . how the tongue is tapered to give a wedge-tight fit which prevents mastic extrusion. In addition, 12" x 12" blocks are laid speedily with minimum number of joints . . . save installation time, cost and waste. Factory finished in light or dark oak.

FOR RADIANT HEATING: Authorities working with radiant heating and exhaustive tests pronounce Hasko blocks ideal for radiant heating installation.

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Flooring
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It's A Water Hog

Yes sir! It handles anything from seepage to 15,000 gallons per hour. And it won't clog while pumping solids. Self-priming, of course, and *fast*. Has automatic seepage control, guaranteed 28 ft. suction lift, plenty of discharge pressure, and a built-in gasoline-engine that has the *guts* to keep going without fussing or babying under the toughest working conditions.



But Never A Truck Hog

No sir! A Homelite Gasoline-Engine-Driven Pump is the last word in compactness. Fits in a corner of a truck or trunk of car. Requires no crew of men to unload it... no special planking to roll it on location. One man picks it up and carries it right to the spot you want it. Write, right now, for our new descriptive bulletin.



SPEED YOUR CONSTRUCTION WORK
WITH *Homelite Carryable Pumps*

HOMELITE CORPORATION, 505 RIVERDALE AVE., PORT CHESTER, N. Y.
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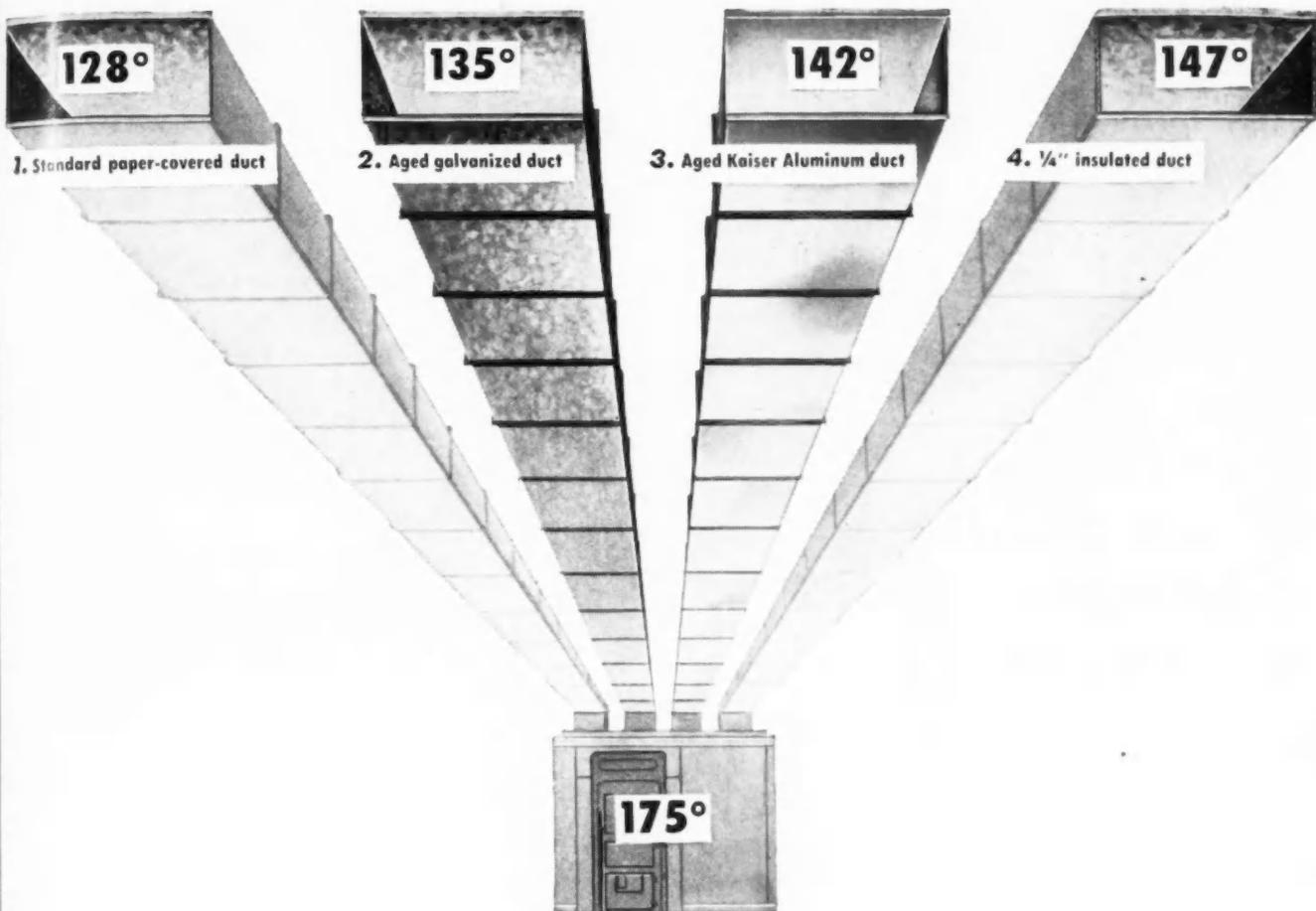


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HOW TO CUT DUCT AND FUEL COSTS

(and retain desired B. T. U. delivery)

Simply specify Kaiser Aluminum for all heating ducts!

The above illustration is a simple example. It is a comparison of materials in ducts of a specific size, operating under identical conditions.

Note what happens to the initial air temperature of 175°: At the end of 100 feet, delivered air temperature actually varies from 128° to 147°.

Why? Because of different radiation losses from the surface of the ducts.

These comparisons were proved by actual tests conducted by Aladdin Heating Corp., under the direction of B. F. Raber, Professor of Mechanical Engineering, and Mr. J. T. Gier, Research Engineer.*

With such proved facts, it's easy to see how duct systems of light, strong Kaiser Aluminum can be more economical! Only duct with 1/4" insulation can deliver more heat—but it costs far more.

Because bare Kaiser Aluminum radiates less heat, installation savings are possible through elimination of insulation. And fuel consumption is cut because of lower required B.T.U. input.

So, to cut duct costs and fuel costs—always specify ducts of Kaiser Aluminum!

*Name of university supplied on request.

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FREE BOOKLET proves you can cut duct installation labor costs and offer clients lower fuel costs with Kaiser Aluminum. Write for "New Conceptions in Ductwork." Builders' Service Dept.: Permanente Products Company, Kaiser Building, Oakland 12, California.

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ABS-49

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**A COMPLETE LINE
OF VITREOUS CHINA
AND ENAMELED
CAST IRON**

**A GOOD NAME
WITH
EVER-GROWING
ACCEPTANCE**

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**ADVERTISING
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Day by day, competition for the consumer's dollar is becoming stiffer. More and more, your merchandising and sales problems require right answers to assure profitable and progressive business operations.

Only a source of fine plumbing fixture supply that is aggressive in its methods and thoroughly experienced, can give you the service you desire

in a manner that is profitable.

You'll find Eljer's policies are helpful and popular because they are carefully organized to ease your sales problems. You'll find Eljer Fixtures are sold by leading Distributors, actively interested in helping you make your business grow and prosper. *You'll find now is a good time to see your Eljer Distributor . . . or write Eljer Co., Ford City, Pa.*

It pays you, it pays us-

because we specialize in Plumbing Fixtures and Brass

ELJER





MONTHLY REVIEW

NEWS OF THE NATIONAL ASSOCIATION OF HOME BUILDERS AND AFFILIATED ASSOCIATIONS

Chicago Chapter Bi-Weekly Forum Luncheons Proving Good Association Activity

A local association activity which has proved to be both educational and entertaining to members of the Chicago Metropolitan Home Builders Association, and which might well be used as a pattern by other groups, is the program of forum luncheons held twice monthly at the chapter's headquarters in the Chicago Loop.

The purpose of the luncheon sessions, as outlined by Roy Healy, secretary of the forum committee, is to obtain interesting speakers with an outstanding knowledge of their field who will stimulate discussion. Although a number of the meetings have been filled to overflow, no special effort is made to attract sensational crowds nor publicity. The committee chairman is Edward G. Gavin, editor of the *American Builder*.

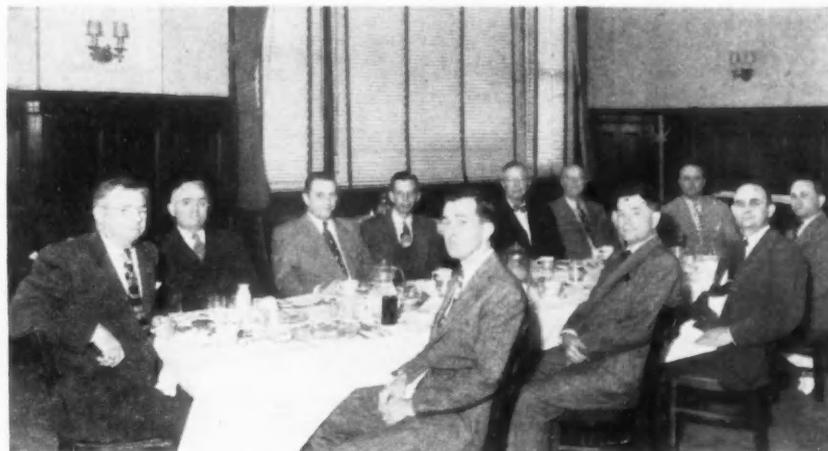
The programs begin with luncheon. The featured speaker then talks on the subject of the day, usually taking no longer than 15 to 20 minutes. Following the talk, the discussion is opened to the entire group, with the speaker replying to questions from the floor. Outstanding films on building industry subjects have also been used as program features; after the movies are exhibited, a period is allotted for a discussion of them.

A special demonstration forum was held at The Stevens hotel, Chicago, during the NAHB convention in February, at which visiting delegates were given an opportunity to observe and participate. At this meeting, Philip Creden, advertising and merchandising manager of the Edward Hines Lumber Co., Chicago, led a discussion on the merchandising of homes.

A recent speaker at one of the forum sessions was Dr. J. S. Long, recognized as an authority in the paint and plastics field. Other outstanding speakers during the last six months include Frederick W. Turner, Jr., general counsel of the Cook County Lumber Dealers Association; Joseph T. Meek, executive secretary of the Federation of Illinois Retail Merchants Associations; Carl G. Lans, director of the NAHB Technical Service Department; Everett H. Kincaid, Community Planners, Chicago; Mrs. Henny Mollgaard, Milwaukee builder; and Kimball Hill, vice president of the Chicago Metropolitan Home Builders Association.

Movies have included the premiere showing of "White Magic," by the U.S. Gypsum Co., and a film on the construction of the typical California beach house.

Plan Aid for Low Income Home Buyers



MEMBERS of the Richmond NAHB affiliate's board of directors (left to right): Ernest E. Mayo, president; C. G. Yagel, executive secretary; E. H. Wicker, national director; I. Norris Blake; John Toler, auditor; S. T. Massie; B. B. Orange; B. O. Williams, vice president; C. Stuart Duggins, Carl F. Robison; and J. Edward Seay, treasurer

A plan which would provide home ownership for a substantial number of the nation's low-income families, without resorting to public housing, has gained wide attention since it was proposed recently by the Home Builders Association of Richmond, Va.

The plan's purpose is to obtain government aid for financing the purchase by individuals of housing in older,

poorly maintained sections of cities. Its framers say that, through repair and alteration, much of this property could be converted into comfortable homes which would last for years.

Backers of the Richmond plan point out that the reason millions of old homes, still structurally sound, are in

(Continued to page 70)

"Keys to Happiness" Used in Dayton



FIRST "Keys to Happiness" in Dayton, Ohio, are presented by Joe Haverstick, Montgomery County Builders Association, to young veteran and wife. Haverstick gives these keys to home buyers with informative booklet on building industry

Jersey Builders Name Officers at First State Convention in Atlantic City



ELECTED to lead the New Jersey state group in first full year of activity are (left to right, standing) B. W. Renninger, secretary; C. J. Von Drehle, executive secretary; R. E. Hanly, vice president; (seated) E. J. English, treasurer; E. M. Spiegel, president; J. S. Wright, executive vice president. Four sectional associations form the group

Emanuel M. Spiegel of North Arlington was elected president of the New Jersey Home Builders Association in the group's first convention, April 1-3 at the Traymore hotel, Atlantic City. More than 600 builders and associates attended.

Spiegel succeeds Willard E. Closs, Summit. Other officers chosen to lead the organization, which was set up several months ago as the New Jersey Council of Home Builders Associations, are: vice president, Raymond E. Hanly, Camden; secretary, B. W. Renninger, Lavalette; treasurer, Edward J. English, East Orange; counsel, Alexander Feinberg, Camden; executive vice president, John S. Wright, New Providence; and executive secretary, Clarence J. Von Drehle, Hackensack.

The four sectional groups which met to form the state association are the New Jersey Metropolitan, North Jersey, South Jersey and Shore.

Speakers at the convention included Gov. Alfred E. Driscoll of New Jersey; Rodney M. Lockwood, NAHB president; Harrison L. Todd, president of the New Jersey Association of Real Estate Boards; and Warren J. Lockwood, assistant FHA director.

Spiegel, a member of the New York bar, practiced law from 1928 to 1941 when he entered the building field in New Jersey. Since that time he has built more than 500 homes and apartments in Bergen and Union counties. He is regional vice president and executive committee member of NAHB.

Hanly, a native of California, served in World War I and located in New York in 1919. He is a realtor in the Camden area, where he began operations in 1924. Renninger was planning supervisor for the Radio Cor-



W. E. CLOSS, retiring president, receives watch in appreciation of his services

poration of America at Camden until three years ago, when he became a builder and, later, an NAHB director. English, an NAHB delegate from New Jersey for three years, is president of English Brothers in East Orange and has been building homes in Essex county for 17 years.

Increase Size of Portland Publication

The March 26 issue of "The Portland Home Builder," official publication of the Portland, Ore., Home Builders' Association, Inc., was marked by an increase in size to eight pages and a new two-color layout. Larry W. Bome, Association executive secretary, is editor, and James I. Jordan, advertising manager.

At a special meeting of the executive board, March 14, it was decided to table final consideration for the time being on a proposed housing survey for Portland.

NAHB Chapter Organized At Mason City, Iowa

The first meeting of the recently organized Mason City, Iowa chapter of NAHB was held March 21, when officers were installed and plans made for the support of several group projects.

Thomas C. McIlvain was elected president; Edgar Payne, vice president; A. M. Halsor, secretary; and Ernest Zerble, director.

Among the projects sponsored by the new organization are a study of local and national building codes and the building of an economy experimental house which will sell at a price between \$7,000 and \$8,000.

1949 Program is Topic Of Fort Worth Meeting

Discussion of a projected Home Builders program for 1949 highlighted the first of two important February meetings of the NAHB Fort Worth chapter. Members consolidated all available information about the various factors involved in building houses.

Low-cost housing was the topic of the industry-wide second meeting. Speakers at an Economy Housing Forum included representatives of the Veterans Administration, FHA, Home Builders and Mortgage Finance Agency.

The Richmond Plan

(Continued from page 69)

poor condition or have become slums is that financing for this type of housing is almost impossible to obtain. After the property has deteriorated it is acquired, at a small part of its worth, by buyers with cash and is used for rental purposes. With no repair over a number of years, it becomes uninhabitable.

The plan, approval of which has been expressed by both Virginia senators in letters to the Richmond Association, proposes that such properties be converted into private homes in two ways, both requiring federal financing and cooperation by local governments.

A house could be sold to a prospective home owner, provided certain repairs were made, under government insured loans up to 95 per cent of the cost of the house, plus repairs and alterations. In the case of builders, loans could be made up to 85 per cent of the cost of building and repairs. In re-sale to individual purchasers, the 95 per cent loan would apply.

Local governments could encourage the plan by enactment of moratoriums on property tax increases in the affected areas. Installation of sidewalks, street resurfacing, etc., would help.

Thousands of good homes with ample size rooms could be bought at monthly payments of from \$15 to \$40 a month, according to an outline of the plan. It was also suggested that buildings beyond repair be wrecked and their space used for parks.

Niagara Builders Re-elect Entire Officer Slate

The Niagara Frontier Builders Association re-elected its entire officer slate for a second term in its annual election meeting March 8 at the Park Lane hotel, Buffalo, N.Y.

Continuing his duties as president of the group is Frederick T. Williams, president of Frederick T. Williams Co., general contractors, designers and home builders. Williams also heads the Buffalo Better Homes Exposition, sponsored by the Builders Association, April 30 through May 7, and the Buffalo Real Estate Board.

Other officers re-elected were Oscar Giesecke, vice president, who is vice president of the O. H. Giesecke Co., and a NAHB national director; David M. Hannah, secretary, a partner in the Border Building Co.; and treasurer



FREDERICK T. WILLIAMS

Charles F. Peacock, president of Peacock Homes, Inc.

Directors elected were: One year term: Raymond C. Dewey, Philip N. Fleck, Giesecke, G. Lawrence Mitchell, Howard W. Pearce, C. M. Weinheimer; two year term: John R. Bryan, Hannah Peacock, John G. Percy, Jr., Edward Setel, Harleigh A. Welsh; three year term: William R. Albright, J. Harold Genrich, M. J. Peterson and Williams.

Urge Standard Municipal Code to Cut Plumbing Costs

Asserting that the absence of a uniform plumbing code added as much as \$500 to the cost of a house in the state, delegates to the New Jersey Home Builders convention at Atlantic City April 1-3 urged the adoption of a standard set of regulations which they said would eliminate the extra cost.

A statement by a Newark plumber, Max Cohen, revealed that he is required to obtain thirty-four separate licenses in order to do plumbing in as many municipalities.

Cohen said that each local government not only requires separate licenses, but all have different regulations, many of them expensively restrictive. He recommended a state examination, the satisfactory completion of which would entitle a plumber to work anywhere in the state. "Under the existing system, plumbing runs 20 percent of the cost of a building," he said. "There is no reason for so high a price."

Cortright's Column

By Frank W. Cortright

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



POWER TOOLS FOR SALES

In the past decade the most significant trend in the home building industry has been the mechanization of construction methods. Power tools have been brought into play and the entire process of building a home has undergone a thorough streamlining.

The natural results of this trend have been greater speed in home production and substantial economies all along the line.

Today, home builders in many parts of the country have begun the final phase in mechanizing home building from start to completion. As the home buyers market returns to a normal competitive condition, "power sales tools" must be brought into play in the field of sales. Old sales methods must be dusted off and new equipment for the sales machine be built.

There seems to be a general agreement among leading economists that consumer demand for many items is far more selective. Seldom are entire projects sold out before the first home is completed. Instead, we find definite evidence of new homes selling in a normal pattern. Progressive builders are showing the way by preparing to meet the situation before it arrives.

What then are the 1949 tools which the home builder can employ to bring his sales message forcefully and effectively before the prospective home buyer?

Even in the most competitive market a home that is tastefully and functionally designed, soundly built, well-located and aimed toward the strata of the buying market that is seeking new homes is half sold. The last factor of pricing is, of course, all important.

Once having solved the basic problems of price, location, design and construction, the home builder comes to grips with the current psychology that pervades the country. Through many sources, often high places in government, have come warnings of deflation when everything will be selling for less.

This is unrealistic and a dangerous approach as men who are working every day with the problems of home building well know. Our economy has undergone a constant expansion and a glance at the trend line shows that this has been going on not just for years and decades, but for several centuries. We are on a new plateau of costs and the home buyer who waits for the substantially reduced prices waits in vain.

Overcoming the fallacy that prices may go down is an Association job, on the national and local levels. Each home builder and each person in the allied segments of the industry have a job to do in their personal and business relations. In addition to the over-all publicity work of the Association, much can be done by the individual builder who, by modern sales techniques, recognizes that we are living in a new postwar world and new sales tools are simply one of the basic facts of life.

After the groundwork of good planning and construction is laid, the big sales guns can be brought into action. Lined up beside the old, they give a far more effective attack than ever before.

Direct mail pieces are a standby. This type of advertising offers a broad range of creative thought. Newspaper advertising has the proof of years behind it, too.

Publicity, placards, and special events to attract public attention will bring sales results, as will unique tie-ins with your sales offer.

Among the new methods that are now available is radio which has come into its own with big sales results for many industries. Pioneer merchandisers among home builders are getting splendid results over the air waves.

And who can deny the intriguing possibilities of television which can bring your product before the eyes of a great, buying audience?

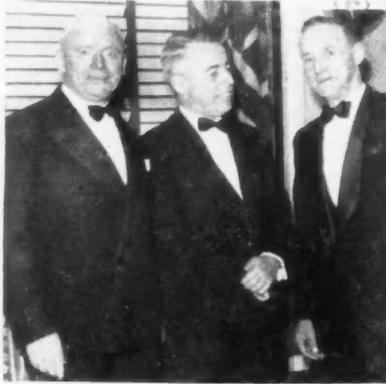
Model homes are perhaps the best of all methods since home hungry buyers can experience the thrill of occupancy and possession.

The ceiling on sales is set only by the producers of homes today. With so many sales tools at hand, the market ahead need cause the home builder no concern.

NEW LEADERS HONORED AT DETROIT GROUP'S ANNUAL BANQUET



THREE of the Metropolitan Detroit Association's new officers for 1949 (left to right): Norman A. Burns, secretary; Samuel Hechtman, treasurer; Henry F. Fett, president. Bert C. Whitney is first vice president; Wallace A. Colwell, executive secretary, and Earl C. Doyle, general secretary. George Duke is retiring president



DISCUSSING industry problems before the banquet are Edmund Kuhlman (left), who served as master of ceremonies; William K. Divers, chairman of the Federal Home Loan Board, who was the featured speaker, and William J. Guinan, who is retiring as executive director. Guinan will continue to edit "The Bildor"

1949 Officers Installed at Jacksonville



NEWLY-ELECTED officers of the Jacksonville, Fla., Home Builders Association who were installed at the group's annual banquet: (left to right, seated) Walter J. Cowart, secretary; B. C. Buck, treasurer; George Wood, president; Lawrence C. Pearce; (standing) Fred Thelman, vice president; Joseph W. Davin and Victor Nihoul

Mechanics Trained by Seattle Group



A SEATTLE Master Builders apprentice training class. Seattle builders stress these classes, look forward to having an adequate number of well-trained mechanics

New officers of the Builders Association of Greater Detroit were installed at the group's 21st Anniversary Banquet, April 6, in the Statler hotel, Detroit. They are Harry F. Fett, president; Bert C. Whitney, first vice president; Norman A. Burns, secretary; and Samuel Hechtman, treasurer.

More than 800 persons attended the annual event. An address was made by William K. Divers, chairman of the Federal Home Loan Bank Board, on the "Function of Home Loan Bank and Housing." Edward Kuhlman, Detroit, was master of ceremonies and Edward G. Gavin, editor of the *American Builder*, served as toastmaster.

Other officers and staff members of the Detroit Association are Vice Presidents John Weinhart, public relations; Webb Coe, educational committee; Frederic Gerhardy, labor committee; A. W. King, legislation committee; Wallace A. Colwell, executive secretary; Earl C. Doyle, general secretary; and W. J. Guinan, editor of the "Bildor."

BUILDERS' REVIEW CONTINUED
ON PAGES 228 AND 236

See Record Attendance at 1949 Chicagoland Home Show

Plans for the third annual Chicagoland Home Show, which will be held at the Chicago Coliseum May 14-22, are nearing completion, it has been announced by Nathan Manilow, president of the Chicago Metropolitan Home Builders Association, sponsor of the event.

Among the features of the Show this year, the most comprehensive yet arranged by the Association, are a student contest in home designing with awards totaling \$1,500; a free advisory service by representatives of builders, Veterans Administration, Federal Housing Administration and mortgage companies; and the "Home Seekers Supermart," a large composite display by a number of builders.

The student contest, held for the first time this year, is open to all students who have not graduated from high school. Competition is in three divisions: Designing of a small, one-story home; construction of models for a similar home; and designing or creation of household utilities or conveniences. Ten prizes are awarded in each division, first prize being \$200.

The 1949 Show is again under the direction of Paul S. Van Auker, NAHB convention and exposition director. Exhibits fall into the following major classifications: Building materials and building products, heating equipment, kitchen cabinets and equipment, gas and electric appliances, lumber and mill work, plumb-

(Continued to page 236)

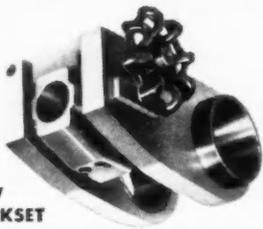


"We saved time, money and installation headaches on the Richland atomic-energy housing project with KWIKSET LOCKSETS"

...says **JOHN L. HUDSON**, president of John L. Hudson Company, Portland, Ore., builders of the 450-unit Richland housing project shown below.



400-A,
5-pin
tumbler
entry
locking set
for exterior
doors.
Handle can
be ordered
separately.
Deadlatch
optional.



**NEW
KWIKSET
JIG**

Screws on in a jiffy; holds tight. Assures exact right-angle holes. Saves time and money. Write for details.

GOOD HARDWARE MARKS GOOD CONSTRUCTION ... IN ONE HOME OR A THOUSAND

Front door hardware can give a good or a poor impression of the construction that's gone into a house. And handsome, lustrous Kwikset locksets give a *good* impression.

Yet builders save up to 20% on hardware costs with Kwikset because of low first cost and fast, easy two-hole installation.

Kwikset locksets are sturdy, too. All parts are of brass stampings or pressure-cast from high-test Zamak No. 5.

Each lockset is *unconditionally guaranteed* against defects in materials or workmanship. Over 4 million in use. Available for all standard installations and in finishes of satin or polished chrome, brass or bronze.

Manufactured by KWIKSET LOCKS, INC., Anaheim, California



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

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. AB-1

Name _____ Company _____
Street & No. _____ City _____ State _____

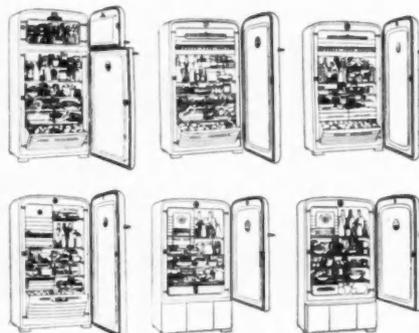
How to get the MOST into a small kitchen!

Kelvinator One-Width Appliances Provide Extra Space . . . Simplify Kitchen-Planning



In today's small kitchens, every inch of space counts! That's why Kelvinator appliances, amazingly roomy inside . . . yet so compact outside . . . are the answer to many problems in design. In addition, Kelvinator offers the *exclusive* advantage of *uniform widths*. Six Kelvinator refrigerators, for instance, are 31 1/4" wide. Any model, chosen according to budget, will fit. You avoid last-minute changes in plans.

Your
choice!
all
31 1/4" wide!



4
Kelvinator
Ranges
and
Home
Freezer



All 39 Inches Wide!

AMAZING NEW FEATURES, efficient use of space, greater convenience and economy for home-makers feature Kelvinator electric ranges. They are all one width. Freezer, too! Design around Kelvinator!



SPACE-SAVER PACKAGE

Get Kelvinator's 1949 "Space-Saver" refrigerator. It is full 6 cu. ft., but only 24 in. wide. Range is only 21 in. wide, with advanced design permitting installation flush against wall. Top-of-the-line quality throughout. For information, write Kelvinator Division, Nash-Kelvinator Corporation, Detroit, Michigan.

GET MORE *Get*
Kelvinator

AMERICAN BUILDER

E D I T O R I A L

A Little Public Housing

A LITTLE public housing in an economy is exactly like a little cancer in a human body. Neither can be controlled. Once either takes root, complete and speedy removal is the only possible preventive against a spread that soon snuffs the life out of the body in which it is embedded.

Irrefutable medical evidence precludes any argument about how cancer develops, spreads, and kills. Equally irrefutable, but unfortunately less publicized, evidence exists to support the contention that public housing develops, spreads, and kills in the same way. The evidence is in New Zealand, Australia, and England, where limited public housing programs were started at various times. In New Zealand, all housing is now public housing. In Australia, unless something unexpected occurs to stop the spread, three years will see the end of private home building. In both cases confiscatory taxes to support socialistic states make it impossible for anyone, regardless of his income, to net enough to pay for his own home. England is well advanced toward the same end.

In all cases, the first housing bill limits the number of units to be built by government, and also places a limit on the incomes of families eligible to receive the alleged benefits of partially or totally subsidized public housing. It is soon found that there are more families eligible than there are units provided for in the bill. Lawmakers succumb to pressure for additional units on the basis of alleged discrimination against other eligibles. Another bill is passed authorizing more thousands of units.

Then the groups with incomes 10 to 25 per cent above the legal limit prescribed for occupation of the subsidized units either start working fewer days to diminish their incomes to eligibility levels or raise a strong cry of discrimination in favor of a selected minority. Another bill is passed increasing the income eligibility limits. From that point only 10 to 20 years is required for government to throw out all limits and take over the construction and ownership of all housing. That is the history of public housing elsewhere, and there is no reason to believe that it can or will operate otherwise here.

Even so, there should be no objection to public housing if it provided more and better houses for less money. The reverse, however, is true in every case where public housing is the rule. Houses are smaller, have fewer conveniences, are located where government wants them built, have less style, require infinitely more time to produce, and cost from two to two-and-one-half times as much to build. The cost probably is much greater, because it is impossible to discover what many hidden government costs amount to. Taxes have to be increased to staggering percentages of income to support hordes of non-productive payrollers, and the socialist Utopia has been achieved. It is the strangulation of incentive, the liquidation of producers, and perfect division of ever increasing poverty.

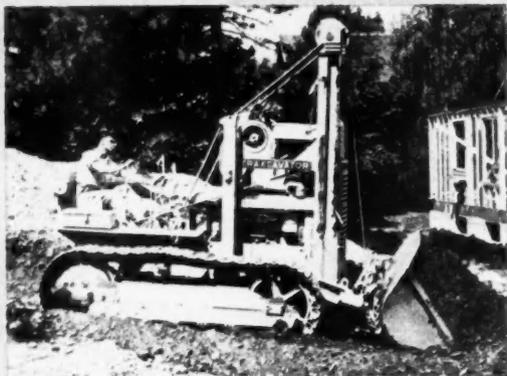
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Labor-Saving Tools and Equipment Mean Much to the Builder In Today's Market

EFFICIENCY and economy in every phase of home building is dominating the thinking of the industry. Two factors are responsible—the rapid rise in building costs since the close of World War II, and the gradual change from a sellers' to a buyers' market.

In attempting to achieve maximum efficiency and economy in home construction the importance of utilizing all the newest in labor-saving tools and equipment should not be discounted by any builder—large or small. Progressive and forward-thinking manufacturers have studied the problems of the industry. They have come forward with a host of new devices plus improvements in those already developed. As a result, the home building industry today has been mechanized to a point not realized nor appreciated by the general public or the average home purchaser. While continuing to do more and more of the work of home erection with tools of all types, designers and builders have not been forced to sacrifice any of the attributes of the American home in consistent quality and permanence or in individuality of design. Builders are, in fact, able to do better, more precise and accurate work with the excellently machined equipment now offered by a host of tool and equipment manufacturers, who are listed on page 89.

This issue of *American Builder* features a few typical home builder operations where labor-saving tools and equipment are helping to hold costs down and step up efficiency. These were selected at random from various sections of the United States. There are thousands of others. Information and details on many of the devices mentioned in the articles in this issue can be found in the advertising pages.

Labor - Saving T

This home building firm not only uses the most modern in tools and equipment, but carefully co-ordinates all phases of activity on projects to achieve maximum output and value for prices quoted



Walter Bollenbacher, president, left, and L. Kelton, vice president and secretary of firm



g Tools and Equipment *At Work*

GENIAL, affable Walter Bollenbacher is one of California's top home builders. His volume of sales in 1948 was close to \$10,000,000. At one time last year he had 1,100 homes under construction simultaneously. With an operation of that size, planning, organizing and use of labor-saving equipment are of prime importance.

Bollenbacher lays great stress on advance planning. He feels that a tract development practically runs itself during the construction period and makes possible completions in 45 to 50 days—at the rate of 10 per day—if it is properly planned and co-ordinated in advance.

During the advance planning stage, all electric, gas, water and telephone layouts are co-ordinated so that when construction starts those in charge of various crews will know where all elements are to be located. Construction crews do not understand engineering plans. For this reason the various underground and overhead utilities are included in the plot plan. This is to prevent the unloading of lumber, sand or other material in the wrong spots on the subdivision site so crews coming on the job will not be confronted with a pile of sand or a stack of lumber right where work must be done. This plot plan is given to all material supply houses to guide unloading and the

company checker double checks the unloading location. It is costly to move sand or lumber on the job.

Long before FHA made it standard procedure, Bollenbacher was grading his tracts. He found that grading may cost \$10 per lot but saves up to \$80 per lot on foundations. Rough grading is co-ordinated so the dirt will be equalized. A soil testing engineer is always on the job and a constant grade check is made.

The first use of power equipment in the actual building operation is in digging trenches for footings. This is done with a Cleveland trencher. In Southern California it is necessary to go down only 12 inches for footings. The foundation forms are simple—1-inch boards cleated together. James Nicely, the superintendent on Bollenbacher's largest projects, has used the same forms more than 100 times by carefully oiling them after each use and handling them with reasonable care.

As soon as foundations are stripped, gas, water, and sewer lines are installed and the rough plumbing assembly is put in place. These assemblies are put together in the plumber's shop on the site where jigs are set up for the purpose. A battery of four Oster machines (The Pipe Master) cut and thread the pipe.

ALLIED Contractor crews do the same specialized work day after day with the same tools. With this system foreman as well as individual workmen become especially proficient in doing certain operations with special tools. When men know they will use the same tool tomorrow they take better care of it today





HOLES in mudsills are bored with a Skil-Drill by men in mudsill and girder crew. Left, a Cleveland trencher digs foundation footings. By careful stripping, oiling and handling, foundation forms have been used more than a hundred times



The homes are erected by specialized crews and foremen. These men do the same jobs day after day and become very proficient. They require little supervision. The crews are as follows: 1. Foundation; 2. rough plumbing; 3. mudsill and girders; 4. joist and subflooring; 5. layout; 6. framing—raising walls, applying ceiling joists, rafters and roof sheathing; 7. lathing; 8. plastering, exterior and interior; 9. finish and fixtures; 10. linoleum and shades; 11. landscaping; 12. clotheslines and incinerators.

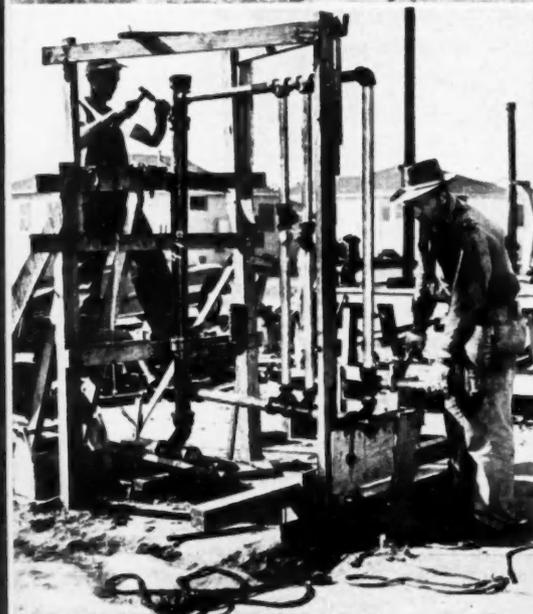
Carpentry work is done by the company's own men. All other work is sublet. Bollenbacher has some very definite ideas about subcontractors. He uses the best, not the cheapest. He points out that many subcontractors can submit low bids but too often they cannot pay their bills, get in trouble, and cannot finish the job. This creates a chain reaction series of

delays and throws the whole schedule out of gear. Even more important than price, the main qualification of a sub must be that he has the men and materials to get the work out on time. This is important with Bollenbacher. On a recent job the plumbing contractor had 157 plumbers at work at the same time. An essential in all advance planning includes qualification and selection of subcontractors.

Lumber for each house is packaged by the lumber dealer and delivered to the lot, piled with the mudsills on top and roof sheathing on the bottom. The package does not include rafters. This stock is delivered to the shop, cut and notched there before being hauled to the site. Notching is done by attaching a Disston dado head to the regular power saws. The company uses four radial Comet power saws, which are moved from lot to lot to cut framing lumber to exact size required. Some builders cut all lum-



BELOW a battery of four Oster Pipe Masters cut and thread pipe on the job site for preassembled plumbing stacks. One is shown at left being assembled by plumbers



ber in a central yard, but Bollenbacher has found it is cheaper to move the saw to the lumber than to move the lumber to the saw and then move it again to the lot.

All trades are co-ordinated in advance. A time schedule is set up and each is advised what it is—six, eight, or ten completions a day. The project does not move any faster than the slowest subcontractor. If one operation slows down many others are affected. Trouble can pile up fast. Bollenbacher has proved that it is better to accept a higher bid from a sub who can produce because bogging down on a high speed operation will cost more in additional overhead, interest and carrying charges than could possibly be saved by taking a low bid from a doubtful sub.

Bollenbacher is a great believer in the use of power tools. They make the work easier for the men, take much of the drudgery out of it and speed it up. The company owns four Comet power saws and 50 Skilsaws. The superintendent reports that his raising crews erect the framing and get the roof sheathing on in 50 to 55 man hours, using these electric powered saws.

The mudsill crew uses a Skil-Drill for boring holes in the mudsills. The finish and fixture men who hang the doors use a Stanley-Carter planer to fit doors and a Stanley-Carter router to rout for butts. A templet is tacked to the jamb and the router does the work in a minute or two.

The roofer uses a conveyor belt powered by a gasoline motor to get his bundles of asphalt shingles to the roofs. Two Fordson tractors can be used as loaders or graders.

The firm name is Allied Contractors, Inc. Bollenbacher is president and Louis L. Kelton is vice president and secretary. Bollenbacher is the builder, and has been active in the

Los Angeles area for a generation with several thousand units to his credit. He constructed a major portion of the residential income property in Beverly Hills and has built dozens of luxury houses there. Kelton handles the office and promotion end of the business. He also spent his entire life in the building business. Before going to California, he was associated with Bing & Bing, Inc., in New York.

Until the last few months every tract this company promoted was sold out with spectacular speed. Last spring 254 homes were disposed of in Lynwood Gardens, Los Angeles, in three weeks. There was no advertising—not even a sign on the property. The streets and sidewalks were not in and there was no model home for buyers to examine. The firm had made arrangements for advertising and publicity and the furnishing of a model home, but the houses sold before these promotional helps could be put into action. Later, another group of 392 homes in the San Fernando Valley sold out in record time.

Today the situation is somewhat different. There is no longer any emergency shortage of houses in the Los Angeles area and houses must be sold. Buyers can take their choice of thousands of homes. But this transition from a sellers' to a buyers' market does not worry Bollenbacher and Kelton. They are prepared to sell their homes. Bollenbacher says he plans to build a "crying room" in his office for some of the younger builders who have known nothing but the lush market of the past two years. As far as he is concerned, he has been through competitive markets before.

The current development, Allied Gardens, is located in the southern part of Los Angeles about 12 miles from the heart of the city. It comprises 542 homes, all two-bedrooms, except for a few three-bedroom



SINGLE-FAMILY and multi-family homes are built by Allied Contractors at low cost with maximum use of labor-saving tools

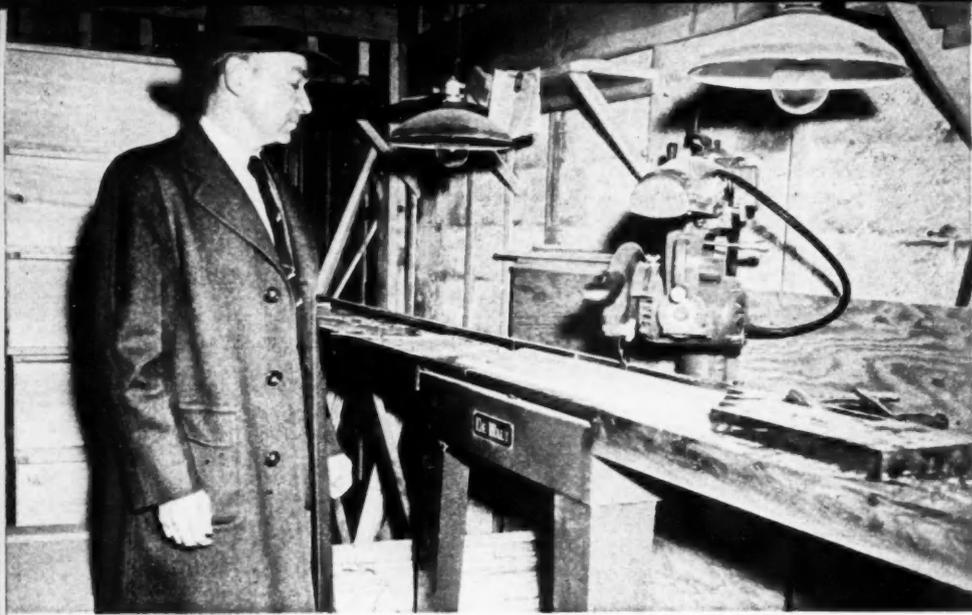
houses placed on corner lots. Construction is frame and stucco with asphalt shingles on the roofs. Lots average 55x100. One-car garages are attached. Sidewalks, paved streets, curbs, gutters and sewers will be in on completion of the project. Stainless steel sinks and drainboards, hardwood floors, dual floor furnaces, Kwickset locks, Hall-Mack chrome bathroom accessories, Standard plumbing fixtures, Herco water heaters are features.

Prices on the houses are \$8,400, \$8,500 and \$8,600, depending on models. They are offered to veterans at \$190 down and about \$62 per month. Non-veterans pay \$750 down plus impounds and \$80 per month. The \$190 figure for veterans includes all escrow and impound charges and is the total down payment required.

This firm's plan for the immediate future is to get prices down as much as possible on present models. This involves even more efficient and wider use of power equipment.

A TEMPLET is tacked to door jamb so routing for butts can be done accurately with Stanley-Carter router. Radial saws are mounted on wheels so they can be moved around to each house site easily





CONRAD J. GETTLER, president and treasurer of the firm, standing by the shop radial saw setup which will miter four pieces of trim at one stroke with special templet

TO ACHIEVE efficiency and economy in the use of labor-saving tools and equipment requires more than an elaborate array of the best of these items. Best results can be achieved only if the builder and the men he employs have enough ingenuity to use the equipment so that maximum efficiency is obtained. Using the tools and equipment properly also means more than working with them. It means keeping each well-sharpened and in good repair, whether it be a small drill bit or a trench digger.

These are the thoughts of Conrad J. Gettler, president and treasurer of Sunnybrook, Inc., home builders of Glenside, Pa., a suburb of Philadelphia. He and his associate, John P. Henrie, vice president and secretary of the company, are firm believers in the savings that can be effected by using equipment to the limit on their building jobs. Gettler, who is in charge of building operations, which include a large, especially well-equipped woodworking shop, also feels that every man using a tool or machine of any type must have a cer-

tain amount of initiative and ingenuity to adapt the equipment to the job to which he is assigned. He should first of all know what the machine or tool will do when it is at its best. From then on he should strive to keep it working in that manner or even improve on it if possible.

In conformity with this idea, Gettler has in several instances suggested modifications in equipment to manufacturers so that the product could be even better adapted to use by builders. He was instrumental in getting some changes made in the Zern door jig, one of which he uses regularly in his woodworking shop. For some time he has been contacting manufacturers in an effort to get a power hand drill designed so that the moment power is shut off a brake would automatically stop the bit shaft from turning. He believes this would speed work measurably on many jobs around a woodworking shop or on the home building site.

Gettler reports difficulty in buying woodworking drills the exact length needed for a specific job. He believes

Getting

Labor-saving tools have been a big factor in the success of this firm which has completed more than 4,700 homes since 1938 when they built their first project

it lowers efficiency to have a bit either too long or too short. In connection with this same subject he has found that it saves time and money to have a power hand drill of the right size for each bit used regularly to eliminate the need for workmen to stop and change bits in the same drill to do two different jobs. The policy here is always to have the proper tool or machine for the job to be done.

Because this firm insists on top efficiency in the operation of equipment, all saw sharpening and setting is done in the shop by employees. Practically all of the saw blades used are hollow ground to leave joints cut by them about the same as though they had been planed.

This is important in the Sunnybrook shop because of the great variety of fine work turned out to be used in the houses erected by the firm. Shop lumber is bought in carload lots and run through machines as required. All mouldings, trim and baseboard are run there, cut to size, mitered and prefit. A special templet designed by Gettler and his superin-

STREET view in Sunnybrook's Country Club section where 1,500 homes have been completed and 200 are under way



the Most Out of Power Equipment

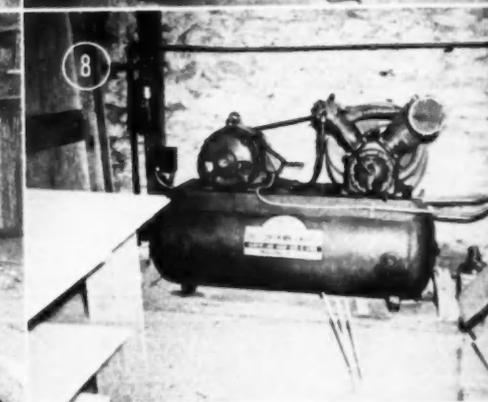
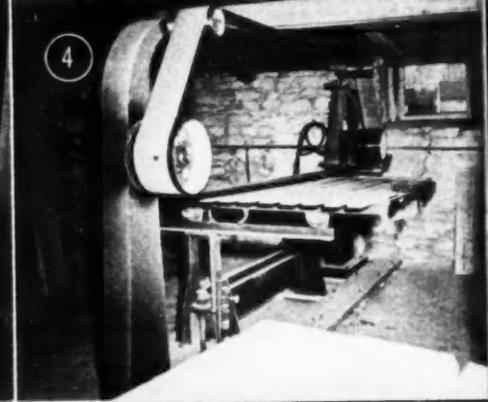
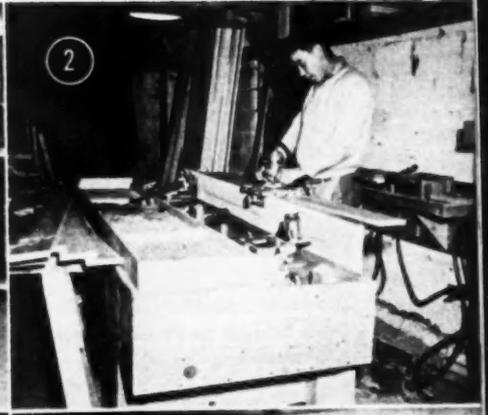
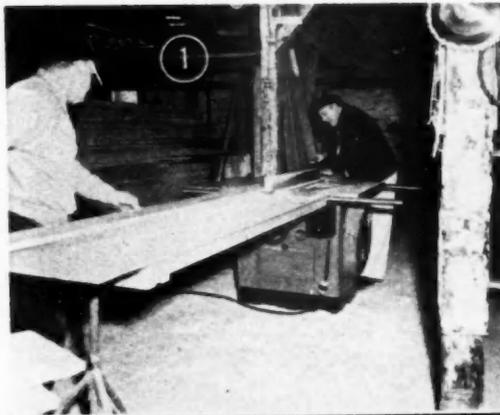
LABOR-SAVING EQUIPMENT USED

- Acme saw filer
- Beach belt sander—2 H.P.
- Black & Decker electric drills
- Delta 24-inch band saw
- Delta table saw—5 H.P.
- DeWalt radial saw—1 H.P.
- DeWalt radial saw—5 H.P.
- DeVilbiss and Hovey-Binks paint spray equipment
- Handy glue press
- 2 Homelite pumps
- 5 Homelite generators
- Hutchinson shaper—3 H.P.
- O'Brien compressor—29 C.F.M.
- Parks planer—3 H.P.
- 22 Porter-Cable powered hand saws—all sizes
- Powers 18-inch jointer
- Sterling powered hand sanders
- Walker-Turner table saw—2 H.P.
- Zern door jig

tendent makes it possible to miter four pieces of regular trim with one stroke of a one-horse DeWalt radial saw.

All doors are prefit, drilled and mortised for hardware in the shop. Using a Zern door jig, routing for butts is done on the door and the jamb at the same time. With the jig, special drills for each bit, and the router, four doors can be prepared for hardware in the time it would take to do one by conventional methods—and the work is more accurate. All shutters used on Sunnybrook houses are made in the shop in bunches of 2,000 to 3,000 at a time, at a saving of about \$2.00 a pair under regular cost.

The firm manufactures all kitchen cabinets installed in Sunnybrook homes. To do the job right with good equipment, a complete paint shop was installed, including a large compressor for spray guns. Because a great deal of gluing is involved in making good cabinets, a glue press was also added to shop equipment. Cabinet doors are faced with hardboard on both sides over a wood frame, all glued with the press, edges and faces finished and



1—NEW 5 H.P. table saw with 12-inch blade. 2—Mortising door and jamb at same time on jig. 3—Portion of paint shop. 4—Two H. P. belt sander. 5—Glue press used in assembling kitchen cabinets. 6—24-inch band saw. 7—Five H. P. radial saw, with blades all arranged on rack in orderly fashion. 8—Large paint compressor for the paint shop





THIS is typical of 387 houses in one project. Prices ranged from \$10,700 to \$11,500 including the garage, sundeck and basic shrubbery. Lots average 60x130 feet

then spray painted. The care taken to deliver a quality, unblemished product in the houses is demonstrated by the fact that all kitchen cabinets are carefully wrapped with corrugated paper before being hauled from the shop to the houses under construction.

Stairways, mantels, and special built-in cabinets for Sunnybrook houses are made by the firm's workmen in the woodworking shop. Gettler realizes this type of operation is unusual for a home builder, and freely admits that when regular millwork manufacturers can supply the same products of equal quality to him promptly at a lower price, he will be willing to discontinue much of the woodworking end of the firm's operation.

To assure adequate electric power on the building sites beyond power lines, Sunnybrook builders own and operate five Homelite generators, each capable of running a saw and sander

at the same time. In cutting framing on the job, 22 Porter-Cable power hand saws of all sizes are used. In the more than ten years that Gettler and Henrie have been building houses, they have accumulated their power equipment little by little and the more they got the better their cost figures showed up until now they would have to revamp their entire operation if it became necessary to eliminate any of the equipment.

Since 1938 this firm has built about 4,700 houses in the Philadelphia area. The lowest-priced house they ever marketed was a \$3,550 prewar row house and their largest houses were a few in the \$27,000 price range in 1942. At the present time, prices range from \$9,100 to \$18,300. Operations are going on in three separate subdivisions. One of 387 houses is about completed. The Sunnybrook Country Club section, where the highest priced houses are being erected, is a beautiful subdivision with curvilinear streets, well landscaped and planted with trees.



CAPE CODS and Colonials were used throughout the Sunnybrook Country Club subdivision. Houses similar to the one below on lots varying in width from 65 to 94 feet and up to 135 feet in depth are priced in a range between \$16,500 and \$18,300, depending on the size of the lot, exterior and interior finishes and appointments



Here the firm is erecting Cape Cods and Colonials in the \$16,000 to \$18,000 price range. For this money the purchasers get a two or three-bedroom brick, stone or frame exterior home, usually with two baths, well designed and erected on a large lot, minimum 65x135 feet. About 1,500 houses have been completed here and about 200 more are planned. David F. Henrie is sales manager.

This spring work is getting under way on a new development of 145 story-and-a-half basementless units to include two bedrooms and bath on the first floor and an unfinished attic with built-in stairway to sell for under \$10,000. The firm is also completing a large community shopping center which will comprise 26 stores, a theatre and bowling alley.

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With a background of military experience where mechanized equipment was the order of the day, these young builders were quick to realize the advantages of power tools in the construction field



DOOLEY father-son builder team was originally incorporated as Mayfield Builders, Inc., and are known to trade as Mayfield Construction Co. Firm includes Roger Dooley, left; H. A. Dooley, center, and Robert, right who handles sales. Roger, above, is in charge of construction

Building With Power Tools

THREE years ago, ex-G.I.'s Roger and Robert Dooley were primarily real estate men, with limited experience in home construction. Today, as members of the father-son team, Mayfield Builders, Inc., Des Plaines, Ill., they are successfully building and selling well-constructed homes.

Roger, enterprising older son of the team, decided after the war that the best way to have good homes to sell was to build them. The idea was shared by Robert and their father, H. A. Dooley. They began to study operations of large builders throughout the country. They picked up ideas from the University of Illinois' Small Homes Council. In 1947, they built and sold 10 homes; 25 more

were sold and occupied in 1948, and 15 are currently under construction. Now, their total project is planned for 95 houses with a shopping center.

Roger, who handles the construction end, has no fixed ideas about building or design. Instead, he maintains an open mind for new ideas, and continually adopts methods that he considers best for his work.

Various operations in construction are standardized so that pre-cutting is profitable, and the father-son team uses power tools as much as possible to speed the job.

The main standardization element in their construction is a basic 24-foot unit, spanned by ceiling and floor joists. This is used

in each house they build. To this unit additional rooms are added, and the floor plan of each house can be widely varied. Since the 24-foot unit always remains the same in each house, and since it constitutes the largest cubage of each house, pre-cutting becomes profitable.

Precutting is done in one of the partially finished homes that is centrally located on the project. When all homes in the project are completed, the house used for the shop will be finished and sold. Framing members for the basic unit of each house are cut at the shop for length, and after the members arrive at the site, power hand saws are used to make the angle cuts.

Roger carefully worked out the



PARTIALLY finished house centrally located on site provides space for precutting equipment and storage. Lumber is stored under temporary tarpaulin roof until cut



GABLE ends are assembled on horses before being hoisted and put into place

procedure of marking and cutting materials in the shop. He places emphasis on materials handling, and realizes that time is money; that handling, in the shop or on the site, must be kept at a minimum. His system in the shop is aimed at cutting down handling time. Throughout the project, Roger plans work ahead so that workmen will not have to remain idle. By holding labor costs to within 50 per cent of materials costs, he believes that he can make a reasonable profit on each house without additional extensive tabulation of costs other than labor and materials.

Roger Dooley finds that many ideas, successful for other operations, may not work on his project. When the firm first started building homes, they tried roof truss construction. With trusses, it was convenient to use short lengths of lumber which meant extra bolting of 2x4's, more materials handling and more labor, according to Roger. Now, they use 2x6's for



SYNTRON hammer used for breaking up concrete or rock is easily handled

ceiling joists that span the entire 24 feet in one piece, and roof rafters are framed independently of ceiling rafters.

The firm builds mostly two-bedroom, ranch style basementless houses that sell for \$15,600 to \$16,100. They build some three-bedroom homes to sell for \$16,500 to \$19,500. The homes are built on concrete slabs, heated by radiant forced warm-air.

An 8-inch wide trench, 3½ feet deep, is dug for foundations after the land around the area is well levelled off. Concrete is poured directly into the trench, and this wall on the inside is insulated with two inches of fiber glass, 12 inches deep, around the entire house. Over a fill of sand and gravel, a moisture barrier is placed. Then radiant heat ducts are laid around the inside of the perimeter. After the feeder ducts are installed, the concrete slab is poured. Warm air registers are installed in each room, with heat outlets from the outer



EIGHT-inch blade Skilsaw is used to make angle cuts on rafters at site

BRANDED PRODUCTS USED

Armstrong Temlok insulating sheathing
 Barrett asphalt shingles
 Bell & Gossett circulating pump and fixtures
 Dexter locks for interiors
 Grote steel medicine cabinet
 Harrison steel kitchen cabinet
 Kehm boiler
 Kentile and Tile-Tex flooring
 Kohler plumbing
 National door butts
 R-O-W windows
 Schlage exterior locks
 Thermopane glass
 U.S.G. Sheetrock
 Waste King waste disposer
 Westinghouse circuit breakers



COMPLETE project, as now planned by Mayfield Builders, Inc., will include 95 homes and a shopping center. Homes range in price from \$15,600 to \$19,500, including lots, and are fully landscaped and decorated. Floors are oak and asphalt tile

perimeter ducts. A return air duct is later arranged at the heating unit. Heat is supplied by a new type automatic gas-fired furnace which forces air down into the ducts in the slab. The heating unit occupies a small space in the utility rooms of the houses.

Exterior frame walls are constructed on the ground, then tilted into place. Load bearing interior partition walls of 2x4's are also tilt-up type, and they help support the ceiling joists which span the basic

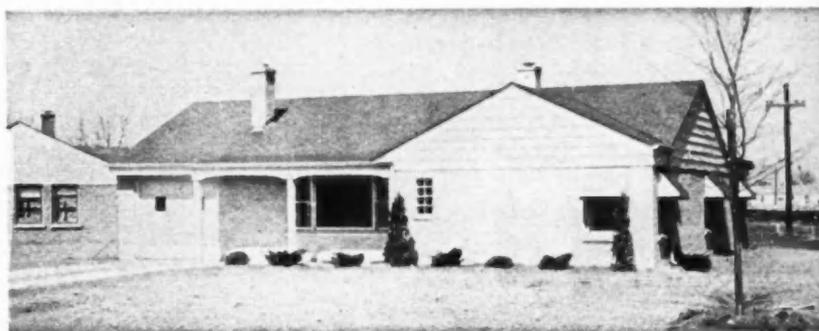
24-foot width. Thus the total unsupported area of the span is reduced. Changes in the interior partitions can easily be made for customers, and no extra charge is made for this as long as the size of the walls remains the same. Mineral wool insulation is used for exterior walls and ceilings.

Mayfield Builders, Inc. maintains a sales force of two men on the job and four others in the realty office. H. A. Dooley, president of the firm, has been in the real estate

business for about 12 years. He handles the financing of the homes the boys build. Robert E. Dooley is in charge of sales, and the model home which is kept open at all times at the project. The firm does some local newspaper advertising. They are rapidly establishing a good reputation for soundly-constructed homes in their community, and many prospective home buyers are becoming increasingly interested in work done by the Dooley father-and-son team.



ONE reason why roof trusses were discontinued in their houses, according to Roger Dooley, was so that additional space could be provided in attics, as it is in this two-bedroom model



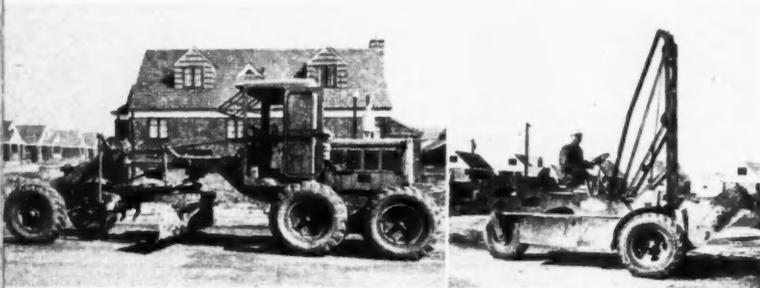
Rooms are added on to basic 24-foot unit in these houses



Modern Equipment Cuts Costs



HEAVY equipment like this moves dirt on the 210-acre Argo Village tract where Argo Homes, Inc. is completing 1,000 homes



EQUIPMENT used before and after homes are completed

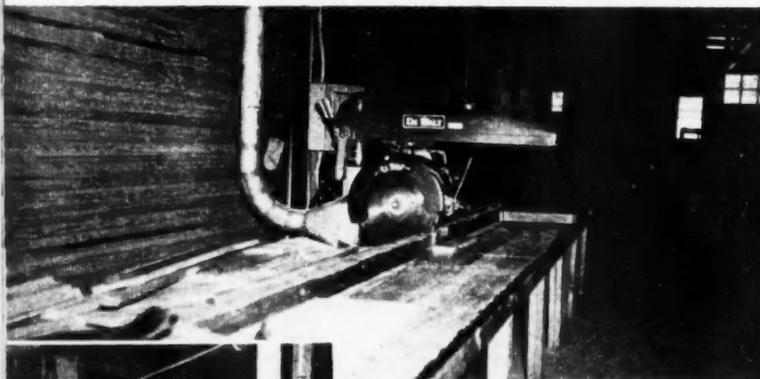
Power tools play the leading role on this project. They are used in almost every operation from the time materials arrive until homes are completed

LUMBER arriving at the Argo Village project in Elmont, L. I., N. Y., must run a complete gamut of power tools before it ultimately ends up, packaged, in front of one of the 400 homes under construction. Before the lumber finds its place in the finished home, it will again be subjected to time-saving power tools.

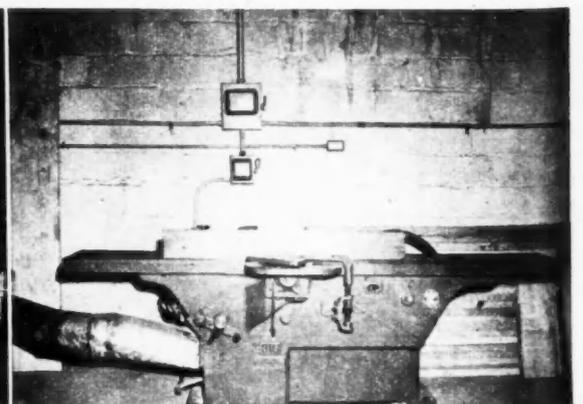
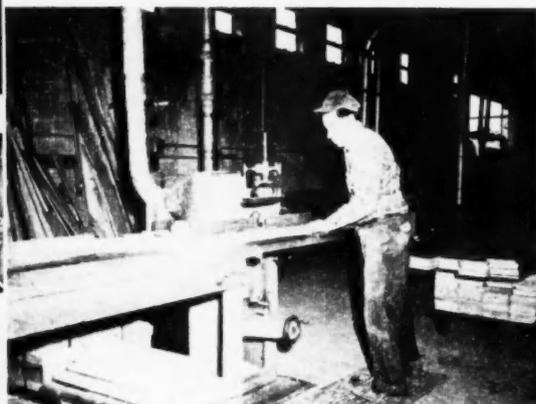
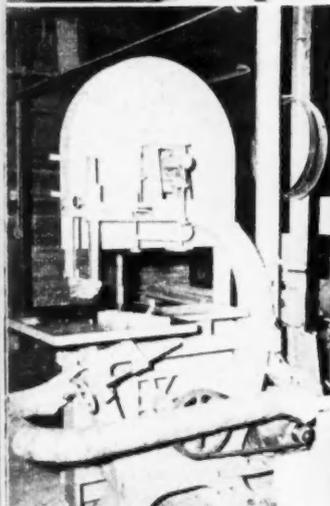
Precutting and materials-packaging constitute a large part of the power tool operations. In addition power equipment is used throughout the project.

When a carload of lumber arrives at the railroad siding, it is unloaded and then picked up by a Ross carrier to be delivered to the 210-acre Argo Village tract. This carrier unloads the lumber at the Argo yard, and a fork lift stacks it. From the stacks, the lumber is taken into the shop to be run through power saws, routers, shapers or sanders. In finished form, the lumber will be packaged and strapped—with enough lumber in each package for one house.

Meanwhile, heavy power machinery prepares the site. Twelve Pans and 3 Turnapoles were used in breaking



MODERN power saw is used for precutting



ASSEMBLY line production made possible through standardization of plans and the use of modern power equipment is not far from a reality in the Argo mill. Rough lumber enters the mill, runs the gamut of saws, routers, edgers and surfacing tools,

and emerges finished, ready for packaging. Packaging saves both time and cost by facilitating the handling of lumber and by conserving the time carpenters might otherwise spend searching for the proper lumber to be used in the home



TWO-BEDROOM bungalow type home, with attached garage, is built in project to avoid monotony. Exterior of this five-room house is brick veneer and asbestos

ground for Argo Village. Foundations were poured from powered cement mixers. Sewer pipes were laid by machinery. The rough framing is cut and erected by power tools, and the back filling is done with a Scoopmobile. After the homes are completed, a road grader goes to work.

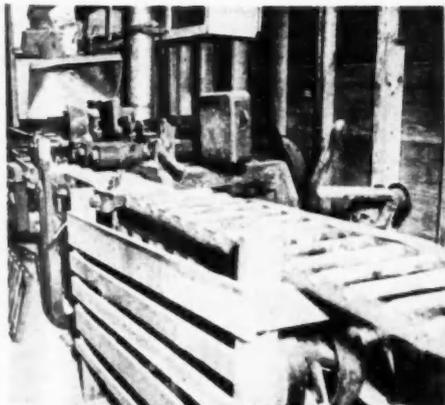
Last year, 600 homes were completed in the tract. Besides the 400 more to be completed in 1949, a large shopping center, with specialty shops and super markets, is planned.

Two basic floor plans are used for the two-story homes in the project. A bungalow type of house is interspersed with the two story dwellings to avoid monotony. Standardization of plans and materials permits assembly line production.

The two-story homes with attached garages are on 50x100-foot plots. Exteriors are of brick veneer and asbestos siding. These houses have full basements with automatic oil heat, copper tubing throughout, weather stripped doors and windows, and Venetian blinds. The color of the wall-



POWER fork lift does both stacking and delivery work



SAVINGS over conventional methods have run as high as 50 per cent through precutting and packaging material at Argo Village. Materials in one package include 52 rafters; 140 7-foot 9-inch studs; 20 7-foot 6-inch studs; 48 jack studs; 90 pieces of 2x5's

16 inches long for blocking down to windows; door and window headers; 100 feet of 1x12 cornice, primed; 100 feet of 1x6 cornice, primed, 2x8 60/12; 2x4 moulded cornice 5/16. Other packages also go along to complete house. Interior trim is precut

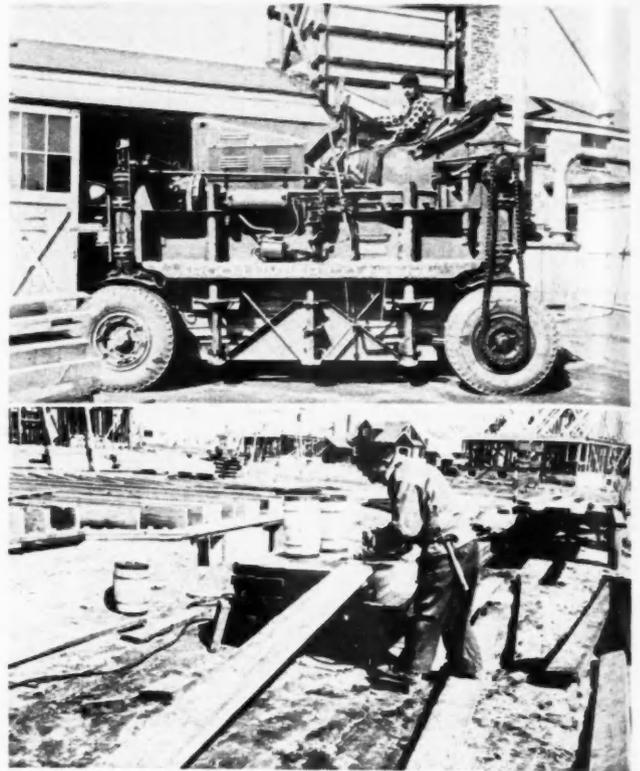
paper, bathroom tile, Formica sink top and kitchen floor covering is selected by the home buyers.

Face brick backed with cinder block is used to the height of the first floor. The second floor is of wood with asbestos cement shingles, wood siding or stucco finish. Roofing is of asphalt shingles.

Interior wall and ceiling finishes are gypsum lath and plaster. Plenty of cabinet space is provided in the kitchens as well as a combination sink and tub. Dining and living rooms have oak floors and ample electrical outlets. A large guest closet opens off the entrance foyer. Bathrooms have tile wainscots and ceramic tile flooring. An extra lavatory is provided on the first floor. The attic contains two inches of insulation. Garages have metal upward-acting doors. Selling price of these 6-room homes is \$12,990.

John Aragona, president of Argo Homes, Inc., heads the project, and John J. Braglia is sales director. Although standardization has been used to speed construction, nothing has been sacrificed in good work. Landscaped lawns, playgrounds, parks and public beaches, plus some variation in floor plans of the homes provide a setting that appeals to prospective home owners.

Argo Village was made possible through the co-ordination of men and materials. But even with the best of co-ordination to complete so many homes in so short a time would be impossible without modern equipment. Argo Village is a success story of power tools.



WHETHER it is a large lumber carrier or a hand-powered saw, power equipment plays time-saving role on this project



ANY ONE of the three spacious bedrooms is easily accessible from the stairway to the second floor of this house. Notice convenient location of the bath

VESTIBULE with large guest closet is attractive feature of first floor. Steel casement window is provided in the living room

Power Equipment Owned by Argo Homes, Inc.

- | | |
|----------------------------|--------------------------------|
| 4 Bulldozers | 1 Band saw |
| 1 Ross carrier | 1 Table saw |
| 1 Fork lift | 1 Molder |
| 5 Trucks | 1 Automatic rip saw |
| 2 Jeeps | 1 Shaper |
| 4 Trailers | 2 Sanders |
| 3 Concrete mixers | 1 Router |
| 2 Scoopmobiles | 3 Skilsaws |
| 1 12-inch joiner | 3 Wappet saws |
| 1 De Walt saw, 7 1/2 H. P. | 3 Gasoline portable generators |
| 3 De Walt saws, 3 H. P. | 1 Metal cut-off machine |
| 1 Air compressor | 1 Grind stone |

The following equipment is rented: 12 Pans, 3 Turnpoles, and 6 Bulldozers.



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These Manufacturers Produce Contractors' Equipment and Labor-Saving Tools

Adapto Co., 4102 N. 100th St., Milwaukee, Wis. (Stair cement forms)

Ajax Building Bracket Co., 1551 Rydalmoat Rd., Cleveland Heights, Ohio (Building brackets)

Allis Chalmers Mfg. Co., 1125 S. 70th St., Milwaukee 1, Wis. (Earth-moving equipment)

American Floor Surfacing Machine Co., 515 S. Clair St., Toledo, Ohio (Floor surfacing machines; Portable electric saws; Portable electric sander)

American Saw Mill Machinery Co., Hackettstown, N.J. (Power saws and sawmills)

J. W. Apley and Son, Inc., P.O. Box 849, St. Petersburg 2, Fla. (Concrete block machinery)

Arrow Contractors Equipment Co., 2020 Walnut St., Chicago 12, Ill. (Small scooter loader)

Atlas Press Co., Kalamazoo, Mich. (Power saws)

Automatic Transporters Co., 101 W. 87th St., Chicago 20, Ill. (Lift Trucks)

Paul Atwater Co., Box 1898, Wichita, Kan. (Paco form ties)

Barnes Mfg. Co., 651 N. Main St., Mansfield, Ohio. (Pumps)

Bouideal, Inc., 821 S. Water St., Saginaw, Mich. (Safety ladder step)

Beaver Pipe Tools, Inc., Warren, Ohio. (Portable pipe and bolt threading machine)

Bell Aircraft Corp., Prime Mover Div., P.O. Box 1, Buffalo 5, N.Y. (Power operated wheelbarrow)

Bennett-Ireland Co., Norwich, N.Y. (Hoists)

Besser Mfg. Co., Alpena, Mich. (Block and brick making equipment)

Bl-Jax, Inc., Archbold, Ohio. (Scaffolding)

Black and Decker Mfg. Co., Towson, Md. (Electric tools)

Blaw-Knox Co., Farmers Bank Bldg., Pittsburgh, Pa. (Transit mixers)

Block Lift Co., Mt. Vernon, Ohio. (Carrying handle for concrete blocks)

Boice-Crane Co., 930 W. Central Ave., Toledo 6, Ohio. (Woodworking equipment)

Bostitch, Inc., E. Greenwich, R.I. (Staplers)

Bestrom Brady Mfg. Co., 537 Stonewall St., Atlanta, Ga. (Surveying instruments)

Bradford Machine Tool Co., 659 Evans St., Cincinnati, Ohio. (Power hand saws)

Briggs and Stratton Corp., 2711 N. 13th St., Milwaukee, Wis. (Portable engines)

Branson Instrument Co., 1405 Walnut St., Kansas City, Mo. (Surveying instruments)

Bucyrus-Erie Co., South Milwaukee, Wis. (Hydraulic cranes)

Buch Manufacturing Co., Elizabethtown, Pa. (Wheelbarrows)

Buffalo Products, Inc., 315 Babcock St., Buffalo 10, N.Y. (Key forms for bonding plaster to poured concrete)

Building Forms Co., 710 N. Michigan Ave., Chicago, Ill. (Building Forms)

Bulfinch Concrete Forms, Inc., 14 Church St., New York 6, N.Y. (Forms)

Buss Machine Works, 240 Eighth St., Holland, Mich. (Planers)

The Byers Machine Co., Ravenna, Ohio. (Shovels, cranes)

Carboloy Co., Inc., 11177 E. 8 Mile Rd., Detroit, Mich. (Masonry drills)

Caterpillar Tractor Co., 600 W. Washington St., East Peoria, Ill. (Earth-moving equipment)

Central States Wallmaster, 1140 W. Lake St., Oak Park, Ill. (Self-feeding paint roller)

Chain Belt Co., 1800 W. Bruce St., Milwaukee 4, Wis. (Concrete mixers)

Champion Mfg. Co., 1307 Washington Ave., St. Louis, Mo. (Masonry saws)

C. H. & E. Manufacturing Co., 3849 N. Palmer St., Milwaukee, Wis. (Power Saws)

Cheyne Industrial Mfg., 731 Lyndon St., Detroit 21, Mich. (Aluminum ladders)

Chvrolet Div., General Motors Corp., General Motors Bldg., Detroit 2, Mich. (Trucks)

Clark Equipment Co., Industrial Truck Div., Battle Creek, Mich. (Lift truck)

Clarke Sanding Machine Co., Muskegon, Mich. (Sanding machines)

Clark Tractor Div., The Inn, Battle Creek, Mich. (Lift trucks)

Clipper Mfg. Co., 2808 Warwick, Kansas City 8, Mo. (Masonry saws)

Comet Mfg. Co., 9253 Nicollet Ave., Minneapolis, Minn. (Power hand truck)

The Cleveland Trencher Co., 20100 St. Clair Ave., Cleveland 17, Ohio. (Trenching equipment)

Consolidated Machinery & Supply Co., 2031 Santa Fe Ave., Los Angeles, Calif. (Radial saws)

Construction Machinery Co., 420 Vinton St., Waterloo, Iowa. (Concrete mixers, hoists)

J. B. Crofoot Co., Mt. Prospect, Ill. (Screen tappers)

Cummins Portable Tool Div., C. B. N. Corp., 4740 Ravenswood, Chicago, Ill. (Portable electric saws)

C. R. Daniels, Inc., Daniels, Md. (Tarpuclins)

Delco Appliance Div., Lyall & Whitney Sts., Rochester, N.Y. (Pneumatic tools)

Delta Mfg. Co., 620 E. Vienna, Milwaukee, Wis. (Power saws)

Detroit Surfacing Machine Co., 7433 W. Davidson St., Detroit, Mich. (Portable electric sanders)

De Vilbiss Co., 306 Phillips, Toledo, Ohio. (Paint spraying equipment)

DeWalt Products Co., 154 Fountain St., Lancaster, Pa. (Power saws)

Diston, Henry & Sons, Inc., Tacony, Philadelphia, Pa. (Hand saws)

Dodge Div. Chrysler Corp., 7930 Joseph Campau Ave., Detroit, Mich. (Trucks & Power Wagon)

The Donley Bros. Co., 13910 Miles Ave., Cleveland 5, Ohio (Steel brick clamps)

Du-All Scaffold Bracket Co., 44 E. Broad St., Columbus 15, Ohio (Scaffolding brackets)

Duchette Co., 940 Shoreham Bldg., Washington 5, D.C. (Tube forms)

Duncan Machine Works, 735 Tenth St., Boone, Iowa (Concrete block machines)

W. E. Dunn Co., 415 W. 23rd St., Holland, Mich. (Concrete block machines)

Empire Level Mfg. Co., Box 97, Milwaukee 13, Wis. (Levels)

Eveready Co., 1509 So. Michigan, Chicago, Ill. (Masonry saws)

Fastener Corp., 864 Fletcher St., Chicago, Ill. (Hammer tappers)

Federal Motor Truck Co., 5780 Federal St., Detroit, Mich. (Trucks)

Fenton Crafts, Fenton, Mich. (Quadrant transit)

Fleming Mfg. Co., 4985 Fyler Ave., St. Louis, Mo. (Concrete block machines, concrete mixer)

Flex Arm Mfg. Co., 401 S. Pasadena Ave., Pasadena 2, Calif. (Support for power hand saws)

The Flexsaw Co., Port Austin, Mich. (Power saws)

The Foote Co., Nunda, N.Y. (Concrete mixers)

A. W. Flint Co., 196 Chapel St., New Haven 6, Conn. (Steel scaffolds)

Foley Mfg. Co., 3300 N.E. Fifth St., Minneapolis 18, Minn. (Saw filers)

Ford Cement Block Mach. Co., Cedar Falls, Iowa (Cement block machine)

Ford Motor Co., Dearborn, Mich. (Trucks)

Foster Mfg. Co., 247 Delaware Ave., Buffalo 2, N.Y. (Woodworking tools)

Franklin Machine & Foundry Co., 55 Pawtucket Ave. E. Providence, R.I. (Power saws)

Ford Cement Block Mach. Co., Cedar Falls, Iowa (Cement block machine)

Florida Die Casting Foundry, P.O. Box 1589, Orlando, Fla. (Pallets)

Fulton Bag & Cotton Mills, Atlanta, Ga. (Tar-paulin)

General Floorcraft, Inc., 333 Sixth Ave., New York, N.Y. (Floor surfacing machines)

J. E. Gaskill Co., R.R. 4, Holland, Ohio (Mortising Device for House Doors)

Franklin Machine & Foundry Co., 55 Pawtucket Ave. E. Providence, R.I. (Power saws)

660 South Boulevard, Pontiac 11, Mich. (Trucks)

Goldblatt Tool Co., 1515 Walnut St., Kansas City 8, Mo. (Masonry trowels)

The Gorman-Rupp Co., Mansfield, Ohio (Pumps)

F. C. George Machine Co., 100 S. Westmoreland Dr., Chicago, Ill. (Cement block machines)

Gesner Equipment Corp., Hamden, Conn. (Radial saws)

A. L. Hansen Mfg. Co., 5037 N. Ravenswood Ave., Chicago 40, Ill. (Hammer tappers)

Henniker Machine Co., Henniker, N.H. (Woodworking machines)

Heston & Anderson Div., St. Paul Eng. & Mfg. Co., 601 Kirkwood Ave., Fairfield, Iowa (Power saws)

Higer Co., St. Cloud, Minn. (Floor machines)

Hommel Corp., 67 Riverdale Ave., Port Chester, N.Y. (Portable generators)

E. H. Hotchkiss Co., 10 Hoyt St., Norwalk, Conn. (Stapler machines)

Frank G. Hough Co., Libertyville, Ill. (Buildzers)

The Hyster Co., 2902 N.E. Clackamas, Portland, Ore. (Lumber carriers)

H. D. Hudson Mfg. Co., 589 E. Illinois St., Chicago, Ill. (Paint sprayers)

Hutchinson Mfg. Co., Norristown, Pa. (Woodworking machines)

Huther Brothers Saw Mfg. Corp., 1290 University Ave., Rochester, N.Y. (Saws)

Independent Pneumatic Co., State & Claim Sts., Aurora, Ill. (Portable electric saws, drills, hammers, nibblers, impact wrenches, grinders)

Ingersoll-Rand Co., 1 Broadway, New York 4, N.Y. (Compressors, Power drills)

International Harvester Co., 180 N. Michigan Ave., Chicago, Ill. (Trucks)

International Steel Corp., 1321 Edgar St., Evansville, Ind. (Metal scaffolding)

Irvington Form & Tank Co., 43 Cedar St., New York, N.Y. (Concrete forms)

Jackalator Corp., 289 Joseph Ave., Rochester, N.Y. (Scaffolding)

Jackson & Church Co., 321 W. Hamilton, Saginaw, Mich. (Brick and block making machines)

Jaeger Machine Co., 550 Spring St., Columbus 12, Ohio (Concrete mixers, tilters, pumps, hoists)

Juniata Co., Huntington, Pa. (Safety ladder stage)

Jitterbug Sander Co., Inc., Menominee, Mich. (Portable electric sanders)

Kett Tool Co., 58 Third, Cincinnati, Ohio (Pneumatic tampers)

Keuffel & Esser Co., 300 Adams St., Hoboken, N.J. (Levels and transits)

Kimball Mfg. Co., Inc., 1629 Sycamore, Royal Oak, Mich. (Device for cutting insulation board)

King Mfg. Co., 3146 W. Chicago Ave., Chicago 22, Ill. (Portable hoists)

Knickerbocker Mfg. Co., 603 Liberty, Jackson, Mich. (Concrete mixers, tilters & transit mixers)

Koehring Co., 3026 W. Concordia Ave., Milwaukee 10, Wis. (Concrete mixers, power wheelbarrows)

Kwik-Mix Co., Port Washington, Wis. (Concrete mixers)

Lansing Co., Lansing, Mich. (Wheelbarrows)

LaPlant-Choate Co., 2920 First Ave., N.E. Cedar Rapids, Iowa (Earth-moving equipment)

Lincoln-Schlueter Floor Mach. Co., 1250 W. Van Buren St., Chicago 7, Ill. (Floor sanders and floor polishers)

Lincoln Tractor Co., Arcadia, Calif. (Tractors)

Lith-I-Bar Co., Holland, Mich. (Concrete block machines)

The Lubin Rule Co., Saginaw, Mich. (Measuring devices)

Mack International Motor Corp., 350 Fifth Ave., New York, N.Y. (Trucks)

Mackinburg-Duncan Co., Box 1197, Oklahoma City, Okla. (Caulking guns)

Mall Tool Co., 7740 S. South Chicago Ave., Chicago 19, Ill. (Electric vibrator, portable power saws, electric planes)

Marathon Foundry & Machine Co., Wausau, Wis. (power saws)

Markwell Mfg. Co., 200 Hudson St., New York (Stapling machines)

Marlow Pumps, Ridgewood, N.J. (Pumps)

Martin Fireproofing Corp., 2100 Military Rd., Buffalo 17, N.Y. (Masonry saw)

Master Rule Mfg. Co., 201 Main St., White Plains, N.Y. (Rutes and tape measures)

Master Woodworker Mfg. Co., 407 E. Fort St., Detroit 26, Mich. (Power saws)

Maxon Construction Co., 131 No. Ludlow, Dayton, Ohio (Ready mix trucks)

Mayer Bros., Tool & Mfg. Co., Inc., Port Austin, Mich. (Levels)

Mine Safety Appliances Co., 201 N. Braddock St., Pittsburgh, Pa. (Power actuated tools for driving studs into steel and concrete)

Mixer-Mobile Manufacturers, 6853 N.E. Halsey, Portland 16, Ore. (Concrete mixers)

Muller Machinery Co., Metuchen, N.J. (Concrete mixers)

Sam Mulkey Co., 1621 Locust, Kansas City, Mo. (Conveyors)

Multiplex Concrete Machine Co., Elmore, Ohio (Concrete block machines)

Neapco Products, Inc., Pottstown, Pa. (Portable door jia)

Nicholls Mfg. Co., Ottumwa, Iowa (Squares, trowels)

Norberg Mfg. Co., 3073 S. Chase, Milwaukee 2, Wis. (Power saws)

D. Onas and Sons, Inc., 43 Royalston Ave., Minneapolis 5, Minn. (Portable power plants)

The Oliver Corp., Cletrac Div., 19300 Euclid Ave., Cleveland, Ohio (Earth moving equipment)

The Osgood Co., Marion, Ohio (Earth moving equipment)

The Oster Mfg. Co., 2045 E. 61st St., Cleveland 3, Ohio (Pipe cutting and threading machine)

Parks Woodworking Machinery Co., 1524 Knowlton St., Cincinnati, Ohio (Planers)

Patent Scaffolding Co., 38-21 12th St., Long Island City, N.Y. (Steel Scaffolding)

Porter Cable Machine Co., 1714 N. Salina St., Syracuse, N.Y. (Portable power tools)

O. Pearson Mfg. Co., Lake Villa, Ill. (Cutters)

Portable Electric Tools, Inc., 255 W. 79th St., Chicago, Ill. (Electric drills)

J. M. J. Products Co., 226 Centerville Ave., Belleville, Ill. (Cutters)

Powder-Power Tool Corp., 1618 N. Vancouver Ave., Portland, Ore. (Impact tools)

Power King Tool Corp., Warsaw, Ind. (Power tools)

Port Austin Level & Tool Mfg. Co., Port Austin, Mich. (Levels)

Ransome Machinery Corp., Dunellen, N.J. (Cement mixers)

Red Devil Tools, Coit St., Irvington, N.J. (Hand tools)

R. S. Reed Corp., Three Rivers, Mich. (Concrete blocks and brick making machines; hand trucks)

Reid-Way, Inc., 2935 First Ave., N.E. Cedar Rapids, Iowa (Floor sander)

Reimann and Geogger, 69 Division, Buffalo, N.Y. (Ladder jacks; scaffold brackets)

Reo Motor Car Co., 1331 S. Washington St., Lansing, Mich. (Trucks)

Richmond Screw Anchor Co., 816 Liberty Ave., Brooklyn, N.Y. (Concrete ties, etc.)

Safway Steel Products, Inc., 6228 W. State St., Milwaukee, Wis. (Steel scaffolds, stages)

Sasgen Derrick Co., 3101 W. Grand Ave., Chicago 22, Ill. (Derricks)

Superior Concrete Accessories Co., 4110 Wrightwood Ave., Chicago, Ill. (Cement forms and form boards)

Superior Fastener Corp., 2949 Elston Ave., Chicago, Ill. (Hammer tacker)

Schultes Level, Inc., 17403 Gable Ave., Detroit 12, Mich. (Levels)

Shopmaster, Inc., 1214 Third St. S., Minneapolis, Minn. (Power shop tools)

Silent Hoist and Crane Co., 875 63rd St., Brooklyn, N.Y. (Hoists)

Simonds Saw and Steel Co., Fitchburg, Mass. (Hand saws and blades)

SkilSaw, Inc., 5033 Elston Ave., Chicago, Ill. (Portable electric saws, floor sanders)

T. L. Smith Co., 2835 N. 32nd St., Milwaukee, Wis. (Concrete mixers)

L. Sonneborn and Sons, Inc., 88 Lexington Ave., New York, N.Y. (Sanders)

The Speed Corp., 2025 N.E. Sandy, Portland, Ore. (Portable electric saws, floor sanders)

Stearns Mfg. Co., Inc., 602 E. Beecher, Adrian, Mich. (Concrete block making machines)

Specialty Machine Co., 732 S. Illinois St., Belleville, Ill. (Cutters)

Singer-Kennedy Co., 21 E. Van Buren St., Chicago, Ill. (Corner levels)

Stanley Works, New Britain, Conn. (Portable power tools)

Star Paper Fastener Co., Norwalk, Conn. (Stapling machines)

Stemco Corp., 3130 W. 121st St., Cleveland, Ohio (Power actuated tools for driving studs into steel and concrete)

The Steel Scaffolding Co., Inc., 856 Humboldt St., Brooklyn 22, N.Y. (Steel scaffolding)

Sterling Wheelbarrow Co., 7036 W. Walker, Milwaukee, Wis. (Wheelbarrows)

Stone Mfg. Co., Manlius, N.Y. (Stone saws)

Stow Metal Products, 758 Kent Rd., Stow, Ohio (Vise for holding doors and window sash)

Super Tool Co., 21650 Hoover Rd., Detroit, Mich. (Masonry drills)

Timely Products Co., 538 Yearling Rd., Columbus 9, Ohio (Timely house plan templates)

Toolcraft Corporation, 47-45 Meadow St., Waterbury 91, Conn. (Woodworking machines)

Tri-State Building Materials Co., 2037 E. Lancaster, Ft. Worth, Tex. (Cutters for asbestos cement)

R. K. Tyra Co., Forest Lake, Minn. (Concrete block machines)

Treco Products, 204 Hartford Ave., Buffalo 17, N.Y. (Saw sharpening machines)

Universal Form Clamp Co., 1238 N. Kostner Ave., Chicago, Ill. (Cement forms and form hardware)

Vital Mfg. Co., 7500 Quincy Ave., Cleveland, Ohio (Caulking guns)

J. D. Waller & Co., 134 S. California Ave., Chicago 12, Ill. (Power saws)

Wallace Supplies Mfg. Co., 1300 Diversey Parkway, Chicago, Ill. (Pipe bending machines)

Walker-Turner Co., Inc., 639 South Ave., Plainfield, N.J. (Power saws)

Fred W. Wappat, Inc., Mayville, N.Y. (Portable power saws)

Warren Knight Co., 136 N. 12th St., Philadelphia, Pa. (Levels and transits)

Waterson's, 28 E. Larned, Detroit, Mich.

Waver Impactor, Inc., 12 N. Third St., Columbus, Ohio (Machine for tamping asphalt surface)

Wayvell Chappell & Co., 40 N. Jackson Blvd., Waukegan, Ill. (Floor sanders)

Western Reserve Mfg. Co., 3710 E. 93rd St., Cleveland, Ohio (Caulking guns)

G. W. Wetzel Co., Macomb, Ill. (Scaffolds)

E. Weyer, P.O. Box 153, Planetarium Station, New York 24, N.Y. (Rafter dial and estimator)

David White Co., 319 W. Court St., Milwaukee, Wis. (Transits)

The White Motor Co., 842 E. 79th St., Cleveland, Ohio (Trucks)

Whiteman Mfg. Co., 3249 Casitas Ave., Los Angeles 25, Cal. (Power concrete finishing machine)

Willys-Overland Motors, Inc., Wolcott Blvd., Toledo, Ohio (Jeeps and trucks)

Wiremold Co., Station A, Hartford, Conn. (Surface wiring systems)

Wodack Electric Tool Corp., 4627 W. Huron St., Chicago 24, Ill. (Electric hammer)

Woodworkers Tool Works, 222 S. Jefferson St., Chicago, Ill. (Shapers, Shaper siddles, cutters)

Worthington Pump and Machinery Corp., 261 Canal St., Holyoke, Mass. (Compressors, pumps and air tools)

XL Products Co., 4617 Airport Way, Seattle, Wash. (Woodworking machines)

Yale & Towne Mfg. Co., Philadelphia, Pa. (Pumps, hoists, industrial trucks, scales)

Zagelmeyer Cast Stone Block Machinery Co., Bay City, Mich. (Concrete block machines)

AMERICAN BUILDER

Blueprint House

Number 29

Norman R. Johnson, Architect



WIDE, sweeping front of this one-story ranch type house is further accented by the angular position of bedroom wing

A Blueprint for Better Living



THIS attractive one-story house, which belongs to Carl Stone of St. Paul, Minn., was designed by Norman R. Johnson, architect of the same city.

In the plan of this house, the architect has effectively used the space to promote the owner's idea of good living, which is to allocate the major portion of the home to the living, dining and service areas. Two bedrooms and two baths constitute the quiet area.

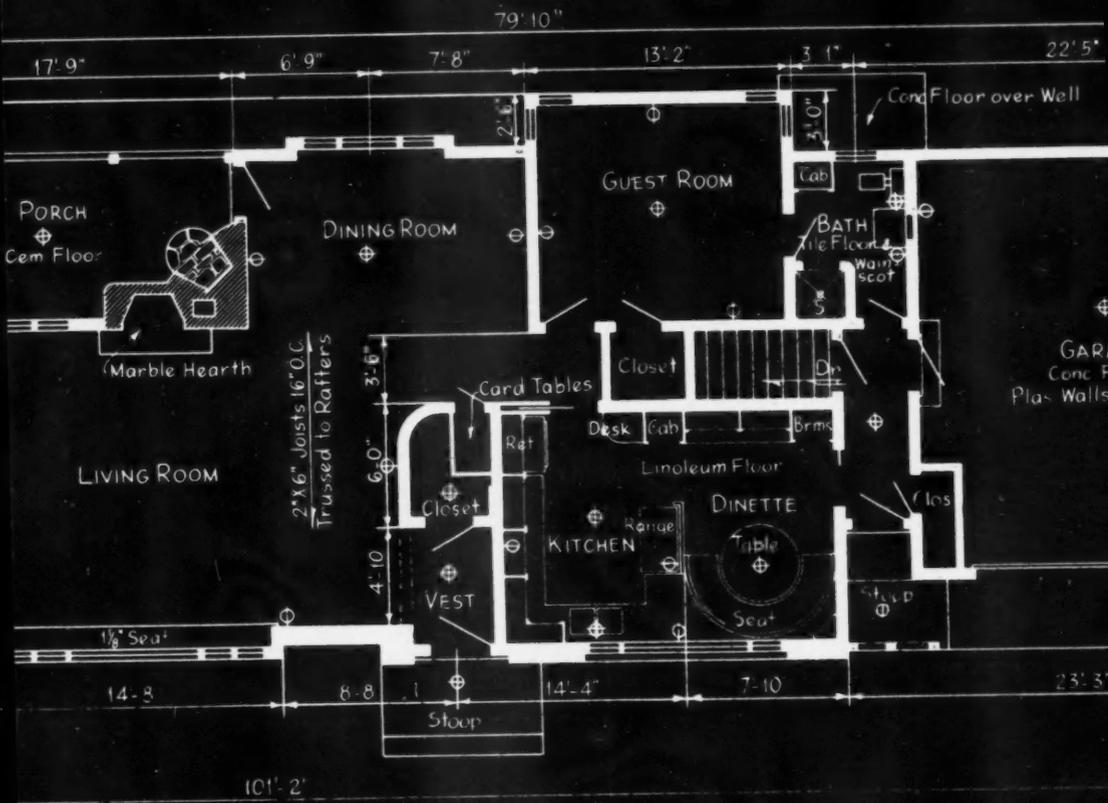
The exterior treatment of the house follows in general the pattern of design consistently used in the past by this architect with marked success. A shallow pitched hip roof with wide overhanging eaves that extend around the entire house establishes the theme for the whole. A combination of stone and shingles on wall surfaces, broken by window and door fenestration of varying sizes, produces a facade of great interest.

The house contains six rooms, two baths, ample closets and a two-car garage. The owner's bedroom and bath are located at one extreme end of the house. This is approached through a corridor lined with closets and cabinets on both sides. In this same wing is located the owner's private library. A guest bedroom with adjoining bath is located at the opposite end of the house.

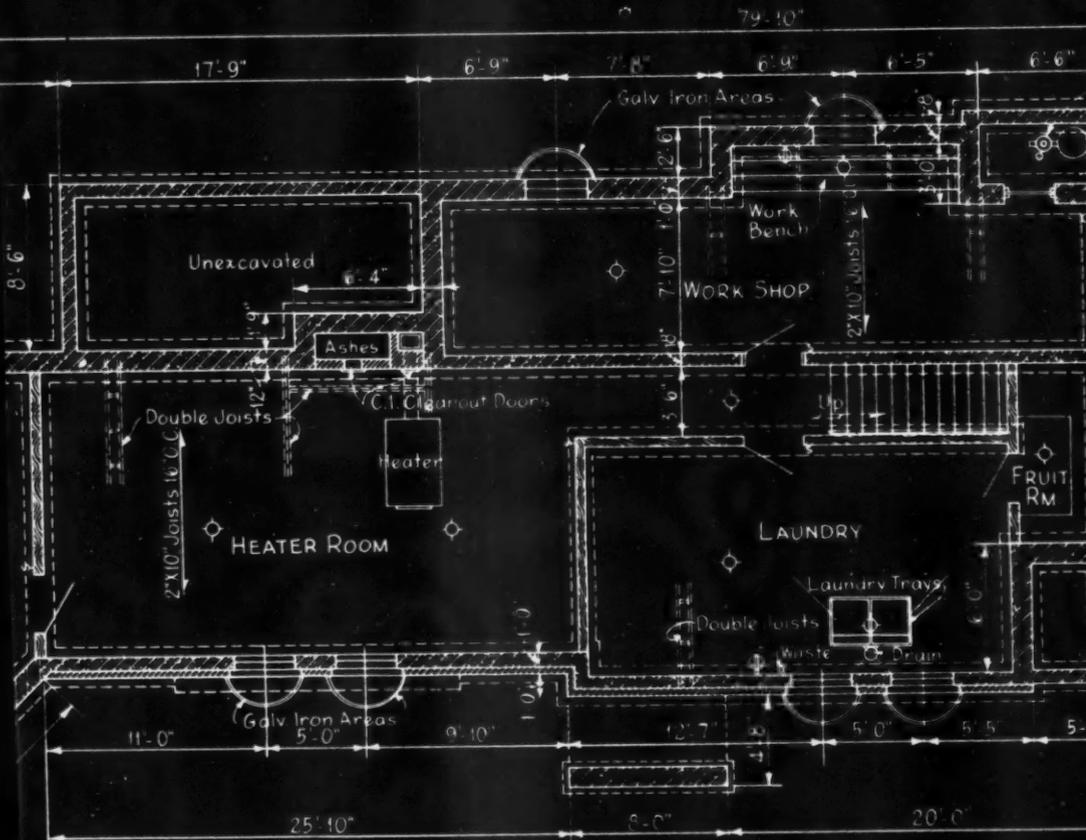
Basement walls are constructed of concrete blocks 12 inches thick. The dividing walls are 8 inches thick. First floor framing, walls, and roof are of wood members. Interior walls and ceilings are plastered; the library walls are of finished plywood. All windows are Anderson casement type except where fixed sash is used.

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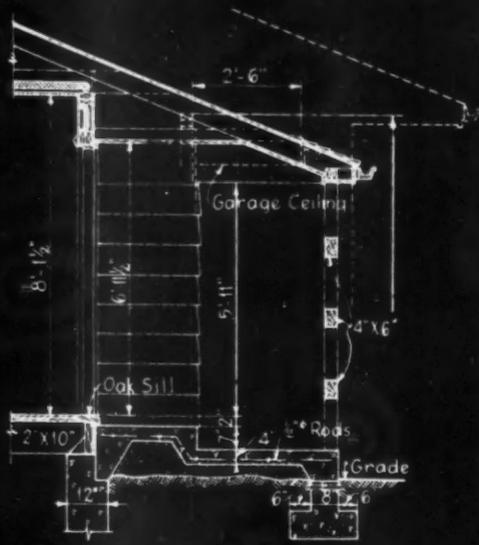
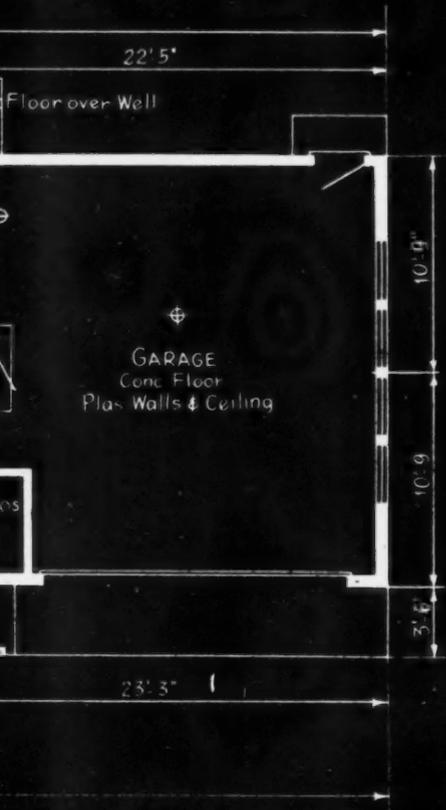




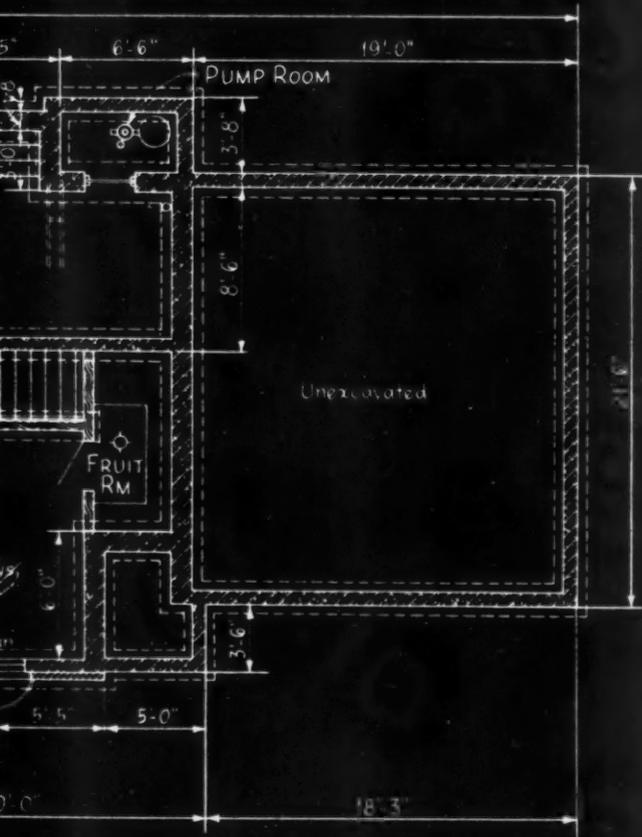
FIRST FLOOR PLAN



BASEMENT PLAN



SECTION THRU ENTRANCE



DESIGN NO AB 142

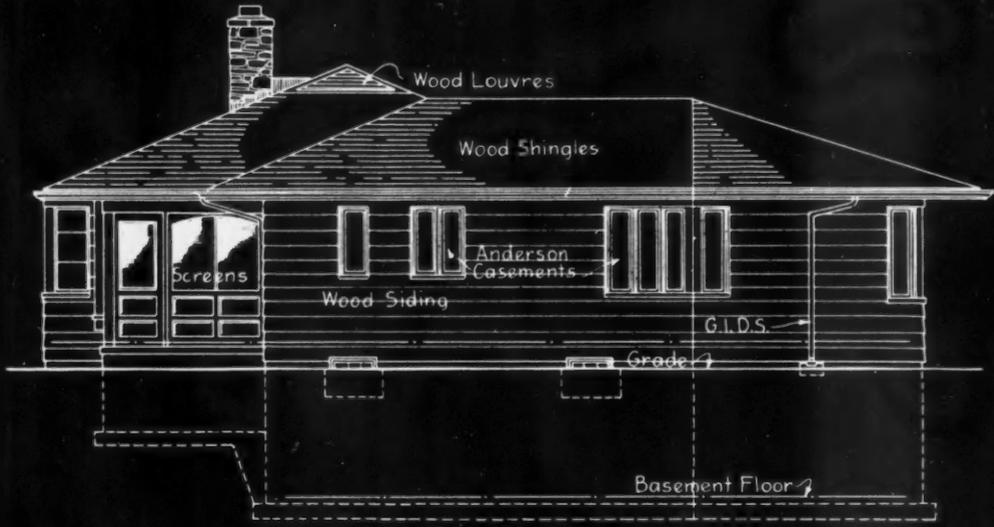
AMERICAN BUILDER BLUE PRINT SERIES

Designed By

NORMAN R. JOHNSON ARCHITECT

2055 Bayard St Paul, Minn.

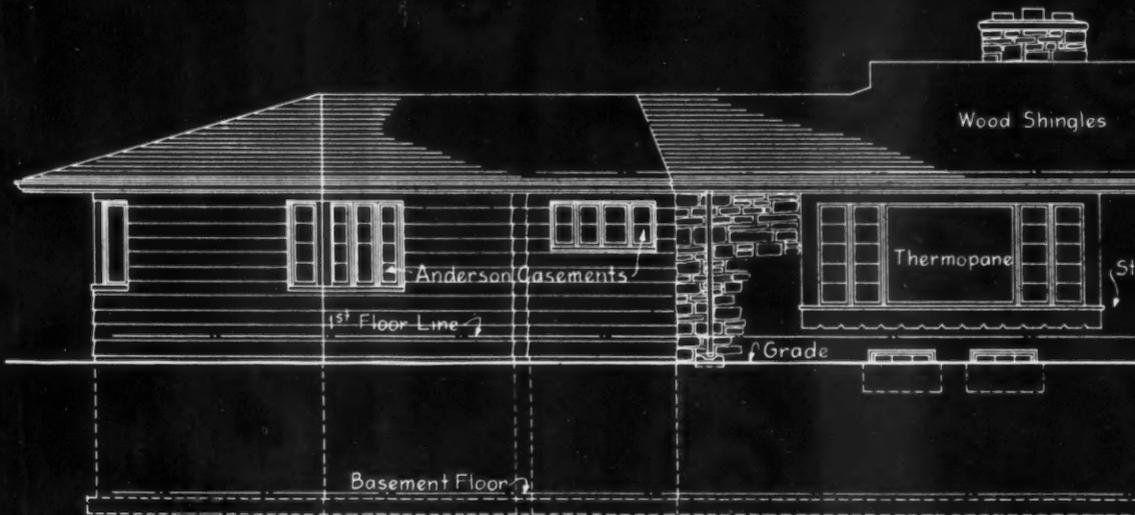
Simmons Boardman Pub. Corp. 105 W Adams St. Chicago, Ill.



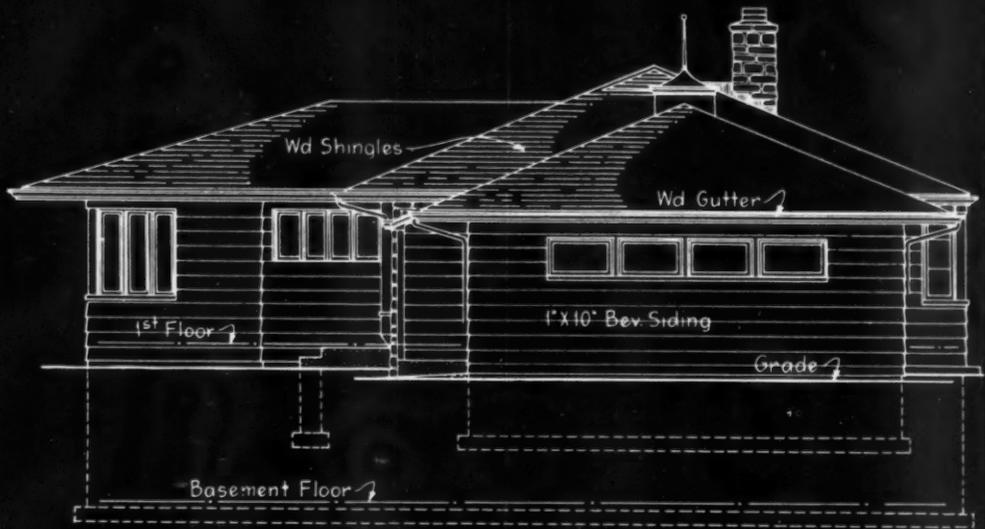
LEFT SIDE ELEVATION



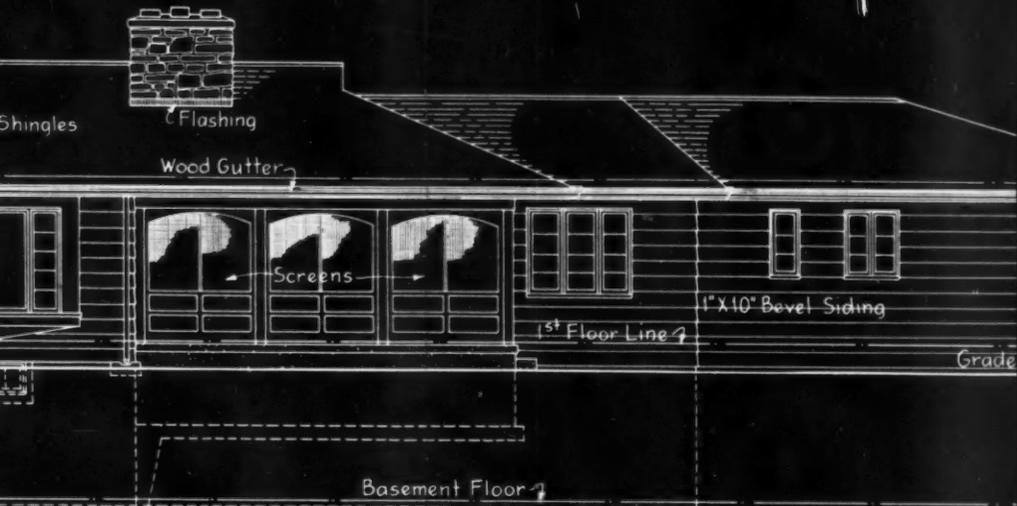
REAR ELEVATION



FRONT ELEVATION



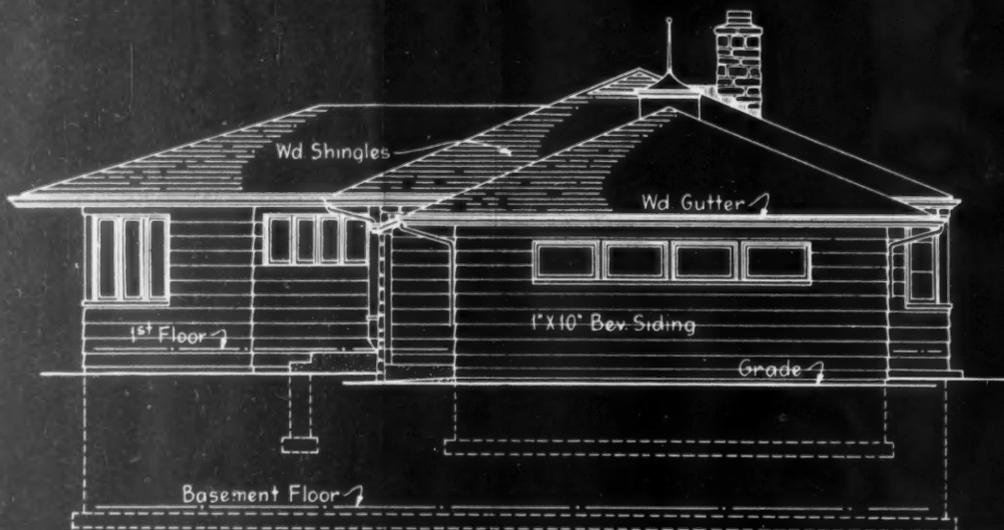
RIGHT SIDE ELEVATION



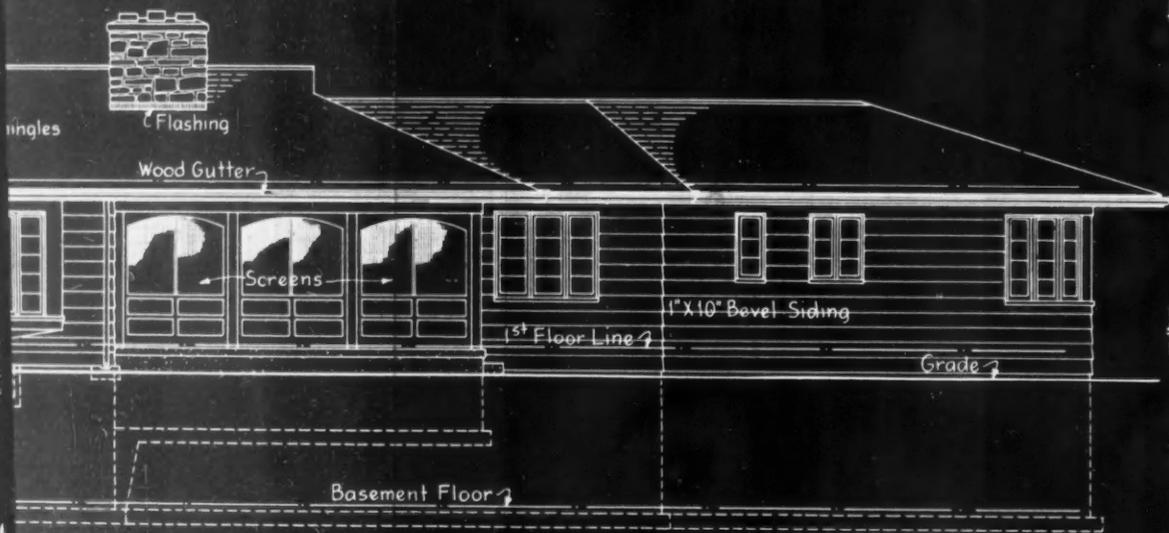
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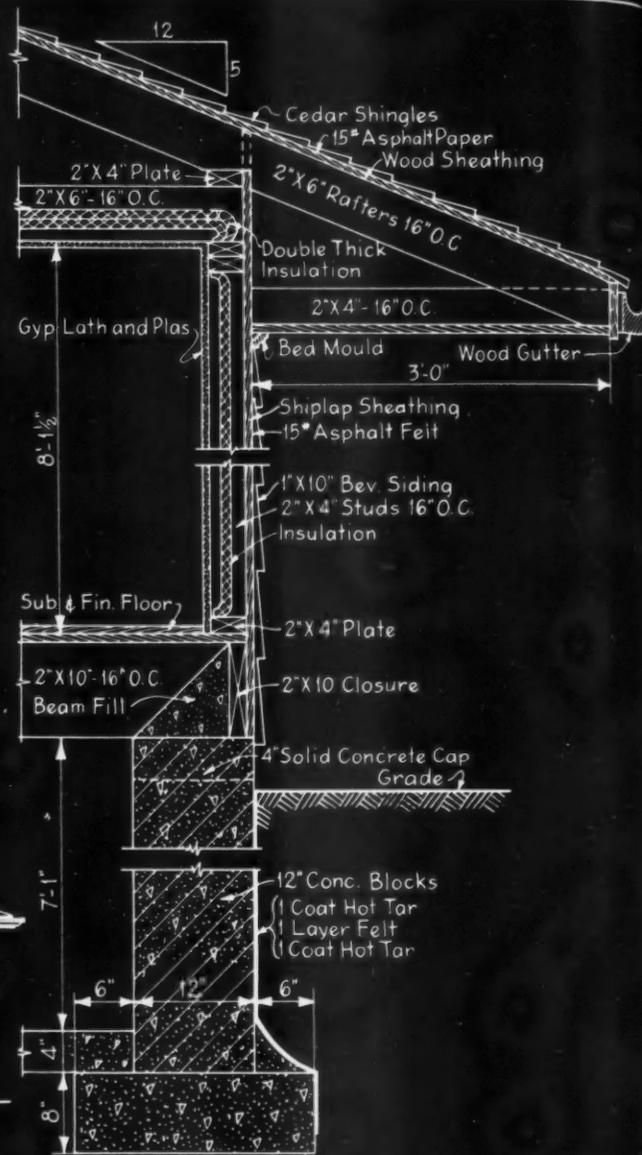
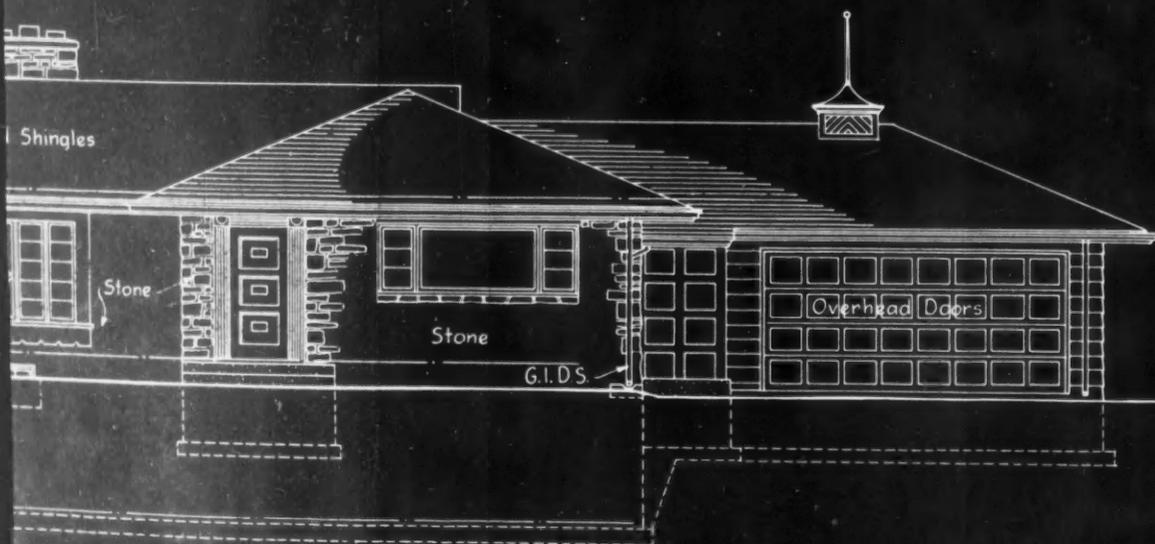
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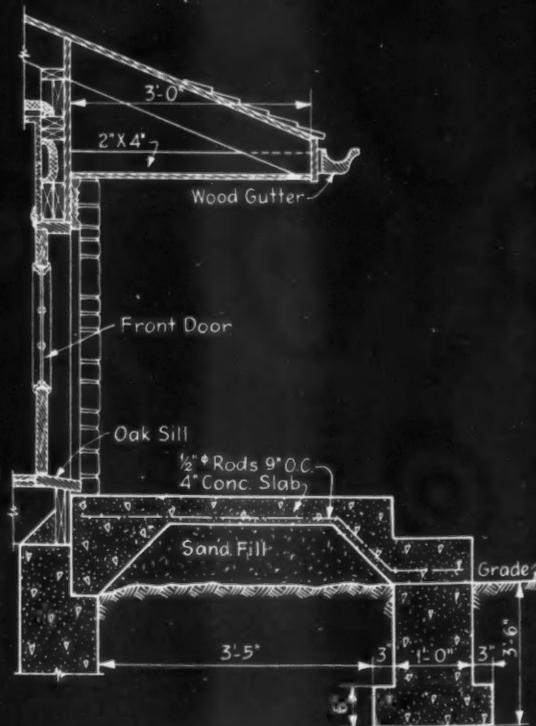
RIGHT SIDE ELEVATION



REAR ELEVATION



TYPICAL WALL SECTION



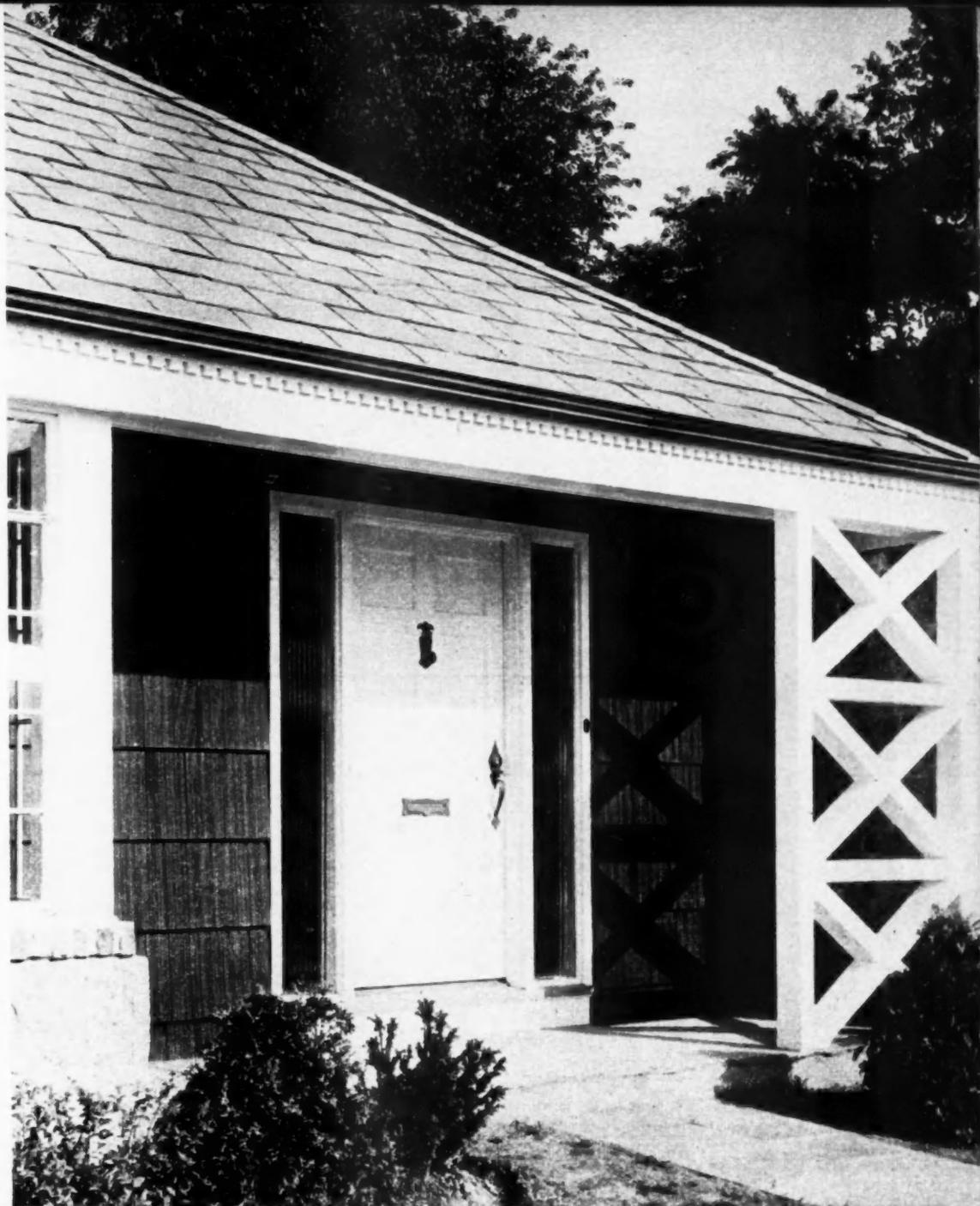
SECTION THRU FRONT ENTRANCE

GOOD detailing entrance in lattice contrasted frame, over-all effect here. Material: roof: v stone crete fo ed glas

SI

Entr ed i or c are

GOOD materials and fine detailing characterize this entrance. Heavy members in lattice work are in direct contrast to the finely executed door, sidelights and frame, and cornice, yet over-all the units are in perfect harmony and scale. Materials used are slate on roof; wood shingles and stone on sidewalls; concrete for platform, and fluted glass in door sidelights



SHELTERED ENTRANCES—

Are Worth Sacrifice of Space

Entrances whether recessed into perimeter of house or attached to front wall are distinct assets to homes

THE group of quality houses designed and built by Newell & Daniel in their Lake Success, L. I., development are characterized by the consideration given to the entrance motif in the over-all planning. The examples shown indicate a broad, sweeping effect that dominates the entire front of each house.

The long, low one-story, or ranch-type dwelling has popularized the recessed or sheltered entrance. It pro-

vides ample protection from the elements, and allows the designer greater latitude in practical architectural expression.

Another popular arrangement for the one-story house is the entrance porch which projects beyond the main wall. This porch should be generous in size to maintain proper balance with the house. Proper proportion can best be accomplished through the use of an adjoining bay that is

DOOR and sidelights of entrance at left are well protected from the elements by means of the extended roof overhang. The horizontal lines of this one-story house are further accented by the fluted glass and wood muntins in sidelights. The severity and plainness of the door combination is softened by the adjoining bay. Materials in this detail are slate roof, stone sidewalls, stucco soffit, steel casements, slab door, wood trim and brick platform

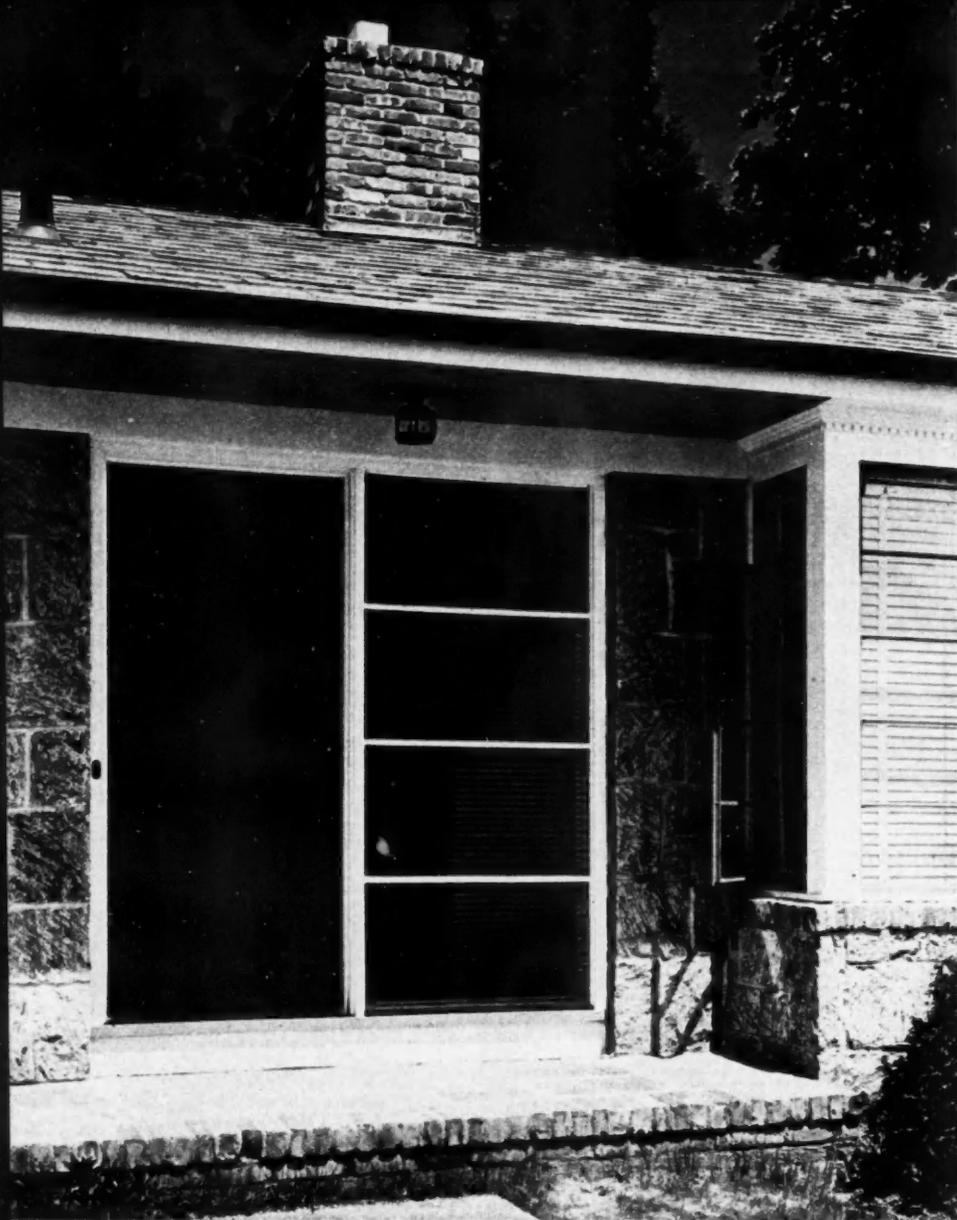
integral with the sheltered entrance.

Entrances, whether they are recessed into the basic perimeter of the house, applied directly to the front wall as a form of ornament, or built out beyond the main wall line, are nevertheless, a distinct asset and a "must" to houses of distinctive character.

The cost of the entrance in relation to the house proper is in direct proportion to the amount of space allotted to it. Where a combination of features are employed, such as a sheltered entrance and adjoining bay, the cost should be appreciably reduced.

When the entrance and shelter occur within the perimeter of the house, the roof can be maintained in an unbroken line. The savings obtained by avoiding changes in roof contours to accommodate projections is somewhat offset by the loss of square feet of floor space within the area.

The type of entrance preferred by the builder will be determined greatly by the character of the plan and the design of the house, rather than by the cost of one type of entrance over that of another.



PROJECTING entrance porch shown below is best designed with an adjoining bay in order to properly proportion the unit with the balance of the house. An additional cost is generally involved because of the change in roof lines. Fluted glass is used in sidelights. Muntins are painted dark to conform to door



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SHELTERED entrance and adjoining bay are the predominant features of the front of house shown above. In this case a portion of brick wall with circular opening, recessed entrance, and floor-to-ceiling windows in bay, all contribute to the success of these features. Planting box in front of bay extends beyond wall line. Materials used are wood boards and battens and painted common brick on side-walls, slate roof, stucco soffit, steel awning type windows, glass block in door, sidelights, wood trim, and brick

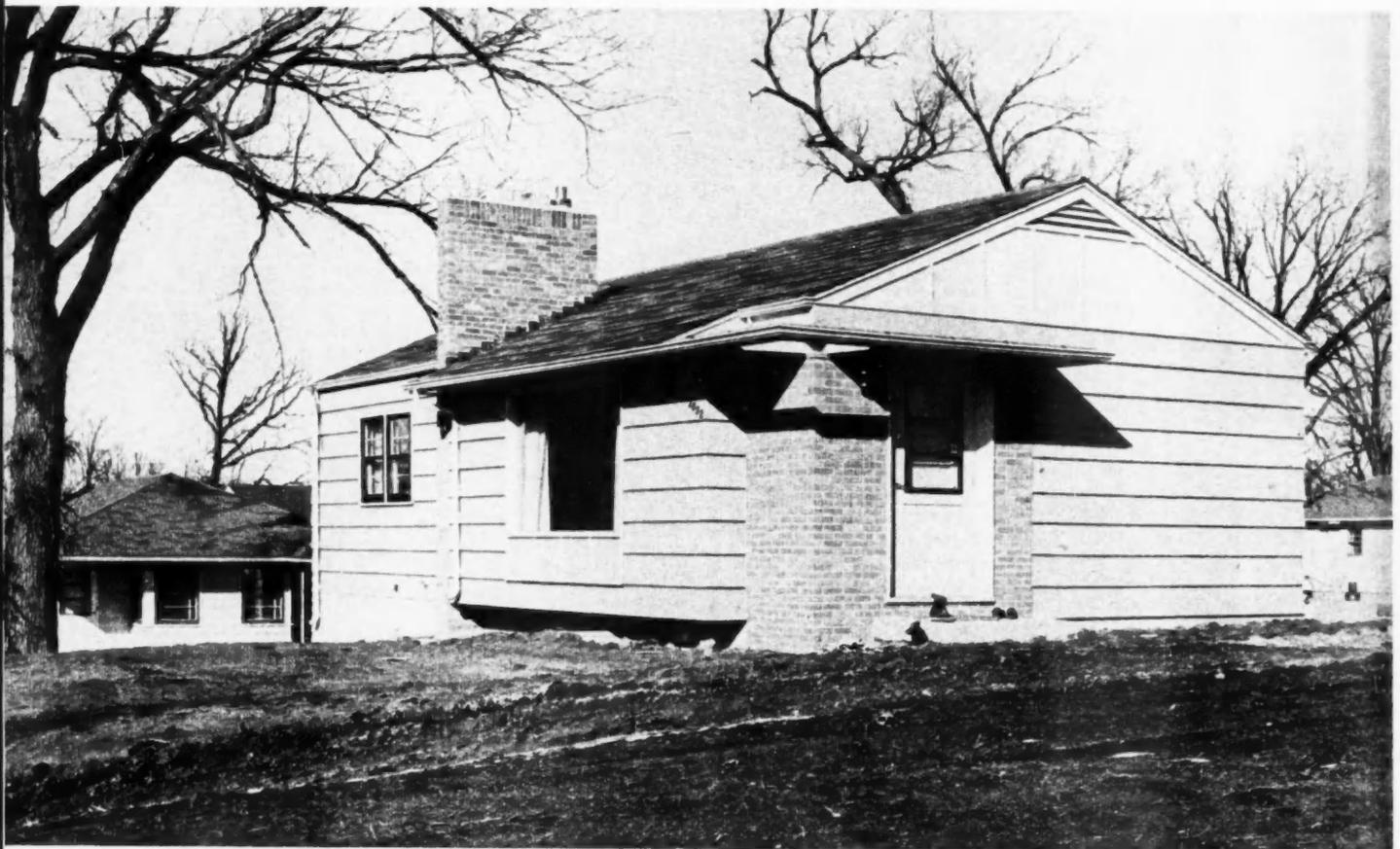
GLASS BLOCK is used effectively in sidelights adjoining moulded door in the entrance shown at right. Cornice above protects door from elements. Pattern is adaptable to a two-story house



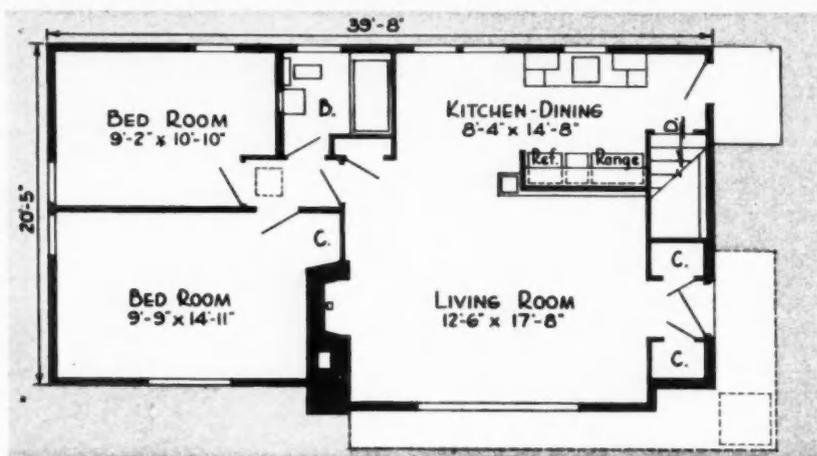
OPEN PLANNING—

The Answer to Small Houses

Illusion of larger rooms is obtained in houses of limited square foot area by Minneapolis builder through introduction of door height partitions



CHIMNEY, bay and entrance as a featured assembly provide the interest to this basic "A" two-bedroom house



PLAN of basic "A" house. Rectangular periphery obtains economy in layout

BUYERS are style conscious regardless of the price range. Thus Paul K. Enghauser, president of Enaco, Inc., developers of the Noble Grove addition located on the outskirts of Minneapolis, Minn., sums up the attitude of purchasers of new homes. He maintains that it is necessary to produce houses that retain the advantages of standardization, insofar as design does not become monotonous, in order to keep the price structure in line with demand.

In the design of the houses in Noble Grove, Enghauser and his architect-associate, G. W. Brandhorst, have held to simple, yet effective lines in their "A," "B," and

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ASSOCIATED together in the development of the "Noble Grove" project in Golden Valley, a suburb of Minneapolis, Minn., is the builder-architect team of Paul K. Enghausser at left, and G. W. Brandhorst, operating under the name of Enaco, Inc.



PARTIAL view of living room in basic "A" house showing the door height partition forming separation from kitchen-dining room

"C" types of homes. The first two are two-bedroom houses, and the last one a three-bedroom set-up.

Definite variations from the three basic arrangements are obtained through projecting bays, recessed areas and porches, and picture windows, plus the addition of breezeway and garage. Changes in wall materials and roof profiles, together with an undulating terrain offer additional opportunities for change.

This builder, in addition to changes in house designs, also employs unusual methods to avoid monotony in block planning. An entire project is laid out and platted. Then one house of a fixed design is selected and built in each

block. Houses of different designs or positive variations are then placed alongside of the first. This process is repeated until each block is built up. The developers have found that this method has paid out well. It has sustained the interest of the home buyer and given assurance that the entire project shall be carried out as contemplated.

In the interiors, a number of novel arrangements have been introduced that have proven sound and practicable, and make for better living. These innovations, which include door height partitions between living room and the kitchen-dining area, elimination of doors for bedroom closets and in

their place providing a track and curtain, have received the whole-hearted acceptance of the buying public. This is due primarily to the fact that these features in design and appointments take the house out of the competitive market should the new owner decide to sell at some futuro period. They also add interest and reduce costs, as well as give the illusion of additional space in the main rooms of the house.

Noble Grove is a subdivision located in Golden Valley, a suburb of Minneapolis. It consists of 80 acres fully subdivided and platted. Areas have been left within the plat for park purposes and the streets

have been extended to connect to existing streets on either side of the project. The terrain of the entire area is rolling and wooded, thus making it ideal for home-sites. The lots average 85 x 135 feet.

The project was started in 1947 and, although planned for veterans, it was not contemplated that the houses would be kept under a \$10,000 ceiling. The firm did plan to build a total of 190 houses on the project. Of this number 47 have been completed and 73 are now in various stages of construction.

There are three basic types of houses: A, B, and C. Basic "A" is a two-bedroom house containing 825 square feet. This house sells for \$10,800 including



VARIATIONS are possible in basic "A" plan due to the sloping terrain. Exposed portion of basement provides room for garage



TWO BEDROOM house takes on a different appearance through the application of a hip roof, breezeway, and attached garage



SIMPLIFIED construction is evidenced in the shed roof design as applied to the "A" house with attached breezeway and garage

land. Basic "B" is the same type of home as "A" except that it contains 875 square feet. Basic "C" is a three-bedroom house containing 1,050 square feet. It is priced at \$13,750, including land. These basic types have a number of variations to avoid repetition and to conform to site conditions. The "A" type is built with basement garage where building site permits. This increases the cost of this house to \$11,400, including land.

These houses include two fireplaces (one on the first floor and one in the basement), large sealed window in living room, Kitchen Maid factory fabricated cabinets (with all built-in features such as bread drawers, vegetable trays, flour bins, towel racks, etc.), kitchen ventilating fan, and operating windows which are weatherstripped. All of the houses have full basements, and are completely insulated and decorated. Conventional plaster is used throughout.

In preparation for construction, Enghauser precuts most of the dimensional lumber in a large barn located on the premises, which has been converted to use for this purpose. Recently, this builder found that it was just as economical to have all the material delivered direct to each individual site where the carpenters, equipped with Skilsaws and other labor saving tools, can do their own cutting as required. In this manner unnecessary handling of lumber is avoided. Besides having the distributorship for a number of items that go into their houses, such as Kitchen Maid cabinets, kitchen fans, window units, et cetera, this firm also has on hand a large volume of basic materials.

The work in the field such as layout and supervision of the construction is carried on by Hubert M. Nelson, a member of Enaco, Inc. Design is under the supervision of Gerhard W. Brandhorst, a registered architect. Offices of the company are located in a one-story building close to the downtown area of Minneapolis. Showrooms are available for display of materials and designs to prospective customers. All selling of the homes in the Noble Grove addition are conducted from this office. Very little advertising is done. Most of the contacts for sales have been made through present buyers.

This company employs about twenty carpenters, three masons or bricklayers, common laborers, and also men that install all outside sewer work. The painting, plumbing, heating, plastering, electrical wiring and sheet metal work are sublet.

Financing is handled either through a straight GI or combination FHA-GI loan. Down payment to a veteran is approximately 10 per cent. Monthly payment on the basic "A" two-bedroom house is approximately \$65.00 per month including insurance and taxes.



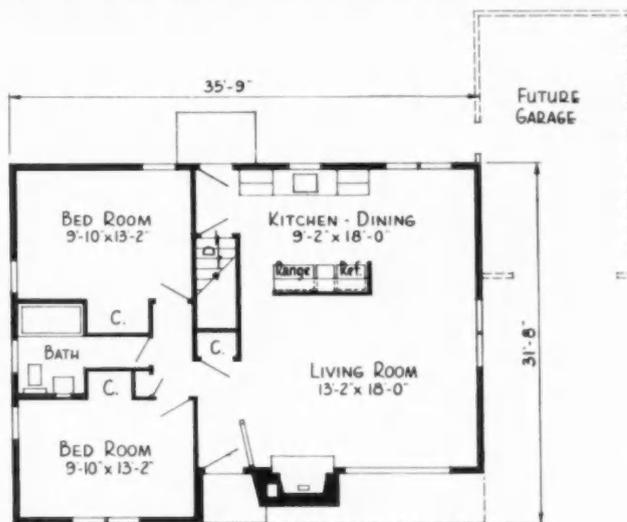
PLAN of "C" three-bedroom house. Entrance side of house shown at right. Living and dining area face toward rear of property overlooking future garden. Sidewalls covered with shingles



BASIC "B" two bedroom house provides shelter for entrance and picture window. Plan of "B" house below

MATERIALS AND EQUIPMENT USED

- | | |
|--|-------------------------------------|
| Balsam wool or Fiberglas insulation | R-O-W spring cushion windows |
| Imperial wallpapers | Rezo slab doors |
| Kitchen Maid cabinets | Rheem hot water heater |
| Kohler plumbing fixtures and trimmings | Twindow picture windows |
| Lightolier electric fixtures | U. S. Gypsum plaster base |
| Miami medicine cabinet | U. S. Gypsum sheathing |
| Nelson master slab shingles | Ventrola kitchen fan |
| Patek paints | Waterman-Waterbury warm air furnace |
| R-O-W screens | Yale & Towne hardware |





NOTE front of house detail. Attention is focused on the unusual position of bay and open louvred roof overhang of porch

When A Builder Builds His Own—



Many features he may have thought visionary when applied to operative building, are considered constructive when viewed in light of his own home

WITH a building site measuring 150 feet in width by 260 feet in depth and a hill extending upwards at rear, Allen F. R. Svensson, president of Sebco, Inc., builder of Minneapolis, Minn., had a rare opportunity of applying some of the more advanced ideas on house planning and design in the development of his new home.

The house is placed tight against the foot of the hill after having a portion of it cut away. The front lawn is raised and terraced above the adjoining gravel road. Thus a fine view is obtained of a boulevard, parkway, and small lake a short distance away. Orienting the house to the site is one of the fundamentals of good planning which has been fully carried out

by this owner, even to the position of the living and dining room bay with relation to the small lake. Other portions of the house, such as open and screened porches, are likewise placed strategically with relation to view. The host of trees and shrubs that extend on up the hill provide a perfect background for this modern example of good living.

In common with all owners, Svensson made changes in the house after the work was in progress. This included the two porches at ground level on one side of the house, and the extension over the garage on the other side which is used for a den. These additions to the original scheme provide a balancing effect to the entire house.

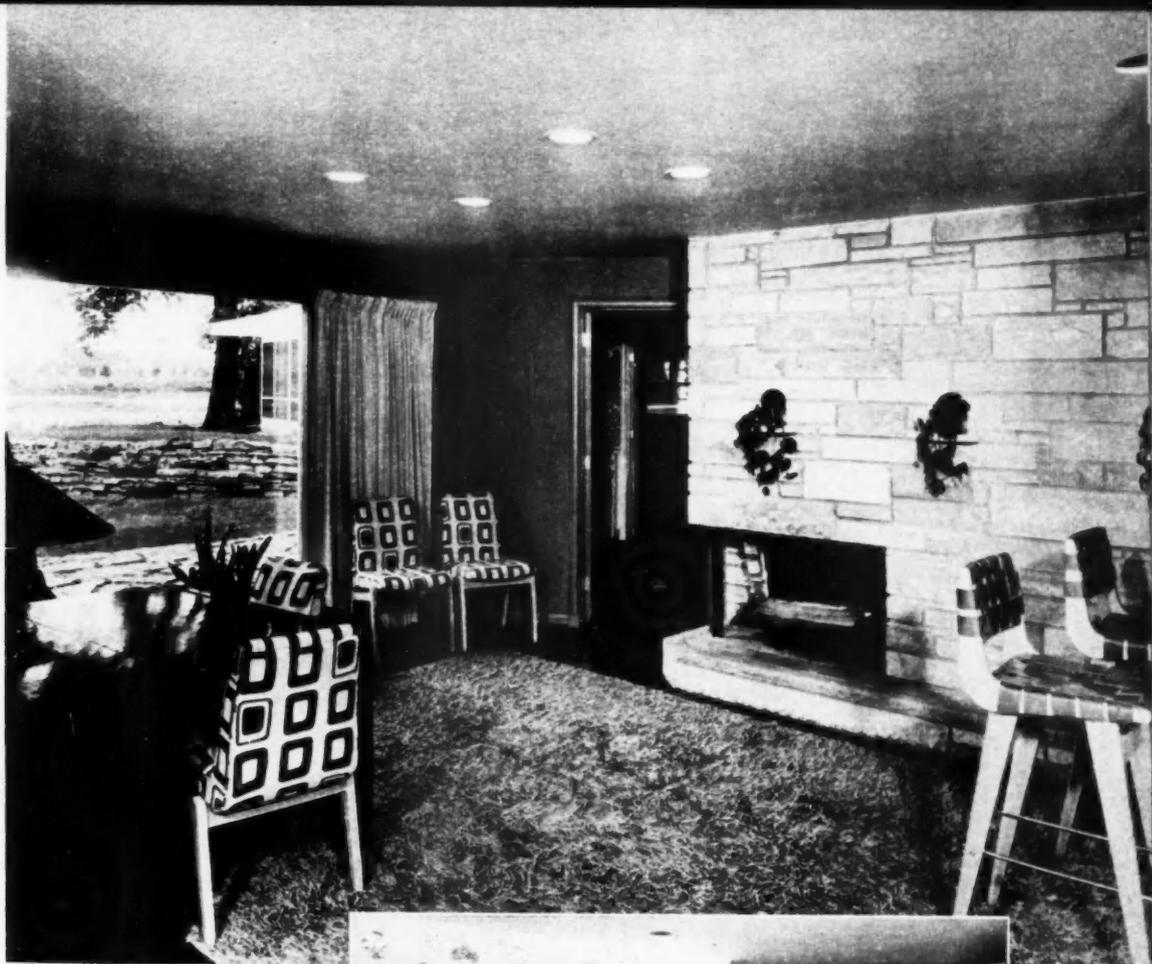
The general character of the plan and design of house is a modified adaptation of the modern. The white trim of windows, doors, and bays are in striking contrast to the 12 inch face of stained redwood siding of second floor. The mottled stone veneer of the first floor and stained wood shingled roof lend a balance of color to the whole.

This house contains two floors but no basement. The first floor is devoted to service except for the dining room and entrance hall. A concrete mat is poured over the entire surface. Finished floors are rubber tile cemented to concrete.

The second floor contains a large living room which is approached from the floor below by a broad

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VIEW into kitchen-play-room from combination entrance-hall and dining room. Large stone fireplace with raised hearth occupies the major portion of one wall. Position of the large bay, which is oriented toward a small lake in the distance, is responsible for the angular walls of this room and the bar



OPPOSITE view in dining room toward bar and stairs in adjoining hall that lead to living room above. Modernfold doors permit opening to bar to be closed when not in use. Painted, papered, and wood paneled wall surfaces all occur in one room, yet are in perfect harmony with each other



VIEW taken from children's playroom into kitchen beyond. Opening adjoining the door has a wide counter extending into kitchen which is used by family for informal eating. Counter can be extended by raising the dropleaf on playroom side for the use of the children. Walls are finished in painted, striated plywood with perforated Celotex blocks on ceiling for deadening sound

DIRECT view of front of house shown at right. House is placed well back from the road with the rear walls abutting the foot of hill. Heavy foliage and trees at rear provide a perfect background

TWO VIEWS of second floor living room. The one at left shows the approach to room from stair. The vertical pattern of the wood paneling of stair wall contrasts with figured paper on adjoining wall. The other view shown below features the large bay overlooking the lake. The fireplace wall and hearth are finished in light colored pressed brick. Plastered walls are painted

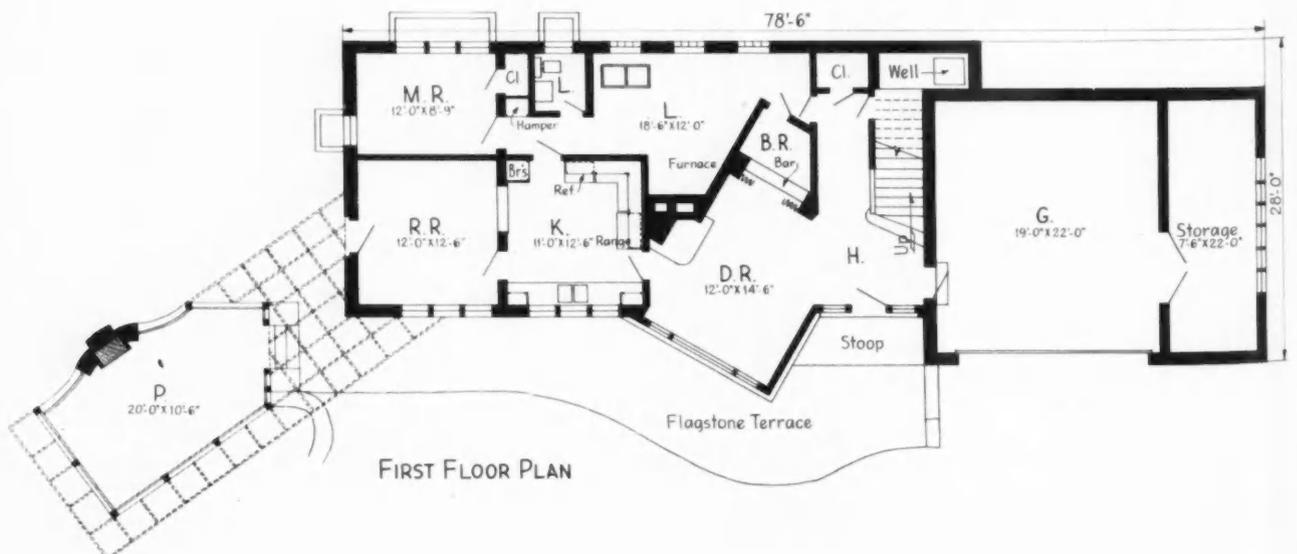


MATERIALS AND EQUIPMENT USED

- Crane Co. plumbing fixtures
- Pratt & Lambert paints
- Waterman-Waterbury warm air furnace
- U. S. Gypsum rock lath, plaster base
- Schlage, and Stanley hardware
- Colonial Bronze Co. cabinet hardware
- Geneva kitchen cabinets
- Philip Carey medicine cabinet
- Mosaic tile floors
- Bruce hardwood blocks in den
- Goodyear rubber tile floor
- Certaainteed Glass Wool Co. insulation
- Rheem hot water heater
- Pittsburgh Twindow picture window
- Barcol overhead garage door
- Hubbell Electric switches and receptacles
- Modernfold doors
- Libbey-Owens-Ford glass block
- Celotex block ceiling

stair occupying one wall of the combination entrance hall and dining room. Balance of area, with the exception of den, is devoted to bedrooms, bath, and closets. Adjoining the master bedroom is a large dressing closet containing

wardrobes, cabinets, and vanity. The irregular shape of the living room and the first floor dining room is an asset rather than a liability. A conversational area is established around the bay and fireplace with the portion between



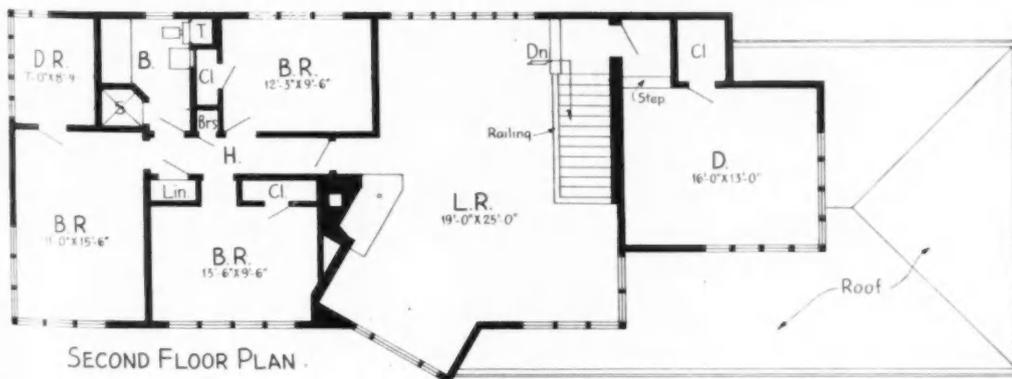
FIRST FLOOR PLAN



the front wall and stair wall used for card games. In this manner traffic through the room is confined to the rear portion. The angular position of the bar with relation to dining room is also an asset, as it effectively forms a di-

viding unit from the hall. The laundry and playroom with relation to the kitchen is particularly successful. It permits having the children under close supervision while carrying on household duties. The second floor framing walls

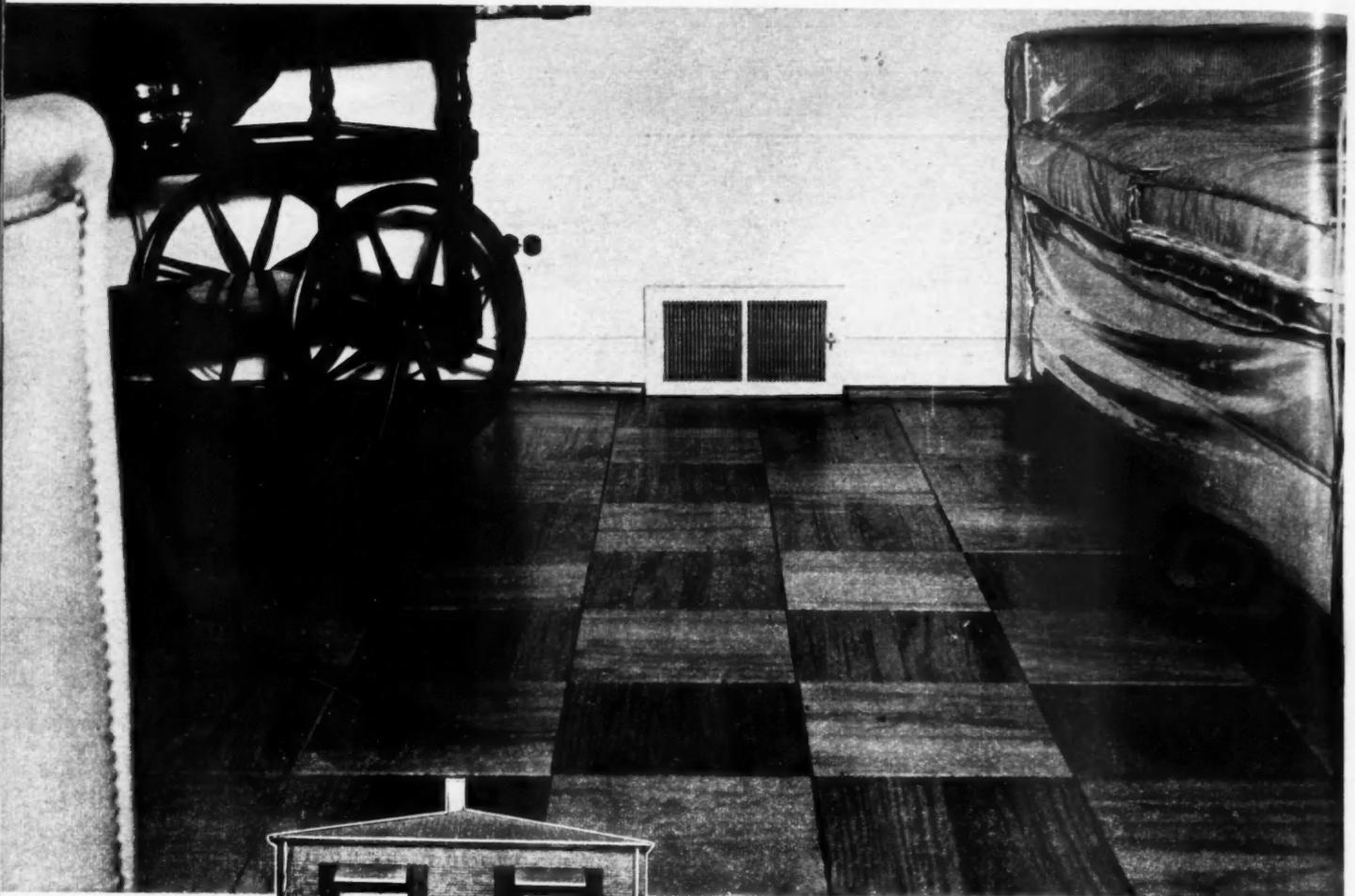
and roof are built up of wood members. Side walls and second floor ceilings are insulated. Roof is covered with stained wood shingles. The rear masonry wall up to second floor is faced with rough cast stucco.



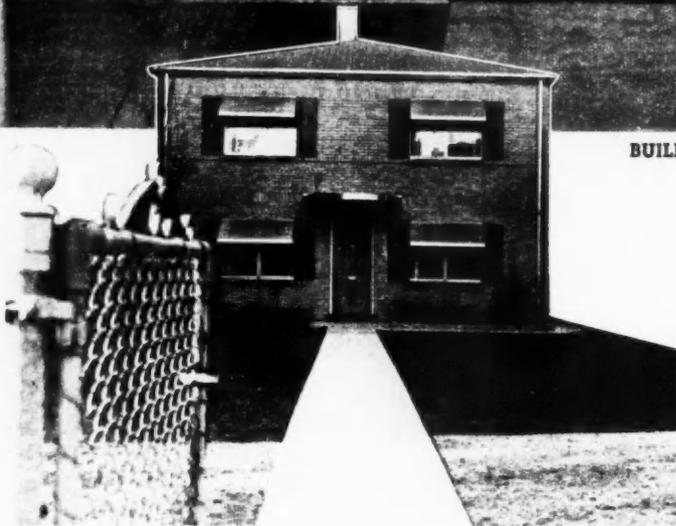
SECOND FLOOR PLAN

THE first and second floor plans of this house were laid out to conform to the needs and requirements of a growing family. The layout is unusual in that the house is two stories high but has no basement. With the exception of the dining room and entrance hall, the entire first

floor area is devoted to service and play. The large screened porch which contains a barbecue, adjoins the children's playroom. The second floor contains a large living room readily accessible from hall below, a den, three bedrooms, and bath. Layout of the house is adapted to the site



BUILDER of this home uses new flooring with radiant or other heating



Wood Flooring Developed to Use With Radiant Heat

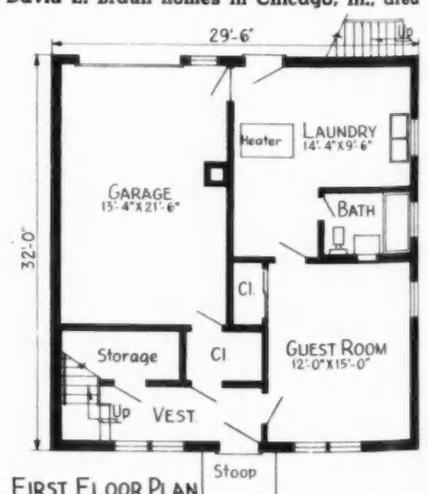
SECOND-floor living quarters characterize David E. Braun homes in Chicago, Ill., area



CHARLES H. ANDERSON,
Anderson Floors, Inc.,
worked with Higgins, Inc.
to introduce new flooring



SECOND FLOOR PLAN



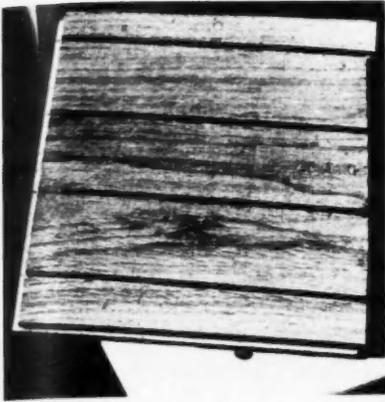
FIRST FLOOR PLAN

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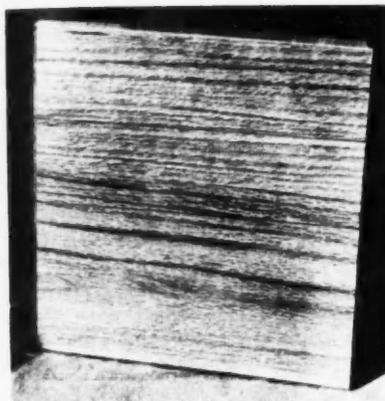


FLO

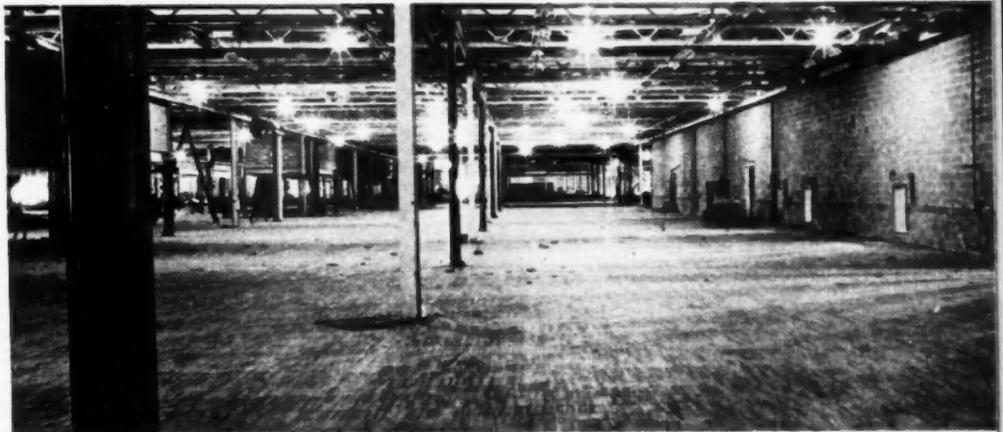
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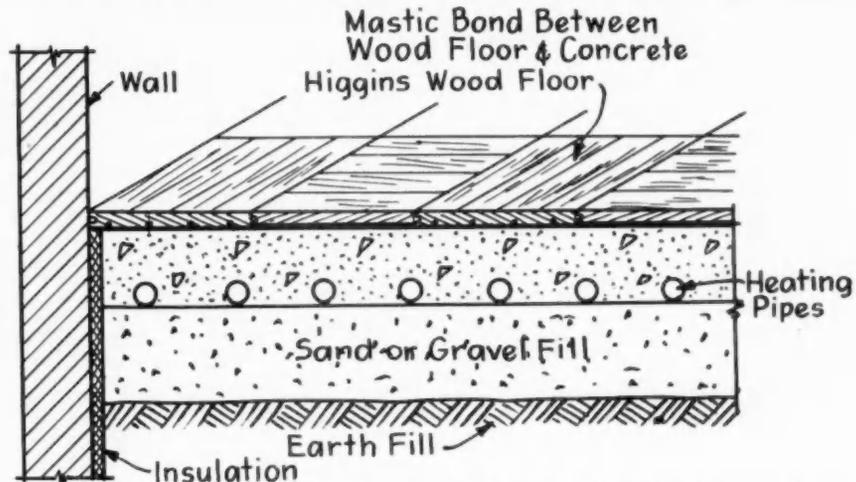
UNDER side of new flooring is grooved to allow for expansion and contraction. The blocks are laid in mastic and mastic forces its way into the grooves



FLOORING is chemically treated



STUDEBAKER plant, South Bend, Ind., one of large flooring jobs done by Anderson



Block flooring is tongued and grooved on all edges. Can be laid in mastic

A NEW type of wood flooring that may be successfully used with radiant heat installations has recently been developed by Higgins, Inc., New Orleans, La. Charles H. Anderson, president of the Charles H. Anderson Floors, Inc., Chicago, helped develop and introduce the flooring to the building industry. The flooring is a five-ply hardwood, bonded with waterproof glue impregnated with chemicals that resist moisture, termites and other vermin. It can be installed in basements, game rooms, and in all residence work where radiant heat is used with concrete slabs. The flooring maintains dimensional stability.

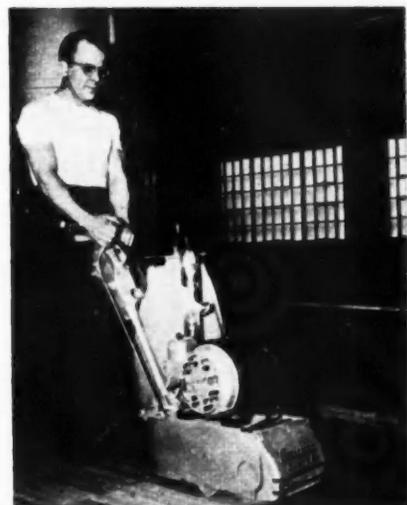
The flooring, 9-inch square blocks 1/2-inch thick, is grooved on the under side. The blocks are laid in mastic. Mastic is applied directly over the concrete slab, and when the flooring is laid the mastic is forced into the grooves to increase the holding strength of flooring to the slab. The grooves, spaced two inches apart, are 1/8-inch deep. Each block of the flooring is tongued and grooved on each of its edges.

Typical installations of the new type flooring were made in two homes built by David E. Braun, Chicago. One home under construction in Skokie, Ill., will incorporate the flooring with radiant heating, and in the other home in Chicago, the flooring is installed with forced warm air heat. The two homes are alike except for the type of heating installed.

For radiant heat, Braun uses an 85,000 B.T.U. capacity Bell & Gossett unit. Radiant copper tubing is installed in a 4 1/2-inch concrete block slab placed over a 4-inch fill of sand or cinders. Foundations and footings extend four feet below grade, and the outside edge of the foundations below grade are insulated with a waterproof material.

Anderson, who has been in the flooring business for 24 years, heads a company that installs and works with hardwood flooring. Some of the larger buildings in which his organization has installed flooring are the Merchandise Mart building, Chicago; the Customs house, Denver, Colo.; the Studebaker Aviation plants in Chicago and South Bend, Ind.; Reg-

ister Tribune building, Des Moines, Iowa; WGN Television building, Chicago, and the Fuchs bakery in South Miami, Fla. Besides industrial work, the firm installs flooring in residential units. They install the flooring and surface it. Surfacing equipment includes 20 to 25 sanding machines.



ANDERSON uses 20 to 25 of the new 8-inch sanders made by American Floor Surfacing Machine Co. in his surfacing



WARNING posters and safety suggestions are readily available, and they may do much toward cutting down accidents

"It Pays To Be Careful—

TOGETHER"

By Larry Holmes

Insurance Manager, Chicago Metropolitan Home Builders Association

Reduction in insurance premiums is only one dividend that may be realized through cooperative effort on the part of builder groups. There are other advantages

MARTIN CHARLES HUGGETT, executive vice president of the Chicago Metropolitan Home Builders Association, boiled down all the arguments for industrial safety to the six words which title this article. He uses the slogan frequently in his weekly Bulletin as part of the Association's continuous effort to help reduce home building costs by cutting down the costs of accidents. And it is working.

Mr. Huggett coined the phrase from experience. The Chicago Association is one of the home builder groups which has discovered that concerted and cooperative effort to reduce accidents pays very real dollars-and-cents returns in addition

to the intangible benefits it produces.

Direct savings are accomplished by reducing the costs of liability insurance, both workmen's compensation (employers' liability), and public liability (bodily injury and property damage). Rates for these coverages are based on the total amount of claims paid in relation to the total premiums paid by the insured. Each classification of operation has its own rate. These rates range from a few pennies per \$100 of the employees' remuneration to as much as \$25 per \$100 of payroll.

Rates are determined by statistical agencies which compile data for the insurance companies. In



PERCENTAGES NOT ADJUSTED TO REFLECT THE IMPORTANCE OF LOST TIME ACCIDENTS

ANALYSIS of home building accidents by cause is supplied by Kemper Insurance Co. engineering consultation service. Mishandling of objects causes most accidents

some states this statistical work is done by an official state body. In other states it is done by a rating bureau to which the insurance companies all subscribe. A national actuarial body compiles the data nation-wide, state-by-state, also, and makes its findings available to insurance companies and their agents. These are the basic or "manual" rates and are the cornerstone of all rate making in the liability field.

The manual rate for each classification of employment is applicable throughout a given state, and only in that state. For instance, the rate for residential carpentry varies from as little as \$1.86 per \$100 of payroll in one state to more than \$5 per \$100 in another.

This is caused by two factors: (1) The amount of benefits which the state law says shall be paid to a workman injured or killed on the job. (2) The frequency and severity of the injuries and accidents in that particular employment in the particular state. This latter is by far the heavier factor.

It naturally follows that if accidents can be reduced, the cost of the insurance will be reduced. In the instance cited above, it is apparent that the state which pays only \$1.86 premium for its residential carpenters must have a very careful bunch of carpenters and job superintendents, and probably has a state organization of some kind constantly checking on safety—a union, a contractors' association, or possibly an active state industrial commission.

In addition to reduction of the state-wide manual rates, there are other ways of reducing the total cost of liability insurance.

Entire industries sometimes carry on nation-wide accident reduction programs. Leaders of this type of activity are the railroads who have had an industry-wide safety program for more than thirty-five years. The railroad program was the inspiration for the formation of the National Safety Council which is the clearing house and leader of accident prevention in scores of fields today. The oil industry and the cement manufacturing group have active programs. Early this year the heavy construction industry through the Associated General Contractors adopted a program for its chapters with the national body serving as co-ordinator and as guide. Such industry programs have sometimes reduced costs as much as 50 per cent.

There also is a possibility that an individual employer may earn a re-

duction in his rates by himself. There are several "ifs" in this plan. In the first place he must develop a sufficiently large annual insurance premium (the size of which varies from state to state). His record of claims must be above the state-wide average. He must submit authentic data on payrolls, losses, and premiums for a period of several years (usually three or four years). He must place his insurance with a company which will grant preferred rates. Also, in most instances, his operations will be very rigidly inspected by safety engineers from the insurance company to determine his eligibility.

A third method of reducing liability insurance costs is now coming into widespread use among home builders and other trade associations. Because of its immediate availability in most of the states, it appears to be the most practical plan at present or until an industry-wide program may be inaugurated by the national association. The plan can be operated by one large local association, by pooling all the associations within a state, or by combining several states in the project.

Basically the plan is to segregate the residential contractors and subcontractors who are members of the association from the others within the state, or states, and treat them as one big preferred risk

plan. It has been operating in California for thirteen years. In one year—an exceptionally safe year—insurance costs were reduced 83.3 per cent! The average saving to members over the thirteen years is between 40 per cent and 50 per cent for all three associations. Milton Morris, the San Francisco association's dynamo, passed the good news along to other local association secretaries at a national meeting of executives in Chicago in 1946. Since that time more than twenty other local associations have started safety-insurance programs.

The dollars-and-cents reduction in insurance premiums is only one of the dividends from the program. Reduction in human suffering; improved labor relations; good industry publicity; splendid sales talk for prospective members who can qualify; and a self-sustaining new membership service are among the others.

It has been the experience of those who have installed a safety and insurance program that the members "eat it up." The builders and their foremen are grateful for the expert guidance the program makes available to them.

This guidance takes many forms. Probably most important is the service of professional safety engineers. When an insurance company is assured of a volume of



MEMBERS of Chicago association with perfect safety records receive this award

and to conduct safety work among these members which will cut down their accidents and hence the total of claims which must be paid. Being "careful together" in this manner has paid some surprising dividends.

San Francisco, Los Angeles and the Peninsula (California) associations discovered or invented this

business which the plan makes possible, it can afford to assign top-flight safety engineers to the home builders' operation.

The American Motorists Insurance Company, a nation-wide casualty insurance company and one of the big Kemper Insurance

(Continued to page 182)



AN old barn provided space for precutting shop and materials storage. From here precut materials are delivered to the home site

By studying cost and time saving methods used by large-scale builders, this father-sons team adopt ideas that pay dividends

PRE-CUTTING is the profitable phase of this building firm's operations, and to make precutting successful, the firm has carefully worked out materials handling procedures.

All lumber for several homes is cut to exact size at the cutting shop, which is located in a large barn near the site of the firm's operations. Precut materials include studs, rafters and headers. The shop workers pile each length separately. Then the man who delivers the lumber to the foundations is provided with a chart that shows exactly what lumber is required for each house. He loads the truck with the necessary pieces and when he arrives at the foundation of the home under construction, he places the lumber on the subfloor or

on the ground, as near to the place where it will be used as is possible.

The firm, Arthur M. Gilbert & Sons, a father and sons building team of Eugene, Ore., makes a regular practice of studying large building operations and reading trade publications for ideas. Currently they are completing a 135-home project. The father, Arthur Gilbert, and his two sons, Kenneth and Archie, have made an extensive study of precutting methods. Precutting, they realize, can easily be an expense instead of a saving if the carpenters spend valuable time looking for lumber to use.

Archie Gilbert runs the precutting shop where he makes cabinets as well as mouldings. Considerable storage space is provided in the barn that

houses the shop, and the firm purchases some materials in carload lots.

Most of the homes built by Gilbert & Sons are two bedroom units. Their prices range from \$8,850 for the smallest model containing 750 square feet to \$11,900 for the home that contains 1,075 square feet. All homes have 14x20 one-car garages. The houses are financed through F.H.A. Down payments range from \$1,800 to \$2,000.

To facilitate precutting, the firm chose four of the most popular floor plans of the seven that had been in use. Then the men devised three sets of concrete forms which take care of the four plans they are now standardizing, as well as three other floor plans if they want to use them.

The larger homes have oil-fired forced warm air furnaces with registers in each room. Full-sized dining rooms plus breakfast nooks in the kitchen, utility rooms, fireplaces and concrete patios are among the features of the homes in the higher price brackets.

GARAGE
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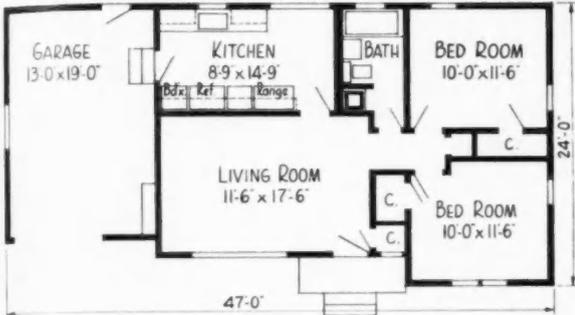
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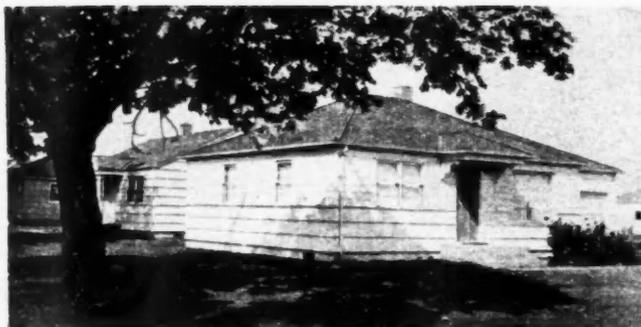
Garage
13.0x1

HORIZONTAL
doors
built
wood

Handling Methods Make Precutting Profitable



THIS floor plan is one of four that Gilbert & Sons are standardizing. Three sets of concrete forms take care of seven floor plans. Cabinets arriving at home, right, were made in the firm's precutting shop which was set up at the project



Varied exteriors belie the fact homes in project are built from standardized floor plans

Exteriors of the homes are wood siding or shakes. Interiors are plastered, and most living room ceilings are coved. Hardwood floors, linoleum drainboards with cove backsplash are provided.

Plaster receives one coat of oil paint, and three coats of paint are applied to the interior and exterior woodwork. Because of a prolonged rainy season in that area, many ex-

terior materials used are primed on both sides for added protection.

Since sewers are not available to the project, the firm provides septic tanks. Asphalt streets with concrete curbs and gutters are standard.

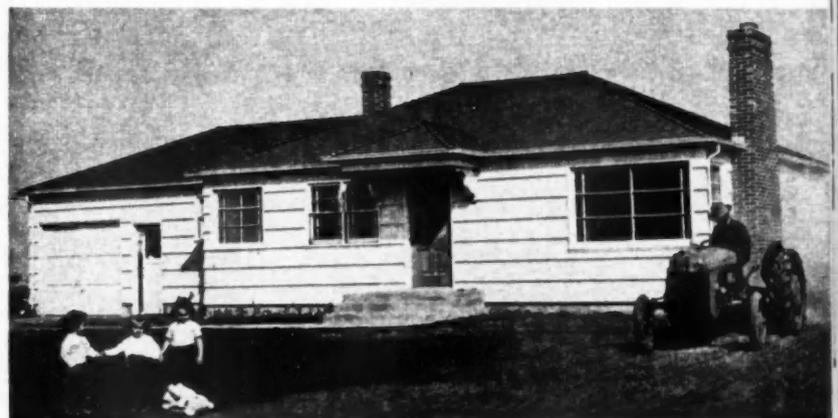
The two Gilbert boys have grown up in the building business, learning much from their father who started out as a carpenter in 1925. Arthur Gilbert now does the buying and

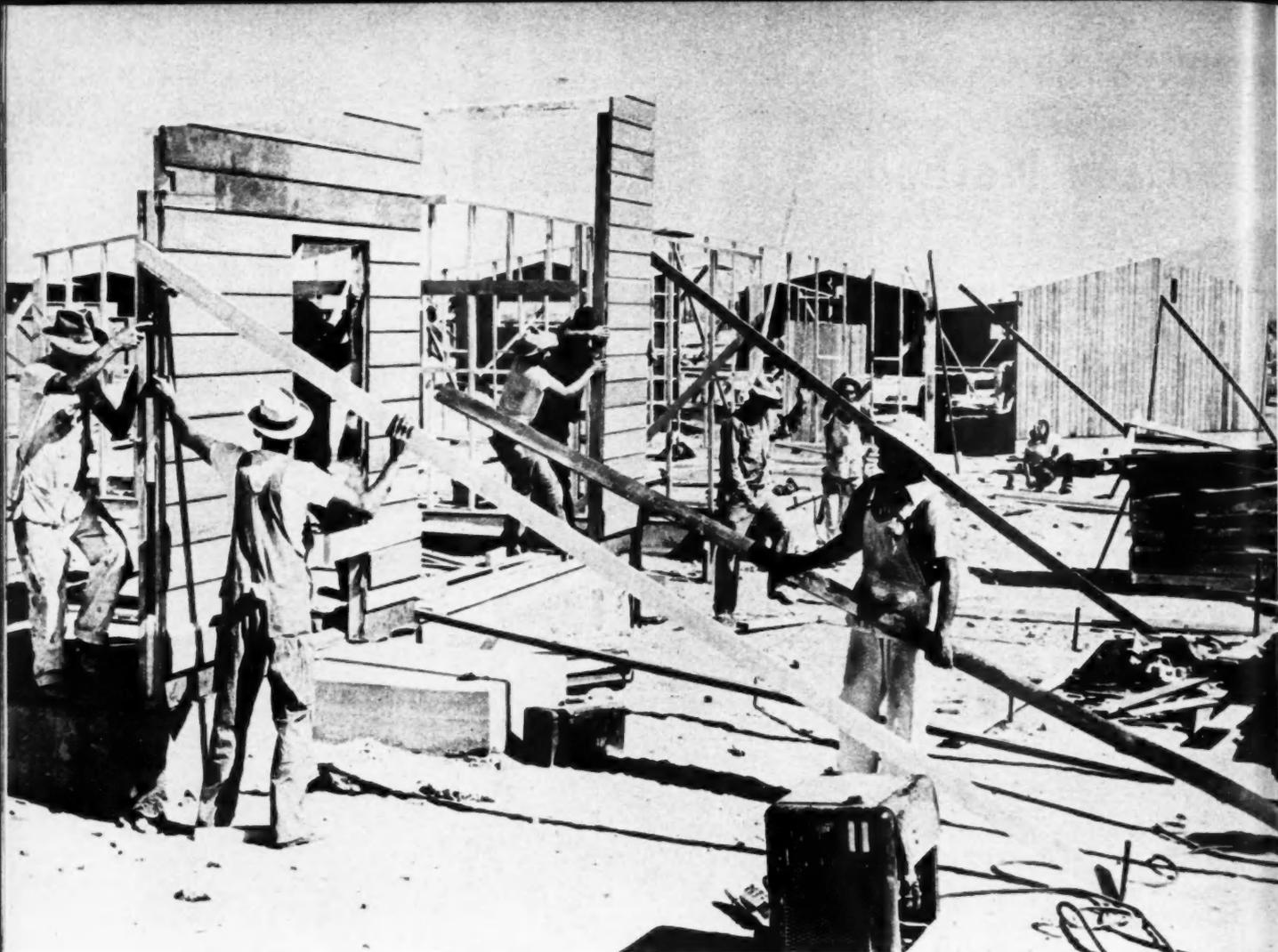
selling for the firm; Kenneth supervises construction from foundation to plastering, and Archie takes over the finishing, after the plastering is completed.

This father and sons team is doing a big job in Eugene, Ore. They have already completed 63 two- and three-bedroom homes and are now finishing up 13 more. The balance of the 135 homes in the program has been started.



HORIZONTAL line treatment, emphasized with siding, windows and garage door, adds interest to this typical home built by Arthur M. Gilbert & Sons. Exterior and interior woodwork of these houses are given three coats of paint





CAREFULLY planned schedules of all operations enable Del E. Webb to erect houses at the rate of seven per day



MORE than 11,000 feet of 8 and 10-inch vitrified clay pipe go to provide sewerage facilities for the first 700 homes. Over 50 miles of pipe will be installed

Low - Cost

There is no sacrifice of quality in design, workmanship, or materials in this large-scale, low-cost housing project in Tucson



CREATOR of Pueblo Gardens, Del E. Webb, right, chats with Sid Taylor



WHEN completed, this development will comprise a \$20,000,000 "city within a city", with 3,000 single-family homes housing more than 10,000 residents

Housing With Style and Quality

ON A DESERT site in Tucson, Ariz., one of the largest housing developments in the nation is currently taking shape at the rate of seven homes per day. Known as Pueblo Gardens, the project was initiated last June by the Del E. Webb Construction Company of Phoenix. When completed, the \$20,000,000 "city within a city" will provide its 10,000 residents with 3,000 low-cost homes and a \$2,500,000 civic and shopping center, as well as churches and schools.

Webb, whose success in the highly competitive construction field is credited in large part to his willingness to use new materials and methods, brings to the Pueblo Gardens development all the skill and know-how acquired on several other big-scale construction jobs. A former carpenter, he heads a firm nationally known for its multi-million dollar projects, constructed from New Jersey to Oregon, from Florida to California. He is

also vice president and part owner of the New York Yankees, having obtained his start in athletics as a minor league baseball pitcher prior to his carpenter days.

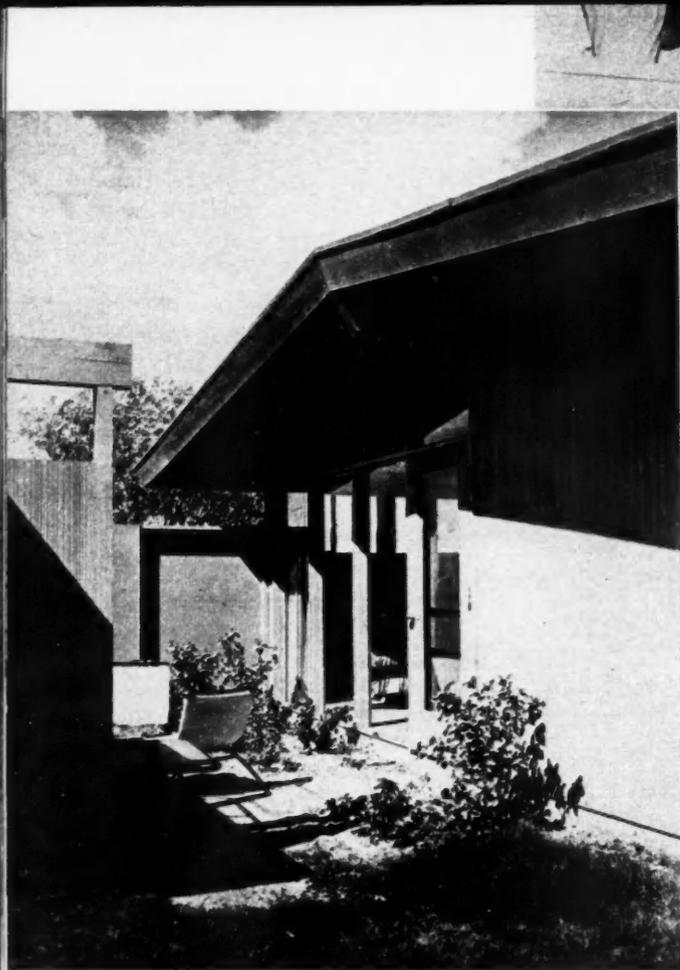
Careful preliminary planning and materials scheduling has enabled building activity to proceed at the present seven houses per day rate, and construction is now ahead of schedule. The first block of houses to be completed consists of 700 dwellings, calling for 5,500,000 feet of lumber which is precision cut and packaged on the site—at a Webb-constructed and operated mill. Over five miles of redwood patio fences are being erected, 120,200 square feet of glass installed, and six miles of surfaced streets laid.

Utilities and plumbing installations will require laying in excess of 50 miles of pipe. Sewage disposal is accomplished with mains connecting living units to the Tucson municipal

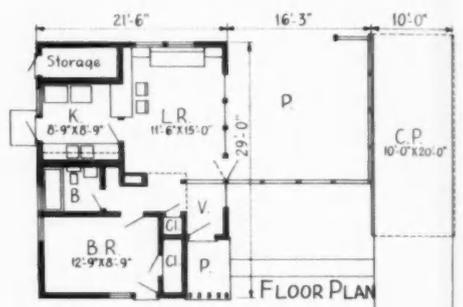
system, with each block of houses being cut in simultaneously. Over 85 per cent of all sewer mains had been installed five months after the project got under way.

Due to Tucson's rapid growth and the consequent limitations of sewerage facilities, outlying districts have previously depended on septic tanks and cesspools. A cooperative sewer enterprise was recently initiated to provide sewerage facilities for the entire metropolitan area. Bonds for the project were approved by voters last fall. Under the new system an outfall sewer will collect sewage from four interceptor lines, conveying it to a new disposal plant.

Because of the size of Pueblo Gardens, and its status of construction, the subdivision was granted permission to cut into the new interceptor lines. Mains are of 8-inch and 10-inch vitrified clay pipe, 7,875 lineal feet of 10-inch and 3,130 feet of 8-



LEFT, outdoor patio of \$5,975 two-bedroom house. Above, living room of \$7,975 three-bedroom house looking toward patio. Right, a typical floor plan of the \$4,975 one-bedroom house. Large window areas are characteristic of all houses



inch clay pipe going into sanitary installations for the first unit of 700 houses. The mains are laid at depths ranging from six feet to 14 feet. Several types of trenching machines were used, from blade excavation in the softest soil to heavily powered trenchers in the typical desert caliche—soil hard as sandstone, sometimes as impenetrable as rock. Analysis of soil conditions and assignment of equipment were under the supervision of J. N. McPhee, Webb's superintendent in charge of over-all construction.

Designs for the six different floor plans are the work of Architects Paul Williams and A. Quincy Jones. Far from sacrificing the quality so frequently absent in low-cost houses, the Pueblo Gardens' homes possess a luxurious appearance comparable to many individually designed and expensively built dwellings.

One of the outstanding features is the lavish use of glass, an infrequent application in low-priced houses. The dwellings are also characterized by exceptional insulation, necessary to offset desert temperatures. Wide roof overhang and use of double vapor barrier wool batts for ceiling insulation utilize the heat-reflection rule.

The window areas extend the living space beyond the physical boundaries of the home. To insure privacy for each owner, detached patio fences have been used, and these in turn

make it possible to vary the appearance of each dwelling. In the small home the front window wall is seven feet high by 14½ feet wide while the rear door arrangement provides a glass door and adjoining window to give a daylight wall seven feet high and 6½ feet wide. The horizontal bands of windows have aluminum sash. A two-bedroom design has the entire end of the living-dining area glass from floor to ceiling providing a window wall 12 feet wide by 7½ to 9½ feet high, varied because of the pitched roof. Another two-bedroom design has a window wall 10 feet high by 12 feet wide.

Aluminum-backed gypsum board provides wall insulation. The flat roofs, which eliminate hip and valley framing, are sealed and covered with crushed stone. This framing system

permits sloping ceilings, which are used to architectural advantage by visually enlarging room areas. Door-height closets separate entryways from living room areas.

Although construction varies, the majority of the houses are frame with redwood siding or striated plywood exteriors. Where plaster or stucco is used, increased wall strength and the elimination of plaster cracks is achieved by the use of Gunite, which has also reduced plastering time.

Landscaping of the entire project is included in the price of the houses, which vary from \$4,975 for a one-bedroom home to \$7,975 for a three-bedroom dwellings. The figures include a large landscaped lot, termite-proofed construction, paved streets and complete utilities, patio walls, backyard fencing, and outdoor storage.



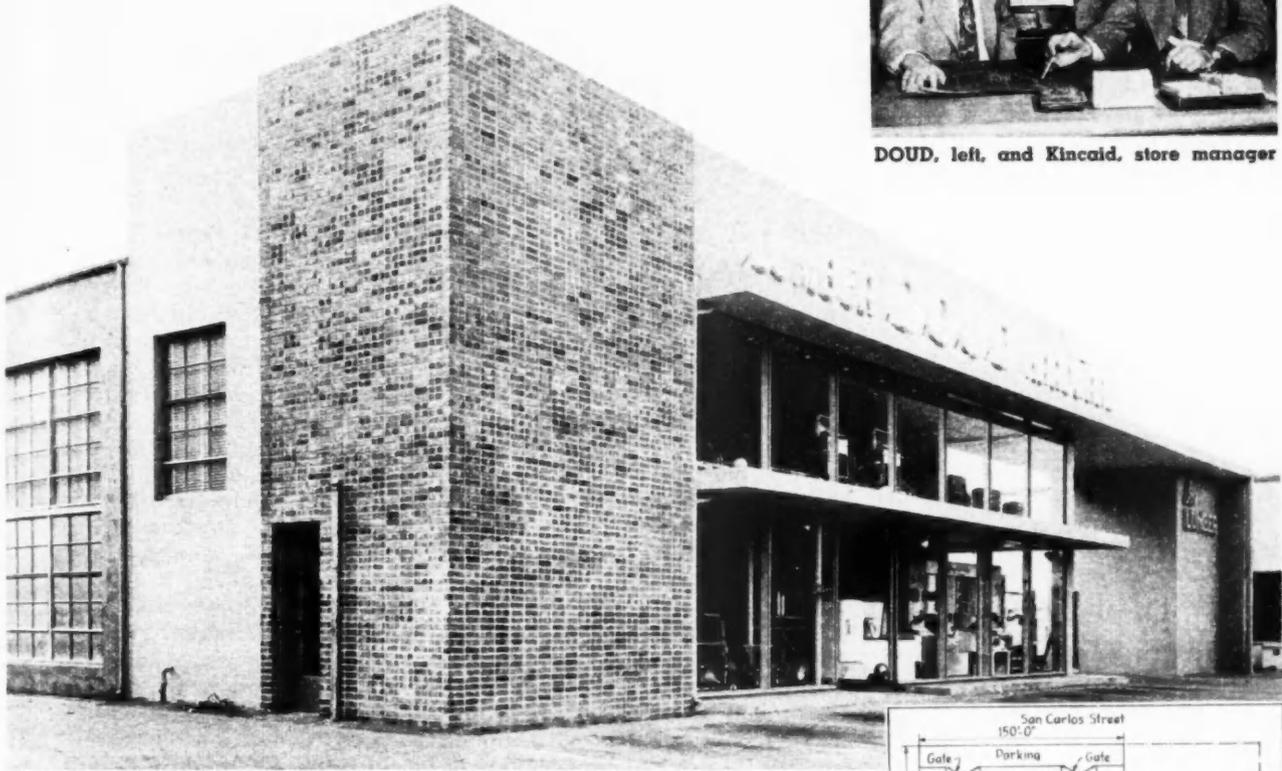
TYPICAL house in Pueblo Gardens. Patio fences give privacy and also individuality

Contractors Get Quick Service---

Whether It's a Small Item or Lumber for a Complete House



DOUD, left, and Kincaid, store manager



UNUSUAL design provides two tiers of display windows. Yard layout, right

LUMBER dealers can sell almost anything connected with building or household needs, if they advertise and attractively display their merchandise.

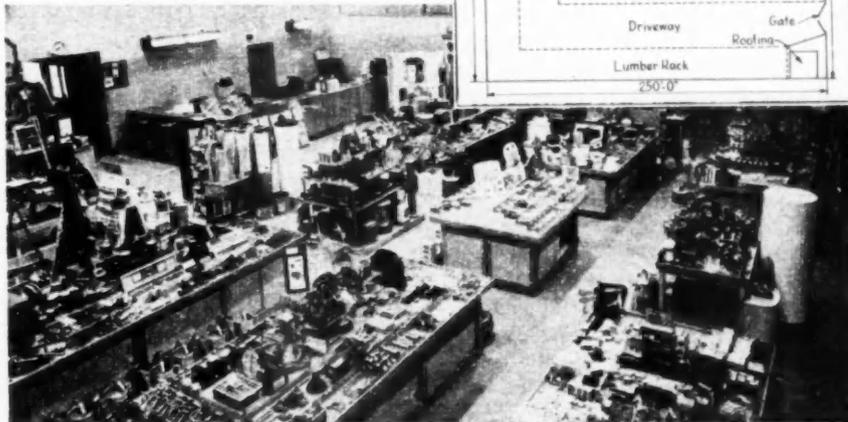
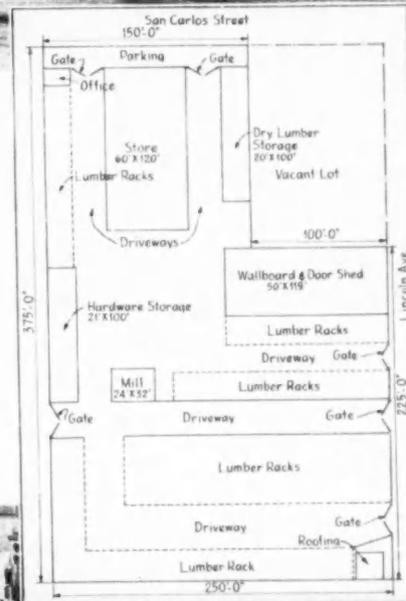
This has been the experience of the Doud Lumber Co. of San Jose, Calif. When this company's store and yard were built in 1945, building materials and hardware were scarce and hard to get. F. J. Kincaid, the manager, decided to fill shelves and counters of his attractive store with any available merchandise related to the business. He secured housewares and cooking utensils, and such unusual items as bicycles, scooters and ice cream mixers, as well as tools, tool chests, small motors, power drills, gas heaters, underground garbage receivers, fireplace equipment, shower stalls, and lawn umbrellas. This miscellaneous assortment of goods sold well, and carried the new concern through the postwar period of shortages.

But the real business of the Doud Lumber Co. is selling lumber and building materials; the real objective, to serve contractor-customers in the best way possible. Now the store can obtain the type of merchandise needed

for this purpose, and kitchen hardware and similar miscellaneous items are being replaced by builders hardware and Class "A" equipment used by carpenters and other mechanics.

The builders hardware department is designed for the use of architects and builders. They are welcome to bring their customers in and look around as much as they please. No pressure is put on them to buy.

The entire plant is laid out in such
(Continued to page 200)



COMPLETE assortment of items for the home is offered in the Doud store

Construction Outlook for 1949

by Herman B. Byer

Acting Chief, Division of Employment and Occupational Outlook, U. S. Department of Labor, Bureau of Labor Statistics, Washington, D. C.

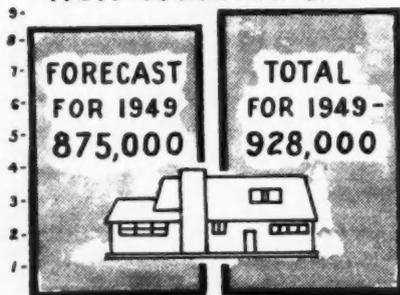


The forecast—A good building year marked by adjustment and stability rather than expansion, with a 6.1 per cent increase over 1948 in over-all construction expenditures

THE CONSTRUCTION industry entered 1949 after having established a remarkable postwar record. This has been a period of expansion in all respects. As I view the situation, 1949 will be a good year for the construction industry, but will be characterized by adjustment and stabilization, rather than continued expansion. I hope, and many others do also, that such will turn out to be the case. At this stage, further adjustments, contin-

ued improvement in the supply of materials, and an orderly price situation would be far more advantageous to the industry, and to all the users of its products, than would further expansion sufficient to maintain undue pressure on the industry's increasing capacity.

NUMBER OF DWELLING UNIT STARTS IN NON-FARM AREAS



ued improvement in the supply of materials, and an orderly price situation would be far more advantageous to the industry, and to all the users of its products, than would further expansion sufficient to maintain undue pressure on the industry's increasing capacity.

Within the past seven years, from the start of 1942 to the end of 1948, construction has gone through a complete cycle which, under more normal conditions, might have extended over a generation or more. Activity in 1942, when so much of the war plant and of military and naval facilities were built, was almost as great in physical terms as in the two highest years of the 1920's. But by 1944 the physical volume of construction activity had declined to almost the levels of the lowest year of the depression. By

1948, new construction in physical terms (as measured by construction expenditures adjusted to eliminate the effects of price changes) had increased by almost 170 per cent from 1944, and by almost 140 per cent from the somewhat higher level of 1945. It is interesting to compare this latter increase with that during the corresponding period at the end of World War I, from 1918 to 1922; for that period the increase in physical volume was about 40 per cent.

Last year our total expenditures for new construction, measured in current dollars without any adjustment for changes in construction costs, was almost 17.7 billion dollars—somewhat over 13.6 billion dollars for privately financed work, and slightly more than 4.0 billion dollars for public construction of all types. The largest item was privately financed non-farm residential building which made up almost 40 per cent of the total, and privately financed utilities constituted about 14 per cent of the aggregate.

EXPENDITURES ON ALL TYPES OF NEW-CONSTRUCTION



construction expenditures, but in 1948 less than one per cent of the new construction fell in this category. Publicly financed industrial construction made up a quarter of all expenditures in 1942, but last year was negligible in extent. These had been replaced by our normal peacetime public works—highways, school buildings, hospital and institutional buildings, sewer and water projects, and conservation projects.

During all of this postwar period, however, housing has received the greatest attention, and it is in this area that the most spectacular advances have been made. The number of new permanent units started in non-farm areas totalled 670,500 in 1946, 849,000 in 1947, and 928,000 in 1948. If we add those started between the defeat of Japan and the end of 1945, and those started during the opening months of 1949, we have a total of more than 2 1/2 million new housekeeping dwelling units put under construction since the end of the war, not counting units started on farms, temporary units provided in public projects under the Veterans' Emergency Housing Program, and units gained by alteration of existing buildings.

(Continued to page 212)

EXPENDITURES ON ALL TYPES OF PRIVATELY-FINANCED CONSTRUCTION



Dramatize Your Project—For National Home Week



FOR the home builder seeking the greatest benefits from National Home Week, there is one fundamental answer—*dramatization*.

It is *dramatization* that brings attention. It is *dramatization* that brings out the crowds. It is *dramatization* that helps any home builder put his story across.

National Home Week brings that opportunity!

The casual observer passing a home building project last September probably did not remain casual for long. What met his eye in many leading cities were crowds of people thronging to see the new homes and building products that were on display during National Home Week.

In many cities home builders who were marketing entire communities of homes hung out the "sold out" sign before NHW had come to a close. These alert merchant-builders had the foresight to dramatize their homes and their projects in a way that made people want to come and see them.

Dramatization of new homes and products can be your keynote. The

alert builder has plenty of chance in this direction.

This year National Home Week will be bigger and better because not only home builders but every segment of the industry is making preparations to join this report to the consumer.

The work that can be done in every city to build a big NHW campaign naturally falls into two general classes: That which should be done by the Association as a whole, and that which can be done by individual builders.

For example, the Association can dramatize the industry's achievements by building a model Economy Home in the Town Square during the Week, September 11-17. Plenty of publicity about the stunt should precede opening day. Then when the Big Week arrives the public will flock to observe modern construction methods and the completed project. In this model home can be posters and sales promotion displays pointing up various modern materials and appliances. It is also a wonderful place to put

up bulletins and explanatory material about financing methods, supply problems, industry production records, and other facts and figures about the home building industry.

Building a sample home on the City Square is an Association project, just as tours of NHW building projects for mayors and city officials would be. But the individual builder need not rely entirely on the activities of the Association to bring interested customers to see his new homes. The Home Builder can merchandise his project for National Home Week in co-ordination with his Association and multiply the benefits.

Take the idea of building a model home. The individual builder with a flare for publicity could set aside a certain house under construction in a current project to be his special National Home Week House. The way to win friends and influence buyers is to keep visitors happy, it seems, so a grandstand might be in order to make kibitzing a pleasure, rather than a training hike through muddy

(Continued to page 224)

ASSOCIATIONS REPORT ON PLANS FOR NATIONAL HOME WEEK

MANY local Home Builder Associations are already well along the road to a big NHW program.

The Seattle Master Builders say, "We are making a definite drive on the 'Economy Home.' We are working up teams of architects and builders; each team is to construct a pilot house to check on consumer acceptance. We will ask Mayor Devin of Seattle to declare the Week of September 11-17 as official National Home Week."

St. Paul builders have important plans. . . . construction of a low-cost home on a site which has been selected on the State Fair Grounds. . . . We will have co-operative exhibits in most of our large department stores, furniture stores. . . .

Our public relations will include several spot announcements and 15-minute programs on local radio stations."

Salt Lake City's Association members hope to have twice as many homes on display this year as last and are making plans to enlist the support of the Salt Lake Real Estate Board, the Utah Furniture Dealers, the Nurserymen's Association, the Gas Consumers Council, the Utah Mortgage Bankers, the Utah Electrical Association, the Utah Lumber Dealers, and many other trade groups.

The Home Builders Association of Richmond, Va., says, "We plan to hold our 1949 Home Show during National Home Week and develop these two programs simultaneously."

The Home Builder's Association of

Alleghany County, which includes the Pittsburgh area, has a comprehensive program. Among the events are ". . . a gigantic better homes exposition covering 53 acres of park grounds with all existing buildings, plus 180 exhibits we shall have to construct ourselves—in all over a half-million feet of exhibit space. Plans call for construction of a True Economy Home, and the Home-of-a-Thousand-Ideas. A feature of the show will be the development of a flower theme. We hope to obtain close co-operation from our local department stores. From all indications, civic support is assured. There will be exhibit homes, radio programs, tie-in promotions, placards and window displays."



EVEN roof line maintains unity in over-all appearance of Delaware Park Shopping Center, Buffalo, N. Y.

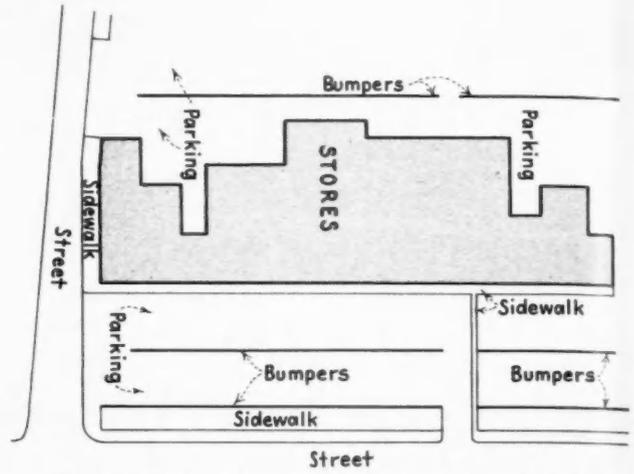
Shopping Center For Established Community

BUILDERS of shopping centers realize that no store owner would like his place of business to be a duplicate of one his competition operates, yet most builders realize the importance of maintaining a uniform appearance of stores in a shopping center.

The shopping center, as a whole, must first attract clients to the area, then the buildings should offer each store owner the opportunity of adding individual appeal to represent the business he will conduct. How a shopping center was planned to appeal as a unit, allowing "individualism" on the part of each store owner, is shown in the Delaware Park Shopping Center in Buffalo, N.Y.

Completed in ten months, the 21 stores in the Center were immediately occupied, and are doing a large volume of business. Clients from the surrounding established residential areas are attracted by ample parking space, and by a layout which permits a free flow of pedestrian traffic. Architect G. Morton Wolfe, of Buffalo, in planning the Center achieved an appearance of spaciousness and unity by specifying comparatively low and even front elevations.

The Center, three miles from downtown Buffalo, faces busy Delaware Avenue, and when a customer



DELAWARE Park stores occupy 1,035,000 cubic feet

drives into the Center from this main thoroughfare he can park in the large paved area immediately off the street, in front of the shops. Near the stores, the customer is impressed with the individuality of each unit. From Delaware Avenue he is impressed by the overall appearance of unity in the shopping center.

Construction work, done by the Shirley-Herman Co., Buffalo general contractors, was speeded up by the use of power tools. This equipment included gasoline shovels, bulldozers, rollers, power saws, power concrete float machines, a concrete mixer, and gasoline pumps. A concrete slab was laid over concrete footings placed four feet below grade. Floor covering is asphalt tile, and ceilings are insulation tile. Wood sheathing and wood joists were used for the roof decks.

Interior walls received three coats of plaster. Exterior materials applied included granite, Indiana limestone, brick and concrete block.

David Bernant, New York, contracted with Wolfe and the Shirley-Herman Co. to plan and build Center.

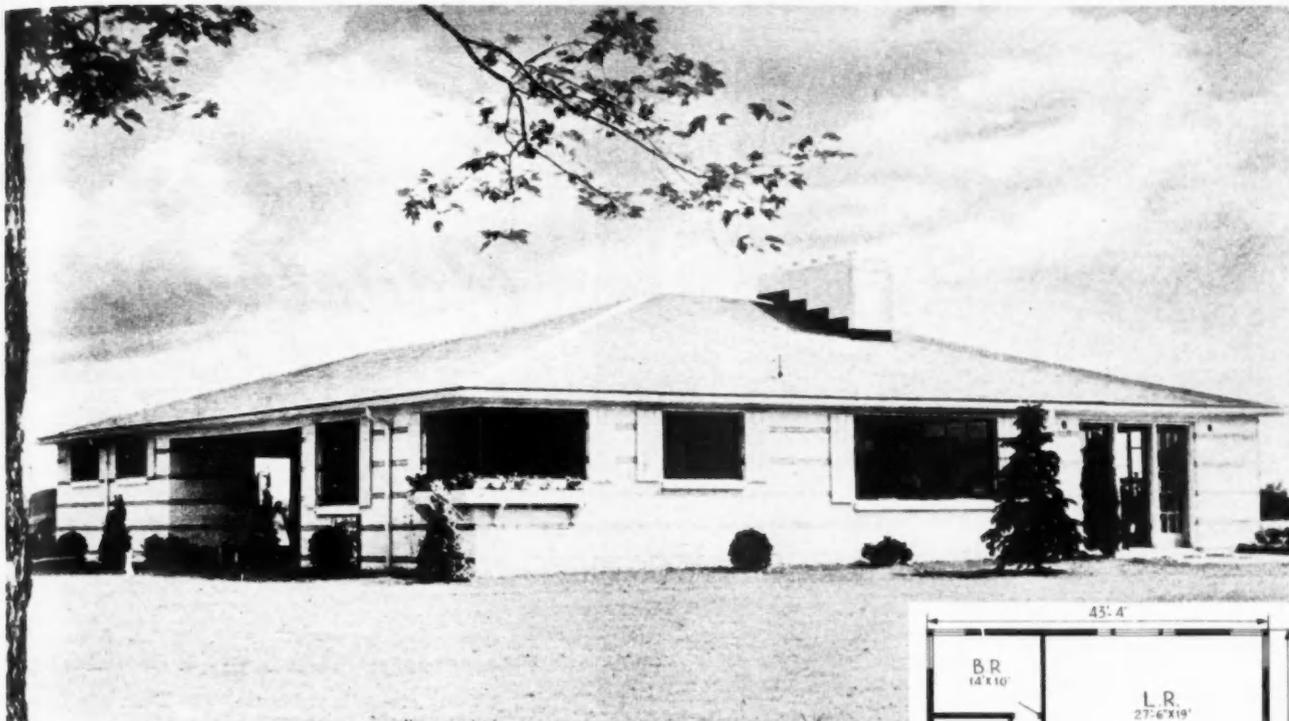


FRONTS are protected from sun by overhangs or awnings



Ra

AL.T. A w come already home N.Y., Con style has fi temb about three \$14.50 ance. plete visite Th by N good achie slab slab pour per v heat joint cond was T v were wall cret rock



COST of home with land was less than \$23,000

Ranch Style in Block and Brick



ALTHOUGH Richard Narrow of Williamsville, N.Y., is a newcomer to the building field, he is already a pioneer in ranch style home construction in the Buffalo, N.Y., area.

Completing one of the first ranch style homes in the area, Narrow has finished three others since September, 1948, and plans to build about 14 a year. The two- and three-bedroom houses, priced at \$14,500 and up, found ready acceptance. When the first one was completed, as many as 1,800 people visited it in one day.

The home shown here, occupied by Narrow, is representative of the good design and construction he achieves. It is built on a concrete slab over the rough 3-inch concrete slab placed on a gravel fill, tar was poured and Sisalkraft building paper was laid. Wrought iron radiant heat pipes were installed with all joints arc welded, then the finished concrete slab, four inches thick, was poured over that.

Two trenches, 38 inches deep, were dug for the inside and outside walls. At this depth, walls of concrete block and brick rest on solid rock. Concrete blocks used for the

exterior walls are 8x8x16 inches; for the interior, 4x8x16 inches.

Inside walls and ceilings were insulated with 4-inch wool batts, and received three coats of plaster. Insulation around the outside walls is 3/4-inch fiber board. Millwork and trim is white pine. Floors are asphalt tile. Regular wood shingles were used as roofing.

BRANDED PRODUCTS USED

- Amerwood paneling
- Bryant water heater
- Byers wrought iron pipe
- Celotex concrete building units
- Celotex insulating building boards
- Crane, and American-Standard bathroom fixtures
- Gold Bond plaster
- Hope windows
- Kelvinator range and home freezer
- Norge refrigerator
- Pryne & Co. ventilators
- Sisalation insulation
- Speakman shower heads
- Stanley, and Yale & Towne hardware
- Tile-Tex asphalt tile flooring



OFFICE in home is attractively paneled



CABINETS have sliding glass doors

Engineered House Construction

Part VI

Exterior Walls

The exterior wall is the starting point of good construction. In the production of a sound building, regardless of size, the proper assembly of its parts, the workmanship and the materials play equally important roles



METHOD of applying insulating board sheathing to exterior wall

NOTWITHSTANDING the numerous combinations and variations that are possible in the construction of a wall, there are only three basic types in use at the present time. These types are as follows:

1. **FRAME.** This type consists of all wood members being securely fitted and nailed together. The various kinds of framing are: The balloon frame, the modern braced frame, and the platform frame. The balloon frame is the most economical though least rigid method of light frame construction. The braced frame, sometimes called the combination frame, is a modification of the heavy timbered frame which was used until the middle of the Nineteenth Century. The platform frame is the type of construction in general usage today. The exterior framing extends up to each floor and rests on each respective floor. Sheathing is applied to the frame, and the exposed surface or skin which is placed against the sheathing may be one of a number of different materials that are adaptable to the design to be used.

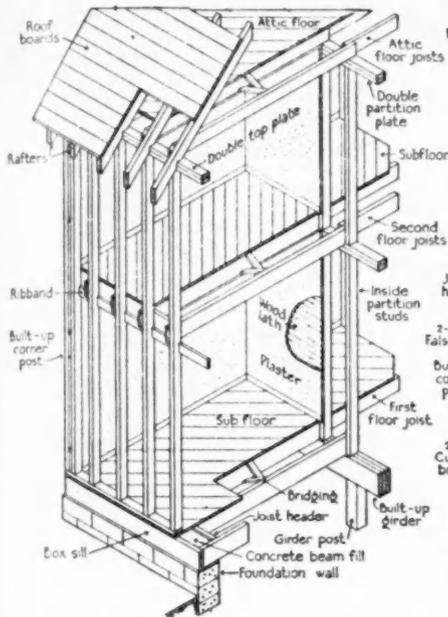
2. **MASONRY VENEER.** Basically this system is similar to frame construction, except that the skin or sur-

face material is of brick, stone, or some other material intended to give the appearance of solid masonry construction. Wall is built up of wood in the same manner as frame. Between the face of the wood sheathing and the back of the masonry veneer a one-inch air space is provided. The masonry veneer is then secured to the sheathing with metal ties. This type of wall construction is preferred by many builders and architects because it permits greater flexibility in the design of a house through the introduction of a number of different wall surfaces.

The subject of walls will be discussed again next month in this series on Engineered House Construction. This limited treatment on exterior walls will be treated further and in addition there will be a series of illustrations and explanations on interior walls

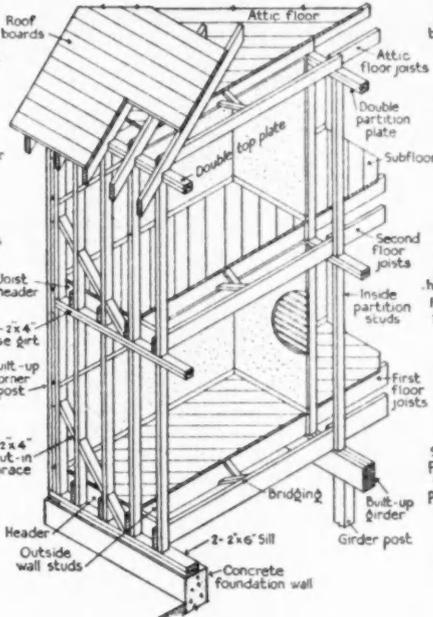
3. **SOLID MASONRY WALLS.** Perhaps this is the most common of all system of building construction. These walls vary in thickness from eight to twelve inches in their application to houses, depending upon height. They can be built with either common brick or concrete block back-up of four to eight inches in depth with four inches of face brick or stone facing. Inside face of solid brick or concrete block walls are furred to receive lath and plaster. Basement walls and foundations should be at least as thick as the walls above. In the case where basements are provided, however, the wall should be at least two inches thicker than the wall above. This compensates for the pressure of the earth against the wall, particularly in the case where no cross walls are encountered. If, however, upon investigation it is found that the stresses due to earth pressure and the superimposed building exceed the specified safe working stress, then the thickness of the basement wall must be increased to bring the stresses within the specified limit.

A variation from the solid wall that has received widespread recognition



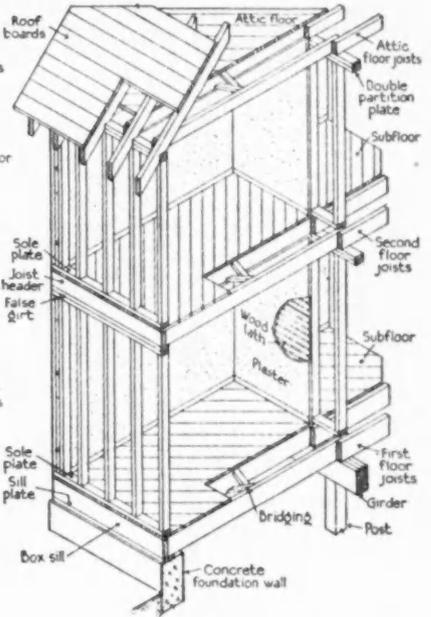
THE BALLOON FRAME

THIS type of frame has many things to recommend it. The one-piece studs, extending the full height of wall and tied together by the ribband at the second floor line, reduce to the minimum the shrinkage factor. It is strong and rigid but requires careful fire stopping. It is more efficient when interior studding is set directly on girders or bearing walls



THE MODERN BRACED FRAME

THIS type of frame is an outgrowth of New England solid timber post and girth construction. Instead of heavy posts, walls are built with 2x4-inch studs set 16 inches on centers. The second floor is carried on a double 2x4 plate. This type has several commendable features. Simple to build it has good provision for fire stopping at sill and second floor. Cut-in bracing used

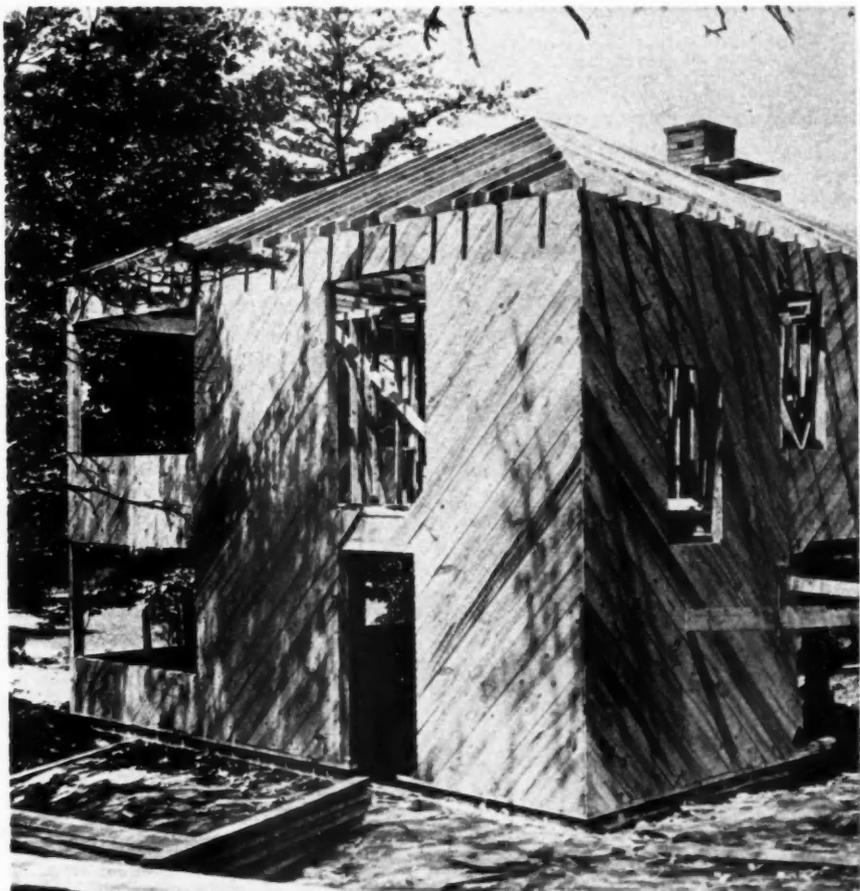


THE PLATFORM FRAME

THE platform frame is extensively used. It is similar in principle to the braced frame but has boxed sill construction at each floor line. This makes for greater shrinkage but it is equalized on each floor when a similar type of construction is used under bearing partitions. Frame is more efficient when studding is set directly on top of girders or bearing walls

is the cavity wall. This is made up of two separate brick or tile walls which are separated by an air space about two inches wide. The two walls known as wythes, are held together by rustproof metal ties placed in the mortar joints at regular intervals (every six courses) as the walls are constructed. There should be no bridge between the inside and outside tier. The term bridge, as used here, refers to materials that may become lodged within the two inch air space, thus acting as a conductor for the transmission of moisture or cold air. In laying up this type of wall, the mason needs to be extremely careful to see that excess mortar does not drop into the air space and thereby form a bridge. The exterior wythe is the exterior finish; the interior wythe can be used as the interior finish of the room. Due to the insulation value of the two-inch air space, plaster can be applied directly to the inside face of the interior wythe. Savings in construction work can be established after the bricklayer becomes accustomed to the movements required to lay this type of wall.

Another type of wall is reinforced masonry. This is used wherever there



CONVENTIONAL wood sheathing secured diagonally to wall studs for rigidity



SCORED plywood veneer applied to outside face of studs provides rigidity to walls

is a heavy stress. The secret of a good reinforced masonry wall is that it must be solid. The reinforcing rods may be placed either in a vertical or horizontal position. Vertical reinforcing is recommended for any wall in which there is pressure.

Hollow concrete blocks of either heavy or light aggregates are now widely used in exterior wall construction. Stone and gravel were the original aggregates but now crushed and graded cinders are more generally used because they are highly cellular, light in weight, fire resisting, insulating and nailable. They also provide a good mortar and stucco bond. The cinder blocks are not as strong as the other type, but they will carry loads sufficient for use in most houses. When the exterior of light aggregate blocks are sprayed with a waterproof-

ing compound it then makes a very desirable and attractive wall surface. By butting the blocks together and closing up the vertical joints, and then raking out the horizontal joints, some very unusual effects may be obtained. When care is used in laying up the blocks the interior surface of blocks can be exposed in the room and treated as an interior finish.

Other types of wall construction that are similar in concept to the three basic types mentioned are being developed through prefabrication methods. The all steel house, as represented by the Lustron Company, employs the use of steel channels for the vertical members and a skin of metal panels both inside and out. Insulation and other features are used to make it practical.

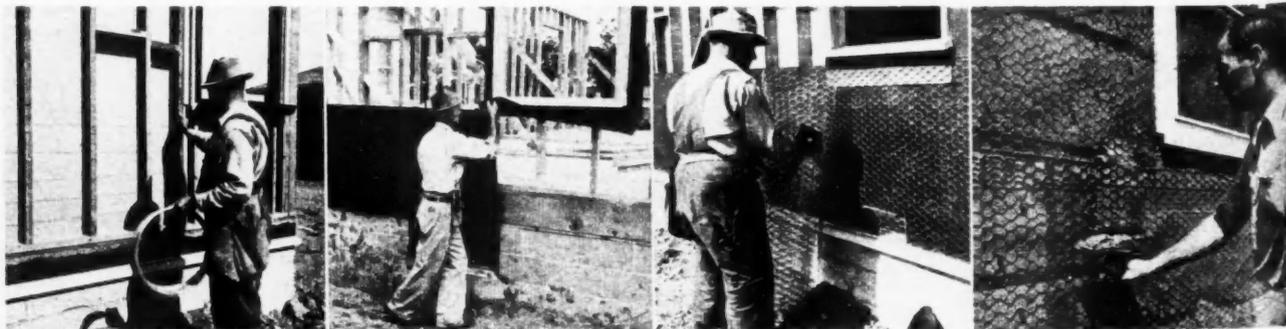
The stressed-skin principle is ap-

plied in the manufacture of wall panels for prefabricated frame houses. Reduction in the size of the vertical framing members has been made possible through increased structural strength that is obtained with the use of glued-on surface panels. Indications are that the demand for glues will increase in home construction. The new durable glues are ideal for the fastening of plywood and composition boards to studs and framing members.

With the introduction of large window openings in the exterior wall, of large open areas within the house where several rooms are combined in one, and of the use of movable partitions which destroy much of the rigidity of the house, the question of immobility in the exterior walls with relation to wind pressure becomes of prime importance. This rigidity can be obtained in frame walls through the use of sufficient diagonal bracing at the corners of the house or wherever a break occurs in a continuous horizontal surface. The use of large rigid sheathing materials in houses of this type is essential as far greater bracing resistance is obtained with this type than with the six or eight-inch wide boards.

With the advent of the basement-less house where a concrete slab is placed under the first floor area, the finished first floor line is usually placed from six to eight inches above grade line. Thus the wood members of the wall framing are placed dangerously close to the ground where they are subject to decay and termite attack. To guard against this condition it is well to adhere to the following practices:

1. Do not place wood in contact with soil.
2. Outside wood trim, water-tables, etc., should be eight inches or more above finished grade.
3. Provide dampproofing between wood and masonry where conditions may allow dampness to reach wood.
4. Avoid construction that permits condensation of moisture within the walls.



STUCCO applied to walls. Method uses wire stretched horizontally to form base for felt. Three coats applied to 1 1/2 inch mesh wire

SLOPE GRADE AWAY

6" MIN

BAS TWO m

5. In crawl sp 18 inch girders

6. Slo tion wa drainag

7. Pr of sheet masonry wood.

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8. Lu against danger

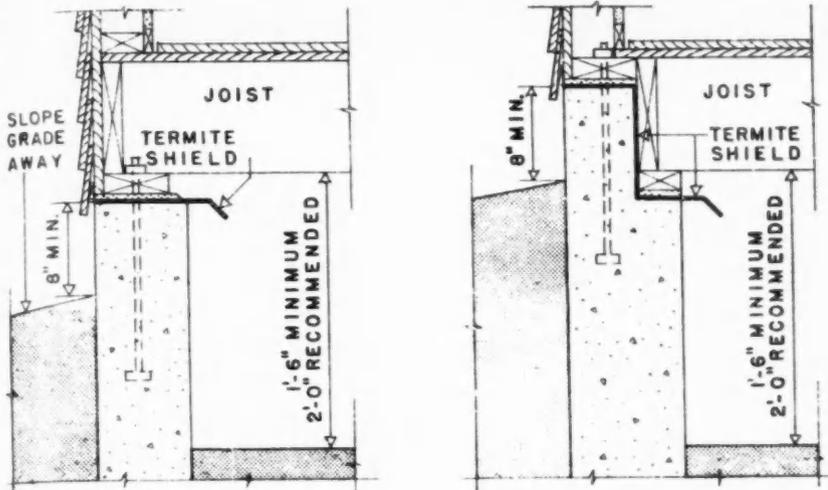
The s and le which unabate

ing su quality of con

promin stucco. 20 year cement

To ard l bridges wires the ou

WOOD ing w



BASEMENTLESS AREA UNDER FIRST FLOOR
 TWO methods for applying metal termite shield between concrete wall and framing

5. In basementless houses where a crawl space is provided, allow at least 18 inches between bottom edge of girders and joists and ground below.

6. Slope ground away from foundation walls to secure proper surface drainage.

7. Provide barriers in the form of sheet metal shields placed through masonry or between masonry and wood. To be effective the shield should be properly made and installed.

8. Lumber treated at the mill against decay should be used where danger of soil contact may be made.

The search for lower building costs and less expensive materials with which to produce houses continues unabated. Today builders are studying suggestions for adding to the quality while reducing costs. A type of construction that is regaining prominence under these conditions is stucco. Not the magnasite stucco of 20 years ago, but reinforced Portland cement stucco, properly applied.

To build this type of wall standard 16-inch on center studs are bridged. Then 18 gauge galvanized wires are stretched horizontally on the outside face of studs. These are

spaced approximately four inches apart. Over the wires a 15 pound felt is applied. Next a one-and-one-half inch 17-gauge mesh is put in position on the face of the paper. Furring nails hold the mesh 1/4-inch away from the paper permitting a good bond to be obtained. Three coats of stucco are then applied giving the exterior coat a thickness of about one inch. The result is an attractive exterior wall surface of reasonable cost. This is obtained without the use of exterior sheathing.

The advantages of gypsum or insulating board sheathing in the construction of houses are many. Large sheets make these materials economical to install. The large panels work to great advantage in the construction of the one-story ranch house where they impart added rigidity to the exterior walls where large openings are encountered that would normally weaken the structure.

Treated plywood for use as exterior sheathing is excellent. It offers the maximum protection from the elements because of its density, and makes for a rigid frame wall due to its tensile strength.



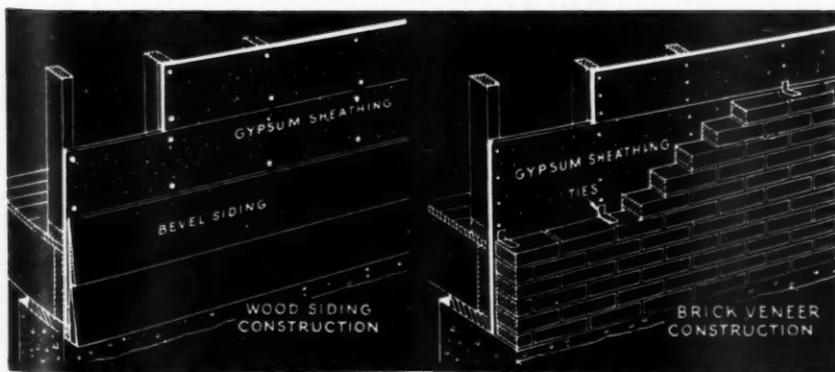
PORITION of cinder-block wall under construction. For additional rigidity reinforcing rods are placed in blocks. Voids in blocks are used for extending conduit



CAVITY brick wall in process of being built. Two rows of brick are separated by a wide air space. Metal anchors placed in joint at every sixth course bond the two walls. Care must be used in building



TYPICAL brick veneer wall under construction. This type wall is preferred by many builders because of its flexibility and the variation in design that is offered



WOOD siding applied over gypsum sheathing with nails driven through into studs

BRICK veneer applied over gypsum sheathing as it is to other sheathing

The Swinging Pendulum

by R. E. Saberson

HOUSING hysteria is fast disappearing. So is the housing shortage. A calmer and far more sensible approach is taking form—at least on the part of the public. Only the dyed-in-the-wool bureaucrats remain to be convinced that the greatest political football of all time actually is not what it used to be.

Of course, there are those who insist that so far as they are concerned it is as difficult as ever to get a place to live. This no doubt is true. Furthermore, it may continue to be true for some time to come—individual tastes being what they are. Conceivably it is difficult to imagine a situation in which the housing needs of every family have finally been satisfied and the giant housing industry standing by with little if anything to do. That would indeed make tough going for everybody.

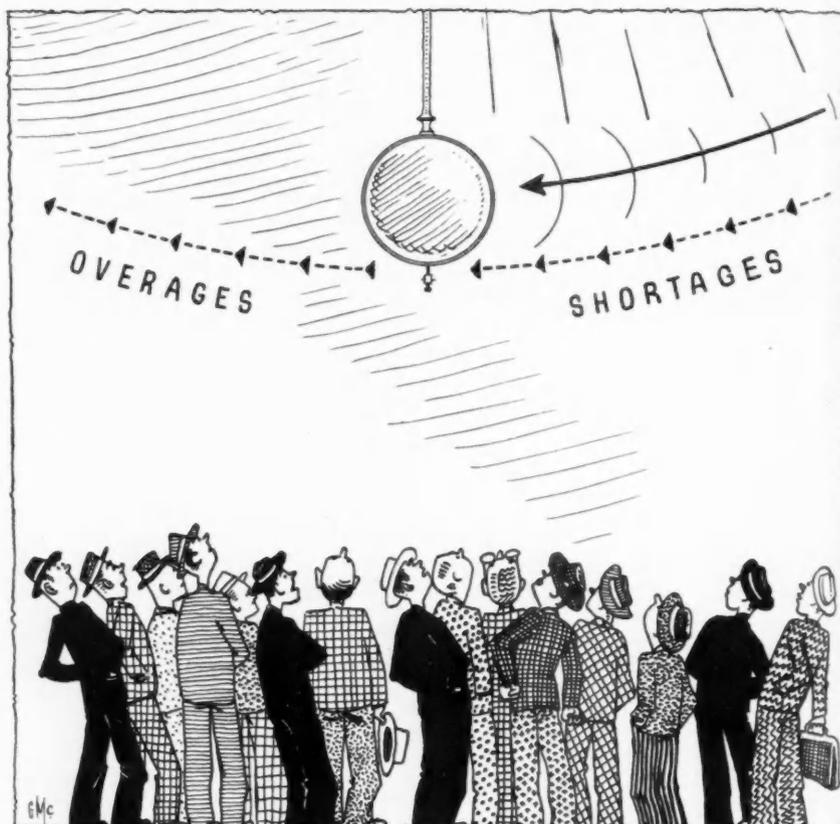
Shortages Produce Overages

However disastrous over-production of housing might prove to be to our national economy it is something that can easily occur as witness what has already happened in industry after industry. Housing alone is no exception to the rule.

It has been our contention all along that great shortages eventually turn into great overages with exceedingly serious results—not only to producers, but to consumers. When production facilities reach the point where they exceed demand someone is certain to take a beating. Unfortunately, this financial chastisement extends all the way down the line until it reaches the ultimate consumer. No one escapes.

It may seem more or less untimely to point to the dangers of over-production as applied to houses, but the subject is fresh in our mind following a perusal of two Sunday newspapers from different sections of the country . . . Newark, N.J., and Minneapolis, Minn. The home story, as revealed in the advertising sections of each publication, is pretty much the same and as different from a year ago as night is from day. Each week finds house buyers more firmly seated in their respective saddles.

Came the first week in March in Minneapolis, for example. With the arrival of certain unmistakable signs of spring, the classified columns headed "Houses For Sale" began to lengthen to such an extent, as compared with a year ago, that we finally



took time out to make an accurate count of the offerings.

The "For Sale" total on the first Sunday was 1256 individual homes.

"Sure thing," said a friend with considerable reassurance. "The home buying season is on. This is the time of the year when houses sell the most readily in these parts. Watch them disappear."

Three weeks later we made another check. By this time the number of single houses had increased to 1459. In addition, there were 602 residential units involved in apartment buildings and 240 in duplexes that were offered for sale.

Now it may be that there is nothing particularly heartening in the fact that 2300 families (10,500 people) are being offered homes in a single edition of a single newspaper. Whenever we mention the number someone promptly informs us that prices still are too high, or that the houses are undesirable, or that they are located in the wrong places. Maybe so! But this much we do know. A year ago it was a horse of a different color.

Perhaps there is no better evidence

to indicate the extent of the change that is taking place than the account of the rental situation which appeared in the same publication. Last August in the metropolitan area of the Twin Cities there were 6500 "Wanted To Rent" advertisements compared to 5300 "For Rent" advertisements. By the following February the monthly totals had undergone a spectacular reversal when the "Wanted To Rent" ads had dropped to 3,250 and the number of "For Rent" offers had increased to 5500.

While it still may be exceedingly difficult for the average family to fit available living quarters to its individual needs and tastes, as we said before, once again it must be admitted that it is much easier to do so than it was a few months ago—if figures mean anything at all.

While this highly encouraging shift was taking place, FHA reported that more loan applications were received in its Minneapolis office during the first three weeks of March, 1949, than in any other three-week period in its history—a total of 1200 residential units, 750 of which were rentals.

Northern New Jersey seems to differ little from Minnesota, according to a recent twenty-page section in the *Newark Sunday News* devoted to home building, construction materials, mortgage financing real estate.

Headlines Tell Story

Despite the fact that the classified ads are not included in the supplement, 149 individual homes were featured in write-ups or display advertisements that leave little unsaid to convince home prospects that today's housing is not without its virtues.

Putting aside the claims of the many companies which use generous advertising space to describe their offerings, we encountered these typical headlines in the articles which describe what is going on:

"Builders Busy in Buyers Mart," "Realtors See Sales Activity Continuing," "Lumber and Materials Supplies Appear Much Freer," "Financing and Title Insurance Reach All Time High," "Money On Hand in Good Supply," "Common Lumber Has Caught Up With Demand," "Prices Leveling Off," "Ample Mortgage Money Available in New Jersey," "East Orange Construction May Hit New High in '49," "Roselle's Biggest Year in Building," "Homes Opening Up Wooded Districts," "Construction Active in Suburban Areas," "Adding Homes in Clusters in Newark's Environs."

Headlines tell the story not only in northern New Jersey but in the New York City papers which describe in articles and advertisements the prodigious home building activity taking place on Long Island. And it's the same wherever you go, whether it is Los Angeles, Cleveland, Detroit, Chicago, Milwaukee, Houston, or any other metropolitan area, even though the starts in all cases may not be as numerous as recent all-time highs.

Economy Homes Mushrooming

It may be said without fear of contradiction that homes will be built in sufficient quantities to satisfy such demand that exists within all price classifications. In Minneapolis the president of the Home Builders Association was credited with the statement that about 300 houses (most of them above the \$10,000 figure) were standing idle at the time the nearly 1500 individual houses were being advertised.

Now, 300 unsold new homes might well prove to be a retarding factor in the minds of many contractors. No doubt such was the case in this particular price classification. However, it merely meant that many builders dropped to the next price level where they will stay until that field has been

exhausted. Some day there will be too many of the \$8,500 to \$10,000 houses. Then it will be necessary to seek new worlds to conquer in still lower-priced classifications.

Now, all this does not mean that no one has been building lower-priced houses. That particular field was by no means neglected even before we began to concentrate attention on an "economy house".

Western Building, Portland, Ore. points with justifiable pride to the fact that "during the first 11 months of 1948 the light construction industry of the West built 24.7 per cent of all the city dwelling units in the country, 23.6 per cent of all the single-family houses, 24.2 per cent of all the duplexes, and 29 per cent of all the multi-family units in the United States during that period." A commendable record to be sure, especially when it is known that "the average cost of all the dwelling units built from January through November, 1948, was \$7,138."

Nor is the West the only section of the country where economy homes are available. The same thing is true in many metropolitan areas. Assuredly, it is even truer in smaller cities and towns where land and labor costs are lower.

An attractive 4-page folder from Griffin's, Hudson Falls, N.Y. describes and illustrates the much-publicized Industry-Engineered House which this progressive company makes available on the following attractive terms: "For ex-GI's. No down payment, \$65 per month, including lot. For any family, \$900 down, \$60 per month, including lot. Payment includes principal, interest, insurance and taxes."

These are not exceptional cases. They merely happen to be examples of housing achievements that are before us as we pen these lines. You encounter them in almost every publication you pick up. They are the accounts of what a fighting industry has done and can do to meet a temporary emergency. Now it is settling down to the longer, and even harder, competitive pull.

It is highly significant that we, as a nation, now have more and better housing, and that a far smaller proportion of the population is living in substandard housing than ever before. This has been brought about as a result of rapid production of new homes and great improvement of old homes. We quote from a report of the Construction Industry Information Committee:

"In every respect—except one—we are better off than we were before the war in that last peace-time year, 1940.

We still do not have as many vacancies in proportion to the total number of dwellings as we had then, which means *we have less opportunity to shop around in buying or renting a home.* But we are catching up fast."

Record a Challenge

This imposing record will not be good news to politicians. As a matter of fact, it probably will be hotly denied by the host of do-gooders now on the public payroll. At the time from 1,200 to 1,500 houses were being advertised for sale in the Minneapolis papers, the mayor of the city "learned during a trip to Washington that Minneapolis faces one of the worst housing shortages in the nation."

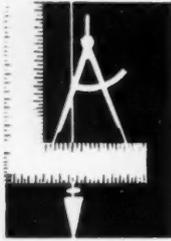
A tragic fire had occurred in a city-operated quonset hut project. Three little tots had lost their lives. "It's no secret that the quonsets do not comply with the city building code," the mayor is quoted as saying in the *Minneapolis Tribune*. "This was brought out at public hearings two years ago. But we had to do something to keep all these families off the street. *We took what the Federal Government would give us.*"

What the Federal Government gave Minneapolis and what the city built with it added up to a housing project where "young people live like moles" according to the mayor's statement.

It is not our purpose to place any personal blame upon the shoulders of politically-minded bureaucrats, but merely to point out that such individuals are the last people in the world who are fitted by experience or anything else to handle anything as complex as housing projects, be they great or small. Only a casual reading of the Hoover report is necessary to convince anyone that it is high time for Uncle Sam's overburdened, red-tape-ridden, overlapping agencies to undertake less and less instead of more and more.

As the housing shortage wanes and the building industry proceeds to build such homes as are needed in various price classifications, the Government has not been able to get ready to begin to step in and "do something about it" as its hopeful public housers and energetic expeditors promised.

It would be far more encouraging to the overburdened taxpayers of the land if Uncle Sam would first put his own house in order. Unless and until he can do that we are still betting on the industry that rolled up its sleeves and built the homes that broke the back of the emergency. Had it not been for its ability to perform under the exceedingly difficult situation created by acute shortages of materials and labor we would still be up to our necks in housing troubles.



TECHNICAL GUIDE for Builders and Craftsmen

Insulation with Fiber-Partitioned Aluminum Sheets

INSULATION against heat is being very satisfactorily accomplished through use of a commercial product called Infra Accordion Insulation, a multiple sheet aluminum with a fiber separating partition.

The product, which has recently been strengthened in its construction, owes much of its effectiveness to a "compartmentation" which is maintained in the fiber partition after application to walls. This provides an additional reflective air space, increasing thermal values for resistance to the flow of heat rays. It also creates an additional air space, which is a non-conductor of heat.

It is a natural law in heat transfer that all materials, including all insulations, transfer or resist heat flow in the same way. The same laws of nature apply to all physical objects—aluminum, paper, cotton, wood, rock, glass, brick, et cetera. The only differences are in: (1) the de-

grees of conductivity; (2) the percentages of radiant absorption, and (3) the amount of convection.

The flow of heat by radiation and conduction, regardless of direction, is invariably from the hot surface to the cold surface; only in the case of convection and wind currents is it ever otherwise. The function of all insulation, fibrous or reflective, is to prevent heat from escaping or entering a structure.

Conduction, which is heat flow through matter, accounts for about seven per cent of all heat flow through wall spaces. It results from actual physical contact of one part of the same body with another part, or the contact of two separate bodies.

Because of its very low density the percentage of heat transferred through air by conduction is relatively small. The more dense a substance, the better conductor it is. Minerals, being very dense, are conductors of heat, but, by reducing their density through mixing air into the mass, their conduction is also reduced.

Radiation is the process by which rays are transferred through space. They emanate from the surface of every object whose temperature is above absolute zero—the sun, a stove, a radiator, a human being. Infra-red heat rays travel away from every point of the surface in all directions.

When these rays strike the surface of an object they are generally absorbed, and only then is heat engendered in the object. This heat spreads throughout the mass by conduction. The greatest amount of heat is engendered by the infra-red heat rays with their long wave-lengths.

In order to retard heat flow by conduction, walls and roofs are built with air spaces. Conduction through this air space which has slight but still some density, combines with convection currents to account for between 20 and 35 per cent of the heat which passes through the air space. All authorities are in agreement that 65 to 80 per cent of the heat that passes from the warm wall to the colder wall, summer and winter, is radiant heat.

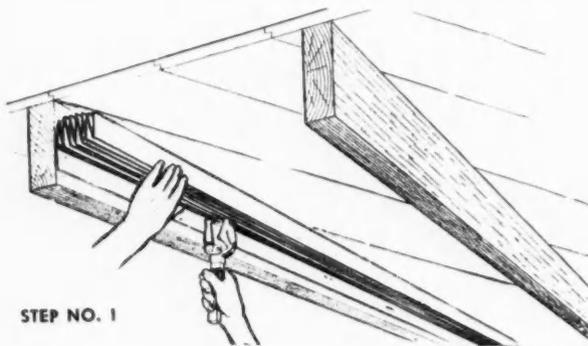
In actual practice, nearly all materials used in building—brick, stone, wood, paper—are, regardless of their color to visible light, over 90 per cent black for infra-red radiation. Air spaces within building walls are usually bounded by materials which are good radiation absorbers.

The aluminum surfaces of the Infra accordion type of insulation transmit or emit by radiation only a negligible percentage of any heat actually absorbed by any or all of the three methods—three per cent of the 90 per cent absorbed. These surfaces have the property of turning back or rejecting 97 per cent of the heat rays which strike them. This is distinct from heat flow by conduction and by convection, which processes still go on.

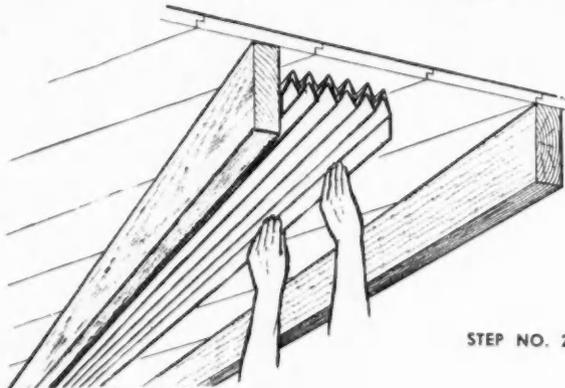
A good example of convection, responsible for 15 to 28 per cent of all heat transfer through wall spaces, is the rising of air heated and expanded by contact with the surface of a warm radiator. Since the two aluminum sheets of the Infra insulation are non-porous and are impermeable to all gases, including heated air, they prevent the flow of heat by convection.

(Continued to page 126)

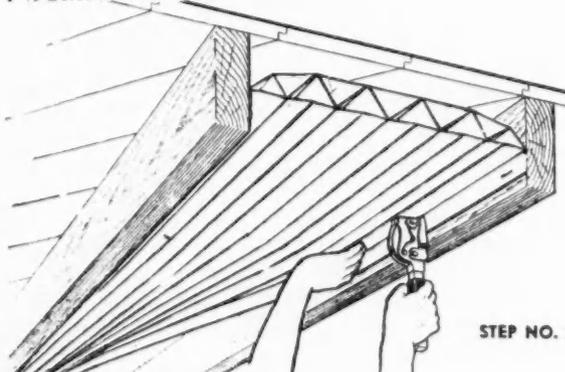
(Data and drawings furnished by Infra Insulation, Inc., 10 Murray St., New York, N.Y.)



STEP NO. 1



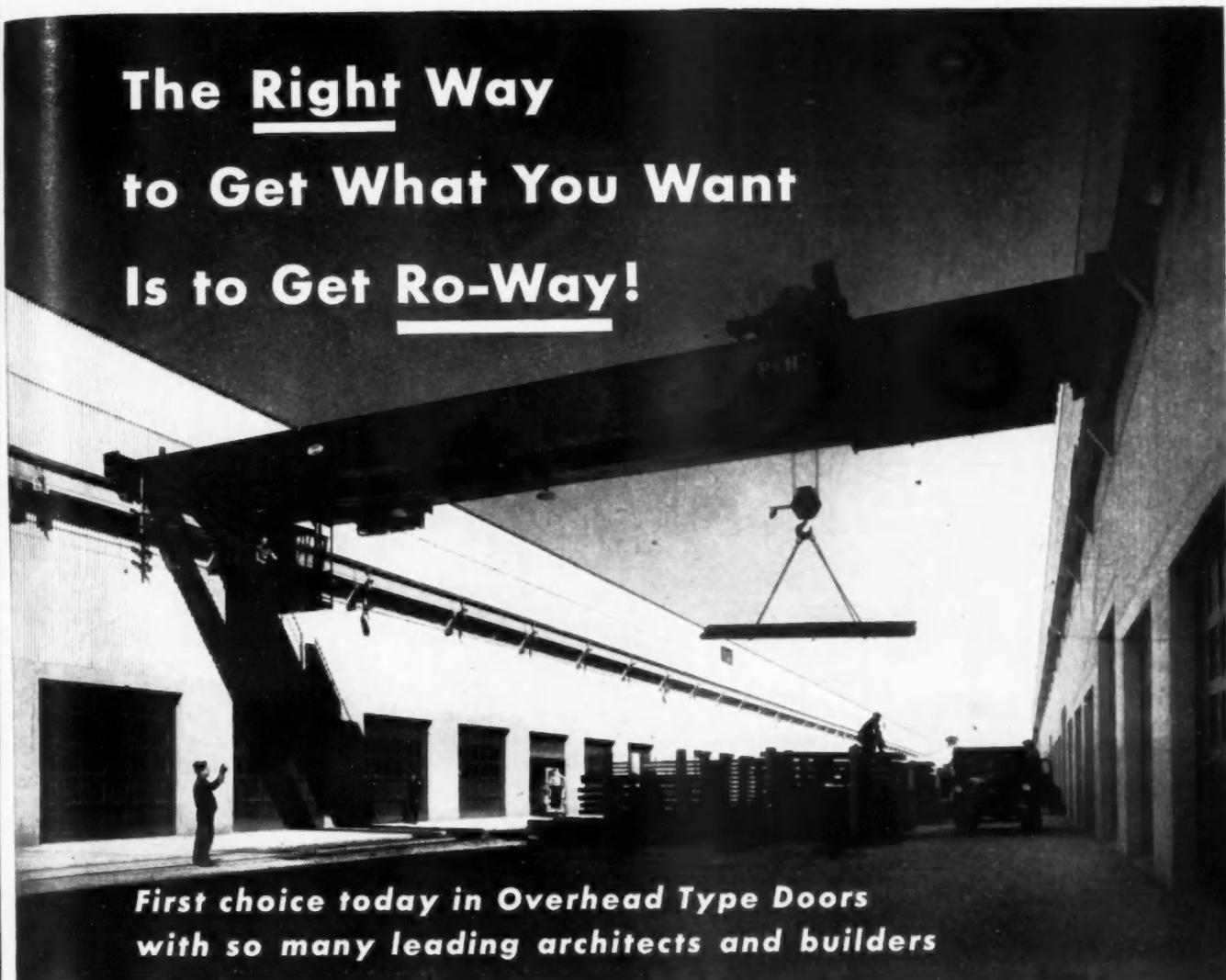
STEP NO. 2



STEP NO. 3

THREE steps in Infra application

The Right Way to Get What You Want Is to Get Ro-Way!



**First choice today in Overhead Type Doors
with so many leading architects and builders**

- You get design that looks *right*
- You get engineering that has proved *right*
- You get construction that is guaranteed *right*
- You get exclusive features that work *right*
- You get operation and appearance that stay *right*
- You get sales service that treats you *right*
- You get installations you know are *right*

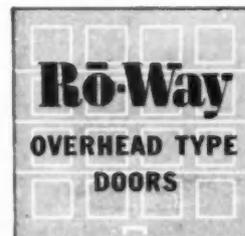
Whatever you want in Overhead Type Doors, the *right* way to get it is to get Ro-Way—for all commercial, industrial and residential applications.

ROWE MANUFACTURING COMPANY, 751 Holton Street, Galesburg, Illinois



Standard sizes available for prompt shipment. Good delivery on special sizes for commercial and industrial use.

There's a RoWay for every Doorway!



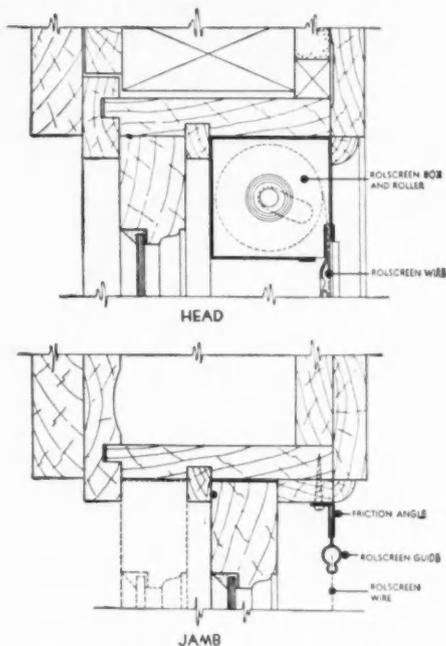
TECHNICAL GUIDE for Builders and Craftsmen

(Continued from page 126)

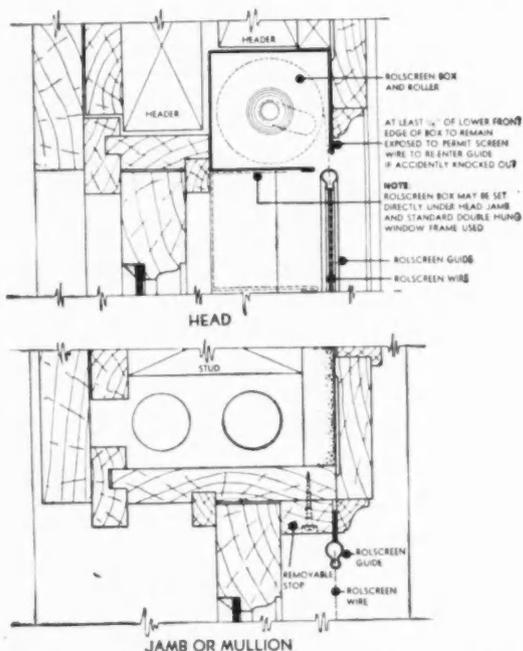
Installation Methods For Roll-Type Screens

THROUGH improvement in installation methods, it is now possible to adapt roll-type screens for use with most double-hung or casement windows of either wood or steel.

For wood or steel casements, the adjoining wood window stop can serve as a guide holder for either split stop or friction angle installation. Wood cover mould is applied to the face of metal box for finish directly under wood casing.



FRICTION angle installation of screen to double-hung wood sash



SPLIT-stop application of screen to double-hung wood sash

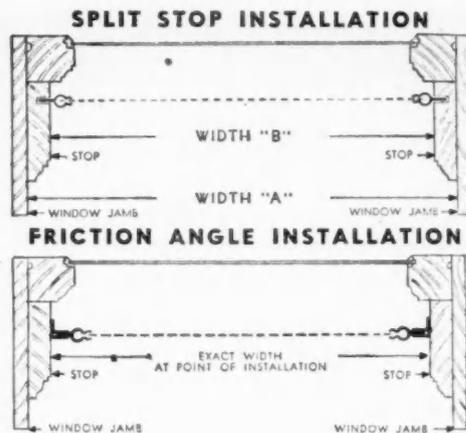


ILLUSTRATION of method of measuring windows for installation of screens: Top, split-stop application and below, friction angle

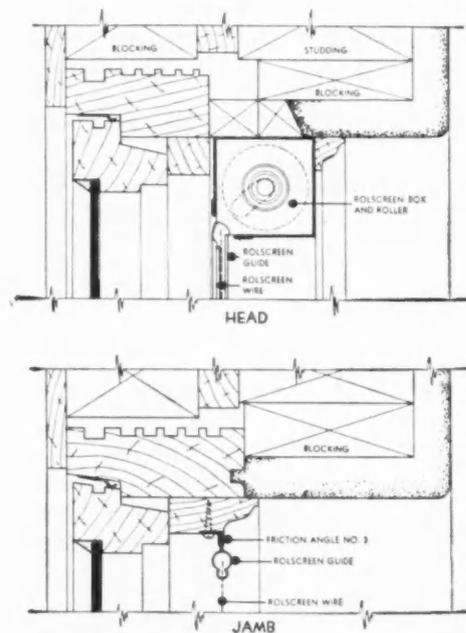
An exception is shown in Diagram 2 where metal box for roll screen is inserted into head with bottom face of box flush with base of top frame. Builders should be careful to note that a change in position of supporting headers is essential for the recessed method.

Window stops for split-stop installation may be cut in two or prepared with a kerf saw to receive the screen guide. In the event that the friction angle installation is preferred, then angle can be secured to face of stop. Basic difference between these two installation methods is that with the recessed method, a lesser amount of metal frame is exposed.

Two examples are given of the installation of this screen frame with the Andersen wood casement window. The method of applying the screen to this type of window is similar to the others, with some of the differences shown in the diagrams.

Advantages of the use of roll-type screens are that they require no seasonal removal or reinstallation, no storing, no painting and, in normal usage, seldom need repair. Their mobility provides better light and facilitates the washing of windows.

(Data and drawings furnished by the Rolscreen Co., Pella, Ia.)



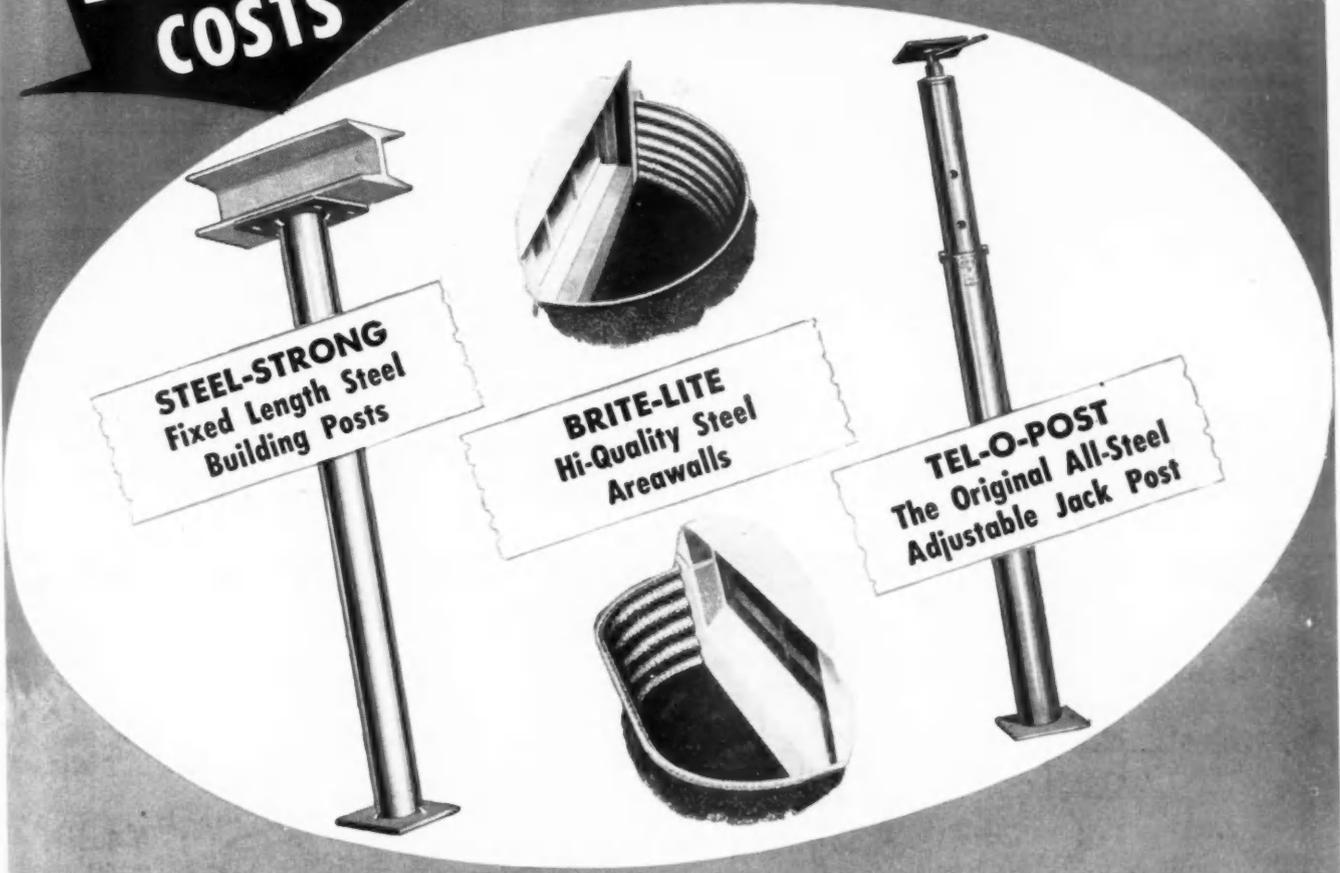
APPLICATION of screens to Andersen wood casements

(Continued to page 130)

**THREE
WAYS
TO CUT
BUILDING
COSTS**

BRAINARD

**THE NAME THAT MEANS
HIGHER QUALITY
AT LOWER COSTS**



STEEL-STRONG
Fixed Length Steel
Building Posts

BRITE-LITE
Hi-Quality Steel
Areawalls

TEL-O-POST
The Original All-Steel
Adjustable Jack Post

**A REAL
"BEST for LESS"
LINE**

HIGHER QUALITY — Because we make our own steel we can be certain that only the highest quality goes into our products. Higher quality because all Brainard Products are rigidly tested and inspected before they are marketed. **LOWER COSTS** — Because we produce our own steel we eliminate extra costs. This saving is passed on to you. (Even greater savings result when purchases are made in volume.) And Brainard Products are designed for easy installation which means a saving in time — further lowering costs. Write today for literature, price lists. State whether distributor, dealer, jobber or builder.



Brainard Steel Co.
BUILDING PRODUCTS DIVISION

Dept. 659

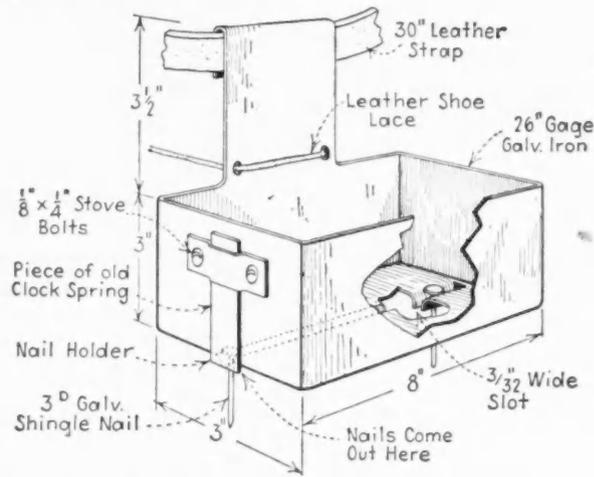
WARREN, OHIO

BRAINARD STEEL CO., WARREN, O.
I would like to receive data
 on TEL-O-POST BRITE LITE STEEL-STRONG
Name _____
Address _____
City _____ Zone _____ State _____
 Distributor Dealer Jobber Builder

TECHNICAL GUIDE for Builders and Craftsmen

(Continued from page 128)

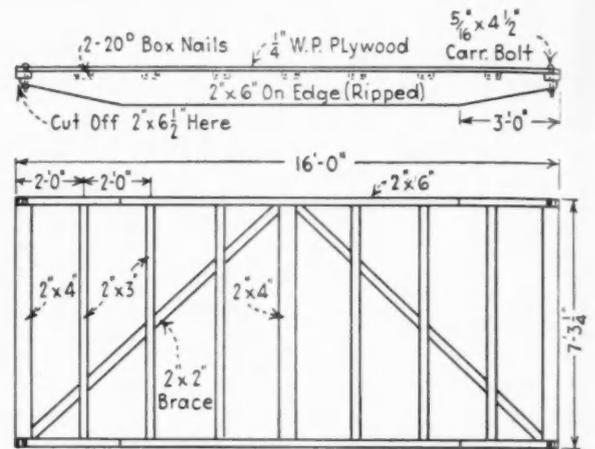
(The following suggestions are submitted by J. G. Caldwell, San Mateo, Cal.)



How To Make a Shingle Nail Stripper

THIS simply constructed nail stripper is very handy for persons who object to holding nails in their mouths. It is a metal box 3x3x8 inches with a slot in the base through which the nails slide. Nails can be removed two at a time, and their points are always down.

How To Make An Overhead Door

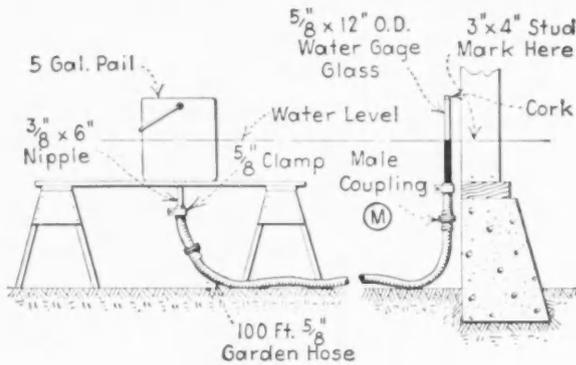


SINCE overhead door hardware sets are sold in various sizes according to the weight of the door, savings result when doors are kept as light as possible. This double overhead door can be built at a weight of from 220 to 240 pounds, depending on the type of lumber used.

This door may be installed without use of tapes or truss rods, and as a result, time is saved in installing it. The 2x6 on edge top and bottom pieces make construction of the door easy for the carpenter.

Pieces are glued with waterproof glue, and nailed together. The plywood is also glued and nailed to the framework.

HOW TO DO IT · HOW TO DO IT



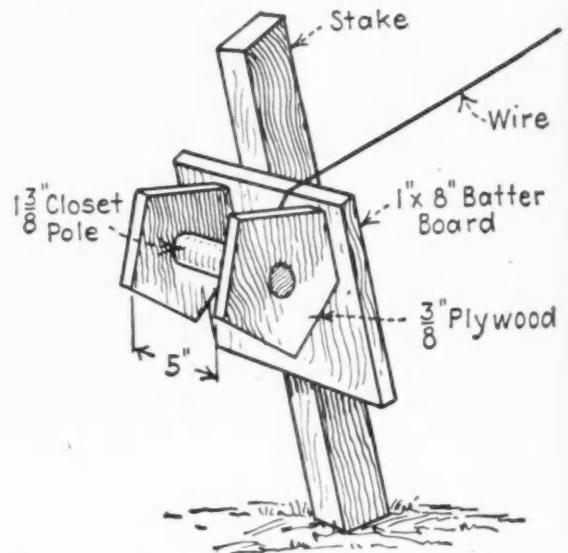
How To Make a Water-Level Gauge

TO MAKE this level, which may be used by one man, solder a 3/8x6-inch nipple to a five-gallon pail. To this, clamp a short length of 5/8-inch hose with a female connection. Clamp a 12-inch length of 1/2-inch gauge glass to 12 inches of hose with male coupling.

To use the level, set pail on horses and attach garden hose. Unscrew hose at "M" and screw to any hose bibb. Then fill pail. Fasten glass at "M" and allow some water to run out of hose to clear air bubbles; then cork glass. After removing gauge to corner of building, uncork glass at that location. Mark water level on corner stud. Repeat the operation.

In constructing the apparatus, particular care should be taken that there are no leaks nor obstructions to the passage of water.

How To Make a Wire Puller



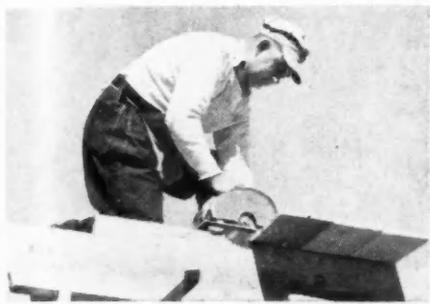
IN STAKING sites of building foundations of more than 100 feet, wire is preferred to twine because it may be more tightly stretched and will sway less in the wind. Here is a simple wire-tightening device; Inscribe a pentagon within a 5-inch circle drawn on a piece of paper. Use pattern of pentagon to cut two pieces of plywood, and nail plywood to a piece of 1 3/8 inch closet pole. After wire is made taut, pentagon is placed against batter board. Stakes supporting batter board are then driven into ground.

(Continued to page 132)

New

AMERICAN 8 1/2" SAW

has the Guts for All-Around Cuts



American now offers the ideal all-around Saw for builders! It feels right . . . cuts right in any position . . . because it's balanced right! Big power G. E. motor develops 2 1/8 H.P. . . . zips right through wood, stone, tile, sheet metal, composition. Big capacity 8 1/2" blade will cut a 2 1/8" plank at 45°, or 3" straight cut. Blade speed 5300 R.P.M. New stability and strength provided by wide base of hard aluminum alloy . . . calibrated for ripping. Holds accurate depth of cut and angle adjustment. Complete with metal carrying case. Precision-built . . . sturdy for long life. Send coupon for details.

DEALERS: Write for attractive proposition on fast-selling new American Saw . . . also disc sanders, belt sanders.

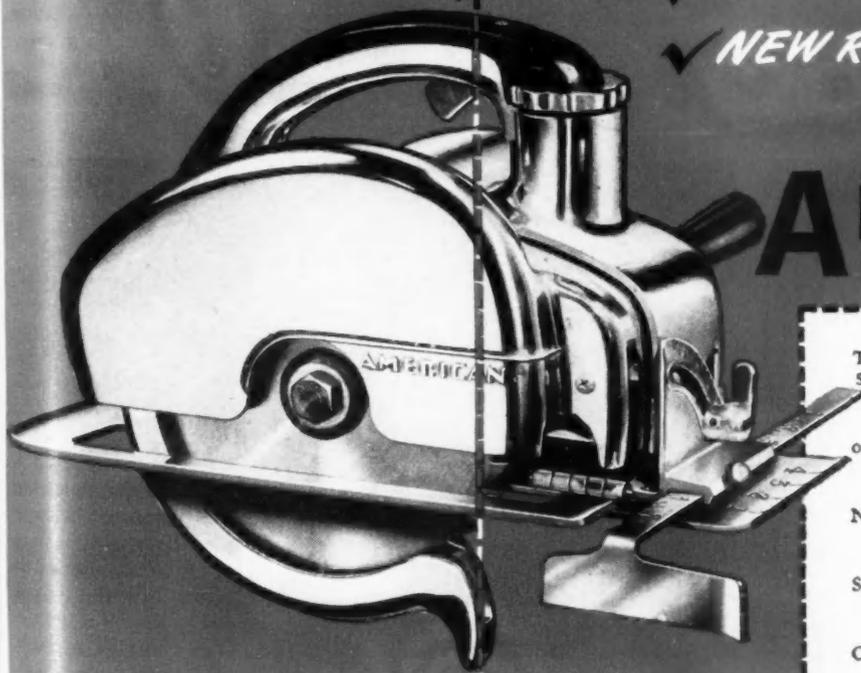
BALANCED HERE!

- ✓ BIG CAPACITY-8 1/2" BLADE
- ✓ BIG POWER MOTOR
- ✓ NEW STRENGTH & STABILITY
- ✓ CALIBRATED BASE
- ✓ NEW RIPPING GUIDE

SINCE 1903

AMERICAN

PORTABLE TOOLS



No Jolt — No Twist when starting
BALANCED TORQUE PRINCIPLE

The American Floor Surfacing Machine Co.
511 So. St. Clair St., Toledo 3, Ohio

Please send illustrated bulletin and price
on new American Power Saw. No obligation.

Name.....

Street.....

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



*** Convection Heating with**

TUTTLE & BAILEY
Standardized
COPPER CONVECTORS

Planning a comfortable home depends on a great many things . . . but high on every homeowner's "must" list is an adequate heating system. An important part of that system is the method of heat distribution.

Convection Heating — as provided by Tuttle & Bailey Convectors — means constant circulation of room air, even temperature from floor to ceiling, in every corner. T & B heating elements — constructed entirely of copper (fins, tubes, headers) — assure fast response to thermostatic control, quick transmission of heat, raising room temperatures in about one-fifth the time required by cast-iron.



The results? More efficient heat distribution . . . more economical operation . . . *real comfort!* It will pay you to keep these performance facts in mind when your customers ask advice. Specify and install *CH . . . with Tuttle & Bailey Standardized Copper Convectors.

ASK YOUR JOBBER

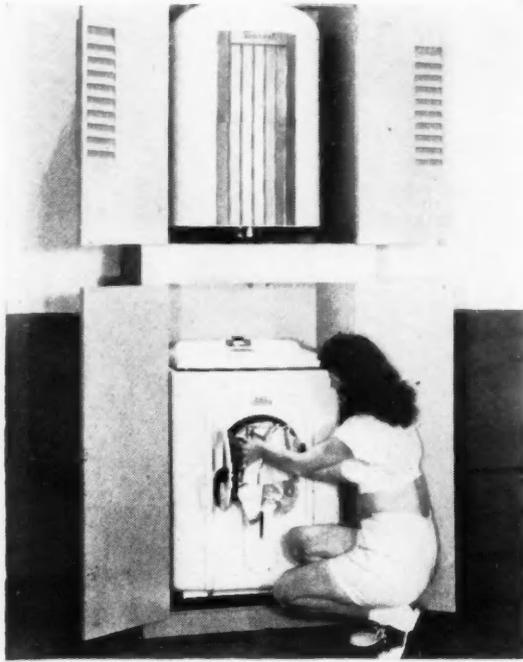
TUTTLE & BAILEY inc

NEW BRITAIN, CONNECTICUT

For detailed facts that will aid specifying and installing Tuttle & Bailey Convectors, write today for your copy of Catalog No. C8R.

**TECHNICAL GUIDE
for Builders and Craftsmen**

(Continued from page 132)



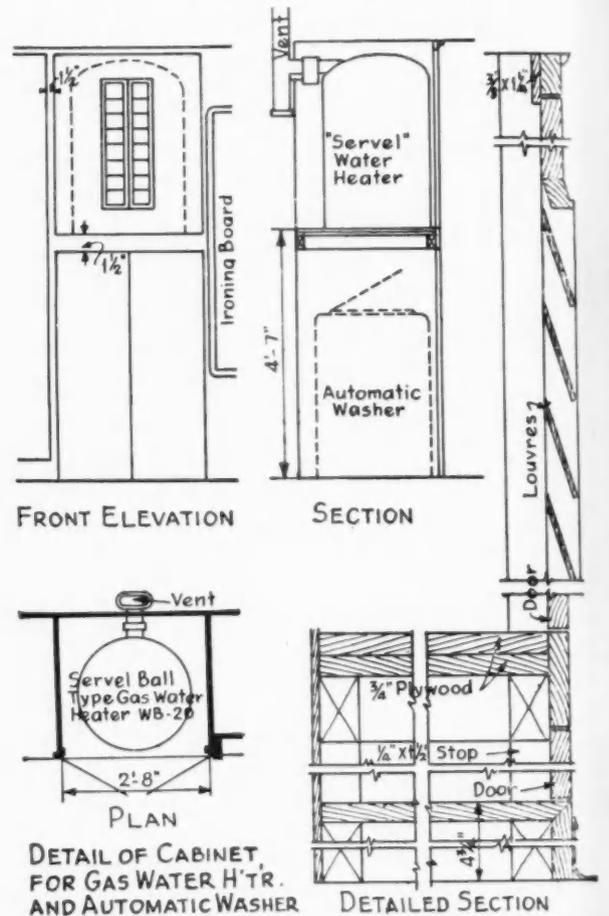
Space-Saving Utility Closet

THIS utility cabinet which houses a water heater and an automatic washer can be a valuable addition to any home where the saving of space is important.

Use of the cabinet keeps the appliances out of sight when they are not in use. Heater is ventilated by means of louvers in cabinet doors. The cabinet while shown as a separate unit, can be made an integral part of kitchen fixtures.

Another advantage of the cabinet arrangement is the situation of the water heater controls at eye level, which makes the adjustment of the thermostat easier.

Location of the water heater in the kitchen instead of the basement or utility room can result in appreciable fuel savings by avoiding temperature loss of water in the pipes. This is particularly true if the utility cabinet is installed in the kitchen wall adjacent to the bathroom.



HOW TO DO IT • HOW TO DO IT

Entrance Porch—Traditional or Contemporary

By R. J. Alexander

THE ENTRANCE porch detailed on the opposite page, embodies some of the gracefulness of traditional design in the denticulated and moulded members of the cornice. It also introduces the simplicity and sturdiness of contemporary design in the square, clean-cut members of cornice, posts, and lattice. The application of the two principles of design to an entrance detail indicates that a similar adoption of contrasting members to other details of the house may be used with equal success.

Further simplification is carried out in the door and sidelight frame. The conventional brick mould is substituted for a flat member that is also repeated on the face of door mullion. The restraint in the use of mouldings is characteristic of the entire entrance feature.

Good hardware is essential to a well-designed entrance. A note of simplicity is evidenced in the effective arrangement of the three principal units. The flat brick mould provides a plain surface for the door bell installation.

The entrance is designed for use with a two-story house; with a slight modification of the cornice it could be adapted for use on a one-story or a story-and-a-half house. The floor of entrance is brick laid on a concrete slab. The brick is arranged in an appropriate pattern with a border of headers and a field laid up in herringbone pattern. Hard common or reclaimed brick pavers would be in keeping with the design as well as the use of colorful flagstone.

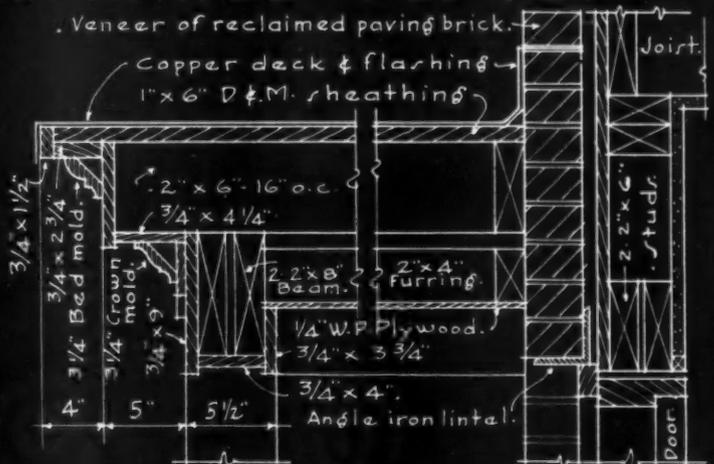
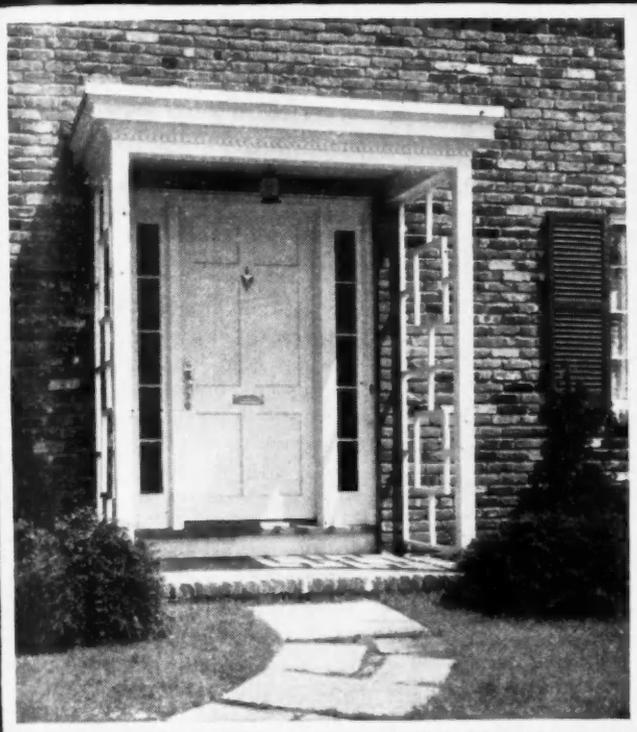
The stoop footings are of concrete, extending below frost line. The footings and the porch posts are anchored to the main foundation wall. Deck of entrance porch is covered with long-lasting copper sheets. Roof is pitched back to the wall line with drips or short rainspouts at either side to expel the rainwater on to the ground close to the wall. Good workmanship is exhibited in every portion of the entrance. It is of the type that will be found most generally in top quality homes.



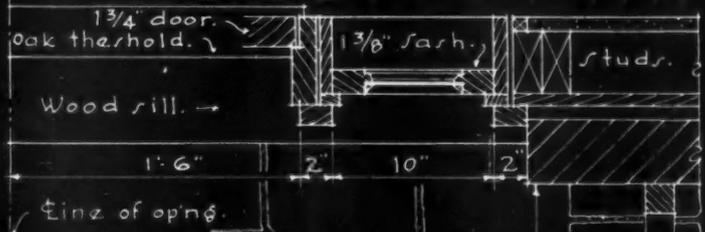
How-to-Do-It Pointers continued to Page 150

AMERICAN BUILDER'S BETTER DETAIL PLATE

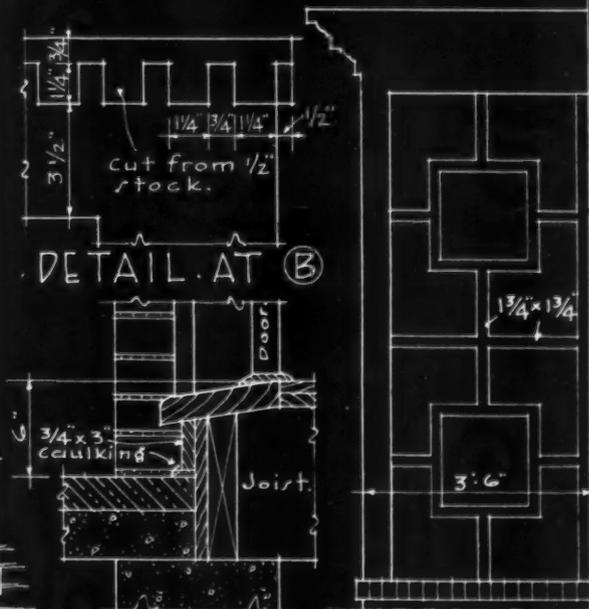
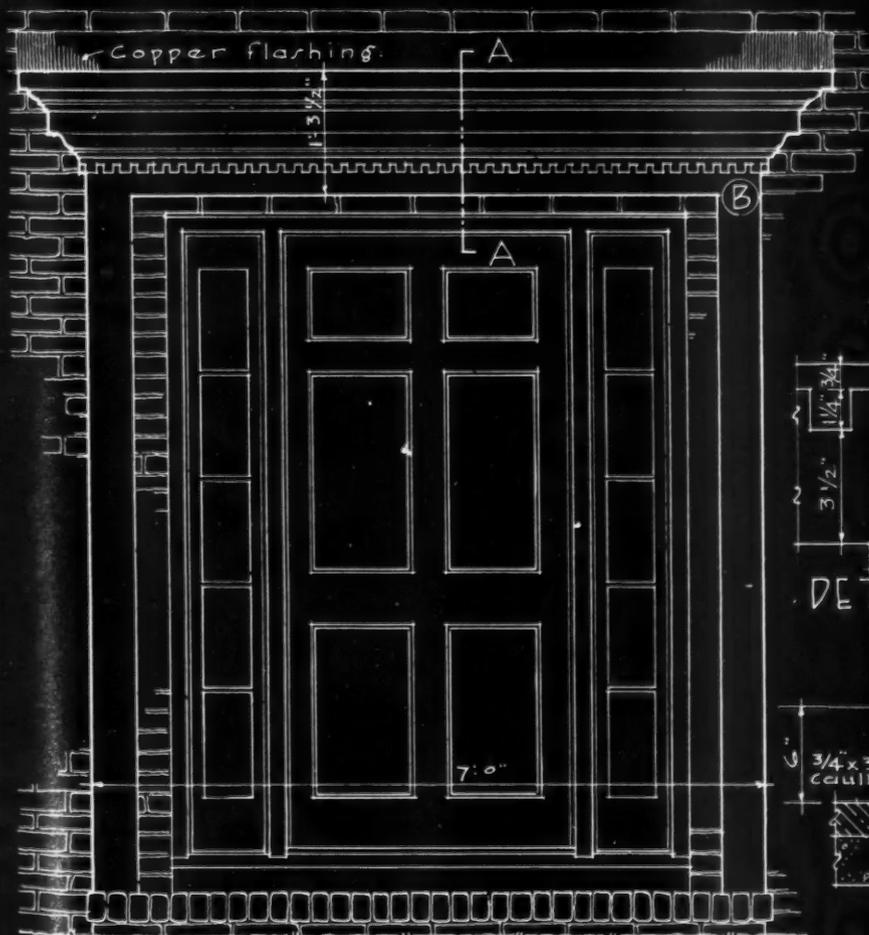
NO D-54. POPULAR ENTRANCE DESIGN R. J. A. 1949



SECTION A-A



HALF PLAN



ELEVATION OF ENTRANCE THRU SILL ELEVATION

DEALER REVIEW



NEWS OF NRLDA AND STATE AND REGIONAL ASSOCIATIONS

Dealer Conventions Continue to Draw Record Attendance and High Interest

REPORTS from annual conventions of state and regional dealer groups continue to indicate a determination by lumbermen in all sections of the country to cope, through concerted action, with the outstanding problems facing the industry.

Active opposition to federal housing legislation remained a leading discussion topic in the business sessions. Advertising and merchandising methods in connection with the returning "buyers' market" received wide attention.

The conventions continued to follow a trend toward heavier attendance, increased interest in Association work. There were more exhibitors and a greater interest in this phase of activity.

More convention reports are given below:

Iowa

A total registration of 2,348, including 678 exhibitors, was recorded at the 16th annual convention of the Iowa Retail Lumbermen's Association March 16-18 at the Des Moines Coliseum.

W. W. Holman of Melbourne was elected president, succeeding Charles E. Goessling, Shenandoah. Roy C. Jansen, Auburn, was named vice president for Northern Iowa; and L. J. Deur, Missouri Valley, vice president for Southern Iowa. W. H. Badeaux of Minneapolis was re-elected secretary.

Trustees are: G. W. Dulany, Clinton; A. F. Umhoefer, Ashton; Jansen; Deur; Frank Finkbine, Atlantic; John Haire, Jr., Fort Dodge; Mel B. Griffin, Algona; C. J. Spahn, Dubuque; B. P. Jepson, Dysart; Harold Weitz, Des Moines; James Weir, Mt. Pleasant; and Robert Duffus, Leighton.

Members of the executive committee are Holman, Weitz, Jepson, Umhoefer and Badeaux.

Independent

The Independent Retail Lumber Dealers Association—comprised of dealers from Minnesota, Wisconsin,

Iowa, North Dakota and South Dakota—reported substantial progress during the past year at the group's 10th annual convention at the Radisson hotel, Minneapolis, March 14-16.

Leonard J. Lee, Moorehead, Minn., dealer and former treasurer, was elected president for 1949. He succeeds Charles Lampland, vice president of the Lampland Lumber Co., St. Paul. Other new officers are: Philip B. Steiner, Sauk Center, Minn., vice president;



Leonard J. Lee

John Broten, Minot, N.D., secretary; and Ashley Vye, Wheaton, Minn., treasurer.

Edwin W. Elmer, Minneapolis, was reappointed executive secretary of the association. Newly-elected directors are Vye, Henry Hess of Pine Island, Minn.; Clarence Scherer, Minneapolis; Leslie Olson, Mora, Minn., and G. A. Eddy of Swaledale, Iowa.

Eighty-five manufacturers and distributors were represented in the building supply exhibition on the mezzanine floor of the hotel. All spaces were occupied.

Carolina

The need for intensified sales effort at the retail level and for unified opposition to the proposed government housing program were emphasized at the annual meeting of the Carolina Lumber and Building Supply Association, which was

The President's Column

By C. B. SWEET
President, NRLDA



I never cease to be amazed at the things one hears in Washington. On a recent trip back there, I was riding from the airport to the hotel. Just to make conversation, I asked the taxi driver how the weather had been, which indicated of course, that I was accustomed to small talk. The driver replied, "... well, it has been fairly nice lately, but we did have several million snow flakes this morning." No doubt he has been hauling bureaucrats around town so long that the only way he had of expressing a snow flurry was to refer to it as "millions of flakes." It used to be that only Amos and Andy expressed themselves in millions and billions, but now everyone in Washington seems to have "millionitis."

As a case in point let's look at the proposed housing legislation. The administration is asking for 17 billion dollars to build 1,050,000 public housing units. Although I am baffled by millions and billions, I can understand that this would figure out to \$17,000 per unit, in addition to the cost of the land, architects' fees, or actual construction. This figure of \$17,000, which the Federal Government says it requires for each public housing unit, is more than twice the amount required by private industry for the average home it actually built last year. Of course, under the private enterprise system of building, there would not be several thousand additional government employees taking their cut and adding further to taxpayers' burdens.

(Continued to page 137)

held at the Asheville, N.C., municipal auditorium March 23-25.

Among the outstanding talks on the 26th convention program were "Survival of the Retail Lumberman," by Don A. Campbell, secretary of the Kentucky Retail Lumber Dealers Association; and "Dangers and Opportunities Ahead for the Material Dealer in 1949," by Arthur A. Hood, editor of American Lumberman and Building Products Merchandiser.

New officers named at the meeting are: C. G. DesChamps, Spartanburg, S. C., president; H. G. Sherrill, Statesville, N.C., first vice president; L. C. Fisher, Charleston, S.C., second vice president; W. F. Scarborough, Lumberton, N.C., third vice president; and W. V. Groome, treasurer; E. M. Garner, secretary-manager; and R. S. Hunt, field secretary, all of Charlotte, N.C.

Registration was approximately 500. An estimated 1,200 persons viewed the 60 displays in a one day public showing.

Intermountain

The sixth annual convention of the Intermountain Lumber Dealers Association was held March 10-12 at the Hotel Utah in Salt Lake City. Nearly 800 persons attended the three-day session and there were 50 exhibits.

M. L. Horsley, Soda Springs, Idaho, 1948 vice president, was installed as president; and Melbourne Romney, Salt Lake City, was re-elected secretary-treasurer. New officers are W. A. Spear, Provo, Utah, and M. E. Ray, Elko, Nev., vice presidents.

Members of the Association's board of directors are (one year term) J. R. Coffin, A. E. Montgomery, A. G. Peterson; (two year term) A. E. Anderson, Jr., H. B. Wheelwright, W. W. Weigle; (three year term) S. C. Robinson, E. D. McCaslin, Vance Petersen.

Florida

The two-day convention of the Florida Lumber and Millwork Association, Inc., was held at the Sorensen hotel, St. Petersburg, March 24-25. Registration at the 29th annual event was approximately 300.

Elected president for 1949 was Robert D. Morris of the Carolina Lumber Co., Jacksonville. Vice presidents are Francis J. Igou, Orlando; Forace F. Holland, Panama City; and R. C. Tylander, West Palm Beach. Marie M. Bennett of Orlando was re-elected secretary-treasurer.

District directors for the Florida group are: A. J. Hayward, Pensacola; A. E. Thornton, Tallahassee; E. B. Smith, Neptune Beach; Virgil D. Wilder, New Smyrna Beach; H. M. Horton, Fort Pierce; L. D. Mullins, Jr., Riviera Beach; F. A. Davenport, Miami; Edward Simpson, Fort Myers; R. W. Addison, Sarasota; J. E. Griffin, Lake Wells; B. F. Edwards, Tampa; Rayond C. Hauk, St. Petersburg; Leonard E. Todd, Ocala; and T. A. Brotherson, Mount Dora.

Harry L. Lawson, Miami, is director-at-large and national director. James F. Mack of Hollywood was named member of the NRLDA executive committee.

Louisiana

Ivy C. Jordan of the Superior Lumber Co., Monroe, was elected president of the Louisiana Building Material Dealers Association at the group's 29th convention, March 16-17, in the Jung hotel, New Orleans. He succeeds J. Frank Carroll of Alexandria.

Attendance at the annual event was 645 and there were 66 exhibitors—both record figures.

The other new officers are Roland Privat, Rayne, first vice president; Thomas A. Harrell, Winfield, second vice president; George E. Knoop, New Orleans, treasurer; R. Needham Ball, Baton Rouge, secretary-manager; and Katherine F. Ball, Baton Rouge, assistant secretary.

Six new directors were named for a three year term. They are: Harry Balcom, J. E. Deen, Gilbert E. Derouen, Weldon W. Poole, J. M. Myatt, and Roosevelt Daigle.

President's Column

(Continued from page 136)

The emergency arising out of the unprecedented storms of the past winter furnished an outstanding example of private enterprise at work. The Union Pacific Railroad Company battled repeated blizzards for seven consecutive weeks. They fought winds up to 80 miles per hour, and snow drifts of 30 feet in height. It was a day and night task for 14,000 (private) employees using 15 large railroad rotary plows, 33 spreader plows, 180 carry-alls and 124 flame throwers. It was all privately managed and paid for, in the true American way. Don't you suppose private industry could take care of the rumored housing shortage in the same way Union Pacific licked the elements?

TV Show Promotes 'Odd Job' Work in Home

A weekly television show, "Walt's Workshop," produced to offer interesting ideas and instruction in home handicraft, is being broadcast over Chicago NBC Station WMAQ by the Edward Hines Lumber Co., Chicago, as part of the firm's spring promotion campaign.



WALTER E. DURBAHN (left), industrial arts instructor at Highland Park, Ill. high school, collaborates with Philip Creden in the construction of a bird house. Durbahn is the "Walt" of the "Walt's Workshop" television show, and Creden is advertising and merchandising manager of Edward L. Hines Lumber Co., sponsor of the weekly program.

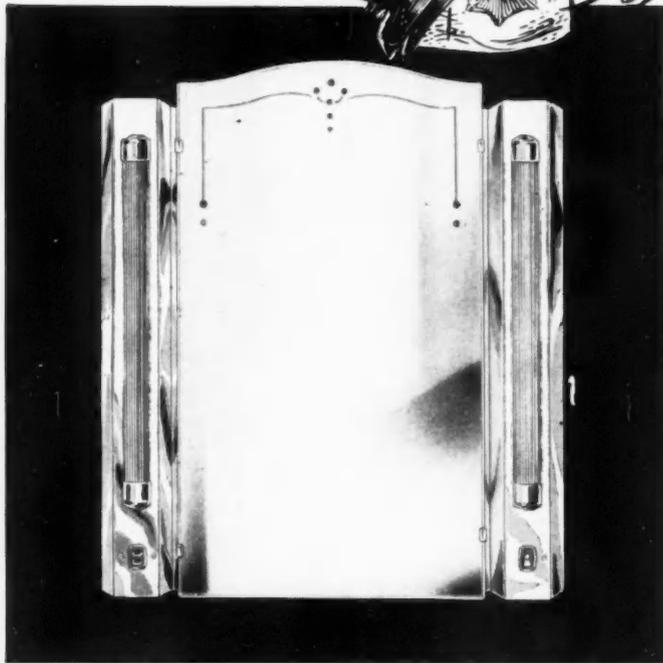
The show, directed by Philip Creden, Hines advertising and merchandising manager, has a "how-to-do-it" theme, designed to satisfy the urge of home owners and apartment dwellers to do practical "odd jobs" of building and repairing.

The setting of the program is a basement workshop equipped with work bench, tool cabinet and two saw horses. Walter E. Durbahn, director of vocational training at Highland Park, Ill., high school, acts as instructor and handyman.

Subjects selected for the telecasts are typical of odd jobs required at times of nearly all homemakers. The first program demonstrated the building of bird houses. At the conclusion of the show, listeners were directed to the sponsor's lumber yards for plans and materials which would enable them to build their own bird houses.

More than 800 letters and postcards, requesting plans, were received in the four days following the telecast, the sponsors said. Many persons sent requests for garage plans, remodeling ideas and plans for homes.

I'm
the
Queen



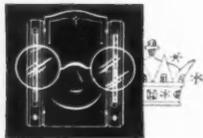
...and I've got everything

Classic beauty, superior engineering and quality material are skillfully combined by Mirro-Glo to enable you to supply your clientele with the quality merchandise they want—at the price they will pay.

For additional information concerning our line, write for our Royal Family folder. We also produce the Stan-forted line of perforated metal and the Bend-zy line of finer air registers.

... for example

Plastic light diffusers cut glare 50%



Bulb edge glass shelves are safe and adjustable.



Bar spring door stop protects contents and mirrors.



The **MIRRO-GLO**
CABINET CO.

A DIVISION OF
STANDARD STAMPING & PERFORATING CO.

3131 West 49th Place, Chicago 32, Ill.

Catalogs and HOW-TO-DO-IT INFORMATION

558—COMBINATION STORM SASH AND SCREEN—A new Bilt-Well unit introduced in a bulletin of Carr, Adams and Collier, Dubuque, Iowa. The unit, which will be built in 41 modular sizes, consists of the complete storm sash (upper and lower sections) and a screen section which interchanges with the lower section of the storm sash. Construction of the new product eliminates the wood surrounding frame.

559—COMBINATION STORM AND SCREEN WINDOWS AND DOORS—A folder distributed by the Alumatic Corporation of America, Milwaukee 4, Wis., illustrates aluminum door and window units which can be converted to either storm-type or screen by simple adjustments.

560—PORTABLE ELECTRIC TOOLS—A complete line of Thor electric tools, with illustrations and specifications, is listed in Catalog 38-A (second edition) of the Independent Pneumatic Tool Co., 600 W. Jackson Blvd., Chicago 6, Ill. Included are drills, tappers, grinders, sanders, hammers, polishers, valve refacers and other tools, with accessories.

561—ELECTRIC PRODUCTS—A number of new, attractively illustrated brochures published by Hotpoint Inc., Chicago 44, Ill., gives specifications and features of their lines of electric refrigerators, ranges, water heaters, dishwashers, sinks, food waste disposers, washers, ironers and home freezers.

562—THE MODERN POULTRY HOUSE—A booklet which discusses in detail and illustrates insulation and ventilation of the poultry house as a means of achieving healthier poultry and increased egg production published by the Universal Zonolite Insulation Co., 135 S. LaSalle St., Chicago, Ill. Also discussed are furnishings for the ideal poultry house.

563—ALL-STEEL GARAGE DOORS—A new folder which furnishes information about the three types of Strand all-steel garage doors has been published by the Strand Garage Door Division, Detroit Steel Products Co., 3101 Griffin St., Detroit 11, Mich. It includes instructions and diagrams on how to build a garage opening.

564—AIR FILTERS—The Technical Data Booklet recently published by the Air Filter Div. of Research Products Corp., Madison 10, Wis., contains details on the firm's complete current line of air filters and related products. The booklet also has general information on air filters and air filtration and illustrated technical articles on phases of the subject.

565—OVERHEAD TYPE DOORS—A new pamphlet by the Raynor Manufacturing Co., Dixon, Ill., describes and illustrates the company's wood sectional Up-and-Over Door used in residential, commercial, industrial, farm and rural buildings.

566—CHEMICAL PRESERVATIVES—are discussed in several new folders issued by the Protection Products Manufacturing Co., Kalamazoo 99, Mich. The subjects are "Wood Life," a toxic water repellent; "Woodhealth," for controlling termites, and other insects and vermin; "Rainchek," a water and moisture repellent for masonry; and a water repellent aluminum finish for masonry, wood, canvas and metal.

(Continued to page 140)

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

HOME...AMERICAN DRUGGIST...INSTITUTIONS...AMERICAN BUILDER...THE SCHOOL EXECUTIVE...
BARRHOUS CLEARING HOUSE...PROGRESSIVE GROCER...BUILDING SUPPLY NEWS...RETAILING...RUG PROFITS

CONNOR

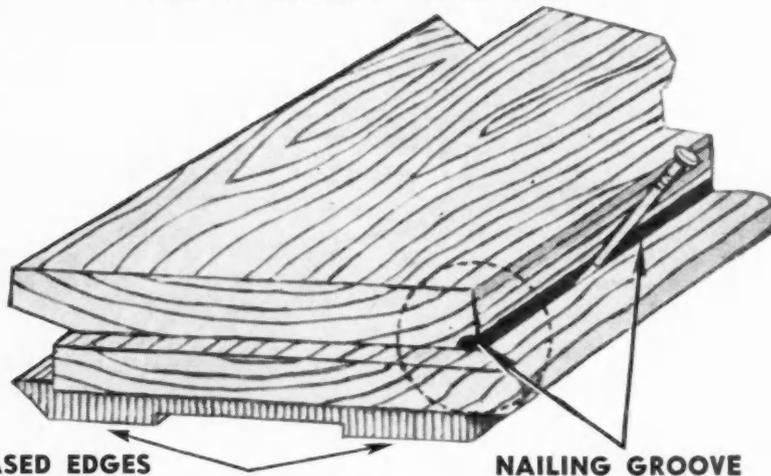
FOREST PRODUCTS SINCE 1872

Manufactured and
Graded Under
M.F.M.A. Specifications

"LAYTITE"

Maple and Birch
FLOORING

The World's Finest
-- Bar None



EASED EDGES

NAILING GROOVE

Write for illustrated 75th Anniversary Booklet

CONNOR LUMBER AND LAND COMPANY

MIXED CARS—Northern Hardwoods, Pine and Hemlock

PHONE No. 3

MARSHFIELD, WIS.

P. O. Box 112-D

Teletype No. 26

Mills: Laona, Wisconsin and Connorville, Michigan

Behind The Mills—The Connor Timber Stands

Catalogs

(Continued from page 138)

567—"COLORS OF THE YEAR"—is a booklet published by the O'Brien Varnish Co., South Bend 21, Ind., which contains color charts and other recommendations for house decoration. Suggested color schemes for rooms are based on rug and floor colors. Another chart illustrates exterior paints and trim colors.

568—PLASTIC FLOORS—A new catalog by the Thos. Moulding Floor Manufacturing Co., 165 W. Wacker Dr., Chicago, Ill., covers the full line of the company's floor and wall tile and accessories. Numer-

ous illustrations include samples of the products' colors and designs, and pictures of actual installations.

569—INSULATION VALUES—This 108-page handbook, which lists 12,852 FHA-approved heat transmission coefficients or "U" values of various walls, floors, and ceilings, is published by Silvercote Products, Inc., 161 E. Erie St., Chicago 11, Ill., manufacturers of reflective insulation materials. Numerous drawings of typical sections illustrate the proper position of the insulation to obtain stated "U" values.

570—ROOF COLOR IN HOUSE DECORATION—The importance of roofing colors in the exterior decoration of the home is featured in a new four-color book, "Putting Nature's Colors to Work . . . with Roofs that Are Daylight Engineered." published by The Flintkote Company, 30 Rockefeller Plaza, New York 20, N.Y. A comprehensive study of color as applied to roofing is clearly explained and illustrated in the book.

571—"AUTOMATIC ELECTRIC WATER HEATER—What It is—How It Operates"—is the title and subject matter of an 8-page booklet issued by the Electric Water Heater Section, National Electrical Manufacturers Association, 155 E. 44th Street, New York 17, N.Y. In *American Builder's* New Product section, March issue, page 125, it is erroneously stated that the Association supplies a water heater. The Association supplies only information concerning the electrical water heating method, and some of this information is included in this booklet.

SERVICE COUPON—CLIP and MAIL to CHICAGO

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

(May, 1949)

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

Numbers

Name

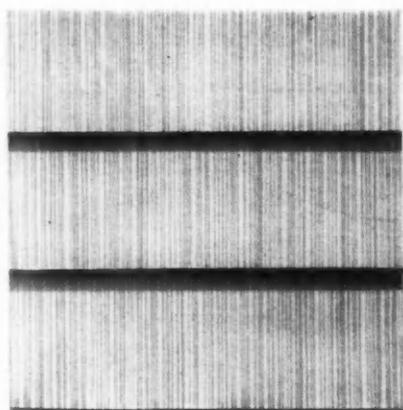
Street

City State

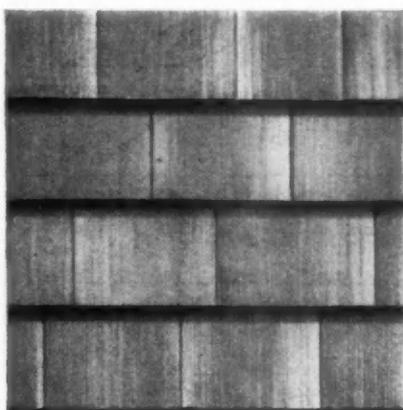
OCCUPATION*

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

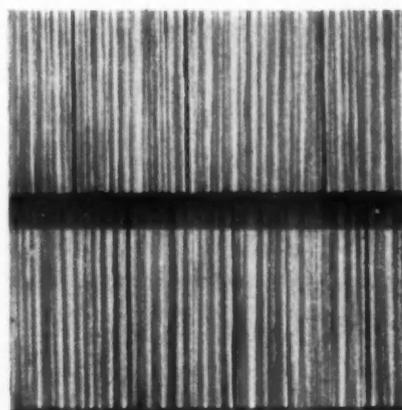
YOU GET MORE BUILDING VARIETY WITH STAINED SHINGLES AND SHAKES



Stained Cedar Shakes have grooved texture, invisible joints. They are laid with any desirable exposure between 8" and 16".



Stained Cedar Shingles have smooth texture, visible joints. They can be laid with any desirable exposure from 6" to 16".



Handsplit shakes have rugged texture, luxury appearance ideal for roofs or sidewalls. Use any exposure between 8" and 16".

VARIETY IN COLOR, EXPOSURE AND TEXTURE

PRESTAINED shingles and shakes give the builder an opportunity to make each home of a project look different in color, texture of wall surface, and width of weather exposures—without plan changes. Many colors available, and pre-staining eliminates finish coat painting after application.

EXPOSURES can be varied so that no house is the same as the homes on either side. Builders order the proper length shakes for each exposure, so as to get the most coverage for the money. Shingles and shakes provide the quality appearance and economy so much in demand today.

TEXTURE of shakes is grooved, altogether different in appearance from smooth-surfaced shingles. This added variety is obtained with no change in application. By alternating shingle and shake homes, using several colors, builders can make each house different, make projects distinctive.

FOR PARTICULARS, WRITE TO ANY MANUFACTURER LISTED BELOW

ASSOCIATED MANUFACTURERS

• West Coast Stained Shingle Co., Seattle, Washington • Portland Shingle Company, Portland, Oregon • Wood Beautifiers, Seattle, Washington • Colonial Cedar Co., Inc., Seattle, Washington • M. E. Smith Lumber & Shingle Co., Seattle, Washington • Canadian Forest Products, Ltd., Vancouver, British Columbia • The Robert McMillan Shingle Co., Ltd., Vancouver, British Columbia • Croo-Digt Company, Inc., North Tonawanda, New York • Everett Shingle & Shake Company, Everett, Washington • Perma-Products Company, Cleveland, Ohio • Capilano Timber Company, Ltd., Vancouver, British Columbia

STAINED SHINGLE & SHAKE ASSOCIATION

HERE'S A THAT CUTS HOME-

Modern Reinforced Concrete Stucco

Low Cost—Compare the price of Portland Cement with other siding materials. There's your answer to why stucco is lower in cost. Besides, modern stucco is applied quickly and easily—saves labor. These are reasons why stucco construction helps meet today's urgent demand for lower-cost homes.

Good Construction—Modern reinforced concrete stucco adds strength and durability. Stucco consists of 3 layers of concrete reinforced with steel—to 1-inch thickness. This is quality construction that boosts your reputation as a builder of good homes.

Attractive to Buyers—Modern reinforced concrete stucco gives you these additional selling features:

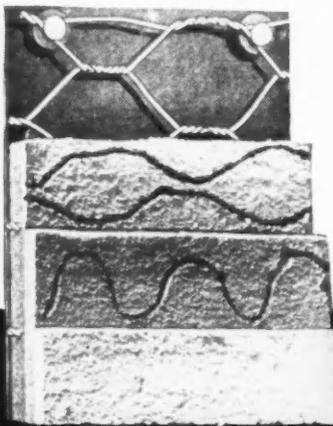
- 1 Lasting attractiveness—stucco is not only attractive when new, but also retains its good looks throughout the years.
- 2 Ease of maintenance—its durability, strength and crack-resistance means expense-free maintenance. No periodic painting required. Stucco is unaffected by rot and termites.
- 3 Fire protection—stucco protects home and family because it won't burn.
- 4 Good insulation—stucco walls keep out heat and cold, moisture and dust.
- 5 Suitable for all climates—stucco has proved its suitability in both extremely hot and below-zero climates.
- 6 Ideal for new homes as well as for overcoating older homes.



Stucco is strong and permanent—possesses durability in extremely hot or below-zero temperatures.



Modern reinforced stucco adds attractiveness to ranch-type, modern or conveniently designed homes.



NOTICE HOW concrete stucco is rigidly reinforced with Keymesh deeply embedded in the scratch coat. Keymesh is made of tough, cold drawn, heavily galvanized steel wire, woven into open mesh design.

For stucco and overcoating, use Keymesh, 1½" hexagon mesh, 17-gauge wire, or 1" hexagon mesh, 18-gauge wire. For interior plaster and base for tile, use Keymesh, 1" hexagon mesh, 20-gauge wire.

KEYSTONE STEEL & WIRE

Manufacturers of Keymesh Reinforcing,

Durable, Low-Cost Stucco Calls

COMBINATION BUILDING COSTS

The KEYSTONE SYSTEM of Stucco Application

When you follow the Keystone System of Stucco Application you are assured of strong, durable construction. The houses you erect will be attractive, saleable and lower-priced, without sacrificing profit. Here's what the Keystone System does for you:

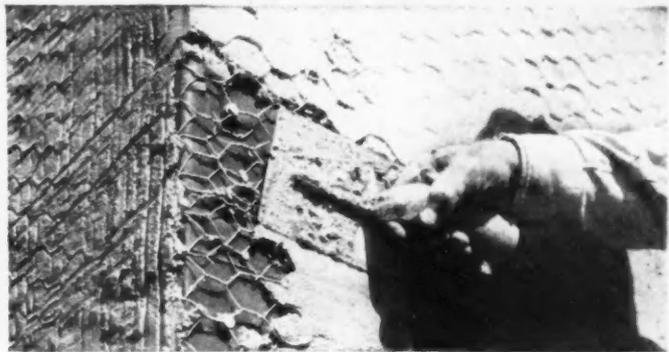
Produces Stronger Stucco—In the Keystone System of Stucco Application, strong galvanized steel Keymesh Reinforcing is deeply furred out $\frac{1}{4}$ " to $\frac{3}{8}$ " away from the wall. The open mesh design of Keymesh allows the plaster to flow through—and *around*—the reinforcing, deeply embedding each steel wire. As a result, stucco reinforced with Keymesh possesses lasting strength and permanent crack-resistance. This has been proved on thousands of stucco homes erected the Keystone way.

Easier, Faster, Smoother Lathing—Keymesh Reinforcing unrolls flat, goes into place flat and lays flat. It forms around corners easily. Besides, it has no rough surfaces that cut lathers' hands. Lathers who are using the Keystone System of Stucco Application testify to the fact that it simplifies and speeds up work, and results in smoother lathing.

Produces Quicker, Better Finished Job—Plasterers find it easier to get a true wall when they apply stucco on Keymesh Reinforcing, because Keymesh is correctly furred out from the wall. The scratch coat goes on to even thickness. Consequently succeeding coats go on smoother, quicker and easier.



The use of Keymesh Reinforcing speeds up construction because of its ease of application.



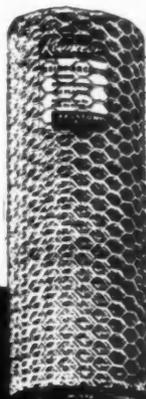
The Keystone System of Stucco Application definitely insures smoothly finished, permanent siding.

ASK YOUR DEALER for complete information about the Keystone System of Stucco Application. He can supply you with details and specifications. And, he has Keymesh Reinforcing for you in any quantity you need—in easy-to-handle 3' x 150' rolls.

COMPANY PEORIA 7, ILLINOIS

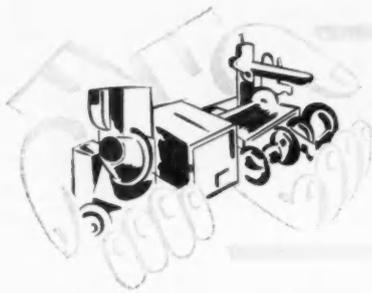
Welded Fabric, Tie Wire and Nails

for **KEYMESH**



Keymesh

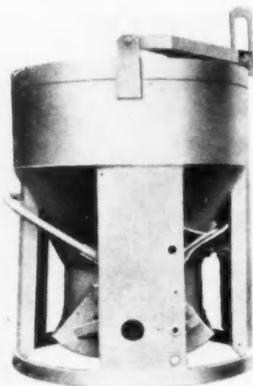
REINFORCING FOR STUCCO,
OVERCOATING AND PLASTER



NEW PRODUCTS

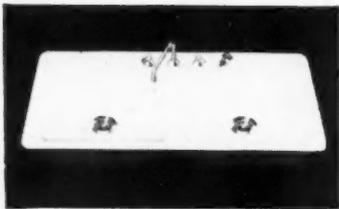
Offered by Manufacturers

CONCRETE BUCKET AB5906
Johnson Lo-Slump concrete bucket easily handles concrete of any stiffness. In 2, 3, 4 and 8-cubic yard sizes, the bucket discharges mass concrete with cement content as low as two bags per cubic yard and slumps down to 1/2-inch, using 6-inch aggregate. Double clam discharge gate



can be operated manually or by compressed air. Operated by air, bucket gates close instantly when supply hose valve is released or when nozzle is pulled from bucket air socket. Six-foot diameter 4-yard size weighs 4,000 pounds. Koehring Co., 3026 W. Concordia Ave., Milwaukee 10, Wis.

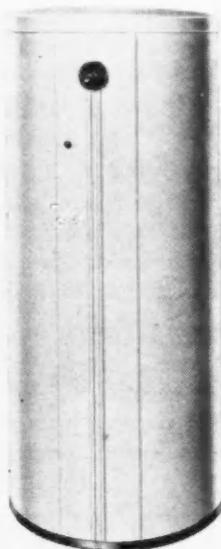
DOUBLE-BOWL SINK AB5903
Double bowl sinks, with or without faucet ledge, are eight inches deep, made of 14-gauge steel enameled with wet-process porcelain enamel. May use any regular trim. No crumb cups or other brass goods



supplied. Complies with United States Bureau of Standards specifications for formed metal plumbing ware. Flat rim permits continuous tile or linoleum drain-board to run flush with edges of rim. Alliance Ware, Inc., Alliance, Ohio.

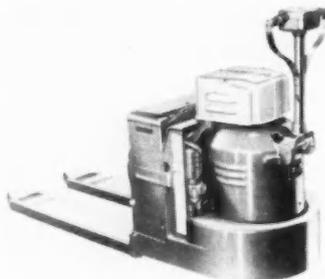
BUILDING LOGS AB5923
These pre-cut Douglas Fir logs are designed for construction of rustic type buildings. The log is square-cut on three sides, with the outside surface peeled of bark and treated to resist discoloration, termites, weathering and dry rot. The inside surface is planed smooth and may be finished to form a natural "knotty pine" interior. Log Structures of the Southwest, Inc., 344 W. Colorado Blvd., Glendale 4, Calif.

ELECTRIC WATER HEATER AB5911
Automatic electric water heater contains thermostat, heating element connections, controls and drain faucet behind single, easily removed front panel. Available in 10, 30, 40, 52, 66 and 80-gallon capacities, unit heats water by two patented immer-



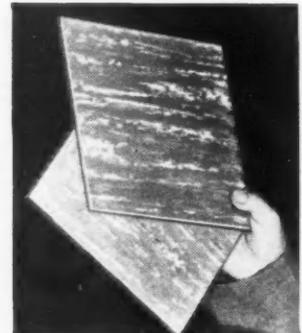
sion type elements. Nichrome spiral wire is embedded in refractory material under pressure and encased in copper sheaths. Copper sheaths are chromed and tested under high voltage for insulation breakdown. John Wood Manufacturing Co., Inc., Conshohocken, Pa.

HAND PALLET TRUCK AB5913
Battery powered hand pallet truck is easily maneuvered in close quarters. Incorporates safety handle with control buttons for



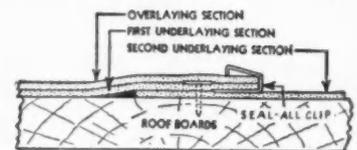
either right or left hand operation, three-point suspension for smooth travel over uneven surfaces and differential-action trailer wheels that eliminate wheel scuffing. Automatic power cut-off instantly cuts off power supply to motor upon release of control handle, and applies positive quick-acting brake to drive shaft, immediately stopping truck. Towmotor Corp., Cleveland 10, Ohio.

ASPHALT TILE AB5910
New color-blends in yellows, greens and blues are achieved by this firm through introduction of new basic raw materials for Ma-Ti-Co asphalt tile. Colors blend



well with other colors in traditional and modern types of interior decoration. Solid colors as well as marbled asphalt tile are available. Mastic Tile Corporation of America, Newburgh, N. Y.

ASPHALT SHINGLE SEALER AB5924
"Seal-All Clips," used to prevent the raising of asphalt shingle tabs, have four main parts: A point which holds the clip in place; a shoulder which enfolds the lower edges of overlaying and underlying shingles; a lower leg which is inserted between the top edge of the second underlying shingle section and the bottom edge of



the first underlying shingle section; and an upper leg which rests on top of and over the overlaying shingle, with the point in position to engage the overlaying shingle when set in place with a slight hammer blow. The clips do not require special tools for installation, and are not noticeable on the roof. Seal-All Clip Co., Box 302, Flint, Mich.

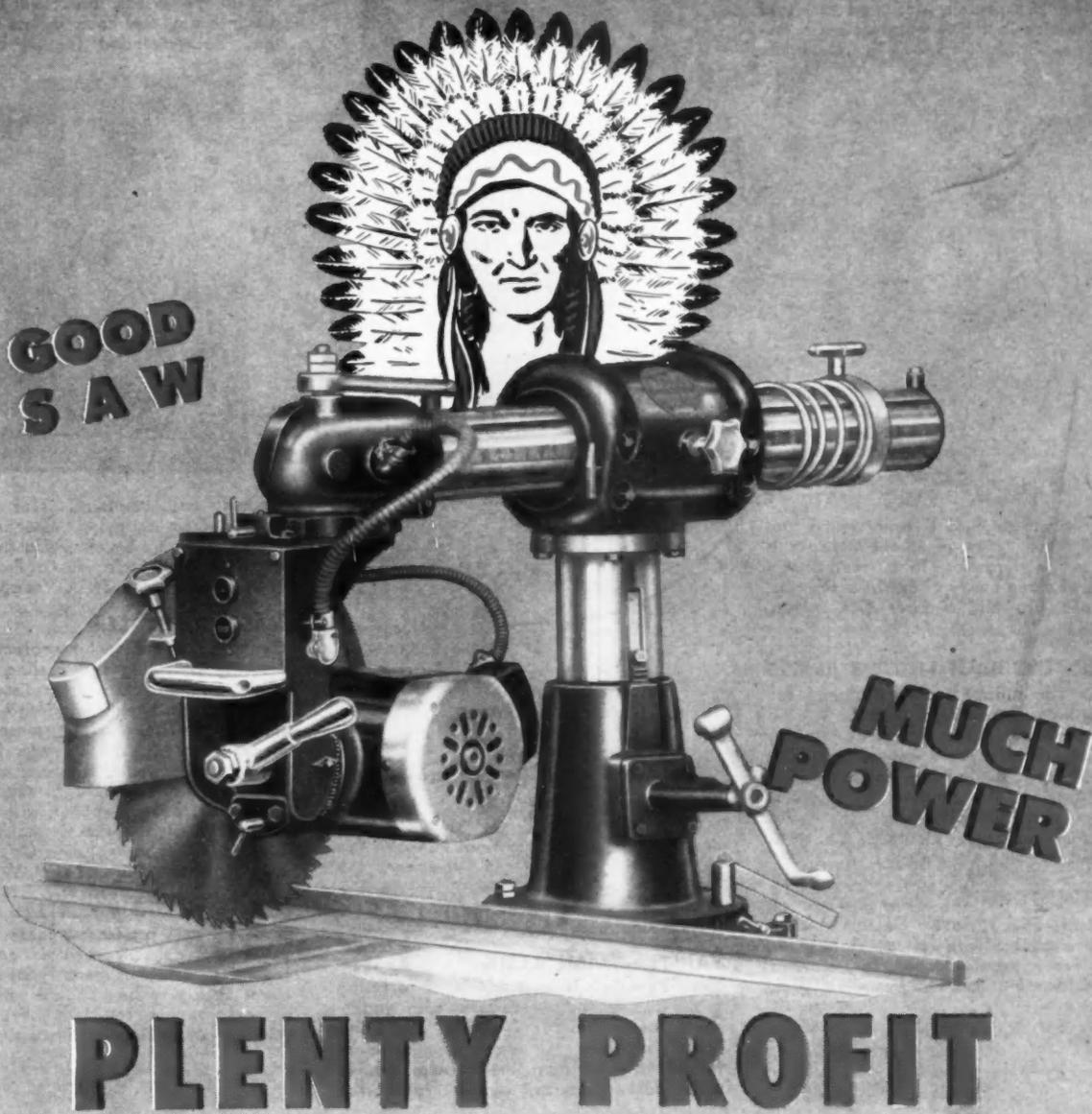
MASON'S LEVEL AB5922
All working edges of this mason's level are encased in an aluminum channel. It is made of mahogany and finished with clear lacquer. The level's six plumb and level vials



are set solid at factory, and glass lenses protect the vials from dirt and moisture. Manufactured in 42 and 48 inch lengths. Royal Oak Industries, Grand Haven, Mich.

(Continued to page 146)

COMET SAWS - BIG MEDICINE IN THE POWER SAW FIELD

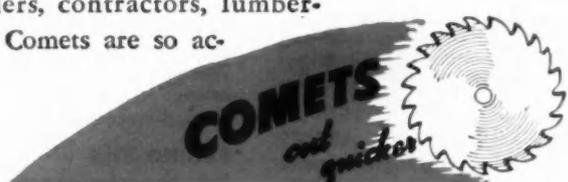


Big Indian speaks wise words. Short, sharp, direct, true! Several thousand Comet owners go along. Comets do everything any radial power saw can do but better! That's a fact which has pushed these fine saws to the very top in popularity and acceptance among builders, contractors, lumbermen. Comets are so ac-

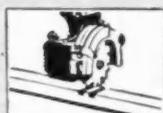
curately and sturdily engineered and built that there is practically NO parts replacement cost after years of tough field service. Ask any Comet owner his opinion. It ought to sell you a Comet saw. Immediate delivery on Juniors, Clippers, Seniors, Senior 8, Timbercutters. Order from the nearest Comet dealer or write direct.

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

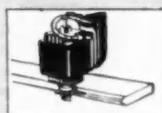
Distributors of Davis and Wells Woodworking Machines



BEVEL CROSS CUTTING



DADOING



SHAPING



BEVEL RIPPING



RIPPING

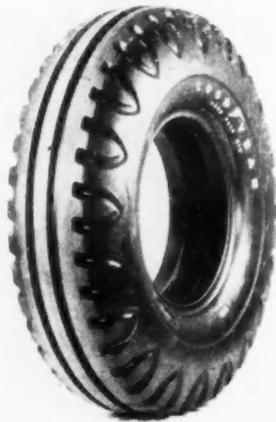


COMPOUND MITERING

(Continued from page 144)

TRUCK TIRE AB5918

Currently being manufactured in three sizes — 12.00-24, 13.00-24 and 14.00-24 — this truck tire is especially designed for front wheel service in heavy construction, excavation and strip mining, and is expected to



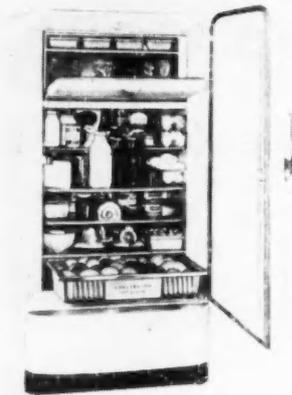
help to eliminate hard steering and vibration in these types of operations. It is known as the Hard Rock Rib. Tread design consists of three heavy circumferential ribs. Goodyear Tire and Rubber Co., Akron, Ohio.

RUBBER TUBE DUCT MOLDER AB5925

A pneumatic rubber tubing designed for molding holes in concrete. Ductube is used to produce ducts for telephone, power, light and other types of installations. The tube is inflated on the job, and placed in desired position for pouring of concrete. When concrete has set, the tubing is deflated and removed. Ductube Co., 940 Shoreham Building, Washington 5, D.C.

REFRIGERATOR AB5902

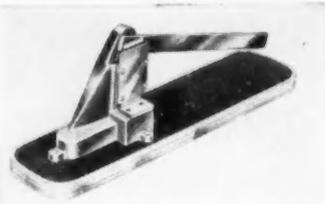
Coolerator Space Saver DeLuxe Model 9RD7 is available with left or right door hinges. Providing eight cubic feet storage space, refrigerator is 28 inches wide, 57 7/8



inches high. Full-width freezer locker holds 40 pounds of frozen foods, while simultaneously freezing 56 ice cubes. Holds 17 quarts of fruits or vegetables. The Coolerator Co., 128 W. First Street, Duluth 1, Minn.

METAL MOULDING SLOTTER AB5915

Slotting tool is designed for speeding up and improving bending and curving work on metal trims and mouldings. Cutting edge is hardened tool steel blade. Free swinging handle operates with minimum pressure.



Adds finished and professional touch to the installation. Wooster Products Co., Wooster, Ohio.

VENTILATING FAN AB5921

A night cooling unit for apartments and small homes, this Silent Breeze window ventilator fits inside any window frame measuring 27 inches or wider. It extends into the room 3 1/2 inches, and is easily installed



and removed. "Rubber float" 24-inch fan has four blades. Motor is two-speed, 115 volt, 2 ampere, 60 cycle, single phase AC. Holcomb and Hoke Manufacturing Co., Inc., Indianapolis, Ind.

VANITY—WASH BASIN AB5919

The "Vanette" is a combination dressing table, vanity and wash basin with underneath cabinetry. It includes "his" and "hers" drawers, removable compartmentalized trays, a medicine cabinet drawer with locking device, built-in toothbrush



holder, removable tissue receptacle and linen and towel storage space. Briggs Manufacturing Co., 3025 Miller Ave., Detroit, Mich.

GLAZING COMPOUND AB5901

Armstrong's "33" elastic glazing compound is used for glazing windows and doors, both wood and metal sash. Will not harden in container, and remains permanently elastic, expanding and contracting with temperature changes. Available in one, two, five and ten-pound metal containers. One-pound cans are packed in counter display carton, 24 per carton. The Armstrong Co., 4065 S. LaSalle St., Chicago, Ill.

PAINT BRUSH CLEANER AB5916

"Brush Flush," a liquid paint brush and paint roller cleaner, is used by immersing the brush in the liquid, agitating and wiping off the excess. Brush will be ready to dip into any new color in less than a minute. Recommended for all base paints,



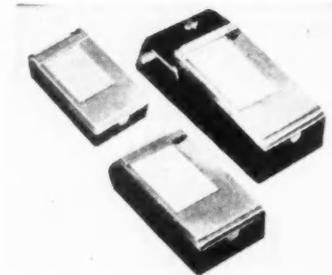
enamels and varnishes. Not harmful to bristles, hair or nylon. Cleaner may be used repeatedly by removing flushed paint from bottom. Elgin Plastic Products Co., 4011 W. Harrison St., Chicago 24, Ill.

MASONRY SEALER AB5904

Century Cement sealer protects concrete masonry by filling and sealing pores and voids. Sealing and water resistant properties protect against underground water seepage in below-grade masonry. They also protect against damage from alternate freezing and thawing of walls above ground. Pleasing, uniform texture and appearance. May be applied with stiff brush. Sealer sets in presence of moisture. E. D. Coddington Manufacturing Co., 5024-5042 N. 37th Street, Milwaukee 9, Wis.

AUTOGRAPHIC REGISTERS AB5907

Invoices, work orders, purchase orders, express and delivery receipts and bills of lading are a few of many types of business forms that may be handled with new line of autographic registers. Featherweight portable model ejects all copies and has



concealed compartment for filing carbon copies; Manifolder, large capacity counter machine, ejects all copies, and refolding Recorder model locks in file copies in serially numbered order and ejects the others. UARCO Inc., 141 W. Jackson Blvd., Chicago 4, Ill.

FACING TILE AB5909

Nine new colors of ceramic glaze structural facing tile offered by this firm are venetian cream, colonial mottle, blush coral, blush coral mottle, spring yellow, pewter gray, gulfstream green, glacier green and silver pine mottle. Trim shades are chocolate, fall red and ebony. Metropolitan Paving Brick Co., Canton, Ohio.

(Continued to page 148)

Just one page



from the Crane bathroom story!

The Crane bathroom story is the story of a *complete line*—a style for every taste, a price for every budget.

For instance, there's the *Neuday* Group above, just right for the homeowner who has to watch his costs. Then for the man who goes "all out," there are such Crane style leaders as the *Criterion* group below. But whatever their price, *all* Crane bathrooms have the high quality and the lasting beauty that make Crane the best-known name in plumbing.

That's true in Crane kitchens, too, where Crane has the right sink for every possible requirement. And in home heating, Crane supplies everything needed for any system, any fuel.

See Sweet's Builders' File for selections from the Crane line—or get the *complete story* from your Crane Branch or Crane Wholesaler.

For moderate budgets, the Crane Neuday Group

For the best in bathrooms—the *Criterion* Group—leader in the Crane style parade. Here is the very latest in design, the most careful craftsmanship—a bathroom group with elegance in every line. (For those who prefer a countertop lavatory, Crane offers the *Marcia*, styled to blend with the *Criterion* bath and closet.) Controls are finger-tip Dial-ese, as in all Crane bathrooms.



CRANE

CRANE CO., GENERAL OFFICES:
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PLUMBING AND HEATING
VALVES • FITTINGS • PIPE

NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS

(Continued from page 146)

FORK LIFT TRUCK AB5914

An operator can load a truck with four cubes of blocks in five minutes, or a large trailer with 12 or 14 cubes in 20 to 25 minutes with the Service Motowlift. Equipped with air-expanding forks. Unit has capacity of 4,000 pounds on 24-inch load center.



Service-side shifter moves load laterally, enabling operator to spot a cube tight against others without jockeying. Ford-powered. Service Caster & Truck Corp., Albion, Mich.

WATERTIGHT SURFACE TILE 5926

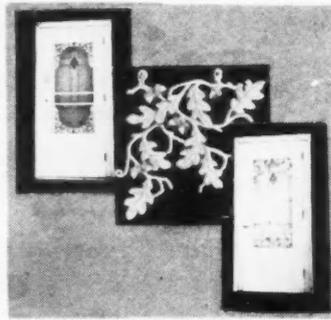
Styron Bri-Tile, made of Dow chemical raw materials, has wide application where watertight surface is desired. Permanent color. Well-suited for areas around tub



or shower stalls. Bright, jewel-like colors run full thickness of tile. Squares are 5x5 inches. Wide range of colors available. Acorn Plastic Engineers, Inc., Erie, Pa.

ORNAMENTAL SCROLLS AB5917

"Scroll-etts" are aluminum scrolls with a baked-on white, bronze-tone, or polished aluminum finish, easily installed on screen or storm doors. Can be used as ready-made arches for built-in bookshelves, be-



tween kitchen cabinets and for other ornamental uses in the home. Howard A. Daum Co., 666 Washington Rd., Pittsburgh 16, Pa.

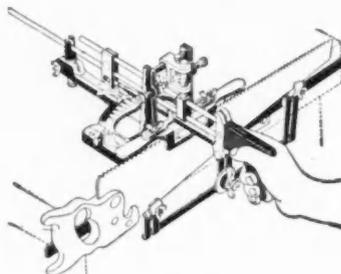
CORRECTIONS

In the April issue, page 168, the wrong address was given for the manufacturers of product AB4917. Correct address is: Delta Manufacturing Div., Rockwell Manufacturing Co., 600 East Vienna Ave., Milwaukee, Wis.

Product AB3929, March issue, erroneously intimates that the National Electrical Manufacturers Association produces an electric water heater line. The Electric Water Heater Section of this association promotes the electric water heating method, and information concerning it may be obtained from them.

SAW FILER AB5912

A.Z. saw filer is semi-automatic, hand-operated machine for precision-controlled filing of hand, band or circular saws. Operator can control depth, hook, bevel and feed of next tooth under file, making it



possible to file teeth quickly and uniformly. Easily adjusted for size of teeth. No set-up time required. Nu-Art Products, 607 47th Street, Brooklyn 20, N. Y.

GAS FORCED-AIR FURNACE AB5920

This 100,000 B.T.U. horizontally-designed Norman Southerner model gas-fired forced-air furnace measures 21 1/4 x 23 x 52 inches. Because of compact, horizontal design, it can be installed in attic or closet, under ceiling, floor or stairs or other small space.



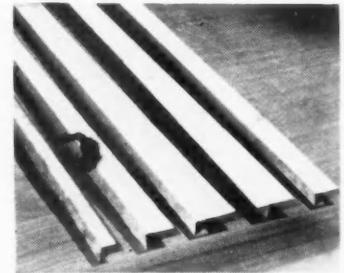
Has streamlined cabinet, blower motor resiliently mounted on solid base and completely wired, and heavy gauge electrically-welded steel combustion chamber. Norman Products Co., 1150 Chesapeake Ave., Columbus, Ohio.

GARAGE DOOR AB5908

Crawford "Doormaster" requires only 3/4-inch headroom above the opening. Two-section door is 16-panel construction with four-light window in upper section. Tracks are installed level with top of door opening, and door glides upward and inward on that level. When open, door is completely within the garage. Crawford Door Co., Detroit, Mich.

ROOF EDGING AB5938

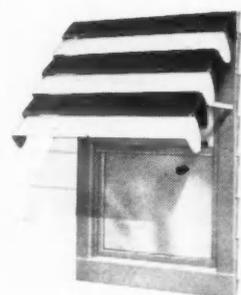
Galvon roof edging, made in five different types, is electro-zinc-coated steel, combin-



ing maximum protection from weather. Material withstood 52-hour salt spray test. Firm also supplies gravel stop and ridge angle. Central Products Co., P. O. Box 118, Battle Creek, Mich.

METAL AWNING AB5931

Perm-A-Vent is an easily installed steel awning, finished in baked enamel. To put in place, two angle brackets are screwed



to the top of a window casing, side arms fastened to the lower side casings and pair of stair-like main brackets attached to these. Stripes are then snapped over "stairs" and finished with decorative side scallops. Yorkline, Inc., Union City, Pa.

(Continued to page 158)

CHECK NUMBERS AND MAIL COUPON FOR INFORMATION

American Builder, 105 West Adams Street, Chicago 3, Illinois

NAME ADDRESS

CITY STATE

AB5901	AB5909	AB5917	AB5925	AB5933	AB5941
AB5902	AB5910	AB5918	AB5926	AB5934	AB5942
AB5903	AB5911	AB5919	AB5927	AB5935	AB5943
AB5904	AB5912	AB5920	AB5928	AB5936	AB5944
AB5905	AB5913	AB5921	AB5929	AB5937	AB5945
AB5906	AB5914	AB5922	AB5930	AB5938	AB5946
AB5907	AB5915	AB5923	AB5931	AB5939	AB5947
AB5908	AB5916	AB5924	AB5932	AB5940	AB5948

When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder.

Easiest
**OF ALL
 GARAGE
 DOORS to
 INSTALL
 and PAINT**

Costs Less

1. TO BUY
2. TO INSTALL
3. TO MAINTAIN



Galvannealing makes painting easier



Hardware is assembled at factory



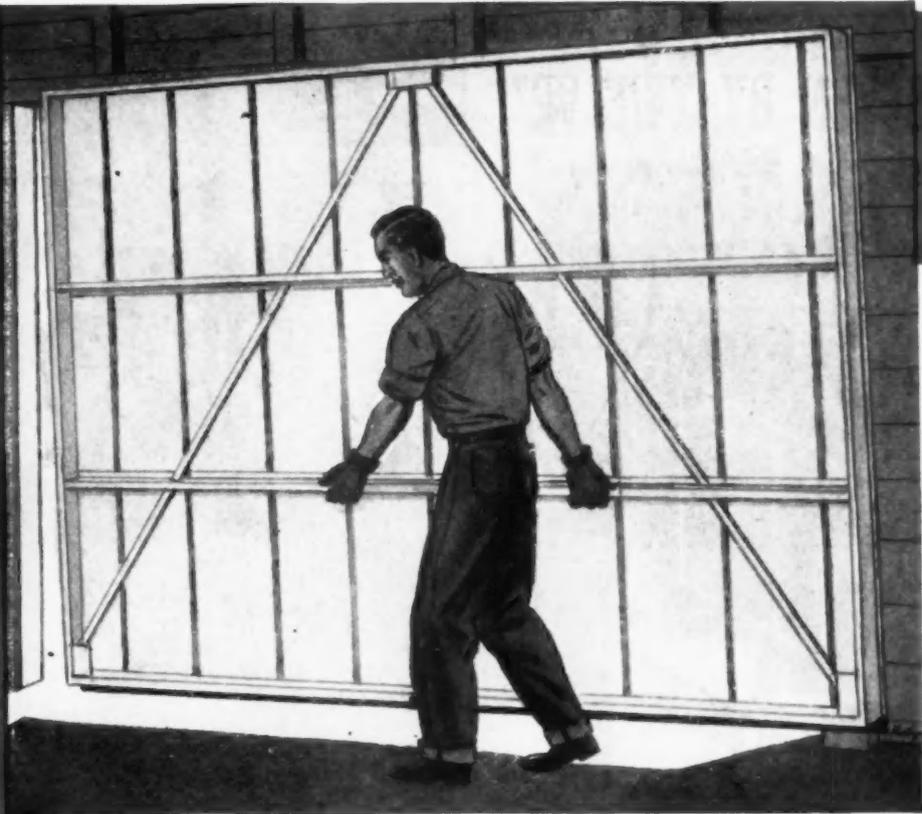
MAIL COUPON FOR INFORMATION AND DEALER'S NAME

ALL-STEEL • GALVANNEALED • OVERHEAD

STRAND

GARAGE DOORS

FOR SINGLE AND DOUBLE GARAGES



The Strand all-steel one-piece door-leaf eliminates field assembly of single doors—receding or canopy type (8' x 7'). Receding-type doors for double garages (16' x 7') are quickly assembled from two 8' x 7' door-leaf units and splice channel.

Hardware comes already assembled, and serves as an installation templet. Only ordinary tools are needed—no "factory trained expert" is required and installation is surprisingly quick and easy.

Strand Doors are easiest to paint because they're galvannealed for rust-protection—with a heavy galvanized zinc coat, oxidized to provide an excellent base for paint without special priming coat. They can be painted to match any color scheme.

The strength of steel—that can't warp, sag, rot or shrink—assures lifetime durability and means a satisfied customer for you every time you install a Strand Door. Volume production, concentrated in one plant, and standardization on three models, make Strand doors an unequalled value! Order from your dealer, or

STRAND GARAGE DOOR DIVISION
 Detroit Steel Products Company
 Dept. AB-5, 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

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WROUGHT IRON STOCK STEP RAILINGS



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To help you in your use of wrought iron railings, Coffman has produced a standardized packaged line of step and straight rails of high quality at low cost. The step rails are designed for standard 7 inch rise—12 inch tread, and may be adapted to any number of steps. Step and straight sections are sturdy, of solid stock, rigidly welded. Combination of sections will fit most any condition. Installation is quick and simple.

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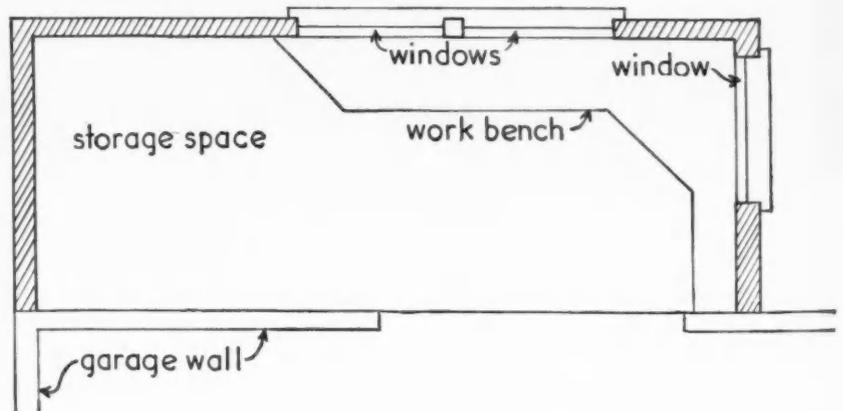
The R. J. Coffman Co. Inc.
ORLANDO, FLORIDA
ESTABLISHED 1925



TECHNICAL GUIDE for Builders and Craftsmen

(Continued from page 134)

How to Build a Garage Addition



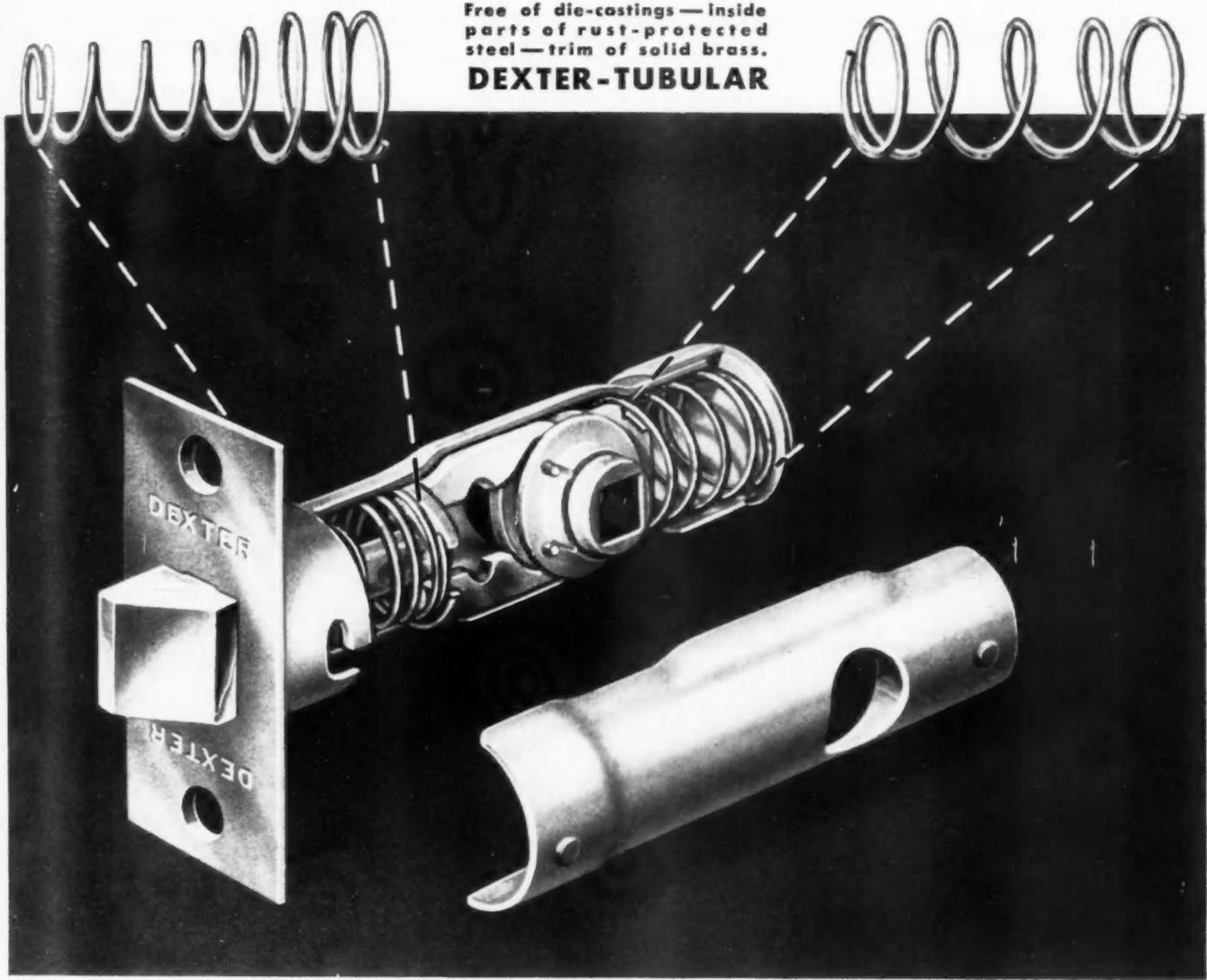
IN building this addition, a combination concrete base and floor are used flush with the present garage floor. The floor and walls are integral and are designated as a thick edge slab, which is an extension of the slab into excavated portion at walls. A four foot opening, cut in the garage wall gives access to the annex. This opening should be placed to allow the car door, when fully open, to swing into it. The windows in the side and a corner window in one end admit plenty of light. Small screen openings in each end, under the extended roof, serve as ventilators. Roof of new addition is to extend under eaves of present roof, thus

eliminating unnecessary flashing.

The extension to the garage need not be confined to the side of the building but can also be placed at the rear or front. This is sometimes necessary because the 18 foot garages built a number of years ago are not large enough for present cars.

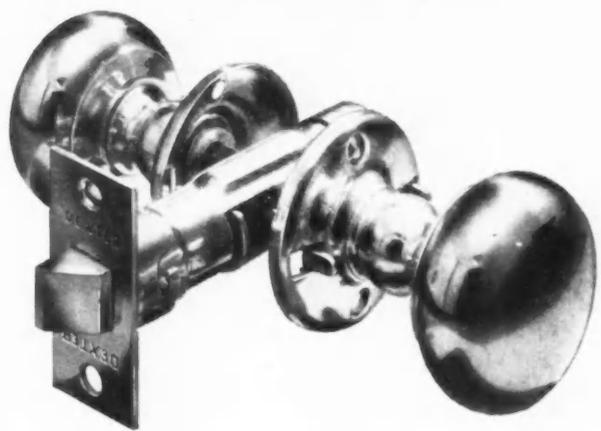
If the present garage is covered with a hip roof, then the roof of the lean-to, regardless of where it is placed, can be extended under the present eaves. In the event that the old garage has a gable type roof, metal flashing will be necessary where new roof of lean-to abuts either front or rear walls of the old garage.

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



The soft touch . . . with the snappy comeback

THERE'S NO FOOLIN' when a duo-sprung Dexter Latch goes into action. First, there's the soft touch, gentle and easy-like, which offers just enough tension to make one aware that smoothness is something to appreciate in a door latch. Then comes the quick kick that sends the knob and latch bolt back into normal position — without faltering. And this goes on for years and years — a lifetime — with no change in the feel of the soft touch, nor in the sure comeback of the knob and bolt. It's all done with springs — big ones, exclusive with Dexter Latches. A light, feathery one up front, and a husky, heavier one in the rear — each of the right size for the right action. That's the way it is with Dexter Latches all the way through — thoughtful engineering that has made the Dexter name stand for superiorities not to be found in any other latch.



NATIONAL BRASS COMPANY
Grand Rapids, Michigan

MAKERS OF BUILDERS, CABINET, SCREEN DOOR
AND SHELF HARDWARE

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



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**YOU CAN HELP
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 BY USING
all three
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REINFORCED BUILDING PAPER
 at about \$15 per 1000 square feet

AS BUILDING-PAPER, over sheathing of frame, brick veneer, stucco or stone-faced houses . . . under wood, tile and other flooring . . . as a vapor-barrier . . . FHA approved over sub-fill, under concrete slabs . . . under floors with radiant heating . . . For curing freshly laid concrete driveways, walks, basement and garage floors, etc.

2
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REINFORCED REFLECTIVE INSULATION
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Costs 50% less than bulk or blanket types of insulation, and costs less to apply. Does two jobs: Acts as insulation and as a vapor-barrier (FHA-approved).

3
COPPER ARMORED SISALKRAFT

REINFORCED PURE COPPER FLASHING
 at about \$9.75 per 100 square feet

Costs 80% less than heavy sheet-copper, and less to apply for concealed flashing, foundation damp-coursing, etc.

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*EXTENSION LADDERS—Top strength in design and construction. Equipped with steel rung braces, automatic safety locks, rope and pulley. In sizes from 20' to 52'.



*SINGLE LADDERS—

Equipped with rung braces and tie rods. Lightest, strongest of its type. Standard sizes from 8' to 24'.



*UNDERWRITER STEP LADDER—

Heavy duty, rung back, knee braces and truss rods. Safety spreader. Sizes: 4' to 20'.

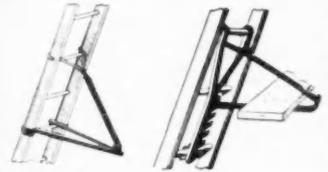


*SAFETY PLATFORM LADDER

Ideal for general work with wide platform, rung back, steps knee-braced and truss-rodged. Sizes: 3' to 18' (height of platform).

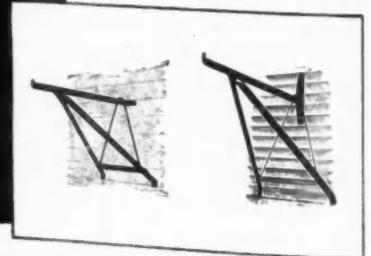
LADDER JACKS

Men do more and better work on safe equipment. **ONE-MAN Ladder Jacks** (right) adjust to any pitch on either side of a ladder. Weight is distributed on three rungs. **New rail jack** (left) provides added safety by using side rails of ladder for support.



SCAFFOLD BRACKETS

Simplify installation of safe working platforms for many types of sidewall work. **"Trouble Savers"** are light, easy to handle and extra strong. Made of rail steel in nail-attached, studing and bolt-attached types. **They do not bend!**



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GOLD MEDAL Tubelox Steel Scaffolding—Safety Scaffolding Machines—Junior Safety Swinging Scaffolds—Steel Sidewalk Bridges—Ladders, Light Ladders • "TROUBLE SAVER" Sectional Steel Scaffolds—Steel Scaffold Brackets—Adjustable Steel Trestles

Write for ladder bulletin, "Invest in Safety and Economy"



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Here's a line of windows you'll find designed to fit the need of every job, regardless of your cost limitations! Even we are amazed at the many ways in which architects and contractors adapt Mesker Steel Casements to so many different types of jobs. Standard sizes can be used singly or in combination to obtain any desired window effect for any style of architecture. Most important, if price is one of your problems, Mesker Steel Casements are the answer. One of today's lowest-priced lines, Mesker also offers appreciable discounts for quantity. Interested? You'll find the Mesker Catalog in Sweets—or write us!



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

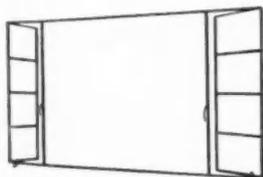


No tugging—no lifting —no struggling as with old-style windows. Mesker Steel Casements cannot swell, warp, shrink or stick.

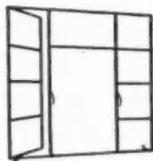
**MESKER BROTHERS METAL WINDOWS
4342 GERALDINE AVE., ST. LOUIS 15, MO.**

THE MARK OF *modern* POST-WAR CONSTRUCTION

There's an efficient, low-cost Mesker Steel Casement to fit every window need in every size home!



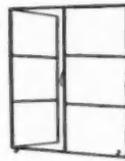
PANORAMA



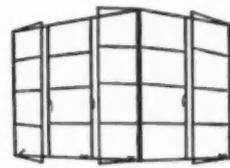
PICTURE



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a new
Universal-Rundle
recipe

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**Manufacturers' Products Hit
New High in Readers Interest**

UP to April 12 more than 15,000 inquiries had been received in the offices of *American Builder* seeking data on the building products and equipment illustrated and described in the February issue. Inquiries are continuing to pour in and because of this sudden upsurge in work in the Readers' Service Department, there has been some delay in answering all requests for information. By the time this



TYPICAL pages from February 1949 *American Builder* "Building Products on Review" feature which drew 15,000 inquiries.

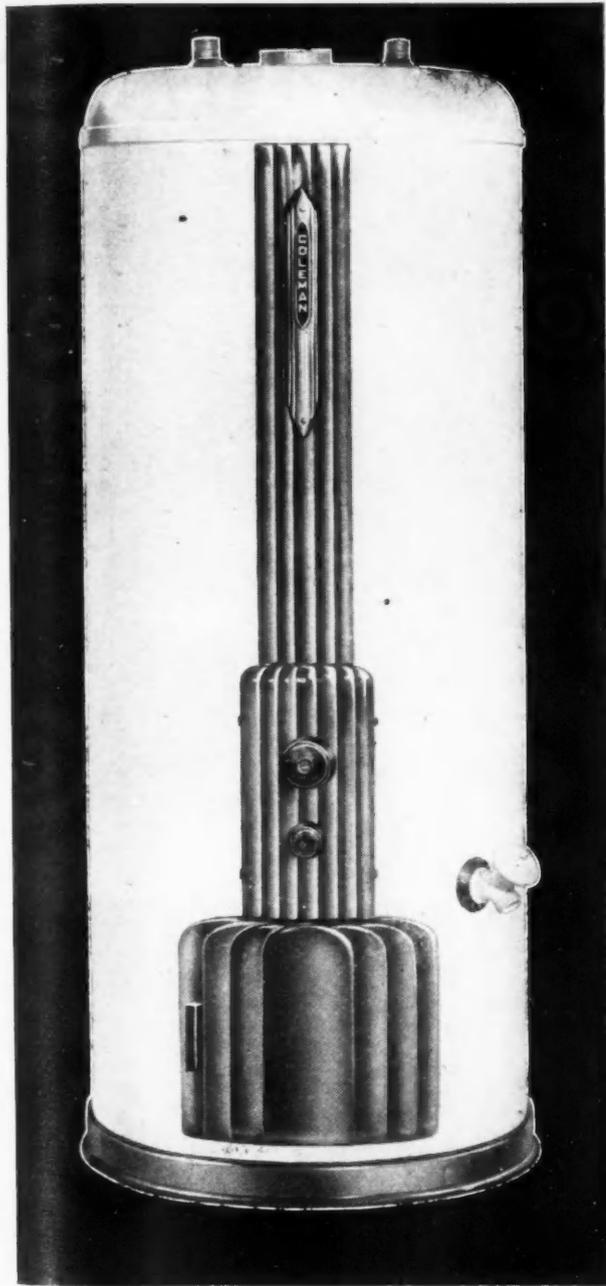
issue is read by subscribers, however, the department will be back on schedule and all requests for data about products mentioned in the February issue or any other issue will be disposed of promptly.

The "Building Products on Review" feature of the 1949 February issue contained 382 individual photographs of all types of material and equipment used by builders. The Columbia Protokosite Corporation's new decorative plastic bricks for interior partitions, announced as item No. AB29101, drew the largest number of inquiries for any single product. With very few exceptions, however, there was an unusual amount of interest on the part of readers in all the products and equipment shown.

Actually the special February issue treatment of this material is merely an expansion of a regular monthly department carried in the *American Builder*, titled: "New Products Offered by Manufacturers," except that the February presentation not only includes the newest developments announced by manufacturers, but reviews for readers some of the refinements and changes made by manufacturers in conventional products which may have already been described in earlier issues of the magazine.

Recent surveys indicate an unusually high interest on the part of *American Builder* readers in new product and equipment announcements by manufacturers and distributors. This record response to one department in one issue of the magazine double-checks with all the reports made by reader interest surveyors in the field. The February "Building Products on Review" is an annual feature.

How **Coleman** Gas Water Heaters Help PROTECT YOUR PROFIT AND HELP YOU SELL



They Are Priced To Help You Make Money, Even on "203-B-2" Houses

You give value that buyers and lenders recognize—and make money, too, when you install Coleman Automatic Gas Water heaters. See the right models for the houses you are planning, at your Coleman dealer's or distributors. Check them for value. See the features that make even low-price Coleman water heaters a *real* talking point, when you're selling a house. And—*get a quotation!* Then you'll see why so many successful builders are switching to Coleman Gas Water Heaters now.

These Coleman Features Give The Better Water Heating That Makes Customers Happy

1. 20-gallon model heats 28-gallons per hour. Larger sizes heat correspondingly fast.
2. New Coleman-designed "Blu-Arch" burner. It holds down gas bills.
3. Full Automatic Fuel and Temperature Controls.
4. Insulated top and sides with Fiberglass—it holds heat.
5. Tank tested to 300 lbs. per square inch—it's long-lived.
6. Approved by AGA—it meets all requirements.
7. Gleaming white finish—it's attractively styled.

Mail Coupon Today For Name of Your Nearest Coleman Distributor, and Details of Coleman's Builders' Co-operation Plan.

The Coleman Company, Inc., Wichita 1, Kansas

**AUTOMATIC
GAS
WATER HEATERS**

Coleman

The Coleman Company, Inc., Builders' Contract Dept. AB-692, Wichita 1, Kansas.

Please send me complete specifications on Coleman Water Heaters for fuel I have checked. Also send me name of my nearest Coleman Water Heater distributor, and details of your Builders' Cooperation Plan.

Gas LP Gas Oil

Name _____

Address _____

Town _____ State _____

FOR ECONOMY...



From the Western Pine Region

This fine general-purpose wood is now available in generous quantities. As manufactured by member mills to the high standards of the Western Pine Association, it comes to you carefully graded and well seasoned. Its cost is very attractive in these days when the market for more moderate priced homes is increasingly important.

If you are not familiar with the qualities, characteristics and uses of White Fir from the Western Pine region, ask your lumber dealer. And by all means, write for the White Fir Species Book. Factual, complete, profusely illustrated, including photographs of typical pieces of each grade. It's FREE. Write today to Western Pine Association, Dept. 30-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*

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.

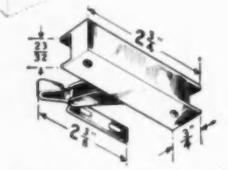


NO
MORTISING
 •
SURFACE
ATTACHMENT
CONCEALED
OPERATION

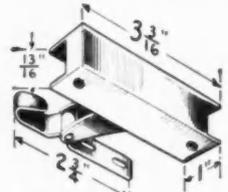
Win-Dor Snagger is a simple fool-proof spring-activated automatic closing device that works like magic on any size door. There is a properly tensioned spring housed for horizontal or vertical installation (at top, bottom or sides in cabinets and cupboards). This spring activates a lever which projects 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 a Snagger with 8 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 is required.

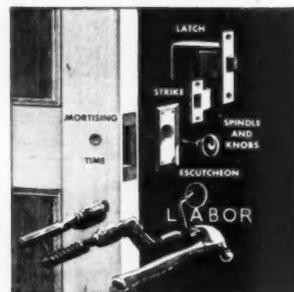
**See Your Builder's
 Hardware Dealer**



Series 47 Snagger 4 lb. pull



Series 48 Snagger 6 lb. pull

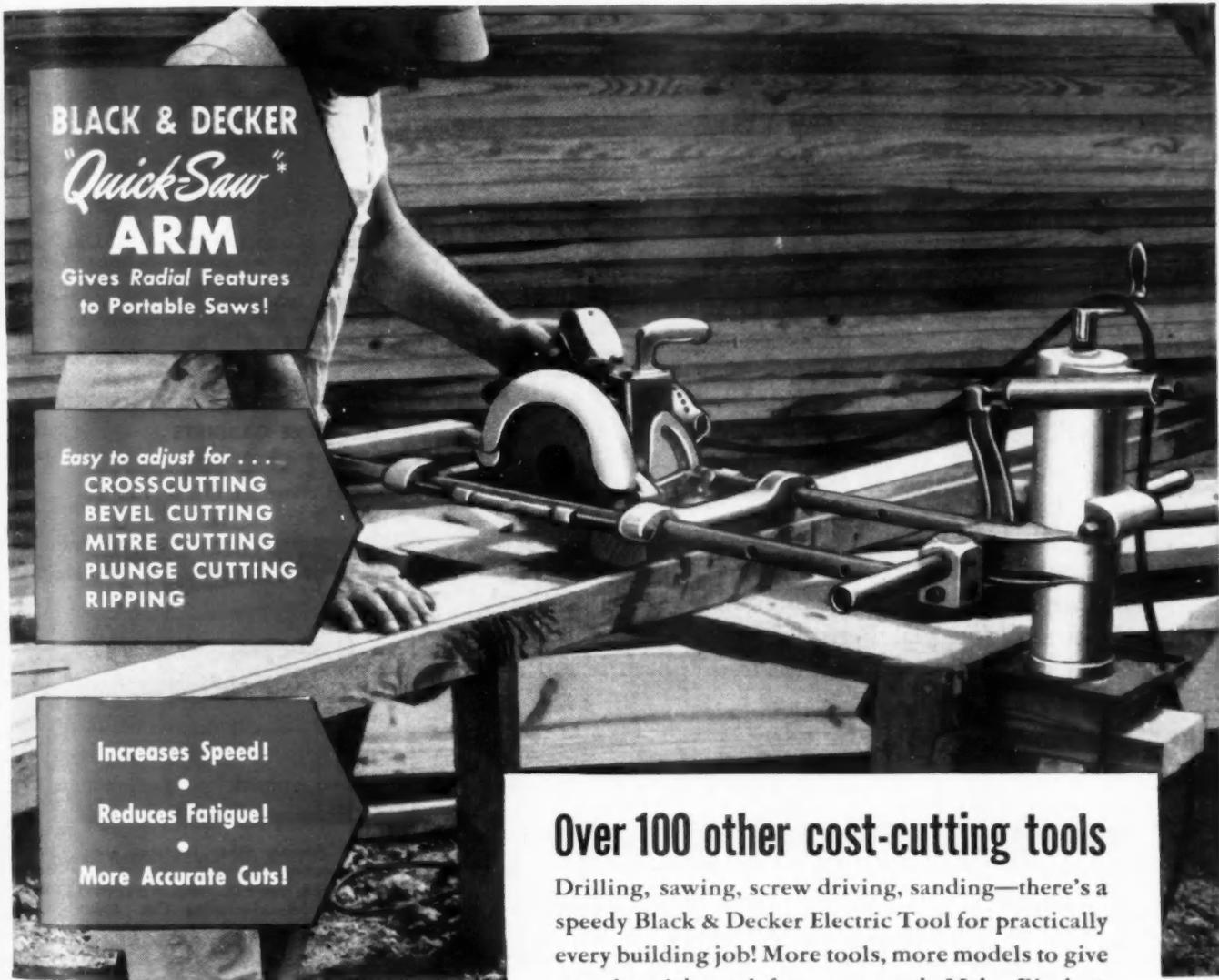


The Casement Hardware Co.
 406 NO. WOOD ST., DEPT. A, CHICAGO 22, ILL.

SAVES

- ✓ TIME
- ✓ LABOR
- ✓ MONEY

● Use a Black & Decker Quick-Saw Arm (\$148.00) to make a *positive* set-up for repeated pre-fab cutting. Use its flexibility of adjustment to make many kinds of cuts. Either way you save plenty of building time and money! All 3 B&D Electric Quick-Saws (and most other makes) fit into its carriage in a jiffy. Ask your nearby Black & Decker Distributor for a free demonstration today. Write for detailed catalog to: The Black & Decker Mfg. Co., 666 Pennsylvania Avenue, Towson 4, Maryland.



BLACK & DECKER
"Quick-Saw"
ARM
 Gives Radial Features
 to Portable Saws!

Easy to adjust for . . .
 CROSSCUTTING
 BEVEL CUTTING
 MITRE CUTTING
 PLUNGE CUTTING
 RIPPING

Increases Speed!
 •
 Reduces Fatigue!
 •
 More Accurate Cuts!

Over 100 other cost-cutting tools

Drilling, sawing, screw driving, sanding—there's a speedy Black & Decker Electric Tool for practically every building job! More tools, more models to give you the *right* tool for *every* need. Make Black & Decker your "Electric Tool Headquarters." Select your tools from the *world's most complete line!*

*Trade Mark Reg. U. S. Pat. Off.

LEADING DISTRIBUTORS  EVERYWHERE SELL

Black & Decker

PORTABLE ELECTRIC TOOLS



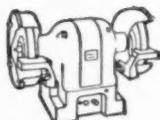
Electric Quick-Saws



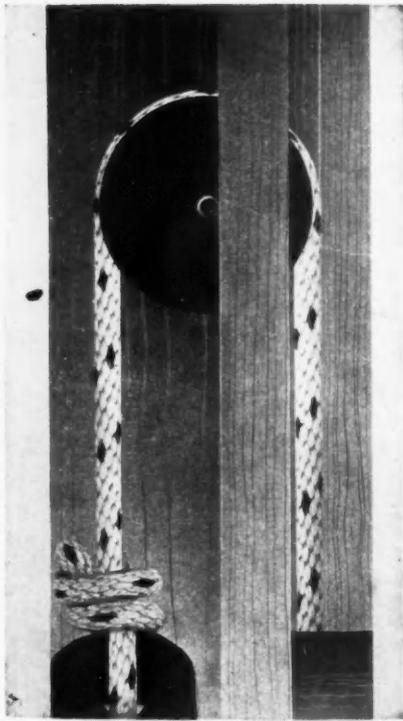
Electric Drills



Portable Sanders



Bench Grinders



®

SPOT SASH CORD

Simplicity — no other device is as simple or as permanently efficient for balancing double-hung windows as the time-tested combination of Spot Cord, pulleys and weights. Perfect and permanent balance and noiseless operation are assured. There is nothing to get out of order.

The part that takes the wear is the cord — and Spot Sash Cord will last almost indefinitely. It is made of extra quality fine cotton yarn, firmly and smoothly braided, and guaranteed free from imperfections.

Identified by our trade-mark, the Colored Spots (Reg. U.S. Pat. Off.) Send for sample card with table showing right sizes for different weights.

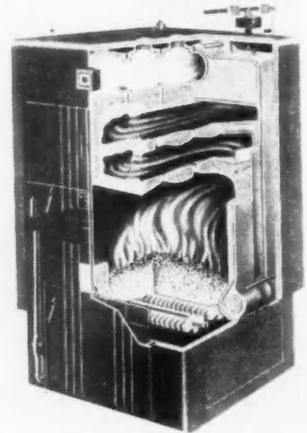


SAMSON CORDAGE WORKS
BOSTON 10, MASS.

NEW PRODUCTS

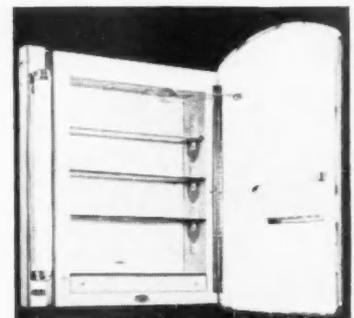
(Continued from page 148)

MEDIUM-SIZED BOILER AB5943
Crane 30 boiler, medium sized, burns coal or oil and may be fired manually or automatically. Furnished in sizes from 6 to 16 sections. Net I-B-R ratings range from a



maximum output of 180,000 B.T.U. per hour for smallest capacity to maximum of 792,000 B.T.U. per hour for the largest-capacity boiler. Incorporate corrugated multiple-pass flue design that presents maximum area to fire and hot gases; controlled water travel, multiple waterways, large fuel capacity. Crane Co., 836 S. Michigan Ave., Chicago 5, Ill.

MEDICINE CABINETS AB5940
Park Lane, Bennett Bilt cabinets equipped with fluorescent lighting, have chrome-plated brass light brackets and fluorescent bulbs 18 inches long by 1½ inches in diam-



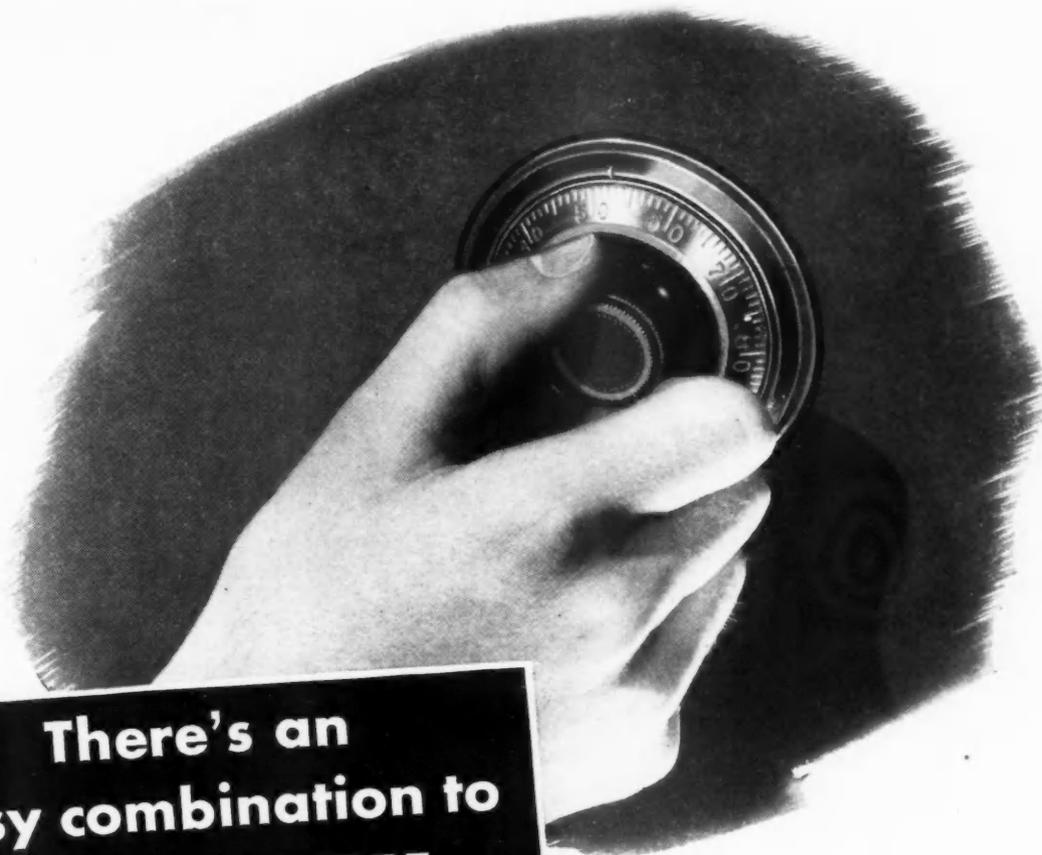
eter. Among other features are electric razor outlet, four glass shelves, all-welded one-piece cabinet, and extra thick door. Bennett Manufacturing Co., Alden, N.Y.

CEMENT SIDING FASTENER AB5927
Two-headed nail-like fastener spreads at base when driven by hammer. Named the Speed Clinch Fastener. It is used in applying asbestos cement siding to gypsum sheathing. Provides anchorage in either single or laminated sections of the sheath-



ing. Clinching action is automatic. Fastener is made of steel wire and cadmium-plated to resist corrosion. Tinnerman Products, Inc., 2035 Fulton Rd., Cleveland 13, Ohio.

(Continued to page 160)



There's an
easy combination to
**QUALITY
CONCRETE**

THERE IS A "right combination" for quality concrete on every job. It is achieved by applying methods and procedures established through years of painstaking research in the laboratory, years of practical construction experience on the job.

These simple, easy-to-follow methods and procedures are described in "*Concrete Facts for Concrete Contractors*," a non-technical free booklet answering such questions as:

How many gals. of water should go into a mix for public garage floors? (p. 9)

Can I save time—and money—by speeding up the rotation of the mixer? (p. 16)

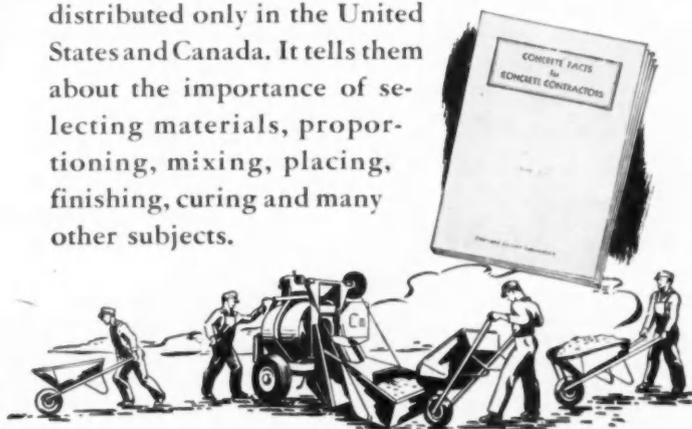
Why does vibration produce quality concrete more economically? (p. 19)

To obtain quality concrete you must know the answers to these and many other questions

covered in this booklet. Remember, delivering good concrete is just good business. A good job is your best salesman. It creates a satisfied customer, spreads your reputation as a quality builder and sells more jobs for you.

If your concrete work does not measure up to quality standards someone is failing to follow good design and construction practice. Often such failures can be traced to new men.

Should you want help in training such men, have them write for the free, 48-page, illustrated booklet, "*Concrete Facts for Concrete Contractors*," distributed only in the United States and Canada. It tells them about the importance of selecting materials, proportioning, mixing, placing, finishing, curing and many other subjects.

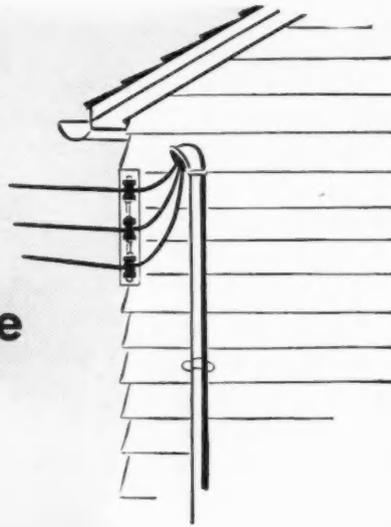


PORTLAND CEMENT ASSOCIATION

Dept. A5-3, 33 WEST GRAND AVENUE, CHICAGO 10, ILLINOIS

A national organization to improve and extend the uses of portland cement and concrete through scientific research and engineering field work

These Wires can choke electric service



**They can
choke sales,
too!**

When service entrance conductors are too few or too small they choke off what customers want—the necessary electric supply for modern living. They're apt to choke off sales, too!

In the houses you design or build, provide an adequate Electric Service Entrance, having three wires, *large enough* to bring in as much electricity as the home may need, now or in the future.

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:

- ▶ Adequate electric service entrance equipment, fed by three ample size wires;
- ▶ Enough outlets, fixed lights and switches;
- ▶ 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-5
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.....

NEW PRODUCTS

(Continued from page 158)

WATER HEATING BOILER AB5939

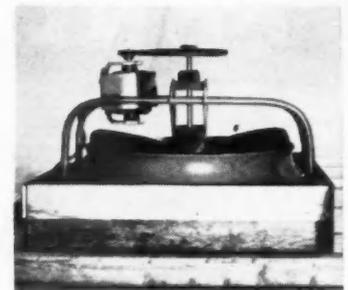
Because of compactness and provision for forced circulation, Kehm Master Boiler can be installed in basements, utility rooms, or attics. Can also be used for large jobs by zoning or cross connection. Models 100E, 125E and 150E have respective AGA rated



inputs of 100,000, 125,000 and 125,000 B.T.U.'s and outputs of 80,000, 100,000 and 120,000 B.T.U.'s. The Kehm Corp., 135 S. La Salle St., Chicago 3, Ill.

ATTIC FAN AB5941

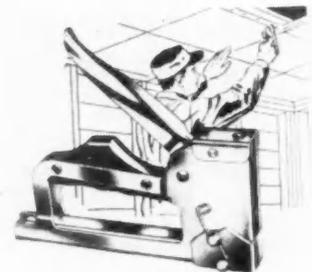
Designed especially for vertical operation in homes with low-bridge attics, the Ventura Packaged Attic Fan requires only 30 inches clearing space between blades and



attic ceiling. Can be installed without appreciable alterations. Expels warm air through attic louvers or vents. American Blower Corp., Detroit 32, Ill.

CEILING TILE TACKER AB5944

Duo-Fast staple tacker, Model CTX-850, is designed to tack up interior finishing material with tongued-joints. It is a one-hand



tacker, driving a heavy 1/2-inch staple which toes-in when driven, resulting in strong holding power. Fastener Corp., 860-902 Fletcher St., Chicago 14, Ill.

(Continued to page 164)



FOUND! a way to *lower* building costs!

The architect and builder gave costs a double-barreled jolt in remodeling this inviting restaurant. By using rugged Masonite brand hardboards, they made significant savings in both material and labor expense. And the result is quality construction that can't fail to attract new clients to their door.

The old walls were quickly transformed with smooth, handsome Panelwood, selected expressly for this purpose. For the wainscoting, the architect utilized the exciting new Masonite Leatherwood—with the feel and appearance of finely worked Spanish-grain leather. To match the wainscoting, sturdy Leatherwood panels are used also for flush doors and booths. Strong, scuff-proof, moisture-resistant Masonite Tempered

Presdwood goes around the gracefully curved counter fronts. And Masonite Temprtle, painted a spotless, enduring white, gives the kitchen walls that tile-like, hospital-clean look.

A full line of Masonite brand hardboards is available to you—one for every building purpose. These "wood-made-better" panel materials are tremendously strong and stable. Easy to work and quickly applied without fuss or muss. Take and hold almost any finish. Won't split, crack or shrink. They help you get quality construction at down-to-earth cost—every time. Available at all lumber and building supply dealers. See our 24-page Specification & Detail Book in Sweet's Architectural File. Masonite Corp., Chicago 2, Illinois.

MASONITE

PRODUCTS

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

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

GET SAMPLES!

MASONITE CORPORATION

Dept. AB-5, 111 W. Washington St., Chicago 2, Ill.

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

Name

Firm and Title

Address

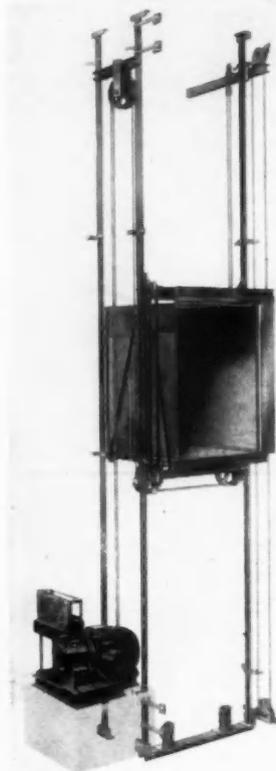
**Structural.
Reinforcing or
other Blding Steel
Shipped from Stock**

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

Joseph T. Ryerson & Son, Inc., Plants at: New York, Boston, Philadelphia,
Detroit, Cincinnati, Cleveland, Pittsburgh, Buffalo, Chicago, Milwaukee,
St. Louis, Los Angeles, San Francisco.

RYERSON

**New Electric Freight Elevator
is Self-Supporting
Inexpensive to Install**



A new self-supporting elevator has been designed to provide a low-cost, electric elevator installation for every type of business and institution that requires vertical freight transportation, but does not need heavy-duty freight elevators. It fills a long-felt need by making materials handling considerably easier and less costly for small business. The elevator is being made in three standard sizes of 1,500, 2,000 and 2,500 pounds capacity. Vertical rise is limited to 35 feet—sufficient for a three story building.

As illustrated, the elevator is installed as a complete unit in a new or existing hoistway. Only 11 feet of headroom is needed above the top floor landing. Expensive construction, such as a penthouse on top of the building for the electric motors and other operating machinery, overhead supports, roof alteration and building reinforcement, is eliminated. As the elevator supports itself, no heavy strain is placed on the building. The weight of car, load, hoist ropes and sheaves is carried by three guide rails in the hoistway and transferred to the bottom of the shaft. The elevator can be operated by any employee without special training. For complete details, write for Bulletin B-720H. Address: Otis Elevator Company, 260 11th Avenue, New York 1, N. Y.

**Premium SHEET METAL
for the Better Trade**

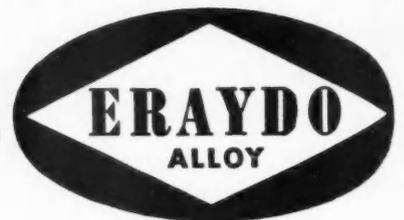
ERAYDO ALLOY is the ideal sheet metal for your customers who want a "better than average" job.

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

- | | | |
|---|--|--|
| Potts-Farrington Co.
4250 Wissahickon Ave.
Philadelphia 29, Pa. | Sheet Metal Mfg. Co.
941-953 Myrtle Ave.
Brooklyn 6, N. Y. | Wm. A. Conway, Inc.
215-19 N. Central Ave.
Baltimore 2, Md. |
| The Asbestos Distributors Corp.
390-396 Lindley St.
Bridgeport 6, Conn. | Bayonne Steel Products Co.
Clinton & Jelliff Aves.
Newark 8, N. J. | Roofers Supply Co., Ltd.
355 Guy Street
Montreal, Quebec, Canada |
| Slakey Brothers, Inc.
P. O. Box 1048
Sacramento 6, Cal. | Tanner & Company
409 S. Pennsylvania
Indianapolis, Ind. | Republic Metals
4040 W. Lake St.
Chicago 24, Ill. |



**FOR
GUTTERS
DOWNSPOUTS
VALLEYS
FLASHING
and other Sheet Metal Work**

AVAILABLE NOW!



**ILLINOIS ZINC
COMPANY**

2959 W. 47th Street, Chicago 32, Ill.
630 Fifth Ave., New York 20, N. Y.

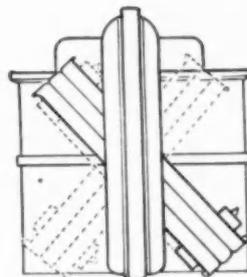
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**DELTA
MILWAUKEE**
®

Model 40A, shown, is a cabinet-base machine with a rip capacity up to 3 1/4". Also popular with builders is Delta Multiplex Model 30A with cabinet base and a rip capacity up to 2 1/4". Either machine is easy to take right to the job; two men can carry and load it on your truck. Both models are widely used for cutting foundation forms, sheathing, roofing, cabinets, doors, frames, drawers, sills, stair treads, etc.



You get this Advantage

You can get an unlimited number of saw positions, with the Delta Multiplex center-pivoted saw arm. It can be set quickly to cut any miter — either right- or left-hand — at full capacity up to 90°. The saw rotates through 360°.

DELTA® Multiplex Radial-Arm Saw

has greater capacity... so
it handles more kinds of jobs

You can get almost any cross-cutting, ripping, and mitering position, with a Delta Multiplex. The patented "Versatile Elbow" makes that quick and easy. It's a center-pivoted track that carries the cutting head and lets you put the blade at any angle. The cutting arm rotates 360°. You get 100% mitering capacity.

With a Delta-Multiplex, you cut the full length of the sliding arm—on difficult left-hand, as well as right-hand, miters from 0° to 90°. The saw blade moves through practically the center of the table. Thus, your work rests firmly on the full table — and you get full-capacity cuts.

Inspect the Multiplex models now on your Delta distributor's sales-floor. His name is listed under "Tools" in the classified section of your telephone directory. Ask him to point out the Delta Multi-

plex features that assure you of safety, speed, convenience, capacity, and economy. Also ask him about buying the Delta Multiplex on easy credit terms.

Send coupon for descriptive literature on Delta Multiplex Radial-Arm Saws having rip capacities up to 6".

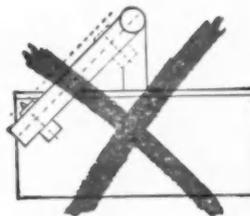
DELTA MANUFACTURING DIVISION

ROCKWELL MANUFACTURING COMPANY
MILWAUKEE 1, WISCONSIN



Model 20A — for cutting interior trim

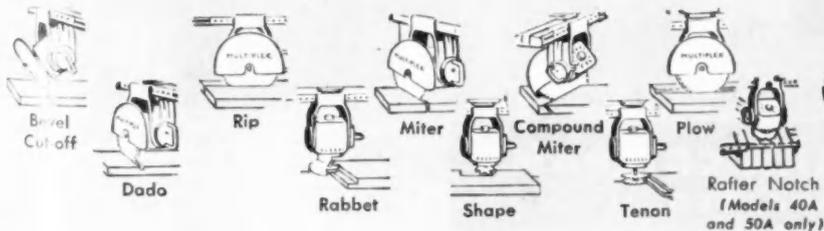
Exceptionally low in cost. Portable — can be carried easily in the back of your car. Has rip capacity up to 2".



You avoid this Limitation

Conventional radial-arm saws pivot from the column. This old way, you have practically no mitering capacity at 45°, and almost none beyond 45° on left-hand miters.

One Multiplex does all this — and more!



TEAR OUT COUPON AND MAIL TODAY!
DELTA MANUFACTURING DIVISION
714E N. Pierce St., Milwaukee 1, Wis.
Send me descriptive literature on the complete line of Delta Multiplex Radial-Arm Saws.
Name.....
Title.....
Company.....
Address.....
City..... (.....) State.....
rs-11



The Barcol OVERdoor

A good door for good homes...

WEATHERTIGHT. Special roller crank closing action moves the entire door smoothly and evenly against the stop strips in the last few inches of its downward travel, effectively sealing the opening.

EASY WORKING. Tailored twin-torsion counterbalancing springs accurately support the weight of the door, so minimum effort is required for raising or lowering. Sticking is eliminated by the fast-freeing effect of the exclusive roller crank closing action.

Barcol OVERdoors assure satisfaction ... giving long, trouble-free service because they are strongly built, ac-

curately assembled, and carefully installed by factory-trained men.

ADAPTABLE. The picture above shows a somewhat unusual installation, in that this garage has both a single width and a double width entrance. It is, however, an excellent illustration of the adaptability of Barcol OVERdoors. Suitable doors can be furnished for any design of building and for any size of opening.

ELECTRIC DOOR OPERATORS. Available for swinging, sliding, and overhead type doors, and for sliding gates. They offer the convenience and protection of switch control or the amazing Radio Control.

SEE OUR
CATALOG
IN SWEET'S

FACTORY-TRAINED SALES and SERVICE REPRESENTATIVES in PRINCIPAL CITIES



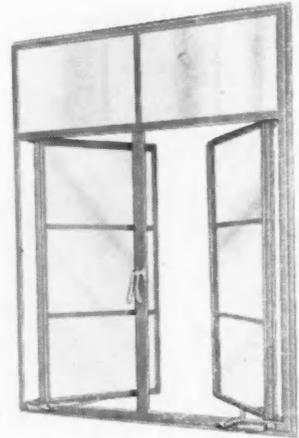
BARBER-COLMAN COMPANY
104 MILL ST. • ROCKFORD, ILLINOIS

NEW PRODUCTS

(Continued from page 160)

STEEL CASEMENT WINDOWS AB5933

Sections of billet, hot-rolled steel are used in new Copco residential windows. Hinges have supporting wrap-around leaves and offset faces. Smooth joints are provided



by flash-welded corners. Ventilators are controlled by crank mechanism. Copco Steel and Engineering Co., 14035 Grand River Ave., Detroit, Mich.

VERSATILE MOVER AB5948

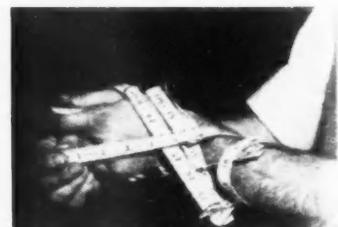
The Bell Prime Mover combines features of a motorized wheelbarrow, a 9 or 14 square-foot platform truck, and a snow plow. Bucket on unit holds 10 cubic feet of material, or 18 feet with sideboards. Mechanically dumps material by operation of



foot pedal. Equipped with a 9 square-foot steel platform, it hauls half-ton loads. Powered by enclosed engine, climbs 20 per cent grade fully loaded. Three gallons of fuel provide 8 hours' continuous service Bell Aircraft Corp., P.O. Box 1AB3, Buffalo 5, N.Y.

FOLDING RULE AB5947

Six-foot folding rule, unbreakable, is made of hardened and tempered alloy steel. Can be bent and twisted, yet will always spring



back to normal shape. Joints pivot on bearing surface of hardened steel. Rivet is enclosed and protected from wear and rubbing. Durall Tool Corp., Yonkers, N.Y.

(Continued to page 166)

ELEVEN THOUSAND SQUARES

SHELTER NEW CHICAGO DEVELOPMENT!



JOSEPH E. MERRION
J. E. Merrion and Co., Chicago

Mr. Merrion has been in the building and real estate business in the Chicago area for 25 years. His firm has built several thousand housing units. Associated with him in planning Merrionette Manor were Earl Minx, architect, and William A. Dean, landscape architect. Mr. Merrion is a former president of the National Association of Home Builders.



J. E. Merrion Chooses Asphalt Shingles for His 542 Home Merrionette Manor

The fact that J. E. Merrion and Co. know that exactly 11,382 squares of asphalt shingles were used in roofing their homes in Merrionette Manor indicates how carefully they operate. The fact that they chose asphalt shingles indicates how carefully they plan. Because asphalt roofing is construction's biggest dollar's worth.

In deciding upon asphalt roofing, Merrion measured each basic advantage—one of which is the ability of asphalt shingles to provide a harmonious variety of roof colors and patterns. Colorful, clean-lined, fire-resistant asphalt shingles fitted perfectly into the plan to create a community of homes with individuality, yet in complete harmony with each other.

Match your requirements against the advantages of asphalt shingles—beauty, low cost application, weather resistance, fire resistance, durability—and you'll find they're your best buy.

WRITE FOR THIS NEW FREE BOOKLET

"Good Application Makes a Good Roof Better" is the message of the 24-page booklet now available. For everyone interested in roofing, it's a helpful guide . . . or a reminder. Contains step-by-step information about good application practices—with diagrams. Get free copy from a member company or write direct.



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High Speed Apartment Building With

BUCYRUS-ERIE HYDROCRANE

Schroedel Construction Company, Milwaukee, Wis., used modern equipment to speed erection of 200 high quality, steel frame apartments on their Estabrook Homes project. The Bucyrus-Erie Hydrocrane played an important part in stepping up the building pace as these pictures show. Hydrocranes are available in two sizes — 1/4 yd., 2-ton H-2 and 3/8 yd., 3-ton H-3. For complete information write us today.

BUCYRUS-ERIE HYDROCRANE DIVISION
South Milwaukee, Wisconsin



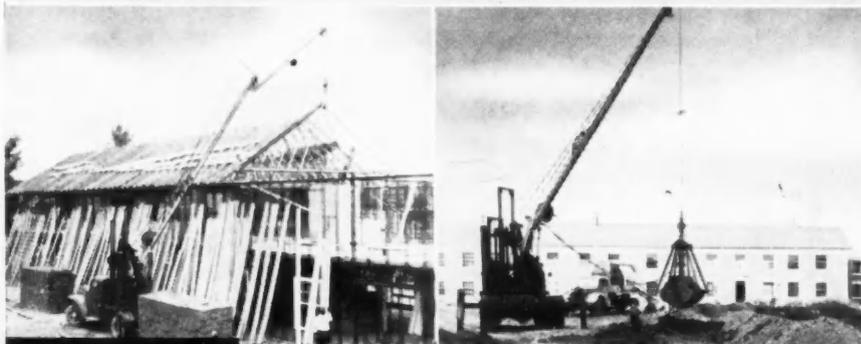
Here the Hydrocrane places steel wall frames. Full hydraulic control permits moving frames a fraction of an inch at a time if necessary—an important safety factor.



Hoisting concrete buggies is another quick, easy job for the Hydrocrane. Operation is simple — hand levers only, no foot controls.

The Hydrocrane lifted and placed these pre-assembled wooden roof trusses at the rate of 120 per day. Note how extension jib gives added reach to boom.

With hydraulic clamshell bucket the Hydrocrane digs and back fills utility trenches. Highly mobile, it travels at truck speeds — moves quickly from job to job.



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Coupon
Today to

BUCYRUS-ERIE HYDROCRANE DIVISION
SOUTH MILWAUKEE, WISCONSIN
I want the full story on the Hydrocrane.

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Company.....

Address.....

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

35H49

NEW PRODUCTS

(Continued from page 164)

FLUORESCENT LIGHTING FIXTURE AB5934

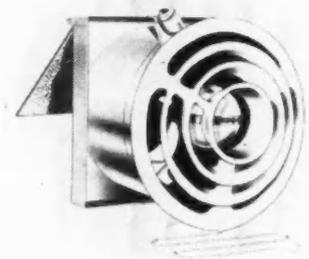
Equipped with two joining white 18-watt half-circle fluorescent tubes, the Circlarc unit provides a light circle 12 inches in diameter. Complete unit has outside diameter of 13 3/4 inches. Overall height, in-



cluding adaptor, is 6 inches. Each tube has one inch diameter. Unit has 100 watt output; bulbs, a life expectancy of 2,500 hours. National Lighting Products, Inc., 4217 Harrison St., Chicago 24, Ill.

VENTILATING FAN AB5932

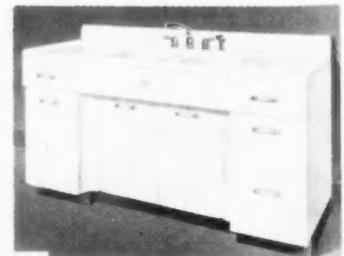
A snap-on air injector grille is a feature of the Westinghouse Poweraire Home Ventilator fan. Fan is capable of complete change of air every two minutes in average



kitchen or laundry. Has Micarta blades, insulated outside door and single pull chain control. Westinghouse Electric Corp., 653 Page Blvd., Springfield, Mass.

SINK AND CABINET UNIT AB5928

Tracy Deluxe Porcelain Unit includes a 66-inch double bowl, double drainboard sink top fitted with crumb cup strainers, and faucet with spray attachment. Steel



undersink cabinet has insulated doors and windows, concealed ventilation, and large storage space. Tracy Manufacturing Co., Pittsburgh 12, Pa.

(Continued to page 170)

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 URE
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 Steel

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INTRODUCING

The New and Improved **RUSSELL PATENTED**

"CUSHION-SEAL"

METHOD OF GLAZING

Thermopane

PICTURE WINDOWS



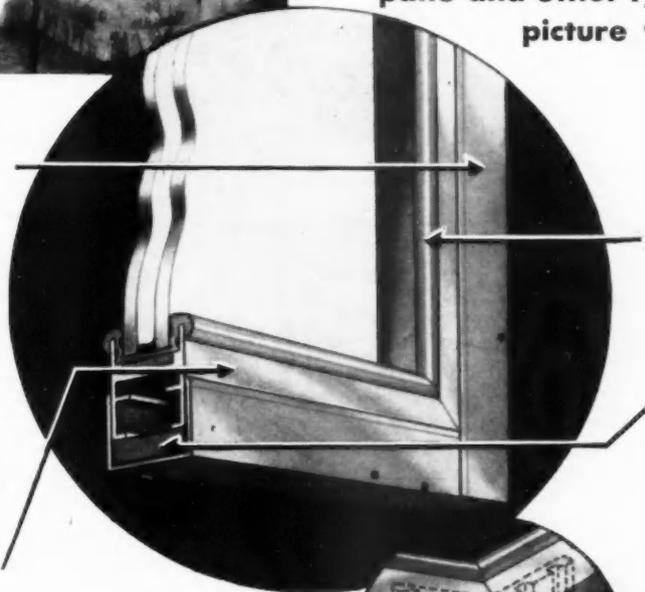
PATENTED THERMOLOK* Closure Frame eliminates expansion, contraction and settlement problems . . . permits wider use of standard stock sizes of Thermopane and other types of dual glazing for picture windows . . . simplifies installation

Patented Thermolok Closure Frame

. . . This well-known feature of the famous F. C. Russell Company combination window permits the sash to "float" within the closure frame—provides automatic and continuous adjustment for expansion, contraction and settlement—weatherproofs the entire window opening. Grips the sash securely . . . makes possible perfect installation on "out-of-line" openings. Greater use of standard sizes of picture windows is possible because the "floating" feature provides for variations of up to 1" in width and 1" in height.

Patented Extruded Aluminum Sash

. . . Unique construction provides maximum strength at minimum weight . . . provides insulating, dead-air space within the frame.

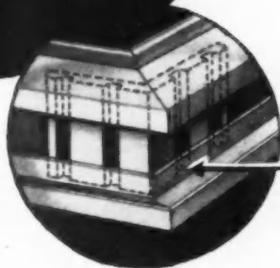


KOROSEAL Cushion . . . Acts as both insulator and shock absorber. Koroseal is molded at sides to provide for expansion and contraction through the thickness of the glass.

Compensating Spacers . . . Used at bottom only. Permit centering of sash within Thermolok Frame. Prevent settling of picture window and maintain a perfect cushioned contact between Koroseal and glass.

Beautiful, Satin-finish Aluminum . . . Harmonizes with any color scheme or architectural design; Beautifies any structure.

Rigid, "Staked" Corners . . . Corner braces are inserted and "staked" to provide maximum rigidity.



Now it is possible for you to specify or install heat-saving, comfort-giving, picture windows . . . glazed in a manner that simplifies installation . . . adds to its beauty . . . assures perfect, lasting satisfaction and performance. » See any F. C. Russell Co. distributor or write direct for details and specifications.

©TFCRC *T. M. REG. APP. FOR

THE F. C. RUSSELL COMPANY

DEPARTMENT 5-AB59 • CLEVELAND 1, OHIO

World's Largest Manufacturer of Combination Windows

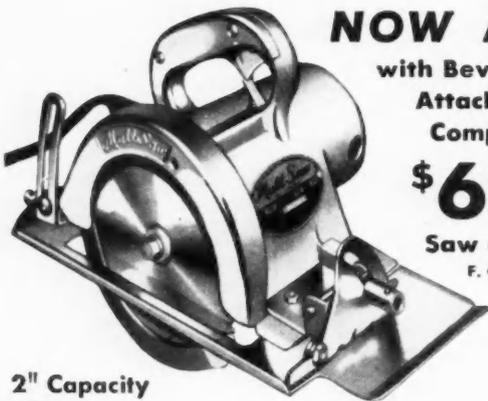


**It's Quick...
and Easy**



with a Model 60

Mall Saw
REG. U.S. PAT. OFF.



NOW Available
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Attachment
Complete

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Saw only \$54.95
F. O. B. CHICAGO

**2" Capacity
6" Blade**

A super saw value for the money that will handle most of the cutting on small house construction with speed and accuracy.

When equipped with the new demountable Mall *Depth of Cut and Bevel Cut Attachment*, the Model 60 MallSaw will cross-cut, angle-cut or rip rough or dressed lumber from 0° to 2°. It will also make 90-degree angle cuts to 1 31/32"; 45-degree bevel cuts to 1 11/32"; and minimum cuts of 5/16" at 90-degrees and 1/4" at 45-degrees. In addition, it can be used to groove mortar joints, cut metals, cut and score tile, concrete and other aggregate compositions. The No. 30487 *Depth of Cut and Bevel Cut Attachment* can be purchased separately for only \$7.00 F.O.B. Chicago.

Ask your Hardware or Power Tool Dealer for a Model 60 MallSaw with the new Mall Depth-Bevel Attachment **TODAY**. **FREE** Booklet *Mall Portable Power Tools* mailed upon request.

MALL TOOL COMPANY

7737 SOUTH CHICAGO AVENUE, CHICAGO 19, ILL.

Established 1921

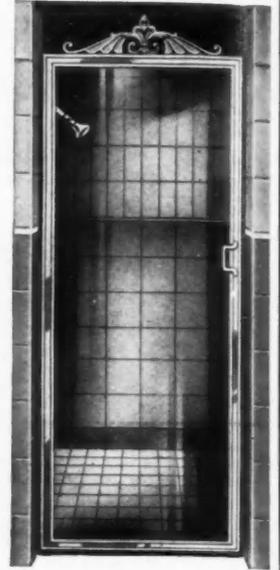
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*Add Extra Beauty
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Remember!

every cellar, at one time or another, will spring a leak if it is not properly **THOROSEAL** 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
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STANDARD DRY WALL PRODUCTS

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BUILDERS SAY:

It's Brick first

FOR PRIDE OF OWNERSHIP

To give your customers maximum pride in the work you do, *build with brick!*

Take it from the men who actually do the building—you yourselves.

In a recent nationwide survey you builders rated brick *first*, among all materials, for "pride of ownership" in both residential and non-residential building.

You gave good reasons for this. You placed brick *first* . . . for fire safety . . . for permanence . . . for beauty . . . for structural strength . . . first 10 times on a list of 12 such qualities!

But the reasons for this pride of ownership go beyond brick's many obvious structural advantages. They include, too, the warmth, the friendliness, and the feeling of security that are a part of any brick home.

For homes with all of these qualities—homes that your customers will be proud to own and you'll be proud to build—remember...BRICK FIRST.

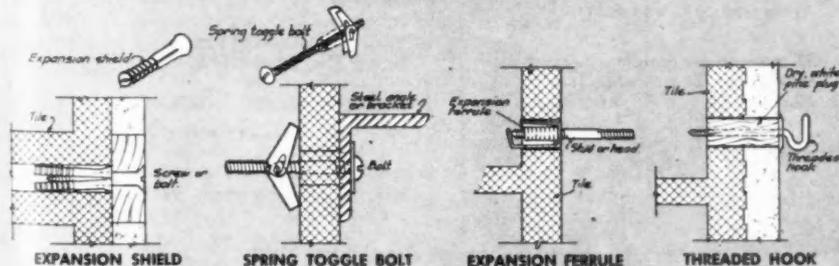


NEW PLANBOOK TO HELP YOU BUILD BETTER HOMES AT LESS COST!

Get our brand new plan book—MODERN BRICK HOMES—featuring 20 labor-saving, cost-reducing house plans engineered for economy. Here are 56 pages of home building suggestions including such interesting discussions as location of site, selection of plans, financing, interior arrangements and exterior beautification. Send 50¢ with your name and address to Dept. AB-5 at address below.

TIPS ON GOOD MASONRY PRACTICE

TYPICAL METHODS OF ATTACHING TRIM • SHELVING • FIXTURES TO STRUCTURAL CLAY TILE WALLS



Various methods of fastening furring, grounds, picture molds or other surface fixtures to structural tile walls may be used. Those methods shown at the left are used after the wall is in place. During construction wood nailing blocks or metal nailing plugs may be built in the joint. Wood nailing blocks should be of seasoned soft wood creosoted to prevent shrinkage and rot. Metal nailing plugs are recommended as providing better construction. In installing the types shown here holes may be drilled directly through the face shells of the tile with hard steel or carbide tipped drills. In some cases where softer tiles are used, as in plastered partitions, small holes may be made by the use of ordinary 1/8 inch punch and hammer.

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

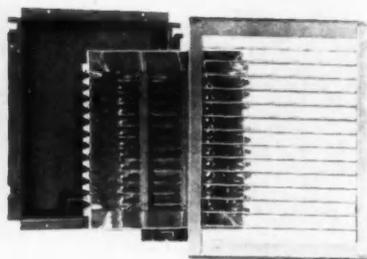
Specifications for General Electric Built-in Wall Heater

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 $\frac{5}{8}$ 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, 4507 Btu.
8. Size: 17 $\frac{3}{8}$ inches high by 13 $\frac{3}{8}$ inches wide by 4 inches deep. Wall opening, 11 $\frac{3}{4}$ 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 NN5X
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

NEW PRODUCTS

(Continued from page 166)

WATER HEATER AB5935

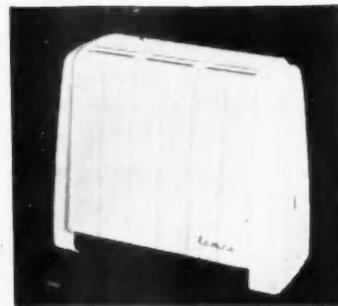
Designed to fill needs too small for larger commercial water heating units, the Smithway-Burkay Model 417 is for use in small restaurants, small apartment buildings, large homes, etc. Has over-all height of



approximately 4 feet and diameter of 18 inches. B.T.U. input is 110,000. Features include high limit control, a finned heat exchanger for immediate response to hot water needs, and "waterwall" combustion chamber of tightly wound copper coils. A. O. Smith Corp., Milwaukee, Wis.

GAS HEATERS AB5942

Cabinet styling of Temco gas heaters is designed for simplicity and compactness, incorporating Pyrex glass on fronts of radiant models. Mahogany porcelain enamel finish is not affected by heat. Unvented line is made up of three radiant

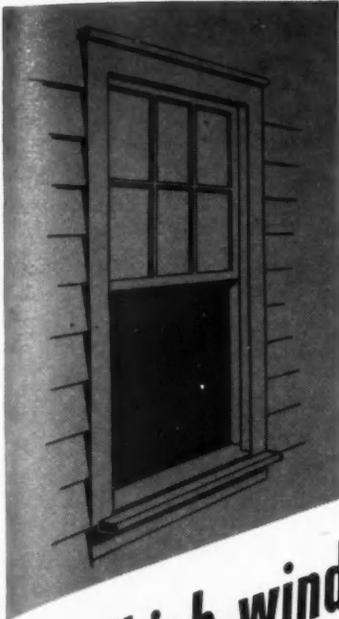


models: 12,000, 20,000 and 30,000 B.T.U. capacities. Non-radiant circulators consist of units having 20,000 and 30,000 B.T.U. ratings. One vented model is rated as 12,000 B.T.U. Tennessee Enamel Manufacturing Co., Nashville 9, Tenn.

GARAGE DOOR LOCKS AB5946

Lock-O-Matic door locks, for upward acting garage doors, are positive spring lock type. Outside handle, with center tumbler lock, is chrome plated. When locked, handle turns freely, defeating any attempt to force the lock. Two keys furnished with each set. Inside door handle is never locked. All parts made of heavy gauge, cold rolled steel with black enamel finish. Three lock types provided for pivot type door, pivot or jamb type door hardware, or for jamb type hardware. Either type is easily installed. The Tavart Co., Clearwater, Calif.

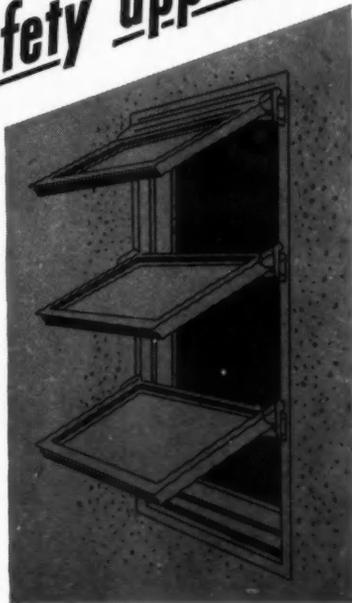
(Continued to page 174)



Today's home buyers want something better, safer, than the ordinary window.



Which window has greater safety appeal?



Gate City Awning Windows answer today's demand for a window that is safe to leave open . . . safe to wash . . . and operate!

• Open windows invite prowlers —unless they are Gate City Awning Windows. For these scientifically designed windows discourage intruders . . . provide safe ventilation night and day. They also provide safety against water damage. No danger of a sudden shower soaking floors or furniture; the tilted sash deflect the rain.

And—these windows are safe to clean. No sitting on window sills. No ladder climbing, either, when installing screens or storm sash, for these are indoors. And there's no pushing or straining to operate the sash. Just a turn of a small handle.

Your prospects will welcome this safe window . . . will be glad to pay a little extra for it. Get the facts about it today! Write to Gate City Sash & Door Co., Dept. B-5, Fort Lauderdale, Florida.

AWNING WINDOWS BY
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Your Best Jobs!



HERE ARE THE DEPENDABLE QUALITIES YOU GET IN EVERY INSTALLATION OF ROYAL OAK FLOORING:

- ★ THOROUGHLY PRE-SEASONED OAK
- ★ MACHINED TO PRECISION ACCURACY
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- ★ UNIFORM TEXTURE PROMOTES FINEST FINISH
- ★ RESPONSIBILITY OF THE MANUFACTURER

Royal Oak Flooring is sold throughout the United States by local lumber dealers and warehouses.

For further information, address:

CROSSETT LUMBER CO. CROSSETT ARKANSAS



An
Extra
Hand
For
Every
Man

**Bostitch H2 Self-Feeding Hammers
DO TWICE THE WORK
WITH HALF THE EFFORT**

See what you gain when these Bostitch Self-Feeding Hammers replace hammer and nails for putting up insulation and building paper, laying roofing, and for other light nailing jobs. Every effortless flick of the wrist places and drives home a sturdy staple (up to 1/2" long) like a two-pointed nail. The other hand is free for closer control and faster placing of the work. No fumbling nails . . . no mouth infection . . . no finger injuries. The rubber grip protects the worker's hand. Quick and easy to load. Add up all these advantages and you'll agree that you, too, can do *twice the work with half the effort* with Bostitch H2 Self-Feeding Hammers. Try them and you'll agree with a big contractor who says: "We are able to bid lower on jobs and they have made a marked increase in our volume of work."



New Hammer for Roofing. Here's the new H4 version of the popular Bostitch Self-Feeding Hammer. Drives heavy wire staples up to 3/4" long with a single blow. Cuts roofing time in half or more. Its longer reach also cuts down staging needs. Many other uses in construction work.



How to Speed up Tacking. This Bostitch T5 Gun Tacker shoots staples in . . . within 1/16" of corners, closer than any other tacker. A time-saver for applying insulation, metal lath over joints and corners . . . a cost cutter on dozens of jobs.

LOOK INTO BOSTITCH

In building, as in other industries, you'll find Bostitch stapling tools fasten better and faster at lower costs. Fill in the coupon and get the proof.

BOSTITCH — 384 Mechanic Street, Westerly, Rhode Island

Please send me complete information about the time-saving, cost-cutting uses for Bostitch machines in construction work.

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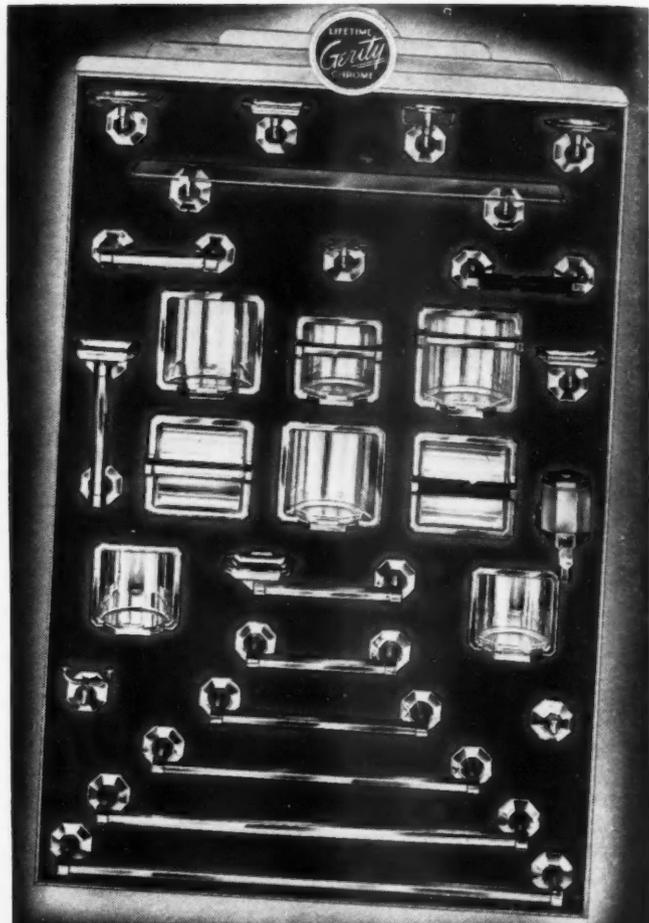
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AND FASTER
fastens it better, with wire

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**Gerity's Patented Self-Centering
Backplate Makes Installing a Cinch!**

GERITY bathroom accessories are superbly styled in brilliant chrome guaranteed not to chip, crack or tarnish. Install GERITY with confidence.

Gerity-Michigan Corporation
Adrian, Mich.

New Eagle-Picher Decorator Paints

simplify your interior painting problems



10 modern colors that harmonize with each other and with all colors in furniture, drapes, rugs

One word describes this new idea in interior paint — *simplification*. Eagle-Picher's new interior paints are *pre-harmonized* in color values . . . they simplify your interior decorating problems, color selection for your clients and tenants, application problems for painters.

First, the ten beautiful, modern colors in the line were formulated to harmonize completely with each other and with *any color* in furniture, drapes

and rugs, old or new. They're extremely popular with homeowners across the country.

Result—both redecorating and planning color schemes for new homes are simplified. You can easily plan a modern, harmonious color scheme for every room, your clients can easily select colors that will harmonize with each other *and* with their present colors in room furnishings. Eagle-Picher's interior paints come in three matching finishes—flat, semi-gloss and gloss—so the line simplifies the buying and applying of interior paints, too. They're ready-to-use, oil-base paints—of the same high quality that has made Eagle-Picher White Lead outstanding for over a century.

A complete line of paints for all interior and exterior use

Eagle-Picher Company

General Offices: Cincinnati (1), Ohio

Makers of quality painting materials since 1843



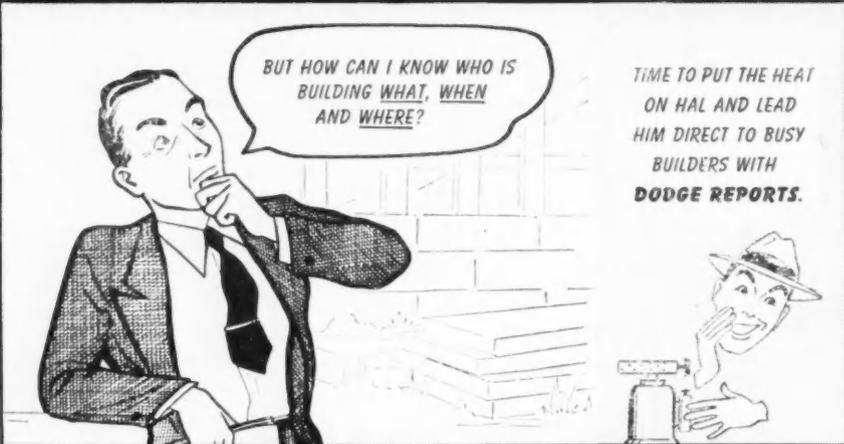
HOW HARD-WORKING HAL
SAVES MONEY
MAKES MONEY!

by
 Your Local
DODGE MAN



MIGHTY SWEET ORDERS
 FOR ME IN ALL THIS NEW
 BUILDING THAT'S
 GOING ON!

NEW CONSTRUCTION IS PROFITABLE
 BUSINESS, HAL!



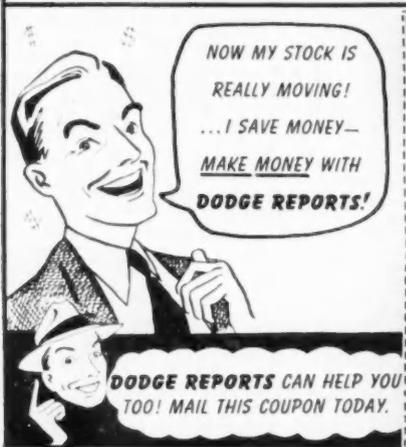
BUT HOW CAN I KNOW WHO IS
 BUILDING WHAT, WHEN
 AND WHERE?

TIME TO PUT THE HEAT
 ON HAL AND LEAD
 HIM DIRECT TO BUSY
 BUILDERS WITH
DODGE REPORTS.



WHERE HAVE I BEEN?
 ... SURE, **DODGE**
REPORTS TELL ME
 WHO NEEDS
 BUILDING SUPPLIES.

HEY HAL! YOU NEED
 ADVANCE CONSTRUCTION
 NEWS. **DODGE**
REPORTS TELL YOU
 WHO TO SEE AND WHEN
 ... AND THE COST
 IS PEANUTS!



NOW MY STOCK IS
 REALLY MOVING!
 ... I SAVE MONEY—
MAKE MONEY WITH
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DODGE REPORTS CAN HELP YOU
 TOO! MAIL THIS COUPON TODAY.

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Without cost or obligation, let me
 see some current Dodge Reports.
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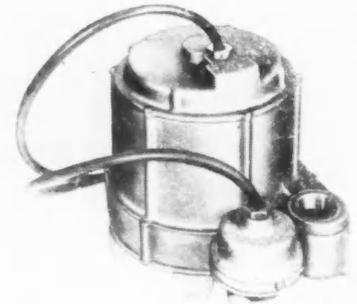
CONSTRUCTION NEWS DIVISION
 F. W. DODGE CORPORATION
 119 W. 40th Street — New York 18, N.Y.

NEW PRODUCTS

(Continued from page 170)

SUBMERGIBLE SUMP PUMP AB5930

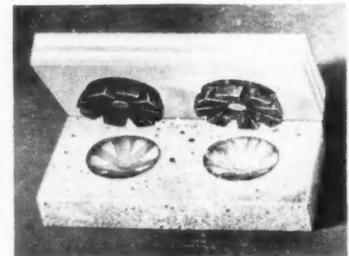
The Kenco P-109 Sump Pump is completely submergible and capable of continuous operation; pressure of rising water actuates diaphragm switch and subsequent pumping action keeps it in operation. Switch, located in discharge line, has no moving parts exposed to water. Pump is 9 1/2 inches in diameter, weighs 45 pounds. In case of



power failure, goes into operation as soon as current is restored. Powered with 1/3 HP, 115 volt AC motor, rated at 3,300 GPH at 10 feet. Will pump water to height of approximately 25 feet. Kenco Inc., Elyria, Ohio.

PLASTERING SURFACE KEYS AB5937

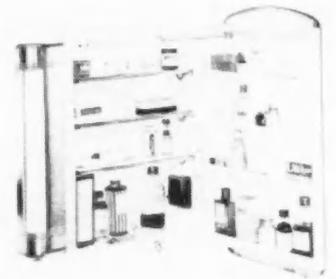
"Kifs," small, elastic button-like nobs, are nailed to wooden forms which support concrete when it is poured. When forms are removed nobs are pulled out, leaving cone-shaped cavities. When plaster is applied it squeezes into cavities, forming a



keyed, mechanical bond between concrete and plaster. Keys remain on forms, ready for re-use. Buffalo Products, Inc., 315 Babcock St., Buffalo, N.Y.

VERSATILE CABINET AB5905

"Stor-In-Door" cabinet is a convenience for powder room, shower room and for storage in linen or clothes closets. Furnished without a mirror, it becomes spice



extract cabinet in the kitchen or pantry. Surface and recessed types available. Made of one-piece seamless steel, with and without incandescent or fluorescent light. The Grote Manufacturing Co., Bellevue, Ky.

(Continued to page 178)



another **NEW**

Mueller Climatrol fuel-thrifty Furnace

... the compact Type 110 Gas-Fired
Winter Air Conditioner

Designed to meet your requirements for modern comfort in low-cost homes and multiple-dwelling housing projects

This new Mueller Climatrol Furnace is tailor-made to your current activities. Look at the list of features — everything you want for the type of building on your board today.

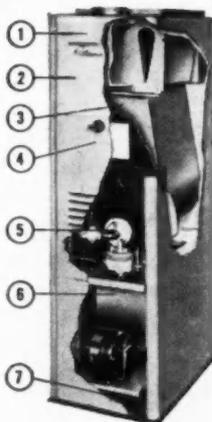
The compact design is ideal for closet installation in low-cost homes and individually-heated apartments — either in the basement or in ground-level utility rooms. The space-saving dimensions of the hi-boy cabinet and the efficient forced-air circulation are ideal for utility-room installations, and ranch-type homes. And the optional white-enamel finish matches other appliances for smart, harmonious kitchen installations.

You don't have to look beyond the complete Mueller Climatrol line for the top-grade heating that makes each of your jobs a standout success. Whether you want gas, oil, or coal — warm-air, hot-water, steam, or vapor — a Mueller Climatrol Furnace delivers *full comfort value for every fuel dollar your clients spend.*

Favor Mueller Climatrol on every job — it really pays. And Mueller's 92 years of experience backs your choice. Write for complete details . . .
L. J. Mueller Furnace Co., 2016 W. Oklahoma Ave., Milwaukee 7, Wisconsin.

special features of
New Type 110 Gas-Fired Winter Air-Conditioner

1. Beautiful Cabinet — available in handsome crinkle green, or gleaming white to match kitchen and laundry appliances. Controls are enclosed.
2. Compact Size—60,000 and 80,000 Btu input capacities in compact, deluxe hi-boy cabinet.
3. Efficient Heat Exchanger — all-welded steel, with upward air-flow over abundant heat transfer surface assured by thermodynamic design.
4. Easy Cleaning—all parts including blower, motor, controls, burner, and heat exchanger are accessible from front through easily-removed door and panel.
5. Fuel-Thrifty Burner — durable cast-iron type with individually drilled ports. Single-port air-shutter prevents clogging.
6. Quiet Blower—mounted on "live" rubber to eliminate vibration and noise. Multi-blade fan driven by continuous-duty, long-life motor.
7. Filters — mounted in base when return air is brought up from below. Side filter rack is available for return through side panels.



B-43

MUELLER
Climatrol
REG. U.S. PAT. OFF.



FOR GAS

FOR OIL

FOR COAL

**LOW INSTALLATION COSTS . .
HIGH INSULATION VALUE**



with **INSL-COTTON**
INSULATION



Insl-Cotton is from 4% to 36% more efficient than any other type of insulation on the market today — "K" factor 0.24. Only three inches of Insl-Cotton has the insulation value of a five-foot brick wall. Yet, the labor cost of installing Insl-Cotton in an open attic is only about 1/2c per square foot. Homes insulated with Insl-Cotton have greater sales appeal because comfort and fuel saving qualities are *built in* for all the years to come.



FROM HOMEOWNER, TO ARCHITECT, TO CONTRACTOR AND BUILDER, EVERYONE IS MORE SATISFIED WHEN THE INSULATION IS INSL-COTTON, AND HERE'S WHY . .

- **Lightweight** — weighs only .875 of a pound per cubic foot . . less structural strain . . less weight to handle.
- **Easy to Install** — requires no special tools, no blowers or spreaders. New labor can easily do the job.
- **Harmless to Handle** — has no shot, silica, fine glass or abrasive particles to irritate installer's skin, eyes or lungs.
- **Flame-proof** — under normal conditions, Insl-Cotton's flame-proofing lasts a lifetime.
- **Won't Sag or Settle** — expands with age and fills more closely.
- **Uniform Protection** — there are no high or low spots. Insl-Cotton gives uniform protection over every inch it insulates.
- **All New Materials** — no inferior materials or salvaged mattresses. Insl-Cotton is all new material. An excellent sound deadener.
- **Insect Repellent . . Moisture Resistant** — thoroughly cleaned and borated . . won't harbor insect life.

CERTIFIED — No other insulation except flame-proof, fire-retarding cotton insulation made under Federal supervision can make this claim. Insl-Cotton contains no second-hand material. Every lot is tested and certified to the U. S. Government. Exceeds Government requirements for FHA, FPHA, HH-I-528 specifications.

All Cotton Insulation is Not Insl-Cotton . . Insist on the Original and Genuine Insl-Cotton.

INSL-COTTON DIVISION
TAYLOR BEDDING MFG. CO., TAYLOR, TEXAS • BELTON, TEXAS
Originators of Flame-Proof, Fire-Retarding Cotton Insulation

MAIL THIS COUPON TODAY !

TAYLOR BEDDING MFG. CO., Taylor, Texas

Gentlemen:

Please send specifications and full information on Insl-Cotton

Name _____

Address _____

City and State _____

Check Here:

- Distributor Dealer Architect Building Contractor

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

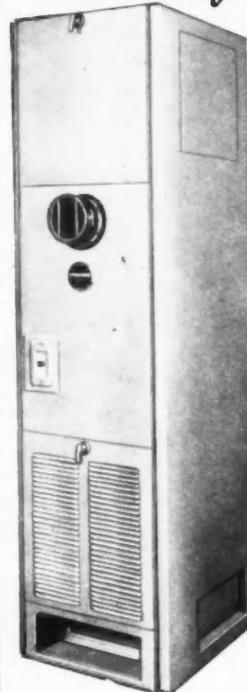
JITTERBUG SANDER COMPANY, INC.
MENOMINEE, MICH.

Write for 10-Day Free Trial Offer

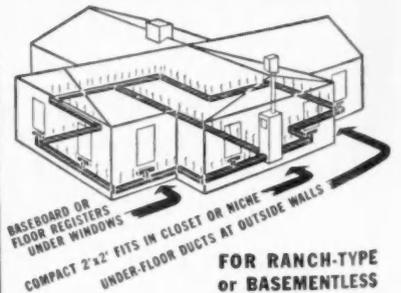


**RADIANT FLOOR PANEL HEATING plus
FILTERED CIRCULATING WARM-AIR**

*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.



...but this floor can take it!

IT'S *Koroseal**

THE WORLD'S FINEST FLOOR COVERING!



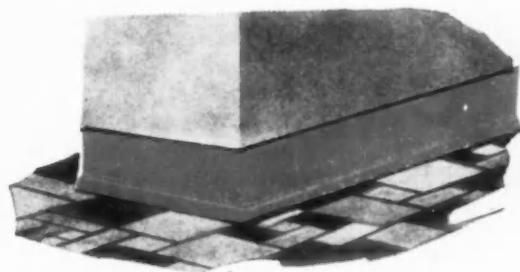
Yes, a million footsteps from now, this lovely Koroseal tile floor will be just as bright, just as lustrous, just as good as new!

Koroseal is the reason, of course! This miracle plastic is tough. It lasts 2 to 20 times longer than any other floor covering you've ever seen. It's grease and acid-resistant . . . is unaffected by soap or moisture . . . has no pores to clog with dirt or germs . . . and is easily cared for by an occasional thin wax coating!

It's colorful, too. Koroseal comes in 18 mirror-brilliant hues, and matchless Marblitone and Crystaltone designs that blend perfectly in any interior. So write today for free samples and further information about this new wonder plastic building material! It's a Sloane-Blabon exclusive.

Also ask to see samples of Cove Base and Cove Molding in Koroseal. This new building material saves time and money. Installation is quicker than wood base-board or molding, it keeps new-looking years longer, and needs no painting.

*© B. F. Goodrich Co.



For information and sample write Dept. AB-3.

SLOANE-BLABON CORPORATION
295 FIFTH AVENUE • NEW YORK 16, N. Y.

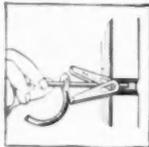




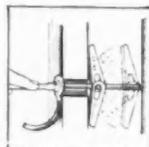
PAINE
Spring Wing
TOGGLE BOLTS
cut fastening and hanging costs

Whether you are building a new home or office or are repairing an old building you'll have no fastening problems if you use Paine Spring Wing Toggle Bolts. Spring Wing Toggle Bolts provide a secure and permanent fastening in hollow walls and ceilings and other hollow spots where it is impossible to reach the other side. They may be used in wood, gypsum, marble, lath and plaster, tile and sheet rock. They are especially useful for installing heavy shelves, partitions, wall mirrors, lights, and plumbing fixtures.

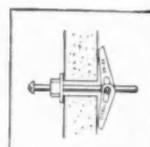
For the big user, try Paine's Toggle Bolt Clamp that grips the bolt when it is to be tightened, so it can be tightened with a screwdriver. It cuts installation time in half and saves the mechanic's fingers. Get Paine Toggle Bolts from your supplier today.



Just drill a hole. Unscrew wing. Put bolt through item to be fastened. Thread wing back on bolt. Push wing through hole.



The wing springs open when through hole. Pull on bolt while tightening to prevent wing turning.



When hanging objects that must be moved periodically, use a nut and washer as shown above.

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



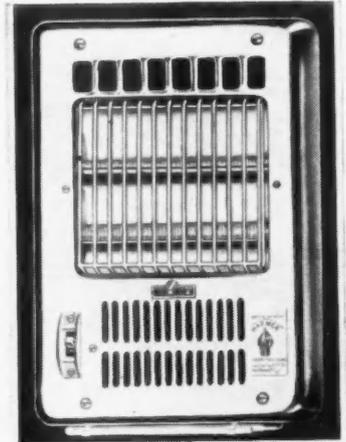
WRITE FOR CATALOG

NEW PRODUCTS

(Continued from page 174)

RECESSED WALL HEATER AB5936

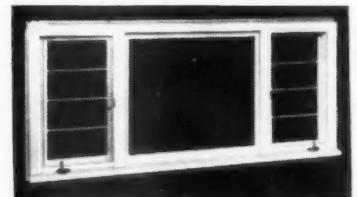
Series 230 KT of Fan-Glo Heetaires, thermostatically controlled, supplies heat both by radiation and convection. Elements providing radiant heat include tubes of refractory material which attain same heat intensity as wires which are coiled around



them. Models of heater consume from 1,250 to 3,000 watts, and operate on 120 to 240 volts; produce from 4,265 to 10,236 B.T.U.'s, according to wattage of particular model. Markel Electric Products, Inc., and La Salle Lighting Products, Inc., Buffalo, N.Y.

PICTURE WINDOW FRAME AB5929

Fully modular for masonry, veneer, frame and block construction, Malta picture windows are produced for use with either casement or double-hung side windows. Although normally designed for Thermo-



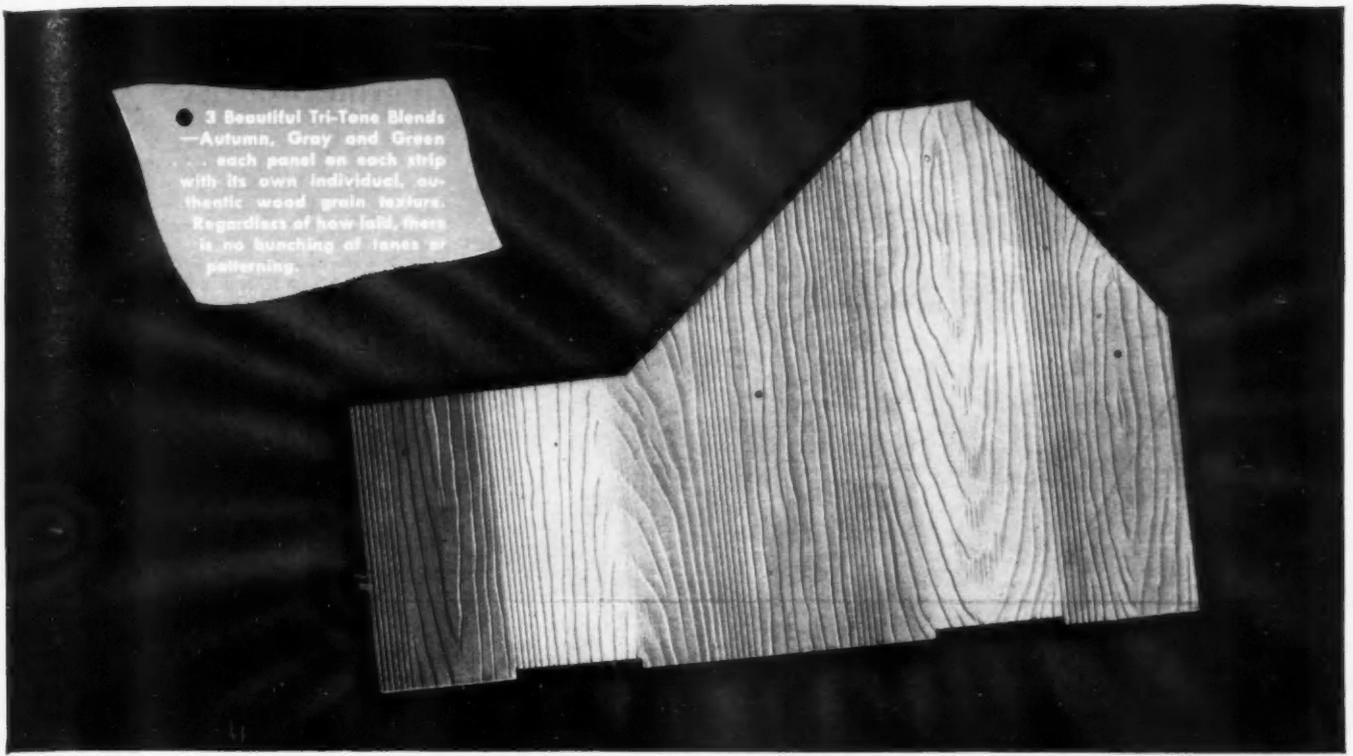
pane, plate or double-strength glass may be installed if wide stops are used. Glass may be set directly into frame where greater glass area is desired. Sash may be shop glazed. Malta Manufacturing Co., Malta, Ohio.

WATER CLOSET SEAT AB5945

Temple Model G-47 water closet seat, made of hardwood, is guaranteed against splitting, warping and cracking. White enamel finish is easy to keep clean, and will not yellow with age. Bar type hinges are solid



brass, chrome plated on nickel. Oversize rubber bumpers protect seat finish and cover. Fits all standard bowls. Seat Div., Temple Lumber Co., Pineland, Tex.



● 3 Beautiful Tri-Tone Blends
 —Autumn, Gray and Green
 ... each panel on each strip
 with its own individual, au-
 thentic wood grain texture.
 Regardless of how laid, there
 is no bunching of tones or
 patterning.

Repeat Profit Performance for You!

FAMOUS

Carey

TRI-TONE

**ASBESTOS-
 CEMENT
 SHINGLES
 ARE BACK!**

Once more you can offer your customers TRI-TONE asbestos-cement strip roofing shingles, newly designed, greatly improved! *Original* Tri-Tone Shingles were applied on thousands of roofs pre-war—and those roofs are as perfect today as the year they were applied. No wonder successful dealers urged Carey to bring back Tri-Tones!

TRI-TONES, made only by Carey, offer these unusual advantages: Full headlap for maximum weather protection . . . permanent color veneer . . . no slate granules to loosen and choke gutters . . . flat, rigid surface with no blowups in high wind areas. And add to all this—a new mechanical innovation to speed up application—nail holes placed for self-alignment!

Distinctive beauty with lifetime permanence, pleasing effect of random widths and staggered butts, easy application—and you see why TRI-TONES step up your sales. Order TRI-TONES from your Carey representative, or address Dept. AB-5A for new free literature.

The Philip Carey Manufacturing Company, Cincinnati 15, Ohio. In Canada: The Philip Carey Co., Ltd., 1557 MacKay Street, Montreal 25, P. Q.

NO. 77 TRI-TONE asbestos-cement shingles

Carey

HAR-VEY ROLLING DOOR HARDWARE

is now Completely Rustproof
--and more silent than ever!



CHAMPION quality Har-Vey Hardware has scored a permanent victory over rust, for use of new oilite bearings has made it completely rustproof. And with this new feature, Har-Vey Hardware rolls even more silently, even more smoothly than ever before!

Rolling doors save space, time and money -- equipped with Har-Vey Hardware, they are simply installed and good for a lifetime of smooth, silent rolling.

Send today for folder showing varied uses & installation details of rolling doors & complete information on Har-Vey Hardware:

Address: **Hardware Division H**

METAL PRODUCTS CORPORATION

807 N. W. 20th St. Miami, Florida



Please send me your free folder on rolling doors & Har-Vey Hardware

NAME _____

COMPANY _____

STREET _____

CITY _____ STATE _____

YOUR DEALER'S NAME _____

INCLUDE
HOME COMFORT-COOLING
IN YOUR BUILDING PLANS
CHELSEA
SPRING-MOUNTED FANS

- Easy To Install
- Certified Air Output
- Quiet in Operation
- A Quality-Built Product
- Unconditionally Guaranteed
- Complete Package Unit

TYPE EV-HORIZONTALLY MOUNTED FAN: A popular, all-in-one, package unit for attic floor installation. Includes automatic ceiling shutter, mounting accessories.

TYPE EM-VERTICALLY MOUNTED FAN: Package unit wall type comfort cooler for wall mounting. Includes automatic outside wall louvers and all mounting accessories.

Home buyers today are demanding comfort cooling as a necessary feature in the modern home. A definite asset to any builder or contractor is the statement "Comfort-Cooled by Chelsea"—makes a house easier to sell, easier to buy and better to live in!

WRITE FOR MANUAL AND CATALOG
Tells how to select and install the right Chelsea Fan for thorough, home comfort-cooling. Detailed description of how comfort-cooling works; address Department B-1.

CHELSEA FAN & BLOWER CO., INC.
1206 GROVE STREET, IRVINGTON, NEW JERSEY

"The Ole Reliable"
MARKWELL
"RB3" SCREEN TACKER
AND RB 5/16" SCREEN STAPLES
Immediate Delivery!

OTHER MARKWELL PRODUCTS NOW AVAILABLE
(CATALOG ON REQUEST)

INSULATION TACKERS — MOULDING TACKERS
SASH BAR TACKERS — BRADMASTER

MARKWELL MFG. CO., INC.
INDUSTRIAL PRODUCTS DIVISION
200 HUDSON ST. • NEW YORK 13, N. Y.

We back your

OK

SPECIFICATIONS



with our **GUARANTEE!**

Fairbanks-Morse name plate on heating equipment is a guarantee to you... and to the home owner for whom you build... of quality in design, materials and workmanship.

We share this responsibility gladly. In 119 years of diversified manufacturing, Fairbanks-Morse has enjoyed the confidence of the greatest names in business, engineering and industry; municipalities of every size; governments at home and abroad; and farmers and home owners everywhere.

Whether you plan and build one house at a time, or multiple units, write for complete information about Fairbanks-Morse furnaces, boilers, stokers, circulating pumps and other heating equipment—with specifications and recommendations for use. Mail the coupon today.



FAIRBANKS-MORSE

A name worth remembering

DIESEL LOCOMOTIVES • DIESEL ENGINES • STOKERS • SCALES • MOTORS • GENERATORS
RAILROAD MOTOR CARS and STANDPIPES • PUMPS • FARM EQUIPMENT • MAGNETOS

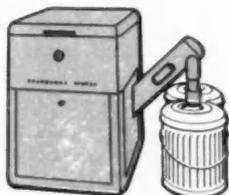
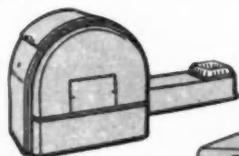
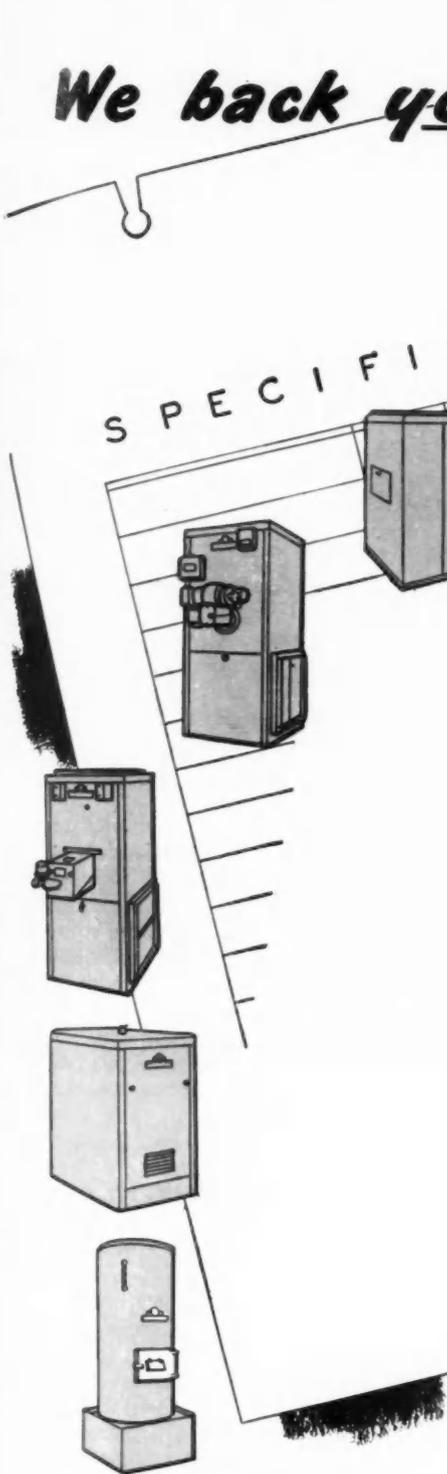
Fairbanks, Morse & Co.,
Room 707, Fairbanks-Morse Bldg.,
Chicago 5, Illinois

Please send full information about your complete line of heating equipment () furnaces only () boilers only () stokers () circulating pumps ().

Name

Address

City State



ANTED
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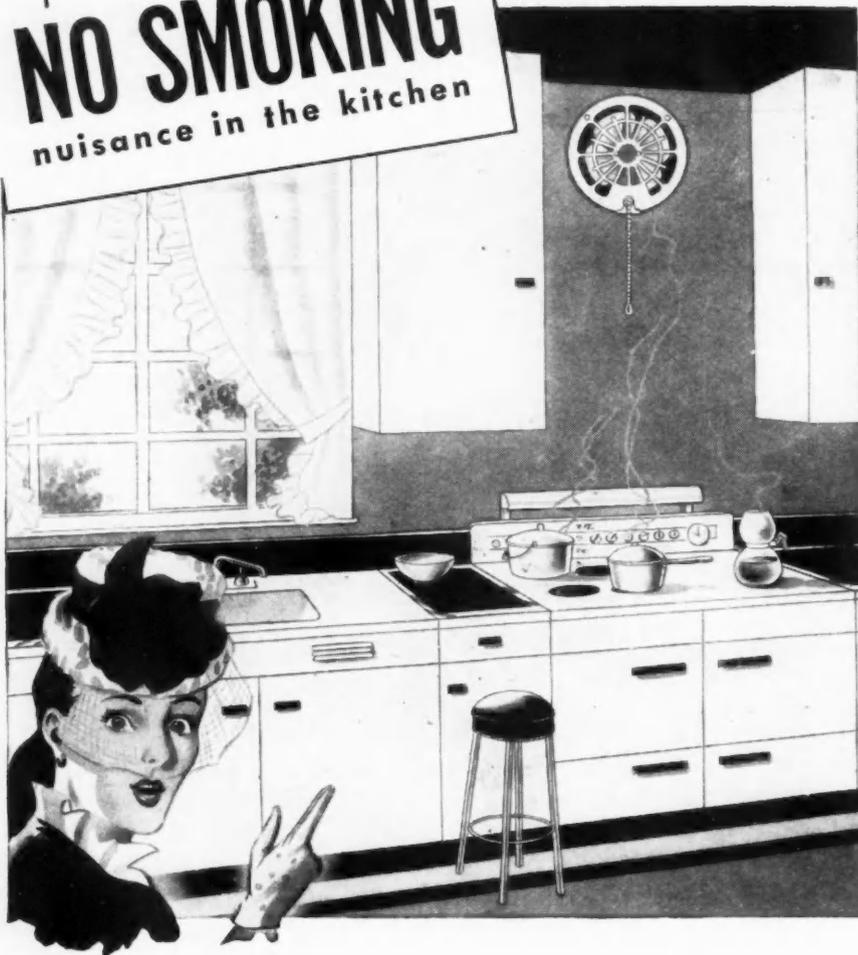
!

BLE

C.

Y.

NO SMOKING
nuisance in the kitchen



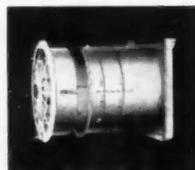
EMERSON-ELECTRIC KITCHEN FAN

... to her it's a sign
of a modern kitchen

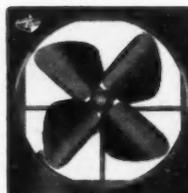
She doesn't need that sign! To every kitchen-conscious client of yours, the mere glimpse of an Emerson-Electric Kitchen Ventilating Fan is a sign . . . of thorough, modern kitchen planning. Don't underestimate *her* influence . . . or the premium she places on comfort and efficiency in the kitchen. You'll please more clients, make quicker sales, if you plan to include an Emerson-Electric Kitchen Fan in every new home or remodeling job.

Economically priced, easy to install in any construction, these sturdy fans whisk out heat and cooking odors . . . prevent spread of greasy vapors to walls and furnishings. Available for either wall or ceiling installation. For complete data, refer to Emerson-Electric Catalog in 1949 Sweet's Architectural File, or write for free Folder No. B-46.

THE EMERSON ELECTRIC MFG. CO.
St. Louis 21, Mo.



Wall-type fan is adjustable to wall thickness. Ceiling-type also available.



Emerson-Electric Attic Fans provide "sleeping-porch comfort" for the whole house! Available in 24- to 48-inch blade sizes, designed to meet any requirements. Write for Folder No. B-46.

EMERSON  **ELECTRIC**
MOTORS • FANS APPLIANCES

It Pays To Be Careful

(Continued from page 109)

group, has had wide experience in safety work in this construction field. It is handling most of the home builders' safety-insurance programs, so the activities which I cite are from direct experience.

As soon as a member comes into the program the safety engineer assigned to the association by the insurance company makes a personal inspection of that member's jobs. He discusses operations with the builder and his foreman. He then makes a written report of his findings and suggestions. This goes to the member and to the association's committee on safety and insurance.

After that first inspection periodical follow-ups are part of the routine and written reports are made each time. If a member has some special problem, such as those posed by new power tools or by the on-site assembly lines, the service of the engineer is available on request and, of course, without cost.

Accident reports and claims are carefully followed. If some job seems to be having too frequent accidents the safety man hikes himself out there to find out how come. And if that member fails to follow suggestions and continues to have too many accidents pressure can be brought to bear. In the Chicago Association the "bad boy" can be referred to the safety-insurance committee which will ask him pointedly why he fails to cooperate and thus hurts the record of the association and jeopardizes chances for reducing costs. If he still refuses to cooperate his insurance can be cancelled, which takes him out of the program entirely including participation in savings, and the case can be referred to the Association board of directors for cancellation of his membership in the Association as an operator whom the Association does not care to endorse. It has not been necessary to take these drastic steps so far; in every instance the "bad boys" have reformed, cleaned house, and cut down their accidents.

Safety clinics for job foremen and superintendents are part of the program. These are conducted by the safety engineers, and sometimes are held right on the job at the larger projects. Safety programs at general membership meetings help keep the subject alive in the builder-members' minds.

(Continued to page 188)

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



You'll Sell Houses *FASTER*

IF YOU INSTALL Westinghouse ELECTRIC WATER HEATERS

You can effect construction economies, make floor plans more flexible and attract buyers faster if your houses have Westinghouse Water Heaters.

Because they're electric, no flue is required. You can locate them anywhere—in basement, kitchen, laundry, bathroom, even in a closet or alcove. Locate them to save long pipe runs. And you don't have to make provision for fuel storage of any kind.

Electric Water Heater installations have jumped 600% in the last seven years. People

want the clean, safe, dependable and attention-free hot-water service they provide. And when they see the magic name, Westinghouse, on an Electric Water Heater, they know you are giving them the best.



Westinghouse Electric Corporation
Appliance Division—Mansfield, Ohio

Please send me a copy of your booklet, "How to Sell Houses Faster" which also contains information on the Westinghouse Water Heater.

Name _____

Address _____

City & State _____

WESTINGHOUSE ELECTRIC CORPORATION
Plants in 25 Cities • Offices Everywhere

HOW TO INVEST IN TOMORROW



Tomorrow will prove the worth of the buildings you create today . . . and the roof you specify plays a vital part in proving that worth.

A roof of Bird Master-Bilt Shingles is an investment worthy of your best building design. It is a roof that not only armors and protects; it adds inimitable beauty and texture in both design and rich color, for Bird Master-Bilt Shingles are available in a wide range of colors and blends, in more variety than is found in any other roofing material.

Bird experience since 1795 is reflected in the narrow cut-outs, the heavy shadowlines, the fire resistance, the thick-butt construction . . . the balanced composition and quality of Bird Master-Bilt Shingles. *Every* material is processed by Bird . . . that's why Master-Bilts are an investment in tomorrow: they're first quality, uniform high quality today. Write us today for full information about Master-Bilt and Master-Bilt Weather-Tex designs. Bird & Son, inc., 12 High Street, East Walpole, Massachusetts.

East Walpole, Mass.
New York



Shreveport, La.
Chicago



BIRD *Master-Bilt* SHINGLES

New houses sell faster
when builders can say . . .

**"Every Home I Build
Has a SENTRY Built-in
Wall Safe!"**



Amazingly low-priced in quantities

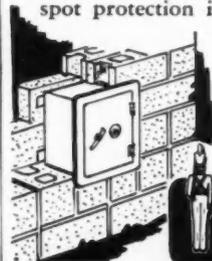
Crime wave sharpens interest of home seekers everywhere in the protection from theft as well as fire provided by Sentry built-in wall safes.

Built into masonry walls, Sentry withstands heat of blast furnace intensity. Dial ring embossed in door, combination is meddle proof. Built-in precision machined lock is welded to one-piece 12-gauge insulated door, cannot be punched.

Perfect hide-away for valuables, Sentry can't be carted off. Its on-the-spot protection is welcome relief from provoking safe deposit box restrictions.

Have Sentry for a "talking point" in every home you build. See how little it costs, how much value it adds. Write now for complete information.

15" high, 12" wide, 9 1/2" deep



BRUSH-PUNNETT CO.

SENTRY SAFES 545 West Avenue, Rochester 11, N.Y.

NOW!
*Undeniably
Superior*



**Radial
Saws**



**WITH NEW LINE 5-LIP
MOULDING CUTTER**



The CMC Radial Saw has long been famous among builders because it does *everything faster, easier, better!* Compound mitering above is just one example. **NOW**, with the new CMC line of 5-lip moulding cutters the CMC Radial Saw is *definitely tops!* Here are some of the advantages of these new CMC moulding cutters.

- SAFER—no blades to come loose!
- FASTER—five cuts per RPM!
- SIMPLIFIES SHAPING OPERATIONS.
- ONE-PIECE DESIGN ELIMINATES COMPLICATED ADJUSTMENTS.

To sharpen, grind only face of cutter as indicated above.

Write today for full details of this new money-making development in shaping!

CONSTRUCTION **M**ACHINERY **C**O'S.
WATERLOO, IOWA, U.S.A.



Mixers—Pumps—Hoists—Dumper Carts

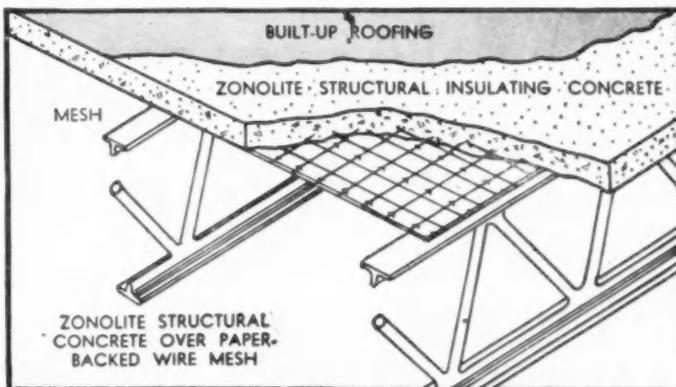
ZONOLITE* BRAND VERMICULITE

A Light-Weight Aggregate

This feather-light aggregate mixes with gypsum to form an insulating, crack-resisting, fire-retarding plaster. Mixes with cement to form a light-weight permanent insulating concrete. As a concrete or plaster, it will never burn, rot or decompose.

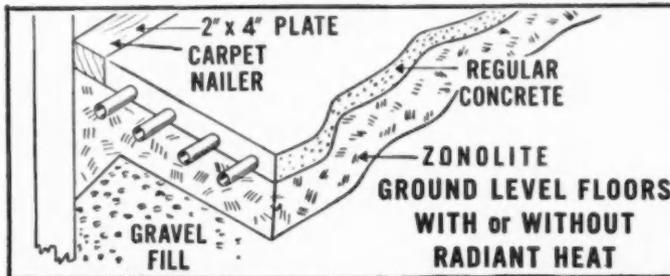
FOR ROOFS THAT INSULATE

Can be used two ways. As a *short span structural roof deck*—combines insulation and deck in one operation. Apply over paper-backed wire mesh, ribbed metal lath, gypsum or asbestos board forms. Reduces cost. As *Roof Insulation* over concrete, wood, metal, and other decks. A highly efficient, rotproof insulation that never has to be replaced.



FOR FLOORS THAT INSULATE

The old enemy to ground level floors—decay, vermin, termites—won't effect Zonolite concrete. Use concrete made of Zonolite Aggregate and Portland cement for floors of basementless houses and for commercial buildings where a warm, dry floor is demanded. Blocks condensation, prevents heat loss. Ideal base for radiant heat coils—it can be poured right on the ground.



FOR PLASTER THAT INSULATES

Plasterers lift only one-sixth the usual poundage when mixing and applying Zonolite plaster—and they do a better job. Up to four times the fire resistance of ordinary plaster. Nails won't chip it, resists cracking. Zonolite Aggregate packed in clean, easy to handle bags. Unused aggregate can be taken to next job. It's the successor to the heavy, clumsy sand pile. No wonder builders like to work with it—and no wonder homeowners appreciate what it does.

Three illustrations are shown side-by-side. The first shows a worker in a cap holding a tray of plaster. Below it, the text reads: 'LIGHTWEIGHT sticks better few droppings'. The second shows a worker using a hammer on a nail. Below it, the text reads: 'NOT BRITTLE absorbs shock and impact...'. The third shows a cracked wall with a large 'X' over it. Below it, the text reads: 'LESS SETTLEMENT eliminates source of many cracks'.

ZONOLITE COMPANY

Dept. AB-59, 135 S. LaSalle St., Chicago, Ill.

*Zonolite is the Registered Trade-Mark of Zonolite Company



FOR FULL INFORMATION MAIL THIS COUPON TODAY



ZONOLITE COMPANY, Dept. AB-59
135 S. LaSalle St., Chicago 3, Illinois

Please rush complete details about Zonolite Granular Fill,
 Zonolite Plaster, Zonolite Roofs, Zonolite Floors.

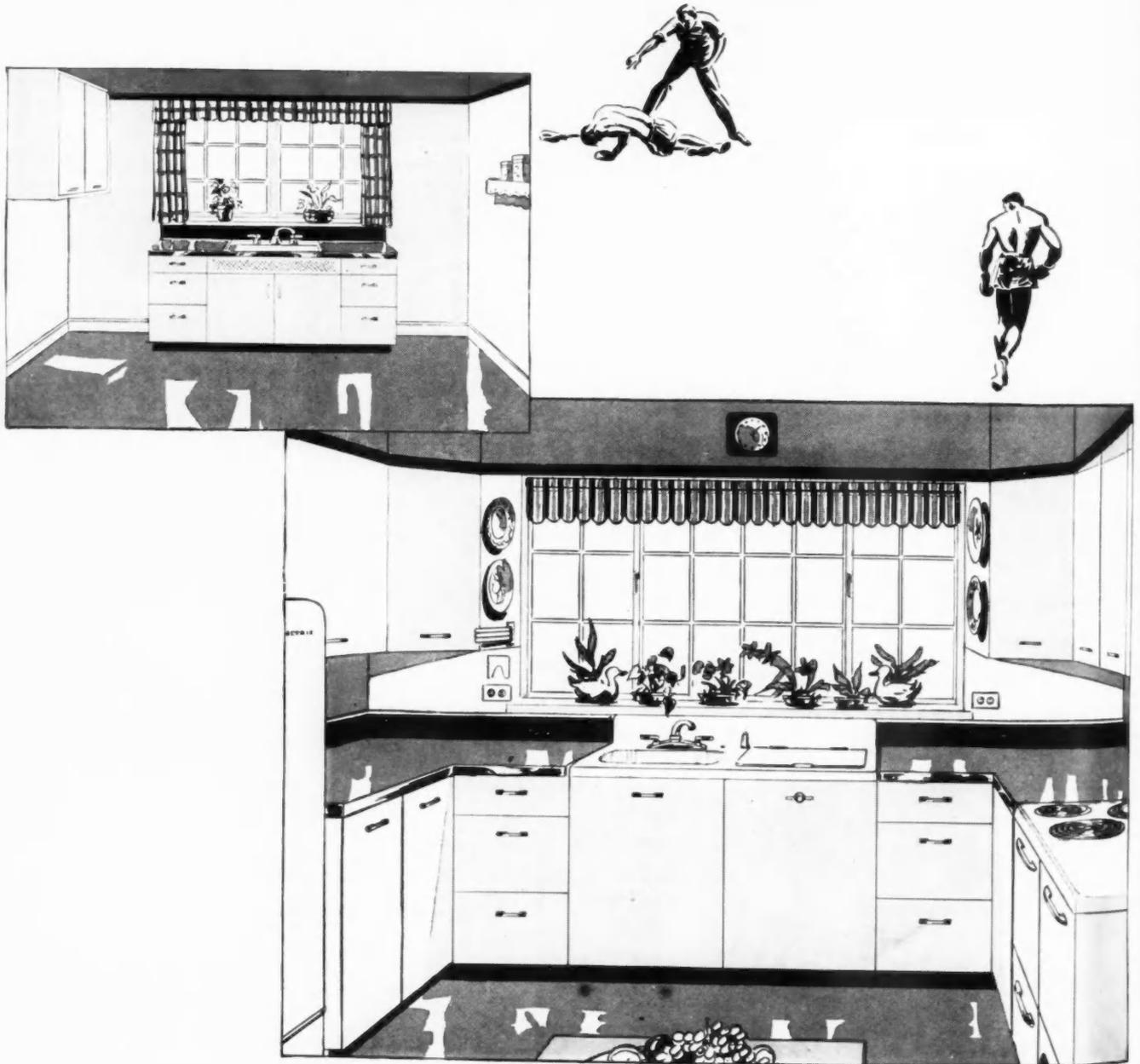
Name _____

Address _____

City _____ State _____

“General Electric Equipped” VS

WHICH SIDE ARE YOU BETTING ON?



America
Count
Count
Count
Count
Count

S "Bare-Kitchen" Houses

Bare-kitchen home building is already down for the knockout count!

Count 1: No house is truly up-to-date without a General Electric equipped kitchen-laundry!

Count 2: Thousands of home-hunters are enjoying the time-saving, worksaving, moneysaving advantages of a General Electric equipped home. Thousands more are learning to insist upon General Electric kitchens—in big and small homes!

Count 3: General Electric appliances help sell homes *faster!*

Count 4: General Electric equipped homes *stay sold!* The buyer doesn't have to load himself down with short-term payments on kitchen equipment. So he's better able to keep up payments on the house.

Count 5: General Electric equipped homes are within everybody's reach—under the "packaged mortgage" plan. The price of the kitchen-laundry is *part* of the price of the house. Paying is easier—because the cost is stretched out over *years* instead of *months*—just by adding a few extra dollars a month to the home mortgage!

Count 6: Economical General Electric appliances often help the homeowner make up this slight extra payment in operating *savings!* A wonderful extra selling point for the "packaged mortgage!"

Count 7: People prefer General Electric appliances. In a recent survey, *51 per cent of the men and 53 per cent of the women said they prefer General Electric appliances!*

Count 8: General Electric equipped kitchen-laundries in your present project will make your *next* project easier to sell!

Count 9: General Electric equipped homes *cost you nothing extra!*

Count 10: General Electric's Home Bureau can help you with planning, promotion, *selling!*

Get on the winning side

Act *today* to include General Electric equipment in the next homes and projects you build.



GENERAL ELECTRIC HOME BUREAU SUCCESS STORY OF THE MONTH

W. H. Weaver, Greensboro, N. C., builder, *always* includes General Electric equipment in his houses. He says:

"My last 187 houses were rented *prior to completion*. My tenants enjoy dependable, economical and efficient G-E appliances. *That helps rent my houses faster!*"

Make *your* next project a *fast-selling* success! Let Home Bureau help—from foundation to sales campaign!

Write to the General Electric Home Bureau, Appliance and Merchandise Department, General Electric Company, Bridgeport 2, Connecticut.

You can put your confidence in—

GENERAL  ELECTRIC

Get Luxurious, Deeper Shadows

at a fraction of
the usual cost
with



Double Coursing means low maintenance cost and a modern, attractive job

When you build or modernize with Dua-Lap Red Cedar Shingles, you achieve shadows and graceful lines in keeping with today's best architectural thought. This double coursing has double insulation value and double beauty, offers home owners double economy in maintenance.

Dua-Laps come pre-stained in eight handsome colors, can be laid with full 12" or 14" exposure over solid or spaced sheathing. Butted, squared and tapered perfectly for easier application. Specify Dua-Laps on your next job.

Write for free Dua-Lap, full-color folder and name of nearest dealer.

American

STAINED SHINGLE CO.

GENERAL OFFICES COR. SPRUCE ST. AND DENNISON AVE.

COLUMBUS 8, OHIO

It Pays To Be Careful

(Continued from page 182)

Warning posters are distributed for display on each job. In Chicago we send one of these to each member monthly. Scores of pamphlets are available from insurance company engineers, the National Safety Council and other sources. "Safety Suggestions for Construction Foremen" has been one of the most useful and popular. It lists some 71 sources of accidents on construction jobs, and can be followed up with detailed blueprints for safe construction of ladders, scaffolding, and so forth.

Also to help analyze the problem and thus learn where to put the greatest stress, the Kemper engineers made a study of the causes of 1,000 home building accidents. The results of this study were presented in chart form and sent to every member of the Chicago Association.

Home building accidents most frequently are caused by: Unsafe scaffolding—one 10-penny nail instead of three or four. Improper or insecure ladders—ladders made of 1 x 3 with 1 x 2 rungs have been seen. Unprotected openings—unfinished stairwells, excavations, and so on. Poor housekeeping—debris, loose boards with nails in them, and shaky stacking of materials. Unsafe guards on power machinery. Ignorance on the part of workmen in handling materials, especially heavy items.

Members and foremen are grateful for the suggestions. What is seen on a job depends on whose eyes are looking at it. A mortgage man looks for one thing; an insurance man looks for another; the architect sees a different angle; the carpenter sees his problems. The safety engineer will look for items none of the others see, so he does serve a very real need, and his work is appreciated. It is his job to keep abreast of new developments and ideas in his field and to make these available to the home builders' work.

In the Chicago Association we give, in addition to the savings on premium costs, an annual Safety Award. This is in recognition of those members who have had perfect safety records—that is, no accident which has caused a workman to lose one full day—during the policy year. For the policy year just past we have only one member who had more than one of these lost-time accidents, while over 75 per cent of our members

(Continued to page 196)

How to support radiant heating

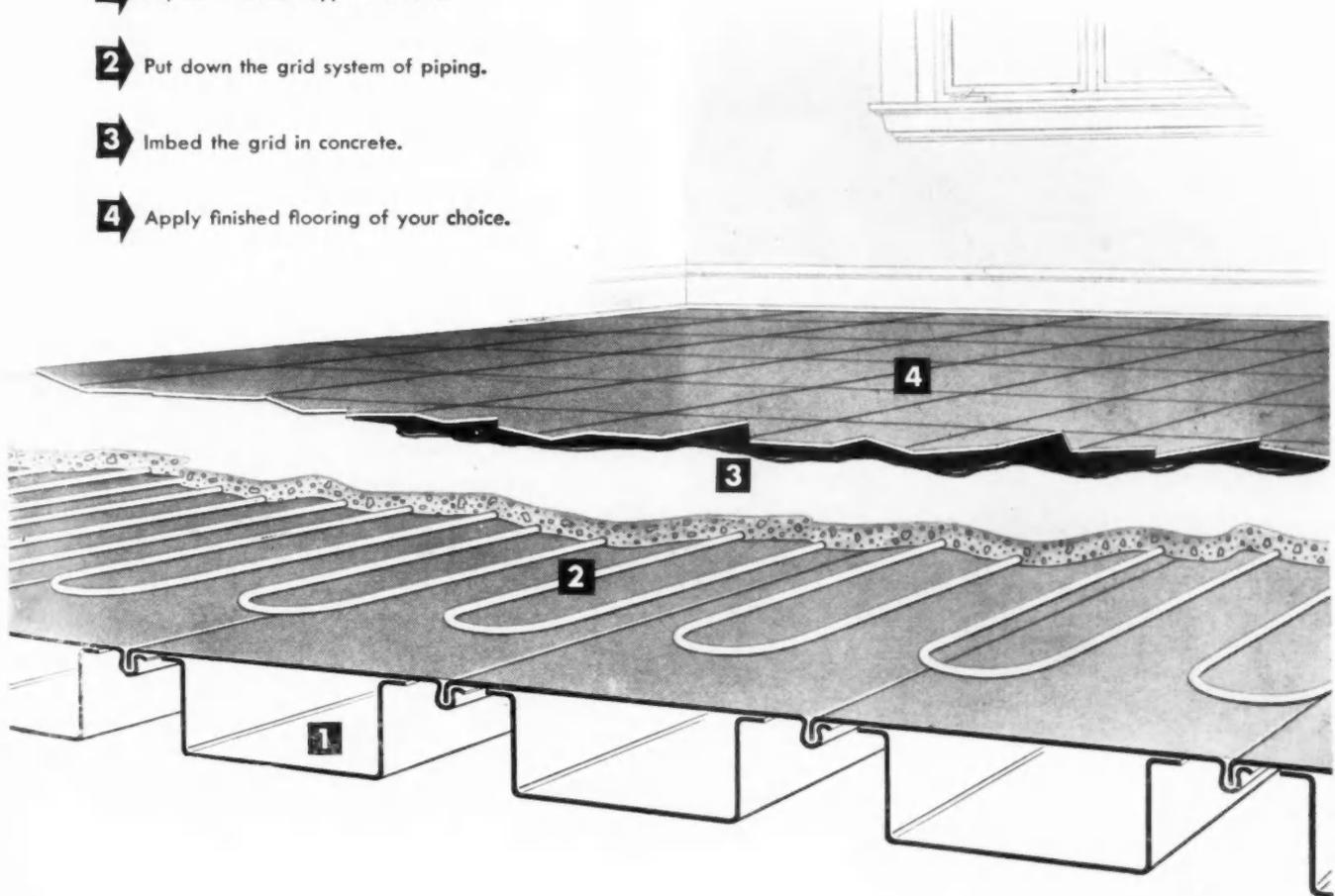
Simply...Economically

Fenestra* Building Panels combine, in one package, joists, bridging and subflooring. They lock together simply and compactly . . . without special skills or special tools. That saves time, money and costly skilled labor on job after job. It's been proven time and again in the field. For example, it took only 45 minutes for three men to lay the entire first floor for a Maryland house. Here's how to install the radiant heating:

That's radiant heating in a hurry . . . strong, attractive, noncombustible construction. A way to build better.

Fenestra Panels also are ideal for warm-air radiant heating. One of our engineering representatives will be glad to discuss the versatility of Fenestra Panels with you. For further information, please mail the coupon. Also ask about Insulated C Panels for walls, as well as famous Holorib Roof Deck. *Trademark

- 1** Lay the Fenestra Type D Panels.
- 2** Put down the grid system of piping.
- 3** Imbed the grid in concrete.
- 4** Apply finished flooring of your choice.



Fenestra
METAL BUILDING PANELS
 ROOFS • WALLS • FLOORS

DETROIT STEEL PRODUCTS COMPANY
 Building Panels Division
 Dept. AB-5, 2260 E. Grand Boulevard
 Detroit 11, Michigan

Please have an engineering representative call.

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

Name _____

Company _____

Address _____

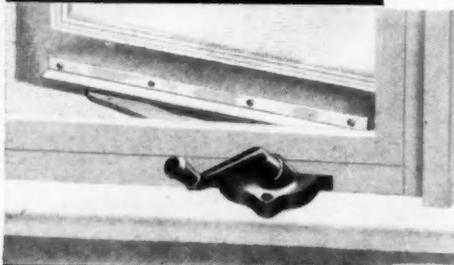
WHY



Getty Casement Operators will not **STICK, JAM, STRIP, or BEND!**
Because . . .

originated the *angle drive* operator and has specialized for more than a quarter of a century in the design and manufacture of the **BEST** Operators money can buy!

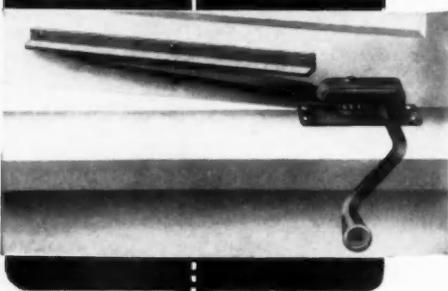
ONLY
GETTY MAKES ALL 3



GETTY
No. 4703 W
Internal Gear
Angle Drive Casement Operator



GETTY
No. 4715
ANGLE DRIVE
External Gear Casement Operator



GETTY
No. 4700
Horizontal Gear (reversible) Casement Operator

Remember- **GETTY** Operators are ALL equipped with heavy brass channel guides.
GETTY Specializes in the manufacture of casement operators...your guarantee of quality.
GETTY Operators—Best in any Case-Ment.
Write for descriptive literature.

H. S. GETTY & CO., INC.
3348 N. 10th ST., PHILADELPHIA 40, PA.

Revolutionary *New* RADIANT HEATING SYSTEM

Lower in First Cost — Lower in Operating Cost Than ANY OTHER Form of Automatic Heat

The MOST SIMPLE AND EFFECTIVE System Ever Devised

Automatically balances itself and heats ALL rooms evenly. No cold floors—no cold spots. If a cold wind is blowing on one side of the house, those rooms heat up quickly, while rooms on the sunny side do not over-heat. *Automatically* puts the heat where it is needed.

Can be installed in EXISTING buildings *without alterations*, as well as in any type of new construction.

Here is today's greatest opportunity to satisfy the demand for the modern comfort of radiant heating—at low cost.

Why put up with cold floors, air stratification, drafty, dust moving, inadequate, out-of-date systems, when you can get *Perfect Radiant Heating* in ceilings, walls and hardwood floors, at *Lower Cost?*

IT'S SENSATIONAL. Thoroughly tested through 8 years of research and proven by 300 installations. Built by Scott-Newcomb (established 1917), pioneers of automatic heat.

Write for booklet—come and see display houses in Saint Louis area.



SCOTT-NEWCOMB, Inc.
1442 South Boyle Avenue
Saint Louis, Missouri

Some Scott-Newcomb territories are now open and are being assigned. You may be eligible. Phone, wire or write today.

SALESMAN of The Month

TRUSCON PIVOTED STEEL WINDOWS

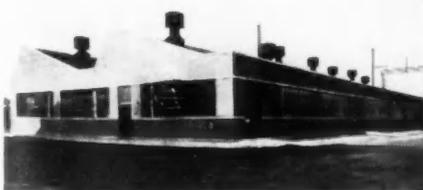
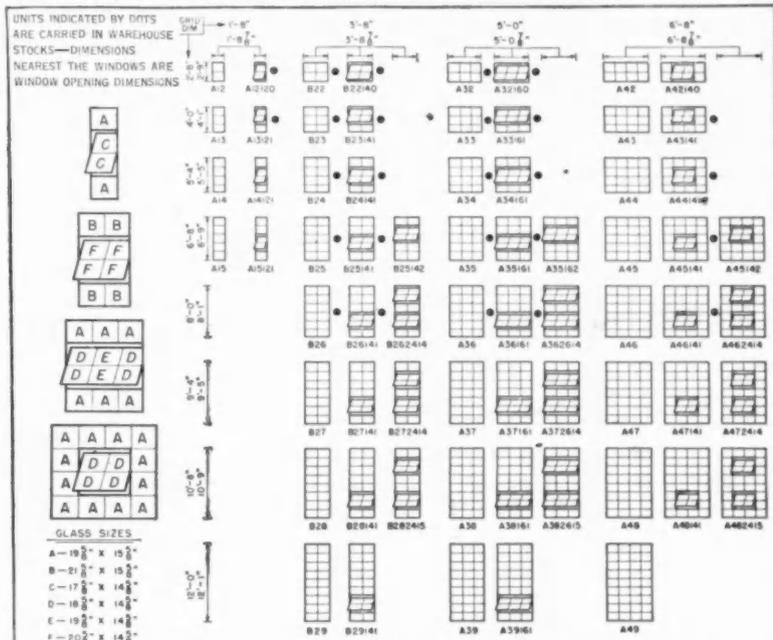
are adaptable to all types of industrial and commercial buildings



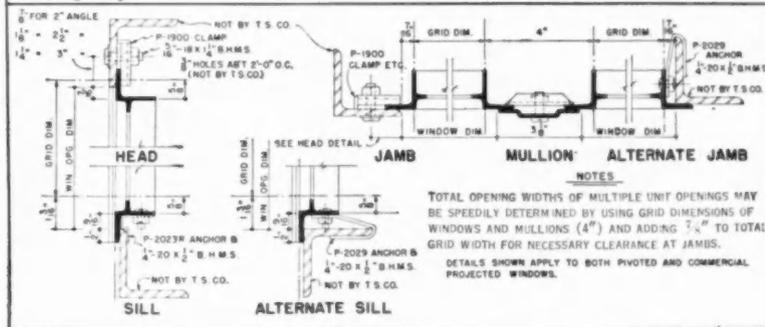
Warehouses, factory and storage buildings, garages, filling stations, and a wide range of other non-residential buildings can utilize the lighting, ventilating and economy features of these Truscon Windows. Use them in the structures you are building—they will build prestige and profits for you.

Wide Range of Types and Sizes

Truscon Pivoted Steel Windows are made of heavy, hot-rolled steel sections. The outside section is of angle shape, providing a 3/8" anchorage at the masonry or mullion connection. The intersection of the horizontal and vertical members is a dovetail mitre rigidly interlocking the bars. All muntin bars, except where ventilators occur, are continuous from head to sill and jamb to jamb. Double contact weathering is provided on all four sides of ventilator.



A typical Truscon Pivoted Steel Window installation showing the extensive lighting and ventilating possibilities of this unit.

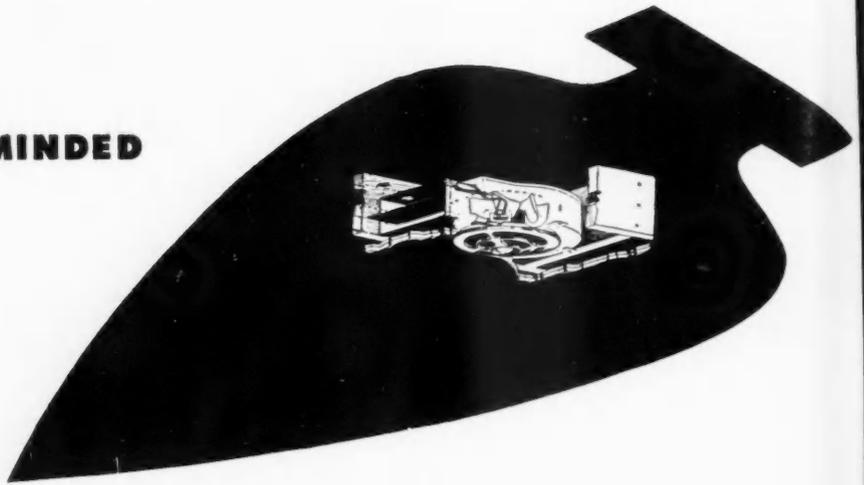


Write for free illustrated literature giving complete details of Truscon Pivoted Steel Windows, and describing the entire line of Truscon Steel Building Products. Their design and construction features can help you build prestige and profits.

TRUSCON
STEEL COMPANY
 YOUNGSTOWN 1, OHIO
 Subsidiary of Republic Steel Corporation
 Warehouses and sales offices in principal cities

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.

FOR KITCHEN-MINDED CUSTOMERS



INSTALL....

Blo-Fan

ELECTRIC CEILING VENTILATOR

The home owner is becoming increasingly critical about the kind of ventilator she gets in her new kitchen. Just "a fan" is no longer enough. Give her the best - install Blo-Fan - either in the ceiling or inside wall, directly over the range, where a fan belongs.

PRYNE & CO., INC. POMONA, CALIFORNIA • LOS ANGELES
SAN FRANCISCO • CHICAGO • NEW YORK

**How to be Sure About Costs
When You Estimate a Building Job**

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!

YOU MAY SAVE MANY TIMES ITS LOW COST IN ONE USE!

In order to get your share of profitable building contracts, you must be able to figure jobs fast and accurately. You must be sure your estimate is just right—low enough to get the job—high enough to give you a reasonable profit.

USED BY SUCCESSFUL CONTRACTORS FOR OVER 40 YEARS!

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!
THE TAMBLYN SYSTEM, 1115 So. Pearl St., A-29, DENVER, COLO.

THE TAMBLYN SYSTEM, 1115 So. Pearl St., A-29, DENVER, COLO.

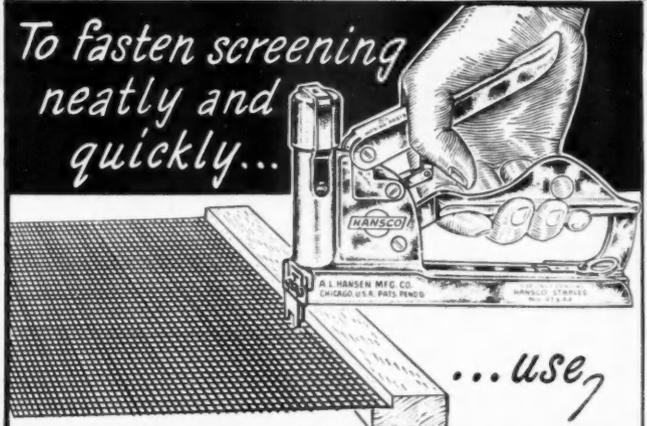
Send me the complete Tamblyn System on free 10 days trial! If I like it I will pay \$8.75 when 10 days are up and \$7.50 per month until \$38.75 is paid. Otherwise I will return it.

NAME

ADDRESS

CITY STATE

*To fasten screening
neatly and
quickly...*



HANSEN ONE-HAND TACKERS

SCREENS—stubborn, curly and difficult to hold and tack in place—are easily fastened with the HANSEN one-hand Tacker. Screen is held in place with one hand, stretched into position with prongs of Tacker, and stapled firmly to wood member. (See illustration.)

Besides screens, the Hansen tacks various types of insulation, building paper, etc. It tacks selvage strips snugly, securely in place. It leaves no pockets for air seepage. Saves time and materials.

REQUEST FOLDER



A. L. HANSEN MFG. CO.
5055 RAVENSWOOD AVE., CHICAGO 40, ILL.



Beautiful Oak Flooring as Seen with Beautiful Contemporary.

How to build home-owner praise

There's one reason for putting oak floors in the homes you build that, in its importance to you, goes beyond the obvious advantages to a home-owner of beauty, durability, and economy.

This is the special pleasure people experience from oak grain's versatility in combining perfectly with

other materials—from other woods to glass and metals, and with any motif from Victorian to modern.

Building with oak floors is bound to earn you the praise of home-owners who realize in their daily living those satisfactions you told them they would discover.

MEMO TO: Builders and Contractors
SUBJECT: Flooring FOR LOW COST HOUSING

You can now overcome the increasing sales resistance created by substitute flooring materials in low cost homes. Oak flooring, preferred by 85% of prospective home-owners, is now available in lower-priced, common grades.

Give the low cost homes you build the plus values of oak, and, at the same time, keep building costs down.

To help home-owners visualize the style and color adaptability possessed only by oak flooring, show them the new free 16-page booklet, "Planning and Decorating the most important side of a room." Send for your copies today.



NATIONAL OAK FLOORING MANUFACTURERS' ASSOCIATION
 814 STERICK BUILDING • MEMPHIS 3, TENNESSEE

ANNOUNCING THE NEW

Thon



CHECK THESE EXCLUSIVE FEATURES . . .

SAFETY-LOCK SWITCH—positive protection against accidental starting.

UNIQUE SHOCK-ABSORBER GEARING harnesses the added power of these great new saws, gives extra life to motor, gears, spindle and blade.

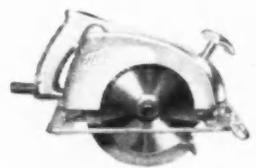
EXTRA WIDE REENFORCED STEEL SAFETY BASE for better balance—easier to handle, far safer to use.

PROTECTED DEPTH AND BEVEL SCALES. In plain sight when you use them—out of the way when you don't. Always accurate.

LONG-SHAFT TRANSVERSE MOTOR-MOUNTING transmits as much as 25% extra power, supports blade on oversize ball bearings from one side of the tool clear to the other.



Silver Line "6"
Max. Depth of Cut 2 $\frac{1}{2}$ "
45° Depth of Cut 1 $\frac{3}{8}$ "

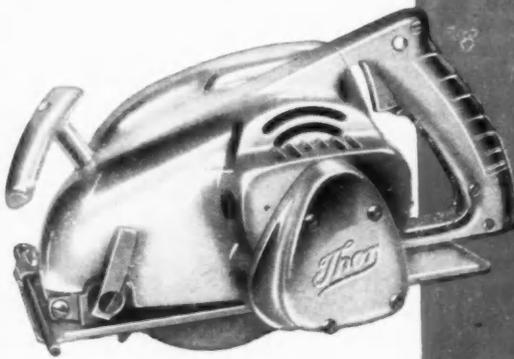


Silver Line "7"
Max. Depth of Cut 2 $\frac{1}{2}$ "
45° Depth of Cut 1 $\frac{3}{8}$ "

Silver Line SAWS

with exclusive Long-Shaft Transverse Motor Mounting
for EXTRA POWER and LONGER TOOL LIFE

PLUS...



... the most powerful motor ever used in electric saws.

... the smoothest operating automatic ball bearing blade-guard ever designed. Rubber snubber.

... die-cast aluminum housings, fully reinforced and protected to withstand rough handling.

... steel inserts for bearings and threads to maintain critical parts in permanent alignment.

... finger-tip control for depth and bevel cuts—no wrenches needed.

... convenient handles, located for perfect balance and accurate control.

... complete ball bearing construction—with larger bearings than in any saws of this type—all grease sealed or easily accessible for greasing.

... built-in sawdust blower. Blows from the inside—out! Keeps cutting line clear, protects motor from dust.

... giant switches—size for size, the largest ever built into saws. Endless performance.

... steel rip guide, adjustable for any thickness of material being cut.

Ready now—after two years of laboratory and field tests. See the great new Silver Line Saws at your nearby Thor distributor.

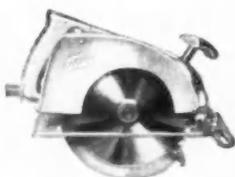
INDEPENDENT PNEUMATIC TOOL COMPANY

Aurora, Illinois

Export Division, 330 West 42nd Street, New York 18, N.Y.

Birmingham	Boston	Buffalo	Chicago	Cincinnati	Cleveland	Denver	Detroit	Houston
Los Angeles	Milwaukee	New York	New York	Philadelphia	Pittsburgh	St. Louis	St. Paul	St. Paul
Salt Lake City	Seattle	San Francisco		Toronto, Canada		Sao Paulo, Brazil		London, England

Thor PORTABLE POWER TOOLS



Silver Line "8"
Max. Depth of Cut... 2 1/4"
45° Depth of Cut... 2 1/2"



Silver Line "9"
Max. Depth of Cut... 3 1/2"
45° Depth of Cut... 2 3/4"

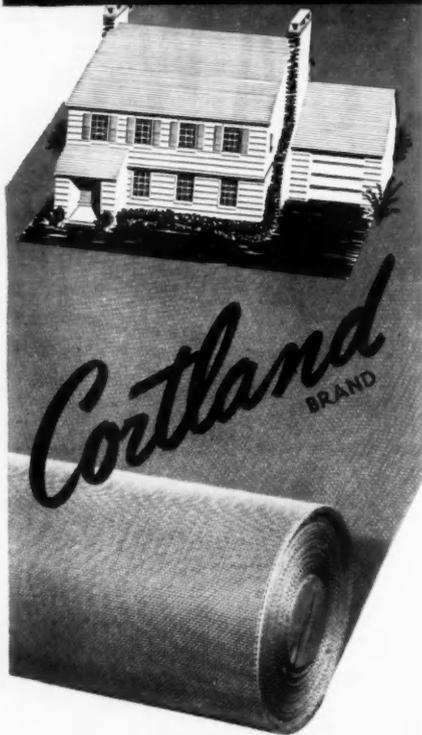


Silver Line "10"
Max. Depth of Cut... 3 3/4"
45° Depth of Cut... 2 3/4"



Silver Line "12"
Max. Depth of Cut... 4 1/4"
45° Depth of Cut... 3 1/4"

FOR LASTING PROTECTION



INSECT WIRE SCREENING

There is no screening like wire screening for lasting protection in window, door, and porch screens. Cortland Brand wire screening keeps the pests out and gives years of dependable service. Wire screening will not burn or sag; takes a minimum of tacking for a smooth, tight job; and it gives added security to windows left unlocked.

Cortland Brand wire screening has been tested under all conditions since 1873. For sure satisfaction specify Cortland Brand insect wire screening whenever you install new or replace old screens. There is a Cortland Brand wire screening for every purpose made to full compliance with U. S. Bureau of Standards specifications for steel, bronze, and aluminum wire:

Cortland Gray Wick - Popular all-purpose grade steel wire, electro-coated and enameled against corrosion.

Cortland Bronze - Special alloy wire, rustless, and not affected by salt air, acids, or gases.

Cortland Aluminum - Lightweight Alclad aluminum wire can't rust or stain.

Wire - Poultry Netting - Nails - Wire Screening

WB

Cortland
BRAND

Wickwire Brothers, Inc., Cortland, N.Y.

It Pays To Be Careful

(Continued from page 188)

have perfect records and will receive the awards. Also, some half dozen are entitled to special awards for two and three years without a lost-time accident. The Association is proud of this showing. The members are enthusiastic about it and the reduction it means in their costs. The newspapers and trade papers find it a good news and feature story. It is concrete evidence of the value and efficacy of the program and the work of our safety engineers.

The work of the safety engineer is specific and direct. But I have found it also beneficial to consult the National Safety Council officials. This organization is deeply interested in the problems of the home building field. It is recognized that our problems are not identical with those of any other industry. For one thing the construction of homes employs at least twenty trades and crafts. Few home builders maintain their own crews for all of the construction operations which go into a job. And even in those associations whose rolls are open to subcontractors it is not logical to hope that all will be brought into membership. We are not an integrated, vertically organized industry from surveyor to roofer.

It does seem, however, that each of the trades which are concerned could profitably conduct an accident prevention program to augment that which is available to them through membership in a home builders' association. This could be done through either the respective unions or through the various trade associations. Possibly it is a function of the home builders' associations to take the leadership in such a movement.

In any event the safety-insurance programs already in operation by local home builders' associations have proved their value on the thesis that "It pays to be careful together."

Flanders to Assist HHFA

WILLIAM D. FLANDERS of the Fred F. French Investment Co., Inc., New York City, will join the Housing and Home Finance Agency on a part-time basis to assist in the development of the Economy Housing program, it has been announced by HHFA Administrator Raymond M. Foley.

Flanders has assisted the government in its housing programs on two previous occasions.

Ponderosa Pine Elects T. L. O'Gara President

T. L. O'GARA of Weyerhaeuser Sales Co. was elected president of Ponderosa Pine Woodwork at the annual meeting held recently in Chicago. Arthur Hansen of Huttig Manufacturing Co. was elected vice president.



T. L. O'GARA

Fred E. Bissell, Jr., of Carr, Adams & Collier Co., was elected secretary and Arthur H. Mohring of Edward Hines Lumber Co. was elected Treasurer. E. W. Ruddick was re-elected general manager.

Among the speakers at the meeting were Frank Stevens, retiring president; E. G. Gavin, editor of *American Builder*, and Erle Racey of the Southern Sash and Door Jobbers Association.

SPECIAL REDUCTION...

ACE-KUTTER

Asbestos Siding
and Shingle
Cutter



ALL PRICES
C.O.D.
F.O.B. FACTORY
FORT WORTH

PATENT PENDING

LIST PRICE

Special price to dealers
in dozen lots . . .
40% off

\$8.95

FORMERLY \$11.95

All steel • 3" x 3/2" x 22" • Weighs less than 4 lbs. This reduction is made possible through amortization of original dies.

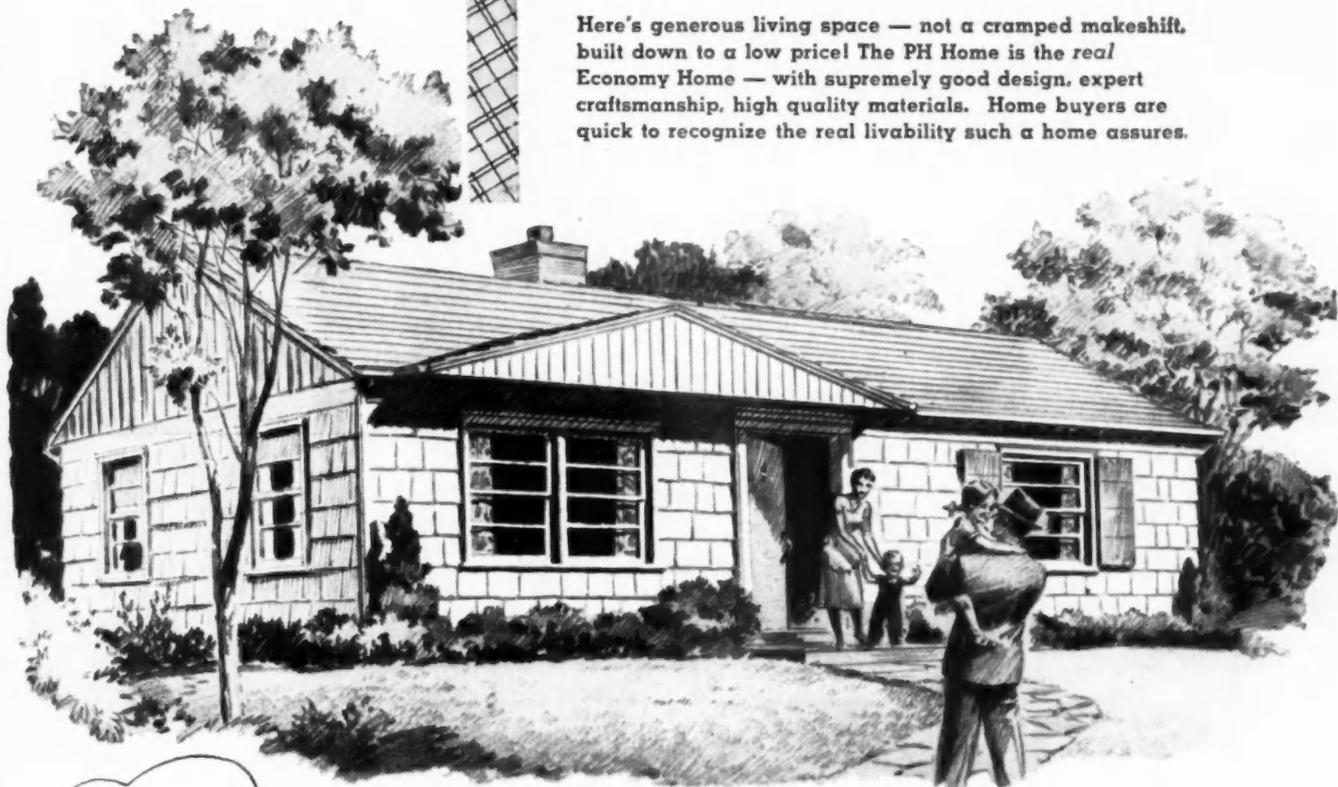
MAIL YOUR ORDER TODAY TO

**TRI-STATES
BUILDING MATERIALS CO.**

Dept. D, P.O. Box 1476
FORT WORTH 1, TEXAS

the **REAL** economy home

Here's generous living space — not a cramped makeshift, built down to a low price! The PH Home is the *real* Economy Home — with supremely good design, expert craftsmanship, high quality materials. Home buyers are quick to recognize the real livability such a home assures.



YOUR KEY to BIGGER PROFITS IN '49!

Look at These Profit Features

- ✓ Full size — 24 ft. wide x 32 ft. long
- ✓ Large living room — 11' 7" x 17' 4"
- ✓ Joint-free, crackproof walls
- ✓ Choice of 2 or 3 bedrooms
- ✓ Flush doors throughout
- ✓ Built with or without basement
- ✓ Choice of heating equipment
- ✓ Highly rated for F.H.A. financing

1949 is the *low-cost housing year!* The PH Home is "made to order" for this market. It achieves low cost — not by sacrificing desirable selling features — but through modern production methods which make the most effective use of time, labor and materials. Here is the Economy Home you can sell with confidence and enhance your reputation as a builder.

Saves Erection Time and Cost

P&H Homes come to you from the factory 83% complete — with finished walls and complete insulation. Only 169 man-hours or less are required to erect these soundly constructed homes. Your money is tied up for shorter periods.

For a profitable building year in 1949, get in touch with us immediately.



P & H HOMES
301 Spring Street
Port Washington, Wis.



HARNISCHFEGER CORPORATION
EXCAVATORS - ELECTRIC CRANES - ARC WELDERS - HOISTS - WELDING ELECTRODES - MOTORS

Hidalift

the 100% concealed sash balance

Now Available with either

Hidalift CUP TYPE attaching bracket

Hidalift "L" TYPE hinged bracket

Now you can get all of the advantages of Hidalift — the modern, 100% concealed sash balance — with the type of attaching bracket best suited to your own requirements. The new "L" type hinged bracket can be installed or removed with sash in frame. However, on installations with sash removed from frame you can use the cup type which eliminates rabbeting on bottom rail of lower sash necessary to receive "L" type hinged bracket. Either type can be adjusted without removing from sash. Mail coupon for complete information, or samples of Hidalift.

SEE OUR CATALOG IN SWEET'S

1848 T&S TORRINGTON 1949

Starting Our Second Century

HIDALIFT DIVISION, THE TURNER & SEYMOUR MFG. CO. TORRINGTON, CONNECTICUT

Gentlemen:

Send complete literature and prices on Hidalift

Send sample. Cup type "L" type

Send name of nearest distributor

Name.....

Address.....

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

WHY *Bennett Bilt* FLUORESCENT LIGHTED MEDICINE CABINETS

Cost Less

PARK LANE

Complete Bennett Bilt Fluorescent Lighted Medicine Cabinets cost less to buy and install than separate electrical wall fixtures and cabinets of equal quality. These cabinets increase the attractiveness of modern rooms by providing a more finished, self-contained, compact installation.

Nothing has been overlooked for convenience and quality. No other medicine cabinet has all 18 built-in premium features. That's why you should specify and buy Bennett Bilt Fluorescent Lighted Medicine Cabinets. It costs you nothing for the fully-illustrated complete line catalog... it may mean many dollars to you. Write today.

CANTERBURY

THE BENNETT MANUFACTURING CO., ALDEN, N. Y.
CUSTOM METAL CRAFTSMEN SINCE 1906

SECURITY

PRIVACY

GOOD LOOKS

LOW PRICE

all 4 IN La Belle Doorknob Lock

Widen your markets with this new hardware staple that ends the need for lockplates and old-fashioned key-holes. The compact, attractively styled LaBelle, with a tumbler cylinder lock built into its outer knob, is non-jamming and spins like a bearing when locked. You can easily sell it for outside and inside doors of new building or remodeling projects — homes, schools, apartments and government jobs.

SPECIAL . . .
With your initial shipment of one dozen La-Belle Doorknob Locks, you will receive, at no extra charge, a "use-it-yourself" display to help you sell. Order from your jobber or write direct.

La Belle Industries, Inc.
OCONOMOWOC, WISCONSIN



Builders:
 let us prove that
 you can **PROFIT** by using
YOUNGSTOWN KITCHENS

BUILDERS all over the country have discovered that it pays to talk to a Youngstown Kitchen representative when selecting their kitchens. They've found *dollars-and-cents advantage* in using the famous Youngstown Kitchens of white-enameled steel.

Why?

Because Youngstown Kitchens go in faster, need no finishing . . . and require no extras or after-installation adjustments. *And, most important of all, they do not increase the cost of the home.*

Youngstown Kitchens fit any floor plan . . . have the most modern work-saving features . . . and are sold to the builder in a package, with no hidden costs in labor or materials.

Youngstown Kitchens are known to most potential home buyers. Their beauty and work-saving features are immediately recognized. They're often an important factor in closing a sale.

Whether you're building multiple-dwelling units or individual homes, let your Youngstown distributor go over your plans and show you exactly how little it will cost to install this wanted, nationally advertised brand!



" . . . standard equipment!"

says
Alabama contractor

One of the many builders who specify Youngstown Kitchens is R. G. Brasher, Birmingham, Alabama, contractor.

"Youngstown Kitchens are compact, sleek and modern in design, and adaptable to any type home," says Mr. Brasher. "In the homes I build, they are standard equipment!"



MULLINS MANUFACTURING CORPORATION • WARREN, OHIO

World's Largest Makers of Steel Kitchens

BAND SAW
PRACTICALLY ANY
MATERIAL ACCURATELY

AND
TWICE AS FAST
WITH A

Boice-Crane



**ITS SUPER SAVING
SMOOTHNESS SAVES
SANDING-LABOR ON
EVERY CUT**

Close balance, and light but strong moulded Textolite wheels permit twice the speed of other 14" machines, with less vibration and long blade life.

High safety rating. Wheels and blade, except at cutting point, are entirely enclosed. Blade guides adjust by a single control with full safety even when operating.

Capacity: blade to guard, 13 1/2", 27" dia. work; clears stock up to 8 3/8" thick.

Blade speed at 1200 R.P.M., 4,400 feet per minute. Blade length: 98". Widths: 3/16", 1/4", 3/8", 1/2" and 3/4". Overall height (floor model) 67". Sturdy one-piece frame. Cabinet type base has sealed-off motor compartment. Table (15" x 15 1/2") tilts on double trunnions. Single and 8-speed back-gear models.

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POWER TOOLS**

Permit high efficiencies which alert builders are using to cope in part with present building costs.

- Designed for ready adaptability to a wide range of projects, fewer machines are needed to fill all your requirements.
- As nearly 100% safe as modern devices permit.
- Durably constructed, they can take a beating which would incapacitate most machines.



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Please send FREE LITERATURE on Boice-Crane

() Band Saw () Complete Line

NAME

FIRM

STREET

CITY & STATE

Doud Lumber Co.

(Continued from page 115)

a way that contractors can secure quick, convenient service, whether they come in their cars for small items or in trucks for heavy merchandise. There is plenty of parking space in front and on both sides of the store. There are driveways leading into the yard on both sides of the store, and two additional driveways are provided on the side street. Lumber



ROUND recessed lights illuminate interior

racks and warehouses are well separated from each other so there need be no congestion. The yard is completely paved and is enclosed by a wire fence seven feet high, topped with barbed wire.

The store exterior is of unusual design, modern in treatment. On one side of the building, brick extends about 15 feet toward the center before floor-to-ceiling windows begin. The windows are eight feet high, and are placed below a 30-inch canopy. Above this, a similar row of windows extend up to a similar canopy. This unusual construction gives an impressive appearance to the store, and in addition provides a second tier of windows for display purposes. Another canopy, 12 feet deep, extends over the driveway to a small building used for storage. The balcony windows are used for special displays that are generally built on a turn table. Both tiers of windows are illuminated at night, with lights operated by a time clock.

The ceiling of the main store is 20 feet high and is lined with 4x8 ivory insulating board with beveled edges. Thirty round inset lights furnish the illumination. The floor is asphalt tile. Side windows are eight feet from the floor, thus providing additional wall space. They are equipped with Venetian blinds. Neon signs at the back of the store, visible from the entrance, direct visitors to the three main departments—builders hardware, building materials, and lumber.

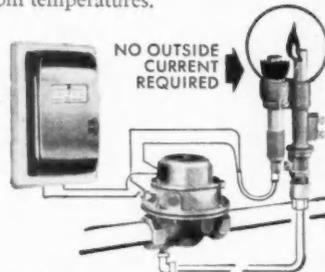
The building was designed by Architect Leslie Nichols and built by Earl Heple, contractor, who, together with Kincaid, worked out many changes as they went along. They

(Continued to page 204)

Control
**INDOOR CLIMATE
AUTOMATICALLY**

without Outside Current

The tiny pilot flame generates the electrical current to operate the control system. All three units scientifically designed to provide safe, remote control of room temperatures.



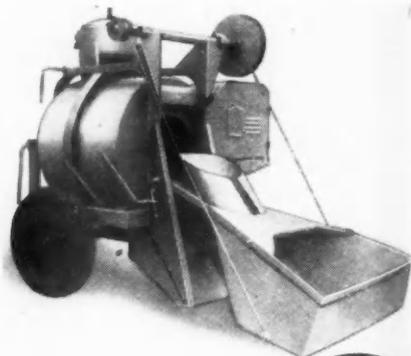
Automatic,
Safe, Silent and Self-Operated



Put GENERAL CONTROLS heating comfort in the plans. It's the easy, modern way and effects construction economies, too.

Request Free Descriptive Literature on the B-60 "All-Gas" Control System

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Manufacturers of Automatic
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**HEAVY-DUTY
HALF BAGGER with
Power Loader and Tank**

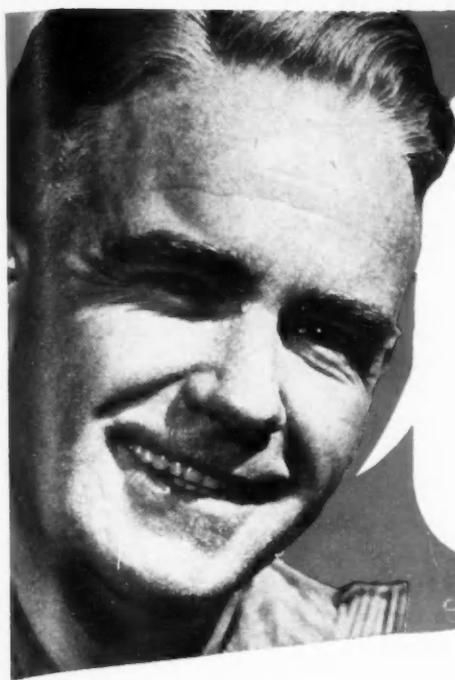


THIS mixer gives the smaller contractor every production advantage found on larger mixers. Output is increased because high shoveling is eliminated. Automatic water measurement, rapid discharge, and Briggs & Stratton air-cooled engine insure perfect performance. Capacity 3 1/2 cu. ft. mixed concrete, plus 10% overload.

Write for prices and specifications

MULLER MACHINERY CO., Inc.
750 WHITMAN AVENUE
METUCHEN, NEW JERSEY

Tilters, Non-tilters, Plaster Mixers,
Concrete Carts, Mortar Boxes



—says a Well-Known New York Contractor

"Here's something really hot! The first POSITIVE 'LOCKING' nail that let me take full advantage of all savings and construction traits of non-wood sheathing:

**"... LOWER UNIT COST ... FASTER APPLICATIONS
"... LESS WASTE ... ABSOLUTE WEATHER TIGHTNESS**

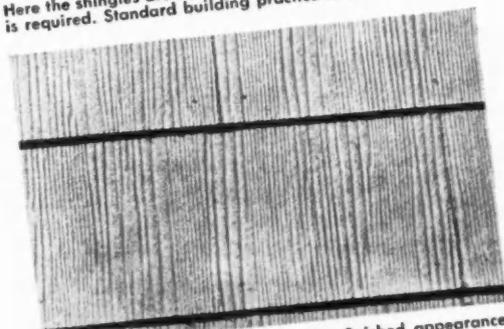
"I use ES-nails for attaching wood or asbestos shingles DIRECTLY to gypsum or insulation sheathing—and save many dollars on both types of construction."



One of the houses in the development, using Stainless Steel ES-nails to apply asbestos shingles to insulation sheathing.



Here the shingles are being applied—no special technique is required. Standard building practice is used.



This gives an excellent idea of the finished appearance—see the flat, even heads—the last word for asbestos shingling.

Other practical reasons for using ES-nails include: their ease of application—no special tools are required, use a regular shingling hatchet or hammer... they are self-clinching... 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 other builders find affords unquestionable strength and enduring safety—at a saving.

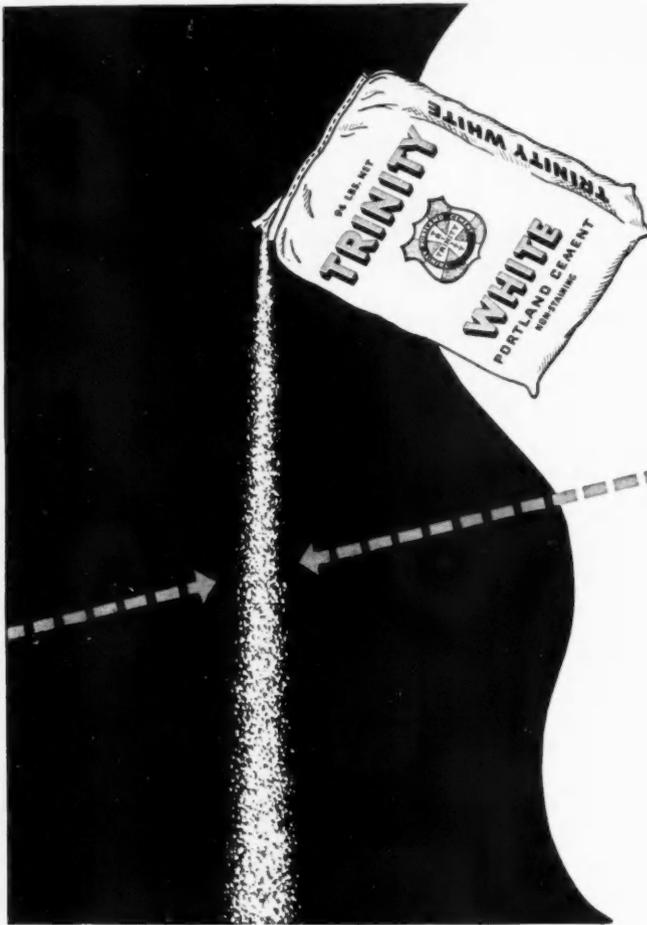
For more information about the value of ES-nail construction—and the savings it will mean to you, call your supplier, or write: Elastic Stop Nut Corporation of America, 2330 Vauxhall Road, Union, New Jersey.

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A Product of

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Your trade will get fine results with this extra white cement. It's true Portland Cement made to ASTM and Federal Specifications. If you do not have it in stock, write the office nearest you: Trinity Portland Cement Division, General Portland Cement Co., 111 West Monroe St., Chicago; Republic Bank Bldg., Dallas; 816 W. 5th St., Los Angeles.

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WARDROBE HARDWARE

- can't jump track
- silent & smooth



...overhead suspension does it

At last here is wardrobe door hardware that does the job! When you specify NORDAHL wardrobe door hardware, its overhead suspension principle guarantees efficient, quiet, and trouble-free operation. Aluminum extruded track and guide comes in lengths up to 18 feet—it can be used with any thickness of panel or plywood door. Cadmium plated steel hangers have phenolic rollers. Specify NORDAHL for new construction or replacing old.



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ALSO SPECIFY NORDAHL SLIDING DOOR FRAMES

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This adherence to quality extends not only to manufacture in modern mills. It has to do with long range product research programs, honest dealings with buyers, integrity of management, and the establishment of APMI sales service in major building areas.

A telephone call to any of the addresses below will bring you intelligent answers to your plywood requirements.



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Correct Sizes
in all shapes
for every need

OVER 680 SHAPES AND SIZES

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*CHROMEDGE METAL TRIMS ARE
MADE ONLY OF ALUMINUM ALLOY
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WITH REVERSING ACTION!

The superiority of IN-SINK-ERATOR'S two directional shredding action has been proved by over ten years of consumer use. This and other features listed assure long and trouble-free operation.



- **TWO DIRECTIONAL SHREDDING** . . . doubles the life of the shredding elements . . . adds self-sharpening feature.
- **SELF CLEANSING** . . . because of its unique reversing feature the In-Sink-Erator has a double cleansing action which is positive and complete.
- **CONTINUOUS FEEDING** . . . food waste can be fed continuously while unit is in operation, giving unlimited capacity for domestic use.
- **COMPACT, PRACTICAL DESIGN** . . . In-Sink-Erator was first to have the shredder mounted directly to motor shaft . . . providing first practical disposer design.

For Complete Specifications Fill in Coupon Below

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Please send complete information about IN-SINK-ERATOR to

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**IN • SINK • ERATOR
MFG. CO. • RACINE, WISCONSIN**

Specializing Exclusively in the Manufacture of Automatic Food Waste Disposers Since 1938

Doud Lumber Co.

(Continued from page 200)

designed and built the shelving, fixtures, and counters.

Kincaid has a department head for each of three divisions of his business. In addition to house jobs and over-the-counter business, the firm does a lot of school work and a great deal of commercial work.

Advertising is conducted by radio, newspaper, and direct mail. The company sponsors weekly boxing



WAREHOUSE is stocked in orderly manner

matches at the San Jose State College, and, in addition, uses spot radio announcements before other athletic events. Ads are used in the Farm Section of the local Sunday paper.

Direct mail promotion is spear-headed by the mailing of the "Doud Report" once a week. It is mailed to a selected list of contractors with the best buys of the week. Among miscellaneous advertising, the placing of signs on all jobs where their material has been used is the most important. They use attractive fibre signs, 14x18 inches. It is the job of the truck drivers to put stakes in the ground and erect the signs.

The Doud Lumber Co. purchased this firm in 1948. Principals in the company are Lee L. Doud and Donald H. Doud of Tacoma, Wash.

General Sales Manager Of Ruberoid Resins

LOUIS HERSCOVITZ, vice president and general sales manager of The Ruberoid Co., has resigned to become associated in Chicago with his brother in a different line of business, it is announced by Herbert Abraham, Ruberoid president.

Herscovitz has been connected with the roofing industry since he was sixteen years old. Prior to joining Ruberoid in 1926, he was Western sales manager for the H. F. Watson Co., which was acquired by Ruberoid in that year. He was promoted by Ruberoid to the position of vice president and general sales manager in 1945 in recognition of his outstanding accomplishments as sales manager of the company's western division with headquarters in Chicago.

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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.

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Product of **GEO. C. BROWN & CO.**

GREENSBORO, N. C. ESTABLISHED 1886

LARGEST MANUFACTURERS OF AROMATIC RED CEDAR IN THE WORLD

Build treads and risers

NEW EASY WAY



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AUTOMATIC TEMPLATE

Cut stair treads and risers, closet shelves, flooring, linoleum, etc., in less than half the usual time. A money-saving tool used by carpenters, apprentices, linoleum layers, craftsmen, hobby workers, etc. Template measures each piece quickly and accurately—saves material. Adjusts to proper length and angle variations automatically. A perfect fit every time. Hundreds of uses. Measures from 30" to 42"—with adjustments, from 20" and over. Metal parts of nickel-plated steel. For prices and information ask your dealer or send postcard or coupon direct to factory.

It's Automatic, Accurate, and Easy to Use
Send Coupon

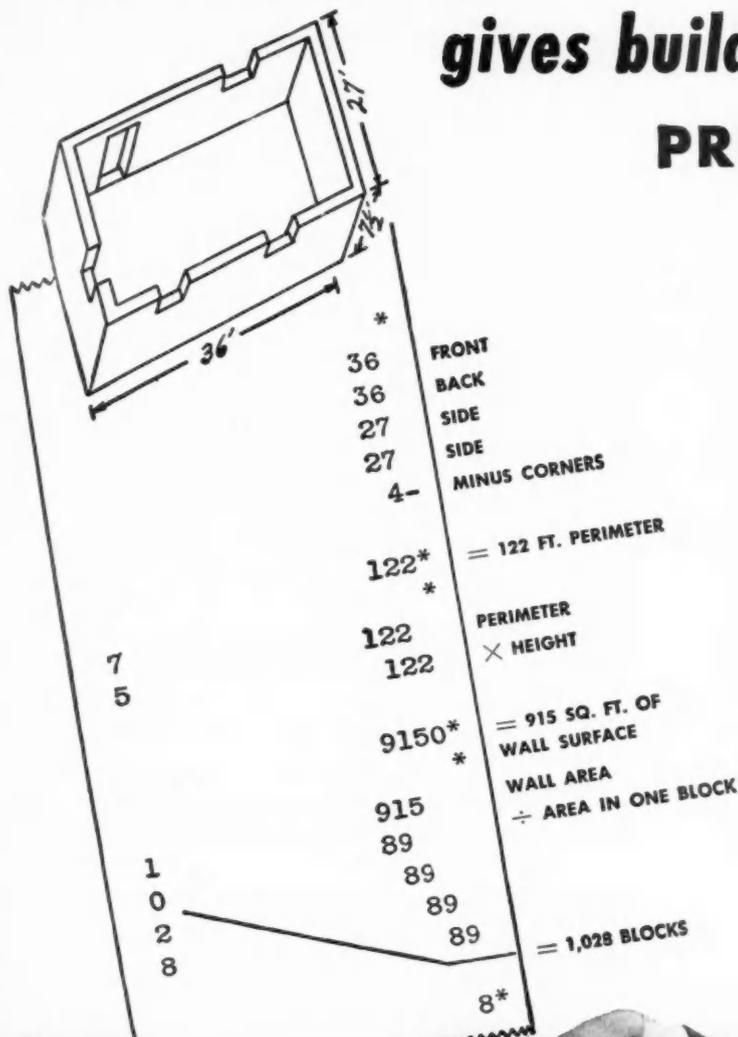


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Only the Remington Rand Printing Calculator gives builders and contractors PRINTED figure facts!



FROM ESTIMATING concrete block to checking your final invoice, this foolproof Printing Calculator automatically prints every factor and answer on the tape. Designed to meet every figuring need of architect, builder and contractor, it automatically divides, multiplies, adds and subtracts — and the printed proof proves you're right.

The simple estimating problem at the left is just one example — the Printing Calculator is ideal for figuring payrolls including overtime and deductions, compiling compensation insurance data and even complicated trigonometric problems where higher mathematics are involved.

Best of all, with the printed tape, you have an electric adding-listing machine, too — *two* fine machines for your one modest investment.

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What do your Flooring Specifications call for on jobs like these?

RANCH HOUSE DEVELOPMENT...



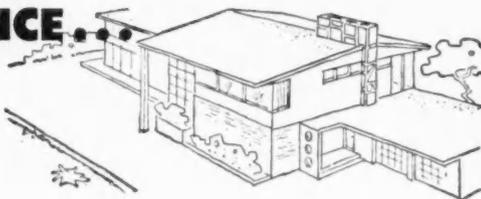
Basementless, concrete slab construction. More and more cost-conscious operative builders are turning to Tile-Tex* Asphalt Tile as the all purpose flooring for a one story ranch house. It's low in cost, has an amazing record of long life . . . and is the only type of resilient flooring which can be installed with perfect safety over a non-waterproofed concrete slab. No other sub-flooring required. Can be installed in gay, colorful patterns or solid tones. Appeals to home owners because it can be used with or without rugs or carpeting.

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★★★★

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THE FLINTKOTE COMPANY
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CONCRETE BUCKET



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JOBBERS! DEALERS! Make new customers, bigger profits with PITTSBURGH INTERLOCK—the colorful plastic wall tile that brings you tomorrow's colors today! Actually hundreds of striking combinations can be created to meet individual tastes from

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Yes, I want to make new customers with PITTSBURGH INTERLOCK color-appeal. Please send full details.

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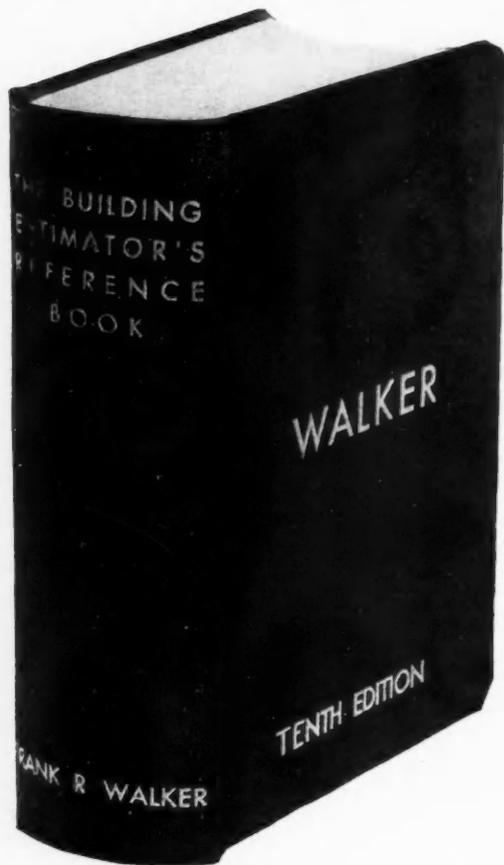
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Write now to the Fir Door Institute for your free copy of a booklet showing the results of these laboratory tests.

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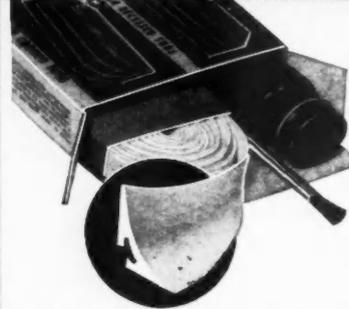
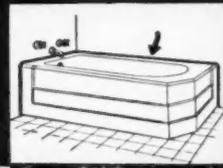


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★ A unit kit contains: approx. 15 ft. Sealing Strip, ample Adhesive and Cleaner and Applicator Brush.

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★ Easy to apply—flexible—water-proof, sanitary—easy to clean.

★ Packed 12 unit kits to a colorful display carton

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**CEILING
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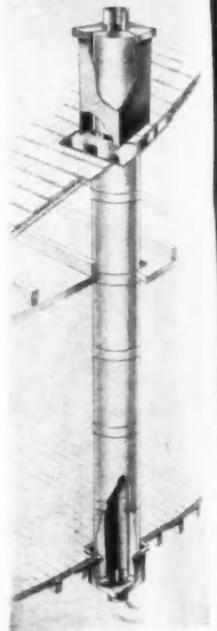
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The New Richmond **RICLEDGE**—NOW available in two sizes: 19" x 17" and 18" x 15". A compact lavatory for your space-saving jobs. Small in size and price, this top quality unit is long on big lavatory features: raised shelfback, recessed soap dishes, anti-splash rim, integral front overflow and Richmond high-gloss finish. This wall hung lavatory, punched for center set fittings, is ideal for the modern home where space is a problem. Plate #G-152.

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Ledgeback lavatories for any location—for any type of installation—are in the Richmond line of fine vitreous china. Bathrooms or powder rooms—if it's ledgeback lavatories you want—Richmond has the best you can get—and in the size you want. Check these sizes against your current jobs.

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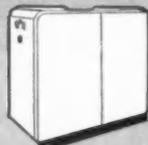
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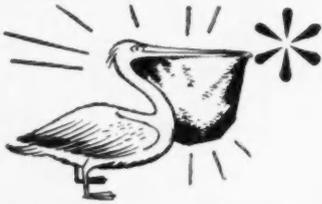
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You get more for less when you choose Paronite Para-Therm (Type RH) wire and cable. This wire carries a bigger pay-load. Saves on initial cost. You also save through being able to use smaller conduits in most instances. And you save in the ease of handling lighter materials.

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Paronite wire or cable is made under the watchful eye of SQC—Statistical Quality Control! Nothing is left to chance. Scores of graphs, tests, measurements—figures and figures—by columns and rows of columns—are drilled, marshalled, compiled and analyzed with individual operations still in progress. With SQC on guard you can confidently recommend and use Paronite for lasting satisfaction.

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WAREHOUSES AND SALES OFFICES: Atlanta, Ga.; Boston, Mass.; Chicago, Ill.; Cleveland, Ohio; Dallas, Texas; Detroit, Mich.; Kansas City, Mo.; Los Angeles, Calif.; Newark, N.J.; Philadelphia, Pa.; Portland, Oreg.; St. Louis, Mo.; San Diego, Calif.; San Francisco, Calif.

Construction Outlook

(Continued from page 116)

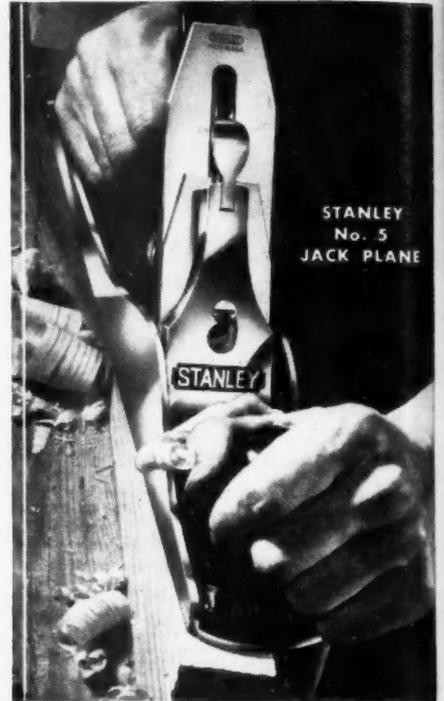
We have no way of estimating with any accuracy the number of units added by alteration, but there seems no question but that over the period the number was substantial, probably several hundred thousand. The housing shortage is certainly not over, but the crisis has passed its peak. The rate of family formation is far below what it was two years ago or even one year ago; and buyers who are able to pay the price have more opportunities for selection than they found a few short months ago.

It is against this background that the joint construction forecast of the Bureau of Labor Statistics and the Commerce Department was made for 1949. We predict total expenditures of \$18,750 million for all types of new construction, in comparison with \$17,666 million last year, an increase of about 6.1 per cent. In physical volume the increase will be considerably less, with comparatively little difference between the two years. The reason for this is that construction costs rose steadily through most of 1948, although small decreases from their highest points appeared in a number of the construction cost indexes by the end of the year. Despite some recent price cuts in building materials, we feel that construction costs will be higher on the average in 1949 than in 1948. Our present expectation is that 875,000 permanent dwelling units will be started in non-farm areas during the year, in comparison with 928,000 during 1948 and 849,000 during 1947.

For privately financed construction, little over-all change in expenditures is expected; an increase from \$13,631 for 1948 to \$13,750 for 1949. Increases are expected for commercial buildings, and for the three non-profit types of private buildings which have already increased so greatly: churches, educational buildings, hospitals, and institutions. In contrast, a decrease of almost 7 per cent is expected for non-farm residential building, and a decrease of about 6½ percent in industrial building.

The course followed by industrial building in the last few years is very similar to that which was observed after the First World War. The peak was in 1920, and was not exceeded until 1929. During the intervening years of high general prosperity the volume of industrial construction was well below the 1920 figure, although the

(Continued to page 216)

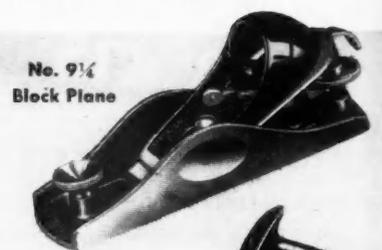


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The choice of 9 out of 10 woodworkers, Stanley Planes feel right . . . work right. These planes—and many other types of planes—are part of the complete line of Stanley Tools. When you buy tools, look for this famous trade-mark. Stanley Tools, New Britain, Conn.



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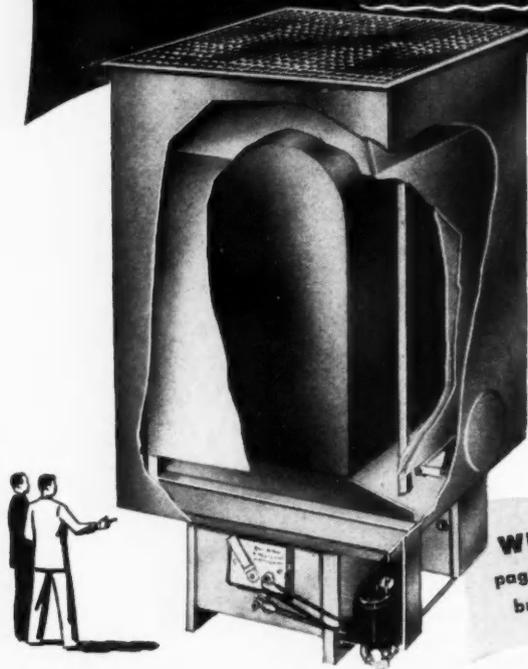
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F-5

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Give them the kitchen they want!*

*INDEPENDENT NATIONWIDE SURVEYS SHOW MILLIONS OF WOMEN PREFER AMERICAN KITCHENS



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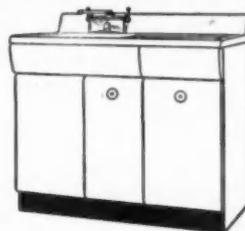
Now you can equip your houses with the prestige and easy-to-see advantages of nationally-advertised American Kitchens at new low prices. For stepped-up production now makes it possible for American Kitchens to offer you two great new economy sinks that materially lower your kitchen costs. Almost identical to our de luxe models on the exterior, these new economy models permit you to equip your houses

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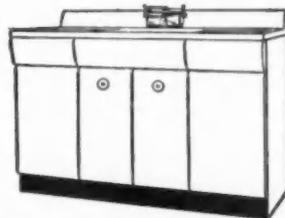
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Construction Outlook

(Continued from page 212)

total construction activity exceeded the 1920 level. The recent post-war peak for industrial building was reached in 1946.

In the field of public construction, we expect an increase of almost 25 per cent from 1948 in expenditures, to 5.0 billion dollars. The largest item, as in most normal years, will be highways, roads and streets, with non-residential building next. Educational building will make up about half of non-residential, with a gain of a third from last year's expenditures. Other important items are hospital and institutional buildings, sewer and water projects, and conservation and development projects. Public housing will be well above 1948, because of non-Federal projects almost certain to proceed, but it still is expected to be less than one per cent of total construction. Whatever housing legislation may be enacted by Congress, it is hardly possible for public housing expenditures by the end of the year to be as great as in any of the years from 1941 through 1943, or in 1946.

Employment Forecast

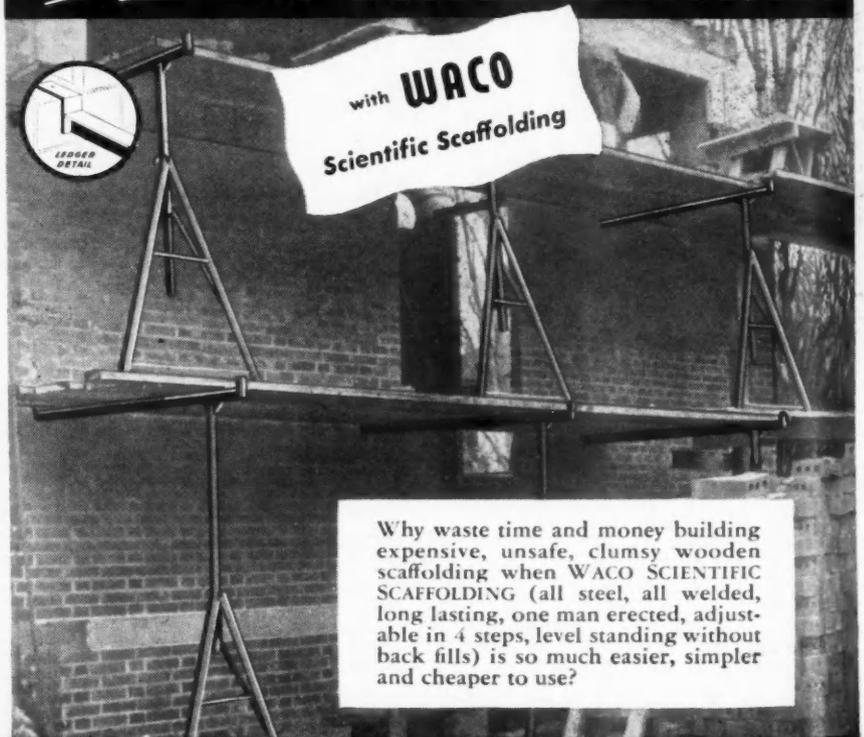
We expect construction contractors to employ about 2½ million

workers at the year's peak, which will probably be in September. Note that this estimate does not include the many thousands of small contractors who work on their jobs in person, or the much larger number of self-employed workmen who do maintenance and repair jobs and very small new jobs directly for property owners. Neither does it include those employed by firms outside of the construction industry for force-account work on new construction or maintenance. The anticipated total is not greatly different from the 1948 peak of approximately 2¼ million in August and September, but otherwise is quite the highest figure since the wartime construction program of 1942. It indicates excellent employment conditions for construction workers as a whole.

At the same time, because of continued growth of the skilled labor force there are likely to be fewer local labor shortages than last year. The construction labor force is increasing slowly through apprenticeship training, and no doubt to some degree through informal training as well. Despite losses from death or retirement, the number of workers should continue to increase slowly, and because of the

(Continued to page 220)

WIPE OUT THE NUISANCES AND COSTS OF WOODEN SCAFFOLDING



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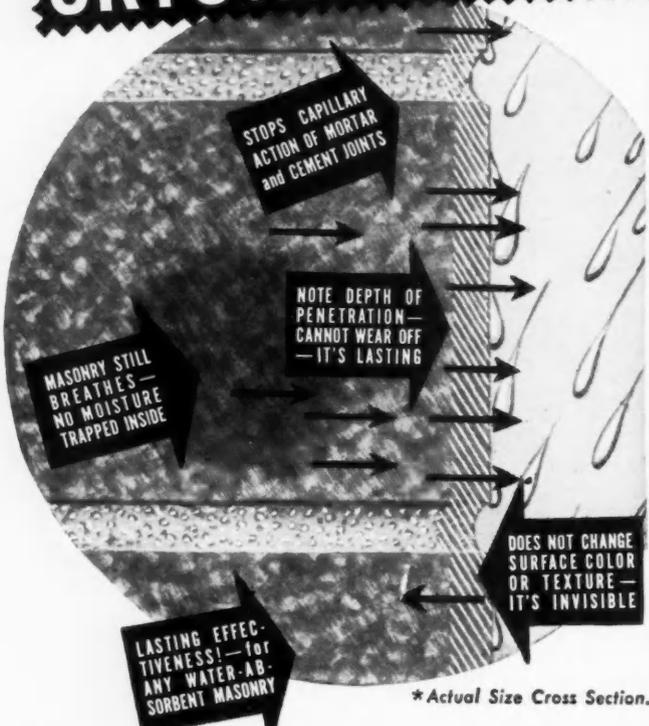


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You Are Assured Prompt Delivery . . . and Complete Home-Owner Satisfaction!

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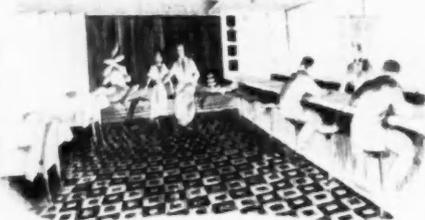
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Construction Outlook

(Continued from page 216)

strong emphasis on formal apprenticeship training, I think that average ability will rise also.

Building wage rates have increased steadily. Our index of union wage rates for all building trades showed an increase of 63.5 per cent between July 1, 1939 and July 1, 1948. The overall increase in wage rates has been greater than the index indicates, as in 1939 there was a very considerable amount of non-union work at lower rates not reflected in the index for that year. Nobody knows just how much non-union work is done now, but there is little doubt that it is much less prominent than in 1939, and also little doubt that the difference between union and non-union rates has been greatly reduced, if not eliminated. Another measure of compensation of building workers is that of average hourly earnings in private contract building construction. This is not a wage rate at all, but is gross earnings divided by the number of hours worked. Thus, it takes account of overtime premiums and all other premiums, such as above-scale rates where these are paid. For building construction as a whole, this figure

was about twice as high in 1948 as in 1939, increasing rather steadily during the year. The annual average for 1948 was about \$1.87; this is a combined average for building workers of all occupations, skilled, semi-skilled and unskilled.

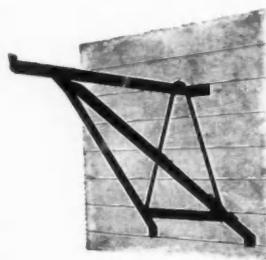
Whatever happens to building material prices or to the indexes of construction cost, I think it very likely that the present levels of wage rates will be sustained and may rise further. The figures for average hourly earnings will be held down somewhat by reduction in overtime and in premium rates, but apart from this they will, of course, follow the trend of wage rates.

Construction Costs

I have mentioned wartime and postwar increases in construction costs, and these cannot be ignored. Our wholesale price index for building materials was at its highest in September, and has come down very little. The index for lumber prices reached a peak in August, and has since decreased by almost 6½ per cent. A rather large part of this decrease has, however, been offset by increases for other materials. It is entirely possible that there will be some further re-

(Continued to page 224)

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Greater Safety with
"TROUBLE SAVER"
Scaffold Brackets



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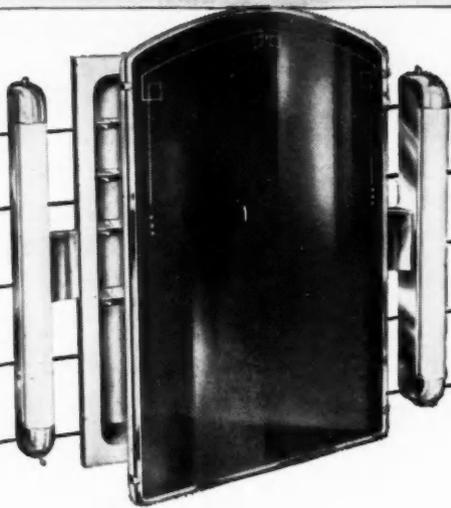
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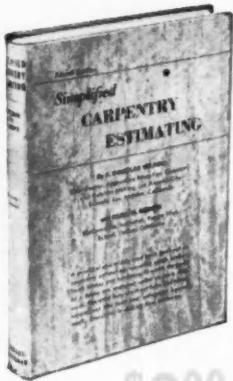
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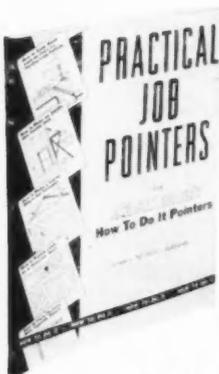
The books described and offered to you here are written and edited for one purpose—to aid you in your chosen profession—building.

Start a reference shelf of building books now. A few minutes a day of your spare time spent in reading these

books will increase your knowledge of the many complex problems of building you are called on to solve every day.

Every professional man should have a reference library of books pertaining to his business. A combination of some of the best knowledge in the building industry has gone into these books. This is your opportunity to share this knowledge of the experts—the opportunity to learn more and earn more.

Select the books you want to begin with. Mail the coupon today. After five days, if you are not entirely satisfied with your selection, return them to us. Your money will be cheerfully refunded.



Practical Job Pointers

"Tricks of the trade," practical short cuts and modern methods of doing all kinds of carpentry and building repair jobs are described and illustrated with working drawings. More than 750, compiled from *American Builder's How-to-Do-It Pointers*, are arranged under subjects and cross-indexed for quick reference. 3rd Ed., 211 pages, 750 illus., 8½ x 11½, cloth.

\$4.00



Blueprint Plans

from *American Builder*

This unique plan book contains 12 complete blueprints of modern small homes designed by leading architects. Contractors can figure local costs from these 16½ x 11½-in. blueprints drawn to ¼-in. scale. Includes descriptions and floor plans of 9 other houses, 7 garages and sketches of built-ins. Plastic tube binding to open flat.

\$2.50

READER'S GUIDE BOOKLETS



Four Book Guides for 10c

These Book Guides are very helpful in picking the right books for your reference shelf. They present complete descriptions of from 60 to 150 Estimating, Carpentry and Building, Shopcrafting and Plan Books of all publishers. We supply these books from our stock as a service to *American Builder* readers.

CLIP AND MAIL THIS COUPON TODAY

Book Department, *American Builder*

Simmons-Boardman Publishing Corporation
30 Church Street, New York 7, N. Y.

Please find enclosed remittance for \$....., for which send postpaid the books and booklets checked below. If not satisfied after five days examination I may return them for refund without obligation.

- () Simplified Carpentry Estimating, \$3.00 () Blueprint Plans, \$2.50
- () Practical Job Pointers, \$4.00 () House Construction Details, \$4.50
- () Modern Methods of Home Heating, \$1.00 () Four Book Guides, \$.10
- () Combination Offer of the Five Books and Four Book Guides, \$11.50

Name.....

Address.....

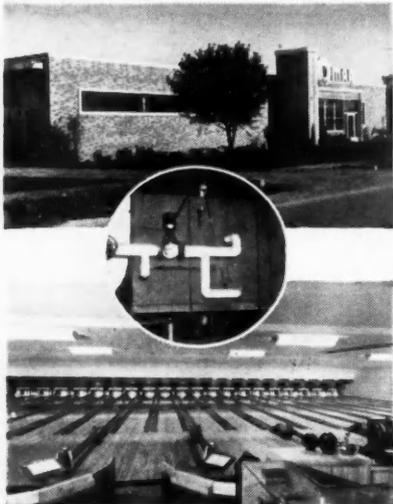
City..... Zone.....

State.....

Specify YOUNG

AIR CONDITIONING UNITS AND COILS FOR BUSINESS . . .

Vital temperature and humidity control accomplished for Omar Bakery, Racine, Wis., by four "YAC" Air Conditioning Units and Coils. Engineers and Builders: The Austin Company, Cleveland, O. Heating Contractor: Smollen Heating Co., Racine, Wis.



. . . OR PLEASURE

"YAC" Air Conditioning Units and Coils provide comfort for active indoor recreation at Luby's, Racine, Wis. Architect: John Topzant, Milwaukee, Wis. Heating Contractor: Smollen Heating Co., Racine, Wis.

● To meet the complexities of today's air conditioning installations, specify "YAC" Units by Young. Young Air Conditioning Units provide the following service requirements . . . Cooling, Heating, Filtering, Humidifying, Circulating, and Dehumidifying . . . in any combination! Eight vertical or horizontal type units have ratings from 450 to 15,750 cfm; custom installations with Young coils handle larger capacities. The sturdy "YAC" cabinets, of heavy gauge galvanized steel, are shipped in sections and quickly installed. Write for details.

YOUNG



HEAT TRANSFER PRODUCTS

HEATING, COOLING AND AIR CONDITIONING PRODUCTS

Convectors • Unit heaters • Heating coils • Cooling coils • Air conditioning units • Evaporative condensers

AUTOMOTIVE PRODUCTS

Gas, gasoline, Diesel engine cooling radiators • Heat exchangers • Intercoolers • Oil coolers • Supercharger intercoolers

OIL FIELD, HEAVY INDUSTRIAL, MUNICIPAL & CHEMICAL PROCESS COOLING EQUIPMENT

Engine jacket water coolers • Oil coolers • Steam and natural gas condensers • Natural gas coolers • Evaporative coolers and condensers • "VAD" Vertical air discharge cooling and condensing units.

AERONAUTICAL PRODUCTS

Oil coolers • Supercharger intercoolers • Radiators • Heat exchangers • Valves • Regenerators

YOUNG RADIATOR CO.

General Offices: Dept. 709-E, Racine, Wisconsin
Plants at Racine, Wisconsin, and Mattoon, Illinois
Sales and Engineering Offices in All Principal Cities

Construction Outlook

(Continued from page 220)

duction in construction costs during the year, but I do not expect it to be great. In previous periods of downward price movements construction has been more resistant to readjustment than have commodity prices.

Dramatize Your Project . . .

(Continued from page 117)

ground. Putting up a unique platform for "sidewalk supers" is one way to gain good will and also get publicity. Railings, signs, and placards which direct the movement of the crowd all add up to good results.

Once the public sees what a complicated job the building of a home really is, there will be less talk about antiquated methods and "a horse and buggy industry."

Here are a half-dozen ideas open to any builder to dramatize his job:

1. Fundamental methods of bringing public attention to focus on a project are newspaper advertising and publicity which highlight the most desirable features of the houses. Direct mail folders to a good list of prospects is an effective follow-up.

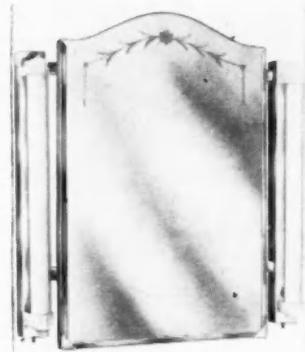
2. Signs and placards are also basic and should be used on the job site and on the avenues of traffic leading to the area.

3. Bringing the ladies into the NHW limelight should increase sales. A decorating contest would appeal to the fair sex and serve as a means of drawing visitors to the new houses to qualify for the contest.

4. To show how houses are constructed, home builders should set up a cross-section of a wall as a special exhibit in a model home. Each part of the wall can be labeled and described, thus pointing up good construction.

5. For the promotional builder who wants to make a real "splash" there is the "old versus new" drama. This involves building two houses on adjacent lots. On one lot, the modern building crew under modern supervision works with power tools and site fabrication methods. On the other lot, ancient tools, old methods, and old time customs are used.

This is a sure-fire way to bring out the press and photographers to cover your story. It's also an occasion when the individual builder can draw crowds to his project, and set up an important event by having a city official on hand to witness the drama of progress. This is a perfect time for the home builder to deliver a talk on the progress of the industry.



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.

LITH-I-BAR CONCRETE JOISTS



IMMEDIATELY AVAILABLE

For all types of fire-safe buildings. For any type building from small homes to commercial or industrial buildings, the Lith-I-Bar System will provide greater speed, simplicity, minimum in field work, therefore, greater economy. Lith-I-Bar Machine made joists embody electrically welded reinforcements. Wire, write or call for location of your nearest licensed manufacturer.



GET THIS
FREE

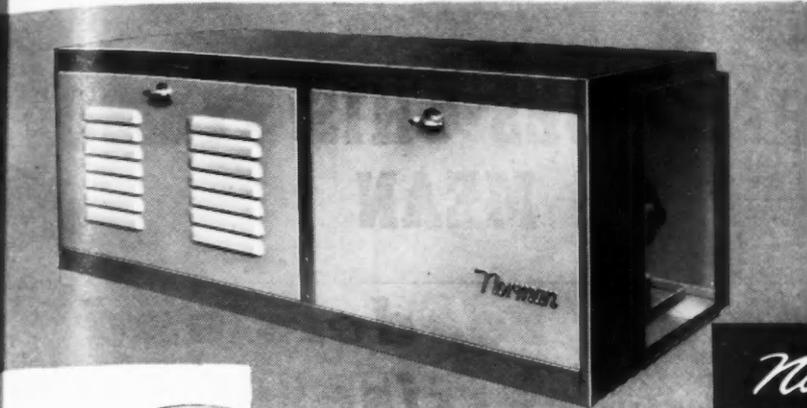
LITH-I-BAR CO.
BOX A-5 HOLLAND, MICH.

THE ONE GAS FURNACE WITH 101 APPLICATIONS



Norman Southerner

HORIZONTALLY DESIGNED FORCED AIR GAS FURNACE



Models Illustrated: Above, Southerner FUB-100;



Left, Gas Conversion Burner. For low cost conversion to automatic heat, get the facts on Norman Gas and Norman Gas-Oil Conversion Burners.

Here's the revolutionary heating system with 101 applications. Compact, horizontal design helps solve heating and sales problems through low cost—small space—installations. Outstanding performance has been proven in thousands of installations.

The Southerner fits in attic, closet, under floor, ceiling or stairs, on service porches or any small space. Brings new heating convenience to all types of homes

and commercial buildings. Ideal for replacement because it fits in any small space without major alteration.

Operates on natural, mixed, manufactured or LP gas. Meets all AGA safety requirements for attic, under floor, closet or service porch installation. Approved by FHA. Available: 30,000, 60,000, 80,000 and 100,000 BTU Furnace and Unit Heater models. Large size dimensions only 21 1/4" high by 23" wide by 52" long.

Norman Products Co.

Dept. 32
1146 Chesapeake Ave.
Columbus 12, Ohio

Please send complete details on the Norman Southerner and its 101 applications to low cost installation in new single and multi-unit home construction.

NAME _____
COMPANY _____
ADDRESS _____
CITY _____

DEALER AND DISTRIBUTOR TERRITORIES AVAILABLE

Red Devil FLOOR CONDITIONING EQUIPMENT



No. FP 1 & 2

FLOOR EDGER
No. FE 1

WOOD
SCRAPER
No. 18

No. 444

RED DEVIL TOOLS. IRVINGTON 11, N. J., U. S. A.

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. 34-5, SOLVAY SALES DIVISION, ALLIED CHEMICAL & DYE CORPORATION, 40 Rector St., New York 6, N. Y.



best tool you can buy

PAYS FOR ITSELF MANY TIMES OVER!

Builders everywhere want this master workman,—for its better work, bigger savings, greater accuracy and built-in POWER!



WALLACE No. 1 RADIAL SAW

with the exclusive
Wallace Angulator

SAWS RAFTERS complete in one handling without marking! Saves \$200 to \$400 on the average home. Does all sawing jobs—PLUS shaping, daddoing, routing, rabbeting, grooving, etc.

Start Saving Now—Write for Free Bulletins
On Our Complete Line of Woodworking Machines

J. D. WALLACE & COMPANY
136 So. California Ave., Chicago 12, Ill.

DO YOUR OWN SURVEYING

Builders are buying this new, simple, patented, precision-built BURT QUADRANT-TRANSIT.

Especially developed for the ordinary requirements of architects, contractors, carpenters, masons and others, whether technically trained or not, who have lines to run, grades to set or plotting to do. Previous experience and knowledge of higher mathematics not necessary. Pays for itself quickly.



Aside from the fact that it has a tripod and plumb-bob the BURT QUADRANT-TRANSIT bears little resemblance to regular transits. It has two view finders, of the gun-sight type, at right angles, one being adjustable horizontally and vertically. A compass may be used. Weight complete with tripod 5 lbs.

It is not intended as a replacement for conventional transits in the exacting work of registered surveyors, but it is an invaluable addition to any engineer's equipment, because of its light weight and simplicity.

BURT QUADRANT-TRANSIT, complete with 54 inch extension tripod and universal stand for 360° horizontal and 120° vertical range, postpaid

\$19.75

QUADRANT alone, removable and pocket size, very handy for estimating, inspecting, two-way floor leveling, frame squaring, etc., postpaid \$10.00. Add state sales tax, if any, to check or money order. Made and sold (by mail only) by

BURT QUADRANT
TRANSIT
FENTON CRAFTS

Box 1442-A • Fenton, Michigan



WHAT DOES THIS SYMBOL MEAN

*to our readers and
advertisers?*

What it is

The Associated Business Papers is a national association of business publications devoted to increasing their usefulness to their subscribers and helping advertisers get a bigger return on their investment.

How the reader benefits

Through the constant exchange of editorial and publishing ideas with fellow ABP members, each individual editor and publisher is able to give his readers the benefit of the best experience in publishing.

One interesting result of this cooperative affiliation has been a program, sponsored by ABP publishers, wherein they work with advertisers to help them make their messages more informative and useful to business magazine readers. *American Builder*, as an active participant, has interviewed many of its readers to find out from Builders and Dealers themselves what some of their *problems* are that are also *opportunities* for manufacturers who know something that will help.

How the advertiser benefits

The more helpful a business publication is to its readers—the more avid and constant its readership; hence, the more assurance the advertiser has that his message, *if as helpful and informative as the editorial pages*, will be read, understood and acted upon. Advertising can be *more* interesting and useful to readers because it can talk more specifically of *user benefits* than is generally possible in editorial material.

A number of our advertisers have expressed interest in applying specifically to the building field some of the "Tell All"* principles brought out in ABP's crusade to help advertisers get a bigger return on their investment.

To dig up material that might reveal angles of interest to advertisers, we employed a Field Reporter to call on Builders and Dealers. He is specially trained by ABP in the art of "drawing out" readers. His field reports are being passed along to manufacturers with the thought that this first-hand, up-to-the-minute picture of reader problems and viewpoints might reveal opportunities for them to step up the interest and usefulness of their advertising. We believe that those manufacturers of building materials and equipment who do this will get a greater value for their money and, of course, it will make *American Builder* more interesting and valuable to the readers.

And what does American Builder Get out of it?

These benefits of ABP membership help us build a better business publication for our special group of "fan" readers, hence a better vehicle for the messages of manufacturers who have something of interest to say to those same readers. It's a matter of record that fruitful advertising usually means more advertising. And that means more income with which to improve our publishing business.

*Definition of "Tell All" Advertising: Each and every advertisement should be given a specific and sufficient objective and should tell all that the business minded business paper reader must know before the advertisement can attain that objective.



Chicago 3, Illinois: 105 West Adams St.; New York 7, N.Y.: 30 Church St.; Cleveland 13, Ohio: Terminal Tower; Ann Arbor, Mich.: 1080 Stein Road; Washington 4, D.C.: 832 National Press Building; Seattle 1, Wash.: 1038 Henry Building; San Francisco 4, Calif.: 300 Montgomery St.; Los Angeles 14, Calif.: 530 West 6th St.; Dallas, Texas: P. O. Box 1808.

Response to Ads Proves Continued High Interest In Home Construction

APHENOMENAL flood of inquiries in response to the first two consumer advertisements in The Celotex Corporation's 1949 campaign proves the continued eagerness on the part of the consuming public to build homes.

The advertisements, appearing in the March 26 issue of Saturday Evening Post and in the April issue of Better Homes and Gardens, pictured an attractive home and described the Celotex "Three Key Plan" to a charming, enduring home at common sense cost. Readers were invited, via a coupon, to send 25 cents for a set of "Celo Charts" which describe in detail three homes of varying designs and price ranges. As of April 15, approximately 15,000 prospective individual home builders had sent for this information, and the stream of inquiries continued strong three weeks after the first appearance of the ads. The messages created so much interest that a number of individuals in the Chicago area took the trouble to travel to the downtown area and visit the Celotex offices in person to get additional details.

A series of advertisements in American Builder and other building trade publications is carrying the

story of the successful Celotex program to builders and material dealers throughout the nation. The firm has received reports of actual building activity that is resulting from its campaign, just getting into full swing. A second series of ads will appear in the April 30 issue of Saturday Evening Post and in the May issues of Better Homes and Gardens, Successful Farming and Progressive Farmer. These will be followed by others.

Convinced of the existence of a great immediate market for homes, but realizing that a real selling job must be done to tap that market, Celotex designed its 1949 advertising and sales program to be of maximum help to builders and material dealers in accomplishing the required selling job. The entire program—largest in the history of the company—spotlights the builder and dealer. Each ad tells its readers that even in these days of higher prices for everything, the family of modest means can build a good, strong, attractive home at a sensible cost. The ads point out that modern builders, through such advancements as improved planning that saves building time and work, use of quality multiple-function materials,

and use of standard millwork and lumber sizes, can assure high value for each building dollar.

The set of Celo Charts which is sent to inquirers consists of three individual pieces, each featuring a specially designed moderate cost home. Each chart contains a floor plan of the home, elevation drawings, areas, dimensions, specification and structural index, general building pointers, and a suggested interior decorating scheme prepared by one of the country's leading experts in this field. The prospective builder is urged to take the Celo Chart to his local Celotex dealer, who in cooperation with a local builder he can recommend, will be able to estimate the cost of the house in his community from the details contained in the chart. The dealer can provide, through National Plan Service, Chicago, complete working plans, specifications, and list of materials at a nominal cost.

Celotex provides its dealers with a wide variety of selling helps which tie-in with its national campaign, and to date nearly 5,000 dealers and builders have co-ordinated their efforts with the Celotex program. Dealers are given the names and addresses of inquirers in their localities and are urged to follow up prospects and refer them to local builders.

REDUCE STRESS

with **alumitile** . . . the featherweight wall tile.

The tons of structural weight that you save when you specify HASTINGS alumitile on large structures is but one of your many savings. You also save hundreds of man hours and thousands of dollars. For HASTINGS alumitile is low in cost, fast to install, and easy to handle. Yet it offers all the advantages of wall tile—enduring beauty, easy-to-clean surfaces, brilliant decorator colors.



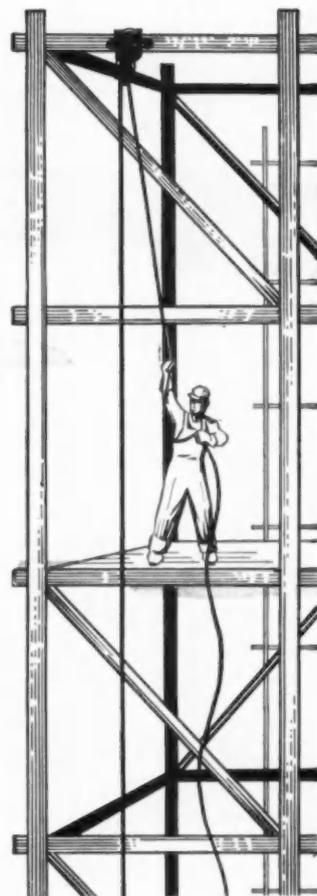
HASTINGS alumitile

For complete information see Sweet's Catalog or MAIL THE COUPON.

FREE

Metal Tile Products, Inc.
Hastings, Michigan
Please send me complete facts on Alumitile including prices, discounts without obligation.

Name _____
Business _____
Address _____
City _____
State _____



MONTHLY REVIEW

(Continued from page 72)

Texas Group Hears Address on Dangers of Public Housing

More than 200 persons representing the Panhandle Plains Hoo-Hoo Club (lumberman's social fraternity) and the Texas Panhandle Home Builders Association heard Edward G. Gavin, *American Builder* editor, speak on the public housing threat to private enterprise in a joint meeting at Amarillo, Texas, March 24.

Pointing out that a united front by all branches of the building industry could exert a powerful influence at the local, state, and national levels, Gavin urged every builder and lumber dealer to join and support their trade organizations.

John Armstrong, general chairman; William F. Ford, Hoo-Hoo president; and G. W. Maguire, home builder president, presided at the meeting.

No Drop in Material Prices Seen by Fort Worth Dealers

Almost unanimous belief that there would be no immediate drop in the prices of lumber, building materials, millwork and trim was expressed by 51 Fort Worth, Texas, material supply dealers recently surveyed by the Home Builders Association of Fort Worth. Thirty-five saw no possibility

of a decline in prices and only seven felt that prices might fall.

Those who believed no decline in prices was likely based their opinions on: (1) the fact that the demand for lumber remains relatively high; (2) the outlook for extensive building; (3) the fact that the quality of lumber will be higher this year; (4) an expected increase in freight rates; (5) the continuing high cost of lumber; and (6) belief that, since prices did not drop during bad weather, they would not fall during spring and summer, when building is at its peak.

Building Trades Commended For Work Record in 1948

Pointing out that only 7,500 building trade workers were involved in strikes during the first six months of last year compared to 153,000 for the same period in 1947, Kimball Hill, vice president of the Chicago NAHB chapter, and chairman of the committee on labor relations, commended the building trades for their splendid work record during 1948 in a recent statement. He said that there was not a single work stoppage on Chicago area projects last year.

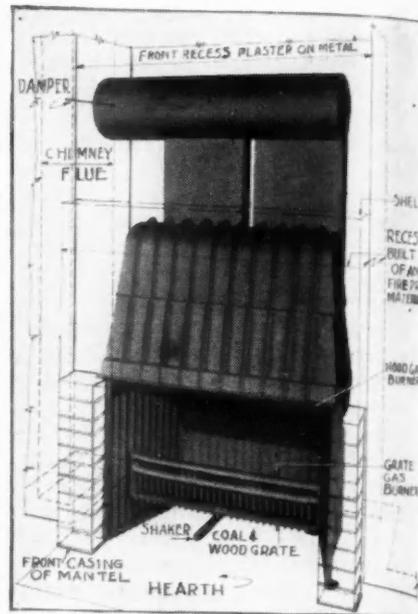
Hill expressed the hope that "labor . . . would also do its part in keeping down housing costs in 1949 by 'holding the line' on further wage demands."

He added that builders, bankers, subcontractors and materials men must do their part to stabilize market.

HEARTH-AIRE-PLACE

HEATS 6 ROOMS AT ZERO FROM ANY FIREPLACE!

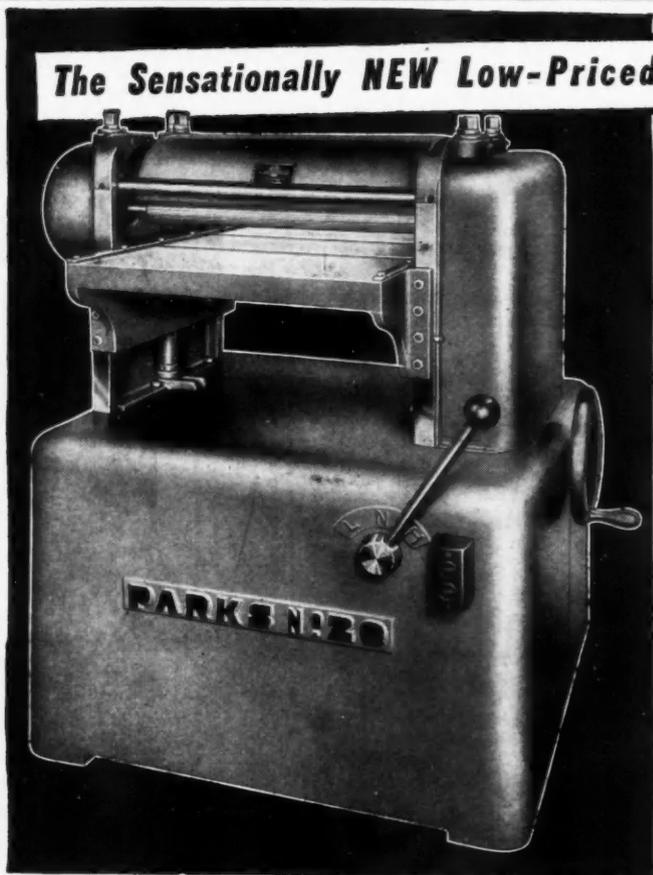
Cast iron unit will not warp
USES COAL — GAS — WOOD
Low in price — Easy to install
Will last as long as the home!
A Real Money Maker



WRITE FOR DETAILS NOW!
Distributors wanted

HEARTH-AIRE COMPANY

3126 Scarborough Rd.
CLEVELAND (18) OHIO



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 surfacer. 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-U, 1546 Knowlton St., Cincinnati 23, O.



KIMBALL ELEVATORS

PASSENGER FREIGHT
HYDRAULIC, HAND POWER
or ELECTRIC

Write for free circular and estimate

Since 1883

KIMBALL has made good ELEVATORS

KIMBALL BROTHERS COMPANY
Box 301 Council Bluffs, Iowa

FOR MAKING OR REPAIRING SCREENS

SPECIAL OFFER this ISSUE ONLY

1—No. 760 SCREEN TACKER
1—Box-10,000 No. 760 STAPLES
1—STAPLE REMOVER

ALL FOR \$10.90

Guaranteed

Drives a flat steel staple securely holding wire. Reversible claws for pulling or pushing wire tight.

Write today for a 5-day free trial.

J. B. CROFOOT CO.
217 Evergreen Ave.
Mt. Prospect, Ill.

Wire stretching claws. Reversed for use with rabbeted screen frames

We ship postpaid if C. O. D. or when check is sent with order.

STEEL LINTELS

- 3 x 3 x 1/4" angles, cut to length and painted one shop coat 34c ft.
- 4 x 3 x 1/4" angles, cut to length and painted 41c ft.
- 5 x 3 1/2 x 5/16" angles, cut to length and painted 61c ft.
- 6 x 4 x 3/8" angles, cut to length and painted 86c ft.

Minimum order 100 pcs. in any combination. Slightly higher for smaller quantities. All angles brand new, cut to exact length.

We also fabricate beams, columns and trusses to order. Materials f.o.b. cars or motor freight. Camden, New Jersey.

CAMDEN IRON WORKS

28 So. 4th St. Camden, N. J.
Phone: CAmden, 4-1237

Get FREE BOOK About Complete Home Building Course

SEE how to "go in for yourself" or become more valuable "all 'round" worker. Hundreds using our practical 47-lesson home-training course in modern home-building methods. Scores of charts and diagrams make things clear. Complete PLANS and "SPECS" for six-room house included. New FREE 22-page book explains. Nothing else like it anywhere. Send card for YOUR COPY today.

COMMERCIAL TRADES INSTITUTE
Dept. D90-5, 1400 Greenleaf Ave., Chicago 26, Ill.

Your FUTURE in the Building Business

Course Covers:

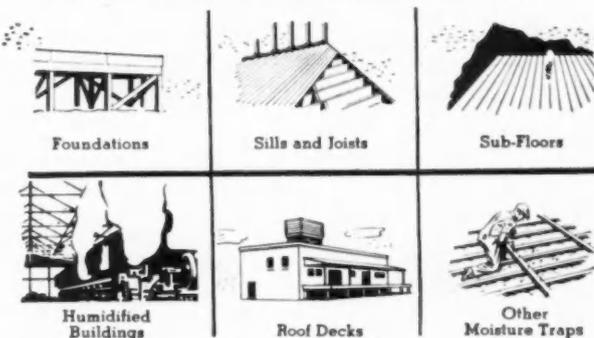
- Estimating
- Blue Print Reading
- Keeping Costs
- Letting Sub-Contracts
- Supervising
- Much More

Get FREE Book

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.

Invizie says:
 "I'M ALWAYS AT YOUR
 SERVICE - NEVER IN
 YOUR SIGHT!"



Double hung windows of every type open and close at the slightest touch of the finger, smoothly and quietly, when Grand Rapids Invisible Sash Balances are installed. That's because "Invizie" (the ingenious mechanism that operates this modern spiral sash balance) does practically all the work of lifting or lowering the window. Completely concealed in the sash itself, there are no exposed tubes, tapes or cables. Ideal for windows with the modern narrow trim — easy to install, with savings on material and installation more than paying their cost — laboratory tested and proved for lifetime service in any climate, they are first choice of home owners and home builders alike.

BALANCE 100%
 concealed in the sash . . . no tapes . . .
 no cables . . .

EASY TO INSTALL
 . . . just drive in two fasteners . . . screw in
 one screw.

10 SIZES FIT 95%
 of all new and old windows . . . completely
 interchangeable.

INVIZIBLES ARE EASY TO SELL
 BECAUSE THEY ARE WIDELY
 ADVERTISED IN NATIONAL
 AND TRADE MAGAZINES



**GRAND
 RAPIDS
 SASH PULLEYS**

No. 103 face plate, cone bearing type, and Nos. 175, 109, 110 sawtooth drive type sash pulleys cover 95% of all sash pulley requirements.

GRAND RAPIDS
Invizie
SASH BALANCE

WRITE
 for illustrated
 1949 catalog
 49-SB-P

GRAND RAPIDS HARDWARE COMPANY
 GRAND RAPIDS 2, MICHIGAN
 Quality Leaders in Sash Hardware for over 50 Years

USE THE

finest!

**UNIVERSAL
 LEVEL-TRANSIT**



Truly the finest in accuracy and dependability, the Universal Level-Transit is smoothly converted from a precision level to a highly accurate transit in 2 easy motions. A practical all-around builders' instrument.

Patented ball-bearing race assures perfect adjustment under the severest conditions. Telescope 12" long, 25 power, horizontal circle 4 1/2" with Vernier to 5 minutes. Price \$165.00

**ACCURATE
 DEPENDABLE**

**DAVID
 WHITE
 COMPANY**

Manufacturers of
 Instruments for
 Engineers, Surveyors
 and Builders.

EXTRAS — MODEL 3000
 Detachable compass.....\$13.75
 Stadia wires..... 5.50
 Extension leg tripod..... 15.00

Write today for full information on Model No. 3000 . . . Also FREE booklet "How to Lay Out Building Lots."

311 West Court St., Milwaukee 12, Wis.

THE NEW PERMANENT WATERPROOFER — FOR BLOCK COATING

**MARVA-
 SEAL!**

U. S. PAT. APPLIED FOR

FOR EXTERIOR WALL SURFACES

**FOR CEMENT & CINDER BLOCKS OF ALL TYPES,
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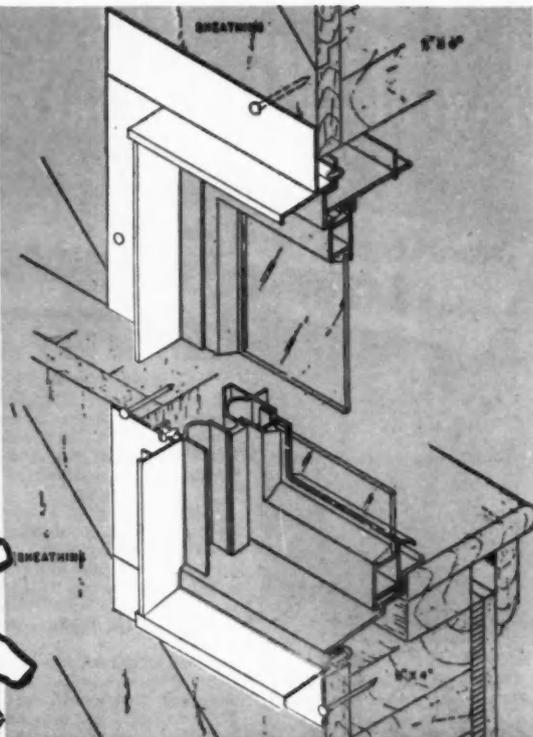
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**"Alwintite Fin-Trim
makes installation
a matter of seconds"**



... and that's all there is to it!

"Believe it or not, mister, when I put in *these* windows, the boys time me with a stopwatch!"

"You can do it that fast yourself with this new Alwintite Fin-Trim. And you won't need any special training or complicated instructions either."

"Yes sir, when you get America's most popular aluminum window *and* this easy, money-saving installation in the bargain, *you've got something!*"

* * *

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With Alwintite Fin-Trim your windows are completely

flushed . . . no special sills, exterior wood trim or casing to buy or apply . . . no painting needed.

Your Alwintite windows come with hardware, balances and stainless steel weatherstripping all built-in and adjusted—ready for quick, easy, 100% weathertight installation.

Easy to see why Alwintite is *the* quality aluminum window with the *low* installed cost!

Distributors in all areas carry Alwintite in 25 stock sizes, 8 styles, with screens and storm sash to fit. You can also get mullions for multiple window arrangement, picture and basement windows. For details write Dept. A-5, THE ALUMINUM WINDOW CORPORATION, a subsidiary of General Bronze Corp., 605 Stewart Ave., Garden City, N. Y.



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ALUMINUM WINDOWS

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Combinations

New Type Central Heating . . .
for **LOW COST HOMES**



AN EFFICIENT WARM AIR FURNACE in a beautiful fireplace design. Install right in the living room. With doors on it's a furnace — holds fire overnight.



WITH DOORS OFF it's a cheerful open fireplace. Will not smoke!

HEATS UP TO 7 ROOMS

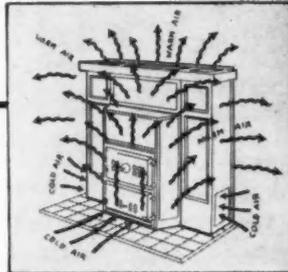
You build low cost homes for less money . . . sell them faster for more money . . . when you install a Fireaire Combination Furnace-Fireplace. Here's another big pay-off for prefabrication . . . a pay-off for you and your home buyers!

The buyer gets a wonderfully efficient furnace that supplies radiant heat, circulating warm air heat, for up to 7 rooms on one or two floors. Burns any fuel economically. Holds fire overnight. Will not smoke. Saves space — enough for a dinette, or other extra half-room.

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You get a complete, packaged central heating plant for about \$100 less than you'd pay for an ordinary furnace with the same heating capacity. Connects to an ordinary stove chimney with an 8 in. x 8 in. flue — quick and cheap to build. And, one semi-skilled laborer can install a Fireaire in two to three hours. You save plenty. You give a lot more house for the money. And, you add the conspicuous extra sales appeal of an open fireplace.



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fit every home. Write at once for style book, specifications, and price list. A post card will do. Fireaire can help you sell homes faster for more money this season!

PROVED BY 10 YEARS USE, U. S. and CANADA

Hundreds of users testify to Fireaire's capacity to keep homes comfortably warm when it's 10 to 20 degrees below outside. Not a novelty, but a practical, efficient, warm air pipeless furnace that gets enthusiastic acceptance wherever it is shown.

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Contractors and builders earn substantial discounts on nationally advertised list prices of Open Fireplaces (\$89.50 up) and Parlor Furnace - Fireplace Combinations (\$139.50 up). Sizes and styles to

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3★ TIMES-HERALD
Washington, D. C.
SUNDAY, APRIL 10, 1949

Real Estate News:

Cost Analysis Disproves Advice Basementless Home Cuts Costs

Basement 45 Pct. Cheaper Than Utility Room Substitute, Gives Additional Space

Thousands of basementless homes built today to cut costs, as advised by a Government housing agency, could have been constructed with full basements at a saving of at least 45 per cent on what was paid for a substitute utility room.

This was revealed yesterday in a cost analysis of foundations, released by the Atlas Speed Forms division of the Irvington Form & Tank corporation of Irvington, N. Y.

The analysis showed that a basement for a house 26 feet by 32 feet, the same size used by the Federal Housing and Home Finance agency in determining that it is cheaper to build a utility room instead of a basement, can be built at a cost of \$813.

For a utility room of similar construction in the basementless house the cost is \$1,460, and there is 4,768 cubic feet less in actual space.

Breakdown Given

costs in
walls.

district of Columbia and environs and generally accepted in most other locations as standard.

Accepted as Standard

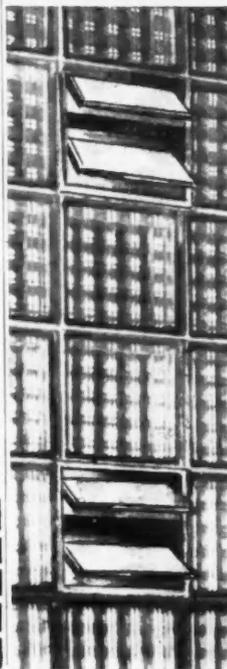
Reprints of this article
and a Cost Analysis may
be obtained by writing to
IRVINGTON

Form & Tank Corporation
IRVINGTON 11, N. Y.

The figures on concrete walls were predicated upon the use of fabricated steel forms manufactured by the Irvington corporation.

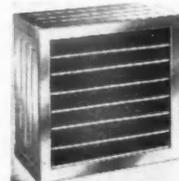
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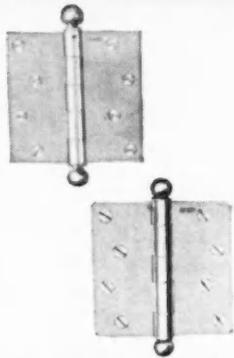
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Butt mortise 75 doors and jambs a day

...millwork accuracy and speed right on the job



The Stanley-Carter Hinge Butt Router and T3 Templet recesses for either square or round-cornered butts.

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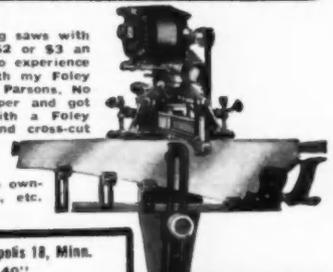
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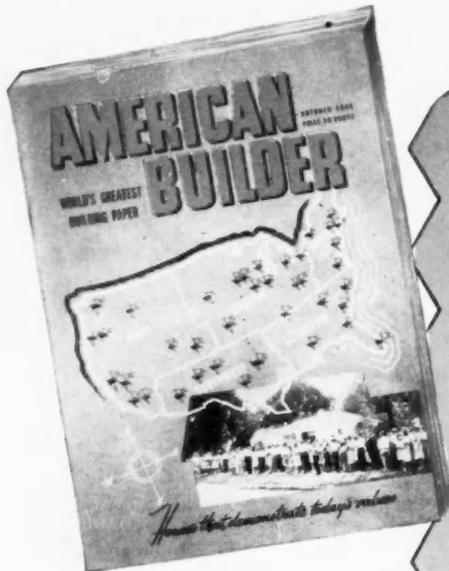


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"YES"
 THE HOUSE IS
SOLD



GIVE HER WHAT SHE WANTS!



• It's not the joists and studding that attract the one who really decides which house to buy—the woman in the case. *She* looks for the "dress-ups"—added refinements that cater to her pride and pleasure.

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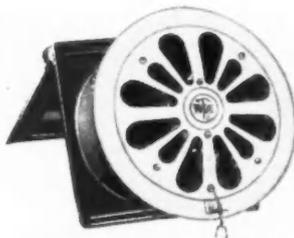


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THE CONTINENTAL, STYLE K-32—A beautiful chime, with ivory-plastic cover and satin-brass tubes. List, \$12.95. One of 14 models—\$3.95 to \$69.95.



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THE BEACON, STYLE DK-200—Brass door knocker with spotlight for keyhole illumination. List, \$4.95. Another type door knocker lists at \$2.95.

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READ WHAT AUTHORITIES SAY:

"Many loose insulations settle down from year to year, producing areas that are eventually without insulation."

"Insulation," by DALZELL & MCKINNEY, published by American Technical Society.

● "Conductivity may vary by several hundred per cent, depending entirely on the arrangement of the fibers."

DR. J. L. FINCK, in *Bureau of Standards Research Booklet No. 243*.

● "For each grade of fibrous material, a certain optimum density exists. For densities greater and less than this density, the conductivity will increase."

DR. J. L. FINCK, in *"Industrial & Engineering Chemistry."*

● "Aluminum foil exposed in a vertical position since 1929 to the dust and fumes in the Heat Measurement Laboratory, M.I.T. Samples of this foil have been removed from time to time and the emissivity determined. Over a period of 10 years, no appreciable change in emissivity was found."

PROF. GORDON B. WILKES, of *Massachusetts Institute of Technology*

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MONTHLY REVIEW

Chicagoland Home Show

(Continued from page 72)

ing equipment, air conditioning equipment, washing machines, ironers and driers, power tools and paints.

With a more varied and complete program, intensified promotion, and greater interest on the part of producers and the public, the sponsors predict a substantial increase over the previous year's attendance figure of around 110,000.

Concurrent with Home Show arrangements, the Chicago group is making plans for a permanent display in its home building center at Association headquarters in downtown Chicago.

Kansas City Association To Stage Home Show in May

The Greater Kansas City Home Show, to be held May 21-28 in Exhibition Hall of the Municipal Auditorium, will be the most comprehensive display of home building materials, equipment and services ever shown in Kansas City, according to an announcement by John A. Kroh, president of the Home Builders Association of Greater Kansas City, sponsor of the exhibition. It will be the first show of its kind to be held in Kansas City since 1941.

Among the features of the exhibition will be model home displays, examples of good and bad construction in home building and demonstrations of plastering and wet and dry wall construction. Several trade unions will demonstrate their crafts and their employment of the apprentice system. Several series of rooms in the exhibition hall will be decorated by leading Kansas City firms. A fashion show is also planned.

A project of considerable interest is the construction of a building portraying solar orientation employed in home heating by harnessing the rays of the sun. The building will be erected by the University of Kansas Department of Architecture. Representatives of the American Institute of Architects will give information about the architect and his work.

Ralph Wells is chairman of the Associations Home Show committee. Serving with him are: John C. Taylor, A. C. Langsworthy, Ralph O. Taylor, Charles E. Vawter, Charles B. Neal, Jack Bear, A. L. Huber, Jr., Paul Darling, Donald Drummond, George Siemens, Jr., and George W. Miller. Management of the show is under the direction of Damon Elder of Paul S. Van Auken and Associates, Chicago.

75 Attend Dayton Meeting

More than 75 builders and associate members attended a general membership meeting of the Montgomery County (Dayton, Ohio) Builders Association held March 15 in the salesrooms of the Miami Valley Distributing Co., Dayton. The meeting was sponsored by the Miami Valley Co.

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individuals laid up Dutch Lap method.

- Made of solid copper wire—pliable yet strong enough to anchor single sections.
- Cannot rust out.
- Hammer is only tool necessary.
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- Beauty of roof unmarred.
- Perfect on repair jobs to correct leaky, unsightly roofs.
- Millions in use since 1935.

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Large variety of attractive models in brick, stone, wood, etc., available.

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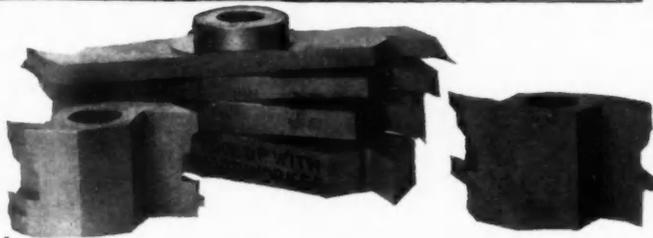
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ONLY EAGLE RULES
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Superior Sash Cutters

Superior Double Hung Sash Cutters, Moulding Cutters, Woodworking Machinery and Tools, Shaper Spindles. Write for catalogue.

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CONTRACTORS!
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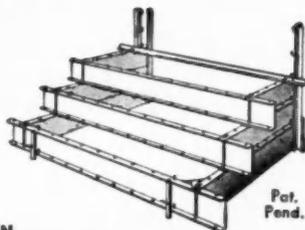
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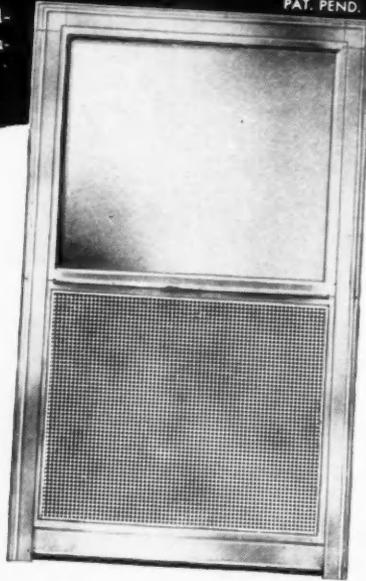
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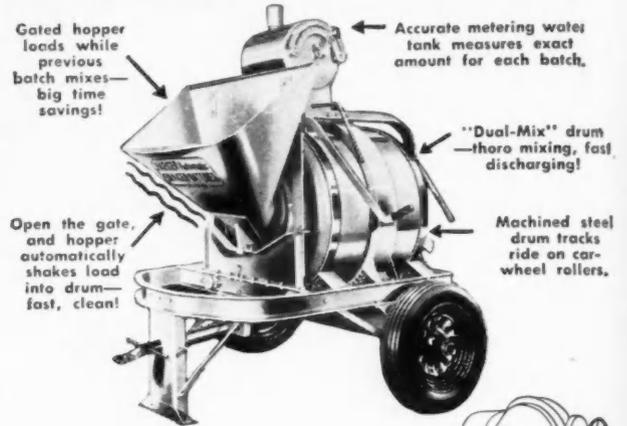


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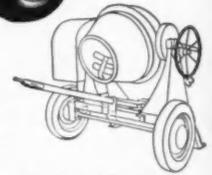
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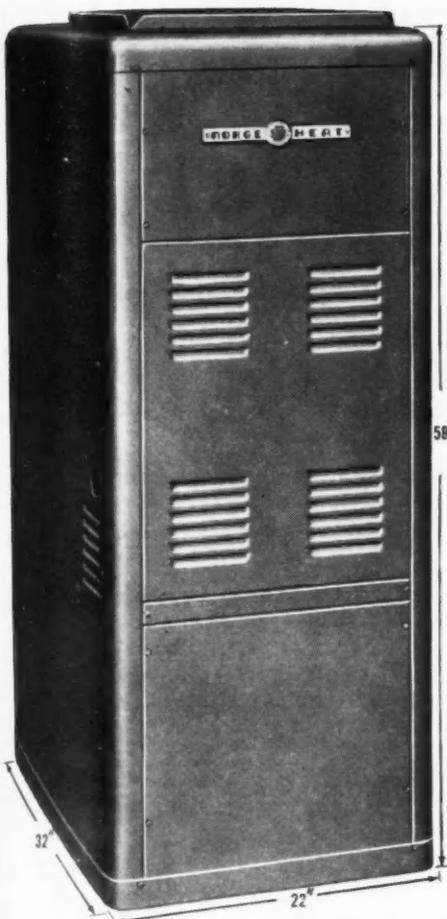
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Bonnet Output	75,000 BTU	87,500 BTU
Blower Size	11" x 10"	11" x 10"
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Height	58"	60"
Motor	1/4 H.P.	1/4 H.P.
Air Filter	16" x 25" x 1"	20" x 25" x 1"

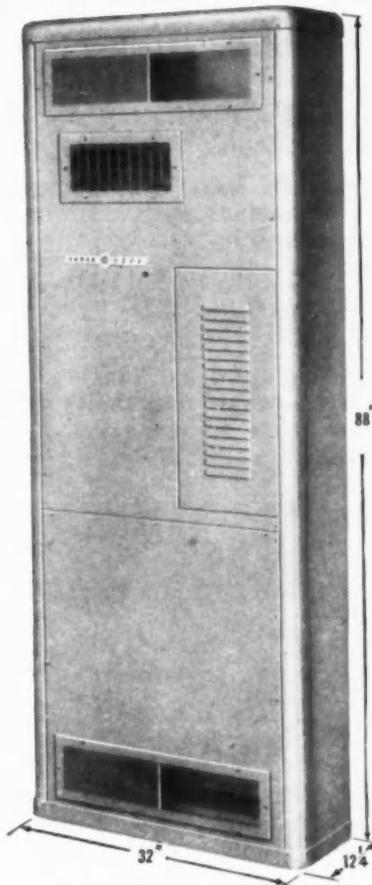
- Drilled raised-port, cast iron burners—AGA approved for Natural, Manufactured and L.P. Gases.
- New Vee-Sectional type heat exchanger gives rapid, thorough heat recovery.
- Fully automatic controls—thermostatic operation—easily accessible.
- Provides filtered summer ventilation.
- Fully approved by AGA for natural, manufactured and L.P. gases.

◀ NOTHING MORE VERSATILE

- Factory assembled—designed for utility room, closet or basement installations. Factory finished boot available for basement installation.
- Drilled, raised-port cast iron burners are approved by A.G.A. for all gases—Natural, Manufactured, Mixed, L.P. and Butane Air.
- Standard equipment includes automatic pilot valve, manual main control and manual pilot valve, gas pressure regulator, and magnetic type solenoid—100% safety shut-off controls for L.P. gases.
- Built-in draft diverter—external diverter is not required.
- Super efficient "Vee-Sectional" heat exchanger provides ultra fast heat transmission through use of Jet-Type gas passages.
- Easy access to all controls and blower assembly.

THE GREAT SPACE SAVER ▶

- Space Saver—only 12 1/4" deep, 32" wide, and 88" high—requires less than 3 sq. ft. of floor space.
- Safely installed anywhere—in wall, closet, utility room, or basement.
- One piece 12 gauge steel combustion chamber and heat exchanger.
- Integral plenum chamber—built into the furnace—cuts installation costs—delivers heat in any direction through ducts, or direct delivery.
- 100% Safety shut-off—combination automatic pilot valve and manual main-control and pilot valve—pressure regulator—solenoid for L.P. gases.



MODEL F-500-62-5 GAS-FIRED AIR CONDITIONING FURNACE

Input—AGA Rating	62,500 BTU's
Bonnet Output	50,000 BTU's
Blower Size	13" x 5"
C.F.M. at 2 S.P.	450 to 600
Motor	1/4 H.P.
Air Filter	10" x 25"



NORGE HEAT



Coal-Burning Furnaces • Winter Air-Conditioners • Replacement Units • Gas and Oil-Burning Furnaces • Gas and Oil-Burning Water Heaters • Floor Furnaces

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NORGE HEAT

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Home Builders have a vigorous, hard-hitting National Association working for them. It reaches the public, the government, the industry with their story.

NAHB's Legislative Department helps obtain sounder legislation in the building field.

NAHB's Labor Department keeps its finger on the personnel pulse to give counsel and aid in employer-employee relations.

NAHB's Public Relations Department constantly sends facts about the progress of the Home Building industry to the government, public and trade.

NAHB's Land Planning Service supplies the latest news on community development, facts that mean more dollars saved.

NAHB's Technical Service Department coordinates data on the Economy House and other Home Builder goals.

NAHB's Chapter Relations brings affiliated local associations together to exchange information and develop promotional ideas.

If you are one of the many active Home Builders who is producing homes for America, you'll want to know more about the services which NAHB offers you.

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send for your FREE booklet...

Mr. Frank W. Cortright, Executive Vice President
National Association of Home Builders
1028 Connecticut Avenue, N. W.—Suite 1116
Washington 6, D. C.

Without cost or obligation please send me a copy of "MEN, HOMES AND YOU."

Name..... (Print)

Firm.....

Street Address.....

City & State..... (Give Postal zone if any)



READ THIS FACTUAL BOOKLET

Send this Coupon Today!

What's the COST of "low-cost" hauling?



THE cost of *any* truck is the total amount of money you invest in it . . . as long as you own it.

That cost is usually far different from the truck's original price!

It can be far higher, for example, when you buy a truck that's too big or too small for the hauling job it has to do.

In such cases, costs go up rapidly . . . in wasted gas

and oil, in repairs, in shortened truck life, in time lost on the job.

It's important, therefore, that *your* truck be engineered and built . . . to fit *your* job! That's what is meant by a "Job-Rated" truck!

Only Dodge builds "Job-Rated" trucks. Every one of these trucks has the right one of 7 truck engines . . . "Job-Rated" for top efficiency and maximum economy. Every Dodge has the *right* chassis unit . . . from engine to rear axle . . . "Job-Rated" to fit *your* job, to save *you* money.

So if you're looking for the "lowest-cost" truck . . . ask your Dodge dealer to show you the "Job-Rated" truck that fits *your* job! Such a truck will give you the best *value* in transportation you can buy.

See or Phone Your Dodge Dealer



For the good of your business—

Switch to **DODGE** "Job-Rated" **TRUCKS**



Measure

a
TEMCO
GAS FLOOR FURNACE



- for ● EASY INSTALLATION
● LOW COST
● CONSUMER ACCEPTANCE

A TEMCO'S EASY TO INSTALL!
No costly excavation needed to install a Temco. Temco's shallow 25 1/2" construction means it will fit right in the space between the house and the ground.

A TEMCO COSTS YOU LESS!
Combine this with the low cost of operation to your customer and you have a dependable thrift investment.

HOME BUYERS KNOW THE TEMCO NAME! Because of this year's powerful national advertising campaign, a Temco Gas Floor Furnace is already presold to your customers.

Measure a TEMCO
for Heating and Building
Economy!



Approved by American Gas Association

To get full information on Temco
MAIL THIS COUPON NOW

TENNESSEE ENAMEL MFG. CO., DIV. B-104
4104 PARK AVE., NASHVILLE 9, TENN.

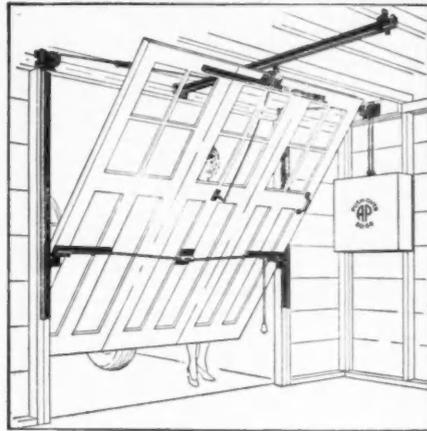
I would like to know how I can save money while getting more efficient heat with a Temco Gas Floor Furnace.

Name _____

Address _____

City _____ State _____

**50-50 PUSH-OVER
GARAGE DOOR HARDWARE**



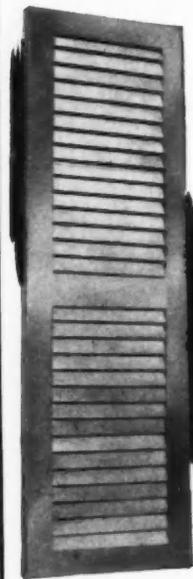
ALLITH

Heavy duty, well-engineered garage door hardware. Result: a quickly installed, easily operated, overhead door. Designed to insure **customer satisfaction**.

Standard set fits any opening up to 9' wide x 7'6" high when doors do not exceed 275 lbs. Other sets available for openings up to 10' wide x 10' high.

ALLITH-PROUTY, INC.
DANVILLE, ILLINOIS

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**ORNAMENTAL
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Beautiful and practical. Twelve standard sizes, nine attractive colors. Individually packed, and ready for installation.

Made of sturdy, non-rusting aluminum, they give a lifetime of service at a common-sense cost. Special sizes on request. Send the coupon below for details on this and

**OTHER ALUMINUM
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Aluminum double-hung windows, two types, 16 sizes, 6 styles with trim. Packaged, glazed and screened.

Attic Ventilators • Custom framed screens • Tension Screens • Storm Windows

METAL ARTS MFG. CO., Inc., P. O. Box 4144, Atlanta, Ga.

Please send me detailed information on your Ornamental Shutters.
I am a Distributor Dealer Builder Architect

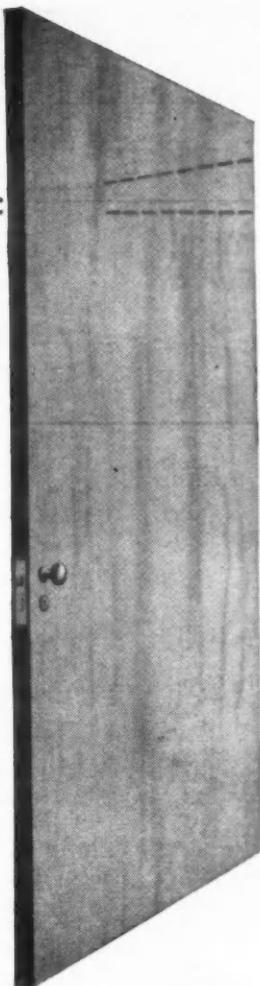
NAME _____

ST. & No. _____

CITY _____ ZONE _____ STATE _____



**The Original Mengel Flush Door
with the Patented
"INSULOK" GRID CORE →**



IT'S more than just a beautiful door! It's an approved way of building durability and utility into any interior... regardless of period and decorative scheme.

For Mengel Flush Doors are engineered and built by skilled craftsmen to give your customers *beauty with a purpose*... beauty with finger-tip lightness, long, trouble-free life, easy upkeep.

Only the Mengel Flush Door has the patented "Insulok" Grid Core. Made of sturdy insulation board strips halved together, it ends expansion and contraction headaches... makes Mengel Flush Doors much lighter than standard panel hardwood doors.

Built Like Fine Furniture! Framing is hard, even-textured poplar. Corner connections have dovetailed lock-joints, securely wedged, to give dimensional stability and seal moisture out. And the 3-ply faces are permanently bonded to frame and core.

No wonder Mengel Doors stand a 25,000-slam test. And every door is "cured" before it leaves the factory to assure warp resistance.

Mengel Flush Doors come faced with beautiful veneers of *Birch, Mahogany, Oak, Walnut, Gumwood* (and other hardwoods to order).

And they *stay* beautiful! Their smooth, unbroken surfaces are easy to clean... offer no place for dust to cling. No panels to shrink... no moldings to come apart.

Easy to Paint! The smooth Gumwood door is perfect for painting... never shows a grain raise.

For new construction or remodeling, push Mengel Flush Doors... the doors with years of performance behind them. For full information call your regular supplier or mail the coupon *today!*

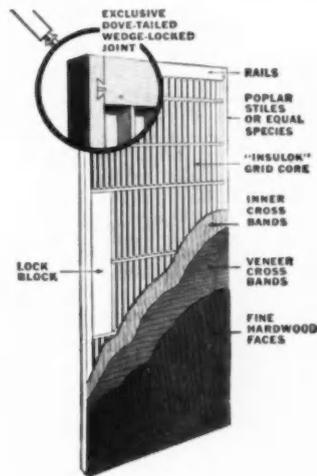
**The Open-and-Shut Case
for Mengel Doors**

1. **An Engineered Door**... with patented "Insulok" Grid Core, hardwood frames and faces, and dovetailed lock-joints.
2. **3-Ply Faces Bonded to Core**... with moisture-resistant resin glue by hot-press method.
3. **40% Lighter in Weight**... than standard panel hardwood doors.
4. **Warp-Resistant**... "cured" before leaving factory.
5. **Slam Tested**... 25,000 times by powerful machine.
6. **Flame-Resistant Core**... made of 3/8" insulation board.

Copyright 1949, The Mengel Company

7. **Sealed Construction**... prevents entrance of dirt, vermin or moisture.

8. **Over-sized Lock Block**... centered on edge of stile, permits reversing door.



••• Mail Coupon Today! •••

THE MENGEL COMPANY
Plywood Division, Dept. AB-1, Louisville 1, Ky.

Please send me complete information about the Mengel Flush Door and name of my supplier.

Name

Company Name

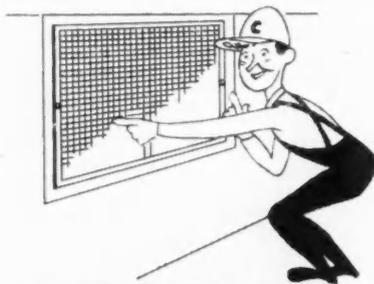
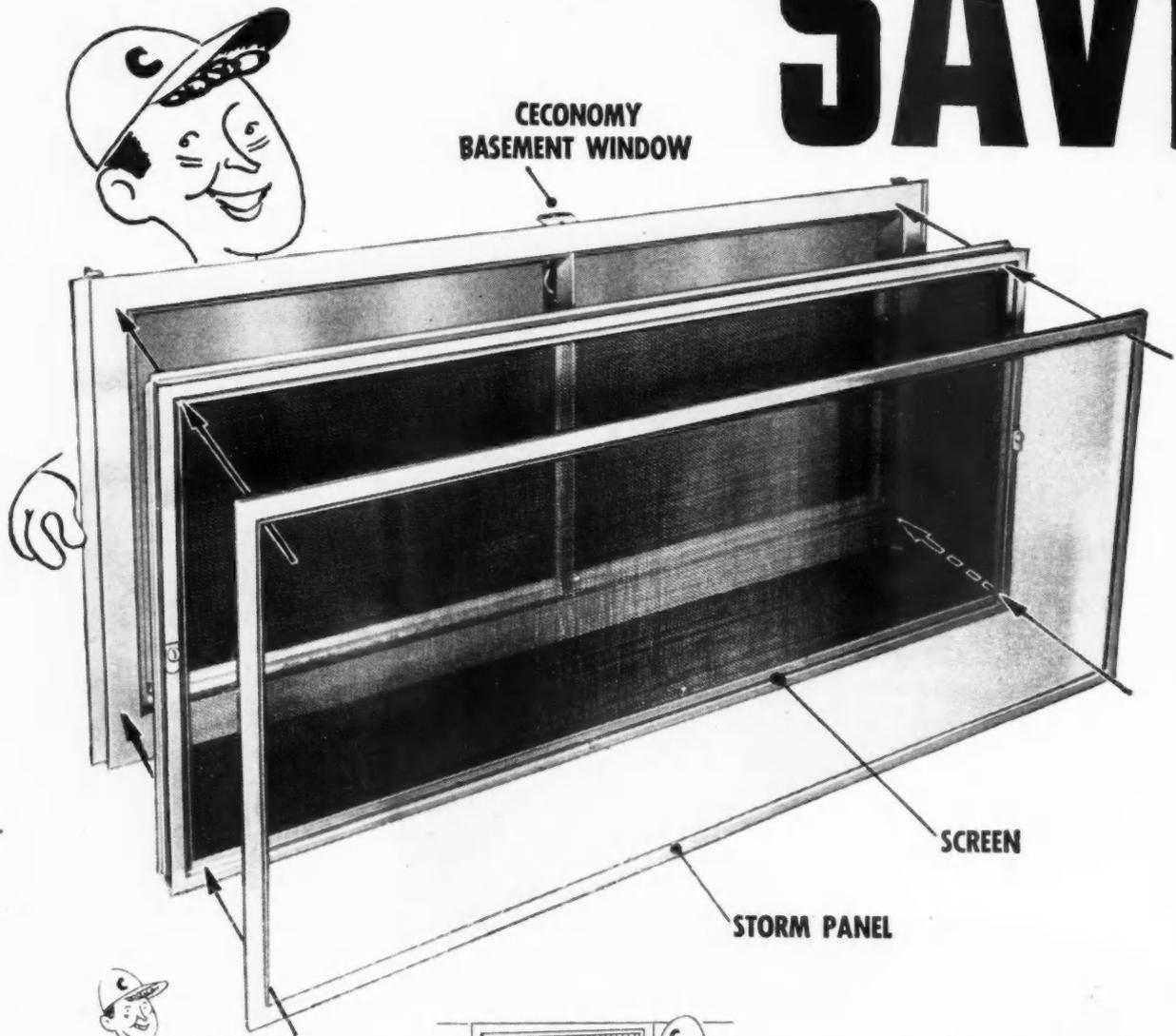
Street

City Zone State



MENGEL Flush DOORS
THE FAMOUS FLUSH DOOR WITH THE PATENTED CORE

SAVE



SAMMY CECONOMY tells how to do it!

When you place your forms for the foundation, nail a wood strip on each side of your opening to provide vertical rebates. Strip forms, lower attached fins of Ceconomy Basement Window into rebates. Plumb and level. Grout with concrete.

After the window has been erected, it is a simple matter for the home owner to affix his basement window screens with only two screws. The screen goes on the outside, does not interfere with the operation of the ventilator.

The storm panel is placed on the outside over the screen, making the screen self-storing. Two simple clips hold the storm panel rigidly in place. Interchangeable—no matching of storm panel to window, no fitting each season.

In construction products **CECO ENGINEERING**

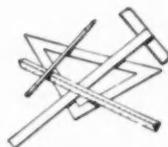
4 WAYS ...

with CECO'S CECONOMY Basement Window

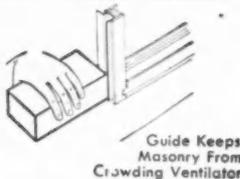
You get four-way economy from start to finish with Ceco's famous Ceconomy Basement Window and the new Combination Screen and Storm Panel. Here's a case where low original cost is matched by savings in installation, performance and maintenance:



1 ECONOMICAL TO BUY—Engineered quality at a price—about \$3.60 for the 2 light 15" x 12" window alone. About \$5.00 for the Combination Screen and Storm Panel. Slightly higher west of Mississippi and in South.



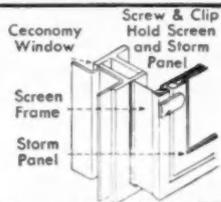
2 EASY TO ERECT—The masonry guide and fin make the window easy and inexpensive to install. Guide quickly aligns masonry. Fin ties window rigidly to construction.



Guide Keeps Masonry From Crowding Ventilator



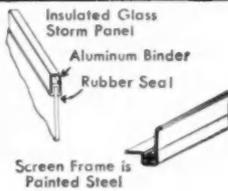
3 SAVES FUEL—The window closes tightly because it has double contact weathering. Then, too, the Combination Screen and Storm Panel provides added comfort, saves additional heat.



Screw & Clip Hold Screen and Storm Panel
Ceconomy Window
Screen Frame
Storm Panel



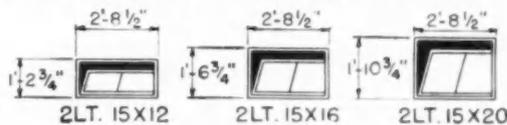
4 LOW MAINTENANCE—The window is engineered in hot rolled steel, bonderized and painted. Can't rot or swell. Screen frame is painted, wired with 18 x 14 bronze mesh. Storm panel is insulated with rubber seal and aluminum edging.



Insulated Glass Storm Panel
Aluminum Binder
Rubber Seal
Screen Frame is Painted Steel

See Ceco catalogs in Sweet's Builders and Architectural Files . . . or write for free literature.

AVAILABLE IN THREE STANDARD SIZES



The above sizes are window dimensions

CECO STEEL PRODUCTS CORPORATION
GENERAL OFFICES: 5601 West 26th Street, Chicago 50, Illinois
Offices, warehouses, plants and dealers coast to coast

CECO STEEL

makes the big difference

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- METAL RESIDENCE CASEMENTS • INDUSTRIAL WINDOWS AND DOORS • METAL FRAME SCREENS • ALUMINUM FRAME STORM WINDOWS • ALUMINUM COMBINATION STORM WINDOW AND SCREEN UNITS • METAL LATH AND ACCESSORIES • STEELFORMS • REINFORCING BARS • STEEL JOISTS AND ROOF DECK • HIGHWAY PRODUCTS • ROOF AND ATTIC VENTILATORS

35
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212
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159
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9-183
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Ready

for instant duty at all times . . .

● Users of The "OVERHEAD DOOR" with the Miracle Wedge are assured perfect performance year in and year out. Durability of tracks, hardware, and all working parts qualifies the door for the most rugged service. Weathertight closure affords added protection for costly equipment which must be kept in good working condition. This door adds to the appearance of any structure — industrial, commercial or residential — and increases its usefulness. Any "OVERHEAD DOOR" may be manually or electrically operated.



TRACKS AND HARDWARE OF SALT SPRAY STEEL

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THE
OVERHEAD DOOR
TRADE MARK
WITH THE
MIRACLE WEDGE

NATION-WIDE
SALES
INSTALLATION
SERVICE

OVERHEAD DOOR CORPORATION • Hartford City, Indiana, U.S.A.

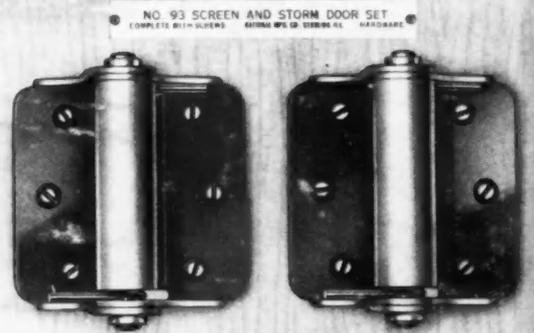
Tops in screen door hardware

Here are two excellent National screen and storm door sets which meet with popular approval everywhere.

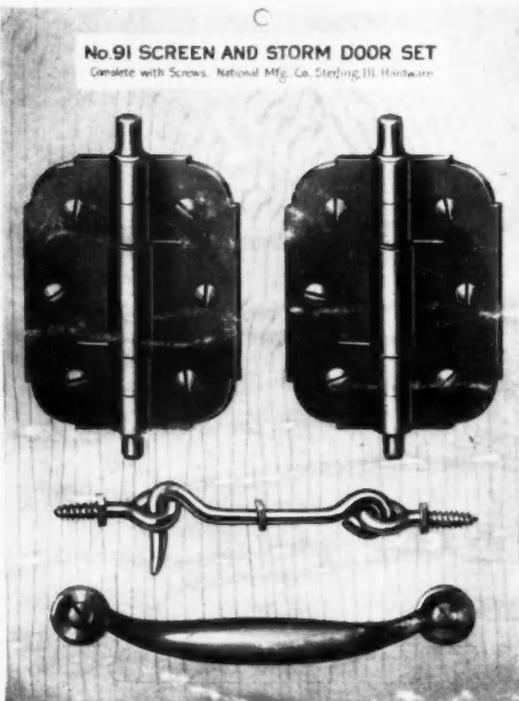
No. 91 Screen and Storm Door Set consists of one pair of No. 122 Loose Pin Spring Hinges made of steel. Music wire spring. Hinge operates with or without spring. One 2½-inch Hook and Eye. One No. 200 Pull. Door can be taken down without removing screws.

No. 93 Screen and Storm Door Set consists of one pair of No. 123 Spring Hinges made of steel. Strong, dependable spring—fully enclosed. Hinge operates with or without spring. One 2½-inch Hook and Eye and one No. 200 Pull.

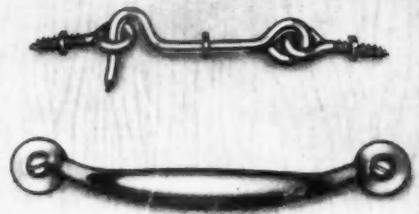
☆ Packed one set in a carton with screws. Furnished in any finish desired.



NO. 93 SCREEN AND STORM DOOR SET
COMPLETE WITH SCREWS. FURNISHED IN ANY FINISH DESIRED.



No. 91 SCREEN AND STORM DOOR SET
Complete with Screws. National Mfg. Co., Sterling, Ill. Hardware



Your National Dealer will be pleased to show you a wall chart illustrating the entire line of National Builders' Hardware. ☆ ☆ Included also are other types of National Screen and Storm Door Sets to meet any requirement.

NATIONAL Manufacturing Co.
Sterling, Illinois