

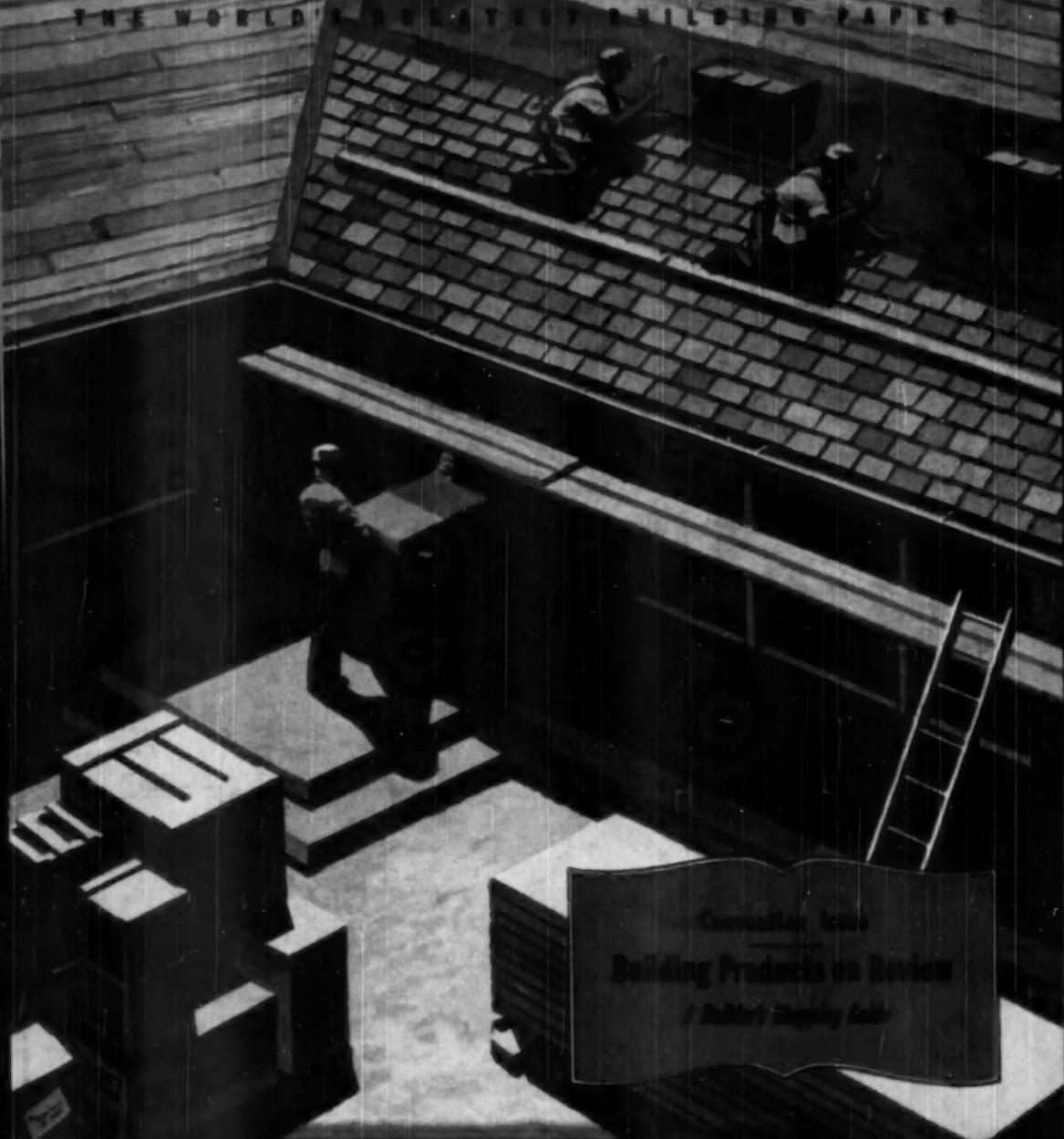
AMERICAN

FEBRUARY 1950

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BUILDER

THE WORLD'S LARGEST BUILDING PAPER



Continued from
Building Products on Review
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Success Story!

No new hardwood floor has ever made such an immediate hit as the Bruce Ranch Plank Floor . . . with its alternate widths, walnut pegs and superb factory finish. Builders report that homes in which they have used this distinctive hardwood floor are selling faster than their other homes with regular strip floors. The added cost for Ranch Plank Floors is surprisingly little—and there's a valuable saving in time on the job because this flooring is pegged and finished at the factory. Whether you're building homes for sale, or on contract, you'll want the whole story on popular Bruce Ranch Plank Floors. Just fill in and mail the coupon below.

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Solid oak with walnut pegs • Alternate 2 1/4" and 3 1/4" widths • New "Decorator" Finish

Architects and interior decorators praise this distinctive new floor



Bertram A. Weber, Chicago Architect, says: "The new Bruce Ranch Plank Floor impresses me as being very beautiful and practical. I consider it suitable for both traditional and modern architectural types. The interesting informality of this floor, with its random widths and walnut pegs, is particularly good for taming ranch-type homes."



Elizabeth Whitney, Chicago Decorator, says: "Decoratively speaking, the Ranch Plank Floor is a real 'find' for both traditional and modern interiors. The random widths make it especially suitable for all Colonial and Provincial styles. In modern rooms, the oak grain and walnut pegs contrast delightfully with contemporary furnishings."



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"Welfare State" Losing Its Glamour

ALL REPORTS show that most members of Congress returned to Washington favoring reductions in government expenditures and were not only opposed to increases in taxes, but for reductions. After having conferred with his leaders in Congress, President Truman's messages have been less in favor of increases in taxes to balance the budget than they were a year ago.

This is significant and important. It is the effect of members of Congress visiting their constituents. It shows the people are learning the hard way — by experience — that they cannot have the supposed benefits of big government spending without *everybody* having to pay for them, directly or indirectly, in taxes. It indicates also that an increasing number are beginning to realize that the benefits they derive from government spending are less than they have to pay for them.

The most dangerous threat to the American political and economic system for almost 20 years has been widespread acceptance of the theory, first, during the depression that the government could spend us back to prosperity, and, second, that after prosperity had been attained huge government spending was necessary to maintain it.

The previous history of the coun-

try was disregarded by the New Deal when it adopted this theory seventeen years ago. The nation had then prospered and progressed, with some setbacks, for almost a century and a half, as no other nation ever did, without anybody ever seriously advocating government spending excepting to provide services which it was assumed could not and would not be provided by private enterprise. Then during the depression the policy of largely increased government spending was advocated and adopted to "prime the pump" and start a revival of production, distribution and employment by private enterprise. The theory did not work. After it had been tried seven years, business and employment in 1940 still showed little improvement.

Then came preparations for and actual participation in war involving wholly unprecedented government expenditures. This created the appearance of prosperity, and the believers in huge government spending predicted a severe depression when spending was enormously reduced after the war. Their prediction failed of fulfillment. During the war there had accumulated, on the one hand, huge shortages of civilian goods, and, on the other hand, large buying power in the hands of both consumers and business; and pros-

perity has been maintained in peacetime by the use of this accumulated buying power to remedy the shortages.

Government expenditures since the war, although greatly reduced, have been larger than ever before in peacetime, and are again increasing, causing the threat of increases in taxes to pay them. Many who thought big government expenditures would benefit them in the belief that taxes to defray them would have to be paid by corporations and the rich, are beginning to realize that they cannot evade their share of taxes and that the taxes they pay indirectly in prices, rentals and so on, are just as certainly deductions from their incomes as those they pay directly. Hence the theory of the socialistic "welfare state" involving government spending to benefit the many at the expense of the few is losing its glamour.

Winston Churchill once stated the case against both capitalism and socialism in a single sentence. He said: "The trouble with capitalism is that it causes inequality of wealth; the trouble with socialism is that it causes equality of poverty." Huge taxing and spending do not create a "welfare state" but a poor-house state.

An increasing number of American voters are learning this.

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Samuel O. Dunn,

A Command Performance



It was midnight some 175 years ago that a man rode through the countryside calling his neighbors to arms.

Freedom was at stake.

History with deadly finality records the outcome of the struggle set off by that ride—a struggle that ended in freedom for all the people of this country—a freedom we take too lightly today.

Maybe it's because 175 years is a long time and none of us can remember that far back—maybe it's because we have gotten used to this thing called freedom—maybe it's because we have had it so long we can't imagine life without it—maybe we believe we just cannot lose it.

But we can!

Today, the threat against the freedom of the American people is as great as it was that memorable night 175 years ago. In some sense greater. Guns do not threaten us—not yet at least—but an idea, a plan, artfully disguised, promises us the "secure" life.

What will it cost? Not much—just our freedom.

Now, let's forego all the high sounding language and get down to cases. What threatens our freedom?

The threat is two-fold . . . from the outside and from within. It isn't hard to identify the danger from the outside. Some twenty years ago, the leaders of Communism and Socialism brought their threats into sharp focus when they declared their operating policies for the future. Both contained a simple philosophy. Bore from within—take a little at a time. Usurp high office—guide the evolution until it becomes complete.

Has any of that happened?

The Communist trials in our country have been most revealing. Every day the press and radio tell us of new infiltration into high places. Nor have the ranks of labor escaped.

What about the inside?

That can easily be answered by another question. Do the American people have as much freedom of use of the money they earn as they did ten years ago? They do not! More people surrender a larger part of their money for tax use than ever before in history. More restrictions curb more people than ever before. More compulsion over the entire populace is advocated. It is a mounting trend becoming more inclusive every year. All of this is offered under the glib promise of liberating man from economic servitude—of a planned life—a total welfare.

So, we have the two threats . . . one from the outside and one from within.

It is doubtful that the American people are fearful that Communism will take over our country in the foreseeable future. It is doubtful too that they are unduly alarmed that Socialism as a method of government will replace our government.

But, what they do not understand is that a creeping Socialistic pattern is spreading itself from within—that it can advance to a point from which there can be no retreat. Because this Socialistic pattern moves forward a little at a time, it is not spectacular enough to be recognized for the dangerous thing it is. It is so easy to accept glittering promises—broad generalities, that mask the eventual result.

So, what is to be done about it?

We believe the state of the nation calls for a Command Performance from Business—a performance to stop this creeping Socialistic pattern which threatens the freedom of all.

Why does business get the call? There are two reasons.

First, business should do this job because of its obligation to people. That is not a new contention at Ceko. For three years, Ceko has been advancing the thought that the prosperity and security of our nation are tied unremittingly to a four letter word W-O-R-K. Ceko has said and still says management must work *more* at managing. We believe this job is the most important task in the over-all concept of management. It is

for American Business



up to alert management to provide real security in the present, as well as the future, to prove that responsibility for economic welfare belongs in private, not in public hands.

The second reason is that business—business men—are the best qualified for the job because American business knows most about selling. Businesses grow because business men sell their product. Is merchandise more important than the system which produced it? Isn't the system worthy of our best selling talents too? Yes... Business must and should sell the idea that real security and freedom for all are possible only under a virile free enterprise system.

Business must expose the alluring misrepresentations that spawn the myth "you can get something for nothing." It must boldly proclaim the simple truism that welfare projects cost money—cost the people their own money. For government has no money except that which is given it by the people through taxes. It must show that excessive taxation is creating a competition to industry which is challenging its right to lead—its right to guarantee economic freedom to people. It must question the cost which could be more than money. Unchecked, taxes can bankrupt the people, bankrupt business, thus making it impossible for individuals acting in private capacities—for business, through free enterprise management—to provide jobs, improve working conditions, assure real security.

It was protest against excessive taxation that occasioned the midnight ride 175 years ago. Now, as then, the same danger threatens.

Yes, freedom is at stake!

Business must create a crusading attitude toward free enterprise. Here the problem is not simple. For lately, the people are taking lightly our system of private endeavor which has had a moving influence on life around the world and

given us the highest living standards ever. They are "going along" thinking little of where it leads. They are not yet alarmed. Therefore, *awakened* belief in that which we so casually call the American Way of Life must practically be revived. New vigor must fire appreciation of the system of individual effort and reward. There must be *reaffirmation* of faith in the dignity of man, in the real security to be found only in the individual acting in self-interest guided by conscience and a sense of fair play. All the people must be awakened. There must be 130 million individual crusades in this country, acting in concert, to keep the American Way of Life vital.

Business men must light the fire of a passionate belief within all the people—a belief in our way of life that burns brighter than any fanatical faith in the destiny of any other system.

Once the people know the danger, once their enthusiasm for incentive living reaches crusading fervor, they will know how to act. They will see through the will-o'-the-wisp promises of an inexhaustible public purse. They will recognize the fallacy of "something for nothing." Their "horse-sense" will renounce it. But to bring all this about, business men must become vocal. Each business must inform its own people. From little companies employing only a few, to big corporations employing many thousands. This program can succeed. The drift toward public dependency can be stopped but business men must be articulate and act decisively.

Mr. Chairman of the Board, Mr. President of Industry, Vice Presidents, Managers, yes—all of us—must get off of our pants and into the plains. We must meet with the people... talk with the people... work with the people. This isn't something that can be done by writing a check!

Let's accept this call for a Command Performance now! Today!! This very minute!!!

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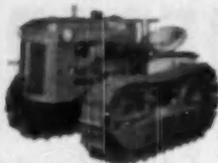
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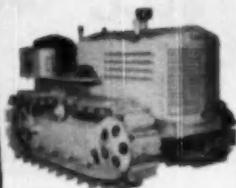
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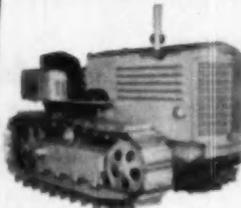
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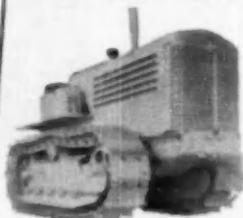
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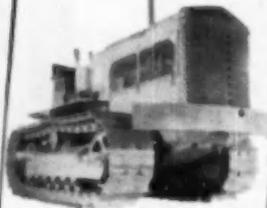
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Industrial Division, 19300 Euclid Avenue, Cleveland 17, Ohio

A Complete Line of Crawler and Industrial Wheel Tractors

These points sell Armstrong's Temlok Tile

There are good reasons why Armstrong's Temlok Tile is a fast-selling interior finish material. This fiberboard ceiling tile is low in cost—attractive in appearance—light in weight—and quick and economical to install. In addition, it has high thermal insulation value, is a good reflector of light, and helps to absorb sound.

Armstrong's Temlok® Tile is made from loblolly pine wood fibers, cut to controlled lengths by a special process. Pressed into boards one-half inch thick, these fibers tightly interlace to give Temlok unusual strength and make it easy to handle both in the yard and on the job. Two coats of Warm White paint are applied to the tile surface. The second coat is ironed on for extra smoothness, ease of cleaning, and wearability. The low-density composition of Temlok Tile gives it excellent insulating properties—an important factor when the material is used in attics or in single-story buildings.

An outstanding feature of Temlok Tile is its unique Lok-Bevel joint. This tongue-and-groove type joint is designed so that tiles can expand or contract without buckling or sagging. It speeds installation and completely hides nail-heads or staples from view.

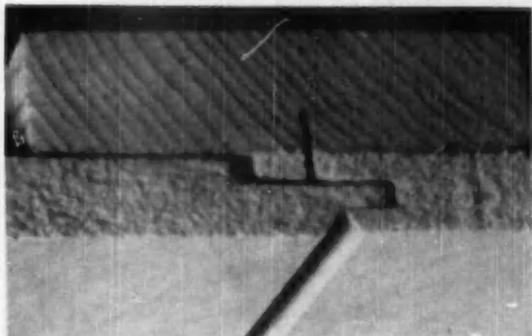
The market for Temlok Tile is a broad one—for both new construction and remodeling. Commercial interiors—stores, shops, recreation centers, offices—are all good prospects for Temlok. It's used extensively, too, in residential attics and basements, as well as in living rooms and dining rooms. Get samples and full details about Armstrong's Temlok Tile from your Armstrong wholesaler or write Armstrong Cork Co., 1602 Ross St., Lancaster, Pa. 

ARMSTRONG'S TEMLOK

American Builder, February 1950.



1. Appearance. Temlok Tile has a two-coat casein paint finish, in Warm White. This smooth, ironed-on finish is attractive and durable—and doesn't require extreme care in handling on the job. It offers good light reflection, without causing glare, and can be repainted with either oil paint or cold water paint.



2. Lok-Bevel joint. This cross-section photograph shows how extra space at either end of the Lok-Bevel joint allows for expansion. This feature of the Lok-Bevel joint assures level surface-alignment of tiles and helps to prevent sagging or buckling. Note how staple is hidden from view by the tile at left.



3. Quick, easy installation. Temlok Tile comes in three convenient sizes: 12" x 12", 16" x 16", and 16" x 32". Tiles are simply nailed or stapled along furring strips spaced 12" or 16" on centers over ceiling joists. Lok-Bevel joint provides extra-wide nailing flange which speeds nailing or stapling on the job.



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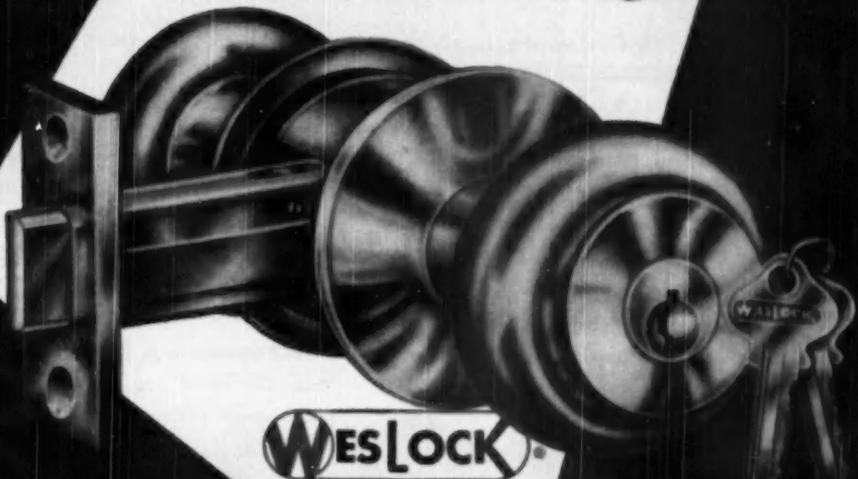
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\$70.

TO INSURE A
\$10,000 SALE?



Old hands at building and selling houses know that one of the features of a house most likely to influence its sale is the quality of the floors.

This is worth remembering—worth acting upon!

Next house you build, invest a few extra dollars in the finest floors money can buy. Install floors of WRIGHT RUBBER TILE in the kitchen and breakfast room. You will be surprised to find how quickly you get those dollars back . . . with interest.

Your house with floors of WRIGHT RUBBER TILE will sell faster and more easily, at a much better price than you can command with ordinary floors.

There's real sales magic in WRIGHT RUBBER TILE. Its outstanding beauty instantly catches your prospect's eye. You can assure him that there is no other floor covering so easy and

economical to maintain as WRIGHT RUBBER TILE. Its unrivalled serviceability—backed by 29 years of proof—appeals to his sense of practical values. Its quiet comfort and non-slip safety underfoot, its resistance to stain and damage of all kinds, make WRIGHT RUBBER TILE a compelling sales asset in *any* house.

Your investment in floors of WRIGHT RUBBER TILE will assure you of faster sales at better prices—will put extra profits in your pocket.

You're betting on a sure thing when you install floors of WRIGHT RUBBER TILE in the house you want to sell more quickly, easily and profitably.

WRIGHT MANUFACTURING CO.
5202 Post Oak Road • Houston 5, Texas

 **WRIGHT RUBBER TILE**

FLOORS OF DISTINCTION

- ◆ WRIGHTEX—Soft Rubber Tile
- ◆ WRIGHTFLOR—Hard Surface Rubber Tile
- ◆ WRIGHT-ON-TOP Compression Cove Base

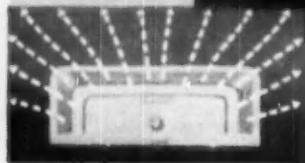
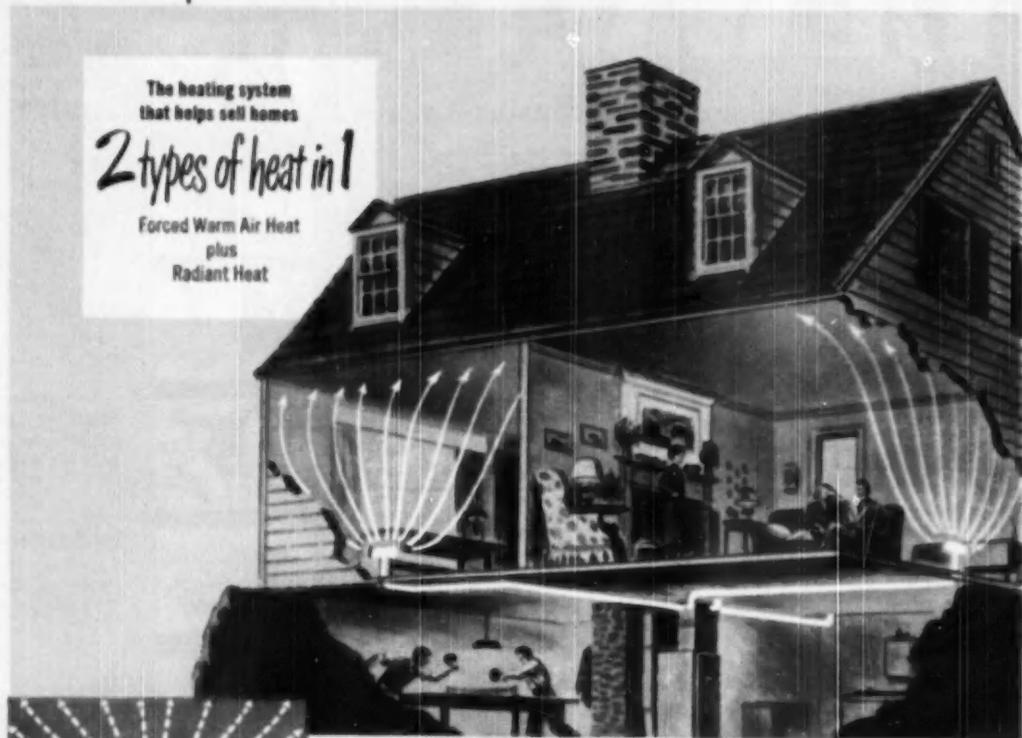
AMAZING
NEW HEAT
DISTRIBUTION
SYSTEM
SMASHES SALES
RECORDS

Thousands of installations
in one year



AIR-WALL
HEATING

The heating system
that helps sell homes
2 types of heat in 1
Forced Warm Air Heat
plus
Radiant Heat



Notice the pattern of heated air from the G-E Air-Wall Register. It blankets the cold walls of the rooms in your home...and warms them so they actually radiate heat!

G-E AIR-WALL HEATING in the homes you build gives you an important competitive advantage over other builders. Home buyers know the *greater heating comfort* of this new system is more than just another selling phrase. It's an obvious conclusion once you explain how home owners can now enjoy both the advantages of *radiant heating* and the recognized comfort of G-E's *warm air heating*. Smaller ducts and standard fittings account for sizeable installation savings, and you can figure costs more quickly and exactly.

ONLY G. E. OFFERS SUCH AN ENGINEERED AND COORDINATED HEATING SYSTEM

You get benefits of 2 types of heat!

The amazing new G-E *Air-Wall* Register, a product of G-E research and engineering, is generally placed just above the baseboard. It directs air up and out in front of the wall... warming the cold surface so it radiates heat. You get better forced warm air heat, too. The air pattern cuts down natural cold drafts which normally creep down cold walls.

Freedom of furniture placement!

You can sit directly in front of the *Air-Wall* Register and feel no draft...no uncomfortable hot blasts. In the morning, when the system goes on automatically, you feel no cold air that has settled overnight in the ducts.

Balanced heat in all rooms!

You can accurately adjust heat flow to each room in the home by simple adjustment of the damper on each duct, with minimum disturbance to the "balance" of heat to other rooms.

Even floor-to-ceiling temperatures!

The wall of warmed air diffuses quickly with other air to give even temperatures throughout the room. Warmer floors, too!

Quiet!

Small *Air-Wall* ducts dampen furnace noise more readily than large ducts. Register design also helps to reduce noise.

*architects—
builders—contractors!*

G-E *Air-Wall* Heating is engineered for low installation cost; its design is guided by the same famous standards long built into G-E furnaces themselves. It is easier and less expensive to estimate a job when you plan to use G-E *Air-Wall*—because of the standard ducts, elbows, and register boxes. You may be able to save a great deal on installation costs, too. This system can be installed in houses with or without basements.

Where is GE AIR-WALL available

It is available right now through your local General Electric Heating Distributor. He is listed in your classified telephone directory.

You can put your confidence in—

GENERAL  ELECTRIC

American Builder, February 1950.



AUTOMATIC HEATING EQUIPMENT

For economy, comfort, quality...

use these efficient, low-cost units for forced warm air heat

General Electric GAS-FIRED Warm Air Furnaces...come in five compact sizes, the largest of which takes up little more floor space than an average-size refrigerator. You'll like their clean, quiet operation, their quick heat, their high efficiency, their filtering which cuts down dust and dirt. All units circulate and humidify the air. Designed for use with the new G-E "Air-Wall" system of heat distribution.



General Electric OIL-FIRED Warm Air Furnaces...come in four models...all of them low-cost, compact, easily installed, quiet and long-lasting. They are designed to save you money on fuel bills because of the compressed air-oil impact method of atomization of each drop of oil. All four models circulate, filter and humidify the air. Designed for use with the new G-E "Air-Wall" system of heat distribution.



for steam or hot water heat, use these famous G-E Boilers

General Electric GAS-FIRED Boilers...turn gas fuel into low-cost comfort. Three to five minutes after the flame goes on, steam is in the radiators, or hot water is pouring out its warmth. Clean, complete and efficient combustion is accomplished through the use of raised port atmospheric burners. All models approved by American Gas Association. Heavily insulated, with jacket construction of heavy steel.



General Electric OIL-FIRED Boilers...give quick comfort, at less cost. These are the compact, efficient furnaces upon which General Electric has built its heating reputation. The way the oil is burned assures you the most heat from every gallon because (1) the oil is mixed with air into a frothy, bubbly foam; (2) each single bubble is then shattered into millions of particles, and (3) these particles burn completely. Five models.



Free
booklets

General Electric Company, Automatic Heating Div.
Section AB-14, Bloomfield, N. J.

Please send free information on G-E *Air-Wall* Heating Please send free booklet on G-E Oil Furnace G-E Gas Furnace G-E Oil Boiler G-E Gas Boiler Please send colorful children's booklet, "The House That The Oil Men Passed By"

NAME _____

ADDRESS _____

CITY _____ ZONE STATE _____

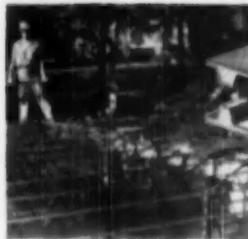


TRUSCON
"O-T"
STEEL JOISTS

light and strong



Truscon "O-T" Joists used for Roof Construction



Truscon "O-T" Joists are easily and quickly placed in position.



Truscon "O-T" Joists used in 2501 Parkway Apts., Philadelphia. Aaron Kolish, Archt.



... conducive to economy

Assure your buildings the

welcome freedom from excessive weight.

Protect them against the aches and pains of undue physical stresses. Plan with Truscon "O-T" to get Optimum Trajection — the most efficient carrying ability ever designed into load-bearing units! • Note the distinctive construction of the Truscon "O-T" Open Truss Steel Joist. Features: Great rigidity through integral welding of wide tee-shaped top and bottom chords and a strong, round continuous web member. High fire resistance. Simple to install, being completely shop fabricated and reaching the job ready for placing.

Each joist is "place-marked", greatly simplifying and speeding construction. Write for illustrated literature giving complete details.



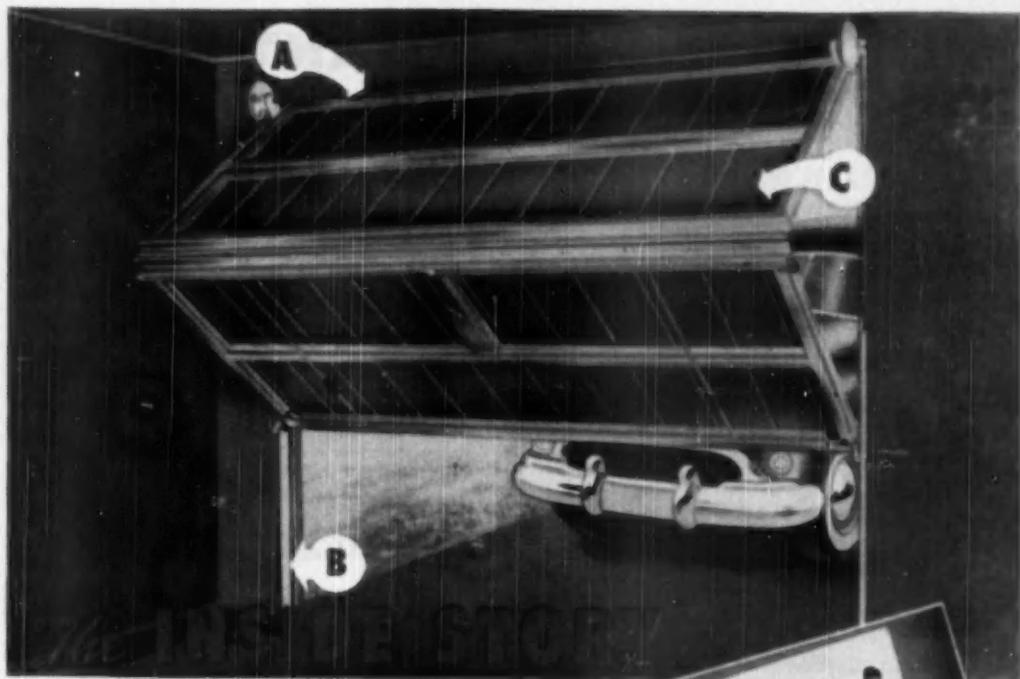
FREE Book on Truscon Steel Windows. Write for it. The Truscon Steel Company Manufactures a Complete Line of Residential Double Hung Windows . . . Residential Casements . . . Security and Basement Windows . . . Screens and Storm Sash . . . Metal Lath Products . . . Industrial Steel Doors . . . Coal Chute Doors . . . Steel Lintels . . . Concrete Bars . . . Welded Steel Fabric.

TRUSCON STEEL COMPANY

Subsidiary of Republic Steel Corporation

YOUNGSTOWN 1, OHIO

Warehouses and sales offices in principal cities



is as Simple as **A B C**

- (A)** Factory mounted spring on door panel adjusted for correct tension before shipment. Tension maintained by lock pin, which is removed after installation.
- (B)** Vertical rails, installed on jamb with 4 wood screws, are the only attachments to garage.
- (C)** Rigid, heavy gauge aluminum panels reinforced and riveted for lifetime, trouble-free service.

◆ FEATHER TOUCH OPERATION

◆ FIRE RESISTANT

◆ SIMPLE CONSTRUCTION

◆ 10 GAUGE ALUMINUM

◆ SIMPLE INSTALLATION

◆ SINGLE CARTON PACKAGE



L. S. TAYLOR MANUFACTURING CO.
 849 MARIETTA STREET, N. W. • • • ATLANTA, GEORGIA



Carpenter and helper install vertical rails.

Door being mounted in rail bearings to complete installation.



L. S. TAYLOR MANUFACTURING CO.
 849 Marietta Street, N. W.
 Atlanta, Georgia

Gentlemen:

Please send full information and prices for:

NAME _____

ADDRESS _____

CITY _____

Wholesaler Dealer Builder

BUILD 5 TIMES AS MANY HOMES IN '50!



with

P&H ECONOMY HOMES

See for yourself why successful builders everywhere will build the P&H way in 1950! Here are two actual P&H Homes that were quick to build, quick to sell — highly profitable to the builders, a joy to the owners. They're attractive, full-size homes — with all the sales-appeal of well-built, conventional homes.

Here's why so many builders look forward to bigger profits in '50... with P&H Economy Homes:

THE TIME ELEMENT . . . P&H Economy Homes save months on the job . . . simplify your problems of erection, financing and selling.

THE COST FACTOR . . . you get the most accurate cost control the building industry has ever known!

THE PROFIT OPPORTUNITY . . . you can meet the price demands of the market and still realize a reasonable profit — a profit you earn on a larger number of units. For a profitable building year in 1950, get in touch with us immediately.



LOOK AT THESE PROFIT FEATURES

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

see our exhibit
at The Home Builders Exposition
in Chicago, February 19-23
Booth 89.

P&H HOMES
301 Spring Street
Port Washington, Wis.
HARNISCHFEGER CORPORATION
PORT WASHINGTON WISCONSIN U.S.A.

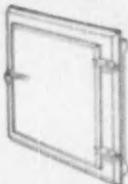
**BENNETT
"DEEP-SEAT"
ASH DUMP**

100% Heavier for Permanent, trouble-free service—9 x 4 1/2 inches.
Cat. No. C-205.



**CAST-IRON
CLEANOUT DOOR**

Air-tight closure... convenient hinge-type door. Crimped masonry wires. Size 8 x 8, 12 x 8 inches.
Cat. No. C-215.



**BENNETT
GRATES & LOG DOGS**



Cat. No. A-501 Heavy Duty. Extra Deep. Removable Ends. Ash dumping trap. For Coal or Wood.



Cat. No. A-505 Cradle Grate. Sturdy Coal or Wood Basket.

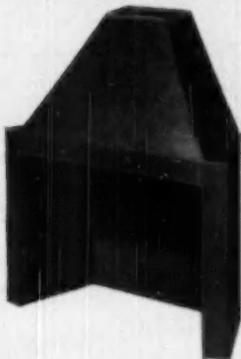


Cat. No. A-515 Wreath Grate. Use with or without andirons. Good outdoor fireplace grate.



Cat. No. A-1451 Log Dogs for Heavy Logs. Protect valuable andirons. Ideal for camp or outdoor fireplace.

**THE
BENNETT
FIREPLACE**



**THE BENNETT LINE
OF SALES PROVEN
FIREPLACE SUPPLIES**

The Bennett Fireplace line is complete—and profitable. And Bennett dealers enjoy a steady demand, thanks to our continuous national advertising. It pays to feature Bennett.

SIMPLIFIED and STANDARDIZED

This simplified Bennett fireplace is sized for standard brick, with no cutting or fitting. It lets you offer every customer "The Perfect Fireplace." Quicker and easier to build—it's priced within the reach of all. It's a big-volume, high-margin unit—a real profit-builder for you. Count on this Bennett—the recirculating unit with most sales appeal.



**BENNETT *Expanslip*
THROAT DAMPERS**

A Better Damper at Low Cost. Steep 60° Front slope gives sure draft. Structural Steel with sturdy slip-joint eliminates damage in shipping, handling and in use. With unconditionally guaranteed steel valve. Cat. No. C-101.



**BENNETT
CAST-IRON DAMPER**

A quality damper at competitive prices. Superior casting facilities in our own foundry enable us to produce this steep slope 50° Damper, with interchangeable Rotary or Ratchet Control feature. With guaranteed steel valve (No. C-105) or cast iron valve (No. C-104).



***Flexscreen*[®]**

SAFETY FIREPLACE CURTAINS

The only Nationally Advertised curtain screen. Every fireplace owner is a prospect for Flexscreen. Its own best salesman, a display on your floor will increase your volume on this "quality" product. This year, the Flexscreen line includes a perfectly balanced line of Fireplace Accessories, too.

Write now to 250 Market St. for

Catalog and Full Information on the
COMPLETE POST-WAR BENNETT LINE

BENNETT-IRELAND, INC.

Charterers in 1884
NORWICH, NEW YORK

"I tried
them
all on
rip cuts
and the
SKIL
Saw"



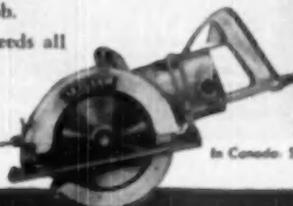
"SKIL Saw keeps going where going is toughest"

It takes a good, tough saw to stand the gaff on rip-sawing. That's one reason carpenters everywhere prefer hi-torque, powerful SKIL Saws. SKIL Saws keep going where others bind and stall. SKIL Saws withstand the roughest use because of extra strong gears. SKIL Saws stay out of the shop, stay on the job.

Try SKIL Saw yourself. See how it speeds all kinds of sawing. Feel how perfect balance

and scientifically placed handles for *both* hands make it easier to handle. Try SKIL Saws today. Ask your SKIL Tools Distributor for a demonstration.

SKIL Tools are made only by SKILSAW, INC.
5033 Elston Ave. • Chicago 30, Ill.



SKIL Tools

Factory Branches in Principal Cities
In Canada: SKILTOOLS, LTD., 64 Portland St., Toronto, Ont.

AMERICAN-Standard plumbing fixtures worth of homes



LIBERTY 5124

LIBERTY BUILDING COMPANY
313 WEST NINTH STREET
LOS ANGELES 15, CALIFORNIA

November 3, 1948

OFFICE OF THE EXECUTIVE SECRETARY
American Radiator & Standard Sanitary Corp.
P. O. Box 1226
Pittsburgh 30, Pennsylvania

Gentlemen:

It is our extreme pleasure to write to you and advise you of the favorable reaction we have received from the use of your Plumbing Fixtures and Fittings in our subdivisions.

In 1947 we constructed 127 duplex dwellings and 75 two and three bedroom homes, all equipped with American-Standard Plumbing Fixtures and Fittings. The use of these fixtures and fittings in this tract was used as a feature in our advertising. At the time we put up the last 70 duplexes for sale we sold every duplex in one day, with sales amounting to over \$1,000,000.00. Our last unit of 31 homes on this same tract was completely sold out in less than six hours!

In 1948 we started developing an area known as "Manchester Square", comprising over 800 dwellings. Our first unit consisted of 119 duplex dwellings. These homes went on sale on January 7, 1948, and again we sold out every duplex which was on sale in one weekend, with sales amounting to over \$1,500,000.00. On July 10 we put up for sale the second unit of this tract, consisting of 105 two bedroom homes, and every one of these homes was sold out on that day, with sales amounting to over \$1,150,000.00.

Since then sales of Liberty Homes have continued at a rapid pace. During 1948 we have already sold 775 units, amounting to over \$6,000,000.00.

The use of American-Standard Plumbing Fixtures and Fittings is a source of constant pride to this company and has always received the highest praise from prospective buyers and actual purchasers of Liberty Homes. It has been our endeavor throughout our building career to use the best materials possible, and for that reason we feel that we can find no better plumbing fixtures and fittings than those manufactured by your company.

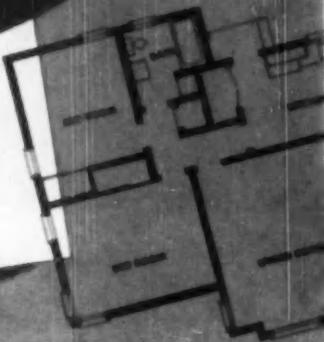
The reputation of our homes has grown rapidly, and we feel that in a substantial manner your organization has contributed to this growth and to the reputation we have gained.

We are extremely proud of our association with your organization through the use of your equipment and materials and it is our sincere desire that this association will continue throughout the years.

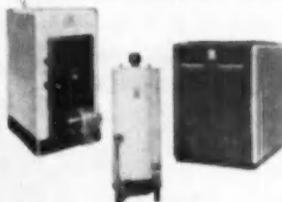
Very truly yours,
LIBERTY BUILDING COMPANY
Walter C. Smith
VOLUME PRINTER

W.P.H.

"The use of American-Standard Plumbing Fixtures and Fittings is a source of constant pride to this company and has always received the highest praise from prospective buyers and actual purchasers of Liberty Homes. It has been our endeavor throughout our building career to use the best materials possible, and for that reason we feel that we can find no better plumbing fixtures and fittings than those manufactured by your company."



Many and more builders who use American Standard Heating Equipment and Plumbing Fixtures, are finding this a strong selling point to stress in their own advertising. It tells the public that only the best products were used — creates confidence in the top quality of the whole dwelling.



For every job you build, there's American Standard Heating Equipment to suit. The complete line includes Boilers, Warm Air Furnaces, and Winter Air Conditioners for homes of all sizes... for coal (hand fired or stoker), oil, or gas. Plus Radiators, Caseworks, Baseboard Radiant Panels, Oil Burners, Domestic Water Heaters, and Accessories.

help sell more than \$9,685,000.00 for Los Angeles builder!

In 1947, the Liberty Building Company constructed 107 duplex dwellings and 95 two and three bedroom homes . . .

In 1948, started 800 dwellings project. Sold first unit of 119 duplex dwellings in one weekend. Two months later sold second unit of 105 dwellings in a single day . . .

In 1949, sales continued rapidly. Had already sold 735 units by December.

. . . and all these homes had American-Standard Plumbing Fixtures and Fittings!

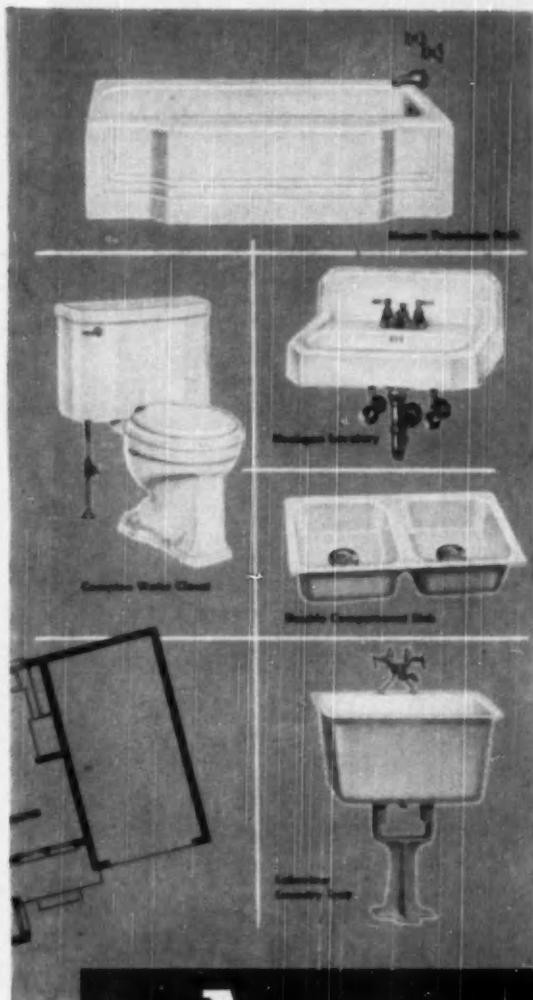


BUILDERS everywhere, like the Liberty Building Company of Los Angeles, have found that American-Standard products help sell the houses they build. No heating equipment and plumbing fixtures are better known . . . none better made. Their outstanding quality, backed by strong, consistent advertising, has created wide public acceptance. It will pay you to take advantage of it!

When you install American-Standard products in the houses you build or remodel, you create satisfied customers. And whatever the type of installation . . . whatever the size of the budget . . . you will find what you need in the American-Standard line. Ask your Heating and Plumbing Contractor for details. **American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pa.**



LOOK FOR THIS
MARK OF MERIT



AMERICAN-Standard

First in heating . . . first in plumbing

Serving home and industry

AMERICAN STANDARD · AMERICAN BLOWER · CHURCH SEARS · DETROIT LUBRICATOR · KEWAUNEE BOILERS · ROSS HEATER · TONAWANDA IRON

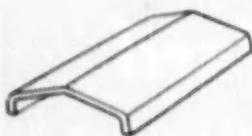
sewer gas
can't harm
CLAY PIPE



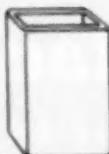
The upper invert of Vitrified Clay Pipe is safe from the destructive, corroding acid fumes that rise from sewage. It protects your reputation by lasting *forever*, because it's chemically inert—top and bottom, inside and outside, through and through. Clay Pipe is safe from fumes and acids alike—and it's economical, too. Fast installation time helps salvage profits of every job. Use the pipe that passes inspections easily. A complete assortment of Vitrified Clay Fittings let you "call the turn". Be sure with Clay—the *only* pipe that never wears out.

**NATIONAL CLAY PIPE
MANUFACTURERS, INC.**

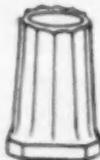
703 Ninth and Hill Bldg., Los Angeles 15, Calif.
1105 Huntington Bank Bldg., Columbus 15, O.
100 N. LaSalle St., Rm. 2100, Chicago 2, Ill.
206 Connolly Bldg., Atlanta 3, Ga.



WALL COPING



FLUE LINER



CHIMNEY TOPS

Vitrified
CLAY

PIPE

6-100-24

7 ways to CUT CONSTRUCTION COSTS!

B & D "Quick-Saws", Hammers, give you MORE OUTPUT . . .

Per MAN

Black & Decker QUICK-SAWS give you perfect balance, close-coupled design, reduced weight and length, comfortable "new grip" switch handle, complete safety. B&D ELECTRIC HAMMERS are hard-hitting and amazingly husky, yet compact and light in weight. Result: your men can handle either tool more easily, with less fatigue; turn out more work every day.

Per HOUR

Black & Decker QUICK-SAWS, powered by heavy-duty B&D-built universal motors specially built for tough sawing operations, are ten times faster than hand sawing. Black & Decker ELECTRIC HAMMERS deliver thousands of sharp, positive hammer blows per minute to make light work of many tough construction jobs.

Per TOOL

These B&D Tools are built to last, give you extra years of heavy-duty service! Both tools are fully protected against dust and over-heating; have powerful motors, extra-tough gears, husky housings, all the extra strength and stamina built into every Black & Decker Tool!

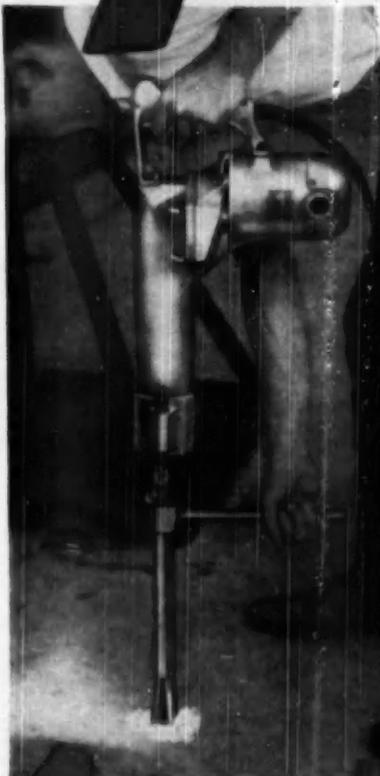
WRITE TODAY for free, detailed catalog. See your nearby B&D Distributor for full details on Saws, Hammers, Drills, Impact Wrenches and many other time-saving, cost-cutting construction tools! The Black & Decker Mfg. Co., 666 Pennsylvania Ave., Towson 4, Md.

LEADING DISTRIBUTORS

EVERYWHERE SELL

Black & Decker
PORTABLE ELECTRIC TOOLS

Trade Mark Reg. U. S. Pat. Off.



4

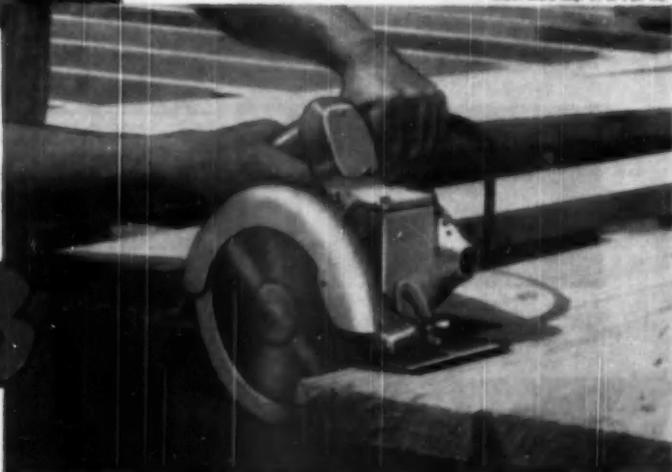
BLACK & DECKER ELECTRIC HAMMERS

drive a wide variety of tools to drill or channel in brick, stone, concrete; chip, clean and scale metal; gouge, shape and notch timbers; seam and crack; tamp and vibrate concrete forms; scuff concrete surfaces to remove form marks. Completely self-contained. Universal motors operate from any standard 110 or 220 volt power line or portable generator. Four models, rated by drilling capacity in concrete for $\frac{1}{4}$ ", $\frac{3}{8}$ ", $1\frac{1}{8}$ ", 2 ".

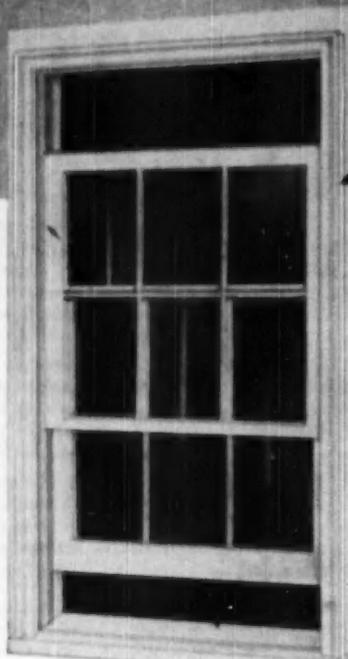
BLACK & DECKER ELECTRIC QUICK-SAWS

rip, crosscut, dado, angle groove—in wood, metal, stone, compositions. Quickly adjusted for angle or depth of cut. Easy to change blades and discs. Universal motors operate on any standard 110 or 220 volt power line or portable generator. Three models for cutting to depths of $2\frac{1}{8}$ ", $2\frac{3}{8}$ ", $3\frac{1}{8}$ ".

3



Not Just One But Two Leaders.....



SUPERIOR
UNIT WOOD WINDOWS

"Superior" is equipped with an exclusively patented "jamb-liner" that serves a dual purpose. It functions as a snug weatherstrip in reducing air-infiltration and also provides free, easy, smooth sliding sash.

Interchangeable "Storm Sash and Screen" can be ordered as standard equipment.

"Superior" is sturdy, durable and extra heavy ($1\frac{1}{8}$ " thick jambs and $1\frac{3}{4}$ " thick sill) to give greater satisfactory service.

"Superior" is constructed of thoroughly kiln-dried Ponderosa Pine and is toxic treated in accordance with NWMA standards.

"Superior" is one type of frame for all standard building construction—brick veneered, solid masonry and frame walls.

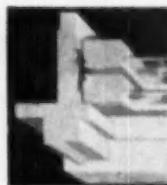
"Superior" is made in modular sizes. Widths: 1'-4" to 3'-8"; Heights: 2'-6" to 6'-6". Yes, it's complete to the Nth degree... Superior in every detail and a window worthy of the name "Superior"!



SASH MAY BE REMOVED EASY and quickly without loosening or removing weatherstripping.



LIGHT, SNUG CONTACT BETWEEN SASH and weatherstrip at all times. No stick, no draft, no drift.



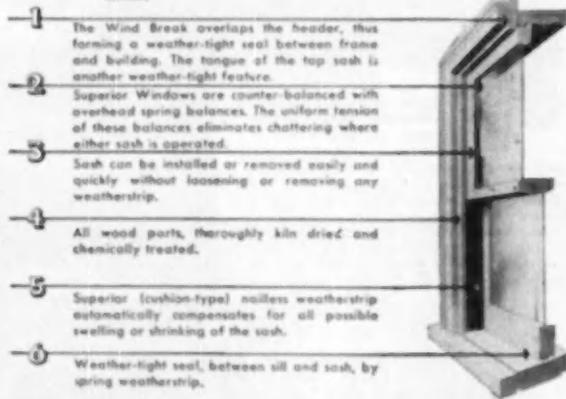
EASY SLIDING YEAR AROUND. Swelling or shrinking will not affect smooth, easy sliding.



PERFECT COUNTERBALANCING AT ALL POINTS. Windows stay in any position.



"Bits-Well Storm Sash and Screen Unit optional equipment.



BILT + WELL
WOOD + WORK

CARR, ADAMS & COLLIER CO.
Dubuque, Iowa

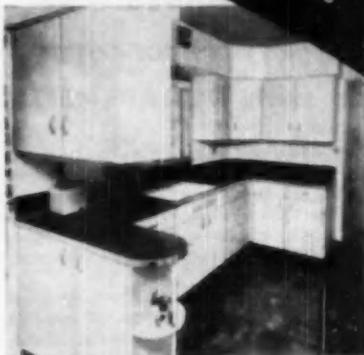
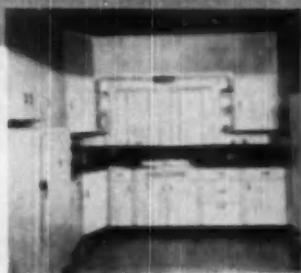
manufacturers of



in the BILT-WELL LINE

And what Loaders! Superior Wood Windows, the most advanced double-hung window on the market. And...Nu-Style Wood Cabinet Units, the most flexible cabinet unit ever offered Dealers and Builders!

NU-STYLE SECTIONAL CABINETS



Nu-Style Cabinets are used in kitchens, bedrooms, bathrooms, play rooms, offices, industrial shops and stores.

Nu-Style Cabinets offer unlimited sales possibilities in both new building and remodeling fields.

Nu-Style Cabinets are in big demand because they are flexible—they can be scribed and . . . they can be enameled any color or finished natural.

Nu-Style Cabinets have many features of utility, convenience and economy that appeals to every homemaker. Leading Dealers are doing a profitable business from a relatively small stock of K.D. carton packed units.

Nu-Style Cabinets are ideal as a warehouse item because they are small, compact (K.D.) carton packages that are easy to handle and stack. Leading Dealers are making big profits from a small stock.

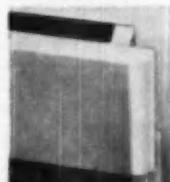
Beautifully illustrated literature, plus advertisements appearing in American Builder, Practical Builder, Architectural Forum, Better Homes & Gardens and American Home magazines pave the way to easier sales.



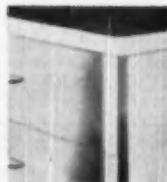
DOVETAIL JOINTS—Drawer fronts are dovetailed into sides. Drawer bottom, back and sides are tongued and grooved together.



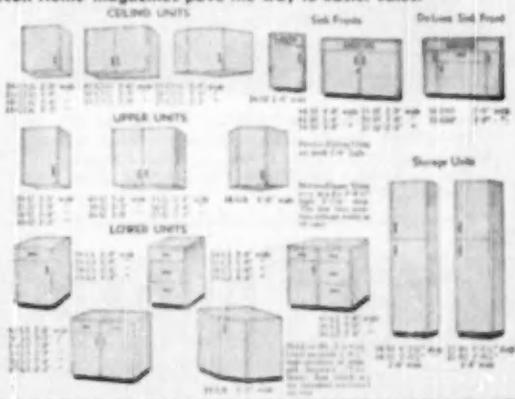
STRONG CORNERS—Tongue and groove construction gives extra rigidity, plus a sealed joint against warping and dust infiltration.



DUSTPROOF—The drawers and door overlap their openings and make the interior of the cabinet dustproof.



SMOOTH STYLING—Is perfect harmony with modern styling of ranges and refrigerators. Easy to clean.



The Bilt-Well Line: Superior Unit Wood Windows • Exterior & Interior Doors • Entrance & Shutters • Close-Up Closets • Car-der Storage Doors • Basement Unit Windows • Louvers & Gable Sash • Breakfast Nooks • Combination Doors • Screens & Storm Sash • Corner (Chisel) Cabinets • Oil-der Cabinets • Ironing Board Cabinets • Mantels & Telephone Cabinets • Multiple-Use & Linen Cabinets • Stair Parts.

Distributed by leading woodwork jobbers



Ten Years Ago...

In August, 1939, this concrete test paving was laid in Second Avenue North, Minneapolis. The badly sealed section of roadway in the background was made with regular portland cement. The foreground section, laid at the same time, was made with Atlas Duraplastic—the first commercial use of the air-entraining portland cement originated and developed by Universal Atlas.



Both sections, subjected to the severity of ten Minneapolis winters and to heavy applications of de-icing salts, are shown just as they appeared in July, 1949—convincing proof of the characteristic durability of Duraplastic concrete, of its high resistance to freezing-thawing weather and the sealing action of de-icing salts. Longitudinal structural crack shows some ravelling. Note perfect transverse joint.

Today Added Durability and Improved Appearance in structural concrete made with DURAPLASTIC*

Preparatory Apartments, Chicago, Ill., nearing completion. Duraplastic used throughout in concrete columns 13 feet deep with network of steel bars and beams. No sign of bleeding or segregation. Contractors report a smooth surface free of blisters or air bubbles. Architect: Foss Associates; Structural Engineer: Frank J. Rasmussen; Contractor: Peter Hansen Construction Company—all of Chicago.



From initial paving installations . . . to the first structural job . . . to beautiful, modern structural achievements like the one shown here, architects, engineers and contractors have come to rely more and more on the extra durability and improved appearance of concrete made with Atlas Duraplastic air-entraining portland cement.

In Duraplastic's rapid ten-year growth, its advantages have been applied to all types of mass and structural concrete—for foundations, walls, columns, and floors. It's ideal for slip-form, gunite, stucco and similar uses.

With Duraplastic, less mixing water is needed for a given slump. The resulting mix is more plastic, more workable, more uniform and cohesive. It's easy to place and finish. Water-gain and segregation are reduced. Surface appearance is improved and has higher resistance to the effects of weather-exposure.

For structural concrete needs of today and tomorrow, Duraplastic offers *better concrete at no extra cost*. It provides the precise amount of air-entraining agent interground with the cement for satisfactory field performance. It complies with ASTM and Federal Specifications, sells at the same price as regular cement and calls for no unusual changes in procedure.

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

Send for new free booklet, "A Decade of Duraplastic Air-Entraining Cement." Write to Universal Atlas Cement Company, (United States Steel Corporation Subsidiary), Chrysler Bldg., New York 17, New York.

*"Duraplastic" is the registered trade mark of the air-entraining portland cement manufactured by Universal Atlas Cement Company.

AD-9-54

ATLAS DURAPLASTIC

AIR-ENTRAINING PORTLAND CEMENT

MAKES BETTER CONCRETE AT NO EXTRA COST



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



576 families live in this modern housing development in Queens, N. Y. The entire project is heated by a B & G Hydro-Flo System supplied by sixteen boilers in eight boiler rooms.

NO JOB TOO **BIG** OR TOO SMALL FOR B & G *Hydro-Flo* HEATING

It is not just happenstance that the popularity of B & G *Hydro-Flo* Heating grows steadily, year after year. You find this *forced hot water* system in buildings of every size and character, simply because it offers completely outstanding advantages.

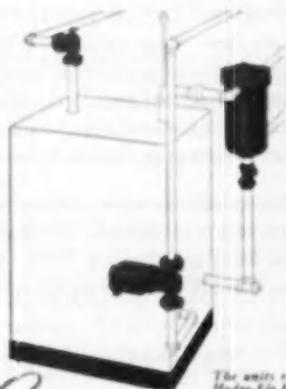
B & G *Hydro-Flo* Heating is amazingly economical in operation—delivers years of trouble-free service—and provides the kind of comfort obtainable only with controlled radiant heat. And B & G *Hydro-Flo* Heating is competitive in price with heating systems worthy of the name!

The close temperature regulation possible with *forced hot water* means that fuel is never wasted in supplying unnecessary heat. Indoor temperature is maintained by accurate controls at the comfort level, regardless of how sharply the weather changes.

Whether radiators, convectors, baseboards or radiant panels are used, B & G *Hydro-Flo* Heating sets the pace for efficiency, low maintenance and comfort.



This modest residence enjoys the comforts of controlled radiant warmth from a B & G *Hydro-Flo* System.



Best for any kind of radiation



The units required for B & G *Hydro-Flo* Heating are few and simple. They can be applied in any hot water heating boiler, whether oil, gas or steam fired.



BELL & GOSSETT

Dept. BA-11, Morristown, N. J.

Company

* Reg. U. S. Pat. Off.

▶ SUBJECT: K&M "Century" Asbestos-Cement Shingles

▶ OBJECT: Attractive, durable, economical roofs



K&M No. 4 Spanish Red Roofing Shingles, applied by Pyramid Roofing Co., are a highlight of the Cherryhurst section in Houston, Texas.

Building Owner Brady M. Steele writes, "It became necessary to re-roof the building housing the Cherryhurst Pharmacy and other establishments." He adds, "I was so impressed with the qualities of the 'Century' No. 4 Red Asbestos-Cement Shingles that I contracted with the Pyramid Roofing Company to put this material on the roof. Now that the job is completed I am more than pleased with the results. The entire building is enhanced by the roof."

Another K&M roofing job . . . another well-pleased customer. K&M shingles will do it for you every time. Your sale is launched by the easily seen "dress up" appearance of these trim, hexagonal K&M No. 4 shingles in charming colors—Spanish red, surf green, black, gray and mottled gray. And you can quote right on shingles so easy to apply, because of large size, plus punching and notching for automatic true laying, working from either left or right.

You are able to assure customers about resistance to weather, rot, rust, fire and upkeep—knowing that K&M "Century" Shingles will make good for you. That's why they make for good business. See your K&M Dealer for full details, or write us direct.



Mr. Brady M. Steele



Original manufacturers of Asbestos-Cement Shingles in this country

KEASBEY & MATTISON
COMPANY • AMBLER • PENNSYLVANIA

UNIVERSAL

introduces
the revolutionary new

Universal *Select-a-Range*

FOR RESIDENTIAL,
APARTMENT AND
INSTITUTIONAL
INSTALLATION

Select-a-Range

and presents a
striking new conception
in kitchen planning
flexibility

by

Royal Barry Wilk



UNIVERSAL

Fresh in conception... imaginative in design... revolutionary in application flexibility... powerful in consumer appeal!

It's the dramatic new Universal electric Select-a-Range, the first really significant advance in range design in over a quarter of a century!

Now for the first time, you can design kitchens with a flexibility and freedom never before possible. Now, you can match cooking facilities exactly and realistically to the specific requirements of each residential unit. And you can do it practically and economically without custom-built equipment... and with matchless efficiency!

Yes, all this is readily achieved with the new Universal Select-a-Range. Based on modular design, it is truly functional, completely flexible in adaptation and extremely simple to install. But best of all, it frees the designer from the rigid dimensions and the limited planning imposed by the conventional "package" range.

The Select-a-Range is another great advance in the 108 year history of Lunders, Frary & Clark, leader in the electric range industry. Pioneers in the electric appliance field, Universal holds many basic patents in range design and has contributed many outstanding improvements to better, faster, easier electric cooking which today are the standard of the industry. It is this experience and this leadership that are responsible for the development of the revolutionary Select-a-Range... as well as a whole new approach to kitchen planning and cooking convenience.

and here it is! >

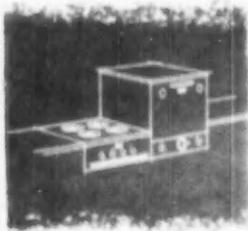
presenting

the dramatic new **UNIVERSAL**

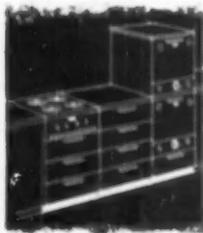
Now you can design your range as you like it!



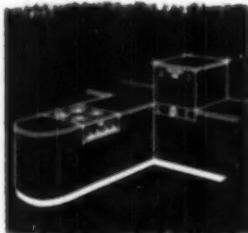
Typical right-hand oven arrangement. Surface unit and oven are located at "Convenience-Level" height for easy cooking. Six storage drawers for large utensil capacity.



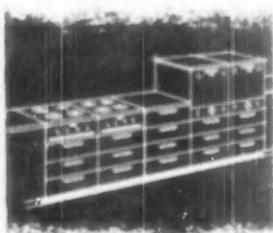
Economy arrangement. Minimum equipment provides complete cooking facilities in a compact space at low cost for apartments and small homes. May be economically expanded at any time.



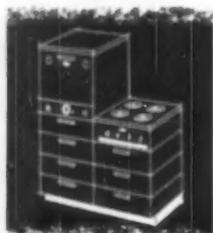
Two-Oven arrangement. One of many arrangements for large homes, estates, farms. Ovens may be right-hand, left-hand or separated at any height desired.



Separated arrangements. Platform surface unit is recessed in peninsular counter to serve either side. Oven can be placed on counter or fitted into wall. Oven venting fitted to oven door. Extra units can be added any time.



Big capacity arrangement. Two surface units and two ovens, large work and storage areas, big capacity make this arrangement ideal for institutional use.



Left-hand oven arrangement. Oven is located at extra high "Convenience-Level" for taller people to eliminate stooping. Provides greater comfort and convenience.



COMPLETE OVEN—with one piece porcelain enamel-lined interior, Thermostat Control and Pre-Heat Push Button. Automatic Timer and Minute Minder are standard equipment but can be eliminated if desired.



STORAGE DRAWER—extra heavy gauge steel, high baked enamel inside and out, brass runners.

More than 25 different arrangements can be created from these three basic modular units. Each unit is complete in itself so that it can be installed separately . . . recessed in stock cabinets or custom millwork. Or these units can be fitted together . . . with a right-hand oven, left-hand oven, double ovens . . . all at the "Convenience-Level" height to eliminate back-breaking stooping and bending.

PLATFORM SURFACE UNIT—with four fast-heating "Monotube" Thrift Units, Seven Heat Control Switches. Platform backsplash and platform light are optional.



Select-a-Range

FOR RESIDENTIAL,
APARTMENT AND
INSTITUTIONAL
INSTALLATION

1st

to give you complete electric range flexibility in kitchen planning!

1st

to give you over 25 range variations and freedom to design kitchens as you want them!

1st

to give you something new... something different in kitchen design to help you sell your house!

Now you can create and specify exactly the range design in your kitchen planning. Gone are the restrictions of conventional range inflexibility. Here's a great new opportunity to project refreshing new ideas into kitchen design with the revolutionary Universal Select-a-Range.

The Select-a-Range is based on modular design. It is made up of three basic interchangeable, independent, self-contained units... an oven, a surface cooking unit and a roomy storage drawer. These units can be fitted together exactly in more than 25 different arrangements.

Ovens and surface units can be placed in any location at any height desired. They can be assembled as a conventional range with the much desired "Convenience-Level" oven height or they can be separated into individual units. Because each unit can be purchased separately, you buy only what you need. The Select-a-Range is easily installed and requires no elaborate preparatory work.

For added sales appeal in every kitchen, here's something new for you... something different... something to help sell the house! It can be financed on the mortgage at low cost.

UNIVERSAL

for greater freedom and flexibility in kitchen planning...



Royal Barry Wills

interprets *Select-a-Range* flexibility

From the board of Royal Barry Wills come these six sparkling, modern kitchen designs . . . illustrating how the flexibility of the Universal electric Select-a-Range adds exciting freshness and sales appeal to kitchen planning.

It is this flexibility that gives the designer greater scope to make the whole kitchen contribute more fully to better living. It is this flexibility that provides full cooking facilities in the most compact kitchen where even the smallest apartment range will not fit. This flexibility gives you no-stoop ovens at the "Convenience-Level" . . . larger work areas . . . more storage capacity . . . greater beauty . . . fuller utilization of space.

All this adds up to more sales power for you. Now homeowners can select the cooking capacity they want . . . from a minimum range that can be expanded later all the way up to maximum capacity. Yes, here's something new . . . something different to increase the desirability of the kitchen. And here is sales appeal at low cost because the Select-a-Range is priced to meet the demands of today's building market. The price of a Select-a-Range of any design can be included in the original mortgage or in a modernization financing plan.

Whether in new construction or modernization, the Select-a-Range is equally at home in Traditional, Modern or Ranch House architecture. Its flexibility is unmatched for apartments, hospitals, small institutions . . . in fact, wherever modern cooking facilities are needed.

National Advertising and Promotion

These six Royal Barry Wills kitchen designs will be offered in four-color full-page and two-page introductory advertisements in leading national magazines such as *Better Homes & Gardens*, *Saturday Evening Post*, *House Beautiful*, *House & Garden*, etc., announcing the Select-a-Range to the public. These advertisements will appear in the Spring and will be supported by a national promotion and publicity program to consumers, builders, material dealers and appliance retailers.

1. Oven and platform surface unit are recessed in an inexpensive wood cabinet. This minimum equipment "economy" arrangement provides a full 40 inch range in a compact space with ample counter working space.

2. A fully equipped range with a right hand "Convenience-Level" oven, large storage capacity and adequate counter space for the average size family. An ideal design for modernization.

3. For easier working convenience, the oven and platform surface unit are separated and installed at right angles. The oven is at the most convenient level with large storage and counter space at either side.

4. Oven and platform surface unit are extended with extra capacity storage and counter space between. Surface cooking unit is integrated with serving area in a peninsular arrangement for added convenience.

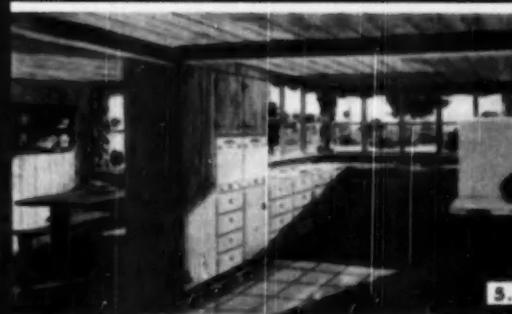
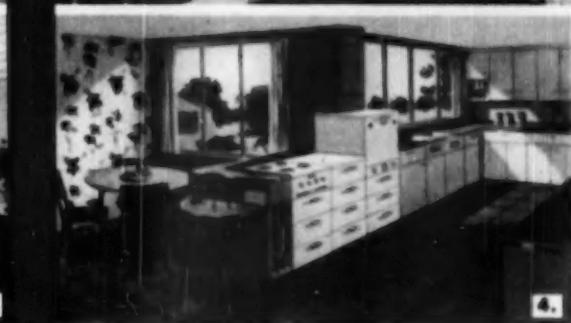
5. Double baking and broiling capacity is provided by two ovens mounted side by side in a wall at "Convenience-Level" height. Here is extreme flexibility not possible with a conventional range.

6. Big capacity arrangement with two ovens and two platform surface units. Low-level oven provides counter-height work surface with second oven at "Convenience-Level" height adjacent to extra large counter space.

A SPECIAL PORTFOLIO of these Royal Barry Wills designs in full color has been prepared for the building profession. For your complimentary copy, write to London, Fry & Clark, Dept. AB, New Britain, Conn.

in these smart new kitchen designs

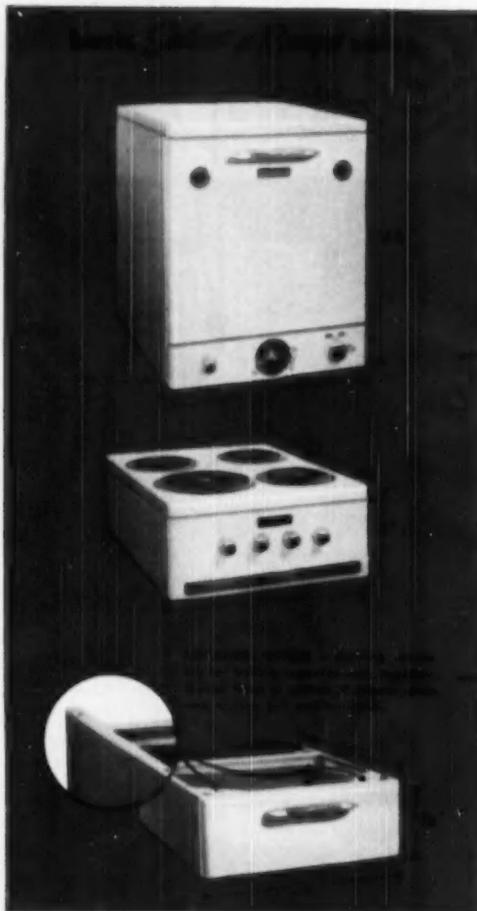
FOR RESIDENTIAL,
APARTMENT AND
INSTITUTIONAL
INSTALLATION



UNIVERSAL

for greater freedom
in your kitchen planning... >

Match the *Select-a-Range* exactly to your



OVEN—RA9401—Outside dimensions: 20" wide x 25" deep x 24 1/2" high. Baking unit 2300 watts; broiling unit 2500 watts. Maximum connected load 4800 watts. One-piece, porcelain enameled interior 16" x 16" x 19" with rounded corners. Built-in rack guides assure level alignment of racks. Counter-balanced door with dual-hinge spring lock. Two oven vents at top of door. White porcelain enamel outside finish. Wired at the rear through a built-in compartment, permits oven to be backed flush against finished wall or cabinet. U.L. installation rating Farm O. Mounting holes in base to fasten oven to counter or storage drawers.

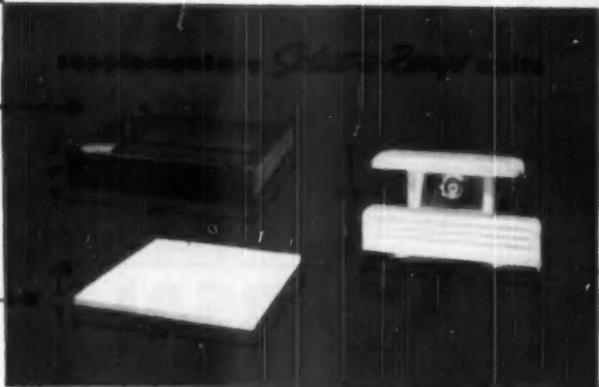
PLATFORM SURFACE UNIT—RA9402—Outside dimensions: 20" wide x 25" deep x 9" high. Four fast-heating "Monotube" units; three, 6 1/2" 1100 watts; one, 8 1/2" 1900 watts. Maximum connected load 5200 watts. Seven-heat control switches for each unit. White porcelain enamel outside finish with acid-resisting platform top. Wired at the rear through a built-in compartment, permits unit to be flush mounted within outside dimensions. Mounting holes in the base to fasten unit to counter, storage drawers or framing.

STORAGE DRAWER—RA9403—Outside dimensions: 20" wide x 25" deep x 7 1/2" high. White baked enamel exterior finish. Drawers are suspended on brass runners for quiet operation. Extra-heavy gauge steel, one-piece body. Mounting holes in top and bottom for assembly to other drawers, oven or surface unit.

TOE BASE—RA9404—Outside dimensions: 20" wide x 21" deep x 4" high. Serves as base on which storage drawers and oven or surface unit can be mounted as one integral piece. Side fastening permits two or more bases to be locked side by side for multiple "stacking" of units. Baked black enamel on heavy-gauge steel.

SPLASH BACK & LIGHT—11-9402-073 & -700—Outside dimensions: 20" wide x 11 1/2" high to top of light. Fastens to back of the surface unit with chromium trim concealing the joint.

COUNTER TOP—11-9403-050—Outside dimensions: 20" wide x 25" deep x 1 1/2" high. Heavy steel with acid-resisting porcelain enamel finish. Serves as top cover for storage drawer unit.

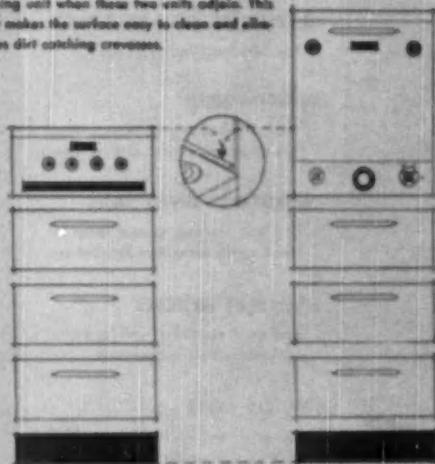


specific design requirements

THE DESIGN of the Select-a-Range provides for the building up of required cooking facilities from basic modular units. These units can be quickly assembled into one or more integrated groups as desired.

The drawings on this page illustrate how the modular design of the oven, surface unit and storage drawers permit grouping in almost unlimited variation. Complete specifications, dimensions and construction detail are shown on the opposite page.

Detail drawing showing chromium filler concealing joint between the oven and surface cooking unit when these two units adjoin. This filler makes the surface easy to clean and eliminates dirt catching crevices.



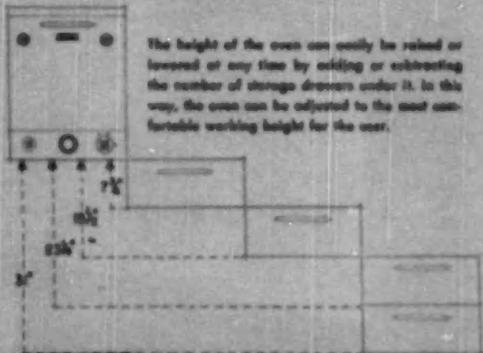
Surface cooking unit can be brought up to counter height with three storage drawers mounted on a toe base.

Convenient working height for the oven can be provided with two or more storage drawers and a toe base.

When two "stacks" are designed as one integral unit, the "stacks" are fastened together providing a secure foundation.



Three storage drawers plus one counter top, or two storage drawers plus one surface cooking unit equals the height of the oven.



The height of the oven can easily be raised or lowered at any time by adding or subtracting the number of storage drawers under it. In this way, the oven can be adjusted to the most comfortable working height for the user.

PLUS 4" TOE BASE

Installation is simple and low cost

When the Select-a-Range is assembled as an integral unit with oven, surface unit and drawers in one assembly, installation is the same as with a conventional range. One 3-wire, 120/240 volt feeder circuit is brought up to the terminals in the back of the oven or surface unit and interconnection made between the two.



When the Select-a-Range Oven is to be installed in a wall or in cabinet work, the recess must be 20 $\frac{1}{2}$ " wide x 22 $\frac{1}{2}$ " deep x 25 $\frac{1}{2}$ " high. At the bottom of the recess, three lengths of 2" x 4" are to run from front to back, narrow side up to support the oven. No insulation space or venting is required. Feeder circuit is brought in at the bottom rear of the recess.



When two Select-a-Range Ovens are to be installed one on top of the other in a wall or cabinet, the recess must be 20 $\frac{1}{2}$ " wide x 23 $\frac{1}{2}$ " deep x 50 $\frac{1}{2}$ " high. No additional bracing is needed for the second oven.



When the Select-a-Range Platform Surface Unit is to be installed flush in a counter, the recess should be 20 $\frac{1}{2}$ " wide x 25" deep x 9" high. Feeder circuit should be brought into the recess at the bottom rear.



When two Select-a-Range Ovens are to be installed side by side in a wall or cabinet, the recess must be 40 $\frac{1}{2}$ " wide x 25 $\frac{1}{2}$ " deep x 25 $\frac{1}{2}$ " high. Separate bracing is required at the bottom of each oven.

F



...ange features make
...eter, easier, better!

EXTRA LARGE OVEN INTERIOR
—16" x 16" x 19" with Balanced Heat and 40% faster preheating with automatic cut-off.

AUTOMATIC TIMER
starts and stops oven as desired with simple, foolproof precision.

COUNTER-BALANCED OVEN DOOR
has automatic broiling stop.

MINUTE MINDER
keeps track of time for any cooking operation from one to sixty minutes.

"MONOTUBE" THRIFT UNITS
are fast heating, cannot warp or bend, concentrate heat distribution.

SEVEN-HEAT SWITCHES
give exact control of heat for every desired cooking requirement.

SWIVELED UNITS
swing up and out for easy cleaning. Chromium flanges keep hot utensils away from porcelain top.

UNIVERSAL

LANDERS, FRARY & CLARK, NEW BRITAIN, CONN.

For further information about the new Select-a-Range and the name of your nearest distributor, write to Dept. B-D, Landers, Frary & Clark, New Britain, Conn.



HOW'S YOUR LANGUAGE IN FRONT OF *Ladies*?

We don't have to tell you that a house with a kitchen and bathroom that pleases Mrs. Homemaker is a house half sold.

Colorful durable Formica surfaces in these two all important rooms speak a language of their own—lady talk that sells fast and sure.



The Formica Vanity, combination lavatory and dressing table, is fast climbing to the top of home buyers "must have" list. National advertising has them looking for the famous Formica Label.

"Just as good" is a fable. Look for the label.
Insist on genuine Beauty Bonded Formica.

Formica is ideal for bathrooms, not alone for its beauty, but for its resistance to alcohol, boiling water, non-bleaching cosmetics, and ordinary mild acids and cleaning alkalies.

You owe it to yourself to send for Formica's full color idea folder "What's New in the Bathroom".

A free copy is yours for the asking. Write Formica, 4514 Spring Grove Ave., Cincinnati 32, O.



Beauty Bonded
FORMICA
at Home with People
at Work in Industry

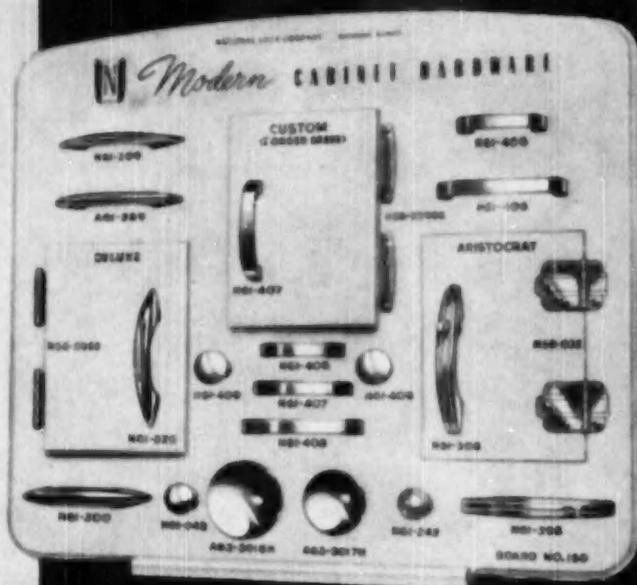
4-STAR
FEATURE

ask your jobber

National Lock's new **no. 150**

DISPLAY BOARD AND **ASSORTMENT**

- One Complete Deluxe Board to Replace Several of Your Other Boards
- Reduces Inventory While Providing All Major Cabinet Hardware Items
- Only 21" Wide, It Saves Counter Space . . . Makes Space More Profitable
- Appeals to Those Who Want the Finest . . . Increases Per Unit Profit



*Superlative
Quality...*

Items in this assortment have been carefully selected as the ultimate in National Lock quality. Included are only the very finest . . . the best hardware available anywhere. Open 'stock, if desired. Ask your jobber for details.

- ★ Forged Brass Hardware
- ★ New Type Concealed Hinge
- ★ Beautiful Concave Knobs
- ★ Smart Die-Cast Handle
- ★ Other Fast-Selling Items

NATIONAL LOCK COMPANY

ROCKFORD, ILLINOIS • MERCHANT SALES DIVISION



DISTINCTIVE HARDWARE... ALL FROM 1 SOURCE

Here's Why It Pays To Specify

Pittsburgh Steeltex Lath For Plaster

You get low maintenance and high fire protection in your buildings with Pittsburgh Steeltex Lath for Plaster. This combination of galvanized welded wire mesh and absorbent backing makes possible positive embedment of the wire mesh and provides maximum reinforcement and protection against plaster cracks. Also this reinforcement has earned high fire ratings for

Steeltex including Underwriters' Laboratories, Inc. test R-2258.

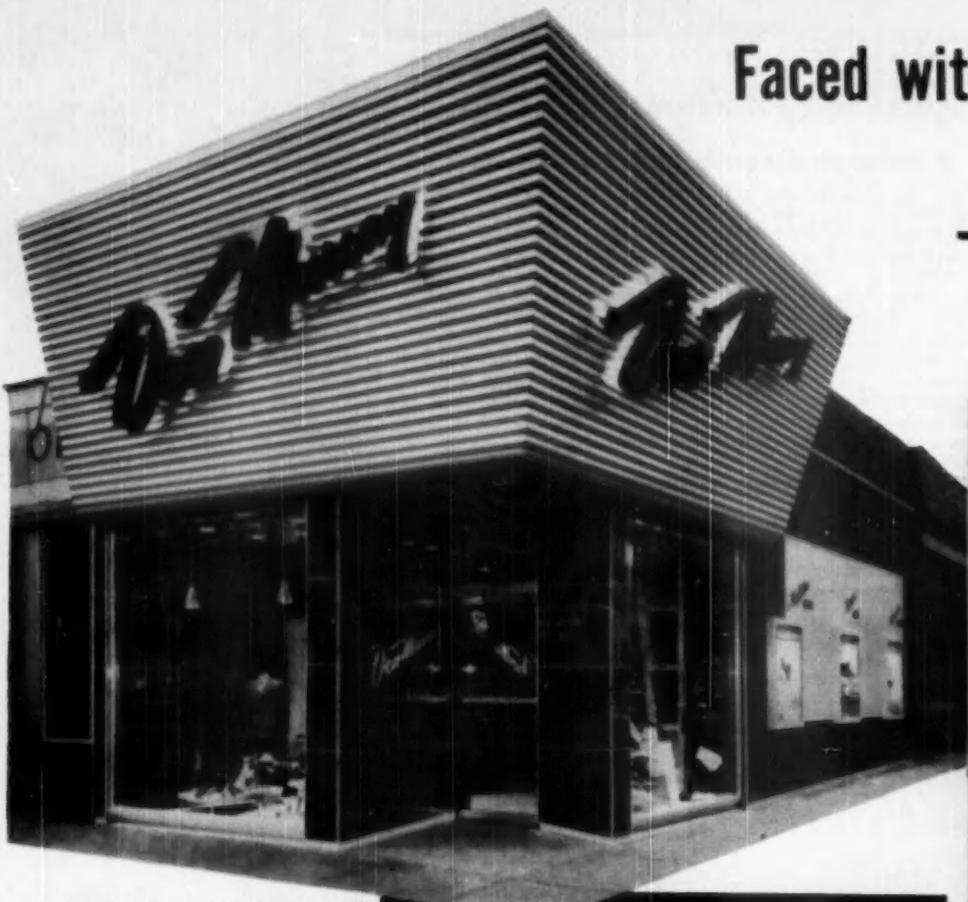
In addition Steeltex provides a rigid troweling surface which speeds its application and saves plaster. For better plaster construction see our catalog in Sweet's or write for Catalog D.S. 136 to Dept. AB, Pittsburgh Steel Products Company, Grant Building, Pittsburgh 30, Pennsylvania.

PITTSBURGH STEEL PRODUCTS COMPANY

A Subsidiary of Pittsburgh Steel Company
Pittsburgh, Pa.



Faced with a



REMODELING A STORE FRONT? You'll find that profit-wise merchants are easier to sell when you say, "We'll be using Pittsburgh Products." For Pittsburgh Glass and Pittco Store Front Metal are recognized everywhere as outstanding products for store modernization. The open-vision front shown here is typical of what Pittsburgh Products can do to help you create sales-winning store fronts for the merchants; prideful and profitable jobs for you. Architect: Phillips & Pisch, Rochester, N. Y.

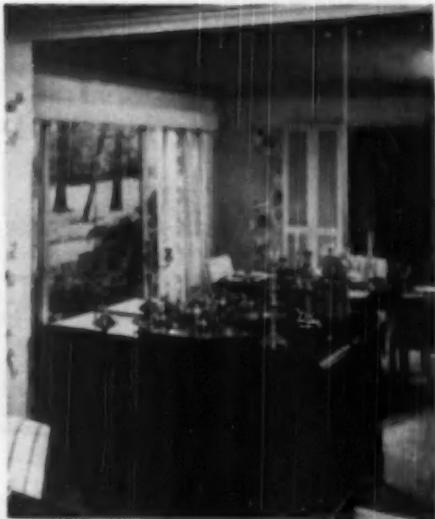
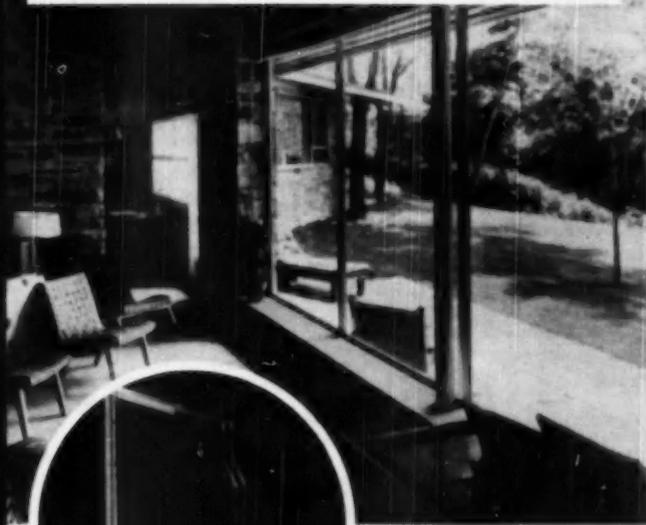
WANT TO SAVE TIME AND LABOR? You can very easily with the new Pittsburgh Doorway. No time-consuming calculations; no worries about setting and fitting. Matter of fact, you don't even need a screw driver. There's no drilling of holes in frame; nothing to assemble. Everything comes to you in one "package": The famous Pittco Checking Floor Hinge, moldings for transom glass, supports for sidelights, strikes for locks, sockets for bolts—*everything!* You simply unspack the frame, bolt it into the building opening and hang the massive Herculte Doors, for which it has been especially developed. There are 12 standard designs available.



tough job of building or remodeling?

Glass can help you!

IS THERE A VIEW of the garden or other spot that makes a living picture for enjoyment from inside the house? Then frame it with Twindow, Pittsburgh's window with built-in insulation. With Twindow you not only afford your client the atmospheric beauty it creates, but you give him its many other advantages as well. Because Twindow minimizes down-drafts, cuts heat losses through windows, virtually eliminates frosting and fogging. Architect: J. P. Trenchard, Washington, D. C.



WHAT TO DO with that small room? To make it look larger, to give it new life, richer personality, Pittsburgh Mirrors (either single units or floor-to-ceiling panels) are the happy solution. Mirrors give the appearance of doubling the room's size. Their true reflections actually double the charm and beauty of the decorative scheme as a whole. Architect: Henry W. Johanson, Roslyn, N. Y.

See the complete listing and descriptions of Pittsburgh Plate Glass Company products in Swoof's Catalog Files.

BUILD IT BETTER WITH—
Pittsburgh Glass



PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS

PITTSBURGH PLATE GLASS COMPANY

America's Most Outstanding Truck Values

—with more power than ever!

Here are the models to make motor-truck history. These new Chevrolet P-L trucks are advance-designed for the heaviest loads, the roughest roads, the lowest cost per trip.

They are far ahead in popularity, performance, payload, price—and they are the *most powerful trucks Chevrolet has ever built*. There is a P-L truck for every trucking job and every one is a real leader on the job.

Chevrolet Motor Division, General Motors Corporation
Detroit 2, Michigan

Leading with all these **Plus Features:**

- **TWO GREAT VALVE-IN-HEAD ENGINES:** the New 105-h.p. Load-Master and the Improved 92-h.p. Thrift-Master—to give you greater power per gallon, lower cost per load
- **THE NEW POWER-JET CARBURETOR:** smoother, quicker acceleration response
- **DIAPHRAGM SPRING CLUTCH** for easy action engagement
- **SYNCHRO-MESH TRANSMISSIONS** for fast, smooth shifting
- **HYPOID REAR AXLES**—5 times more durable than spiral bevel type
- **DOUBLE-ARTICULATED BRAKES**—for complete driver control
- **WIDE-BASE WHEELS** for increased tire mileage
- **ADVANCE-DESIGN STYLING** with the "Cab that breathes"
- **BALL-TYPE STEERING** for easier handling
- **UNIT-DESIGN BODIES**—precision built.

CHEVROLET P*L*

ADVANCE-DESIGN TRUCKS

P* Popularity Leaders

Official truck registration figures for 1949 show Chevrolet trucks preferred over the next two makes combined—proof of the owner satisfaction they earn through the years.

P* Performance Leaders

The new Chevrolet P-L trucks give you high pulling power over a wide range of usable road speeds—and on the straightaway, high acceleration to cut down total trip time.

P* Payload Leaders

The rugged construction and all-around economy of Chevrolet P-L trucks cut operating and repair costs—let you deliver the goods with real reductions in cost per ton per mile.

P* Price Leaders

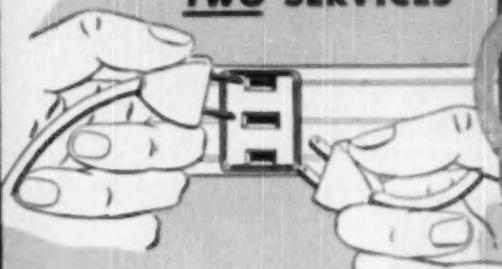
The Chevrolet truck line is the very lowest priced line in the field—saves on initial cost. What's more P-L trucks give owners dollar and cents savings in maintenance and operation.



NOW - a switch controlled "PLUG-IN" STRIP!



ONE RECEPTACLE -
TWO SERVICES



CONSTANT SERVICE



The new NE 3-wire "Plug-in" Strip is a professional multi-outlet wiring assembly with an unusual new feature: Instead of the usual two slots, each receptacle has three.

Appliances plugged into the top and center slots are controlled by doorway switches, while appliances plugged into center and bottom slots will operate independently of the wall switches. Thus, you can turn off all lamps at once, but leave the electric clock, radio, and other appliances running.

- **EASY TO INSTALL.** At last, full switch-controlled service of every outlet with minimum switch-leg wiring. No complicated behind-the-wall installations.
- **ARCHITECTURALLY CORRECT.** An unnoticeable steel baseboard trim.
- **SAFE FOR LIFE.** No soldered or screwed connections . . . a solid copper electrical system from switch box to the very last outlet. Tamper-proof because the capping is locked on permanently.
- **LISTED BY UNDERWRITERS' LABORATORIES, INC.**

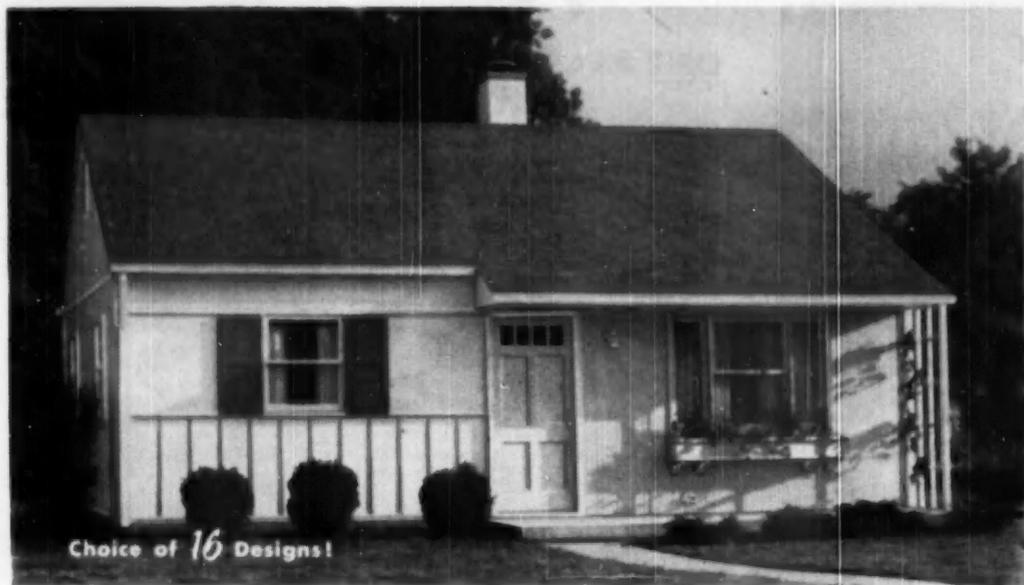
Let us send you a copy of our booklet "The New Switch-controlled 'Plug-in' Strip," and the pamphlet "An Adequate Wiring Plan for Residential Wiring Modernization."



National Electric Products Corporation

1329 CHAMBER OF COMMERCE BUILDING • PITTSBURGH 19, PA.

50% MORE PRODUCTION IN '50



TO MEET THE DEMAND FOR NATIONAL'S "THRIFT HOME"!

● Building a quality home at a price most people can afford pays dividends in the form of more business. That has been National Homes Corporation's experience with the "Thrift Home," now the largest-selling, low-cost quality home on the market! The nationally advertised "Thrift Home" (two and three-bedroom sizes, 16 designs) is more attractive and more saleable than ever. Latest improvement is a beautiful, eggshell satin finish on all interior walls, wood trim and doors—a "New Look" for the interior. The cost is still the same, approximately \$6,000 including lot, with only a few hundred dollars down.

In some areas, National Homes Acceptance Corporation offers a source for final mortgages as well as construction money for the convenience of our dealers.

More production means the opening of more territories. If there is no National Homes dealer in your city, write us regarding qualifications. You may be eligible for a National Homes dealership.

SOME DEALERSHIPS NOW OPEN!

SEE...

the "Thrift Home" at the NAHB
Annual Convention and Exhibit

Stevens Hotel, Chicago

February 19-23

SPACE 95

National HOMES CORPORATION . . . LAFAYETTE, INDIANA U.S.A.

"A real advancement in window screening, easy to handle and install, and architecturally sound."

Harold Straus, Sec'y
Harris Contr. Corp., Brooklyn, N. Y.



"it snaps into place"

"from inside"

DURALL ALUMINUM TENSION SCREENS

"so light and flexible"



"it rolls up for storage"

"no rust or stains"



"aluminum! needs no painting"

"so good looking"



"so snug fitting"

Home owners and builders who know Durall are saying all the things you read above, and more!

With its first introduction, this remarkable new kind of window screen captured the imagination—and appealed to the good sense and pocketbooks —of home owners and builders alike. Over 2,000,000 are in use today!

FREE BOOKLET! Get our special, free Durall booklet, showing complete specifications and prices—for your files. Write today, Dept. AB-2. See Durall at your building supply dealer's.



West of the Rockies ask for Ry-Lok

and only
\$ 3.75
for average size



DURALL

ALUMINUM TENSION SCREEN

NEW YORK WIRE CLOTH COMPANY • 445 PARK AVENUE, NEW YORK 22, N. Y.

American Builder, February 1950.

New Customers Everywhere

make
MORE PROFITS
for you

with
Miracle Walls
by
TYLAC

With the New
Hi-baked
Plastic Enamel
Surface



A Chicago Salesroom Modernized with TYLAC, two-tone Muralac design.

A SALES TIP FOR PROFIT-WISE DEALERS

TYLAC Dealers and Distributors everywhere are building ever increasing sales volumes — not only in homes but in the rapidly widening commercial and industrial fields where remodelling and modernization programs are in progress, or definitely planned for winter and spring. They're finding eager prospects in stores, showrooms, offices, hotels, theaters, hospitals, factories — in fact, wherever there's a business establishment they find a use for Miracle Walls by TYLAC.*

And rightly so, because TYLAC Hi-baked, Plastic Enamel Surface walls combine every feature of superior excellence. Their Beauty, their Economy, their Permanence, make them the preferred interior wall coverings wherever they are shown — and that adds up to Extra Profits for You!

Write us today for our liberal sales plan
and many advertising and dealer helps.

*"Miracle Walls by TYLAC" is the registered trademark of the TYLAC Company in the United States.

TYLAC COMPANY MONTICELLO, ILLINOIS

PIONEERS IN THE PREFABRICATED WALL PANEL INDUSTRY

better looking applications
 ... perfectly aligned tile
 and plank... with the
Nu-Wood clip system

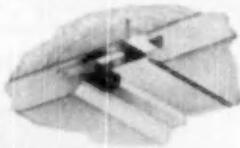
No other insulating interior finish has introduced so many improvements and refinements as Nu-Wood! Fadeproof colors . . . unique textures . . . a "foolproof" tongue and groove joint . . . these are only a few of the features which have made and kept Nu-Wood Kolor-Fast and Sta-Lite Plank and Tile leaders in their field. But there's another *exclusive* feature which assures lastingly true and level wall and ceiling surfaces . . . lastingly tight joints.

Read these advantages and you'll know why Nu-Wood Kolor-Fast and Sta-Lite Plank and Tile—applied by the Clip System—assure satisfied owners who STAY satisfied!

REVERSIBLE CLIP APPLICATION PERMITS CENTER-OF-CEILING STARTING



The reversible feature of the Nu-Wood Clip permits fast, correct application of tile from center of ceiling . . . easier applications, less layout time, assuring uniform ceiling border. Illustration shows clip fitted into groove.



Here is the Nu-Wood Clip fitted over the tongue of Nu-Wood Tile. Note that joint lines can be made perfectly straight because the Nu-Wood Clip permits some adjustment in the position of the tile.



**DECORATING
 ACOUSTICAL
 INSULATING INTERIOR FINISH**

*Reg. U.S. Pat. Off.

Wood Conversion Company, Dept. 119-23, First National Bank Bldg., St. Paul 1, Minnesota

Manufacturers of Balsa-Wool® Insulation. Sold by lumber dealers only.

**IT TOOK NU-WOOD TO PIONEER
 THIS HISTORY-MAKING CLIP**



Self-Aligning Collage!
 With the Nu-Wood

Clip, irregularities of the nailing base do not affect levelness and appearance of job. The clip provides a "floating" ceiling by permitting normal movement of the tile or base. The tongue and groove joint and the Nu-Wood Clip permit tile to adjust to humidity and temperature, reducing possibility of sagging tile.



Complete "Wrap-around" Support! The Nu-Wood Clip completely "wraps" both the tongue and groove with metal—supporting both edges without penetrating either edge.



Tighter Joints—Surfaces Stay Cleaner! Nu-Wood tongue-and-grooved Plank and Tile, applied by the Clip System, assure tighter joints. This reduces air movement through the joint, minimizing collection of surface dirt. Thus, a Nu-Wood interior stays cleaner longer—keeps its fresh brightness. Damaged Tile are easily replaced.



Securely Fastened—Nailed in Place! See how this secure, invisible nailing holds the plank or tile in perfect alignment! The Nu-Wood Clip is sturdily constructed, easy to handle—there are no sharp points or prongs. The clip is rust-proof.

Proved by Thousands of Applications! The Nu-Wood Clip pioneered a new idea in tile and plank application—fast, dependable, sturdy and trouble-free. In thousands of jobs, large and small, Nu-Wood Tile and Plank, applied by the Clip System, have provided proved satisfaction for more than 10 years!

Sta-Lite* Kolor-Fast

High Light Reflection High Sound Absorption

Nu-Wood*

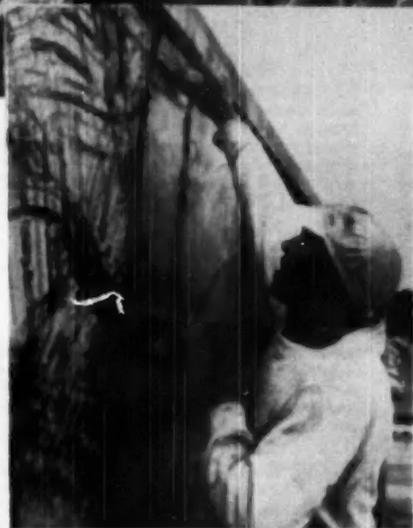


"Neither Snow Nor Rain..."

NEITHER Snow nor Rain nor Glows of Night Stays these Carriers from the Swift Completion of their Appointed Rounds." A half-million men, handling 40-billion pieces of mail a year through 41,695 postoffices, make good this motto of a great service, which some how has never lost its friendly, personal touch. In buildings, too, the U.S. Post Office Department has a personality of its own. Well-constructed postoffices, large and small, set good sound building standards throughout the nation. Witness this new post office in Valley Stream, L. I., near New York City.

Masonry shows the hallmark of quality workmanship and materials—in attractive walls, with fine, smooth joints, and in pleasing, even-textured interior plastering. You SEE the difference, just as the mason FEELS the difference when he puts this rich, extra-fat, easy-spreading LONE STAR MASONRY CEMENT mortar through its paces: Mortar that stays plastic until units are firmly bedded, assuring better bond . . . mortar with high water retention . . . and strength more than ample for any type masonry.

Yes, "neither snow nor rain" stays the men who work IN such a building . . . you can be sure it stays OUT of the walls!



Lone Star Cements cover the entire construction field

UNITED STATES POSTOFFICE, VALLEY STREAM, L. I.



Architect: **JOSEPH J. GUNTHER**, Valley Stream, L. I.
 General Contractor: **MAX NOVIE**, Brooklyn, N.Y.
 Brickwork: **E. J. AUGUSTINE**, Lynbrook, N.Y.
 Stucco: **J. ZITO & SON**, Oceanside, N.Y.

Lone Star Masonry Cement supplied through:
J. P. DUFFY CO., INC., New York City, and
FALLON BUILDING MATERIALS CORP.,
 Rockaway Beach, L. I.

LONE STAR CEMENT CORPORATION

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

LONE STAR CEMENT, WITH ITS SUBSIDIARIES, IS ONE OF THE WORLD'S LARGEST CEMENT PRODUCERS - 15 MODERN MILLS, 27,500,000 BARRELS ANNUAL CAPACITY

MARKETS in the Building Field

New Rise in Construction Costs

LAST March we asked "How Big A Drop in Prices?" and foresaw no substantial drop in construction costs in the immediate future. At the time residential, commercial and industrial building was falling off at a rather alarming rate which would tend to depress prices and there were reports of widespread price cuts in building materials.

The sensational increase in residential starts last summer and fall forestalled further price decreases and manufacturers are now reported to be in the process of marking prices upwards.

By September of last year the full effects of last fall's record-breaking residential building activity had not been felt and prices had dropped from the high level reached in 1948. The wholesale price of Douglas Fir boards and shiplap was \$56.84 per thousand as compared with \$70.78 a year previous. Red Oak flooring was \$147.00 as compared with \$183.26. Yellow pine dropped from \$71.87 per thousand to \$63.33.

Outside white paint was \$4.06 per gallon in September 1948 and \$3.76 in September 1949. Insulation board dropped slightly from \$43.12 to \$42.14. Various types of windows stayed the same price or went up a bit.

Prices of all construction materials were 7 per cent less than the year previous according to the Department of Commerce. Lumber was down 12 per cent, plumbing and heating 1.5 per cent, brick and tile were up 1.4 per cent.

General increases in labor and freight rates during 1949 prevented any substantial decrease in building costs. Roy Wenzlick estimates the cost of a standard 6-room frame house in St. Louis in 1949 dropped less than \$200 from \$14,623 in October 1948 to \$14,429 in October 1949. The same house in 1939 cost \$5,894.

The big residential building surge in the fall of 1949 can not therefore be attributed to substantial reductions in prices. Home buyers have become reconciled to prices they thought fantastic three years ago and with their relatively high postwar incomes are able and willing to pay prevailing prices.

For a period of twenty years from

1920 to 1940, the Department of Commerce index of Construction Costs showed remarkable stability. At the bottom of the depression in 1932 the index stood at 81.1 as compared with 106.7 in 1929, a decrease of 30 per cent. The index had almost regained the 1929 level by 1937 when it reached 100.9.

The factors inherent in the price structure now which make reduced construction costs improbable are the government debt of \$250 billion, Federal spending at between \$40 billion and \$50 billion a year, and the prevalence of union labor always demanding increased wages in mills, building material and equipment factories as well as on the construction site.

The most that can be hoped for in the foreseeable future is a reduction in construction costs of 10 per cent to 20 per cent and this seems improbable.

Although construction costs are related to residential building activity, costs do not fall as far as residential starts. From 1925 to 1932 construction costs fell 30 per cent while the number of new dwelling units started dropped 90 per cent.

So far as the average home buyer is concerned there is one item whose cost is not inflated at all—that is interest. Two primary causes of these low rates have been the government's cheap money policy and a lack of any real shortage of lendable funds.

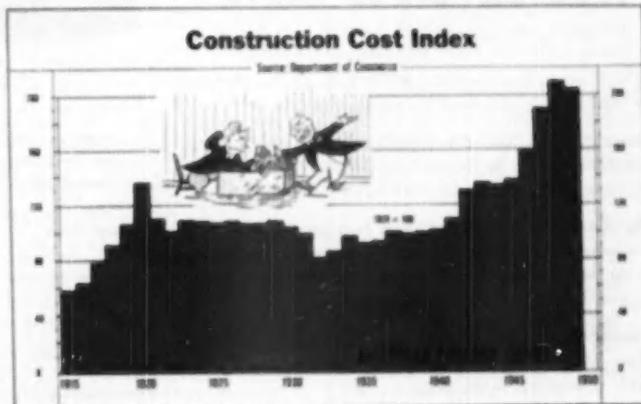
If interest rates had gone up as much as construction costs and other

items, the rates would be 10 to 12 per cent instead of 4 to 5 per cent. Monthly payments under FHA of a 20 year \$10,000 mortgage at 10 per cent would be \$90.50 as compared with \$66.00 at 5 per cent. At 12 per cent payments would be \$100.50 per month. Hundreds of thousands of home buyers would be excluded from the market. That's why new homes today are attractive bargains in spite of high construction costs.

The same reasoning applies to the cost of commercial, industrial and institutional buildings. It's outside the realm of probability that costs will go down more than 10 to 20 per cent. There is a large supply of money which can be borrowed at low rates for construction of such buildings, which are sound enterprises, as well as for modernization of old buildings.

The far reaching effects of FHA financing and low interest rates are undoubtedly the factors behind the big residential construction market. In November, 93,000 new dwelling units were started, 46 per cent above a year previous when 63,600 dwelling units were started. It is expected that starts for 1950 will hit the million mark.

Prospects for 1950 are excellent. The official forecast by the Department of Commerce is 7 per cent fewer new dwelling units in 1950 than in 1949, but there is evidence that instead 1950 will see a new all-time record in housing starts.



INSULUX
GLASS BLOCK®
 AMERICAN STRUCTURAL PRODUCTS
 COMPANY
 Subsidiary of
 OWENS-ILLINOIS GLASS COMPANY

Unaffected by the weather, Insulux Glass Block doesn't have to be painted; retains privacy, yet transmits ample light to interiors... it is easy to clean.

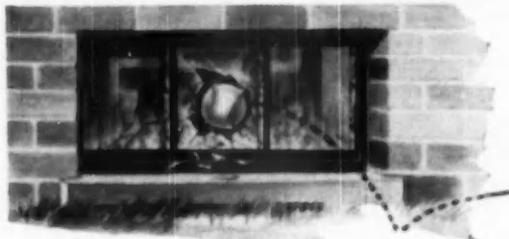
Practical idea for basements— Insulux Glass Block

THE use of Insulux Glass Block instead of ordinary windows is practical for many reasons:

Insulux Glass Block is unaffected by rain, snow, ground seepage, or flooded areas. Glass blocks do not require paint—do not rot, rust or corrode.

The thermal insulation value of Insulux Glass Block is approximately equal to an 8-inch brick wall; yet at the same time, Insulux transmits plentiful daylight to brighten up basement interiors.

Investigate the many plus advantages of Insulux Glass Block—for practically every room in every home you build. Send coupon now!



MAIL COUPON TODAY

AMERICAN STRUCTURAL PRODUCTS COMPANY
 Dept. G-132, P.O. Box 1035
 Toledo 1, Ohio

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

Name _____

Address _____

City _____ County _____ State _____

On and Off the Record

News, Views and Comments

RACIAL COVENANTS—FHA has amended administrative rules to bring them fully in line with the policy underlying the recent Supreme Court decisions relative to racial covenants. Effective date is Feb. 15, 1950.

MORTGAGOR CERTIFIES—Under the new rules mortgagor must certify that he will not file of record any restriction upon sale or occupancy of mortgaged property on basis of race, color or creed or execute any agreement or lease that would so restrict the property. Certification to hold good until mortgage has been paid in full or insurance contract otherwise terminated.

PUBLIC HOUSING—Preliminary loans approved at the end of 1949 amounted to \$35,862,000 to cover planning of 221,390 units in 227 localities.

HOUSING ACT—The Housing Act of 1949 provides that these units are to be built, owned and operated by local housing authorities and rented to families whose incomes are so low that they cannot afford adequate privately-owned housing.

THE QUESTION—It always was and still is—Who knows or how will it be determined who cannot afford to pay for adequate privately-owned housing? The *lowest* income groups are not eligible to rent the units, because they cannot pay the government rent. How much above the *lowest* income families may a family be to qualify? The housing act does not do what was promised—that is, take care of the indigent families.

PRELIMINARY LOANS—They are to cover all expenses a housing authority will incur for preliminary surveys, site selection studies, appraisals, and all architectural and engineering plans except the final working drawings and making final cost estimates of the units. Average preliminary loans at present are \$180 per unit.

SUCCESSFUL FARMING—The research division of the magazine's publishers made a survey of the farm building market, and discovered some interesting things destined to happen in the next 12 months.

NEW FARM HOMES—The survey shows that the magazine's readers expect to build 50,000 homes in 1950; remodel, repair or paint 798,000

existing farm homes; re-decorate all or part of 722,000; and re-furnish 797,000. This is in line with *American Builder's* prediction of increasing farm building activity.

LUMBER SALES—Retail sales volumes reported to the National Retail Lumber Dealers Association for October showed an increase over September of 1.1 per cent, and an increase of 2.9 per cent over October, 1948. Lumber stocks were 7.1 per cent below those of October, 1948.

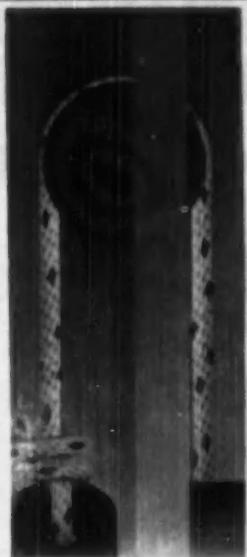
TAXES—They are looming more and more important in the public mind. Once the worker, whether he earns his living in an office or a factory, knows that of every tax dollar he pays to Washington, neither he nor anyone else ever gets more than a negligible fraction back in value of any kind, it should become easy to apply the brakes to bureaucratic expansion and socialist measures.

LOCAL OPTION—A large part of it has been taken away by the Housing Act of 1949. The act does not protect a locality by making acceptance or rejection of public housing mandatory by public vote. The decision rests with the local housing authority, acting with the aid of the Federal government. Vesting such authority in an appointed body is an intrusion on local community self-government.

PROPERTY OWNERS—The owners of homes in any city are entitled to the right to contest public housing at the polls. It is these owners who will have to pay the additional taxes to support tax-free housing units. It is even doubtful if the "lower middle-income groups" who are getting the alleged benefits of public housing would be in favor of it if they were to be told all of the facts of cost. That is, how much their income taxes might be reduced and their net earnings increased if Federal government spending for socialistic measures were stopped.

AUSTRALIA—Recent elections resulted in the rejection of the Labor Government. This followed hard on the heels of the same action and result in New Zealand, cradle of the labor government move.

ENGLAND—Here, the Labor government is having great difficulty reconciling increasing taxes with the division of increasing scarcity.



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

SAMSON CORDAGE WORKS
BOSTON, MASS.

HOUSES SELL FASTER

when insulated with **FULL-THICK** fireproof
Gold Bond Rock Wool Sealed Blankets

THESSE days with the cost of fuel sky-high, your customers want the best insulation they can get. That's why it pays you to insulate your houses with fireproof, full-thick Gold Bond Rock Wool Sealed Blankets. That way you can promise your customers fuel savings up to 40%—savings that continue for the life of the house. You can promise them a home that's cooler in summer, warmer in winter. You can promise them added fire protection with insulation that's *fireproof*, not just "fire-resistant" or "fire-retarding." You can point out that this full-thick insulation gives the house higher resale value too.

And new Gold Bond Sealed Blankets cost you no more in installation time and costs than thin, inadequate insulation. The 8 ft. Blankets go up fast, fill the usual 8 ft. height from floor to ceiling. Make it a point to use Gold Bond Sealed Blankets in your houses . . . and advertise the fact to your prospects. It'll sell your houses faster.

● *Gold Bond Sealed Blankets have a double strength stapling or nailing flange. Vapor barrier is part of Blanket. Breather cover on 3 sides for easy handling. Also Enclosed Blatts in 2 ft. and 4 ft. lengths with all the features of the Blankets. Blankets come in 3 thicknesses: Jumbo, Standard and Mat; Blatts in Full-thick and Semi-thick. Complete descriptive folder on request.*



Fireproof Wallboards, decorative Insulation Boards, Lath, Plaster, Lime, Sheathing, Wall Paint, Rock Wool Insulation, Metal Lath and Sound Control Products.

You'll build or
remodel better with

Gold Bond

NATIONAL GYPSUM COMPANY
BUFFALO 2, N. Y.



EDITORS'
Round Table

LAST AUGUST there appeared on pages 72-77 a story about the "House Full of Ideas," designed and built by Mr. and Mrs. Oscar Clarholm of Daytona Beach, Fla. Soon after the issue was out, the editors received a letter from Mrs. Cullers of Lansing, Mich.

MRS. CULLERS criticized the house on the basis that the plan lacks easy access by guests into either of the bathrooms. In every other detail, Mrs. Cullers agreed that the house certainly is a dream house.

IN THE NOVEMBER issue we replied that probably the Clarholms reasoned that one of the bedrooms always would be unoccupied, and that access to the bathrooms as shown would not be a handicap.

MR. CLARHOLM replied to Mrs. Cullers and the editors recently as follows: "Mrs. Clarholm and I are replying to the letter which you received from Mrs. Dorothy Cullers of Lansing, Mich., saying that "Our House of Ideas" lacks easy access by guests into either bathroom. In the November issue you tell Mrs. Cullers that we built the house for ourselves, and therefore one of the rooms would not be occupied and the bathroom for that room readily accessible. You are right, in that the middle room, just off the dining room, is only occupied when the two boys are home from northern boarding schools, and so is practically a guest room. The other bedroom in that wing is occupied by a nine-year old daughter, and she would more than likely be in bed when we are entertaining guests in the evening. Also, and not mentioned in the August issue, is the fact that just off the screen porch, about 20 feet to the south, we have a guest house, with a living-bedroom, kitchenette, dressing room and bath. This eliminates any over-night guests in the house proper, and makes for better relations all the way around. We think that we do make guests completely comfortable, and we do not want Mrs. Cullers to think we did not try to get a 'powder room' into the picture, but it was either that or leave out the bar. We wanted the bar and thought that our guests could use the two baths in the house, or the one in the guest house, without too much trouble on their part."

THAT SHOULD SETTLE the
(Continued on page 61)

American Builder, February 1950.

'Hot Water Sells Homes.' WHEN IT'S ELECTRIC,"

says James R. Bronkema of Grand Rapids, Michigan

The nationwide demand for Electric Water Heaters continues to grow. Sales and survey figures show that. So does the actual experience of builders—Mr. James R. Bronkema of Grand Rapids, Michigan, for example, who says: "I find an all-electric home easier to sell than any other kind. My customers like to find modern automatic Electric Water Heaters in the homes they buy."



These unusual homes being built by Mr. Bronkema in Grand Rapids have five rooms and complete, all-electric equipment which includes a modern Electric Water Heater.

Modern automatic Electric Water Heaters can save you money on construction costs because 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 costs. Customers like Electric Water Heaters because they are: (1) **AUTOMATIC** (continuous hot water, no attention); (2) **CLEAN** (smokeless, sootless); (3) **DEPENDABLE AND TROUBLE-FREE** (no 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).

This modern, all-electric kitchen has a constant, automatic supply of hot water—thanks to an Electric Water Heater of adequate capacity.



of course... it's Electric! ➔

ELECTRIC WATER HEATER SECTION

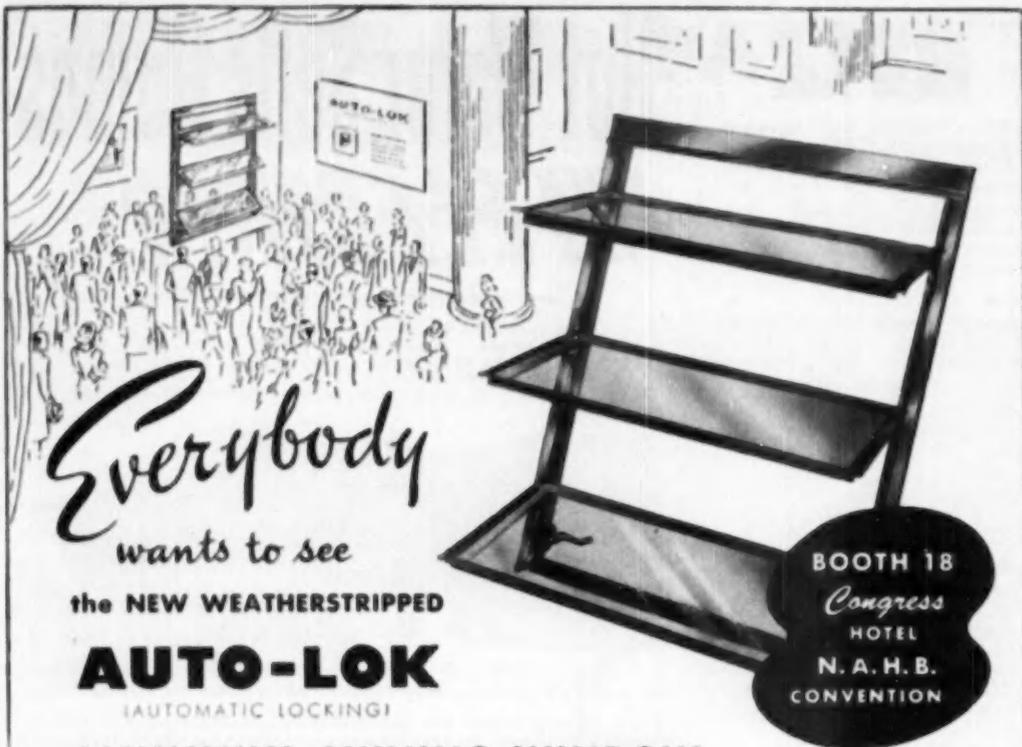
National Electrical Manufacturers Association
155 East 40th Street, New York 17, N. Y.

ALLCRAFT - BAUER - BRADFORD - FAIRBANKS-MORSE - FOWLER - FRIDLANDER - GENERAL ELECTRIC - HOTPOINT - HOTSTREAM - JOHN WOOD - KELVINATOR - LAWSON - MERTLAND - MONARCH - NORGE - PUMCO - REX - BHEEM - ELECTRIC SEPCO - A. O. SMITH - THERMOGRAY - TOASTMASTER - UNIVERSAL - WISE - WESTINGHOUSE

**IT'S EASY TO
INSTALL an**

ELECTRIC WATER HEATER

in a house wired for an Electric Range!



Everybody
wants to see

the **NEW WEATHERSTRIPPED**

AUTO-LOK

(AUTOMATIC LOCKING)

ALUMINUM AWNING WINDOW

the most important new development in the window industry!

The much discussed **AUTO-LOK** aluminum awning window will make its debut at the N. A. H. B. Convention this month. This amazing window, already in use throughout the nation, is the first window of its kind that closes tight enough and stays closed tight enough to permit effective weathering. For the first time an awning window can be used successfully *anywhere* regardless of weathering requirements!

Eye appeal and sales appeal are combined with flawless engineering in **AUTO-LOK**, the window whose vents lock automatically and can be fully opened or closed in half the number of turns of the operator than are required on other awning windows.

There is a wide range of 48 standard stock sizes and many special combination types available. Removable aluminum screens and storm sash are easily installed without the use of tools, and **AUTO-LOK** can be cleaned entirely from within.

A "MUST SEE" at the convention! For full details and specifications consult SWEETS or write: Dept. A28, Ludman Corporation, P. O. Box 4541, Miami, Florida

AUTO-LOK

REG. U. S. PAT. OFF.

THE *Ultimate* IN AWNING WINDOWS

ENGINEERED FOR LEADERSHIP BY

LUDMAN CORPORATION, OPA LOCKA, FLORIDA

EDITORS' Round Table

(Continued from page 59)

"House Full of Ideas" issue even if it proves only that the dream house of one man is not necessarily the dream house of another.

THE FACT IS that taste in houses is about as variable as taste in men's neckties or women's hats. What one man would not wrap around his neck for any price is what another man considers to be a masterpiece of neckware. The same is true of women's hats and the houses that families choose to live in.

SAW A PLAN the other day with what most families would think should have been a master bedroom. It was truncated at the end to permit the installation of a half-bath. Not only were about five feet sacrificed from the length of the room, but the wardrobe had to be moved from the end and installed against the long wall, thus decreasing the effective width of what was left of the room.

REASON WAS that the family building the house was extravagant about the use of bathrooms. The man and woman wanted one placed inside the bedroom so that guests would not be likely to use it. The full bathroom was placed for the easy use of guests. A comfortable, airy bedroom was considered by this couple to be secondary to a private bath.

A CUSTOMER we heard of recently berated his architect because the design of a one-story house made the dining space a combined dining room and corridor. It was necessary to walk through part of the dining space to get from the living room to the kitchen, and across the dining space to get from the kitchen to the bedrooms and bath.

RE-DESIGN of the plan included a corridor, usable only as a corridor, and required almost as much space as originally taken for the dining space. But the customer for some unaccountable reason was satisfied.

THAT probably is one of the reasons why few architects live long enough to retire. It is certainly the reason why one sees such queer things under the guise of livable homes.

OR ARE THEY queer things? They're just queer, because they cater to the special whim or whims of the
(Continued on page 63)

American Builder, February 1950.



8-FT.
LENGTHS

REMEMBER BERMICO AND FORGET PIPE TROUBLES

Cut costs... Build with Bermico

One place you can cut costs... and safely... is with Bermico Sewer Pipe.

Bermico weighs so much less... $\frac{1}{2}$ lighter than other types of pipe. It stores with far less breakage... and its convenient 8-foot lengths save time, money, trouble on the truck and the job. Easily laid, too. A few hammer blows and joints are tight! No joining compound needed. And joints won't "give" or open when soil settles unevenly underneath!

Watertight... rootproof. Bermico sewer lines stand up under extremes of heat or cold... deliver high water capacity flow.

Each length of Bermico is individually inspected to measure up to a high standard of engineering. The result? Millions of feet of Bermico are now in use... perforated pipe for drainage systems... regular pipe for house-to-sewer or septic tank connections.

Cut costs, increase profit, build goodwill with Bermico, the pipe you can trust!

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ANNOUNCING

The New!
THRUSH



Horizontal
water circulator

HERE is a new Thrush Water Circulator to provide Forced Circulating Hot Water Heat for small or large homes and smaller commercial buildings. This new horizontal type circulating pump incorporates all the time-tested features which have made Thrush a leader through the years. Whenever you want to provide the best in radiant heat, specify Thrush Forced Circulating Flow Control System of Hot Water Heat. It provides summer-winter domestic hot water from the regular heating boiler. Installation savings place it well within the reach of the modern, low cost home.

ALSO VERTICAL MODELS



**H.A. THRUSH
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PERU INDIANA

★ Positive forced circulation, quiet, free from service troubles.

★ Thrush Flow Control System assures constant Radiant Heat.

★ Thrush controls even anticipate outdoor weather changes.

SEE OUR CATALOG IN SWEET'S
OR WRITE DEPT. G-2 FOR MORE INFORMATION

FORCED CIRCULATING HOT WATER HEAT

EDITORS'
Round Table

(Continued from page 61)

families who want things the way they want them whether they conform to what generally is considered good practice or not.

CONTRA COSTA COUNTY is in California, and it has an NAHB chapter called the General Contractors Association of Contra Costa County, Inc. If that is a large name, and it certainly is, it isn't too large for the kind of builders in it. Local public housing authorities and city councils in the county are finding that they have something to contend with before they saddle the citizens with the tax burdens that will come from public housing developments.

FREDERICK C. KRACKE, the association's executive vice president, has exercised his right as a citizen to protest every proposed public housing project which in his judgment is unnecessary and wasteful. He gets results, too.

DALLAS, TEXAS is another city in which the public housers have to prove that there is need, and not merely a desire to grab some Federal pap. The Home Builders Association of Dallas prepared an exhaustive statement for the city's council, in which Grover Godfrey, executive vice president, and his associates revealed to the council some of the perils and headaches inherent in mass public housing that the council members had not thought of.

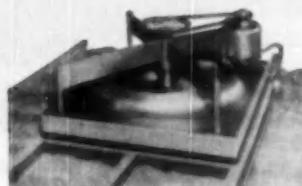
NO ONE in the building industry, as far as we know, ever has said or implied that there is no need for slum clearance or housing the needy. The Californians and Texans mentioned above are not saying anything like that either. What they are saying is that if there is local need for either or both the problem should be accepted as a local problem, and solved locally with local legislation, local enforcement and local money.

THAT, ALSO, as far as we know, is all any opponent of Federal public housing has ever said. But that statement and the solid arguments behind it make no impression on the advocates of a regimented economy.

BUILDERS everywhere will watch with interest for the result of the grass roots battles being waged in many places, only two of which are Contra Costa County and Dallas.

American Builder, February 1950.

See our exhibit at
N. A. H. B. Show



Quiet, powerful, compact



New automatic ceiling shutter

Easily installed—provides cool comfort for hot summer months

Hunter Package Attic Fan is a complete home-cooling system . . . low in initial cost, economical to operate and designed for fast, inexpensive installation. No other small investment gives home-owners so much summer comfort.

Easy to install Delivered on the job as a compact unit, complete with ceiling shutter and modern metal trim, the Package Fan is quickly installed in ceiling opening. No suction-box to build; no accessories needed. Requires only 17" attic clearance, fits any standard hallway.

Performance Guaranteed: Quiet, trouble-free operation is assured by Hunter's 64 years' experience in manufacturing fans, exclusively. Available in capacities from 4750 to 9500 CFM, with air delivery ratings certified. Fan guaranteed 5 years; motor and shutter, 1 year.

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Send copy of "How to Cool for Comfort" to:

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You can give your clients



The famous Flame of Freedom House featured in *Better Homes and Gardens*, designed by David Searcy Barrow.

How you can offset cost of *All-Year* air conditioning

By deciding to use *All-Year* Air Conditioning in the early planning stage, you can make enough economies to give your client year-round comfort at little or no extra cost. Moreover, the features which you would eliminate—such as a screened-in porch, fireplace, attic fan, conventional heating plant—afford comfort only for a short period of time, while *All-Year* Air Conditioning provides your clients with the ultimate in comfort all year-round.



NO FIREPLACE



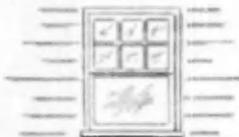
NO PORCH



NO SCREENS



NO STORM SASH



LOWER COST
WINDOW CONSTRUCTION



NO ATTIC FAN

All-Year **air conditioning**

at little or no extra cost!

TODAY, everyone wants the convenience and comfort provided by Servel *All-Year* Air Conditioning in their homes. You can provide your clients with this modern unit simply by planning your homes around a Servel Air Conditioner. Recent studies and cost estimates have indicated that you can do it without increasing the total price. The reason for this is that, by planning around a Servel unit, you gain certain structural economies which offset the price of the Air Conditioning.

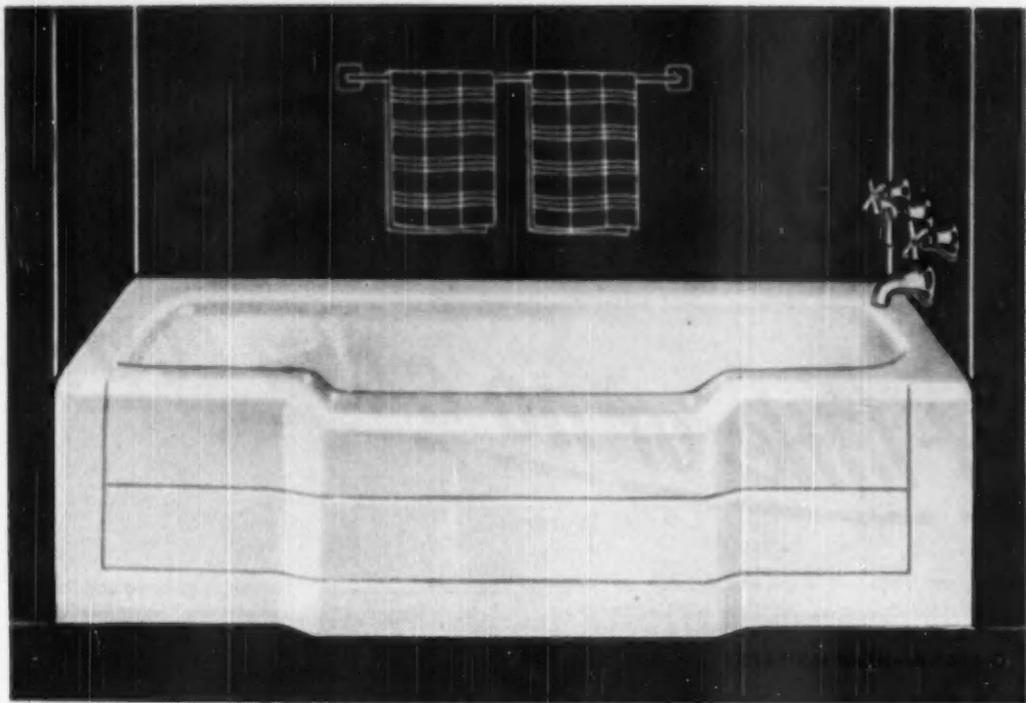
For instance, a house designed for Servel *All-Year* Air Conditioning needs no fireplace. It needs no porch. Outside doors and windows can be kept closed and many windows need never be opened at all. That means a big saving on screens and storm sashes. In most parts of the country the total savings would more than offset the cost of the Air Conditioning.

Keep that in mind when your clients ask you about Servel *All-Year* Air Conditioning. Keep in mind, too, that Servel provides them with year-round

comfort . . . refreshing cooling in summer and instant heat in winter. And changeover is accomplished by a mere flick of a switch.

Keep in mind, also, that the use of Servel *All-Year* Air Conditioning is not confined just to one type of architecture. It can be easily adapted to any type, style, size, or shape of home your client wants. Remember, by including the Servel unit in the original plans, you can provide it for your client at *little or no extra cost*. For full facts, ask your local Gas Company, or write direct to Servel, Inc., 1002 Mcrton Ave., Evansville 20, Indiana.





ONLY ELJER GIVES YOU A "TUB-FULL" OF SALES ADVANTAGES

MORE SAFETY



Low front rim . . . makes it easy for old folks or little ones to step in or out of tub. Bottom of tub is flat for extra safety.

EASIER CLEANING

Rectangular in shape so all parts are within easy reach for cleaning . . . lustrous surface wipes clean with a damp cloth.



MORE CONVENIENCE



Wide front rim-seat makes it easy to bathe children either in the tub or sitting on end-seat. Also ideal for foot bathing.

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Glasslike, satin-smooth finish in snow white or soft pastels. Sparkling chrome-plated brass fittings.



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Comfortable end-seat for a luxurious sitting shower. Tub is full-length inside with sloping end for a restful reclining bath.

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Extra-thick, vitreous enamel is fused to a rugged, rigid cast-iron base for permanent beauty. All wearing parts of fittings are renewable for long, trouble-free operation.



It pays you, it pays us— because we specialize in Plumbing Fixtures and Brass

ELJER





ASSOCIATIONS

Their Plans and Activities



Interest High in American Builder, NAHB Home Design Contest for Women

Ninety-three women, approximately one-third of the women architectural students in colleges and universities in the United States and Canada, have registered for the Prize Homes Competition sponsored jointly by the *American Builder* and the Women's Division of NAHB.

Six prizes, totalling \$1,000, will be awarded in the contest, believed to be the first of its kind for which eligibility has been limited to women. In addition to the cash awards, winners of the first three prizes will be guests of the sponsors at the NAHB convention in Chicago, Feb. 19-23, where 16 outstanding entries will be on exhibit.

The purpose of the competition is to encourage development of designs of single-family dwelling units for families in the middle income bracket. Dwellings may be one or two stories, are limited to 1,300 square feet of floor area and are suitable for sites having a depth of 150 feet and a frontage of 75 feet. It is believed that the emphasis on the woman's point of view will produce a number of new thoughts and ideas in domestic architecture.

Comprising the jury of awards are Arthur V. Hansen, architectural editor

of the *American Builder*; Robert E. Saugster, editor, *Small Homes Guide*; Charles Joern, builder, LaGrange, Ill.; Martin H. Brann, architect and builder, Oak Park, Ill.; Lee Cochran, associate architect with Perkins & Wills, architects, Chicago; Walter T. Anicka, architect, Ann Arbor, Mich.; and Mrs. R. H. Morris, housewife, Highland Park, Ill. Judging will take place Feb. 9 at the headquarters of the Chicago Metropolitan Home Builders Association.

The three top winners will receive their awards at the opening of the Women's Program to be staged in the Grand Ballroom of The Stevens, at 10:00 A.M., Monday, Feb. 20. Prizes will be awarded by E. G. Gavin, editor, *American Builder*. At that time the winners will be given an opportunity to outline before the assembly some of the features of their prize-winning entries.

Also included in the contest winners' Chicago visit will be a dinner, press conference and review of the convention Feb. 19. On Feb. 20 they will be guests of the Women's Division for breakfast and of the *American Builder* for a buffet lunch. Opportunities for sightseeing and shopping tours will be offered the following day.

Taft Talks on Housing At Ohio Convention

The sixth annual convention of the Ohio Home Builders Association at the Biltmore Hotel, Dayton, Dec. 5-7 featured the views on housing problems of a roster of nationally-prominent speakers, headed by the noted Republican leader, Senator Robert A. Taft of Ohio. Other highlights included several panel discussions which elicited wide interest.

Senator Taft spoke on public and private housing. Other speakers included Edward G. Gavin, *American Builder* editor, who delivered the keynote address; Edward R. Carr, NAHB past president; NAHB President Rodney M. Lockwood; FHA Commissioner Franklin Richards; Frank W. Corright, NAHB executive vice president; Gates Ferguson, advertising director, Colobex Corp.; and James Downs, president, Real Estate Research Corp.

Panel discussions were "Mortgage Finance," "Building a Better Home in 1950," "Merchandising a New Home," and "Selling New Homes."

Elected president for the 1950 term was Ivan H. Gore of Columbus, vice president in 1949.

Dallas Hoo-Hoo Reorganized

The Dallas, Texas, Hoo Hoo Club, holder of Charter No. 75, has been reorganized after a period of inactivity during the war and early postwar years.

Long Island Builders Re-elect Frank

Leonard L. Frank, of Roslyn, president of the Long Island Home Builders Institute for 1949, was re-elected for 1950 at the organization's annual meeting in December. There were 183 members at the dinner held at the Stewart Manor Country Club.

In a comprehensive review of the year's activities, President Frank reported that home builders in 1949 erected more than 36,000 new dwelling units in the four counties of Long Island. In discussing the outlook for 1950, the uncertainties of government policies and legislation were listed as an important factor. "It is regrettable," Frank said, "that while government gives its own agencies a long-range building program in the form of a six-year public housing plan under the Housing Act of 1949, private enterprise has been given nothing but stop-and-go consideration."

The many accomplishments of the Institute during the past year were reviewed in the report. Legislative activities, cooperative efforts with local building officials and utility companies, work

(Continued on page 72)



LEONARD L. FRANK (right), was re-elected president of the Long Island Home Builders Institute at the group's recent annual meeting. Other officers are (left to right): Fred E. Gibson, vice president for Nassau County; James Graham, re-elected secretary; and Fred J. Dolan, vice president for Suffolk County. New officers not included in picture are Sidney Essler, vice president for Brooklyn-Queens and Cy Williams, treasurer.



Cy Sweet Says -

C. B. SWEET, President, National
Retail Lumber Dealers Association

As this is being written, another year has drawn to a close, and as is customary, most business men have taken inventory of their merchandise on hand, checked their equipment and personnel for necessary replacements, and planned their financial requirements for the coming year. This procedure is common practice with well-managed businesses; in fact, it is demanded by the stockholders. Unfortunately, however, the biggest business of all, your government, does not follow this course and, so far, the stockholder—the people—have not demanded it.

Let's look at a few inventory figures of just one division of your government, the Commodity Credit Corporation:

1. Nearly five million bales of cotton, worth about \$750 million.
2. Nearly 400 million bushels of wheat, worth \$900 million—enough to give every person in the United States a loaf of bread per week for a full year.
3. Approximately 600 million bushels of corn.
4. More than 70 million pounds of dried eggs—enough to last United States bakers five years.
5. About a quarter of a million pounds of dried milk, worth over \$30 million.

This by no means exhausts the list, but it does give an insight into "planned economy."

How long do you think your business could continue if you had 47 salesmen calling on 1500 people? Yet the Hoover Commission found that 47 agents of seven separate services were calling on 1500 farmers in one cotton county in Georgia; that 88 agents were

working among 3400 farmers in one county in Maryland.

Would you consider it economical and good business to operate trucks that were 15½ years old? I am sure you would not, but the 10,000 trucks operated by the Post Office Department were, on the average, 15½ years old, as of May 1948.

How long could you continue in business if you ran a deficit of 20 per cent of your sales? The Post Office Department did that last year, and it amounted to \$900,000,000.

How would your business prosper if the operating report from your bookkeeper or auditor was eight months late? The Post Office Department gets its report eight months after each quarter's end, from the Comptroller General.

How would your business get along if you had a 25 per cent turn-over of personnel? The biggest business in the world has that record.

How long would you keep a stenographer on your payroll who was unable to take and transcribe acceptable dictation, was a chronic trouble maker, and had a questionable character? Your Federal government kept such a person on the public payroll for a period of 17 months after it had all of the above information.

The fact that all of these things are happening to YOUR government, rather than to your business, makes it no less your concern. Remember, YOU are paying the bills and YOU are a stockholder in the world's largest business. Exercise your prerogative and see that you have proper management that will carry out your wishes. Tell your Congressmen.

mayer and city officials, the Construction Industries Council of the American Federation of Labor, firms in the construction, home appliance and home furnishings fields, public utilities and trade associations.

The St. Louis Builders Committee which will assist Loosley includes Ralph S. Duke, chairman; John Bogdanor, Scherman Building and Realty Co.; Rime Dusard; Adrian Koch; Silvio Lombardi, Lombardi Construction Co.; and Richard Phillips, Missouri Floor Co.

St. Louis Home Show Set for Feb. 11-19

The 1950 St. Louis Builders Home Show will be held at Kiel auditorium in St. Louis Feb. 11-19. H. J. Loosley, managing director of the event, announced recently. The annual exposition is endorsed by the Home Builders Association of Greater St. Louis and the St. Louis and St. Louis County Chambers of Commerce and is staged in collaboration with Better Homes and Gardens magazine.

The show is also supported by the

Dayton Association Appoints A. H. Falace Secretary

A. H. Falace has been appointed executive secretary of the Montgomery County Builders Association, Dayton, Ohio, succeeding the late E. Clarke King, it has been announced by Association President Stanley Swargo, Jr.

Falace, a former Dayton resident, recently returned from Wadsworth, Texas, where he served as manager of the Chamber of Commerce and the Community Chest. He had previously been manager of the Dayton Chamber of Commerce Industrial Department and a



A. H. FALACE

member of the staff of the Industrial Commission of Ohio. He has also been assistant executive manager of the Springfield, Ohio, Chamber of Commerce and manager of the Springfield Safety Council.

A graduate of Ohio University, Oxford, he has done graduate work there as well as at Ohio State University, and has completed special courses at the National Institute of Commercial Organization Secretaries and the Southwestern Chamber of Commerce Institute.

Professional organizations of which Falace has been a member include American Society of Safety Engineers, National Association of Commercial Organization Secretaries and the Texas Chamber of Commerce Managers Association.

Prominent Speakers Slated For Michigan Dealer Meet

Senator Homer Ferguson of Michigan will be one of the featured speakers at the 61st annual convention of the Michigan Retail Lumber Dealers Association Feb. 7-9 at the civic auditorium, Grand Rapids.

Other prominent speakers will include H. R. Northrup, NRIIDA executive vice president; C. A. Fulton, NRIIDA vice president; Clayton Rand, Gulfport, Miss., publisher; Col. Robert Brooks, real estate analyst of the Roy Wenrich Co., St. Louis; and Philip Creden, chairman of the NRIIDA public relations committee.

The exhibit floor will be completely filled, with more than 100 display booths.

Popular social events which will be held again are the Old Guard Dinner, Salesmen's Midnight Frolic and association banquet.

Oak Flooring Manufacturers Name Milton Craft President

Milton Craft, president of Clapman and Dewey Lumber Co., Memphis, Tenn., was elected president of the National Oak Flooring Manufacturers' Association at its recent annual meeting in Memphis. He succeeds Allen Harris, Jr., vice president of the Harris Manufacturing Co., Johnson City, Tenn., who held the post for two one-year terms.

Craft, a veteran of the lumber business, has been active in the association for a number of years and served in 1949 as vice president and board of directors



MILTON CRAFT

member. He was re-elected to the board along with the retiring president.

Re-elected vice president and director was T. C. Matthews, sales manager of the M. B. Farrin Lumber Co., Cincinnati. Henry H. Willms of Memphis was re-elected secretary-treasurer.

Four new directors were named: T. W. Bond, Cotal Oak Flooring Co., Springfield, Mo.; J. W. Fowler, general manager of Frost Hardwood Floors, Inc., Shreveport, La.; S. B. Fullerton, Bradley Lumber Co., Warren, Ark.; and Earl M. McGowan, vice president of the W. T. Smith Lumber Co., Chapman, Ala.

Other directors are L. C. Ailor, Miller Brothers Co., Johnson City, Tenn.; R. M. Lindsay, Veatch-May-Wilson, Inc., Alexandria, Tenn.; B. A. Mayhew, Fordyce Lumber Co., Fordyce, Ark.; J. G. Smith, Arkansas Oak Flooring Co., Pine Bluff, Ark.; and Walter Wood, E. L. Bruce Co., Memphis.

Named Committee Head

Sylvester J. Lowery, prominent Philadelphia builder and real estate man, has been appointed chairman of the advertising committee of the Home Builders League of South Jersey. Lowery and E. J. Frankel are currently building Collingswood, an apartment project at Park View, N.J.

Adopt Group Insurance Plan

The board of directors of the Oklahoma Lumbermen's Association at a recent meeting adopted the group insurance plan of the North American Accident Insurance Co. Officers said that the plan will be made available to members only and that, operating as a group, costs could be substantially reduced.

Cortright's Column

FRANK W. CORTRIGHT, Executive Vice President, National Association of Home Builders of the United States



Everyone talks about preserving our free enterprise system and practically nobody does anything about it!

In fact, the handful of men who are earnestly striving to awake the people of this country to the full distance we have already traveled on the road to a Social Welfare State receive commendation and applause but know in their hearts they are accomplishing very little. It is a common characteristic of all of us to believe that OUR home will never burn down.

The most convincing example of this human lethargy is found in the futile broadcasts of Winston Churchill over a five-year period, warning the people of England that the most powerful military machine in history was being built only an hour's flying time from their island home. Not only were his warnings disregarded but he was contemned and decried as a warmonger, alarmist and enemy of the people. How, then can any people be thoroughly aroused over the loss of their individual freedom when they refuse to be alarmed over invasion, rape and destruction of their very homes and families?

Benjamin Franklin, one of the wisest men the world has known in 1800 years, thoroughly understood this weakness in human nature. He and the others who founded our American system knew full well that Individual and Economic Liberty could not exist where Economic and Individual Security were promised by a socialist government. He and others of the 33 delegates to the Federal Convention of 1787 were wise enough to anticipate a day when Security would be offered as a bribe for the Liberty which he and his compatriots risked their necks to establish—hence his warning.

With complete disregard of political affiliations, James Byrnes, General Eisenhower and Herbert Hoover have recently said the same thing in different words. By whatever name it may be called—"New Liberalism," "Dynamic Democracy," "Socialism," or "The Welfare State"—America's really great men are presently endeavoring to warn the people. Tragically enough, their warnings, like Churchill's, are commended by a few—and scoffed at by the many.

Senator Harry Cain of Washington has expressed most succinctly the three other methods by which we may lose our freedom.

The first of these is the danger of Federal bankruptcy. Impossible? Not at all. Consider that our current debt is \$256,000,000,000 . . . our Federal budget of \$42,000,000,000 still leaves an annual deficit of \$5,000,000,000 . . . President Truman has spent \$191,000,000,000 during the last five years, an amount equal to the total Federal expenditure in the 168 years since George Washington's Presidency!

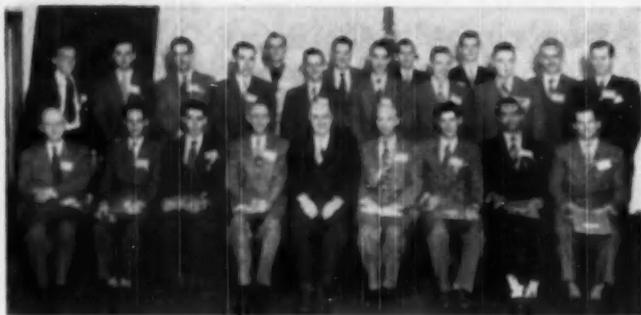
The Senator warns that a one-party system, similar to the Labor Party which has governed England for the last 25 years, is quite possible. Our labor unions, operating with assets of more than \$1,000,000,000, are presently working day and night to eliminate all Congressmen who have opposed the dictates of labor leaders.

Finally, and a far more subtle danger, the Senator warns that the legislative branch of government—the Congress—is increasingly controlled by a powerful and dictatorial Executive branch, the White House. Our three-way form of government, judiciary, legislative, and Executive, so carefully balanced by the Founding Fathers, is already out of balance by a politically packed Supreme Court. *Through the abuse of use of political patronage, the dominance and dictation of the White House may well destroy the freedom of the people's voice in government—the Congress.*

When will the selfish objectives of special groups—including labor, the farmers and the veterans—be reduced for the benefit of all? At what point will the collection of tax dollars by a central government for bureaucratic redistribution back to the people become so high as to cause a revolt? *When will the citizen, the property owner, and all the American people wake up to the fact that they must choose between Security doled out by a Beneficent Central Power and Individual Freedom to face the vicissitudes of life individually?*

Let's hope it will be soon!

Craftsmen Complete Association Course



GROUP of craftsmen who recently completed apprentice training sponsored by Marion County Residential Builders is shown with officers. From left, seated: Elmer E. Moody, association executive secretary; Thomas Hilton, Thomas E. Ramsey; Fred L. Palmer, association apprentice training committee chairman; M. L. Hall, association president; Perry McCain, VA training officer; Ralph J. Erney, Waldo Raybourne, Russell L. Kennard; (standing) William W. Sanders, Philip K. Montgomery, Charles McConnell, Albert C. Weintraut, Charles Sutton, Paul L. Lawhorn, James Trimble, Heath B. Chappell, James W. Wells, Wallace Day, Jr., Alvin Kennard, Jr., Clarence E. Brackett, Edwin C. Lucas, Albert J. Dauvoors.

Twenty-seven craftsmen, the first class to complete a three-year apprentice training course conducted by the Marion County Residential Builders, Inc., Indianapolis, were awarded certificates of completion Dec. 5. The ceremony took place at the NAHB affiliate's 10th annual meeting at the Antlers Hotel, at which the craftsmen were dinner guests.

The program, one of the first in the country conducted by a builders association, is available to all members who care to take part. It was begun in February, 1946, when the first class, for carpenters, was approved. The 27 men who received certificates in December were an accumulation of completions since summer.

At present there are courses for nine crafts in the home building field: carpenter,

electrician, plumber-steamfitter, plasterer, painter-decorator-paperhanger, cement finisher, sheet metal worker, bricklayer-stonemason and linoleum layer.

The association tentatively plans to hold completion ceremonies semiannually. It is hoped that approximately 50 men will complete training each year, many of whom will become permanent members of association members' production crews. Already organized is a system of registration and transfer to employees from one builder to another to effect peak employment and to meet special work needs.

Fred L. Palmer, chairman of the apprentice training committee, awarded the certificates.

Building with Modular Brick Brings Economies. Small Homes Study Shows

The economy of building homes with modular-size brick and tile has again been demonstrated, according to W. J. Goodwin, president of the Structural Clay Products Institute which has sponsored studies in the field at the University of Illinois Small Homes Council.

Goodwin said that new research now indicated that brick masons' working time can be reduced approximately 10 per cent through the use of modular materials in small homes.

"In 1947," Goodwin stated, "the Small Homes Council analyzed costs of building three identical houses using modular brick and cavity-type masonry wall. This summer an exact duplicate of the 1947 house was built, using non-modular brick.

"A comparison of time-study data during construction indicates that the number of man hours of labor can be reduced nearly 10 per cent, even on a simple structure, by use of modular materials. Furthermore, an examination of

To Test Research Findings On Home Construction Sites

A field test program using actual construction sites as laboratories will be carried out by NAHB in cooperation with the new Building Advisory Board of the National Academy of Sciences. Announcement that the program is about to get under way was made by Carl G. Lans, NAHB technical director.

Laboratory projects judged ready for field testing are being listed by William H. Scheick, executive director of the Advisory Board in cooperation with Lans. NAHB members will be selected for field applications of laboratory results, with the idea of developing data on speedier and more economical construction.

During the course of the "observation projects," close study will be made of application, organization of work, personnel and materials and time and motion studies. Each builder will deliver a report on his own project.

The project was described by Frank W. Cortright, NAHB executive vice president, as "opening the way for practical field testing of developments worked out in research laboratories."

Apprentices Learn Carpentry By Building House at School

The students and instructors at the apprentice training school of the Home Builders Association of Metropolitan Washington at Ayrloxu Farms, Bethesda, Md., believe that the best way to learn to build a house is to build one. They are working on one now; the finished product will be 12x12 feet, built indoors in one of the classrooms.

Using the talents of instructors who have had long experience in the field, enjoying splendid cooperation from the Board of Education of Montgomery County and the Maryland-National Capital Park and Planning Commission, the school is gaining recognition as one of the outstanding in the field. Generous contributions of material and supplies are made by association members.

William C. Mitchell, superintendent of Twinbrook, Inc., is school supervisor and Spencer Lawson, Silver Spring, Md., contractor, is the carpentry instructor. Chairman of the school is Robert R. Furman, Bethesda, Md., builder.

The first four weeks of the course consist of classes explaining carpentry as compared with other building trades; study of types of wood and their different applications; uses and care of tools; and techniques of sawing, nailing and planning. In the fifth week actual construction of the house is begun. Power tool technique is taught only in the advanced classes.

the brickwork shows that workmanship improved through the use of modular material at no additional expenditure of labor."

'Home Builders Frolic' Climaxes Membership Drive



FRED C. LOUCKS, chairman of the membership committee of the Home Builders Association of New Orleans, holds gift presented by Harold I. Fallet, association president, for outstanding work in the New Orleans group's recent successful drive which netted 114 new members

30-Day Courses Increasingly Important in NRLDA Educational Program

One of the major phases of the educational program of the National Retail Lumber Dealers Association is its 30-day lumber dealer short course. Since the fall of 1946, when they were started, 86 of the courses have been conducted in major universities and colleges. More than 4,500 veterans and retail lumber dealer employes have been sent to these intensive training schools at no cost to themselves. Graduation has frequently led to advancement and in many instances to management of lumber yards.

The courses have covered 35 subjects with class lectures and discussions led in part by regular university staff instructors and to a large extent by men experienced in the field covered by the subject. More than 30 textbooks are now used in the courses. Visual aids, slide sound films, movies and demonstration models are part of the instruction technique. Field trips to mills, factories producing building materials and to lumber yards where the work of the industry can be observed, are important parts of the specialized training.

During the current term 15 universities and colleges have scheduled twenty-one 30-day short courses in lumber dealer training. They are: City College of New York, New York City; Georgia School of Technology, Atlanta, Ga.; University of Illinois, Urbana, Ill.; University of Kansas, Kansas City, Mo.; University of Massachusetts, Amherst, Mass.; University of Minnesota, Minneapolis, Minn.; Michigan State College, East Lansing, Mich.; New York State College of Forestry, Syracuse, N. Y.; Ohio State University, Columbus, Ohio.; Pennsylvania State College, State College, Pa.; Purdue University, West Lafayette, Ind.; University of Southern California, Los Angeles, Calif.; Southern Methodist University, Dallas, Texas; University of Washington, Seattle, Wash.; University of Wisconsin, Madison, Wis.

Details on the dates of short courses in these schools, and other facts, may be obtained by contacting the regional or state dealer association sponsoring the course, the school itself or the NRLDA offices in Washington, D.C.

More visual aids were recently added to intensify the sales training program. These may be used in connection with the 30-day short course or in district and group dealer meetings throughout the state or regional association areas. The material consists of slide sound films, booklets and questionnaires for salesmen, and covers a total of nine topics: "How to Turn Buying Motives Into Sales," "How to Take the Lead in the Interview," "How to Conduct the Demonstration," "How to Plan Your Sales Talk to Keep Out Competition," and "How to Turn Objections Into Sales," are some of the topics covered.

Oklahoma Dealers' 1950 Plans Include Projects for Public Service



OKLAHOMA Lumbermen's Association officers and directors (from left, sitting): W. K. Nicka, Frederick; By Akard, Enid; President Walter Hinton, Altus; Vice President Paul Leunhard, Oklahoma City; Treasurer Alford Leunhardt, Oklahoma City; L. G. Williams, Stillman; (standing) W. M. Moran, Oklahoma City, executive secretary; L. I. Purbs, Lawton; Vice Stager, Durant; Leslie Sayre, Norman; Hugh Noonan, McAlester; Ted Roggen, Ponca City; Jack Bell, Shawnee; I. D. Bartlett, Clinton; Walter Kelly, Tulsa; Barney Stewart, Jr., Oklahoma City; and Reba Jackson, Oklahoma City, secretary

Historic Cabin Renovated By Dallas Home Builders As Service to Community

The Dallas Home Builders Association, as a community service, recently sponsored the renovation of the old John Neely Bryan log cabin on the Dallas County courthouse lawn. In addition to repairs on the historic structure, erected by the founder of the city, a concrete foundation was placed, a protective canopy built and a cement walk laid.

Special ceremonies held at the beginning of the job were attended by city and county officials and association members. Members of the Builders committee that supervised the project were George A. Jackson, Lucy R. Keek, Robert S. Shelburne, H. D. Lewis and Morris Silberman.

Approximately 50 builders furnished either labor or materials for the work, with Architects Harwood K. Smith and Joseph N. Mills providing the plans. Grover A. Godfrey, association executive vice president, estimated that the entire project would have cost about \$2,500 if undertaken on a commercial basis.

30 Bricklayers Graduated From Association School

Graduation ceremonies were recently held for a class of 30 advanced brick-laying students at the Ayr lawn Farms Trade School. The school is one of the outstanding projects of the Home Builders Association of Metropolitan Washington.

A number of building material firms which have donated materials to the institution were presented meritorious award certificates.

A large group of builders, dealers, contractors and subcontractors attended the graduation exercises.

Projects for 1950 were outlined and 1949 accomplishments reviewed by directors of the Oklahoma Lumbermen's Association at a meeting Dec. 9 in Oklahoma City. The meeting, at which the new budget was set, was the first called by the newly-elected president, Walter Hinton, George C. Wright Lumber Co., Altus.

Among the highlights of 1949 activities were: Launching of a farm program which was given national recognition in magazines and was runner-up in the NRLDA public relations contest; conducting of two 30-day lumbermen's training schools at Southern Methodist University in collaboration with Texas and Louisiana Associations; adoption of group insurance plan for members; publishing of association's first directory and buyer's guide; and conducting, in cooperation with Oklahoma A. and M. College, of a state-wide one-day farm building program.

Projects approved for 1950:

Establishment of legislative council to work on state and national legislation; one-day sales training short courses to be held in connection with all district meetings; continuation of farm building program with A. and M. College; continuation of 30-day training schools; a two-day membership drive in January, with awards to district winners; and an intensified public relations campaign.

Dates set for the 1950 convention are Oct. 17-18.

Pennsylvania Builders Show Set for March 6-11

The seventh annual Central Pennsylvania Builders Show, sponsored by the Harrisburg Builders Exchange, will be held at the Farm Show building, Harrisburg, March 6-11.

The exhibition attracted approximately 305,000 visitors in 1949 and 189 exhibitors.

Optimism Marks Shingle Bureau Meeting

Shingle producers from Washington, Oregon and British Columbia who attended the 33rd annual meeting of the Red Cedar Shingle Bureau recently held in Seattle were given optimistic accounts of enlarged markets for cedar shingles as well as of augmented production.

W. W. Woodbridge, bureau secretary-manager, said that the industry's productive capacity has been growing steadily since the end of World War II and that the current rate is approximately 7,000,000 squares a year. Woodbridge attributed the increased demand largely to these factors: a record of storm and wind resistance in the middle west; acceptance for multi-unit housing developments by many large builders; and a tremendous increase in the use of shingles and processed shakes for side wall construction.

Convention speakers included M. L. Clement, director of the Southern Building Code Congress; C. B. Sweet, NRIDA president; E. L. Conner, president of the Stained Shingle and Shake Association; and W. C. Bell, managing director of the Western Retail Lumbermen's Association.

E. R. Scott was re-elected president of the bureau for 1950 and Vice President W. H. McLallen was also returned



IMPRESSIVE display was made at the Red Cedar Shingle Bureau's annual meeting by pile consisting of 30,000 inquiries for information on cedar shingles. Meet were inquiries about the Carigrade National Home. Examining pile are (left to right) C. E. Sweet, NELDA president; W. C. Bell, managing director of the Western Retail Lumbermen's Association; W. W. Woodbridge, bureau secretary-manager; and V. G. Peterson, bureau treasurer.

to office. Other trustees elected were: Dale Craft, N. A. English, R. H. Farrington, Keith G. Fiskson, N. C. Jamison, J. A. MacKenzie, R. D. Mackie, Charles Plant, Fred A. Roles, C. C. Rose, Paul R. Smith, H. V. Whittall, Earl S. Was-

ser and R. A. Wilde.

Of particular interest was the announcement that bureau's membership increased by 17 mills and 63 machines during 1949. Membership currently totals 112 mills and 617 machines.

Long Island . . .

(Continued from page 67)

with FHA and VA, expansion of membership and service to members all add-up to an impressive record.

Ernest Beck reported on finance committee work at the Miami meeting of the National directors in November. Chester Pynn reviewed his committee's work on building codes and Rudolph Matern covered the accomplishments of the economy house committee during 1949. James Graham, who was re-elected secretary of the Institute at the meeting, submitted several proposed amendments to the constitution.

Other officers elected for 1950 are: Fred E. Gibson, of Rockville Centre, vice president for Nassau; Sidney Kessler, of Jamaica, vice president for Brooklyn-Queens; Fred J. Dolan, of Islip, vice president for Suffolk, and Cy Williams, of Port Washington, treasurer. Ernest C. Beck and Alfred Gross, both of Jamaica, were re-elected as directors. New directors are Samuel Levin, of New Hyde Park; David Strausman, of Hempstead and Frank Clauson, of Roslyn. Directors who continue in office are: Kalman Klein, of New Hyde Park, chairman; Adolphus Flowers, of Merrick; Charles M. Jaeger, of Rockville Centre; Robert J. Rose, of Great Neck, and Saul Sokolov, of West Hempstead.

New members-at-large of the executive committee are Andrew T. Callan, of Manhasset, and John Van N. Meyer, of Forest Hills. Otto J. Hartwig is executive secretary of the Long Island Home Builders Institute.

Jersey Group Re-elects Officers

The entire slate of officers of the Home Builders Association of Northern New Jersey was re-elected at the annual meeting in December, attended by 112 members. The chapter was especially active during the past year in working for the interests of its home builder members. Cooperative efforts with building authorities, FHA, VA and legislative work was outstanding. This

fall the group spent much time and effort in combating the New Jersey public housing law. Sixty-one new members were added to the membership in 1949.

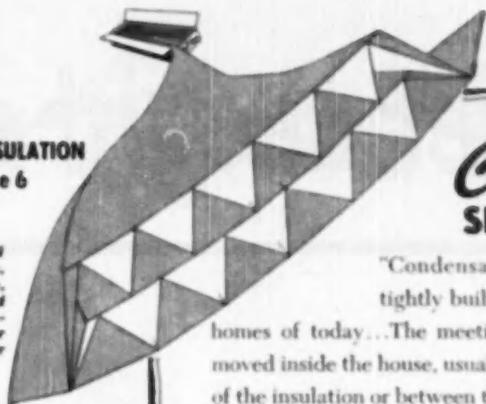
Officers for 1950 are: Carl S. Carlson, president; Stephen Dudniak, vice president; Albert A. Stier, secretary; John S. Cucchiara, treasurer and Clarence J. Von Drehle, executive director.



OFFICERS of the Home Builders Association of Northern New Jersey for 1950. Left to right, front row: George I. Marcus, general counsel; Joseph J. Brunetti, director; Stephen Dudniak, vice president; Carl S. Carlson, president; Joseph A. Goldman, director; Russell N. Willis, director; Milton E. Zerman, director. Second row, left to right: Michael Petruska, director; Charles Costanzo, director; Doyle E. Bush, director; Clarence J. Von Drehle, executive director; Alan D. Allen, director; John S. Cucchiara, treasurer and Albert A. Stier, secretary and NAHB director. Officials not on the picture are: Ralph Carletta, director and NAHB director; Fred Ingonnamore, director; Charles H. Reis, director; Emanuel Spiegel, director and regional vice president of NAHB.

INFRA INSULATION Type 6

Cost of Infra installed between wood joists, in new construction, for material and labor, should be under 10¢ per sq. ft. for Type 6; under 8¢ for Type 4.



Infra Solves the Problem

INFRA Insulation, Type 6, is an impermeable vapor barrier, it weighs but 1¼ oz. per sq. ft. With so little thermal capacity there is practically no exchange of heat for condensation to take place. The construction—4 inner rows of reflective air cells of slight conduction, between 3 radiant-heat-repelling aluminum sheets of only 3% emissivity, effectively prevents contact of condensation-forming temperature extremes.

Infra, which cannot form, absorb nor store appreciable moisture, has 97% efficiency in rejecting radiant heat, which represents 65% to 80% of heat flow thru wall spaces. It is also singularly effective in blocking conduction and convection heat transfer.

Condensation SEVERE PROBLEM

"Condensation...severe problem in the tightly built, well-insulated, high humidity homes of today...The meeting place of warm and cold is moved inside the house, usually somewhere in the outer layer of the insulation or between the insulation and the sheathing. The vapor then collects inside the attic or the walls and the result is plenty of trouble.

"Wet spots on the ceiling or walls, as the moisture flows down from the cold attic space; falling plaster as an end result; constant and repeated paint failures on the outer walls and gable ends; and rotting rafters, joists, studs, sheathing, and shingles or siding; these are only too common and costly results of the over-insulated, under-moisture-proofed home.

"The easiest solution, of course, is the inclusion of a good vapor barrier when the house is built... A series of laboratory tests made by the Forest Products Laboratory and the University of Wisconsin in 1947... Aluminum foil had by far the best rating as a vapor barrier."

From "Weather-Conditioning of Roofs for Residences" by Groff Conklin, "Progressive Architecture," Nov. 1949.

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Don't get caught with



1. There was a building dealer,
Whose name was Sam'l Brown.
His business was progressive
And a credit to the town.



2. But Sam was such a cautious bird,
He worried day and night
About his inventory—
And was he buying right?



5. And when the spring came 'round again,
With building on the boom,
Sam placed some mighty orders,
Cause he had a lot of room.



6. But sad to tell, the rush was on;
The factories couldn't ship
As much as Sam'l needed—
And his sales began to slip.

ASPHALT ROOFING INDUSTRY BUREAU

SPONSORED BY 36 LEADING MANUFACTURERS OF ASPHALT SHINGLES, SIDING, ROLL AND BUILT-UP ROOFINGS

your Stocks Down!



3. "It might be bad," Sam figured,
"To build my stocks up high,
Until I see what others do—
And how soon people buy."



4. So Sam went through the winter months
A-buying hand to mouth.
While all the goods he *might* have had
Were shipped to "Somewhere, South."



7. Sam lost a lot of profit,
Which of course he would have not,
If he had just remembered:
"You can't sell what you ain't got!"

● Spring business looks good. Don't risk getting caught with your stocks down. Past experience tells us that manufacturers cannot make prompt Spring deliveries against a peak load of deferred orders. Your contractors and building customers must depend upon your asphalt shingle inventory to meet their schedules for Spring. The stocks you take in now will insure their goodwill and your future profits.

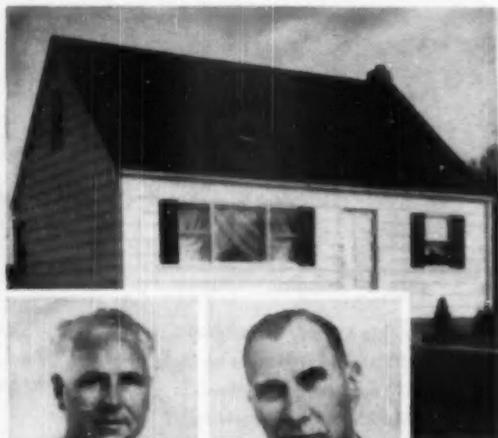
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Be sure to visit Kelvinator Exhibit Booth No. 1
NAHB Convention, Stevens Hotel, Chicago

What About Conventions?

WHAT do conventions have to offer, and what can the member who attends take home with him that he can translate into tangible results in his own business? What they have to offer depends on the program content of the general sessions, and on the number, variety and informative value of the exhibits.

The quality of the program can be anything the members want it to be, because every convention head not only accepts but continually solicits suggestions from the members. Only the members are to blame if the program is not to their liking. Excepting conventions in the few cities that do not have adequate exhibit space, the effectiveness of exhibits is determined entirely by manufacturers of the products on view. The results they obtain from year to year are sufficient to spur them to strive to maintain or achieve high educational and interest value. Thus, conventions have to offer principally what the association members want them to offer.

What a member can take from them that has practical value depends entirely on how he uses his time at the convention. Conviviality and play are pleasant if not important by-products, but the real purpose of a convention is to make the time and money spent by the member who attends an investment in improved business operation.

Good examples of what members can get are afforded by the experiences of a Boston home builder and an Illinois retail lumberman last year. The builder, faced with a problem in the development of a system for circulating warm air heat, collected a group of advertisements clipped principally from the *American Builder* and flew to Chicago with the idea of thus taking one day out of his busy schedule, to attend one session of the panel on heating and have a quick look at the exhibits of the advertisers whose presentations he had brought with him. The proposed one day at the convention became three, spent exclusively with manufacturers of heating equipment and other building products, and resulted in a complete solution of the heating problem. A plus was in the form of several new ideas he had not thought of.

The lumber dealer listened to one speech at a dealer's convention, then left for home immediately to revise his spring purchasing schedule. The move netted the dealer excellent profits in the spring months, whereas with the plan he had charted before attending the convention he would have had to struggle to break even.

Conventions are what the association members want them to be. The values are what each individual takes the time to look for and to find.

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**NAHB
1950**
Convention and
Exhibition

**NAHB
1949**
Convention and
Exhibition

**NAHB
1948**
Convention and
Exhibition

A NEW MILEPOST In Home Building Accomplishment

Annual NAHB convention is now firmly established as the official event for measuring the industry's past achievements and for planning future progress

PLANS are almost complete for the 1950 program of the yearly NAHB convention, a five-day builders' exchange which promises to surpass all previous meetings both in value to the individual and the industry. Discussion panels, a comprehensive new products display, advice on color, lighting, selling—the latest information on mortgage financing, house design, land planning—a thorough report on how to use climate to best advantage in designing houses—a record-sized exposition of materials and equipment—and a series of outstanding speakers—are some of the highlights.

Dates this year are Sunday, Feb. 19 through Thursday, Feb. 23. Preliminary meetings start Feb. 16, with NAHB committees meeting Feb. 17 and the board of directors Feb. 18.

Judging from heavy advance registration, attendance at the Convention will break former records, with more than 16,000 persons expected. Exposition space was sold out almost immediately after applications were opened. Facilities of both the Stevens and Congress hotels will be used.

The display of products and materials opens Sunday afternoon, Feb. 19. An entirely new feature is being added to the exposition this year with the aid of Joe Schulte, technical director for Kaiser-Barns Homes of Los Angeles. This will be a section devoted exclusively to new products.

There will be a round of activities for delegates starting from the moment of arrival. The big Sunday feature will be the gala ceremony opening the Stevens and Congress

exhibits. Several thousand people are expected for this event. The display of building products and materials will be the most lavish ever presented, containing more than 600 products used in building homes.

By using facilities of two hotels, the number of exhibit spaces this year has been increased to a record-breaking 252. The number of exhibitors will exceed 160, also a new record. There will also be more diversification of products than heretofore, with about 35 exhibitors in the show for the first time.

Exhibitors come from nearly half of the 48 states. They will send over 1,800 key personnel to Chicago to show, demonstrate and explain their products and consult with builders.

The special section reserved exclusively for new and revolutionary products will be one of the exposition highlights. Located in the Casino Room of the Congress Hotel, it will feature a diversified group of 20 to 25 new products which differ significantly in function, design or other basic characteristics from products now generally available. Although names of the products to be shown have not been released, it is known that they will include new type tools, structural items, heating systems, plumbing specialties, lighting and equipment, and operating conveniences for home equipment.

On Monday morning women builders will present one of the most colorful sessions of the convention. The program, under the chairmanship of Mrs. Henny Mollgaard, well-known Milwaukee

builder, will be a virtual "must" for men builders. It will feature modern wallpaper and its use in today's homes; proper lighting for homes and gardens; the best house designs for families with children, and the proper use of color—inside and out—for fast-selling houses. A highlight of this program will be the presentation of the prize-winning woman architectural student in the house-design contest sponsored jointly by the *American Builder* and the women builders of NAHB.

The first general session Monday afternoon, featuring many of NAHB's leaders, will set the keynote for the convention. Former President Robert P. Gerholz will preside. Reports will be made by association officers with President Rodney M. Lockwood, Convention Chairman E. M. Spiegel, Secretary Nicholas Molnar and Executive Vice President Frank W. Cortright sharing the stage. Association business will be followed by an "on-stage" press conference with NAHB past presidents, and an address by Dr. Ruth Alexander, nationally-known newspaper woman.

Popular "shop-talk" clinics will be held again this year with nine discussion clinics and round tables—five on Tuesday morning and four on Wednesday. These important working sessions will feature FHA, VA and FNMA questions and answers; the newest innovations in heating systems; a session on local opposition to public housing; rental housing questions; office accounting; tax problems and savings; custom built homes; problems of the small builder; and time and material accounting.

An entirely new convention feature will be staged Tuesday morning—a session devoted to actual demonstrations of new ideas in building. Plans call for the construction of jigs and forms on-stage with actual construction of parts of a house with time-saving techniques.

The general economic outlook and the outlook for mortgage finance will be discussed by several experts in the Tuesday afternoon session. James C. Downs, real estate analyst of Chicago, who has built up a national reputation for his appraisal of the future building situation will lead off with "What's Ahead for Home Building." He will be followed by the "Big Three" of government housing affairs—HHFA Administrator Raymond M. Foley, FHA Commissioner Franklin Richards and VA Loan Chief T. B. King.

Mortgage Finance Chairman Thomas P. Coogan will lead a discussion panel on the mortgage finance outlook with leading authorities participating. This panel is generally believed to be one of the most valuable single features of the entire convention.

Problems of land planning for builders come up for discussion Tuesday evening when the popular land planning panel is presented. David D. Bohannon, NAHB past president and chairman of the land planning committee, will moderate this session.

Another valuable meeting on development problems will be the seminar on Wednesday presented by the Community Builders Council of the Urban Land Institute. In this session, the leading authorities on good development will analyze site plans brought to the seminar and will offer their expert advice on problems involved. This is a meeting for the Council members, but is open to anyone wanting to join at the regular fee.

A session on good design and merchandising is slated for the Wednesday afternoon program. The design panel will present a discussion of design trends and the best use of the newest ideas, with slides to demonstrate the points. This will be followed by a merchandising forum under the leadership of William P. Atkinson, NAHB second vice president, in which selling experts will tell how to meet the market. One of the featured speakers will be Fritz Burns of Los Angeles, recognized as one of NAHB's leading authorities on sales techniques.

The annual banquet will be held Wednesday night with Edward R. Carr, NAHB past president, as chairman. Emphasis at the banquet will be on relaxation and entertainment.

The humorous quiz program, "Dr. Hi-Cue," which tests the knowledge of home builders about their own business, will be presented again Thursday morning by its originator, Joe Haverstick, Dayton, Ohio. This "curtain raiser" proved very popular when it was introduced last year.

"Dr. Hi-Cue" will be followed by a study of the effect of climate on house design, featuring Dr. Kenneth McFarland of Topeka, Kas. Dr. McFarland is rated as one of the nation's outstanding authorities on this subject.

The climate study, "Doubling your Sales by Harnessing Climate," will be presented by House Beautiful magazine under the direction of Elizabeth Gordon, editor. The study is considered an important scientific contribution to home building and was conducted over a period of many months. The Thursday presentation will cover such subjects as the use of knowledge of climate in site selection and site development, and the influence of climate on proper house design.

In addition to the special section at the Congress Hotel, an unusually large number of new and improved products will be shown by exhibitors in the regular sections of the exposition. A survey among exhibitors indicates that over 40 per cent of the exposition will be devoted to products which are either entirely new, very recently improved, or nationally available for the first time.

Advance information indicates that manufacturers will show products designed to lower building costs in greater numbers than heretofore. There will be a variety of new products designed especially for small, low-cost houses.

Most exhibitors will have experts on hand to make on-the-spot analyses of working plans and to submit installation and design ideas.

In the third floor corridor of the Stevens, three additional exhibits of exceptional interest will be shown: the prize winning entries in the house-design contest for women, sponsored jointly by the *American Builder* and the NAHB's women's division; The Southwest Research Institute exhibit devoted to the Revere Quality House; and the national prize winners and

other top entries from NAHB's latest Neighborhood Development Contest.

A well-rounded program of entertainment has been arranged. Tours and events have been scheduled for women visitors and a constant round of attractions is available to all delegates including tours of Chicago's housing projects. A grand rally will open the general sessions and the popular delegates' and exhibitors' dance will be held Monday night. The banquet is one of the outstanding social events.

CONVENTION HIGHLIGHTS

Tuesday, Feb. 19

- 1:00 P.M. Registration Grand Opening Congress Hotel
- 2:30 P.M. Registration Grand Opening Stevens Hotel

Monday, Feb. 20

- 10:00 A.M. Women's Program for Home Builders
 - Winner Women's Josephine Mason
 - Architectural Contest on Wallpaper
 - Maxine Livington on Beatrice West
 - House Design for Families with Children on Color
 - The Lightbulb Co. Lighting for Homes and Gardens
- 1:30 P.M. Grand Rally
- 2:00 P.M. First General Session
 - Presentation of NAHB Officers
 - Color Feature: "WASH AT WORK"
 - Address: "Which Way America?"—Dr. Ruth Alexander
 - On-Stage Press Conference
- 9:30 P.M. Convention and Exhibitor's Ball

Tuesday, Feb. 21

- 10:00 A.M. First Clinic Series
 - Office Accounting for Tax Problems and the Average Builder Savings
 - Custom Built Houses Problems of Small Builders
 - Time and Material Accounting
- 2:00 P.M. Second General Session
 - "What's Ahead for Home Building?" James C. Downs
 - First Ballroom Panel "Better Mortgage Finance"
 - Panel Members:
 - Raymond M. Foley, HHFA
 - Franklin D. Richards, FHA
 - T. B. King, VA
 - Moderator: Thomas P. Coogan
- 8:00 P.M. Second Ballroom Panel
 - "What's New in Land Planning?"
 - Moderator: David D. Bohannon

Wednesday, Feb. 22

- 10:00 A.M. Demonstration Station New Techniques for Builders
- 10:00 A.M. Second Clinic Series
 - Quantities and Ar- Moderns Meeting Systems for Today's Homes
 - FHA-VA-FWMA How to Construct and Manage Housing
 - Elmer Smith Local Political Action for Home Builders
- 2:00 P.M. Third General Session
 - "Today and Tomorrow's House Designs"
 - Moderator: John Highland
 - "Selling Tomorrow's Homes"
 - W. P. (Bill) Atkinson
 - "Here's How We Sold"
 - Fritz Burns
- 6:45 P.M. Annual Banquet Entertainment by Eddie Carr

THURSDAY Feb. 23

- 9:30 A.M. Fourth General Session
 - Dr. Hi-Cue—Joseph B. Haverstick
 - Demonstration: "Doubling Your Sales by Harnessing Climate"—Elizabeth Gordon
 - Address: Dr. Kenneth McFarland
 - Convention Closing by New President
- 2:00 P.M. Inspection Tour of Chicago Housing

Building Products On Review

COINCIDING with presentation at the 1950 NAHB Convention and Exposition Feb. 19-23 of what is probably the greatest and most diversified display of new and improved building and related products ever assembled, the *American Builder* in the pages that follow illustrates and gives a brief description of more than 400 products, representative of the items being produced by manufacturers in the field.

Manufacturing has finally reached the peak peacetime capacity which was foreshadowed by the exceptional production of war materials; and there has been no time in history when product-research has been so intensive. Benefiting directly—in terms of improved construction techniques and cost-cutting—is the building industry.

In listing this large variety of equipment and materials, the *American Builder* feels that it is furnishing a feature which is of definite reference value to builders and dealers, a preview of the products which will be on the market during the year. It has, of course, been impossible to present more than one or two products of any one manufacturer, and the descriptions

Presented in this issue is our annual "Exposition in Print" — pictures and descriptions of more than 400 of the latest products used in construction

are necessarily brief, including only the salient features of each item. To facilitate inquiry for supplementary information, all products have been assigned key numbers which may be used in conjunction with the coupon on page 152.

A large number of the products listed on these pages will be on exhibition at the NAHB meeting, where delegates will see many of them for the first time. In some cases manufacturers are rushing completion of new items in order that they will be ready in time for the convention. Surprise showings, without any previous announcement, are scheduled by several exhibitors.

A few of the products which will be demonstrated at the builders show are mentioned below as examples of the show's diversity. (Most of these are included in the *American Builder's* presentation):

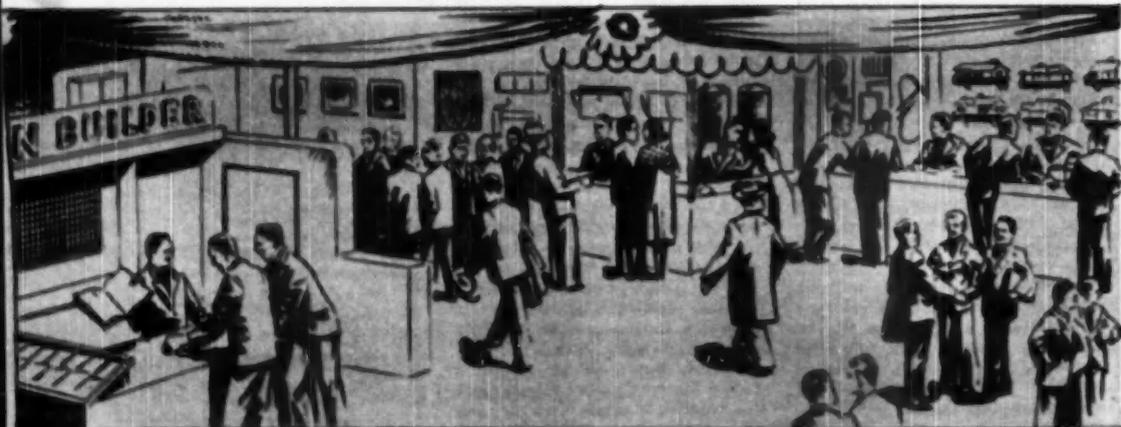
A rod-type concrete form tie with spreader, which is said to cut the cost of building forms by more than half.

Concrete forms made of magnesium, reported to last longer, go up faster and to be more accurate than lumber and plywood forms.

An improved type of aluminum siding. Application will be made under duplication of actual construction conditions, including such phases of home erection as installing window flashing and box corners.

A variety of equipment innovations by manufacturers of heating equipment, including a new oil or gas furnace designed especially for radiant perimeter heating, several units for small homes and basementless houses which are said to increase heating efficiency and to cut fuel consumption.

A hardboard paneling that has the appearance of Spanish leather and hardboard panels surfaced with laminated plastic in attractive colors.



OTHER PRODUCTS ON DISPLAY

Editor's Note: Because some products to be displayed during the 1950 NAHB Convention and Exposition did not reach *American Builder* in time for the February deadline, these products do not appear under their hotel designations. Instead, they are featured elsewhere in our New Products presentation.

A simplified standard for erecting small glass block panels in residential construction, and glass blocks in a new 12-inch size.

A new tri-well sink.

A factory-made garage door on which many designs or patterns can be incorporated at the time of installation and changed later, if desired.

Improvements in prefabricated chimneys, resulting in lighter weights and lower installation costs, including a new low-cost unit for use with gas heating exclusively.

In today's competitive market when costs must be cut to a minimum in order to provide the soundest values possible in houses of all price ranges, a thorough knowledge of the latest developments in materials and equipment is even more essential to builders than ever before. The *American Builder* has long recognized the wide interest in this phase of the industry and will continue to announce new developments in its regular New Products section as soon as information on them is available.



American Builder, February 1950.



A829821—Por rim lavatory, model L-2117-F. AllianceWare, Inc., Alliance, Ohio. For installation with linoleum or tile. Formed from 14 gauge enameling steel. Use with any standard faucet on 4-inch centers. Surface is porcelain on steel, stainproof. Lodge accommodate toilet articles. Size: 31 x 17 inches. **BOOTHS 202, 204.**



A829823—Steel garage door. Aluminum Products Corp., Pontiac, Mich. Built in one piece with all stress points riveted for extra strength. Steel sheets are electrically plated with zinc to prevent rust. Also gives prime coat at factory. Equipped with balanced, oversized springs, heavy ball bearing rollers. **BOOTH 133.**



A829824—American Brass Co., 25 Broadway, New York 4, N.Y. State Model House features copper tubing for plumbing and radiant heating, copper leaders and gutters, and copper chimneys and window flashings. Demonstrates use of Anacoda type of copper tubes, cast bronze solder type drainage fittings. **BOOTHS 147, 148.**

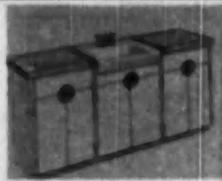
BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



A829825—Amarock Waffle padlock. American Cabinet Hardware Corp., Rockford, Ill. Designed to provide security for homes. Each waffle padlock is stamped together with eccentric bar action. Stops rattles, drafts. Available in five finishes: dull and polished brass, dull brass, Chromium, and black. **BOOTH 187.**



A829826—American 2½-inch portable electric saw. American Floor Surfacing Machine Co., Toledo 1, Ohio. Will cut a 2½-inch plank at 45 deg. or will make a straight cut of 3 inches. Balanced for one hand operation. Balanced torque-motor and saw blade turn in opposite directions. Calibrations on base plate. 2½ H.P. motor. **BOOTH 183.**

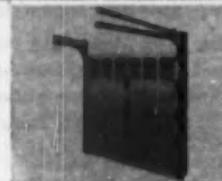


A829828—Dreuxlav lavatory and cabinet. American Radiator and Standard Sanitary Corp., Pittsburgh 20, Pa. A compact lavatory for combination with dressing table. The Dreuxlav has a deep level-wide protective splash rim, two integral soap dishes. Fittings are furnished in non-tarnishing Chromard. **BOOTHS 63, 64, 65, 66.**

BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



A829829—Precut insulating fire brick for combustion chambers. Armstrong Cork Co., Lancaster, Pa. No special knowledge or skill required to assemble combustion chambers for home heating plants. Brick are pre-cut in three sizes to correspond to common oil burner units in use. Refractories can be cut with rasp. **BOOTHS 27, 28.**



A829827—Model 31 Overdoor. Barber-Cotman Co., Rockford, Ill. The hardware of this 4-section lift-up type door is heavy 16 gauge steel. Weight of door is held by flexible steel airplane cables running on ball-bearing sheaves and rollers. Locks automatically in closed position. Stock size: 60" feet. **BOOTHS 137, 138.**



A829828—Emerson formed steel lavatory (E-219-14C). Briggs Mfg. Co., Plumbing Ware Div., Detroit 11, Mich. Stainproof lavatory is available in city blue, sea green, and ivory colors at very slight addition to price of white. Designed to provide attractive decor with economy. Similar styles in vitreous china. **BOOTHS 126, 128, 130.**

BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



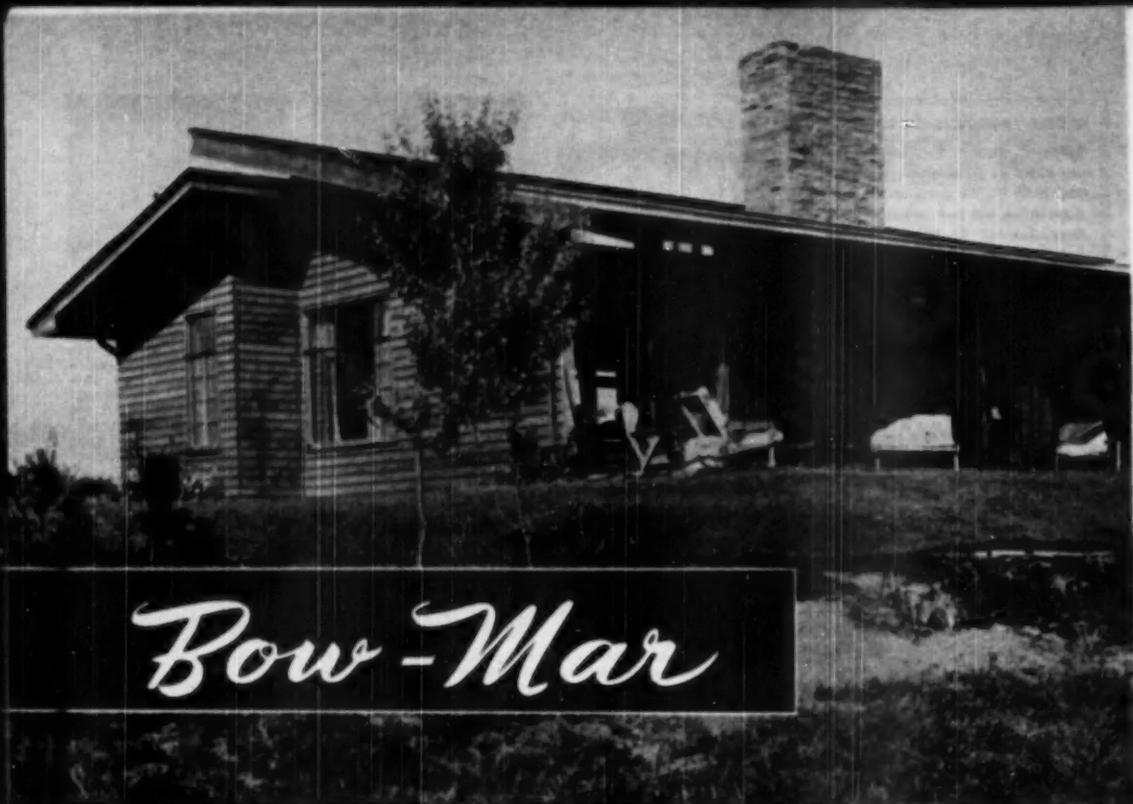
A829827—Sandwood blocks. S. L. Bruce Co., Memphis 1, Tenn. Factory finished blocks containing pecan, elm, beech, sycamore, and hickory in standard 2½/3½-inch thickness. Intended for laying in mastic, blocks are made with two metal spines inserted in back, with opposing beques and grooves at their edges. **BOOTHS 47, 70.**



A829828—All-Weather conditioner, model 574. Broad Heater Div., Allisford Gas Equipment, Inc., 1785 St. Clair Ave., Cleveland 10, Ohio. Features controlled humidity for summer operation by "re-heat" cycle. Low-stage input: 30, 500 S.T.U. High-stage input: 500, 1000 S.T.U. Shipped assembled in two sections. **BOOTHS 108, 109.**



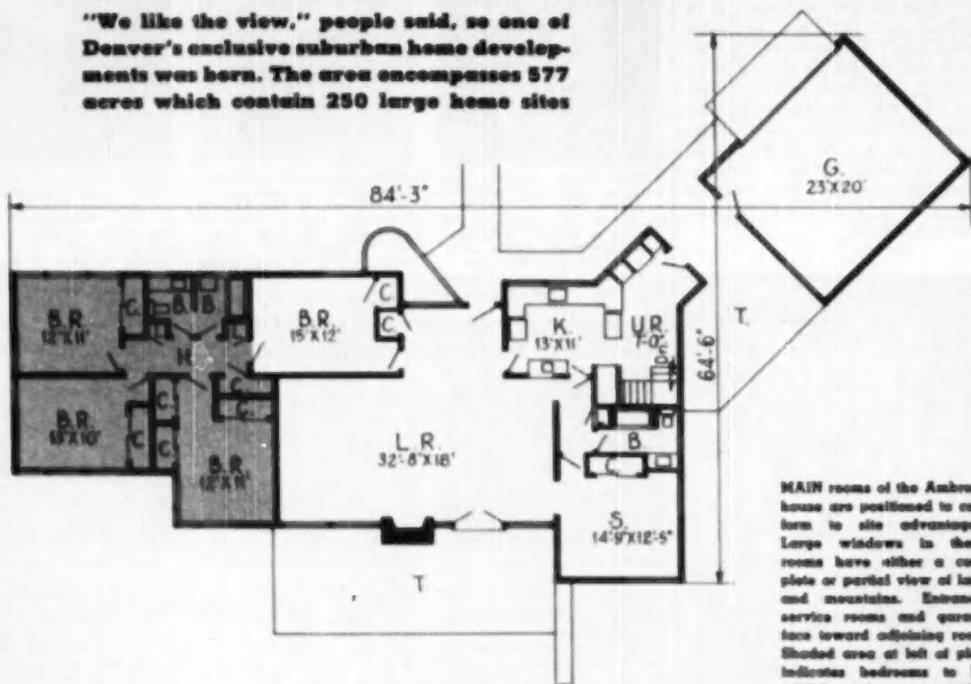
A829829—Sandulite insulated siding. Philip Carey Mfg. Co., Cincinnati 10, Ohio. Insulating wood-grained shingles. Sandulite is made of ½-inch weather tight insulating board. Requires no painting, easily installed over old weatherboard, shingles, or shingles. Available in four colors. Size: 40½x35½ inches. **BOOTH 165.**



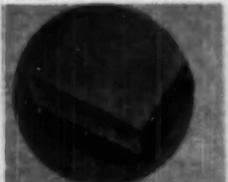
Bow-Mar

LARGE windows in the Ambrose house are designed to capture a view of lake directly in the foreground and mountains beyond

"We like the view," people said, so one of Denver's exclusive suburban home developments was born. The area encompasses 577 acres which contain 250 large home sites



MAIN rooms of the Ambrose house are positioned to conform to site advantages. Large windows in these rooms have either a complete or partial view of lake and mountains. Entrance, service rooms and garage face toward adjoining road. Shaded area at left of plan indicates bedrooms to be added as they are needed



AR28851—Calumet bath type roof wool blanket, Calumet Corp., Chicago 3, Ill. An improved paper-backed product in blankets 18½ and 18½ inches. Paper barrier is impregnated to resist vapor transmission. Each ensuing paper is creased in both directions, giving it a two way stretch of 15-20 per cent. Three-fold flange. BOOTH 4.



AR28852—Brass insect wire screening, Chase Brass and Copper Co., Watubury 21, Conn. A corrosion-resistant material for screening windows, doors, and porches. Woven from cold brass wire 92 per cent copper, 10 per cent zinc for stiffness and strength. The standard grades are made from an .011-inch wire. Can be seen at BOOTHS 98, 99, 100.



AR28853—Type 224 horizontal home comfort cooler, Clifton Fan and Blower Co., Inc., 1228 Grove St., Irvington 21, New Jersey. Ball-driven wall type package fan coil comes complete with fan motor, automatic outside wall shutter, mounting chains and springs, and covers built. Sizes from 16 to 40 inches. On display at BOOTH 145.

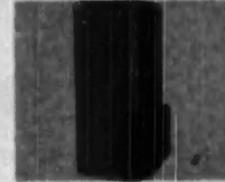
BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



AR28854—Lumite plastic insect screening, Lumite Div., Chicompa Mfg. Corp., 47 Worth St., New York, N.Y. Stainproof and rust-proof plastic woven screening is easily cleaned with soap and water or garden hose. Impervious to salt air, rain, snow and industrial smoke, screening can remain on the house year round. BOOTH 95.

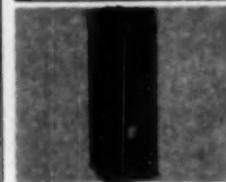


AR28855—Super Fire oil burner, Altrung Div., Chrysler Corp., Dayton, Ohio. Permanent mould aluminum cast housing holds all burner parts. Large cross feed strainer, pressure regulating and cut-off valve integral parts of pump unit. Models J-101, J-102, J-103, J-104, have B.T.U. ratings from 70,000 to 432,000 input. BOOTHS 28, 29.

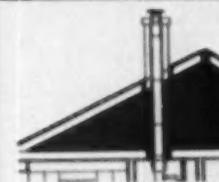


AR28856—Gas-fired forced air furnace, Model 528, Coleman Co., Wichita, Kan. Unit has output of 70,000 B.T.U. per hour, air delivery rate 530 cubic feet per minute at 25 inches water gauge. Compactly styled, occupies 60 square feet. Finish is tan baked enamel. Direct drive eliminated pulleys, belts. BOOTHS 48, 49, 50.

BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



AR28857—Gas-Catal HI-Bay counter-flow furnace, Conco Engineering Works, Mendota, Ill. A unit especially designed for use with under-floor ducts in ranch-type basement-less homes. May be fired at full rating with either oil or gas. Compact unit measures 22 x 23 x 49 inches. Rated at 43,700 B.T.U. per hour at bonnet. BOOTH 118.



AR28858—Teller-made chimney, vitreous floor type "E" flue, Condensone Engineering Corp., 122 S. Michigan Ave., Chicago, Ill. A vitreous enameled metal chimney complete with flue housing and roof flaking. Sections are assembled on job. Flue supported by ceiling and roof-raising floor space. Made in 4, 7, and 8-inch diameters. BOOTH 149.



AR28859—Crawford Style garage door, Crawford Door Co., 41-461 St. Jess, Detroit 7, Mich. This door is constructed with a patented Mar-oles core. Any desired design can be applied to the flush surface with the use of stock moldings. Same design can be repeated on house front door and shutters for home individuality. BOOTH 29.

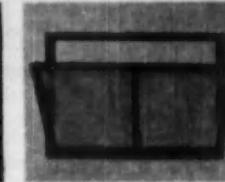
BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



AR28860—Custom cabinet sink, Model CF-9400, Cresley Div., Arco Mfg. Corp., Cincinnati, Ohio. This 50-inch sink is equipped with finger control swing sprout, built-in push button spray with long hose. Also shown in the installation above is the Cresley electric waste food disposer. Anti-splash aerator faucet. BOOTHS 140, 141, 142, 143.



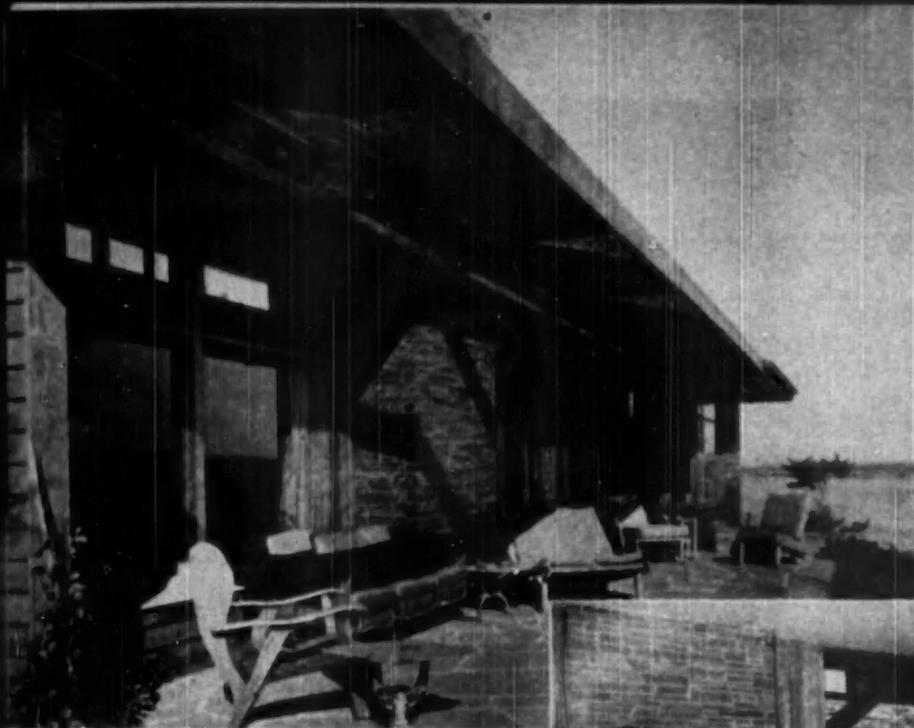
AR28861—Delco-Heat Conditional oil-fired furnace, Model OVC-PL, Delco Appliance Div., General Motors Corp., Rochester 1, N.Y. A two stage vaporizing oil burner with burner rings of special alloy metal. This model designed for restricted spaces. Blower coils connected to furnace front. 70,000 B.T.U. output. BOOTHS 208, 209, 207.



AR28862—Fenster packaged basement window, Detroit Steel Products Co., 3191 Griffin St., Detroit 11, Mich. Package includes window, fully glazed, screen and storm sash insert with screen and clips for installing. Hot rolled steel frame-section. Has complete double contact for weathering. Top opening in vent. BOOTHS 22, 23.

FROM the observation of a beautiful site came the idea of an exclusive home subdivision. Lloyd J. King, a resident of Denver, Colo., acquired a tract of land overlooking Marston Lake near Denver, with Bowes Lake directly to the south. On this site he erected a home in 1942. The many obvious advantages the site offered attracted motorists driving along the nearby highway, who stopped to enjoy the view of the mountain range reflected in the lake at this point.

It was then that King began to realize the potentialities of the area as a high grade home project. He purchased the 577 acres of lake and surrounding land and placed its development in the capable hands of Ambrose and Sons, realtors of Denver. Site planners were Harmon, McCrary and O'Donnell, landscape architects. They proceeded to lay out the entire 392 acres of usable area in one acre or larger plots, bearing in mind the excellent view at their disposal and arranging the individual sites accordingly. Curvilinear drives patterned after early bison trails wind in and out in relation to the site's contours, with the lake and mountain always in view. Lots with 180 degree views of these features are not un-

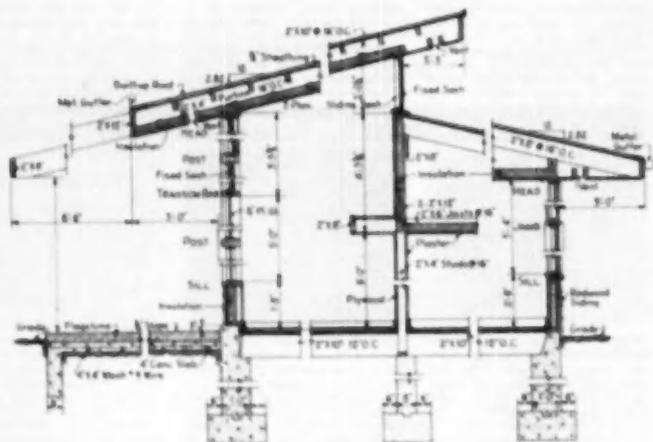


LEFT: Open flagstone terrace extends across the entire front of living room. Exposed roof beams above are covered with ruffin during the entire year. Glass in large fixed sash is 1/4-inch-thick plate. Below: Partial view of living room looking toward terrace. Interior and exterior of fireplace and chimney are built of local stone.



common; and some lots can boast of 360 degree views. The project is laid out on the theory that city people want city conveniences, but still like the advantages of country living with its wide open areas.

Situated in a section where up to this time only large ranch-type estates had been built, the Bow-Mar development naturally suggests a western or functional type of architecture. The project will eventually consist of 250 homes, a business district including all needed commodities, a public school, a community church



DETAILED SECTION

Left: Sectional drawing showing position of clerestory windows.



SIDE view of house indicating manner in which designer has taken advantage of rolling site. Corner window at grade occurs in all-purpose room at lower level

and a stable large enough to house all the horses belonging to Bow-Mar residents.

Twenty-one homes have now been completed which were built at an average cost of \$25,000 each, with an additional number under construction and many more now in the planning stage. Opportunities for home ownership have not been offered to all corners at Bow-Mar; it is handled on a more personal basis . . . friend bringing friend . . . with the ultimate idea of forming a congenial community of residents of comparable means and tastes.

The two houses illustrated are representative of the style of architecture embodied in most of the houses located at Bow-Mar. Other types embrace the conventional ranch house typical of this area.

The Paul D. Ambrose and the Gerald D. Plue houses conform to the functional type. In reference to style Ambrose said, "Our principal purpose in building this way was to command a view to the south, overlooking Bowles Lake, and also to build a house which we believe is very functional. Most of our living is done in the living room which is the major portion of the house. It was built



VIEW in large living-dining room toward front entrance and kitchen. Combination of plaster and plywood are used on walls

American Builder, February 1950.



AS2203—Space sander, lavatory. Eljer Co., Ford City, Pa. This lavatory was especially designed for use in powder rooms and small "downstairs" lavatories. It is made of vitreous china and, therefore, will not corrode. The surface is impervious to stains and the effects of ordinary acids. Available in other designs. **BOOTH** 41, 42, 43.

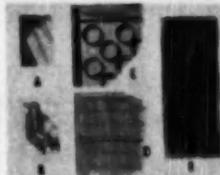


AS2204—Rubber tile. Fremont Rubber Co., Fremont, Ohio. This rubber tile is made in urethane latex-resistant colors that guarantee entire thickness of tile. Fire-resistant—chlorofluoride has no blanching. Tile is slip-resistant, sound absorbing. Cleaned with cold water, damp mop. Easily installed over new or old floors. **BOOTH** 189.



AS2205—Diaphragm waste food unit. General Electric Co., Bridgeport, Conn. This model PAS-38 is designed for installation in clean quarters. Requires only 7 inches between center line of wall drain and sink bottom. Operates on either cover or capless tank. Eliminates waste food including bones. Shop at **BOOTH** 71, 72, 73, 74, 75.

BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



AS2207—General flush door. General Plywood Corp., Lisle, Ill. (A) Three-ply construction. (B) Light opening installation. (C) Hollow-core flush door construction. (D) Solid-core flush door construction. (E) Flush door of select gum. Available in six woods and complete range of sizes. Ball coated. Shown at **BOOTH** 8, 9.



AS2208—Waste King Garburator. Grinnell Mfg. Co., Los Angeles, Calif. This automatic garbage disposer requires 2 inches clearance from bottom of sink to wall waste outlet. Designed as continuous feed unit, pulverator can be fed while operating. Fits most double-bowl sinks without need to lower waste line. Demonstrated in **BOOTH** 61, 62.



AS2209—Hamilton automatic clothes dryer. Hamilton Mfg. Co., Troy, N.Y. An ultra-compact long and counter and six swivel-tilt baskets and provides "fresh air" smell. Circulating drum of steel grip steel. For both gas and electrical heating elements. Heat cycling type thermostat with a range of temperature. **BOOTH** 12.

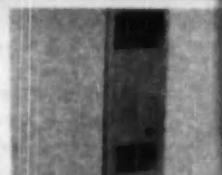
BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



AS2210—P and H Economy House. Harvathfager Corp., Port Washington, Wis. This prefabricated house, measuring 10x22 feet, is constructed with six different elevations, and three different floor plans. All parts of wall panels are bonded to waterproofed plywood which serves as exterior cladding. Upon interior panels. **BOOTH** 99.



AS2211—Hill Termite Control System. Memphis 2, Tenn. Use this termite "castle" to demonstrate insect destruction. This organization offers protection against and control of fungus (wet or dry), bacteria, decay, and termites. Lumber is treated at time of construction to destroy wood-dwelling organisms. Unit displayed at **BOOTH** 2.



AS2212—Wall baster, model 40-WB-Series 14. Hully Mfg. Co., 615 S. Arroyo Parkway, Pasadena 2, Calif. Dual vented circulating type baster fits into 6-inch stud wall in opening 16 x 20 1/2 inches. Equipped with positive safety shut-off valve. Panels, finished in baked enamel maintained at safe temperature. 4,000 B.T.U. capacity. **BOOTH** 161.

BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



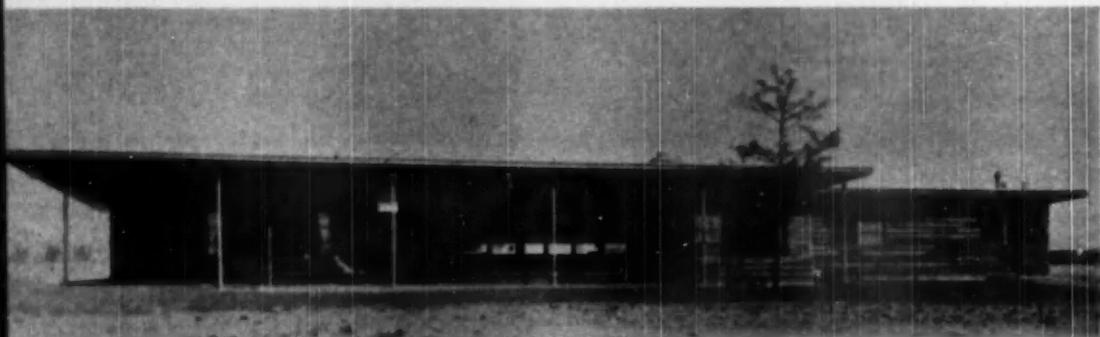
AS2213—Hydrotherm gas-fired hot water boiler, Model No. 2-1/2-HWS. Hottel and Ackerman, Inc., 18 E. 43rd St., New York 17, N.Y. Cast iron boiler supplies 200,000 B.T.U. input and 800 square feet installed radiators. Low water capacity (5 gal.) provides for quick response to temperature changes. ASME pressure rating. **BOOTH** 97.



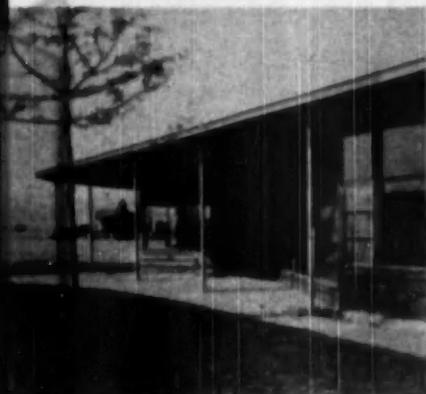
AS2214—Rotary Insear, LB-4. Hotpoint, Inc., 5689 W. Taylor St., Chicago, Ill. Insear is fully automatic, thermostatically controlled. Cabinet uncluttered model. Has automatic line control, manual shoe release, 28-inch roll. Finish is of Celconite white enamel. Low-priced to fit family economy budget. Unit to be demonstrated **BOOTH** 2.



AS2215—Flexalon spring tempered aluminum slat and vinyl plastic tape. Hunter Douglas Corp., 100 Broadway, New York 2, N.Y. Aluminum slat and tape of venetian blinds of same color, many colors available. Slat tape and slat are completely washable. Duralized bond between paint and aluminum. Displayed **BOOTH** 172.

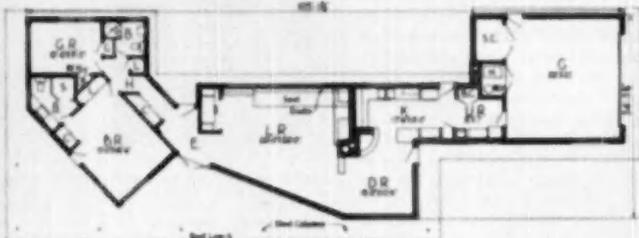


THE lake front approach to the Gerald D. Plue house is a good example of functional design with large glass areas and covered terrace



DETAIL view showing covered terrace

Houses at Bow-Mar are of functional design, with large glass areas to capture view of the mountains

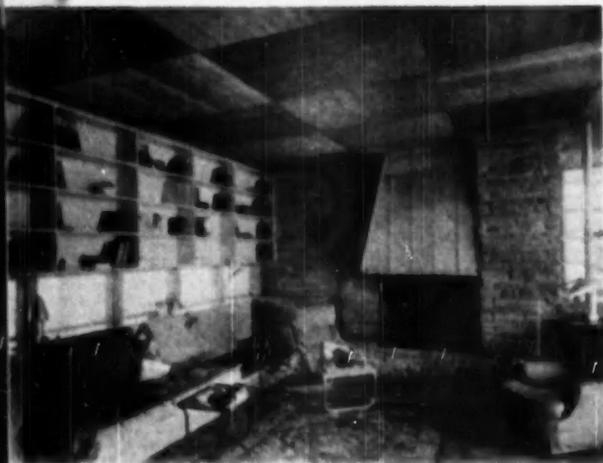


OPEN planning is featured in this house. Living, dining room and kitchen are in reality one large area. Doors are non-existent between rooms except in the bedroom area

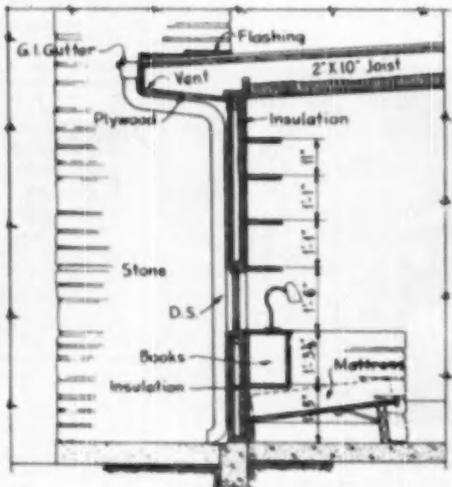
large because we wanted to make it a combination living and dining room, and, if necessary, a playroom. We had large windows placed on the south wall to take advantage of the Colorado sun, which shines 365 days of the year."

With reference to functional design, Ambrose states, "Instead of building an exterior house and fitting the rooms into the shell, we did just the opposite and built the exterior shell

around the rooms we actually wanted to use as living area. I believe that the Plues had approximately the same purpose in building their house. A greater amount of glass area is used and thus their home comes closer to being a sun house than ours. Only two rooms in their house do not have the heat of the sun during winter days. Both houses were built on the theory that much of our living would be outside; consequently our terraces



COPPER-WOODED fireplace at end of living room



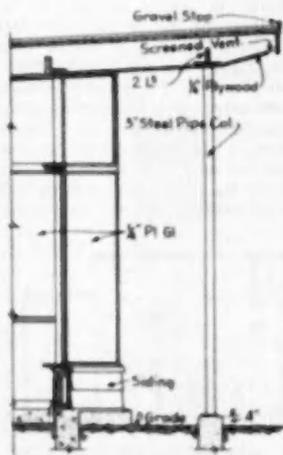
are large and protected. We find that this idea has worked out very satisfactorily and that our terraces can be used from six to seven months of the year."

Both of these houses are placed on a hill top with a tremendous sweep of plains and mountains below. The Ambrose house built by Bellamy and Williams, contractors, at a cost of \$30,000, is compactly suited to the present with provision for future expansion. The architects of both houses, Smith, Hegner and Moore of Denver, have indicated in the plan a thoroughness of study in the proportioning of the existing units to the future extension. The two terraces, one for living, the other for dining, are sheltered against the winter weather. A sun-break of rattan over the main terrace prevents glare on the living room windows and at the same time permits full radiation of winter sun and circulation of summer breezes. The clerestory window in the north wall of the living room provides light to that portion of the room and full circulation of air in summer.

The Plue house, built by Sam McMorrine, contractor, at a cost of \$25,000, has many of the characteristics of its neighbor, except for the fact that the glass expanse is greater and the plan is of the open type. Flat roof has wide projecting overhangs that act as sun shades for all windows and form a shelter for terrace on south wall.

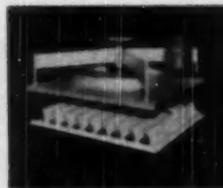
Stained cedar siding on frame walls were used in the construction of both the Plue and Ambrose houses.

DETAIL drawing shows below and at left indicate the construction of front and rear walls of living room including the section with the built-in seat and cupboards

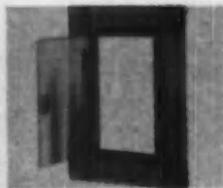


ROOF OVERHANG SHOWING PIPE COLUMN SUPPORTS

American Builder, February 1950.



A82006—Sliding partition gate, Hunter Fan and Ventilating Co., Memphis, Tenn. Designed for fast, minimum cost installation, wall switch operation, in two capacities: 476 and 688 CFM. Vertical discharge type placed on at-ft. floor; no fasteners needed. Springs rubber base provides seal and cushion. BOOTHS 23, 26.

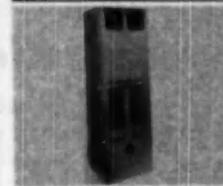


A82007—Militer steel access door, Island Steel Products Co., Milwaukee 1, Wis. Doors come ready to install in one of 13 different styles and sizes. No special framing or finishing needed. Furnished with prime coat of aluminum. Made of 14 and 16 gauge steel. Dimensional range from 60 to 120 1/2 inches. On display at BOOTHS 23, 24.

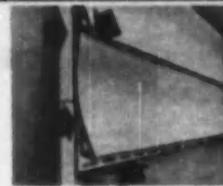


A82008—In-Sink-Erator food waste disposer, Model 96, In-Sink-Erator Mfg. Co., Berlin, Wis. Designed for continuous feeding. Motor and stationary shredder. Disposes of average table waste—fruit pits, bones, left cleaning refuse. Equipped with heavy-duty reversing switch to alternate direction of rotation automatically. BOOTH 163.

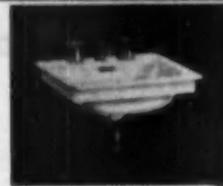
BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



A82010—Model M-7 oil burning furnace, International Oil Burner Co., 280 Park Ave., St. Louis 18, Mo. Specially designed for base-mentless homes, this unit delivers warm air down to floor. Large two-speed fan operates continuously of low speed, providing constant warm air movement. High speed for quick changes. BOOTHS 25, 26.

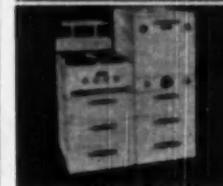


A82012—Kaiser aluminum clasp-board siding, Kaiser Aluminum and Chemical Sales, Inc., 1704 Broadway, Kaiser Bldg., Oakland 12, Calif. Produced in two gauges: #20 and #16, for new and re-siding purposes, respectively. 7 1/2 inches wide with weather exposure of 6 1/2 inches. Available in lengths of 10, 12, 14, 16 feet. BOOTH 26.

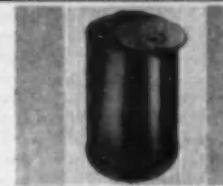


A82009—Arrowhead vitreous china lavatory, Kohler Co., Kohler, Wis. Lavatory designed for building with dressing tables and other flat work. Special metal frame provided (covers water-tight flush joint when installed in wood counter. Has openable valve seats, combination lavatory fitting and pop-up drain. Model display BOOTHS 81, 82, 83.

BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



A82010—Universal Select-A-Range, Landers, Frary and Clark, New Britain, Conn. Range is made up of three basic, interchangeable, independent self-contained units—oven, surface cooking unit, and storage drawers. Can be fitted together to form more than 23 different arrangements. Heating element is electric. BOOTHS 181, 184, 185.



A82011—Indoor home incinerator, Model No. 2, Majestic Co., Huntington, Ind. This is a double-walled cylindrical metal unit fitted with a welded steel rod inner grating and cast iron swinging top and ash clean-out door. Tops to any furnace flue 26 inches or larger. Used household waste, paper to burn garbage. Displayed at BOOTH 51.



A82008—Marble-patterns Marfilo veneered with cream-color Defon Marfilo upper walls. Marsh Wall Products, Inc., Dover, Ohio. Plastic-finished wall and ceiling panels are made in plain colors, horizontal, fluted, cutback wood and marble patterns. Applied to old or new walls with marble adhesive. Sample of the line exhibited BOOTH 184.

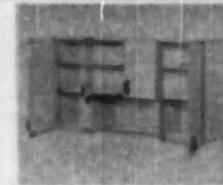
BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



A82015—Shresline copper pipe and fittings, Mueller Brass Co., Fort Worth, Mich. In the installation shown above, Shresline copper headers for radiant panel heating are in place, waiting for concrete to be poured. Construction of large warehouse. Both supply and return lines are shown in this photograph. BOOTHS 198, 199.



A82016—Mueller Climafuel gas gravity furnace No. 111, L. J. Mueller Furnace Co., 280 W. Oldenburg Ave., Milwaukee 18, Wis. 90,000 B.T.U. input. Features include welded steel heat exchanger, cast-iron, drilled-port burner, solid base with leveling screws. Choice of self-generating or selenium gas valve. 20 1/2 inches wide. BOOTHS 98, 91, 92.



A82014—Youngtown Elitex wall cabinet, Mullins Mfg. Corp., Warren, Ohio. Designed especially for builders, this cabinet measures 14 1/2 by 12 inches. Made of vitreous steel with sound-deadened doors, rubber bumpers, positive action catches, and semi-concealed hinges. Open shelf is 26 inches by 6 inches. BOOTHS 112, 113, 114, 115, 116.

VARIOUS of colors, materials and roof lines over garages keep Raymond ranch homes from having monotonous look

Mass Production—Individual Results

Homes in 200-unit development are built to standard pattern but plan is variable to let buyers pick details they like best

BUILDER Joseph Raymond of Hawthorne, N.J., has found a middle ground between building houses for sale and doing custom work. The buyer of a home in Raymond's 200-dwelling development can say "This is the way we wanted it" instead of "It doesn't quite suit us, but we had to take it because that's the way the builder did it."

Raymond achieves this without sacrificing the economy of building houses to conform to a standard pattern. His pattern is flexible, however. Although he does not build to the customer's specifications, in almost every possible instance he does give the buyer a number of possibilities from which to choose. What Raymond calls a "variable room" is an excellent example. This can be either

a dining room, connecting with the living room and the kitchen through open archways, or a walled-off bedroom. The buyer decides which he prefers and Raymond builds it that way. No matter which, the price stays the same.

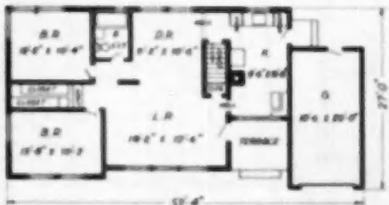
This policy pays off. Forty-six houses were sold the day the first model home opened. Since then, sales at the Raymond Ranch Homes project, located at New Milford, N.J., within commuting distance of New York City, have been consistently far ahead of construction. Only 91 dwellings were planned when the development was opened in October, 1949, but because of the ease with which the homes sold, Raymond soon decided to expand the project if he could obtain more land. He succeed-

ed. The first 91 houses were planned for a 29-acre site, but within a month after selling started Raymond had bought an adjoining 29 acres and increased the number of homes to 200.

The variable room—dining room or bedroom—is not the only item about which the buyer has a choice. The customer may select from exterior color schemes created by Beatrice West of the Rahr Color Clinic. He has a choice of a garage or no garage. If he wants a garage, he may decide whether he wants a small front gable peak over the garage or over a bedroom at the other end of the house. The customer selects his own wallpaper, although the builder buys it and puts it on. The customer decides whether he wants ceramic tile or aluminum tile in the bathroom and he selects the color of tile he likes best. He chooses the color for bathroom fixtures. He decides between double-glazed or ordinary glass in the picture windows. He selects from among 14 possible colors for the breakfast nook set in the kitchen. He selects the color and pattern for kitchen linoleum. He decides whether



\$12,500 model house is highest-priced dwelling offered at Raymond ranch homes. Optional exterior features include garage, stone-work around picture window and wood shingle siding. Plan shows location of kitchen to provide view of both front and rear of house





he wants double-coursed red cedar shingles on the sidewalls or a combination of wood shingles and asbestos siding. He decides whether he wants stone veneer around the front picture window. He selects the style of lighting fixtures. Some of these choices do not change the over-all price of the house, and some do. With one basic floor plan, FHA-approved prices range from \$10,500 to \$12,500. The exact price of any particular house depends upon the exact choices the buyer makes.

There are two model homes—one with a \$12,500 price tag and one at \$10,500—so that prospective buyers can see all the features which make price variations. To enable buyers to inspect both variations of the variable room, one model has two bedrooms and a dining room and the other has three bedrooms and no dining room.

Raymond gives special credit to color for the rate at which his houses have been selling. Referring to the exterior color planning, he says customers "appreciate the advantages of

Color Name	Color Sample	Color Name	Color Sample
White	[White swatch]	Light Yellow	[Light Yellow swatch]
Light Yellow	[Light Yellow swatch]	Light Green	[Light Green swatch]
Light Green	[Light Green swatch]	Light Blue	[Light Blue swatch]
Light Blue	[Light Blue swatch]	Light Purple	[Light Purple swatch]
Light Purple	[Light Purple swatch]	Light Red	[Light Red swatch]
Light Red	[Light Red swatch]	Light Orange	[Light Orange swatch]
Light Orange	[Light Orange swatch]	Light Brown	[Light Brown swatch]
Light Brown	[Light Brown swatch]	Light Grey	[Light Grey swatch]
Light Grey	[Light Grey swatch]	Light Black	[Light Black swatch]
Light Black	[Light Black swatch]	Light White	[Light White swatch]

COLOR chart supplied to builder has samples of actual materials in exact colors being used. Charts are valuable sales aid



A82017—Refrigerator. Nash-Kellicott Corp., 1420 Plymouth Rd., Detroit 22, Mich. Model 81, eight cubic foot unit has full-width frozen food chest, humidity control dial, and twin sliding shelves. Frozen food chest stores up to 60 lb. of packaged foods. Insulated bottle "ports" regulated for local climates. **BOOTH 1.**



A82018—Grounded plug-in strip, Type CP-6. National Electric Products Corp., Chatham, Pa. Plug-in strip provides outlets at either six or 18-inch intervals. Third slot, in addition to two slots in each receptacle, has copper insert mounted to the multi-outlet's steel base to afford ground. **BOOTH 6.**



A82019—Modernfold doors. New Castle Products, New Castle, Ind. Accordion-folding screens with metal frames fabric-covered. Available in many colors in standard sizes based on popular door and ceiling heights. Can be used single or double. Fabric is washable, easy to clean. Saves room open. Convenient. **BOOTHS 101 and 102.**

BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



A82020—Small aluminum tension screen. New York Wire Cloth Co., 60 Park Ave., New York 17, N. Y. Tension design eliminates side frames. Attached with thumb screws and tension catch on bottom bar. Readily unfastened for window washing. Installed from inside house. Reinforced multi-strand edges for increased strength. **BOOTH 12N.**



A82021—Fastenings window hardware. Hordahl Co., 180 W. Alameda Ave., Burbank, Calif. For old installations or new, this hardware is designed to minimize binding and warping by means of a balanced overhead suspension principle and concealed double guide. Extruded aluminum double track provided for rollers. **BOOTH 12B.**



A82022—No-Wall banding plaster. No-Wall Mfg. Co., 222 N. 12th St., Milwaukee 1, Wis. Restores old walls, bonds tight to new dry wall. A one-coat textured finish, also takes all regular plaster finishes. Bonds permanently to concrete, chipped, or painted walls, plaster tile, Spanish plaster, smooth ceiling-board and others. **BOOTH 60.**

BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



A82023—Fiberglas acoustical tile. Owens-Corning Fiberglas Corp., Toledo 1, Ohio. A lightweight perforated acoustical tile of compressed glass fibers, non-combustible. High sound-absorbing properties. Excellent thermal insulation value. Weight, 7/16 pound per square foot. Can be cemented or mechanically mounted. **BOOTH 17.**

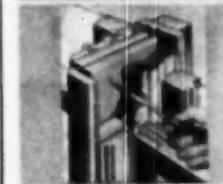


A82024—8-inch Guild Saw. Porter-Cable Machine Co., Syracuse 5, N. Y. Model A-8 saw weighs only 12 1/2 lbs. Maximum depth of cut 7 1/2 inches. Turbines fan blade cut off line of work ahead at all times. For general construction work, heavy duty cross-cutting and ripping. Also uses abrasive cutting wheels. Exhibit **BOOTHS 27, 28.**

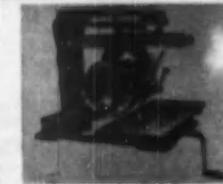


A82025—Six-Pan electric ceiling ventilator. Pryma and Co., Inc., Pomona, Calif. Has 9-position speed control. Combines fan and blower functions. Easily removed for cleaning. Motor fully enclosed, rubber mounted, radio interference-proof. Unit fits flush with finished ceiling or wall. Available in three sizes with speed control. **BOOTH 19.**

BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



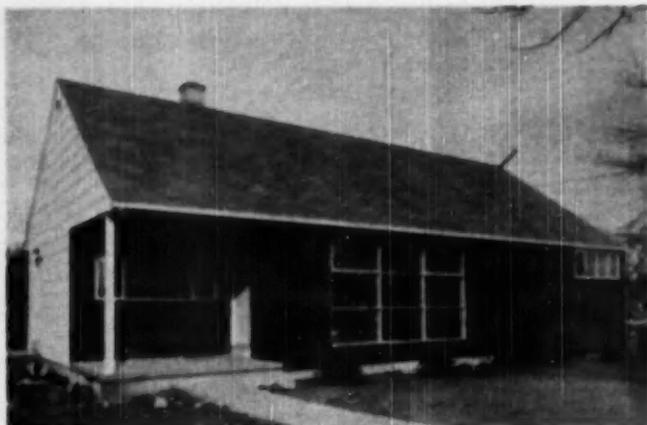
A82026—R.O.W. removable wood windows. R.O.W. Sizing Co., Ferndale 26, Mich. Windows operate by means of spring cushion, removed by pressing catch to left or right side comes free. Pressure from spring guide holds catch in place. Screws at side adjust amount of pressure. Windows removable for repainting. **BOOTH 21.**



A82027—Multiple radial-arm saw. Model 25-A. Delta Mfg. Co., Rockwell Mfg. Co., Milwaukee 1, Wis. Powered with 1/2 H.P. motor with 8- or 9-inch saw. Cuts full capacity, right or left hand, at any angle. Ball bearing slides. Calibrated eye-level scales. All controls in front of machine. Retractable blade guards. **BOOTH 27.**



A82028—Fella Blatcreens. Blatcreens Co., Pella, Iowa. Finger touch open screens up and down like window shades. Eliminates pulling up, tugging down, jangling, stirring, repairing screens. Guaranteed ten years. Blatcreens can be installed on any type of window. These screens admit 20 per cent more light than other types. **BOOTH 22.**



\$10,500 model is lowest-priced home. Asbestos siding is used on end walls and roof, wood shingles on front. Plan shows how dining room converts to bedroom.

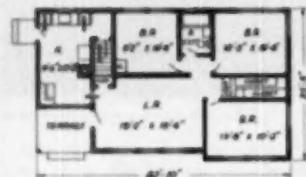


COLOR consultant Beatrice West of Rahr Color Clinic shows painter exact hue. Miss West will speak at NAHB Feb. convention

having a recognized authority select colors not only for each home individually but for the houses as they stand in relation to each other in the development. In other words, good color styling makes attractive homes and an attractive community, too."

The Rahr Color Clinic did not participate in the original planning of Raymond Ranch Homes. In fact, when the firm was retained late in October, about ten contracts already had been signed, and it was necessary for Raymond and his sales staff to ask these ten buyers to approve the color schemes worked out for their homes. All except two buyers were enthusiastic immediately, and it didn't take long to convince the dissenters that they, too, would benefit by the color consultants' experience and knowledge.

Nine exterior color schemes were developed for the Raymond Ranch



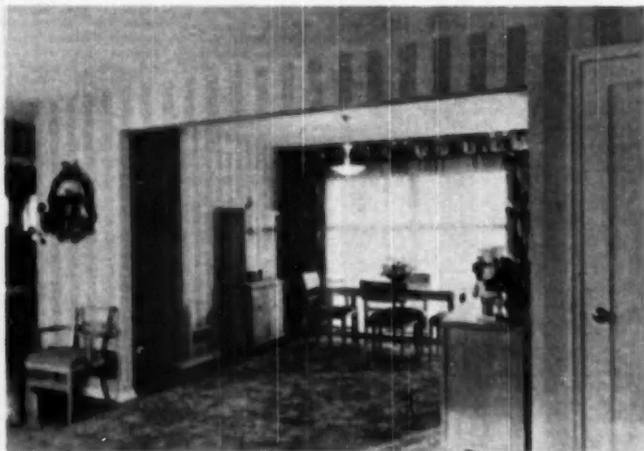
Homes. As delivered to the builder, each scheme shows real samples of materials in every possible case—a real sample of an asphalt shingle in the selected color blend, a real sample of shake shingle stained to the hue desired and a real sample of asbestos siding in its color. Paint colors for vertical board siding, trim, accent and the porch also are shown exactly. Color locations and color specifications are given.

Each color scheme is prepared in chart form, bound, in a neat folder. The sales staff at Raymond Ranch Homes considers these folders one of its most valuable selling aids. A prospective customer is not told, for example, that the house he's interested in will have a red asphalt roof. Instead, he is handed the appropriate color chart, which not only informs him that the roof will be a red blend but actually shows him the material itself. As Miss West puts it: "He can hold his roof in his hands."

In developing each of the nine color schemes for the Raymond houses, Miss West began by choosing a blended color asphalt roofing. This is her customary way of working. For the Raymond Ranch Homes, there are five asphalt shingle blends—red, gray, slate, brown and green, with each except green in two different schemes.

Besides creating the different color schemes, the color clinic decided exactly which of the 200 dwellings would be colored in accordance with each scheme. Decisions are final. If a customer buys the house in location No. 87, for instance, he must take the color scheme designated for No. 87. If the customers want another scheme, he must select a location for which his chosen color plan was specified.

Raymond is convinced that altering his professionally planned color design would detract from the appearance. *American Builder*, February 1950.



DINING room is optional; buyer may choose bedroom in its place. Regardless of choice, price of house is same. Mrs. Raymond, the builder's wife, decorated model home interior



BUILDER Raymond shows sliding doors

ance of the development. This is what he told one buyer who wanted to make a change:

"I put the color on your house partly for the benefit of the people next door and for the people in the next block. And I put the color on their houses partly for your benefit, too. We don't want to have only a collection of houses which might be good-looking in themselves but which wouldn't fit well together. We want to have a good-looking community—your house and all the other houses, the whole thing together!"

The buyer, Raymond says, thought a moment and said, "You're right."

Buyers can make an additional color selection by choosing different siding materials. In one color scheme, the color consultants specified barn red wood shingles or a combination of barn red shingles and gray asbestos siding. If the buyer wants barn red, he can order wood shingles on all exterior walls. If he wants barn red on the front and gray on the ends and rear, he can order the siding mate-

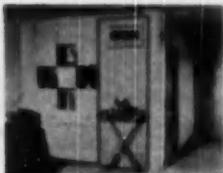
BRAND NAME PRODUCTS USED:

Awning windows, ABC STEEL EQUIPMENT CO., INC., bathroom fixtures, AMERICAN RADIATOR & STANDARD MFG. CO., linoleum, ARMSTRONG CORE CO., waxes, BENDIS HOME APPLIANCES, INC., COMMANDER upward-acting garage door, kitchen ventilator, FASCO INDUSTRIES CORP., paint, MARTIN-LENGUER CO., forced air furnace, BORG-WARNER CORP., hot water heater, BORG-WARNER CORP., range, BORG-WARNER CORP., Thermopane glass, LIBBEY-OWENS-FORD GLASS CO., Thompsons kitchen cabinets, MULLINE MANUFACTURING CO., Youngs-tone sink, MULLINS MANUFACTURING CO.

rials which will give him those colors. "Color has become an exciting experience for me," Raymond says. "In the three developments I built before Raymond Ranch Homes, I selected the outside colors myself and thought I did a good job. But I have to admit

(Continued on page 286)

American Builder, February 1950.



AB25017—Royal Jet-Flow heating unit. Royal Heaters, Inc., 1004 Westminster Ave., Alhambra, Calif. Unit is enclosed in Mosaic cabinet which can be painted or papered to blend with any type decor. 45,000 B.T.U. input unit occupies space 19½ x 27½ inches. Also made in 25,000, 35,000 and 55,000 B.T.U. Three other sizes. **BOOTH 67**

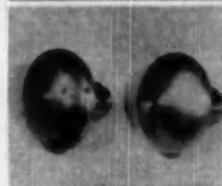


AB25018—Tie-On Shingles, Ruberoid Co., 337 N. Michigan Ave., Chicago, Ill. Each shingle, in addition to being fastened to roof deck at four points with concealed nails is further secured by being locked at four points to the adjacent shingles with integral interlocking feature that requires no wires or clips. **BOOTH 5**



AB25019—Evers prime window. F. C. Russell Co., 1108 Chester Ave., Cleveland 1, Ohio. Prime window made of Armco hot-dipped galvanized steel and finished with baked-on outdoor aluminum enamel. Requires no further painting. Tubular construction for strength. Glass is bedded in mastic. Optional self-cleaning panels. **BOOTH 20**

BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



AB25027—Protective lacquer for hardware. Sargent and Co., New Haven 9, Conn. Above, two identical knobs from Sargent production. One at left, with regular coating after 17 hours salt-spray. One at right, protected by eye lacquer, after 180 hours salt-spray. Once on, eye lacquer is impervious to standard solvents. **BOOTH 183**



AB25030—Long basket for lock placement. Schlage Lock Co., Box 1334, San Francisco, Calif. Basket permits placing lock at distance from door edge for use with large escutcheons. Simple method of installation requires no special tools. Added links five, seven or ten inches long, provide additional space for placement. **BOOTH 129**

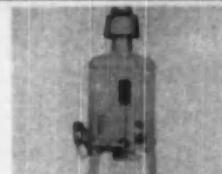


AB25031—Refrigerator, Model 800, Servel, Inc., Evansville 25, Ind. Gas operated, silent refrigerator, mechanically actuated in six sizes, ranging from 3.7 to 8.5 cubic feet food capacity. 244-400A, 6.1 cubic feet, is shown above. Equipped with frozen food storage space, automatic temperature controls and other deluxe features. **BOOTHS 100, 121, 122, 123**

BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



AB25032—Membrane for waterproofing ground level concrete slab. Sical-brath Co., 308 W. Wacker Drive, Chicago 6, Ill. This blanket is especially made for application over sub-fill before pouring concrete. Can be made to fit exact size of floor area. Other standard width rolls up to 12½ feet are available. **BOOTH 192**



AB25033—Gas-fired hot water boiler, Model HW-100, A. O. Smith Corp., Milwaukee 1, Wis. A heater designed for homes of four to seven rooms, for all types of hot water heating including radiant panel heating. Maximum input, 110,000 B.T.U. Over-all height, 89 inches. 19-inch diameter. Automatic controls, modulator burner. **BOOTH 64**



AB25034—Slide-Away garage door. Stamping Products and Mfg. Co., 630 E. Forest, Detroit, Mich. A full-recessing, overhead type garage door requiring one-inch headroom, made of galvalume steel reinforced steel with double bar channel section construction. Cable-operated, self-locking door lock responds to finger touch. **BOOTH 10**

BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



AB25035—Steel sliding closet doors. Steelcraft Mfg. Co., Bessemer, Ohio. A packaged unit consisting of two flush-type steel doors, operated on ball bearings, within a steel door frame. Shipped, ready for installation. Doors may be purchased separately. Have baked-on prime coat. All welded, noise-free steel construction. **BOOTH 55**



AB25036—Kitchen-Aid ventilator. Stewart Mfg. Co., 1288-11 E. Washington St., Indianapolis 1, Ind. Aerodynamic impeller mechanism forces air out of kitchen. Requires six-inch hole near range for installation. Operated by wall switch. Motor is cushioned on neoprene mounts. Unit made of polished aluminum, non-corrosive. **BOOTH 49**



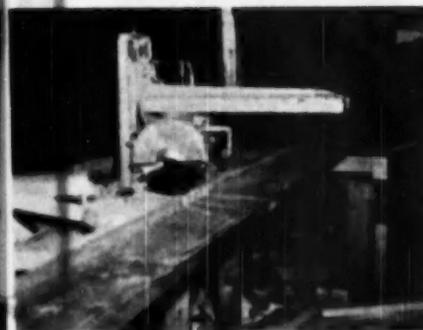
AB25037—Magnesium wall forms. Symons Clamp and Mfg. Co., 6309 Divanoy Ave., Chicago 21, Ill. Weight of panel is less than three pounds per square foot. Does not swell when wet, contract when dry. Will not rust. Facing is 3/16-inch Zl magnesium alloy welded to rectangular frame with cross-pieces 12 inches O. C. **BOOTH 12**

With the thought that conventional procedures needed revamping, a Detroit subcontractor started training his men for faster production. He found that—

Power Tools and Teamwork Speed Rough Framing



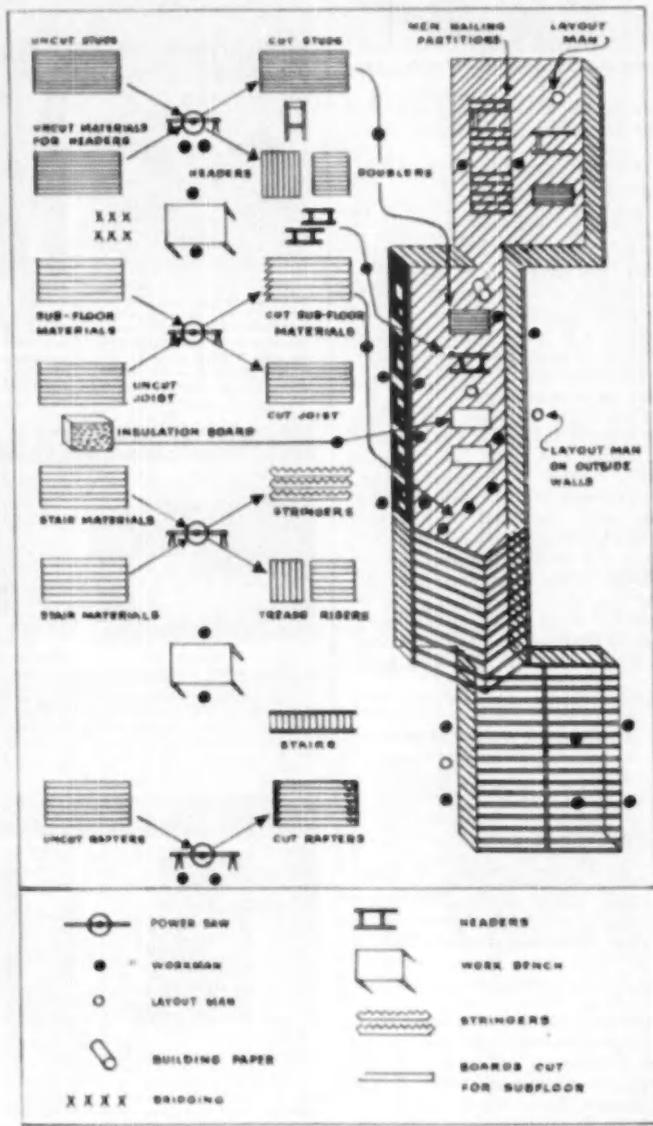
TWO men with this radial saw are able to cut 120 rafters, 5 cuts each, in one hour



UNCUT material is piled on side of saw away from building. This is No. 3 saw



NO. 3 saw in use on apartment project. Radial saws are by I. D. Wallace & Co.



DRAWING of Selch's rough framing system shows flow of material through power saws to building. Uncut material conveniently placed with four feet of space between stacks

American Builder, February 1950.



WILLIAM A. SULAK

WITH a battery of radial saws, a well-planned materials handling procedure, and a specialized work crew, a Detroit carpenter subcontractor is adding speed to rough framing. His well-tested system, used in construction of 175 apartment units in a 10-month period last year, is several times faster than the conventional procedure he used previously.

The subcontractor, William Sulak, of the Sulak Contracting Co., does not claim to be a time-and-motion expert, but says his system relies heavily on "men being at the right place at the right time."

His crew of about 35 men, plus their equipment necessary for rough framing, constitutes a mobile unit. They can be shifted to any job suitable to their organization, and proceed with the precision and speed of a well-trained football team. Each man on the "team" has a particular job for which he is trained. Sulak sublets the rough-framing crew to a builder doing the kind of work where his methods are adaptable, usually to multiple unit frame construction. And important to the efficiency of his crew is that he can keep a team of workers together after he has trained them by keeping them steadily employed.

Speed in the system is developed by eliminating lost motion. Uncut materials arriving on the project (see drawing) are placed in relation to radial saws so that movement of any piece is always toward the building under construction. Lumber is stacked in piles generally with four feet of space between them, on the side of the saws away from the building. Material is placed on saw conveyers, fed into the saw; and finished pieces are stacked at the other side of the saw toward the building. From this point, carriers, usually one man for each radial saw, carry the finished material to a carpenter at the building.

American Builder, February 1950.



AB2020—Three-way job combination. Ther Corp., Chicago 56, Ill. Applies acts as dishwasher, clothes washer, and sink. Change of bits converts dishwasher to clothes washer. Dishwasher capacity: service for six. Takes eight-pound clothes load for washing. Aseafed, non-splash faucet serves washers and bowl. BOOTH 7.



AB2023—Trip-L-Grip framing anchor. Timber Engineering Co., Washington, D. C. These anchors eliminate need for toenailing. Used for joint anchorage, tying down rafters and trussed rafters, to resist plaster cracking around rough openings, and for special roof framing. Supplied with special nails and drawings. BOOTHS 31, 32.



AB2024—Kitchen-type oil boiler. Timken Sifted Automatic Div., Timken-Detroit Axle Co., Jackson, Mich. Counter-high cabinet, finished in white and topped by stainless steel work surface, contains house-heating boiler, instantaneous water heater, expansion tank, circulating pump, tempering valve, and automatic controls. BOOTHS 66, 67.

BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



AB2027—Weatherwood Tile. Tile United States Gypsum Co., 300 W. Adams St., Chicago 4, Ill. Terra-Tile has new speed-clinch joint, provides edges especially designed for speedy, economical application with automatic plaster. Extra wide sponge convenient for nailing job. Has plastic-coated Hi-Lite water-repellent finish. BOOTH 130.



AB2028—Fire-resistant USP partition panel. Universal States Plywood Corp., 55 W. 49th St., New York 18, N. Y. Core of panel is of incombustible insulating material. Size range from 18x34 to 36x48 inches. Easily erected and demounted. Thickness: 1 1/2 inches. Hardwood veneer faces. Light in weight. BOOTHS 151, 152.



AB2046—Fibrous china lavatory, Model 622. Universal-Rundle Corp., New Castle, Pa. Spacious ledges of china lavatory hold toilet paraphernalia. Towel bars at each side are convenient bathroom dish. Chrome-brass fittings of this unit are available on matching plumbing fixtures. Similar units available in cast-iron. BOOTHS 193, 194.

BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



AB2044—Upon Roofing fastener. Upon Co., Lockport, N. Y. Fasteners, placed 12 inches O.C. on studs, are called in two pieces. Upon Strong-Bilt full-wall panel is permanently applied to wall of new house by forcing panel against sharp prongs of fastener, which penetrate panel from rear, with block and hammer. BOOTH 118.



AB2053—Packaged chimney Vent-Feeder Corp., Field Bldg., Chicago 3, Ill. Entire chimney slipped complete in convenient 3-ft. sections including base support, roof housing, flashing, rain cap, and cement to install. NFA accepted. Approved for use with all fuels. Fits one or two stories. Acid-proof tile lining. BOOTHS 148, 149.

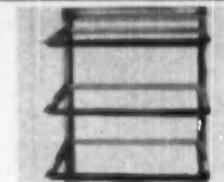


AB2050—Stainless steel wall tile. Stone Tile Corp., Washington, D. C. Tiles stamped from 28 gauge stainless steel capable of withstanding considerable abuse. Furnished in three finishes: satin plate, mill polished plate, satin embossed. Easy to install over putty-like mastic on new or old walls. Water and vermin-proof. BOOTHS 187, 190.

BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



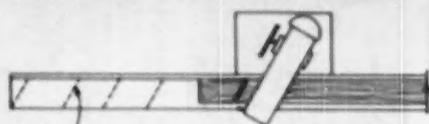
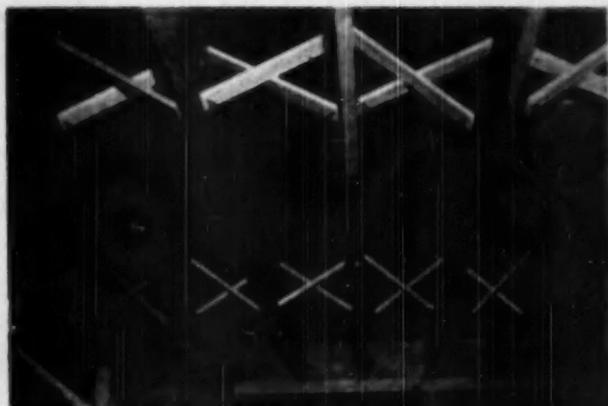
AB25082—Bi-passing closet door. Virginia Metal Products Corp., Orange, Va. Supplied complete, ready to install, with prima coat. Installation requires half-hour labor. Feather touch control slides passing doors on ball bearing rollers. Rubber bumper cushions of door (jambs, 3, 4, 5, 6-foot and 4 feet 8-inch sizes). BOOTH 142.



AB25021—Ware aluminum intermediate eaving type window. Ware Laboratories, Inc., 3700 N.W. 25th St., Miami, Fla. Designed especially for low, ranch-type houses. Has 100 degree ventilator opening which permits access to outside glass area for cleaning. Permits ventilation in inclement weather. Comes in standard sizes. BOOTH 39.



AB25093—Webster baseboard heating design. Warron Webster and Co., Camden, N. J. Planter view above shows copper-finned heating element and special hanger which supports metal baseboard and enclosure. Sponge rubber seal at end. 3 1/2 inches in height. Moulding and baseboard enclosure are metal for increased strength. BOOTH 65.



CUT No. 1

Pencil Marks to Position Rafter



CUT No. 2



CUT No. 3



CUT No. 4



CUT No. 5

BRIDGING, pre-cut, is made ready for assembly to insure with nails in place. Sub-flooring is pre-cut

TWO men operating on a team work at each saw. One is stationed at the saw, the other at the pile of lumber when the first cut, left, is made. Machine is set for ridge angle cut

TO make cut No. 2, the man at the machine swings machine to right until it stops at correct plate-angle position. When this cut is made both men walk to left and position rafter for next cut, aligning it to pencil marks which were made for each cut

CUTS 3, 4 and 5 are made by man who was not at saw for first cut. Angles for these cuts are quickly located by automatic stops positioned on the saw. This saves time and stops for men, who with this system, in Sulak's crew, cut 120 rafters per hour

Usually, Sulak uses two heavy duty radial saws mounted beneath portable frame sheds, and a third mounted on a trailer. The number of saws varies with the size of the project. These saws are lined up parallel to the building under construction. Sulak says that two of his men, carpenters who form a team for each radial saw, can cut 120 rafters every hour.

One man is positioned at the saw; the other at the lumber pile. The man at the saw makes the ridge angle cut-off at the top of the rafter as the first operation. He then swings the machine to the right until it is in the correct plate-angle position, located by an automatic stop.

Both men then pick up the rafter and walk to the left with it, where the man who was formerly at the saw now positions the rafter on the saw table at various pencil marks that have been made for the successive cuts. The second man at the saw finishes making the cuts, using automatic stops on the saw to quickly position for the angles.

While the man who aligned the rafter to the pencil marks removes the completed rafter from the table, the man at the saw goes back to the lumber pile and picks up a piece of lumber for the next cut.

While these saws are at work, at least two other operations in the building are underway, depending upon stages of construction. Work usually is concentrated at one end of the building so that a layout man and two assistants will not lose time. Position of men in the

American Builder, February 1950.



building, and the work they are doing, is coordinated closely with the progress of the radial saws. When outside walls are all cut, and assembly begins, these saws are cutting inside partition members. Plumbing openings and plaster grounds are all provided for so that when the framing crew leaves they do not have to go back to rough these in.

To add to speed and precision, this subcontractor uses power tools "wherever there's a place for them." Since work for his crew is confined to rough framing, power hand saws are used as well as the radial saws.



PRECUT subflooring is carried from the radial saw by one man as it is needed

American Builder, February 1950.



AE5024—Frost-free automatic defrost refrigerator, ADA-76, Westlock Electric Corp., 285 E. Fourth St., Mansfield, Ohio. A 14 cubic feet combination refrigerator-freezer with fully automatic rapid defrost system. Also equipped with Westlock's Sterilamp, meat keeper, butter keeper, and two ham-drawers. **BOOTHS 105, 104, 103, 102.**



AE5026—Washbasin No. 25, Westlock Mfg. Co., 1428 E. Evergreen Ave., Los Angeles 23, Calif. An oval-shaped 20 inches in diameter that can be used with any cylindrical lock set in Westlock line. Cast from brass or bronze in finishes of dull brass, polished brass, dull chrome, polished chrome and dull chrome. **BOOTHS 105, 104.**

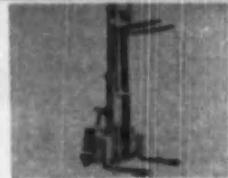


AE5024—Wolfender furnaces, Wolfender Furnace Homes, 778 Tacoma Blvd., Tacoma, Wash. Homes are produced in three models: three-bedroom unit, small two-bedroom unit, and large two-bedroom unit. Homes are available either with or without garages. Eastern sales office at 829 West North St., Milwaukee 13, Wis. **BOOTH 206.**

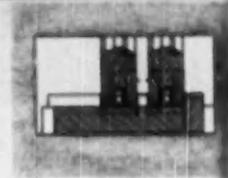
BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



AE5028—Slide-All sliding doors, Woodall Industries, Inc., 808 Oakton St., Skokie, Ill. Sliding doors made of tempered Plywood, complete with roller assemblies and tracks, for wardrobes, closets, and cabinets. Floor-to-ceiling design eliminates framing and plastering and increases usable storage space. Model on display at **BOOTH 191.**



AE5029a—Shred-it-type workover, Yale and Towne Mfg. Co., Philadelphia 15, Pa. Electric fork truck has power travel. Will lift and tie pallet loads up to 4,000 pounds. Heavy bar-steel frame members, equipped with tandem leaf wheels. Can be equipped with steel plate platform and remote bolt control. Short turn radius. **BOOTH 190.**

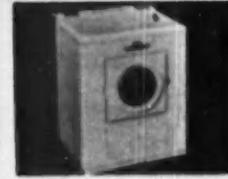


AE5027—Duro-foot combination metal weatherstrip and sash balance, Zagan Inc., 690 S. Chicago Ave., Chicago 12, Ill. Shown above, jamb section detail, using glass frame with metal parting stop, 1 1/2-inch arch. Jamb is entirely covered with metal, eliminating patch-work window. Channel members also house springs. **BOOTH 11.**

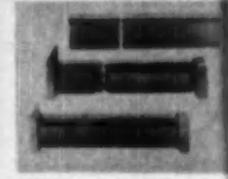
BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



AE5025—Insulux glass block No. 102, American Structural Products Co., Toledo 1, Ohio. A prismatic glass block designed for buildings in frequent-bright-sunlight localities. Recommended for schools, other buildings with large glass areas facing bright sun exposure. Similar in appearance to Insulux block No. 101. **BOOTH 14.**

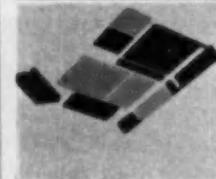


AE5026—Gramatic automatic washer Model G-311, Bendis Home Appliances, Inc., South Bend 24, Ind. Right or left hand door allows flexibility in planning laundry with this tumble-action automatic washer. Dyna-Large cylinder, Tumble Action, has increased cleaning action 18 per cent. Has water saving control to reduce water. **BOOTH 15.**



AE5028—Kritzer radiant heat board, Kritzer Radiant Coils, Inc., Chicago, Ill. Simplified installation takes only three steps. Coils, in ten feet sections, are of 2 x 9 1/2-inch aluminum Gus bonded to two 1/2-inch center, copper supply tubes. Coils float in hanging clips, promoting free air circulation. Model of the unit shown in **BOOTH 108.**

BUILDING PRODUCTS ON REVIEW—AT THE CONGRESS



AE5023—Taperone plastic tile A-1 Plastic Molders, Inc., 1415 Diversey Pkwy., Chicago 14, Ill. Has deep return, laid evenly over rough walls. Corrugated back doubles adhesive surface and makes tile easier. Blunt edges for butting and to avoid overlapping. Uniform color, covered base tile, cut corners. Has deep return. **BOOTH 10.**



AE5024—Tapan Stone Post, Abron Products Co., Seattle, Ohio. A post accepted by FHA. Support with device for minor adjustments at base. This device is covered with concrete when floor is poured, making other adjustments or maladjustments impossible. 3-inch outside diameter. Post of No. 11 S.W.G. galvanized steel. Shown **BOOTH 8.**



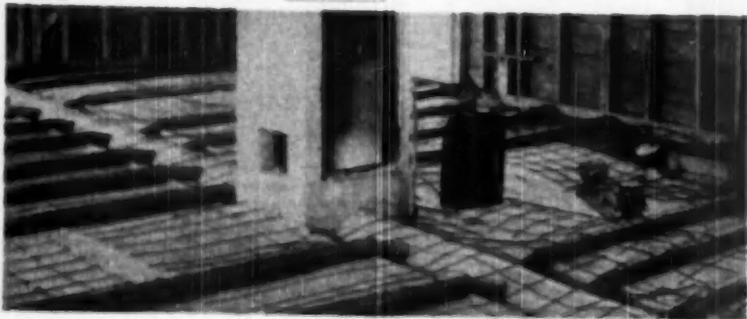
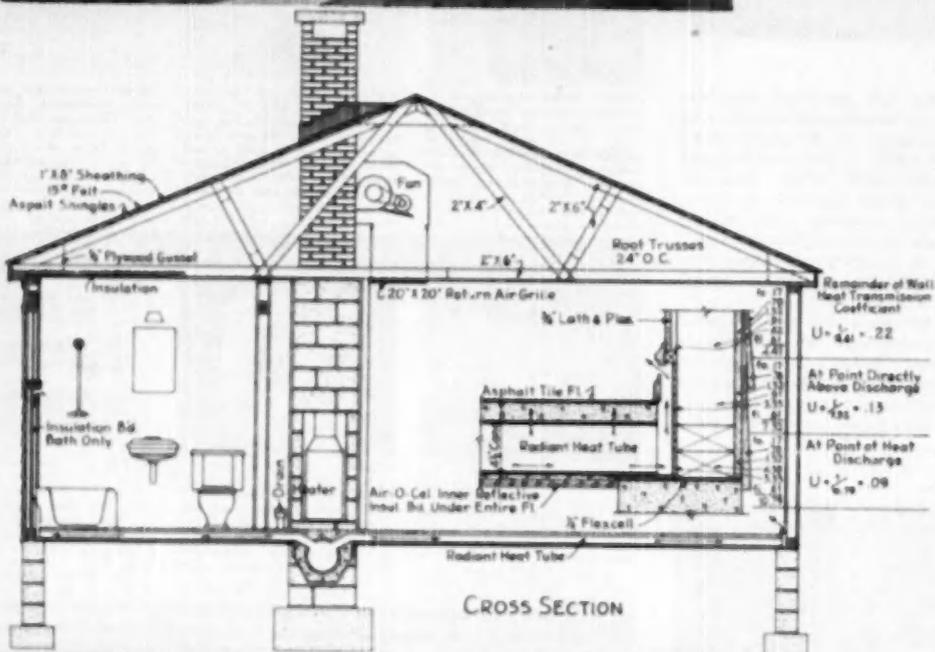
AE5025—Airfield metal sliding closed door unit, The American Welding & Manufacturing Co., Warren, Ohio. Savings in space, increased accessibility to closet contents, plus savings in initial construction costs are described as advantages of these doors. For 1, 4, 6, and 8-foot openings—two doors. Model on display at **BOOTH 6.**

Warm Air Distribution System Provides



SALIZ price of this model home built by Paul E. Schleicher & Sons, Inc., Gary, Ind., was \$9,250. Down payment was \$795, and monthly payments, \$46.15. Price included automatic washer and 18x125-foot lot, which had been fully landscaped.

FLANS of Schleicher's heat distribution method, below. Heat is forced down into large duct in center of floor and out through small ducts to continuous baseboard outlet around perimeter.



MAIN duct in center of floor is 12 inches in diameter. Small ducts are 3 inches. Concrete slab floor is 4 1/2 inches thick.

Even Heat

A builder-heating engineer successfully incorporates results of his research into a low-cost home venture

HHEATING has been of particular concern for several years to a home builder in Gary, Ind. Combining experience in industrial heating engineering with ten years of residential construction work, Paul E. Schleicher has devoted a sizable amount of his time to experimental work with heat. Today he believes he is using one of the most efficient methods he has worked with, so far, for basementless houses.

Schleicher is using an adaptation of a radiant-forced warm air perimeter system with a continuous baseboard heat outlet devised by himself. The baseboard outlet, about three inches above floor level, runs around the entire inside perimeter of the house. Heat is supplied to it through a duct heat distribution system, also devised by Schleicher (patent is applied for).

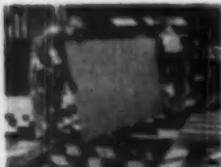
Warm air from an oil-fired counter-flow furnace is forced by fan into a duct, 12 inches in diameter, that runs through the center of a reinforced 4½-inch concrete slab. The heating system is located in the center of the floor, over the large duct. From this duct, warm air passes into 3-inch diameter pipes imbedded in the slab about two feet on centers. The heat then passes through the baseboard outlet into the rooms.

To form the continuous baseboard heat outlet, Schleicher leaves a space of approximately 1¼ inches between the concrete slab and the inside face of the studs. A reflective type of insulation is fastened to the studs from the bottom edge of the slab to a height of seven inches. One 1¼-inch wood block is fastened to each stud at the level of the finished floor, and one for each stud is fastened at a height of about three inches above the floor.

American Builder, February 1950



AE26005—Radiant glass heating system. Continental Radiant Glass Heating Corp., 1 E. 30th St., New York 16, N. Y. Heating by electricity passing through aluminum element fused in glass tempered for thermal shock. Glass of low conductivity not affected by water when hot. Zone Control for varying room temperatures. **BOOTH 22.**



AE26004—Plywood subflooring. Douglas Fir Plywood Association, Tacoma 1, Wash. This ½-inch plywood subflooring now meets FHA minimum property requirements. The panels meet all structural requirements; carry 100 pounds per square foot, uniform load, with 1/160-inch deflection for loads 18 inches on center. **BOOTH 34.**



AE26003—Weathered canopy. Androl Mfg. Div., Falls Stamping and Welding Co., 1780 First St., Cuyahoga Falls, Ohio. Aluminum doorway canopy finished in baked enamel with choice of gray, red, or blue roof and white trim. Slipped 60° dimensions: 68 inches wide, 32 inches deep, 13 inches high. Canopies made in six styles. **BOOTH 5.**

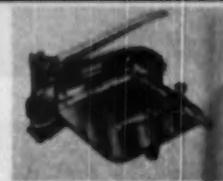
BUILDING PRODUCTS ON REVIEW—AT THE CONGRESS



AE26017—Formica decorative plastic laminate. Formica Insulation Co., 4815 Spring Grove, Cincinnati 32, Ohio. Laminite, 1/16-inch thick, is veneered to plywood to make the counter-top laboratory assembly. Wainscoting and paneling around tub are Formica Beauty-board, 5/32-inch thick and held in place by H-type drips. **BOOTH 21.**



AE26006—Gates rod type concrete form. Gates and Sons, Inc., 60 S. Galopole, Denver 9, Colo. These factory-made ties also act as spreaders within the form. A smooth steel rod is inserted through loops of tie on outside of form to hold in place. When forms are removed, wire is cut flush with concrete. On display at **BOOTH 17.**



AE26007—Floor tile cutter. J.M.J. Products Co., Ballaville, Ill. Model FT-1 cutter cuts cork, asphalt, rubber, plastic, floor tile, and laminated wood and accurately. Each angle up to 45 degrees. Accommodates sizes up to 12½ inches. Over-all magnesium construction. Weighs 19 pounds. Upper blade fabricated of special steel. **BOOTH 41.**

BUILDING PRODUCTS ON REVIEW—AT THE CONGRESS



AE26008—Leca-Letch permanent magnet latch. Laboratory Equipment Corp., St. Joseph, Mich. A latch without moving parts or springs that is trouble free. Works if doors are warped. Latches door freely but gently. Utilizes continuous energy of permanent magnet. Consists of magnet, special steel plate, and screws. **BOOTH 11.**



AE26011—Blue Ridge Louvre pattern glass. Libbey-Owens-Ford Glass Co., Toledo 1, Ohio. Pattern consists of parallel beveled surfaces one inch wide resembling louvers. For interior and exterior glazing, partitions, transoms. Sanded finish. Twenty other patterns available in this translucent glass. 93.4 per cent light transmission. **BOOTH 43.**

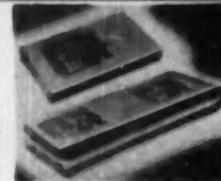


AE26012—Auto-Lok aluminum window. Ludman Corp., P.O. Box 64, Miami, Fla. Extruded aluminum sections. Weather-erected horizontally and vertically. Finished with removable inside screens. Locks automatically. Delayed action—bottom vent opens first. Provides ventilation in rainy weather. On display at **BOOTH 16.**

BUILDING PRODUCTS ON REVIEW—AT THE CONGRESS



AE26014—Masonite Panelwood, product of Masonite Corp., Chicago 2, Ill., covers walls and ceilings of this plywood. This is a 1/16-inch hardboard panel engineered for all types of wallboard installation. Similar to Standard Panelwood but of lower density and strength. Hens down with ½ joints at two-foot intervals. **BOOTH 2.**



AE26019—Fireproof Gold Sand Rock Wool. National Gypsum Co., Buffalo 2, N. Y. This rock wool insulation is now available in enclosed baths and sealed blankets. Both have breather covers on three sides, to hold rock wool in place, and vapor barrier to prevent passage of moisture. Has uniform density for maximum efficiency. **BOOTH 40.**



AE26021—One-Bar window frame. One-Bar Window Sales Co., Inc., 2189 Third Ave., N. Birmingham 1, Ala. Frames eliminate need for finished wood frame, stops, sill and casing—inside and out. Steel One-Bar window frame slides into standard stud framing before erection. Unit comes bordered with prime coat baked on. **BOOTH 10.**



FOLDING door separates living room from bedroom. Wood finish of closets represents quality workmanship stressed by this firm

with four inches of blown mineral wool.

In homes completed last year, the firm successfully used an oil-fired heating unit and flue incased in a brick chimney. In this system, a fan installed in the attic takes heat collected from the flue and fire pot in the chimney and forces it down into the duct distribution system. Cold air returns to a register located under the fan at ceiling level, and is blown back over the wide heating surface of the flue and furnace.

After thoroughly testing the efficiency of the heating system, and while their 89-home project was still in the planning stage, the Schleicher firm began to tell potential home buyers about it through advertising. Interested home-seekers could be shown several homes with contented owners where the heating system had already been incorporated. In some instances, temperature of the floor and room air varied as little as one degree. Shortly after the Schleicher 89-home project began in May, all the homes were sold; the size of the project increased, and the number of home sales for 1949 was over ninety.

Besides the heating system, other features attracted buyers. They liked the idea of a 3-bedroom home in the \$10,000 class with down payments of slightly over \$795, and monthly payments of about \$50. One of the bedrooms is separated from the living room by a Modernfold door, and if the third bedroom is not needed, ten feet can be added to the living room by merely opening the door. Fully landscaped lots, 50 to 63x125 feet, were included in the sales price. With popularity of his homes increasing, Schleicher is planning another 150 similar houses for 1950.

American Builder, February 1950.



AB2982—Aluminum roll-up Kitchcraft door. Orchard Bookens, Inc., 65 Meadow Rd., Butterfield, N. J. Space saver requires no swing area. Made of interlocking slats and operated by counterbalance spring roller at top. Rolls up and down on side rails to any desired position or to floor level. In variety of colors. To see, visit BOOTH 18.



AB2983—Revolver wardrobe Revolver Corp., 429 Alger St., Los Angeles 26, Calif. Closet built around revolving door. Additional storage space behind center mirror door. Two semicircular platforms mounted on door back. Shelves at sides. Similar unit equipped as personal locker for men's suits. Exhibit BOOTH 14, 15.



AB2984—Outdoor safety light. Lavelle Co., Inc., 20 Irving Place, New York 1, N.Y. Catalog No. 57 adjustable socket and MS-4 rubber gasket. Universally adjustable socket mounted on 14 gauge steel plate clips fixed at any angle. Finish: ultra-baked aluminum. Porcelain bakelite mechanism. Comes with 12-inch lead Exhibit BOOTH 23.

BUILDING PRODUCTS ON REVIEW—AT THE CONGRESS



AB2986—Thermador Electric Built-in range. Thermador Electric Mfg. Co., 5119 District Blvd., Los Angeles 22, Calif. Electric cooking top and electric oven unit made separately in various designs utilizing single coil, speeds, tilt-to-clean heating units. Shipped ready for mounting at any work level. BOOTH 16.



AB2988—Automatic windows. Vita Automatic Windows, Inc., 18 Park Ave., New York 17, N.Y. Double glazed picture window electrically operated attached to bronze screen that moves into place as glass disappears into wall. Window can be stopped at any desired point for ventilation. BOOTH 27, 28.



AB2989—Olympia vanities. West-ore Metalcraft, Inc., Olympia, Wash. Vanities made of rust-proof aluminum to withstand bathroom moisture. Plastic counters, rounded corners, touch latch doors. Choice of four colors: Pacific blue, coral coral, cascade green, and yellow. Baked enamel finish. BOOTH 15, 16.

BUILDING PRODUCTS ON REVIEW—AT THE CONGRESS



AB2992—Vermiculite plaster fireproofing. Zenolite Co., 118 S. La Salle St., Chicago 3, Ill. Used for fireproofing floors, roofs, columns, beams, girders and trusses, with gypsum plaster. Lightweight and this material provides as much as four hours fire protection to structural members. Easy to apply. At the Congress Exhibit, BOOTH 4.



AB2994—Disappearing ladder, model No. 15. Minnesota Wood Specialties, Inc., St. Paul Park, Minn. Low-cost model can be installed in any scullery opening 18 inches wide or wider with a room height up to 9 feet 2 inches floor to floor. Simple construction requires mounting two anchor blocks in attic floor only for installation.



AB2998—E-Vanience pan rack. Knaps and Vogt Mfg. Co., Grand Rapids, Mich. Keeps pots and pans out of sight out of way. Designed to fit all kitchen cupboards. E-Vanience is a chrome-plated future fastening underneath the cupboard itself. Holding pots and pans and 14 books, rack rises in and out on easily operated ball-bearing carrier.

BUILDING PRODUCTS ON REVIEW—AT THE CONGRESS



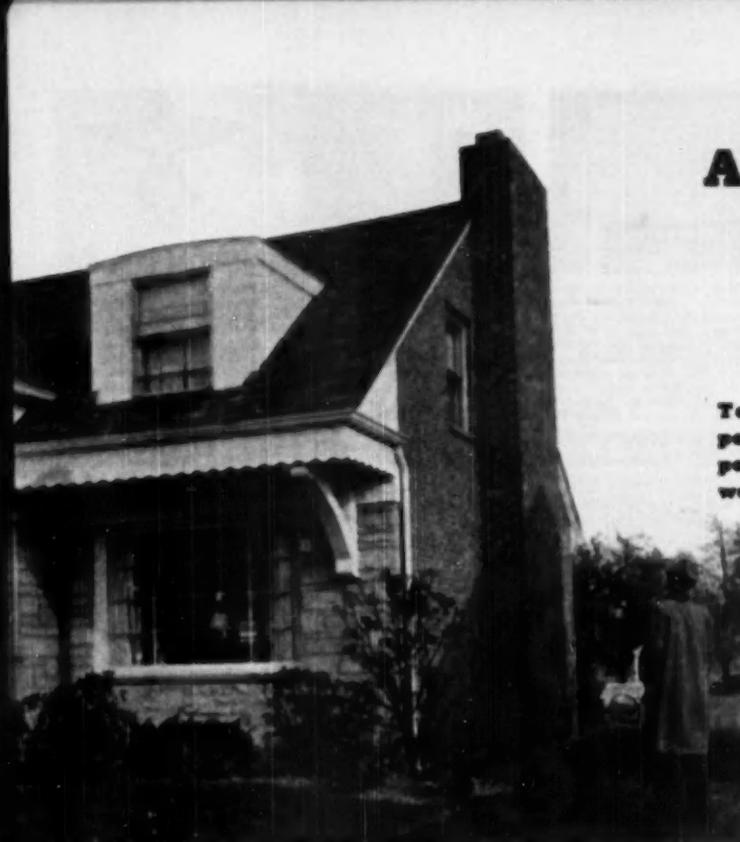
AB2997—Bell prime mover. Bell Aircraft Corp., Box 1, Buffalo 5, N. Y. A motorized wheelbarrow can carry 18 cubic feet in its mechanically operated dumping bucket. Sideboards, doors in photograph above, are removable. Capacity by weight is 1,000 pounds. Operates on tricycle principle, single rear wheel does turning.



AB2999—Perma-Stone exterior wall finish. Perma-Stone Co., Columbus 11, Ohio. A material end process for casting stone-like facing directly on prepared walls by use of patented moulds. Appearance of natural stone in texture and color. Laid in random, broken, or coursed pattern design. Basic material of this product is Portland cement.



AB2999—Win-Dor Jalousie hardware. Coomant Hardware Co., Chicago 22, Ill. Integral hardware factory assembled unit with weatherstripped brackets for sets of wood or glass. Nail-less and rattle-proof set retention. Concealed operator. All exposed parts are of non-ferrous materials. Can be used as interior and exterior partitions.



A Heating Man Looks at the Chimney

Too often inefficient and expensive heating is the result of poor chimney planning or poor workmanship with a good design

By
Guy A. Voorhees

Technical Secretary, National Warm Air Heating and Air Conditioning Association

the first place.

Of first consideration in the design of the chimney is the provision of an adequate flue area for the rapid removal of smoke and flue gas. The quantity of smoke and gases to be removed will depend on (a) the kind of fuel which will be burned in the furnace and (b) the quantity of fuel necessary to maintain the house at a comfortable temperature.

It is the heating contractor's responsibility to determine the heating needs of the house in order to correctly size his heating plant installation. After having designed the heating plant and, through consultation with the home owner, determined the type of fuel to be used, the heating man can specify the required inside dimensions of the chimney flue . . . either from his own experience or from data supplied him by the manufacturers of the equipment which will be installed.

Flues built to serve furnaces which will use oil or gas burners will not require as large flue dimensions as will furnaces which burn coal. In areas where hand-fired coal may be burned, either now or later, chimney flues should be sized even larger than theoretically required in order to offset the effect of soot accumulation. Continual depositing of soot on flue walls will naturally restrict the area of free smoke passage. Dr. A. C. Willard, president emeritus of the University of Illinois and influential factor in the establishment of the continuous warm air heating research program sponsored by the National Warm Air Association, *American Builder*, February 1950.

A MAJOR essential of good home building practice is the careful construction of a chimney which has been correctly designed to perform its intended function. This is the joint responsibility of the architect and builder—neither of whom would call himself a heating expert. Yet, if more chimneys were designed and built *after consultation* with the heating contractor, the number of home owner heating complaints would be materially lessened.

The fundamental purpose of a chimney is to remove from the house the products of combustion, smoke and flue gas, which have been generated in the heating units of the house. When built to serve a hand-fired coal or wood burning furnace, or one heated by a natural draft oil burner, the chimney should fulfill a second purpose; namely, to create enough draft to draw combustion air into the combustion space of the heater. Nothing either structural or decorative should be incorporated in the chimney which will prevent it from effectively and adequately serving these functions.

It is reasonable and logical that the heating contractor should serve as a consultant on chimney construction. The majority of house chimneys are

built for the purpose of serving central-fired home heating systems. Because the comfortable heating of the house is his direct responsibility, the heating contractor should have a voice in every element of construction which will affect the final performance of the system which he installs.

When a home owner with a hand-fired coal furnace complains to his fuel dealer that the coal he is using "doesn't seem to have any heat in it" or "doesn't burn properly" it is a prevailing practice, based on proved experience, to peg the chimney as the first suspect. Draft gauges and other chimney function-testing equipment are enjoying increased use among fuel dealers and heating men. These are proving more and more that poor chimneys are generally the cause of poor and inefficient fuel combustion. When the defects of faulty chimney flue construction have been proved to the new home owner, the general contractor can expect to find himself on the receiving end of vociferous complaints which have, in many cases, even led to legal action.

Chimney rebuilding is expensive. It is certainly many more times costly than it would have been to correctly design and closely supervise the proper construction of the chimney in

Heating and Air Conditioning Association at this University, recommends that in an area where hand-fired bituminous coal may be burned in a central heating plant, the nominal chimney flue dimensions should never be less than eight inches by 12 inches.

In addition to reducing the free area for smoke passage, soot accumulations in undersized chimney flues present definite fire hazards. Chimney fires originate at the bottom of chimneys when soot ignites. Burning rapidly and intensely, such a fire will generate such a high pressure inside the lower part of the chimney as to practically spout the burning chunks of soot out of the chimney and on to the surrounding roof area.

The height of the furnace flue is also an important design factor. This is particularly true when there is a need for "natural draft combustion" as in the case of a hand-fired furnace burning solid fuel. The chimney serving this type furnace must provide strong enough suction to draw air into the combustion space and up through the bed of ash and fuel.

If the heating system is designed for use with solid fuel burned in a stoker, the stoker fan will supply the forced draft pressure necessary to supply the needed combustion air and force it up through the fuel bed. The chimney need supply only the amount of draft necessary to remove the flue gases from the furnace.

An oil burner of the type operating on natural draft will require chimney suction strong enough to pull the air into the combustion space in order to support the burning of the fuel. The oil burner equipped with a forced draft fan will provide its own combustion air and the chimney draft need be only enough to vent products of combustion from the upper part of the combustion chamber to the outside.

Draft intensity of a chimney is dependent on (a) the difference between the temperature of flue gases inside the chimney and the temperature of the outdoor air and (b) the height of the chimney.

The greater the temperature difference between the flue gases and the outdoor air, the stronger the draft. That is why a chimney located somewhere near the center of the house where it is not exposed to winter chill until it rises above the roof will provide a stronger draft than an outside chimney which is exposed to the weather on one or more sides. Cold, dense flue gases collected within the flue confines of an exposed chimney, blanket the venting of the furnace and can result in fumes and smoke



AE20018—Apex Dish-A-Matic Sink. Apex Electrical Mfg. Co., Cleveland 19, Ohio. Incorporates electric hot water heater within unit. Capacity complete service for six. Has high velocity cleaning action, forced-air drying, self-cleaning tub. Dimensions 48 1/2 x 36 inches. Heavy duty outer with safety switch.

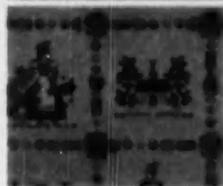


AE20019—Strand overhead garage door. Detroit Steel Products Co., 2101 Griffie St., Detroit 11, Mich. Self-insulated one-piece steel door. Requires 2 1/2-inch headroom. Rubber weatherstrip seals bottom when door is closed. For openings 8'7" and 10'7" feet. Door is filled with heavy springs. \$200RS 21, 23



AE20020—Gas range, builder model No. 7-65. Hardwick Stove Co., Cleveland, Tenn. AIA approved for natural, manufactured and LP gas. Storage space provided by overhead bin with swing door. Swamish Mounting. Castor leveling legs, jammed grate, drip bowl. Drop-door broiler with sliding pan.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AE20017—Stendura soil-proof water-covering. Imperial Paper and Color Corp., Glen Falls, N.Y. Household stains—grease, ink, candy spots, iodine, lippen stains—can be removed with soap and water or with cleaning agents, including bleaches. All color particles and paper sealed with synthetic resin. In many colors.



AE20021—Universal Mailbox. Penn-Gray Mfg. Co., Minneapolis 11, Minn. In size different design, four with vertical and five with horizontal openings. This metal chute fits any wall thickness from 5/8" inches to 2 1/2 inches. Inside cabinet door is furnished in either birch or oak. Push button for bell optional.



AE20022—Incliner model 5-10 L.R. Bowen, Inc., Insulation Division, Cairo, Ill. A gas-fired household inclinator for use with bottle (L.R.) gas. Holds two bushels of wash. Capacity 12,000 B.T.U. with simple, ribbon-type burner. Ash drawer under cast iron grates. 35 inches high. Approved by AIA.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AE20016—Bantam boiler-burner unit. Aldrick Company, Wyoming, W. Rated at 100,000 B.T.U. per hour output. Overall dimensions: 36 1/2 x 46 inches. 14 vertical fire tubes. Bantam is equipped with removable domestic hot water coil to furnish three gallons per minute. Wiring, circulator, valves, optional.



AE20023—Horizontal low-cost hot water boiler. Deery-Shepard Boiler Co., 1311 M. Capital Ave., Indianapolis 2, Ind. Fired interchangeably with breeze or gas-fired equipment. 70,000 B.T.U. Recovers 91 gallons of water per hour at 87 degree rise. Outside dimensions: 18 1/2 x 19 inches.



AE20024—KitchenAid hump dish washer, model ED-16. Hobart Mfg. Co., Troy, Ohio. Stripped-door model for undercounter installation. Also available in cabinet. Porcelain enamel tub with stainless steel fittings. Revolving wash arm with six openings. Two rinse operations. Capacity: service for 6 to 8 people.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



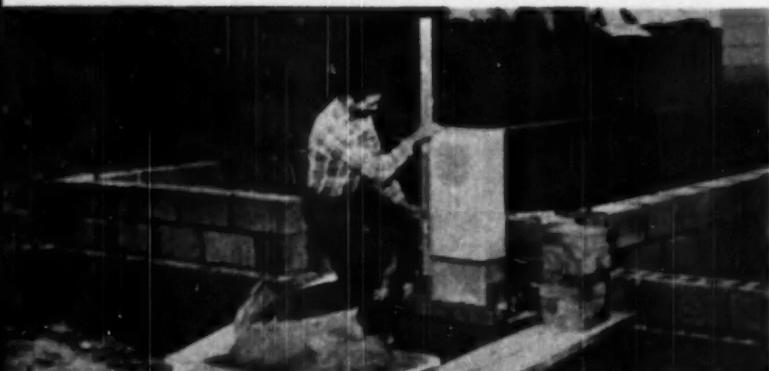
AE20007—NCD portable air compressor. DeVilbiss Co., 200 Phillips Ave., Toledo 1, Ohio. Weighing 22 pounds, this compressor delivers 7 1/2 cubic feet of air per minute at 22 pounds pressure. Furnishes smooth flow of air ample to spray without excessive finishing. Also for cleaning, spraying insecticides.



AE20006—Material handling loader. T. W. Tractormobile Corp., Deerfield, Ill. Powered by Allison-Chalmers engine. Designed for light construction and loading work. Steering wheels in rear. Short over-all length: 12 feet. 1/2 cubic yard bucket mounted over front wheel. Is hydraulically operated.



AE20008—Two-inch diaphragm pump. No. 52-AN. C. H. & E. Manufacturing Co., 200 North Palmer St., Milwaukee 12, Wis. This unit pumps 100 gallons at 5 foot lift. Maximum surface lift: 25 feet. 7 1/2 h.p. air-cooled engine. Swing-type valves, straight-line waterflow. Shaft pin runs in roller bearing.



TO ensure a straight, smooth-jointed lining, each successive length of lining tile should be positioned first and the supporting brick work built around it. Too often this is not the prevailing practice. In most cases the brick work is built up first and then the lining is dropped into position inside. The inevitable result is failure to get tight joints between tile sections and failure to properly fill space between lining and brick work

backing into the house.

From information supplied him by the manufacturers of the heating equipment to be installed, the heating contractor can advise the architect or builder as to the desirable height as well as the inside dimensions of the chimney flue.

The offset flue is probably one of the most prevalent structural faults in chimneys to which the problem of insufficient draft can be attributed. The necessity for creating offsets in keeping with design and structural demands of certain style houses is not to be denied. However, in a great many cases, chimney draft problems in offset flue chimneys could be eliminated by use of the simple ingredients of careful thought and skilled craftsmanship.

From the fractional standpoint, the furnace flue is certainly more important than the fireplace flue. Therefore, if the heater flue and fireplace flue are encased in the same chimney and if one of the flues needs to be offset, let it be the fireplace flue. Wherever possible the heater flue should be kept perfectly straight.

If offset of the heater flue is absolutely necessary, it is important that the angle of offset be not more than 30 degrees . . . and less, if at all possible. To make any heater flue offset greater than 30 degrees is to invite eventual combustion trouble in the heating system.

If the bricklayer begins his corbeling on both sides of the offset at the same level, the cross-sectional area of the flue throughout the offset is materially reduced. A bottleneck is created which increases frictional resistance and slows down the velocity of the flue gases, reduces draft in-

tensity, and volumetric capacity of the chimney.

To explain volumetric capacity: Even when carefully made, chimney offsets will create turbulence and friction. These two deterrent elements will tend to reduce the velocity at which combustion gases flow upward through the chimney. The more sluggish the flow, the greater will be the cross-sectional area necessary to carry the volume of combustion gases which the chimney must handle. Whereas the cross-sectional area of the straight part of the chimney may have been adequate to carry the volume of gases produced, the bottleneck created by an improperly constructed offset will reduce the entire stack capacity of the chimney. The draft, or suction, potential of the chimney is likewise throttled.

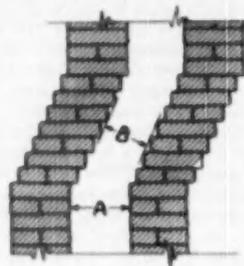
If a flue lining is used, a careless workman will all too often crudely knock off an end of the tile that is to go into the offset and insert it, exerting no effort to fill the jagged connection in the flue angle with a cement joint. Without properly mitered joints at the inclined section of the tile lining, chimney turbulence and frictional resistance are increased.

Because cracks may develop in even a well-built chimney, the National Board of Fire Underwriters recommends, and most city building codes require, a fire clay flue lining in the chimney. This fire clay lining should extend throughout the entire height of the chimney.

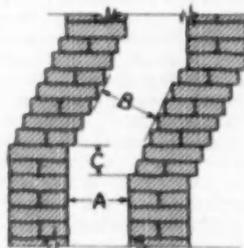
To assure a straight, smooth-jointed lining, each successive length of lining tile should be positioned first and the supporting brick work built up around it. This is not the prevailing practice, however. In most



IF it is absolutely necessary to offset the flue, the angle of offset should never exceed 30 degrees. Less offset is even more desirable for greatest venting efficiency



A COMMON structural fault which presents flue venting difficulties is an incorrectly-built chimney offset. If corbeling is begun on both sides of flue at the same level, diameter of the offset section (B) will be less than diameter of straight run (A). This creates a bottleneck, restricting the volume which the chimney will handle



THIS illustrates correct corbeling practice. Note that the bricklayer ran left hand side two courses of brick higher (C) before starting corbeling on that side. This makes the diameter of flue offset (B) the same as the diameter of straight run (A)

cases the brick work is built up first and then the lining is dropped into position inside. The inevitable result is a failure to get tight joints between tile sections and a failure to properly fill the space between lining and brick work with mortar.

The joints between successive sections of lining should be made tight and the mortar used throughout should be that which is commonly identified as *cement mortar* rather than lime mortar. Various proprietary

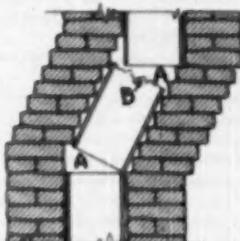
American Builder, February 1950.

masonry cements now available seem to be completely satisfactory.

The objection to so-called lime mortar arises from the fact that many fuels contain sulphur which, after burning, shows up in flue gases as sulphurous or sulphuric acid. Lime is more susceptible to attacks by these acids than is cement and in time will disintegrate, leaving leaks in the chimney.

Since draft depends upon temperature differences between the interior and exterior of the chimney, any air permitted to leak in at any place will reduce the inside temperature and kill draft. Leakage is one of the most common flue troubles responsible for causing furnaces to smoke out of feed doors.

Officials of the National Warm Air Heating and Air Conditioning Association invite architects and builders with problems or questions about warm air heating methods and system designs to contact them. In the interest of enabling home owners to obtain maximum efficiency and enjoyment from their warm air heating systems, the association, located at 145 Public Square, Cleveland 14, Ohio, is always eager to counsel designers and building contractors on warm air heating systems.



CARELESS installation of flue lining in the inclined section of the flue creates unnecessary turbulence and friction areas. (A) and (B), which retard the natural flow of the flue gases out of the chimney



PROPERLY mitered joints where the flue lining sections join at both top and bottom of incline retain full flue area and reduce turbulence. All lining joints should be made perfectly smooth and tight

American Builder, February 1950.



AB2000—Automatic closed light switch. Bar-Lite Co., 200 S. Chestnut Ave., Chicago 24, Ill. Inexpensive switch is connected to control socket by 4 feet of cord. No splicing, carpentry, or electrical connections necessary. Control socket plugs in light socket; automatic switch fastens to door top.

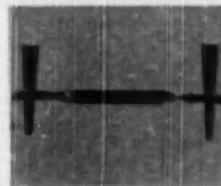


AB2001—Adhesive A-1. Armstrong Products Co., Burton, Ind. This organic adhesive joins metal, glass, ceramics, plastics, wood, and other rigid materials. Contains no volatile solvent. Solids composition sets up to rigid solid. Can be used as gap-filling material. Cures in 24 to 36 hours at room temperature.



AB2002—Barco Speed Vite, of Barco Fast Company, Detroit 1, Mich. Holds any type workpiece—wood, metal, plastic—in firm, rigid position. Portable or permanent, vice attaches to any type work bench with three screws or bolts. Suitable for sawing, planing, drilling, filing, sanding. Will not rust.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AB2003—Concrete form spreader. Farn, Box 198, Wichita, Kan. Spreader fits are used with regular 1½-inch form lumber. Spread 16 inches on center. Keys (seen in picture above) are knocked out of tie and when forms are to be stripped, tie end, snapped off with twist, seizes 1/16 of an inch.



AB2004—Oil-fired wall furnace. H. C. Little Burner Co., San Rafael, Calif. Units light themselves, do not interfere with wall to which carpeting. Not dangerous to children. Similar units available for flush floor or basement installation, gravity or forced air type. Electric ignition precludes need for pilot.

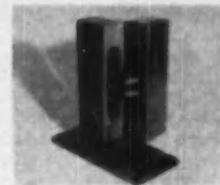


AB2005—Gasket cutter. Zimmerman Packing Co., 2200 Highland Ave., Cincinnati 12, Ohio. For dirt, gaskets, and similar cuttings down to ¼-inch diameter, straight strips of any length, curves of any shape in pliable sheet materials. Molded flexible body with sharp blade protruding at one end.

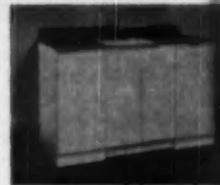
BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AB2006—Stackin sections. Stackin Corp., Pawtucket, R. I. Interlocking steel units of two to six bins each. Made of heavy gauge welded sheet steel and finished in baked green enamel. Base and counter top are available. Made in five sizes from 4½x17 inches to 11x36½ inches. Hopper front bins.



AB2007—See invisible hinge. See Mfg. Co., Detroit, Mich. Hinge has no protruding hinge butt, is mortised in door and jamb, hidden from view. Allows flush, smooth, streamlined interior effect. Makes household cleaning easier. Operates on hardened steel roller bearings. In various hinge sizes.



AB2008—Midwest packaged steel kitchen. Midwest Mfg. Co., Galesburg, Ill. Package includes sink and matching wall cabinets (not shown). Cabinets have 4-inch aluminum-covered backings, all-steel tops covered with linoleum, and porcelain bowls. Size 54, 66, and 72-inch widths. In four colors.

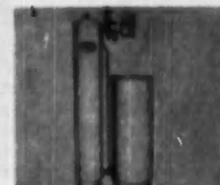
BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AB2009—National art baseboard. National Radiator Company, Johnstown, Pa. Shown above, Type 8F for flush-to-wall installation, Type 8B for semi-recessed installation. Designed for use in place of customary baseboard and cedar plaster. A combination of radiant and convected heat. Safe for children.



AB2010—Series F100 "Vacuum-Burn" oil-burning winter air conditioner. Norga Heat Div., Borg-Warner Corp., Detroit, Mich. Air and oil are pulled into atomization in perfect proportion to burn completely in stainless steel lined combustion chamber. Available in two sizes: 9,000 and 12,000 B.T.U.



AB2011—Eversoft electric automatic water softener. Southern California Engineering Co., El Segundo, Calif. Constant and unlimited supply of softened and filtered water at all times, regardless of how much or how frequently water is used. Unit regenerates itself at night. Plastic lined tank.

BOCA Performance Code

By John Weinhart

Vice Chairman, National Association of Home Builders Committee on Building Codes

Offers Solution to Complicated, Costly Building Code Problems

ONE of the most significant forward steps in building code development in several generations was made late in 1949 when the Building Officials Conference of America completed writing and adopted a new basic building code. If this were an ordinary code, its completion would not be a forward step nor would it be significant because we have had material specification building codes, which have been tagged as obsolete, for years. This new BOCA basic code establishes minimum performance standards, and does not specify materials, thus finally bringing to the industry a code which automatically accepts new materials and methods just as soon as they have passed standard performance tests conducted by a recognized agency.

A building code, such as the new BOCA basic code, can never become obsolete because it sets up performance standards for strength, fire resistance, sanitation and similar factors. As long as a material or combination of materials performs to satisfy minimum requirements, it must be accepted, regardless of whether it has been on the market for a century or only since yesterday. A great many of the 2,200-odd specification codes now in use throughout the United States automatically bar many new materials and methods because of the inertia of local code authorities, plus the difficulty of obtaining amendments to the codes to accept the material, plus the opposition of unions and competitive producers and distributors. Light gauge steel, reinforced gypsum, light weight aggregate masonry block, plywood and metal skins for house walls, resin bonded blues, prefabricated plumbing panels, BX electrical cable and new insulating materials are denied to the residents of hundreds of cities although they have been proved acceptable in laboratory tests. If the new BOCA uniform basic performance code can be adopted generally to replace the obsolete specification codes, these problems of acceptance on new materials and techniques will be largely eliminated.

Late in 1948, the BOCA adopted an abridged edition of the basic code to satisfy a demand from smaller municipalities. One free copy of this abridged performance code was made available to every incorporated city or village. More than 2,000 were distributed and hundreds of municipalities have adopted the abridged code. The abridged edition deals with structures up to three stories in height and has proved an unusually practical document for cities up to 25,000 population. The recently completed basic code is an elaboration of the abridged edition, closely correlated with it, so that the latter can be enlarged by merely adding sections from the unabridged basic code.

Each community which chooses to adopt the basic BOCA performance code must amend the uniform draft before adoption to establish minimum requirements which vary, as a rule, with soil conditions, climate, topography and weather. These local code variations are minor in relation to the over-all basic provisions of the code.

It was five years ago that the Building Officials Conference of America decided that the hodge-podge of building codes in the U.S. and the haphazard manner of revision should be eliminated. At the same time the group adopted a vigorous program aimed at promulgation and adoption of a uniform national building code. With the assistance and full cooperation of the best engineering talent in the country, the new basic code was written. While more than 630,000 man hours was spent gratuitously in writing the code, almost \$100,000 was spent in travel, office and clerical expense. A committee headed by Luther Boggs, of Atlanta, Ga., and the writer as vice chairman, represented the National Association of Home Builders in industry-wide sessions on the new code.

Further implementing the current movement toward uniformity in performance building codes was the organization in 1949 of a joint committee for unification of building codes, embodying representa-

tives from all the major code-writing groups. This committee was made up of representatives from The American Standards Association, Inc.; Building Officials Conference of America, Inc. and its affiliate, the Building Officials Foundation; Housing and Home Finance Agency; National Board of Fire Underwriters; National Bureau of Standards; National Fire Protection Association; Pacific Coast Building Officials Conference; Southern Building Code Congress; Underwriters Laboratories, Inc.; U. S. Department of Commerce, Construction Division. Four meetings of this joint committee have been conducted at which action was taken to establish uniform basic standards for definitions and terminology. The committee will continue to develop unification in the classification of all the groups of buildings, types of construction and other fundamental requirements.

When we realize that 47 per cent of the 2,200 existing codes in the U. S. have not been changed for 20 or more years and that the remaining 53 per cent with few exceptions, have undergone only minor variations in the same period, it is easy to understand why there is so much discouragement in developing cost-saving materials, practices and equipment in the building industry, particularly in home building. These old codes have not been changed to admit new materials and new techniques because their makeup forces such a herculean task on any individual or group wishing to even initiate a change, let alone make the changes. City officials, who, as a rule, know nothing about building or materials, call for an endless array of statistics, research, procedure details and requirements—all correlated to current accepted standards developed by years of practice and study. The most popular code revision technique is to take the existing code, review it, accept most of its provisions, changing only those specifications on which attention has been focused by pressure from an individual or group.

American Builder, February 1950.

The new uniform basic BOCA code can mean tremendous savings in volume production of standardized building materials, accessories and equipment. The new code establishes use groups for structures, uniform for all communities, so that if a building is intended to house a certain number of persons within any given area, the same standards prevail in all communities. The fire exposure test and fire resistance test on any given material or combination of materials is the same in Georgia as it is in Montana. If tests prove its qualifications for acceptance under the performance requirements of the BOCA code, then it can be used wherever the code is accepted.

Because this is a performance code, the testing techniques on new materials and combinations of materials is of especial importance. The plan is to have the existing Building Officials Foundation underwritten by manufacturers until it can become self-supporting. This BOF would become the clearing house which would submit materials, equipment and techniques to accredited laboratories for tests to determine their eligibility under the BOCA uniform code standards. This foundation would logically supervise the tests, assemble reports and make reports available to all interested groups. Work would be carried on closely with the U. S. Bureau of Standards, the Bureau of Fire Underwriters and other established groups issuing reports on standards and practices of interest to the building industry.

No building code, regardless of how good it may be, is enforceable unless it is backed by law. It must be passed on by the local governing body, which is made up largely of individuals with no experience in building or materials. Therefore, it behooves every individual in the building industry to educate himself on building codes and offer his services on local code committees to help the harassed politicians who are striving for the right answers to code problems. Many times there are selfish interests that must be investigated and properly classified regarding code preparation. This problem must be faced whether the interests are labor, material producers, politicians, real estate people or builders and contractors.

The Building Officials Conference of America is one of four prominent groups advancing codes for adoption. Others are the National Board of Fire Underwriters, the Pacific Coast Building Officials

(Continued on page 316)

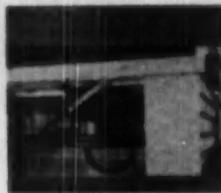
American Builder, February 1950.



AS2003—Level-lock scaffold clamp. Beacher-Lee Corp., Southport, Conn. Reduces accidents due to shaly, springs platforms. Holds planks in firm, level position. Makes walking easier, and reduces fatigue. Clamps available in single and double models, or may be built to specification. Easy to install.

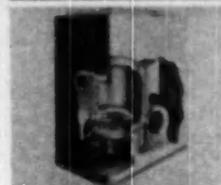


AS2002—White-Low portable power saw. Penberg Manufacturing Co., Bridgeport, Conn. Seven saws in one. It can be used as a rip, crosscut, saw, bevel, or rapping saw, and, when attached to White-Low table, it works as a band or jig saw. Weight, 3½ pounds. Cuts wood, bone, plastic, fibre board.



AS2001—Water Bay Railway hose. The Elston Co., Milwaukee 7, Wis. (It may be installed in basement or wherever there is 2½ inch space.) Hauls from 25 to 100 feet of hose automatically coiled to container. Hose outlet has will lock. Use any standard ½, ¾- or 1-inch or plastic hose.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AS2004—Rotary fired water air conditioning unit. Anchor Rod Products, Inc., Baltimore 24, Md. This new addition to firm's Fluid Heat Division is only 57 inches high, occupies 47½x20½-inch floor space, and fired with Fluid Heat rotary burner. Delivers 10,000 B.T.U.'s an hour of filtered warm air.



AS2005—Silver Streak vanishing door hanger and track, model No. 1011. Richards-Wilcox Mfg. Co., Aurora, Ill. For use in this wall-pocket built in standard 2½-inch studded wall. Also for use on parallel residential wardrobe doors ½-inch or more in thickness. Wheel is equipped with ball bearings.



AS2006—Magnetite tube hammer. Tube Hammer Manufacturing Co., Pasadena, Calif. New type tool for nailing in hard-to-reach places. Nail is inserted in end of tube and held in place by magnetized hammer tip. Weighted handle is used to drive nail guided by tube. Made in 12-, 18-, 24-inch sizes.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AS2008—Paint brush cleaner. The Saragran Co., Boston, Mass. Kwiksoak, new all-purpose cleaner, is rapid softener of hard bristles, cleans freshly-used brushes quickly to permit change of color or storage. Cleaning is by soaking bristles and wiping on dry cloth. Will not harm hair or nylon bristles.

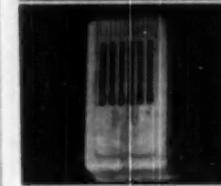


AS2009—Aluminum storm windows. Universal Fabricators, New York, N. Y. Frames of Universal storm windows are extruded from 6055 aluminum. Air space between glass in glass between casements and storm panels is 1 3/8 inches for efficiency of insulation. Has air-insulated rubber gaskets.



AS2007—Shower. Speakman Co., Wilmington, Del. "Floating Seal-Fast," a feature of Speakman Sentinel showers, maintains discharge of water of a predetermined temperature. Works automatically on water pressure alone. Can be removed for inspection or cleaning without tearing off water.

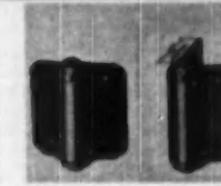
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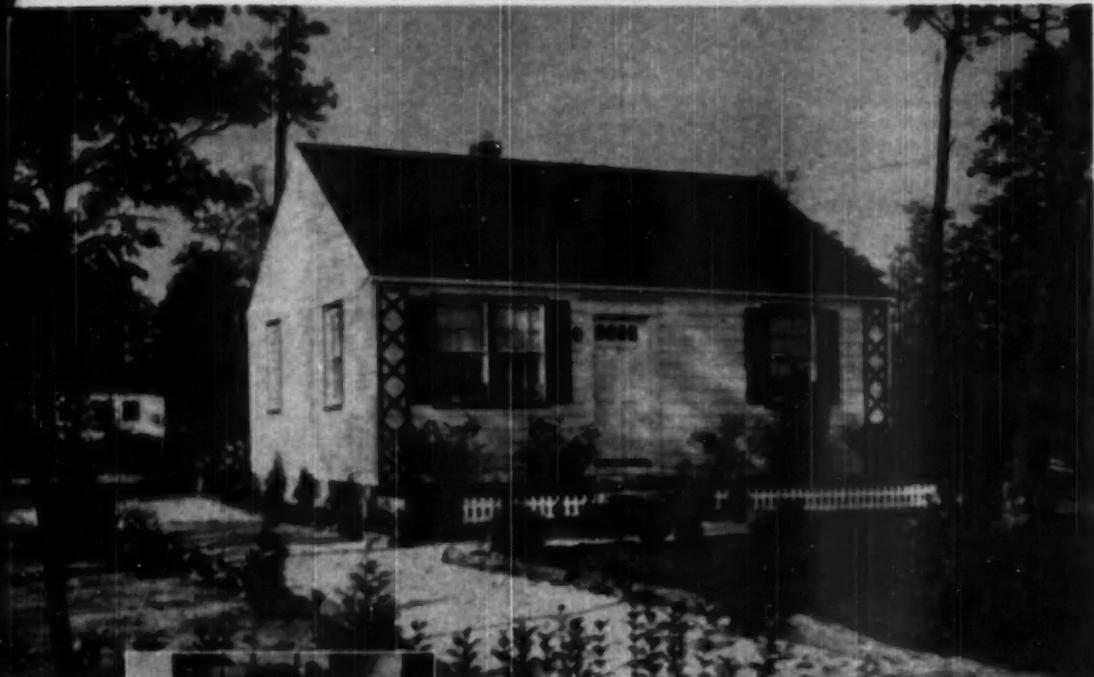
AS2000—Door bell. Cubic Electric Products, Inc., Providence, R. I. "Snapp! Melody Bell" features use of tone bar, with a resonant sound resulting when bar is struck by oscillating motion of chime. Bell is housed in ivory plastic case, 4x7½ inches. Attachable to wall without special tools.



AS2008—Home incinerator. The Clear Manufacturing Co., Butler, Wis. Metal parts of Little-Clearer are heavy cast iron. Has fire brick lining, asbestos board outer jacket. Jets of air enter at corners of unit to feed flames and aid combustion, both primary and secondary. Parts are easily assembled.



AS2006—Full and half surface spring hinge. National Mfg. Co., Sterling, Ill. Left above, heavy steel full surface spring hinge, No. 121, made in 3-inch size for other right- or left-hand use. For screws or storm doors, combination screen and storm doors. Right: similar hinge No. 124 for standard mortise.



ONE of the \$4,990 LoDolce houses erected on Long Island by Dolan & Lewis, Inc.



JAMES LoDolce, left, and son, Charles J.

Volume Achieved in Panelized Shell Houses

Long Island builder successfully merchandises low-priced, uncompleted units to the public and to speculative builders. Houses are FHA-approved and many of them financed under Title I Class 3 provisions

THE erection and sale of low-cost shell houses in Suffolk County, Long Island, during the last building season was an important factor in the large volume of housing completed in that area. A large portion of it was financed under FHA Title I Class 3 provisions.

One of the most successful operations catering to this market is the Long Island Houses and Lumber Co., operated by the father-and-son team of James LoDolce and Charles J. LoDolce, who are selling about eight units per week, ranging in price from \$1,375 to \$4,500 or \$4,850 including a lot. Their basic house consists of a living room, kitchen, two bedrooms and a bath. It is a wall panelized unit, precut and fabricated at a plant near East Patchogue, Long Island.

Wall framing is conventional

2x4 No. 1 fir with studs 16 inches on center. Sheathing for walls and roof is 5/16-inch fir plywood and subflooring is 3/8-inch fir plywood. Corners are braced. Framing is assembled on jigs, some of them up to 32 feet in length. Each side wall leaves the plant as one piece. When drop siding is used for the exterior finish, that is also applied in the shop. Windows are set in the jigs and the siding brought up to them. Windows are then lifted out and moved to the job site as separate units, where they are inserted in the openings and nailed in. Siding shingles, log cabin siding and other materials are used on exteriors besides the drop siding.

In addition to the wall, roof and floor sections, with windows and exterior doors, the basic house includes an oil-fired floor furnace,

kitchen cabinets, kitchen sink, electric wiring and fixtures, full bath and shower, bathroom cabinet, and assembled interior partitions with gypsum board. Flooring is asphalt tile. All ceiling gypsum board is



VIEWS of jigs in shop where house sections are fabricated. Sixty men are employed in this shop and on sites, producing and erecting an average of eight of these low-priced houses per week

applied and all interior walls in bathrooms are covered with gypsum board in the basic house. Insulation, interior doors, trim and paint are not included. This unit, delivered to the purchaser's site, unassembled, is priced at \$2,600. For \$295 more, the purchaser may buy a package from LoDolce containing the necessary materials to finish the interior including insulation for walls and ceiling, all molded window and door trim, base, and ceiling cove molding for the living room. The package also includes five complete door sets—jamb and doors prefinished with hardware attached. Sufficient paint and nails are also included.

LoDolce does a complete erection job for those purchasers who do not want to do the work themselves. In fact, most of the sales are made in that manner and are confined to sites within a 200 to 300-mile radius of the plant. The price of the basic house, erected and completed except for decoration, is \$4,500 without the lot. This includes a concrete block foundation, a 7x8-foot concrete block cesspool and a shallow well pump with an 18-gallon tank and 300-gallon recovery rate per hour.

The rapidity with which these houses can be delivered and assembled on the site has tremendous appeal to purchasers. The floors, walls and partitions are assembled, exterior doors hung and roof shingled on the first day. On the second day, the plumber is brought in to install rough plumbing and wiring is completed. The third day, after partitions are completed, plumbing appliances and kitchen cabinets are installed to finish the job. The well, cesspool and foundation are, of course, completed prior to start of house erection. The chimney is concrete block with a terra cotta 8-inch flue. The price on this job includes concrete stoops front and rear.



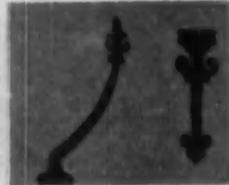
ONE side wall section of a house as it leaves the shop, ready for hauling to site



A82890—Three-guid shib, an insulation supplied as a part of M.S.P. clout tank, Mansfield Sanitary Pottery, Inc., Ferrysville, Ohio. Device consists of an adaptor wire or slinging yoke, clamp, and three bolts, used for fast installation. Rubber gasket sets as cushion between tank and bowl. Patent pending.

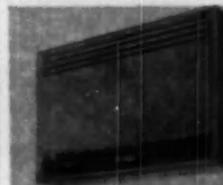


A82891—Steel wall tile with bonded guarantee, Ohio Can and Crown Co., Mason, Ohio. Guarantee provides protection against tile's chipping, cracking, crazing, peeling or ruffling. In 16 colors as well as glossy and satin finishes steel finishes. Can be easily installed without special skill or experience.



A82892—Dimensional biplane plate, Gros Manufacturing Co., Chicago 14, Ill. For use as residence entrance doors, these biplane plates are made of solid cast bronze or alclad aluminum, and are hand hammered. The high grade, artistic building hardware is designed to beautify any entrance to the home.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



A82893—Conveyor radiation, Medina Manufacturing Co., Racine, Wis. Four enclosure styles available in standard line, dimensional in modular units. Curved outlet grille is visible enclosure. Dampers equipped by touch of hand. When closed, danger conceals outlet grille. Removable front panel.



A82894—Terrace tile, The Robinson Clay Product Co., Akron, Ohio. Ideal for patios, terraces or walks, adaptable to porches or floors for garages. Weather-resistant, vitrified tile may be imbedded in ground or laid on the surface. No skilled labor or special equipment required for installation. Three sizes.



A82895—Tractor winch, The Oliver Corp., Chicago 4, Ill. Tractor winch may be installed on Oliver Model "77" or "88" industrial wheel tractor. Efficient operator for stump pulling and leveling, spot cut building. Winch gets power from tractor transmission. Speed varies from 30 to 477 feet per min.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



A82896—Fork-lift truck, Clark Equipment Co., Bufile Creek, Mich. Gravity-dump grading fork attachment applicable to all models of Clark fork-lift trucks of 2000 pound capacity. Handles bulk materials too large to pass through 7½-inch screen. Fork has ½-inch diameter removable tires on 1-inch casters.



A82897—Storm window of aluminum and steel, Eagle-Fisher Co., Cincinnati, Ohio. These units, put on the market this spring, have two metal bound glass inserts and an aluminum screen, all movable for weather control of all seasons. Telescopic channels for each pane. Frames permanently attach to sash.

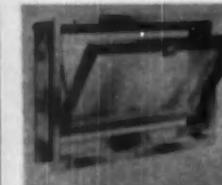


A82898—"Spiral" tubular spiral sash balance, The Caldwell Manufacturing Co., Rochester 4, N.Y. Can be installed while sash is in or out of frame. Can be adjusted after balance is installed. Only three or four turns required to tension balance. 2x4-in. sash. Full-five fitting cover Quiet operation.

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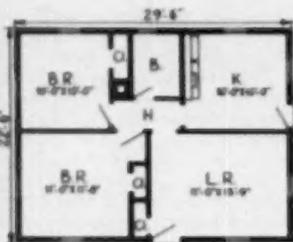
A82899—Skyline "Over-Lock" plastic wall tile, Skyline Industries, Titusville, Pa. Hard finished product weighs slightly more than average wall tile, features easy installation. Ties perforations in each flange force cement through to sealing tile, forming solid vinyl-head contact. Smart beveled edge.



A82900—Stainless steel ventilating window for glass block openings, Modern Stainless Specialties Co., Chicago 21, Ill. Heads and jambs designed for strength to support load. Tubular cast construction provides strength and rigidity to reduce glass breakage. Automatic metal to metal sealing.



A82901—Redwood plywood, 1/4 and 1/2 Wood Working Co., Portland 1, Ore. Above, Melborer beaded redwood plywood for interior paneling. Beaded with hot press process using phenol-formaldehyde resin to increase density and hardness, strong nail holding power. Wood has little shrinkage.

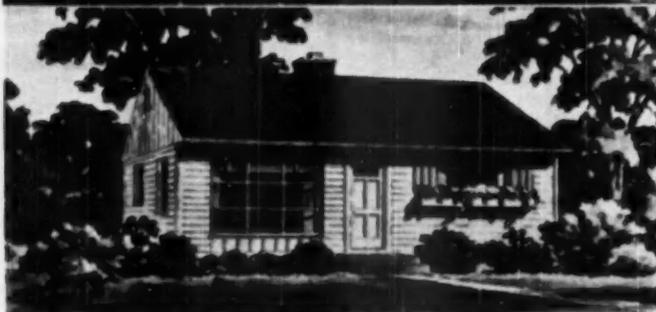


FLOOR plan of the basic LoDolce shell house financed under FHA Title I, Class 2. Local codes and zoning restrictions permit erection of houses in the Suffolk area.

TWO variations of the LoDolce houses being erected and sold in Oakhaven project on Long Island by Dolan & Lewis, Inc. Price of the basic house, 90 per cent completed, on a 73x150-foot lot is \$4,990. The model with the unfinished attic sells for \$5,540 in the same project. About 120 units were sold here by end of 1949.

The houses, designed by Charles J. LoDolce, are varied price-wise, with the cheapest a "Sunshine" house with no partitions, sliding windows, unfinished floors, sold as a package to be erected by the purchaser for \$1,275. The basic house, which has been described above, is advertised as the "Fair Deal" house. During the summer of 1949 a large volume of sales were made on the "Sunshine" house and also on the "Fair Deal" house to individuals and families who erected them as summer bungalows.

LoDolce will sell his houses to individuals, builders or dealers who may erect them in speculative projects or on order. The largest development of LoDolce houses is Oakhaven at East Islip, Long Island, promoted by Dolan & Lewis, Inc., developers. More than 120



1950 LoDolce house, which will be built with the same floor plan as the 1949 house.



PARTIALLY completed "Fair Deal" paneled house assembled over a full basement. Note plywood sidewalls and roof decking with bevel siding on gable ends. Sidewalls will be completed with wood shingle siding.



THE basic "Fair Deal" house which sells for \$2,680 delivered to the site, unassembled but including plumbing material and fixtures, kitchen sink and cabinets, floor furnace, partitions, gypso-board, insulation, interior door sills and interior trim. Erected and completed on the site, without lot, but including foundation, cess-pool, water pump, insulation and double walls, selling price of the house is \$4,500.

American Builder, February 1950.

houses were erected and sold there up to the end of 1949 and plans call for the sale of about 100 in 1950. The basic "Fair Deal" house is erected and sold 90 per cent completed on a 75x150-foot lot in Oakhaven for \$4,990, including the lot. Models with expansible unfinished attics in Oakhaven sell for \$5,340. These developers have been very successful in merchandising the 90 per cent completed LoDolce houses to low-income families, who take great pride in completing the small amount of work left to do such as interior decorating and a few exterior finish additions. The large plots provide plenty of outdoor area for children, in addition to gardens, flower beds and garages. A good proportion of the residents of Oakhaven commute to the New York vicinity for employment. For those who wish to live in Oakhaven and work close to their residence, Dolan & Lewis offer assistance in finding employment for them. Dolan & Lewis are planning a small shopping center at Oakhaven.

The LoDolce firm employs about 60 people in the plant and on house erection crews. Framing lumber and plywood are purchased in carload lots. A versatile crew of men from the plant are transferred to the building sites when work is unusually heavy at the sites. When work in the plant calls for more help, some of the men regularly on erection crews can be switched back to the shop to speed up work there.

Power equipment in the shop consists of four radial saws, one small hand saw, three table saws, one planer, two mortisers, three powered hand saws, two electric drills, and sharpening equipment for the tools. Four regular trucks and one 30-foot tractor-trailer unit are used for transporting materials and house parts. The large tractor-trailer unit is used exclusively to haul house sections.

In addition to fabricating house parts in the plant, orders are filled for precast material for contractors and builders in the area. LoDolces are also filling orders regularly for small prefabricated farm service buildings, garages and warehouses.

The Long Island Houses and Lumber Co. operation has grown steadily during the last two years.

The increase in business which followed Charles LoDolce's introduction of a model village to the public warranted the use of larger facilities and from there on the business grew to its present proportions.

American Builder, February 1950.



AE1027B—"Down-Flame" floor heater. United Air Heaters, Inc., Seattle, Wash. Unit is Underwriters' Laboratories approved. Empties forced draft. Brown-painted burner located at top. Maximum 32 inches in over-all depth. Output is 45,000 B.T.U. Has four-inch power blower. Outer casing of steel.



AE1028B—Flush paneled "Wedge-Tight" overhead sectional garage door. Caldwell Mfg. Co., Lancaster, Pa. Internal framework of wood is covered on both sides with external grade waterproof plywood. Common standard size is check, any design furnished on order. Doors operate on "Wedge-Tight" hardware.



AE1029B—Ford Engine 24 truck cylinder engine. Ford Motor Company, Dearborn, Mich. Largest Ford six-cylinder engine for series F-4 trucks available as optional equipment. Develops 110 H.P. and 217 pound feet torque. Has four-speed synchro-shaft transmission. Equipped with self-cleaning valves.

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AE1033B—Floor lock for material handling equipment. Rapids-Standard Co., Grand Rapids, Mich. Constructed of steel and arc-welded. Floor lock, in three models, is designed for use with Rapistan casters Nos. 238, 25, or 26. Weight varies from 2½ to 6 pounds. Heights from 4-11/16 to 7½ inches.



AE1034B—Sand-O-Blok for hand sanding. Marit Products, Inc., Los Angeles, Calif. Hand sander for sanding contoured, convex, and irregular shapes as well as flat surfaces. Has plastic wedge-shaped body. Rubber sleeve ranging in thickness from 1/16 to 1/16-inch thickness body and cushions paper.



AE1037B—600-G6 mechanism type burner. Republic Heater Corp., Los Angeles, Calif. One-piece unit of solid cast iron has adjustable air shutter for precise measurements to balanced retort chamber. Head pilot tip anchorage. Unit is to be attached to New Standard and Special models. Republic heaters.

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AE1038B—Tetri-O-Matic corner base unit. Lyon Metal Products, Inc., Aurora, Ill. Designed as practical storage unit where right angle turn is required. Revolves in either direction when either handle is released. Size: 18½ inches x 18½ inches high. Finish is white. Unit fits with other Lyon kitchen units.



AE1039B—Arabel lagging adhesive. Arabel Mfg. Co., 110 E. 42nd St., New York 17, N.Y. A plasticized synthetic resin emulsion for cover finishing on steam and hot water lines, boilers, tanks, cold water lines, air ducts and similar installations. Makes secure bond between lagging materials and insulation.

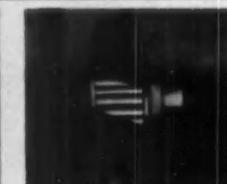


AE1040B—Flush panel garage door. Capital Products, Springfield, Ill. No nails used. Flush panels are electrically bonded to frame with waterproof glue. Ball bearing track rollers and sheave wheels. Slip joint track. Taper seal closing. Headroom requirements: 11 inches; special low bracket, 4½ inches.

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AE1041B—Automatic door-opening device. Actra Engineering Co., Pasadena, Calif. Can be installed without remodeling of doors, walls, or floors. Door opening is electrically initiated by writing on 1/16-inch floor plate either side of door. Air-operated and hydraulically controlled. Doors operate by hand.



AE1042B—Toront overhead garage door hardware. Toront Company, Paramount, Calif. Cutaway above shows Toront male pivot bearing. Unit contains steel shell which revolves in roller bearings. All hardware is installed on jamb, does not employ weight, tracks, cables, or pulleys. Steel trackball ball to jamb.



AE1043B—Semi-direct type trough lighting unit. Culler Light Mfg. Co., Philadelphia, Pa. Over 40 foot candles of diffused illumination produced in this installation utilizing six warm white cold cathode lamps. Deep crosswise louvers shield lamp from line of sight. Sides cut to lengthwise diaphragm.

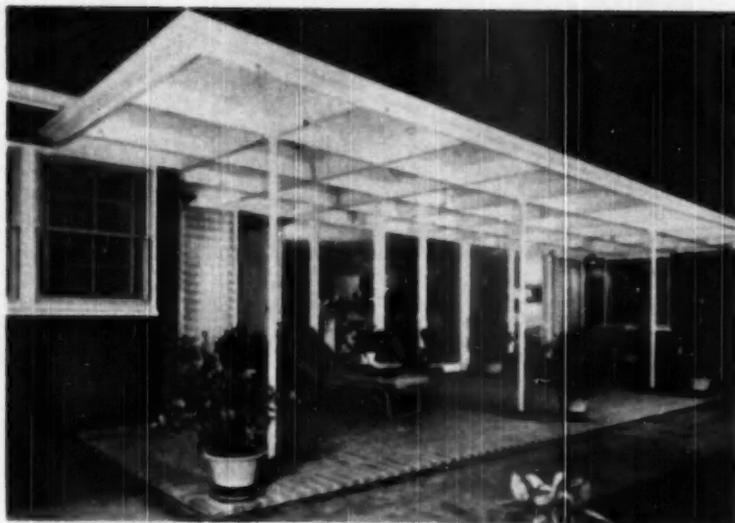
Engineered Conveniences for 20th Century Living

Installation of manufactured and designed-on-the-job convenience features produce added comforts for owner of ranch-style home



ANGLED wall with large-cased opening forms a portion of enclosed porch; this provides protection from inclement weather for the entrance door. Full length translucent glass panel admits light into entrance hall

VIEW of open porch at rear of house looking toward front. Sliding doors placed in center of window wall opens onto porch. Ventilation is provided by glass louvers placed at each end of window wall. Brick floor of porch is laid in basket weave pattern. White finish of trim and porch roof panels attractively contrasts the dark brown of stucco walls



THE Frank C. Sheldon place in Arcadia, Calif., is an example of how special features that are likely to be used in ever increasing volume can be incorporated into medium and high priced homes.

The modern ranch house of today, which has grown rapidly in popularity, extends its livable square foot space over a large area on one level. This has a tendency to widely separate the various zones of living, making it difficult for the occupants to easily communicate with each other.

When Sheldon, who is a general building contractor, planned his house he recognized this problem and made provision during its construction for the installation of a complete Teletalk intercommunication system. Combination receivers and transmitters were placed outside the front door, in the kitchen, in the master bedroom and in each of the other bedrooms. This arrangement makes it possible for the occupants to talk with each other from these various locations, and to answer the front door from anywhere in the house.

Another feature embraces the wiring of the radio so that reception is either kitchen or master bedroom



PLAYHOUSE for children is located in a corner of rear of property. It is used as a quiet house in an emergency



AB25004—Barbecue unit, Grillocraft Co., St. Paul 2, Minn. Sturdily built of heavy gauge steel with baked aluminum finish. Comes ready for use with Grillocraft portable steel cabinet or for installation in masonry. Control of heat accomplished by turning of a knob which lowers or raises fire basket.



AB25005—Slide-away disappearing stairs, Farley & Loetcher Manufacturing Co., Dubuque, Iowa. Set completely assembled, it requires one or two hours to install after ceiling opening has been framed. All screw holes are drilled to insure proper location of hardware. Ceiling panel is beveled.



AB25007—Horizontal water circulator, H. A. Thrall & Co., Para, Ind. Available in six sizes. Completely oil-lubricated pump bearing. Lubrication sealed in. Sturdy spring mounting. Patented flexible spring coupling. Ground and polished stainless steel shafts. Hot brass impeller and impeller plates.

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AB25008—Steel door frame, The Richmond Fireproof Door Co., Richmond, Ind. Furnished with one pair of steel butts welded to frame as well as a universal strike plate and dust box to receive latch bolt of tubular type lock. Shipped as unit, with proper anchors for type of wall construction to be used.



AB25009—Inalith fire-retardant salts, American Lumber & Trading Co., Chicago 4, Ill. Lumber or plywood purchased pre-treated in salts can be installed and painted as any other lumber. High or moderate fire-retarded treated lumber has same structural strength as other lumber. Odorless, nonstaining.



AB25010—"Reddy-Fit" radwood combination window, F. E. Schumacher Co., Hartsville, Ohio. Four-pane window with a universal opening frame, is designed to fit any standard opening without planing or trimming. Consists of two sash sections, one screen section, and a profile frame. Factory assembled.

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AB25061—Combustionless automatic coal stoker, Combustioneer, The Steel Products Engineering Co., Springfield, Ohio. Assures combustion of all volatile gases and carbon particles in coal without objectionable smoke. If shifting furnace or boiler is not in disrepair, unit quickly installed.



AB25063—Flo-Ever Vinylite plastic tile, Delaware Floor Products, Inc., New York 18, N. Y. In 1/2-inch size, available in full range of 18 marbled patterns. Non-porous, grease-proof, water, alkali, acid and fire resistant. Tiles will supply long-lasting beauty to any room of the home. Popular price.



AB25065—Revere-Keystone Three Wall Fastening Screws Copper and Brass, Inc. Provides positive mechanical bond in every direction in the mortar bed, assuring economical and permanent protection against stoppage and leaks. Does not require soldering at end joints. Easy to install. Length 4 1/2 inches.

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AB25064—Lesca insulation clips, The Lenington Supply Co., Cleveland 2, Ohio. Fast, satisfactory method for application of insulation to any sheet metal surface. Each clip consists of pointed, hardened steel shank, topped by broad, flat head for easy driving. Special tongue locks clip in position.



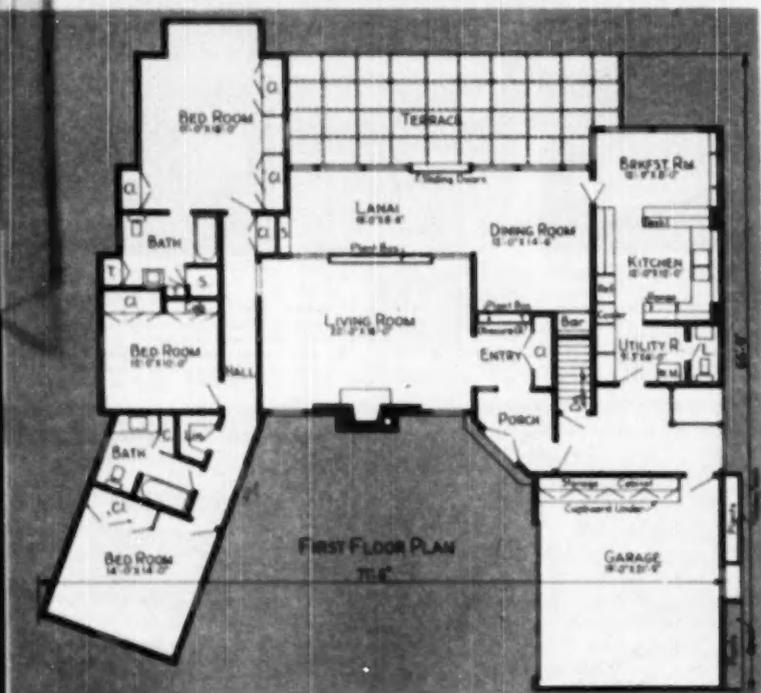
AB25066—Flat Built-in Cabinet shower, Flat Metal Manufacturing Co., Chicago 12, Ill. Designed to be completely recessed in bathroom. No. 79-B has an exposed metal panel. Door opening is framed with special stainless-steel plate that covers joint. Walls are bonded galvanized steel.



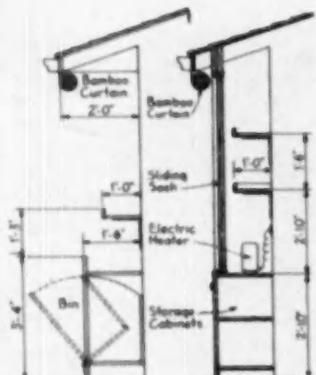
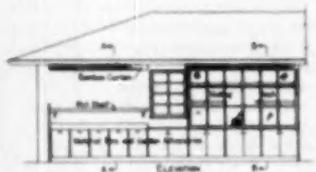
AB25068—No. 664 Beadybill Fireplace combination, The Beadybill Products Co., Baltimore 22, Md. Cast brick style facing, lining and hearth, suitable for gas heater or log. Copper hood over top of fireplace opening is optional. Purpose of hood is to deflect heat away from mantle. Height, 50 1/2 inches.



STREET view of house with San Gabriel mountains in the background. Garage driveway culminates in a paved forecourt providing access to garage placed adjacent to front entrance. Exterior walls are covered with stucco painted a dark brown with contrasting wood trim, blinds and trellis painted white. Roof is covered with cedar shingles.

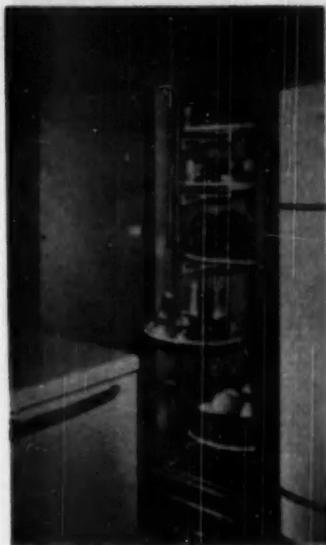


AN unusual feature of this plan is the lanai which is separated from the living room by a large planting box and is continuous with and a part of the adjoining dining room. Window wall separates lanai from rear porch. Quiet area adjoins living room.



SECTIONS and elevation of miniature hot house and work bench adjoining rear wall of garage.

American Builder, February 1950.



A TYPE of "Lazy Susan" made by Ducrest Products. The arms swing out and the trays can be rotated to bring the contents within easy reach. Cabinet is vented at floor and ceiling, and is dispensed

can be obtained by turning a switch when the living room radio is turned on.

The Touchplate electrical system is employed throughout. Two sets of relays are located in the attic and a bell wire runs from switches to relays. Small plastic plates that operate at a light touch are used in place of switches.



ONE section of hot house is left open. The other section is enclosed with sliding glass doors and heated with small electric heater when necessary. Bamboo curtain at outside rolls down for protection from sun



AE20057 — Bald-Way "W" floor sander. The Bald-Way Co., Cedar Rapids, Ia. Built around one moving part principle, revolving motor forms sanding drum. Redesigned with more pleasing lines, more rugged construction. Powerful lead light. Springs rubber motor and released directly to the drum.



AE20058 — I.G. electric ceiling ventilator. I.G. Electric Ventilating Co., Chicago, Ill. Features ease of installation and operation. Type Q for wheel combines full capacity, quiet operation. No radio or television interference. Automatic operation from wall switch. Large capacity, super quiet.

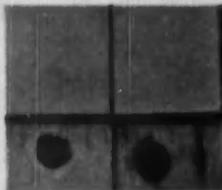


AE20059 — Deluxe custom-built rollings. Selman Manufacturing Co., Aurora, Ill. Built for any type porch, patio, sidewalk or driveway. Designed to give maximum service and beauty of a minimum cost. Simplified dimensioning procedure and "Stillo" dimension sketches make all rollings easy to order.

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AE20060 — Accentlight, wall mounted. General Lighting Co., Inc., New York 20, N. Y. Available in other mounting arrangements. Each has new Fermo-Tension swivel, enabling it to remain focused in any position, and an insulated handle. May be had in coral-red, grey-green, copper-white and white.

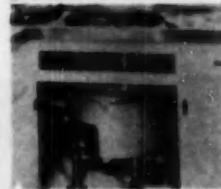


AE20061 — WP-675 Kest Insulator. Common grade pine can be used for siding if knots are covered with this insulator before painting. Prevents discoloration of painted surfaces by leaching of resins through paint. Formula available to any manufacturer. Write Western Pine Association, Portland 4, Oregon.



AE20062 — Selma-tila baked enamel decorative wall panels. Wallace Manufacturing Co., North Kansas City, Mo. Also material sold at Wal-tila, six tempered Mandala. Three designs in process are tile pattern, parallel-line, and smooth surface. Colors are peach, blue, green, yellow, ivory, and white.

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AE20063 — Jackson home dishwasher. The Jackson Dishwasher Co., Cleveland 5, Ohio. Requires 70 seconds time to wash and rinse load of dishes. Uses double-revolving spray method whereby water is pumped through swiftly counter-revolving jet sprays. Will fit in variety of kitchen locations.



AE20064 — Converter Radiators, Type F. Fodder-Quigan Corp., Buffalo 7, N. Y. Easily installed in living rooms, bedrooms, offices and institutions. Can be used with steam, and forced or gravity hot water systems. Can be used as free-standing unit or partially recessed into wall. Mandala style.



AE20065 — Gas furnace. Norman Products Co., Columbus, Ohio. Compact with Northern design port, self-piloting flame retention type burner and Norman design flame distributor plate. Worned air controls close to arched hot metal to obtain rapid transfer of heat. 75,000 to 200,000 B.T.U.'s.

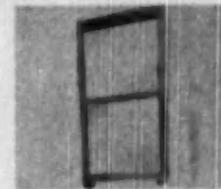
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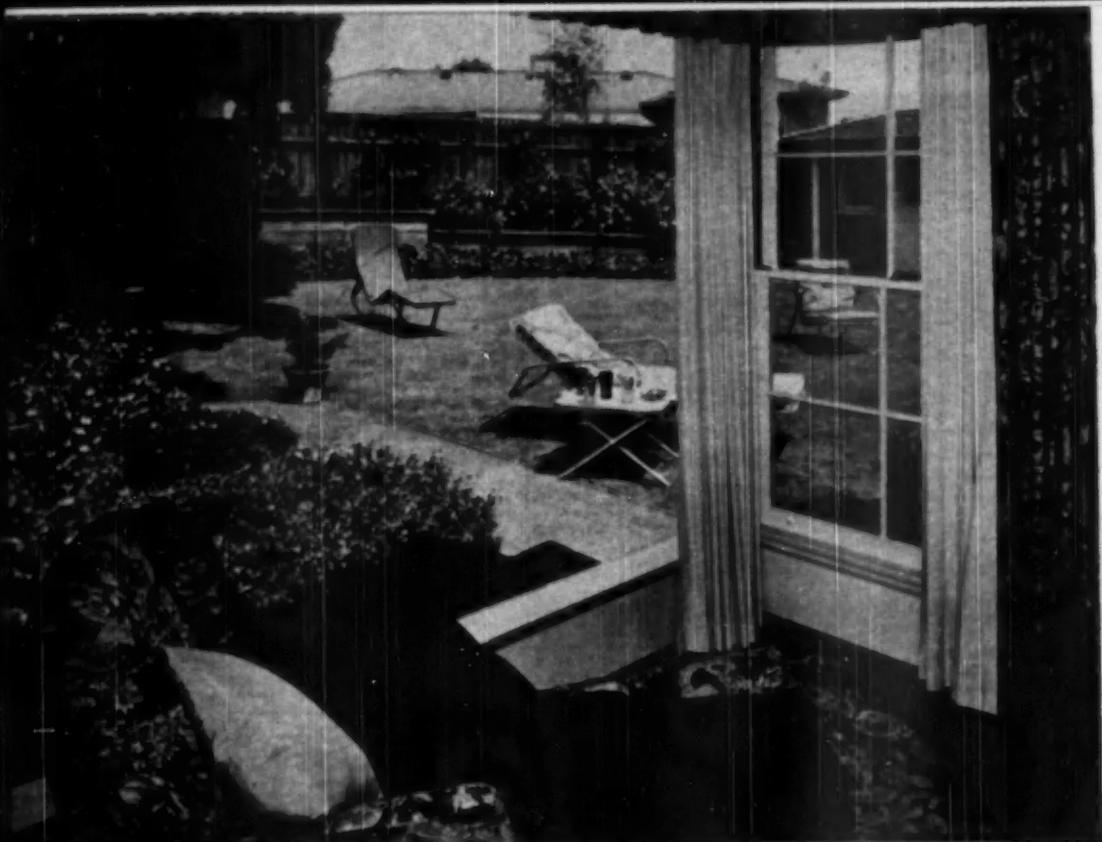
AE20066 — Aluminum self-heating "Security Sash" Security Co., Detroit, Mich. Standard sizes. Self-compensating glass and screen panels eliminates need for seasonal changes, refittings. Changing from storm window to aluminum screen and back again is as simple as opening and closing the window.



AE20068 — Superite ceramic gas burner. Perfection Stove Co., Cleveland 4, Ohio. Automatic gas safety pilot, gas valve, gas pressure regulator, thermostatic control, and convenient pilot igniter. Authorized to carry official AGA listing symbol. For use with natural, mixed, manufactured, L. P. gas.

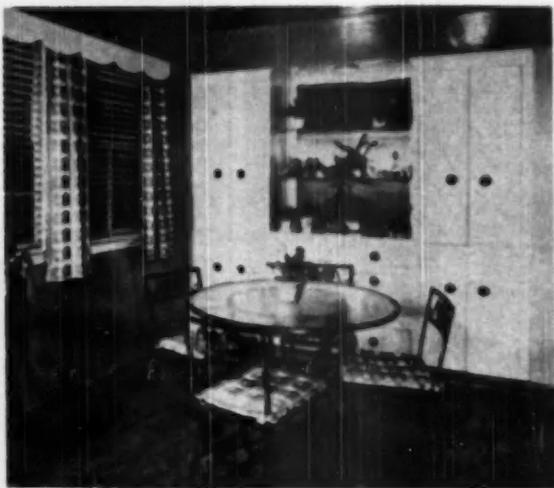


AE20067 — Metalart aluminum double hung windows. Metal Arts Manufacturing Co., Inc., Atlanta, Ga. Stainless steel hardware used throughout. In 48 sizes, eight finish arrangements. Tape balances on head of window provide finger-pull control. Screens concealed in sash optional at no extra price.



VIEW through large picture window of master bedroom showing landscaped area of rear yard. High woven wood fence extends along rear and sides of property providing a measure of seclusion within their own area. Planting area inside of rear fence is kept neat with the aid of wood barricade

VIEW in lunet below. This room is separated from living room by large planting box. Rear wall of lunet is entirely of glass with sliding doors in center of wall. Ceilings of both rooms are faced with three-inch-wide T. & G. boards painted a beige shade



VIEW in breakfast nook adjacent to kitchen. Additional cabinet space is framed around fixed translucent glass sink in window. Display space is provided by plate glass shelves in front of window. Interesting night effect is obtained by recessed light fixture in beam ceiling



A CORNER in the large kitchen showing a portion of the cupboards and Formica counters in this room. Built-in desk is an extension of counter at a lower level. In the wall over the desk is the intercommunication system. Adjacent is switch for radio

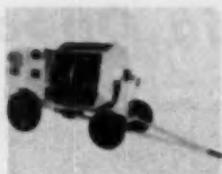
Every room in the Sheldon house has a number of manufactured or designed-on-the-job features. Storage walls, cabinets and cupboards are provided for every possible use. Drawers and shelves built into wardrobes take the place of loose furniture in bedrooms; towel storage with open glass shelves above are built into a recess in the bathroom. A storage cabinet on one wall of the garage provides space for seldom used articles.

The owners' love for plants and flowers are shown by the number of built-in flower boxes. A large free standing box forms a separation between lanai and living room; another is located in entry; still another is built into sill of kitchen window.



OPEN bar shows the interior finished in mahogany plywood including the inside face of sliding doors. Glass shelves above and cupboards below provide ample storage area. Copper sink is recessed into one end of the counter. Fluorescent light above turns on when doors are opened; exterior face of doors is finished to coordinate with the adjoining wood walls

American Builder, February 1950.



AR2006—Ten cubic-foot plecher and mortar mixer. Muller Machinery Co., Inc., Meluchen, N. J. Designed to supply from 40 to 100 plechary with sufficient mixed material. Tip over type. Mixing drum is 24 inches in diameter, 27 inches long. Wisconsin air cooled engine 18.7 H.P. at 2600 r.p.m.



AR2007—Scrape bar. Decatur Steel Products, Decatur, Ind. Designed to make easy the removal of old flooring, siding, sheathing, without damaging tongue and groove. Single thread release tongue side of board, then draw it outward, disengaging it from board. Length 26 inches. Weight 45 lbs.



AR2010—Quikrete beam former. Sanitary Refrigerator Co., Food de Lac, Wis. Metal band beams included with each unit. Steel, with white bonded finish. Fiberglas insulation. Lightweight table-top lids. Up to 600 pounds of food can be stored in built-in lock metal. Small model holds 600 lbs.

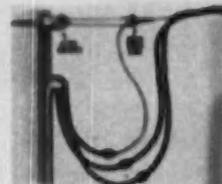
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AR2011—Fayette undercarriage assembly. Fayette Manufacturing Co., Fayette, Ohio. For special trailer or specific transport need. Capacity up to 4,000 pounds. For heavier loads, spring specifications can be changed or a tandem 4-wheel assembly adapted. Two hub and drum assemblies, 16 or 18-inch.

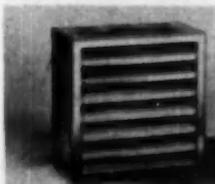


AR2012—Warp-resistant cupboard door. Wisconsin Laminating Co., Chilton, Wis. Plywood facing of three-ply hardwood bonded to rim of low density wood. Bonded with Bakelite (BCU-2) urea liquid resin glue. Gaps between facings prevent unevenness, provide interior ventilation. Stays flat under normal use.



AR2013—Service-drop automatic steel and for use with pre-assembled messenger-supported cables. Electroline Co., Chicago, Ill. Series 2000 assembled as one-piece unit. One end detachable for installation around spot-type insulator or other supporting anchorage. Fastener permits quick and easy installation.

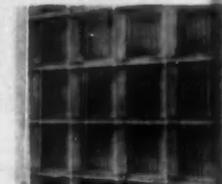
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AR2016—Wall ventilator for glass block. Air Ventilator, Inc., Chicago 11, Ill. Economy and utility models as well as standard ventilator. Economy model is six and eight-inch sizes, with stainless steel louvers on inside and outside. Utility model has glass louvers inside. Comes in sizes 4, 8 and 12 inches.



AR2016—VP Imperial double oven electric range model HD-42. The Centerator Co., Duluth, Minn. One of firm's new line of seven models. This range has push button Thermostat controls. Four-way automatic timer. King size oven plus 9 1/2 x 23-inch auxiliary oven. Other ranges include two apartment class.

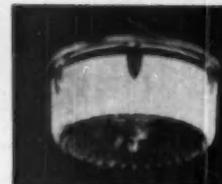


AR2017—Keston prefabricated glass block panels. T. Kirk Almond Associates, Van Nuys, Calif. Made up ready to install as single unit by setting into place. Panels may be installed in homes or other buildings, new or old, faced with wood siding, stucco, brick or cement block. True alignment.

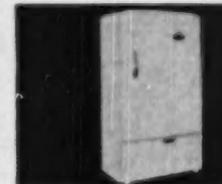
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AR2018—Ship oak flooring, published by The National Oak Flooring Manufacturers' Association, Chicago 1, Ill., is available in variety of sizes and grades; can be obtained unfinished or pre-finished. There is a choice between white oak, red oak, and square-edge and tongue-and-groove style flooring.



AR2019—"Budget" light fixture. Lightstar, Inc., New York, N.Y. Small size, enclosed close to ceiling fixture designed to use 40-watt bulbs safely. All wiring spread through aperture in directed knob carries extra heat and through second ventilation space at top. With one, two, and three lights.



AR2020—Letro-Moot refrigerator. A. J. Lindeman & Horvath Co., Milwaukee, Wis. Available in four models from 7.40 to 9.25 cubic feet, with a variety of equipment and features, incorporating adjustable shelves and door alignment. Freezer ice cube tray and hermetically-coated economical power unit.

MOTELS—A Big Opportunity for

By James V. Malone

Managing Editor,
American Motel Magazine

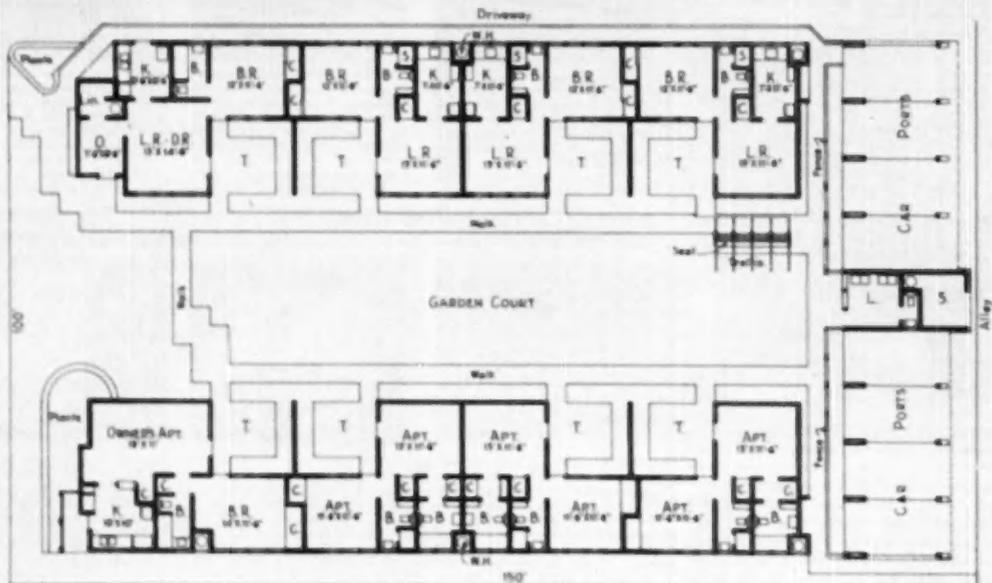
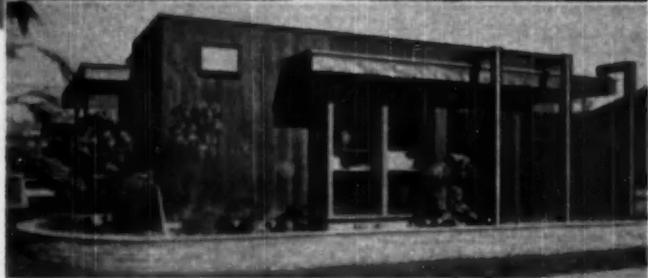
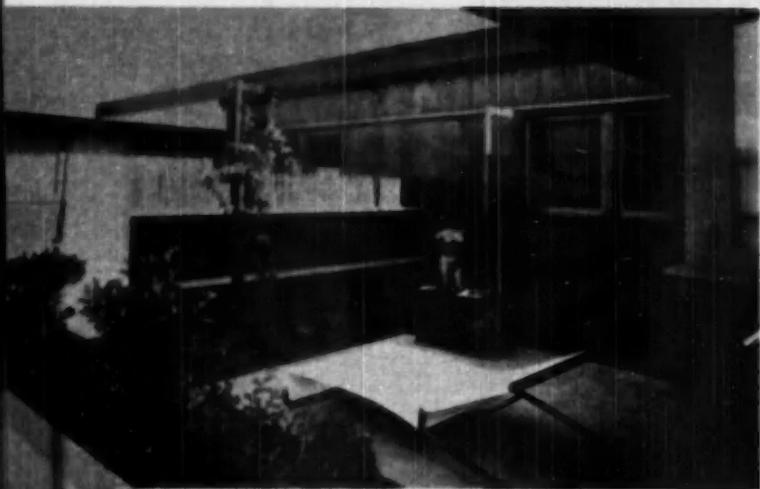
As popularity of these units increases, so increases the demand for attractive design, better materials and workmanship

ONE of the country's most rapidly expanding industries and one which is scheduled for its greatest period of growth within the next five years is the motel industry.

Some estimates show that there are now about 20,000 motels or tourist courts averaging 22 rooms each for more than half a million units. By 1952, according to these estimates it is expected that motel units will total 1,400,000, and that the bulk of these will continue to be in the luxury class with an average of 42 units each.

Luxury motels of the type now common in the south and southwest are growing in number in the north and east. Construction costs per unit

SPLIT redwood screen separates terraces at the Holiday Inn Motel, Long Beach, Calif. Exterior walls of these buildings are natural redwood, while attractiveness of the fronts is enhanced by the use of tinted glass. Trim is painted mustard green. Window frames are sage green



Builders

are variously estimated at between a low of \$1,500 to \$5,000, with one job in Dallas, Texas, now under construction, costing more than \$11,000 per unit. The newness of the motel idea and the speed with which it is growing is another one of those marvels of American public service which creates for the building industry an unrivalled opportunity. Motels are not only going in for the very finest in planning and materials but for the very latest developments in all types of building service: plumbing, heating, air conditioning, lighting, kitchen equipment, and, of course, for all the extras in furnishing and decorating.

A recent study by American Hotel Magazine shows that among existing motels 23 per cent have investments, exclusive of land value, of more than \$100,000; 36 per cent fall into the \$50,000 to \$100,000 class; and 30 per cent have investments of between \$25,000 and \$50,000. Only 2 per cent have investments of between \$10,000 and \$15,000.

Preference by travelers for motels is steadily increasing, according to American Automobile Association figures. In 1937 tourist court accommodations were preferred by only 12½ per cent of the motorists on the road. In 1945, this figure had jumped to 38 per cent. Since 1945, with the growth of better motel accommodations and capacity business still being done by motels, it is clear that preference for them has again been enlarged.

The average motel investment for 1948 was more than \$69,000, a \$20,000 increase over 1947. This figure will show another increase in 1949 over 1948.

Planning Plays A Big Role

Parallel with the increased demand for motels on the part of tourists is the increased competition among motel owners. These proprietors must vie for the tourists' trade with superior locations, appealing design and landscaping, more services, and other desirable features. Motel construction in each instance involves problems particular to the area, but in most cases many of these can be overcome by planning ahead. Experiences of those who developed and completed the attractive Holiday Inn Motel, Long Beach, Calif., point up the fact that initial planning played a leading role in the success of the motel.

Architect O. A. Pearce, when considering the building of Holiday Inn,

American Builder, February 1950



AB26177—Flexitors, long-span pre-cast concrete slabs. The Flexicon Co., Inc., Dayton 1, Ohio. Designed for use with conventional building methods. Pre-stressed steel reinforcement provides high strength with light weight. Length may be specified in inch variations ranging up to 32 feet 6 inches.

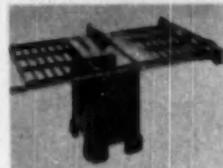


AB26188—Ductile pneumatic tubing. Ductube Co., Washington 5, D.C. Specially designed for mounting ducts in concrete. It remains in place only until concrete is set. Can be used several times. Some of numerous uses include molding of ducts in floors for coating or air radiant heating, and wiring ducts.



AB26198—McTone electric beam number. McTone, Inc., Cincinnati, Ohio. Model 900-4 illuminated numbers operate on from 8 to 24 volts. With each unit, purchaser is supplied with desired digits direct from firm. Can be hooked up in parallel for bell type transformer, or in series for chime transformer.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AB26250—Atlas No. 3195 10 1/2 Arbor Gear saw. Atlas Press Co., Kalamazoo, Mich. Three models, with tables up to 37 1/2 inches. Quick-positioning fence, fast-acting blade controls. Extra-heavy construction, deep-grooved ball bearings, careful machining assures accurate sawing. Has 18-inch blade.



AB26219—Alumalux Barnuda, aluminum roofing. Alumalux Co., Inc., Glendale 4, Calif. Sheets are 19 feet long with 12 inches to the weather. Joined in water-proof "Joiner Strip" eliminating overlaps. Ribs and valleys joined to field sheets with same method. Thick butt lines are a feature.



AB26178—Toppen 1938 Model 6-70 range. The Toppen Stove Co., Mansfield, Ohio. Fits into compact space. High background, one-piece top, manifold panel and "water-fall" front paneling. Full size oven with one-piece easy-to-clean liner has heat control and is fully insulated. Range finish is all porcelain.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AB26216—Time Bounding Lock. Phelps Time Bounding Lock Corp., New York, N. Y. For use on Heraulte all-glass doors. Integrated with regular door lock. Small size provides practical, inconspicuous installation that enhances appearance of door. Records every opening, closing. Lock is tamper-proof.



AB26228—Aluminum casings and door-hoods. Metal Tite Products, Inc., Hastings, Mich. Engineered for easy assembly and installation. Matings aluminum casings and door-hoods are built of 500 gauge aircraft aluminum. Seven color combinations or solid colors. Anodized each have two side panels.



AB26225—Corner kitchen cabinet unit. The Kitchen Maid Corp., Andrews, Ind. New swing shelf counter base unit combines attractive design with utility. Handy shelves provide easy accessibility of stored items. Shape of cabinet and location of drawers make maximum use of corner for work, storage area.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AB26221—Bathub and lavatory. Home Appliance Division, Murray Corp. of America, Scranton, Pa. Bathubs have "lazyback" feature for comfortable reclining. All models finished throughout with acid-resisting porcelain. White, blue, green, sandstone and ivory colors. Lavatories in same colors.



AB26223—Absolux cement dingies. The Absolux Company of Texas, Houston, Texas. Molding asbestos-cement dingies are manufactured in two styles—wave-edge and straight-edge. Colors are natural white, foam green, dove gray and Palomino tan. Dingies is sturdy made, provided with water-proofing.

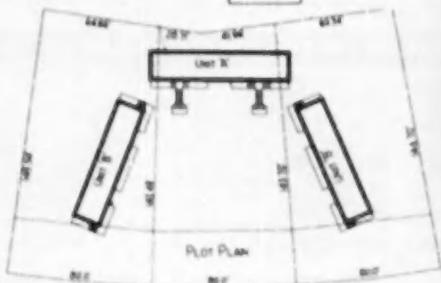
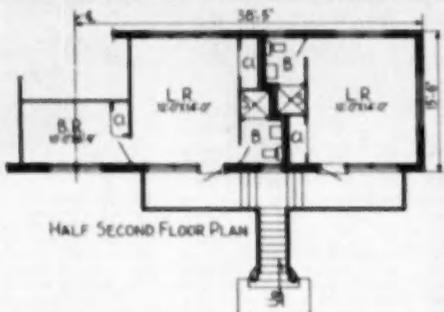


AB26215—Metal knob passage set. Technical Glass Co., Inc., Los Angeles, Calif. No. 426-52 set consists of No. 426 cast metal knob and standard two-hole wrought brass or bronze rose. Operated by knob from either side at all times. No locking mechanism. Has No. 55 latch, spindle, screws.

MOTELS



REQUIREMENT by the owner of the Queens Court Motel units was that they be as fireproof and storm-proof as possible



SECTION of floor plan shows typical units in the Queens Court Motels owned by Jess Newton in St. Simon Island, Ga. Notice that additional small room may be used with one of the units. This may be used as a bedroom, while large room may be used for living room. Plot plan shows how owner took advantage of land to provide privacy for units



felt that many tourists would prefer quiet, homelike accommodations rather than the hustle of the busy hotels or the rather commercial coldness of many motels. In preliminary discussions with the designer, this and other related factors were given careful consideration.

First, while the location was good, being far enough from the main highway to insure quietness, some means of attracting the tourist from the highway was necessary.

Second, due to government building restrictions then in effect, the design had to include housekeeping units (living-dining, bedroom, bath, and kitchen) which could be converted at a later date to more usable single and double apartments.

Third, the designers believed that since most tourists come to visit friends or stay for the season, every effort should be made to induce them to remain at the motel for the duration of their visit.

The first consideration being to attract tourists, the exterior materials, colors, landscaping and architectural details were planned to be eye-catching, yet subdued and inviting. The large expanse of lawn and tropical planting against natural red-wood walls is a welcome contrast to glaring white stucco of many average motels.

The entrance drive placed at one side, leads to the alley and carports. All apartments face the center garden and each opens to its own patio shielded by redwood fencing and planting. Grey-green window trim harmonizes with the landscape. The greyed chateau doors and the long thin line of the coping add a note of color.

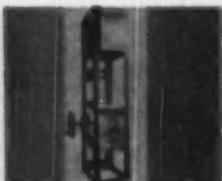
All apartments except the manager's and owner's are a repeat plan for construction economy. All kitchens were equipped with double plumbing so they could be easily converted to baths when controls were removed. Connecting doors allow rental as a double unit or two singles.

Many of the exterior colors and materials are repeated on the interior. Redwood walls are contrasted with others of combined wood and colored stucco. Floors throughout are waxed colored concrete.

The buildings are built on a reinforced concrete slab placed over a 5-inch crushed rock fill. Wood frame construction, used throughout, is based on a 3-foot modular system. All outside walls are supported by 4x4-inch posts, 6 feet O. C., except for window posts which are three feet apart. All window and other openings are three feet wide. Sashes are set in movable frames. Fluted glass in front is fixed by means of wood



AS2022—Alder rotary in-speed copressor drill bit. International Twist Drill Corp., Kansas City, Mo. Copressor drill bit designed to drill one starting hole. Upper part then used to cut, saw, and ream center of circles, oval, square, circles, other designs in light metal, brass, copper, aluminum, wood, plastic.



AS2023—Under-counter dumb waiter unit. Lodgebrock Machine Works, 95 Eighth Ave., New York 11, N.Y. Self-contained dumb waiter unit for capacities ranging up to 200 pounds. Suitable for food bedroom conditions. Of all-metal construction, completely Seagrass. Empty car is about 25 lbs. in.



AS2024—Thomas chimney. Chimney later Co., 1120 Eleventh St., N.W., Washington 1, D.C. For use with any fuel in one and two-story houses. Consists of vitreous enamel-coated steel flue, protected by two concentrically placed aluminum ducts, spaced away from flue and from one another by steel dividers.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AS2025—Star "Molyflu" fan blades. Clamos Bros., Inc., Middletown, N. Y. Steel, shatterproof when used in a frame. Blade is highly flexible and adaptable to high speed cutting. Available in all hand sizes and pitches. Overall copper color. Specifications are printed on the blades in green.



AS2026—Columbia 6-inch saw. Columbia Business Machines Corp., 4700 Ravenswood Ave., Chicago 40, Ill. Adjustable for bevel cuts to any angle up to 45 degrees, to any depth from 1/8 to 1 1/2 inches for pocket and straight cutting. Motor speed of 4300 r.p.m. Recommended to rip and cross-cut 1-inch lumber.



AS2027—Wright's rubber tile. Wright Mfg. Co., 5222 Post Oak Rd., Houston, Texas. Has minimum modulus of 600 pounds per square inch. Low noise level and resistance to marring make suitable flooring for television rooms as well as for residences and hospitals wherever safety is desirable.

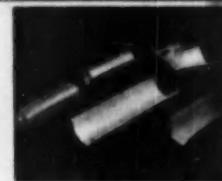
BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AS2028—Tharmostat. Detroit Lubricator Co., Detroit, Mich. Detroit No. 81 Tharmostat features "Times Cycling" principle, automatically adjusting room temperature to existing conditions such as outside temperature, wind and solar radiation. Model is attractively finished, simple in operation.

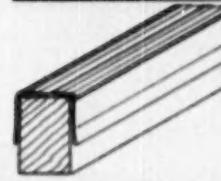


AS2029—Masonry water repellent. Protection Products Manufacturing Co., Eastman, Mich. Invisible Raincheck is a colorless water repellent which penetrates into all types of masonry for protection against moisture and water. Does not discolor masonry and may be used on both interior and exterior.



AS2030—Enduro stainless steel roof drainage products. Berger Mfg. Div., Republic Steel Corp., Canton 1, Ohio. Range in line include "K" gutter, plain round, corrugated round and corrugated square conductor pipe, "snapfit" eaves, and fittings. Fabricated from 20 gauge Enduro stainless steel.

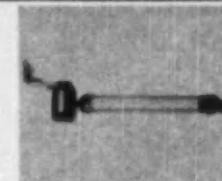
BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AS2031—Triple Seal parking stop cover. Weatherproof Products Corp., 517 Westport Rd., Kansas City 1, Mo. Cover manufactured of spring bronze is easily installed. Designed to make a continuous metal covering for window jamb, eliminate need of painting stop. New cash balance cover being made.



AS2032—Col-matic water softener. Colligan Zeolite Co., Northbrook, Ill. A permanently installed water softening unit. Has push-button control for regeneration in few minutes. Valve automatically calls, rinses, and returns unit to service. Automatic drain device for refilling appliance with water.



AS2033—Streamliner door closer. No. 60. Howell Mfg. Co., Lovell, Mich. Door closer especially designed for use with combination screen and storm doors. Universal type torsion spring makes change for right or left-hand opening doors unnecessary. Plunger is equipped with a Neoprene cup.

MOTELS

stops. Interior partitions are framed with 2x4 studs, 16 inches O. C.

Carport for these motel units consists of a roof supported by 4x4-inch wood columns. An enclosed storage and laundry area, situated in the center of the carport, forms a division for parking space allotted to each building.

Design For Desired Clientele

An example of how both location and design were selected to appeal to a particular type clientele is represented in the Queens Court motel units, St. Simons Island, Ga.

Queens Court is located in an elite section where a great many tourists demand deluxe accommodations. Architect R. William Marshall designed the three buildings on the property to meet exacting tastes and definite requirements. Simple straightforward design is enhanced by ornamental iron railings on stairways from ground level to upstairs units in the two story buildings, and in graceful horizontal lines made by

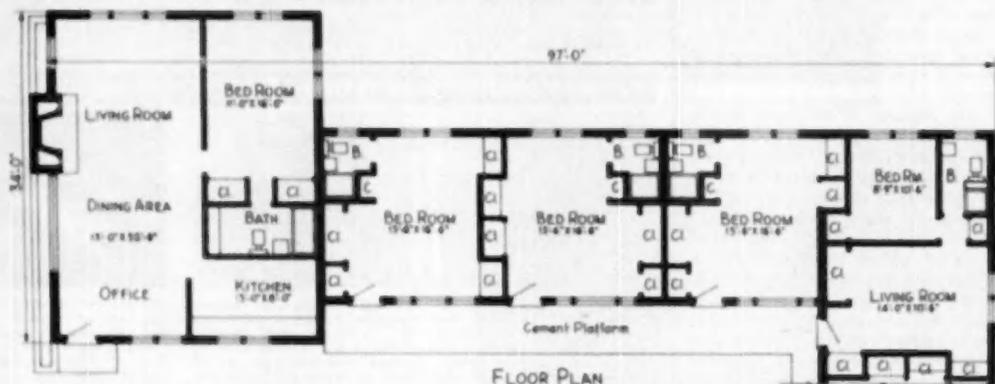


COMPLETE built-in kitchen features Bob Steele Motel near Burlington, Wis.

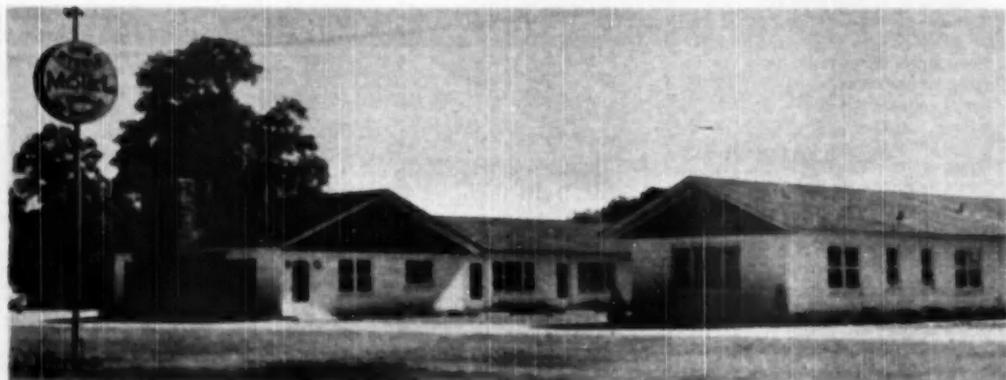
overhangs and Spanish type balconies.

A definite requirement by the architect was that the buildings be as nearly fireproof as possible; another, that they be storm-proof. This was ac-

complished by using masonry construction throughout. Exterior walls, of common brick, are 8 inches thick, as are masonry partitions between motel units. The buildings have reinforced concrete slab floors.



FLOOR plan of Bob Steele Motel shows how closets, built-in kitchens and bathrooms provide sound-proofing between units. Exterior view, below, shows U-shape of court. Lot is large enough to permit an addition which will form a W-shaped building.



Motel Built To Expand

A U-shaped motel building, on a lot large enough so that another wing may be added to form a W-shape, has proved profitable to the manager-owner of the building near Brown's lake and Burlington, Wis.

Though the owner, Robert Steele, had six years experience in motel management and knew much about construction and design factors needed for a successful motel, to develop his ideas he worked closely with Architect Alfred H. Siewert, of Milwaukee, and with Schmidt-Bushman, Inc., local builders of Burlington. As a result, plumbing, heating and wiring of the new addition, when Steele decides to expand his business, will not add an unusual expense. The existing heating unit is amply large for the new addition, as are existing sewage, parking space, laundry and storage facilities.

The gas-fired heating unit supplies hot water through pipes embedded in the concrete slab floors. These pipes are connected to convectors in each room which may be partially controlled by occupants.

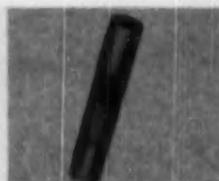
Exterior walls are 8-inch concrete block. Foundations are supported on 8x24-inch footings placed four feet below grade. To provide soundproofing and service to clients, a built-in combination kitchen arrangement and a bathroom forms one partition in each room, while a built-in folding bed and clothes closets form the other. Interior of exterior walls is furred out, with lath and three coats of plaster applied. Ceilings are insulated with thick batts placed between joists. Roof covering is 210-pound asphalt shingles.



AB26273—Mean (steel, Revenue Metal Products Corp., Seattle 5, Wash. Above, 22A-22A Hitchco spring speed for deck mounting. Finger-tip control handle moves sideways and up and down. Side movement controls mix of hot and cold water. Vertical movement controls volume of water. Congress BOOTH 37.



AB26275—Ladson heavy duty cylinders. Ladson Mfg. Co., 1680 S. San Pedro St., Los Angeles 15, Calif. Pneumatic actuating cylinders used to provide automatic operation of building block machine. Machine makes blocks 8 1/2"x11 1/2"x16 inches, of soil, cement, and chemical additives, using soil on site.



AB26282—Leatherback all-purpose building paper. Protective Papers, Inc., Union, Ill. An RMA approved Class B building paper for use in all types of building construction. Made from 60 per cent new paper stock with long fibers content that cross and overlap for strength. Rolls 36 inches x 500 square feet.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AB26274—Flex-Module ceiling lighting system. Selwold Electric Products, Inc., 525 Fifth Ave., New York 15, N. Y. Photo above shows how lighting system is plugged into trolley duct and is then attached to ceiling. Lighting fixtures and panels are suspended on chains from channels embedded in the slab.



AB26275—Nova-Shingle. Nova Sales Co., Towson 3, N. J. Keel in back of Nova-Shingle fits over front lip of Nova-Speed shingling clip eliminating need for ceiling shingles. Allow 1/4-inch exposure. Clip is made in eight foot lengths, provides insulating space between courses. Two types: plain, pre-coated.

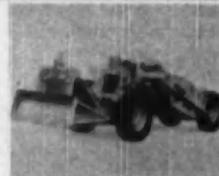


AB26277—Nallock ceiling channel. Incometal Products Co., 210 Cleveland St., Ohio. An inverted heavy gauge steel U-shaped plate with steel rod in center provides anchorage for Nallock nail. Channel is attached to carrying members by saddle or wire tie. Ball point forms tight loop around rod.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AB26280—Chromtrium metal mauling. S. D. Warner Co., Inc., 705 Fifth Ave., New York 15, N. Y. New line of stainless steel maulings in thirteen different styles. Wallboard and wall linoleum shapes have also been added to line from which dealer can select four-tees to receive display merchandise.



AB26281—Attached bulldozer blade. S. G. LeTourneau Inc., Piquette, Ill. Bulldozer blade attached to Model G Roadster Tournapoli is suspended in front of machine, cable-actuated and electrically-controlled by switch mounted on dash control panel. Bulldozer blade has total length of 4 feet, 8 1/2 in.



AB26284—Screen-o-matic disappearing window screen. Lockhart Manufacturing Corp., Detroit, Mich. Permanent installation, automatic and catproof. Screen teeming down, putting up, storage and painting since it is installed. Requires no fitting or special tools. Aluminum housing easily installed.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



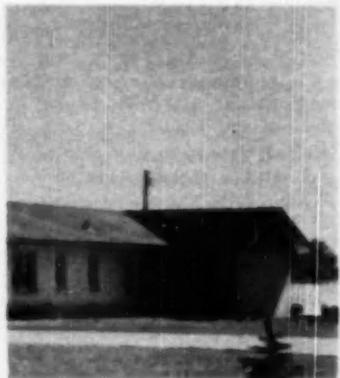
AB26286—Uppon laminated fibre panels. The Uppon Co., Lockport, N. Y. Principle products available include panels for full-wall construction, for re-covering cracked or broken plaster ceilings; Fibre-Tile for baths and kitchens, 3/16-inch panels for general use. Panels attached with floating fasteners.



AB26279—Master Universal Woodworker. The Master Woodworker Manufacturing Co., Detroit 26, Mich. Twelve machines combined in one, it is a complete woodworking shop in itself. Does crosscutting, ripping, jointing, daddling, raftering, planing, boring, sanding, rabbeting, mitring, other jobs.



AB26278—Myers engine-driven "MH" Series centrifugal pump. The F. S. Myers & Bros. Co., Ashland, Ohio. Delivers large capacity against average pressure, in 1/2 and one H.P. class. This efficient pump is one in new "MH" Electro line of pumps and water systems for shallow or deep well use.



American Builder, February 1950.



Sunshine For Sale

By **Martin C. Huggett**

Executive Vice President
Chicago Metropolitan Home Builders Association

The next in this intermittent series of articles by Mr. Huggett will appear in April, and will discuss home building in the author's home city, Chicago

TO ALL intents and purposes Southern Florida is a one industry region. Its inhabitants and for that matter the great majority of its visitors are all engaged in the vocation of selling sunshine. And so good a job is done in the Floridan's chosen occupation, that the Nation wears a path to its portals during the winter season and many thousands remain to make the State their permanent place of residence. Florida visitors and immigrants are not confined to the rich and the financially independent but cover every walk of life, all intrigued by a mild climate and freedom from the rigorous physical problems of the North.

Housing Program Enormous

To meet the epic influx of visitors and settlers permanent and transient housing is being provided in enormous quantities. Hotels of all descriptions, in number exceeding the cities of New York or Chicago, within the limits of the City of Miami Beach alone, apartment houses and apartment hotels, row housing, duplexes and finally thousands of single family dwellings are rising like mushrooms in the night, to meet the purses of all, from America's tired millionaires to the lowliest workers. It would appear that practically every outstanding name of American industry is inscribed on the portal of some Florida mansion.

Opportunities for the Ordinary Citizen

For the ordinary citizen of the middle income group, Florida offers maximum facilities for the purchase of a home. The fact that the State exempts from taxation the first \$5000 of the

assess valuation of every home offers near freedom from real estate taxes to the buyers of the lowest price houses and a major reduction in monthly payments to all others. As a rule, Florida home seekers have found that the monthly payments on purchased homes have been considerably less than the rental of quarters of corresponding areas, and since veterans can usually purchase without or with very small down payments, home purchase has been the rule.

A Man-made Domain

From the air, Southern Florida looks like one tremendous archipelago where some giant might jump from island to island to keep his feet dry. Miami Beach, a city of unknown size varying from an approximate one



ROOF of this Florida home is covered with locally made cement tile of Spanish pattern. Venetian blinds are included

hundred thousand in the summer months to half a million during the height of the winter season, is largely built upon the same sort of ground as the lake front parks and boulevards of Chicago. A sand sucker is put to work transferring the ocean's bed to the formation of islands. In this manner the city is built upon some 38 islands, 28 of which are man-made. Causeways connect the city with

Miami on the mainland and the channels between the islands are spanned with frequent bridges.

Flat Country Has Problems

An elevation of from four to five feet above sea level is presumed by Florida engineers to render land and buildings safe from hurricanes and such tidal waves as they create. A few miles from the coast the land sometimes reaches an elevation of from 12 to 18 feet, and becomes something to talk about. Builders advertise homes as being 10 to 12 feet above sea level. The extensive areas of flat land creates such a drainage problem that sewers are constructed only in the denser portions, while all residences built around the perimeter depend entirely upon septic tanks.

The Air is Also Pure

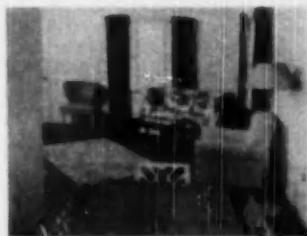
Southern Florida is remarkably clean. After a number of years, buildings still look newly painted and in better surface condition than Chicagoland structures after one winter season. This is true because there are no smoke belching industries and no heating systems of any consequence. The largest heating plant observed in small dwellings was a reflector electric wall unit installed at a cost of \$25.00.

Citizen Employment

Aviation; the growing, marketing and preserving of fruits and vegetables; fishing to a limited degree, except sport fishing, which has shown an extensive development and the feeding, clothing and housing of thousands upon thousands of visitors, constitute the occupational pursuits of most of the people. The Chambers

American Builder, February 1950.

of Commerce at all times seek to keep permanent residents in gainful occupations the year round. On the other hand the Personnel Agencies are constantly seeking temporary positions for winter transients. This sort of competition keeps some workers in a constant state of mental distress lest their jobs be taken from them by outsiders. However the spirit of optimis-



LIVING ROOM—dining room combination in a typical moderate cost Florida home

ism that possesses everyone coupled with the great asset, easy living, subtends apprehension and holds the population intact.

The Lowest Priced Home

The best home "buy" observed in the Miami area was a two bedroom, 720 square foot house that is selling for \$5,750, including a 70x100 foot lot. The house is of concrete block exterior faced with stucco and plastered direct to the blocks on the inside. The blocks rest upon the perimeter of a concrete slab covered with asphalt tile. Ceilings and roof are formed by 2x6 rafters 24 inches on centers supporting 1x6, tongued and grooved, beveled and dressed sheathing. The sheathing provided both the ceiling and the roof platform. To the platform is applied a built up roof of



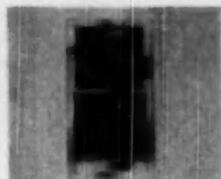
LOW COST Florida home rests on concrete slab, has poured concrete walls, partitions

felt, asphalt and crushed stone. The pitch of the roof and the ceilings as well is one inch in 12 from the center of the building. Windows and the entrance door are of "Louverlite" (glass louvers in aluminum frames). The selling price includes range, refrigerator and venetian blinds.

Another Sound Value

Another model home representing a
(Continued on page 180)

American Builder, February 1950.



AS2814—Arabian aluminum storm and screen combination window. Alumatic Corporation of America, Milwaukee 14, Wis. Combines storm, screen and weatherstripping in one convenient unit. Self storing. Owner can shift from storms to screens in seconds, from indoors. Still is removable. Comes in standard sizes.



AS2817—Collman's standardized wrought iron deck step railing and straight rail sections. The E. G. Collman Co., Inc., Orlando, Fla. Conventional, sturdy, high quality ornamental iron. Completes one place service, welded construction. Combination of sections will fit most any condition. Low cost.

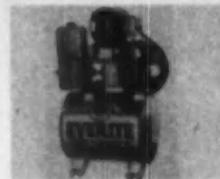


AS2818—Model 99 Strongman outdoor clothes post. The Southern Galvanizing Co., Baltimore 22, Md. Carries four lines with top cap which adds to its appearance and prevents a finished product. Post is hot-dip galvanized after fabrication which provides an availability of rust. Post is 8 feet 11 inches.

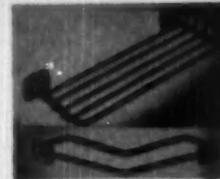
BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AS2819—Gen Deluxe deck type coating sprayer, with Spring Flo spraying spot and end with hose and spray. Price-Meter Spray Manufacturing Co., Los Angeles, Calif. Features include smart styling, ease of cleaning, cast brass construction, metal head thumb control on spray, full adjustment for all sites.

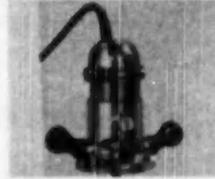


AS2820—Figure 19D-10 Sprinkle water system. Sprinkle Pump & Manufacturing Co., Inc., Lancaster, Pa. Capacity, 200 gallons per hour. Available with 10, 11 and 20-gallon horizontal, galvanized tanks. Unit with 10-gallon tanks will fit under a kitchen sink. The 10-gal. tank measures 27 1/2"x12 1/2"x12 inches.



AS2821—Twin-carrier towel bar and towel short-drying rack. The Anchor Co., Detroit, Conn. Part of a complete line of bathroom and kitchen accessories. Carrier towel bar has two 24-inch fluted bars. Designed for attractive towel arrangement in corner space. Shelf and drying rack is 23 1/2" inches.

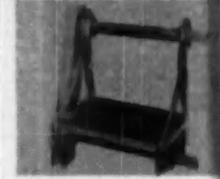
BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AS2822—Stanley-Carter H26 hinge buff cooler. Stanley Electric Tools, New Britain, Conn. Cuts out for buffs six times faster than is possible by hand. Leaves flat surface for the buff, insuring perfect fit. Ideal when round corner buffs are being used on new homes. Has 1/2 H.P. motor. Speed, 18,000 r.p.m.



AS2823—Universal Level-Finisher. David White Co., Milwaukee, Wis. Model 200 includes 6 1/2-inch protected vertical arc, internal focusing and coated optics. Internal focusing assures near of dust- and dirt-free inside lens surface, and better protection for optical parts and mechanism. Tripod included.

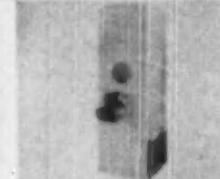


AS2824—Beaucidal ladder tray and ladder step. Beaucidal Ltd., Saginaw, Mich. Sturdy steel tray hooks securely to a conventional ladder rung. Ladder step conserves energy, provides an overhead platform that frees both hands for the job. Easily carried in one hand up the ladder to convenient position.

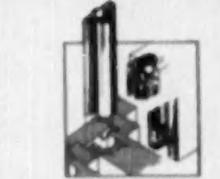
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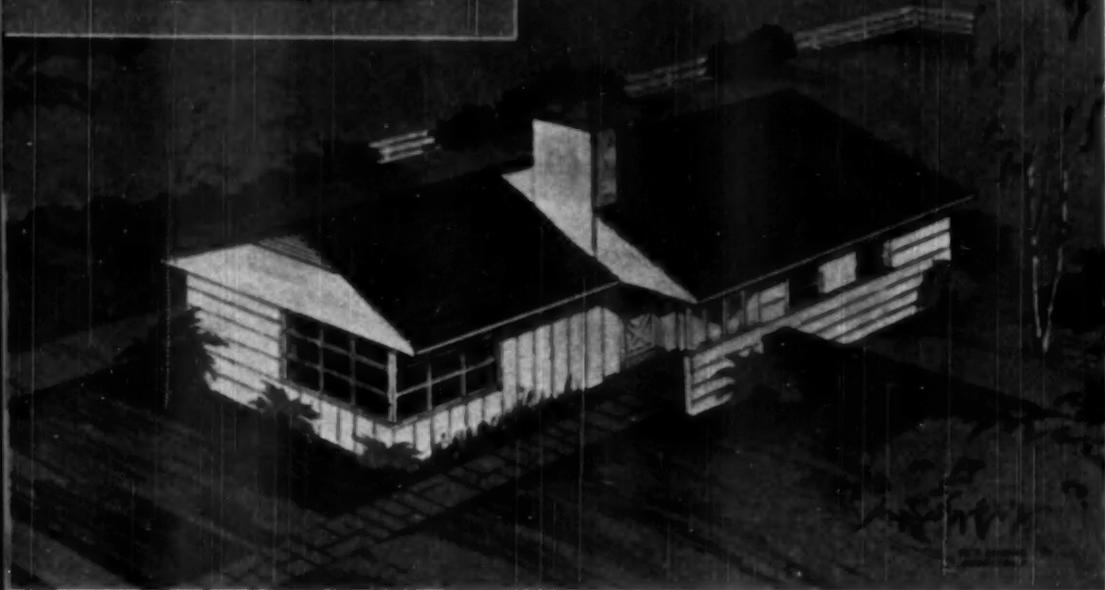
AS2825—Trinity laundry tray cabinet. Elmar Machine Products Co., Los Angeles 21, Calif. Designed to fit all standard sizes of laundry trays or tubs, unit affords storage space of about 28 1/2"x17 inches. Accommodates soap and other cleaning materials. Made of bonded steel with baked enamel finish.



AS2826—Model UV-40 Century furnace. Century Engineering Corp., Cedar Rapids, Iowa. Burner rating of 40,000 B.T.U. When equipped with gas burner it is known as the UV-40 and has input of 40,000 B.T.U. Can be fired by power gas, purifying oil or gas burner. May be used in utility room or basement.



AS2827—Sash balance and weatherstrip unit. Almatic Weatherstrip Co., Chicago, Ill. Motor pulley, cord, bar frames and weights unnecessary. Sash is counterbalanced with coil spring tension to provide double catch in any position. This provides finger-tip window control. Coil spring is concealed.



EXTERIOR is a direct projection of the plan layout without attempt at embellishment other than change in siding

Economy House with Alternate Plan

To provide a livable two-bedroom house with an expandable roof line that can be built economically was the basic thought for this month's blueprint house

ECONOMY without loss of living area was the prime consideration of Walter T. Anicka, architect of Ann Arbor, Mich., in designing the current blueprint house.

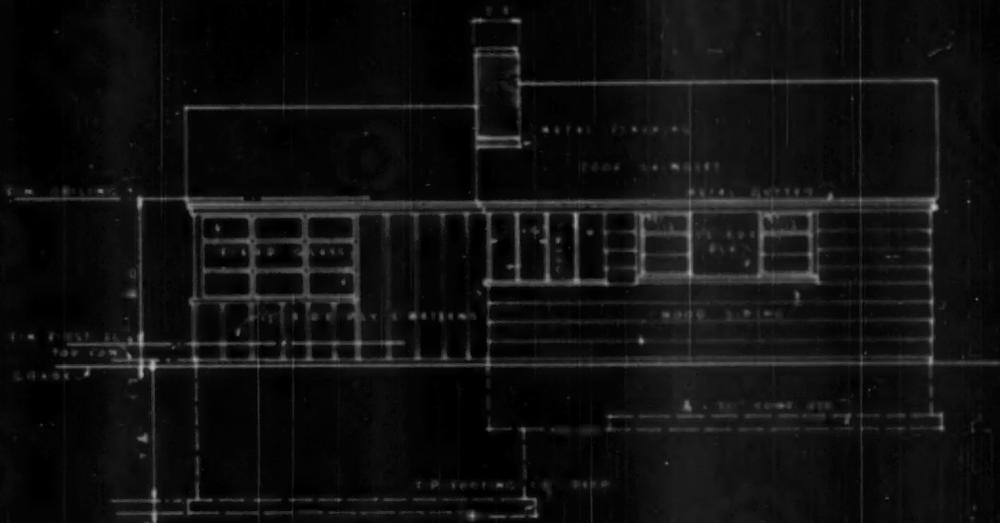
The house contains 1020 square feet of floor space including partitions. Space is arranged to provide the greatest amount of comfort and convenience for the occupants. The reception hall, placed in the center of the plan with a side entrance, provides immediate access to all rooms. The living-dining room and kitchen face the street with bedrooms overlooking the rear yard, away from the noise of the road.

Features in the alternate plan include a fireplace with exposed brick surfaces on three sides, and a wood grille on side of living room opposite the opening, with cupboard below. The alternate plan provides for a basement under the front end of

house, approached by a stair that is placed in the area containing heater as indicated in the basic plan. Heater and laundry service are located in the basement.

To provide for additional room, and yet not increase the square foot ground area of house, the designer altered the roof pitch to establish sufficient head room for a fair sized bedroom and closets. The increased roof pitch enhances the exterior appearance of the house.

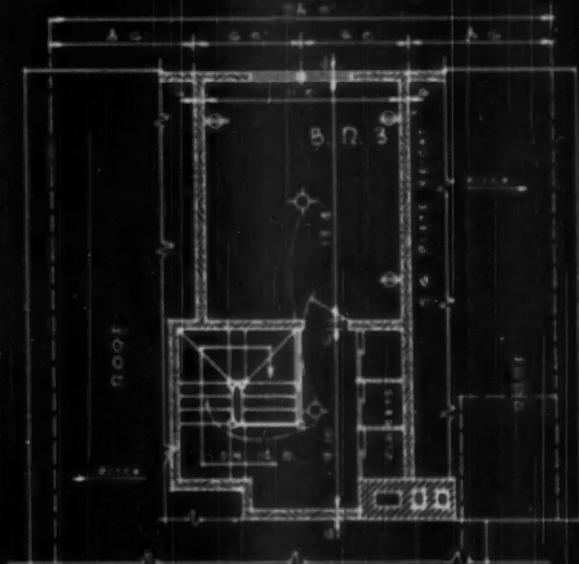
The exterior of the house follows in general the pattern of design used by Anicka and which has found a ready public acceptance. Sidewalls are covered with wide horizontal wood siding, featured areas are covered with plywood and vertical wood battens. A 5-12 roof pitch is used for the basic house, and a 9-12 pitch for the expanded unit. Asphalt shingles cover the roof.



RIGHT ELEVATION



FIRST FLOOR PLAN
(BASIC PLAN)



ALTERNATE # 2 SECOND FLOOR

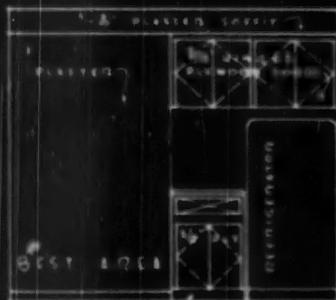
DESIGN NO. AB 151
 AMERICAN BUILDER BLUE PRINT SERIES
 WALTER T. ANICKA ARCHITECT
 Ann Arbor, Michigan



REAR ELEVATION

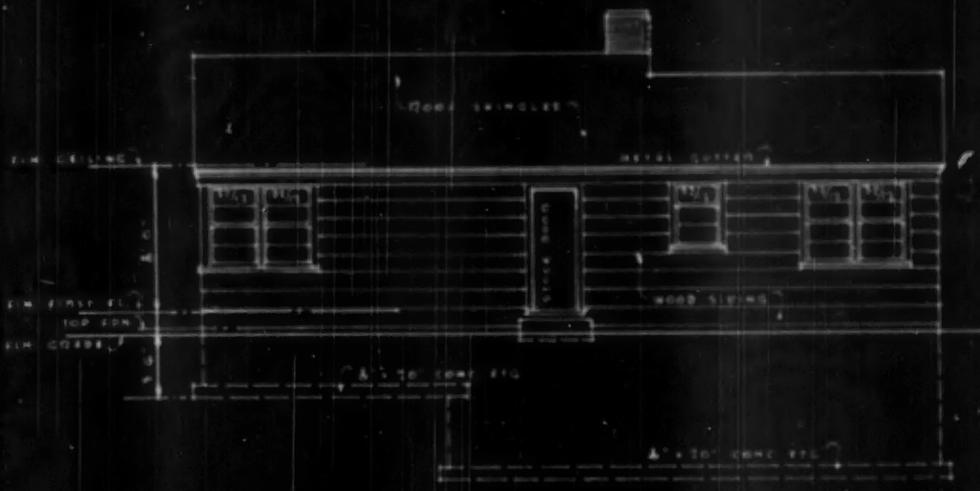


BATH

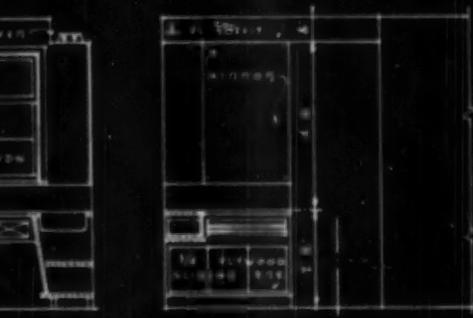


ALTERNATE FIRST FLOOR PLAN

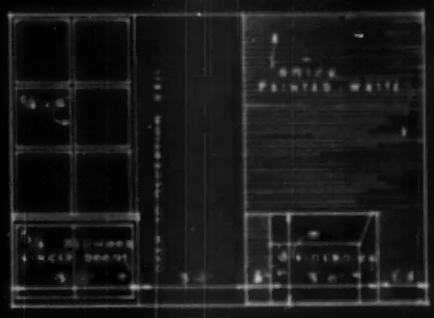
WITHOUT BASEMENT
SCALE: 1/4" = 1'-0"



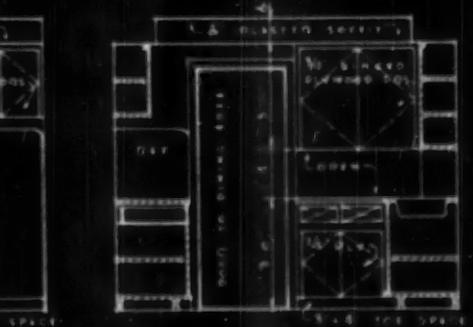
LEFT ELEVATION



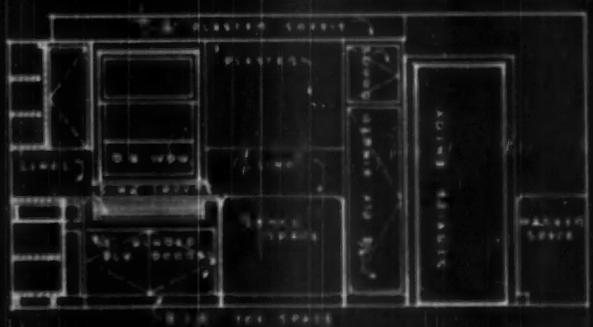
BATH DETAILS



FIREPLACE DETAIL



KITCHEN DETAILS





DON SCHOLZ, left, and Lawrence Prince, stress values in their home building operations in Toledo, Ohio

Interesting design, quality workmanship, service—this formula is answer to home building success

High Cost Homes Find Ready Sale

IN TOLEDO, like almost everywhere else, there is a need for large scale low-cost housing. In Toledo, a city with its share of unemployment, you would expect, and rightly so, that its citizens are cautious spenders. All of which doesn't sound like a ready market for new homes in the \$12-40 thousand class—but one builder has proved that it is. Scholz Construction Company, a spanking new organization, in 1948 sold over a million dollars' worth of new homes and, in the year just past, topped the '48 mark!

President of the company, Don Scholz, aggressive young mechanical engineer who forsook the industrial field for home building has what he believes is the answer to the firm's success: "Interesting design—because exterior appearance sells—quality workmanship, and service."

Giving value in good measure is

no magic formula, but to Scholz Construction it has sold more than 250 homes since the company was formed in 1946. This, without the use of any regular salesmen and a minimum of advertising. The volume is predicated on the time-tried truth that a satisfied customer is the best salesman.

Big, hard-working Don Scholz believes in interesting design and his houses are graphic translations of sound attractive styles from blueprint to frame and stone and brick. The houses are, for the most part, colonial-ranch-type one-story or story-and-a-half-dwellings, of a combination of two of these three materials. He has built what he considers is the longest ranch-type house in Toledo—a 113 footer, and has also included a sprinkling of modern design homes in the jobs the company has turned out since 1946.

Scholz utilizes new building tech-

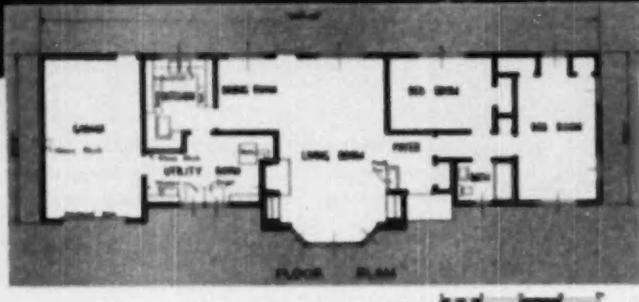
niques and products in adhering to the theory that interesting design sells. Glass block is found in nearly all of his homes, used functionally as well as decoratively in garages, kitchens, snack bars, utility rooms, bathrooms and on the street side in places where daylight is desirable, yet privacy is wanted.

In many instances he has utilized interior glass block partitions to "borrow" daylight from an outside room, thus brightening up what would otherwise be a dark corner.

With no set pattern of architecture and no two houses the same, Scholz Construction does not use a mass production technique. However, all the homes are built according to efficient, workable plans, which are of mutual benefit to both the builder and home owner. The company regularly employs 35 carpenters to make up the three crews it uses. One crew does the rough framing. A second crew does the



PANORAMIC shot of a street in Ottawa Plains Estates illustrates the varied styles of architecture used by Scholz Construction firm



COMBINATION of wood and stone enhances exterior appearance of this typical Scholz-built home. Floor plan, left

exterior trim, cornices, window framing and door hanging; followed by the third and final finishing crew. The foundations and masonry are handled by another group of Scholz workers.

Subcontracts are let for plumbing, heating, roofing, plastering, electrical installation, painting and landscaping.

The heating units are, like every other aspect of the homes, according to the latest design. For the most part, they are a combination of radiant heat and warm air, with hot air registers and cold air returns along the baseboards, and

pipes imbedded in the concrete of the floor.

Recently Scholz has been installing underfloor plenum heating systems in basementless houses. A reverse flow furnace feeds heat into the space between the wood floor and the ground beneath the house. The heat is admitted to the rooms by baseboard registers. The earth beneath the house is covered with two-inch crushed stone and an aluminum foil blanket is laid over the stone to complete the insulating job. Furnaces in the Scholz houses are either of the oil or gas type. Rock lath with aluminum foil back-

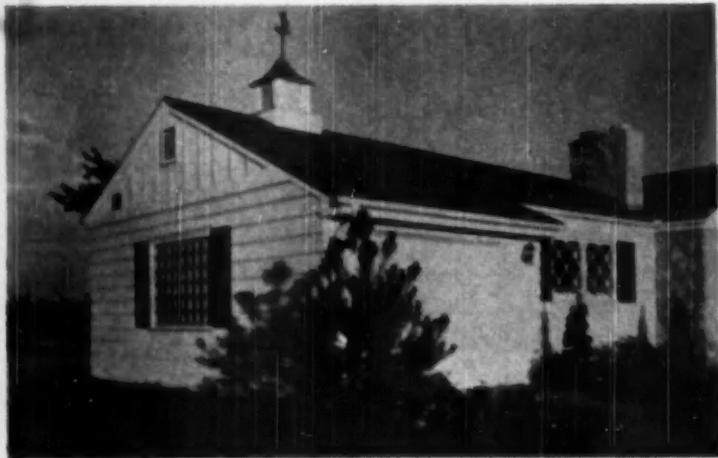
ing is used for sheathing, with Fiberglas blankets in attic floor.

Scholz homes feature attached garages with many of the garages built into the continuous lines of the house. Local building codes require a fire-resisting wall between attached garages and houses, and Scholz uses a flush-type wood-faced door with an incombustible mineral core. This door withstands a one-hour fire test, thus it conforms easily to the local building code and is an attractive replacement for the old cement-asbestos faced door previously used.

Scholz Construction has two major developments completed. The first, Ottawa Plains Estates, is an attractive tract of 88 houses about 10 miles from the heart of the city. When the project was in its early stages, Toledoans by the score caused Sunday traffic jams, winding through the paved streets of the development in an interested, curious motorcade. It was at this time that many of the houses sold themselves. After the prospective buyer had been impressed by the design of the Scholz-built homes, an inquiry at the company office (a small building of construction similar to the homes) disclosed that Scholz could offer a complete "package" transaction including design, building, financing and an unwritten guarantee of construction.

The second major Scholz project is the Talmadge Estates in Ottawa Hills. The homes here are in the higher price range and for the most part are interspersed with other homes in this residential area.

The enthusiastic tenants of the



WINDOW of insulux glass block adds attractiveness to firm's typical garage



projects are quick to assert that Scholz had no "sell 'em and forget 'em attitude"—in fact, two of the Scholz employees spend their full time on customer service.

Another customer relations touch that has won the confidence of home buyers is the personalized service Don Scholz offers in his capacity as president of the organization. He designs most of the houses, assisted by a young designer, Robert Wahl. Scholz also handles the financing, the general supervision of construction and spends some of his time on sales.

Vice President of the firm, an able assistant to Mr. Scholz, is Lawrence Prince, an engineer who worked with Scholz in Hartford, Conn. during the war. They foresaw the opportunity in the home building field and left industrial work to return to Scholz' home in Toledo to begin their new business. Together with Scholz' father, who died in 1946 and Frank Snyder, finishing supervisor, they formed the new company.

Scholz Construction is a member of the National Association of Home Builders and finds the Association extremely helpful, particularly with labor contracts.

In January Scholz had a unique display at the Toledo Home Builders and Industries Exposition which was held in Toledo's Civic Auditorium. The firm constructed a home 71 feet by 24 feet, of a typical Scholz design. The materials were supplied gratis by the company's usual suppliers, the home was landscaped, and a large department store furnished it.

The problem of getting the house inside Civic Auditorium was solved by prefabricating it in 16 foot sections and then erecting it within the exposition building in about a week.

American Builder, February 1950.



AS26001—Balcony seal unit. Balcony Seal Co., Madison 5, Wis. For double hung windows, seal does four jobs. Provides seal, balances, weather seal, parting strip, and inside stop. No grooving of sash or grooving of jamb required. Eliminates four wood members. Makes seal appearing job.

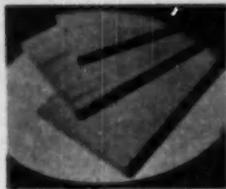


AS26016—Remote control master selector switch. General Electric Co., Bridgeport 3, Conn. Switch is master bedroom controls lighting system for entire house. Can be used to turn on all lights in the house at once in case of emergency. Provides low-voltage control of all lights and their outlets.



AS26017—Cool-Vent ventilation aluminum casing. Cool-Vent Metal Airing Corporation of America, Pittsburgh, Pa. May be used for windows, doors, porch and patio slides, or as carpet. Made from aircraft aluminum, casing are strong, durable, light in weight and easy to handle. Special Gull.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AS26080—Tonal stair treads. Tonal Flooring Co., Crockett, Tex. Elliptical in electric Moore construction fiber, and processed through the Tonal Flooring company plant. Top quality oak is used and the grain and texture of these stair treads are outstanding in appearance. For long, hard use.



AS26042—Precision folding stairway. Precision Parts Corp., Nashville 7, Tenn. Constructed of No. 1 kiln dried poplar throughout. Brackets and rocker arm made of cast aluminum, hinges of cast brass. Door panel is insulated. No springs. Actuated by counterweights. Operates silently at slight pull of cord.



AS26071—Blockite trenchcoat plastic block. MacMaster-Inc., Pittsburgh, Pa. Suitable for installation where the friction of green blocks, but not their weight is desired. Standard finished panel, containing 40 blocks, weighs 46 pounds. In apartments and homes, blocks make attractive screens.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AS26079—Concrete translucent structural and decorative panel. Corvax Corp., Houston 5, Texas. A strong, attractive daylighting material, or, because of its attractive appearance, may be used by decorators and architects for many unusual decorative effects. It is shatterproof, comes in six colors.

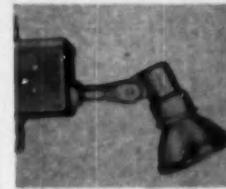


AS26077—Kitchen cabinet unit. Sterling-Frestand Industries, Inc., Chicago 3, Ill. Unit contains extension table which, extended, provides surface of 36 1/2 inches. Cabinet unit is 36 inches wide, 23 inches deep at base and 36 inches high, containing utility and storage space of regular kitchen cabinet.



AS26014—Bumpcrete. Bumpcrete Div., Mason Construction Co., Inc., Dayton 2, Ohio. Recent changes include standardized concrete capacities of two, three and four cubic yards. Gate wings are now higher with greater slope to permit faster unloading. Discharge height on 4-yard body is 6 feet 4 inches.

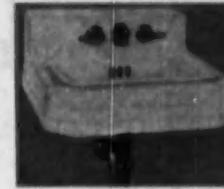
BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AS26043—Remote controlled flood-lighting units. Stuber Manufacturing Co., Broadview, Ill. Units coupled to new General Electric remote control. Any number of switches may be installed at convenient locations around farm or home, and lights can be turned off or on from any of these points.



AS26015—Fabric storage units. Fabrica, Austin, Texas. May serve as partition walls. Minimum floor space needed. Fast installation. Units—clothes closets, dresser units, shelf units—come complete. Sliding panel doors eliminate clearance required by swinging doors. Distributed within 700 miles of Austin.



AS26005—Shylomator lamp. The Humphreys Manufacturing Co., Mansfield, Ohio. Measures 14 inches from front to wall. Made of enameled cast iron. Features include compact mirror fitting with pop-up device, 1 1/2-inch wide shelf back for toilet articles, and spacing bowl. Dimensions, 18 1/2 in.

Bonnyville Homes

AIR-VIEW of Bonnyville subdivision consisting of 100 acres of level ground which is approximately 50 per cent complete in its construction program. All streets are laid out in a formal grid pattern with blocks divided by a service drive

Methods used in heavy construction are applied to mass small home building operation with effective results by ex-army engineer



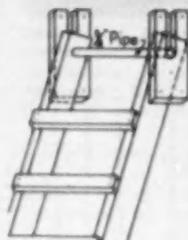
JOHAN BONFORTE, one of the largest builders of homes in Colorado Springs, Colo., has been constantly expanding his building operations since his release from the army engineer corps in 1945. In that year he set up and completed a schedule of 10 two-bedroom houses which he sold for \$7,450 each. His next group of houses numbered 25. Built in 1946, they contained two bedrooms, full basements, and were listed for \$9,200 to \$10,000. In 1947 he moved into the \$12,000 class. He built 12 of these homes in addition to four four-bedroom and two-bathroom houses that sold for \$13,000 to \$17,000. Late in 1947 he dropped back to a two-bedroom house that sold for \$7,350. Twenty of these homes were built.



THE three-bedroom houses vary in appearance as shown in photo at left and below. A combination of stucco and siding is used on facing for one house with horizontal siding for the other. Floor plan applies to house shown at left. Room arrangement varies slightly in house below



American Builder, February 1950.



HALL chest which houses hot water heater provides space for built-in ladder as access to attic scuttle. Views indicate ladder in open and closed position. Detail drawing at left shows top holding device for attic ladder.

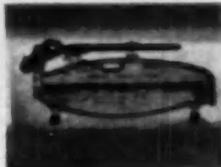
They were sold complete with range, refrigerator and washing machine.

The Bonnyville subdivision was started in 1948 on 100 acres of level ground on the north limits of Colorado Springs. A total of 90 houses were completed in that year with an additional 49 under construction. 1949 saw Bonforte move into high gear with 150 houses scheduled and 125 under way. The houses are two- and three-bedroom homes complete with range, refrigerator and automatic laundry. The two bedroom house sells for \$8,100 and the three bedroom unit for \$9,775. These prices include concrete curb, gutter and sidewalks.

Bonforte has found that the demand for new homes in 1949 was as good as 1948. Sales, which are handled by his own organization, are four months in advance of construction. Approximately 20 per cent of the purchasers are members of the armed forces who are permanently established in Colorado Springs.

The designing of the houses, which is all done by the builder, does not represent a radical departure from the norm, but rather adheres to variations of a simple, conventional type acceptable to all classes. Four different styles of exterior treatment are available in each of the two type houses that are built in this development. Exterior facing materials used are stucco, painted wood siding, stained redwood siding and asbestos shingles. Asphalt shingles are used in a variety of colors on all roofs. Bonforte appreciates the sales value of large picture windows and frequently employs their use, especially

American Builder, February 1950.



AB20001—Improved Handy asbestos shingle cutter. Specialty Tool Manufacturers, Belleville, Ill. New aluminum alloy model reduced in weight 45 per cent. Also available in gray iron. Front-end punch standard on all current models in addition to handle punch. Notching attachment for irregular cuts.



AB20001—Wall-hanging corner cabinet. Ideal Cabinet Corp., Detroit 4, Mich. Designed for use in bathrooms, kitchens and bedrooms. It has a mirror, 16.25 inches, with a stainless steel frame and two glass shelves. Hardware is cadmium plated. May be quickly installed directly against the wall.



AB20000—Trailer-mounted portable compressor. Gardner-Denver Co., Quincy, Ill. For operating small air tools on miscellaneous service jobs. Capacity is ample for operating paint spray guns, chipping hammers, light paving breakers, spaders, tampers and similar pneumatic equipment. In three sizes.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AB20173—Stapl-On hammer stapler. The S. H. Marchless Co., Newark, Conn. Drives six steel staples in the time it takes to put in one tack with conventional hammer. Staples grip-tacked materials twice. Hammer stapler weighs 1 pound 4 ounces, with almost all of this weight in the stapling head.



AB20036—Floor screens. Hough Shade Corp., Janesville, Wis. Polyester basewood floor screens can be manipulated into a variety of shapes and surface effects for a number of functional uses. Height is 5 feet, 6 inches; adjustable width from 3 to 5 feet. Produced in a wide selection of attractive colors.



AB20016—Packaged bathroom unit. U.S. Porcelain Enamel Co., Los Angeles, Calif. La Vanity unit consists of generous-sized lavatory, with built-in overflow, dressing table and storage cabinet. Dimensions are 46 inches wide, 30 inches deep and 32 inches high. Unit has porcelain enamel wash basin and base.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AB20037—Latch. Grand Rapids Hardware Co., Grand Rapids, Mich. Adaptable to practically any kind of "latching-locking" mechanism, the Grand Rapids latch has been used in a variety of applications. One of unusual features is that it holds doors securely latched despite warping or alignment defects.



AB20028—Tilt-top trailer. Ray Miller Research Engineers, Milwaukee, Wis. Frame of 10-ton heavy-duty Model 8 trailer is formed of channels 12 inches deep in the center and of 1/2-inch steel with five cross-members. Three-latch channel extends from corner to corner in form of "X." With 10-ton Budd wheels.



AB20011—Tandem truck. Ray Miller, Inc., Lansing, Mich. New series of tandem trucks, powered by company's Gold Comet gasoline engine, rounds out line of tandem models ranging from 20,000 to 57,000 pounds. New trucks in Model S-25 series rated at 34,000 pounds, 6 V.V. Five wheel/base.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AB20093—Round "E" boiler. Kaweco Boiler Corp., Kewanee, Ill. For steam or forced hot water circulation in radiators, wall, floor, ceiling panels, or for radiant baseboard heat in homes and small buildings. Fashioned for fluid, gas, or solid fuels. Readily convertible from mechanical to hand-firing.



AB20086—Muster disappearing screen and combination window. Comfort Products, Inc., 9231 Wayne Ave., Philadelphia 41, Pa. Twin sliding aluminum storm window has roll-up screen at base. When bottom glass insert is raised, screen comes up to desired point. When lowered, screen retracts in housing.



AB20091—Double-glazed window unit. Pittsburgh Plate Glass Co., Pittsburgh, Pa. Six new standard sizes have been added to the line of Insuldoor units—60 1/2 x 47 1/2 inch, 66 1/2 x 47 1/2, 66 1/2 x 60, 66 1/2 x 66 1/2, 66 1/2 x 80, and 72 1/2. The first four were developed for use in steel case and the latter two for wood sash.

LEFT COLUMN

RIGHT COLUMN

	Excavation	
	Foundation	----- Plumbing (Rough)
	Framing	----- Wiring
	Roofing	----- Trimming
	Flooring	----- Taping
	Sheetrock	----- Wiring (Complete)
	Lathing	----- Plumbing
	Stucco or Siding	----- Painting

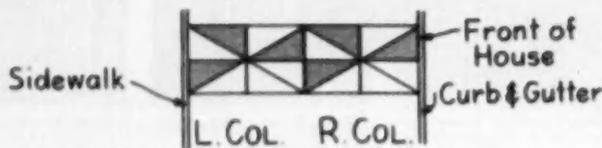


DIAGRAM above is a copy of one of progress charts kept on each house under construction, model of which is placed on the wall of the builder's office at the site. At the end of the working day the progress of the construction is noted on each chart as the men bring in their reports. The house under construction is indicated by a rectangle which is divided into two sections. These sections are subdivided and filled in as the work progresses in accordance with markings shown in left and right columns

in areas that are protected from the glare of sun, such as porches.

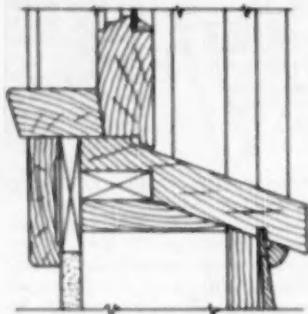
In the erection of these houses conventional methods are used. A large cutting shed is maintained adjacent to the office where power equipment is operated by a trained crew that pre-cuts all dimension lumber from a prepared chart. The lumber is picked up by truck and delivered to the building site in a prescribed amount to

complete a particular phase of the work.

Each phase of the construction is handled by a special crew which is confined to doing a single task on each house. This method is a constant challenge to Bonforte to step up his sales to keep ahead of his mechanics. Special crews are set up as follows: two carpenters and two laborers are assigned to foundations and form

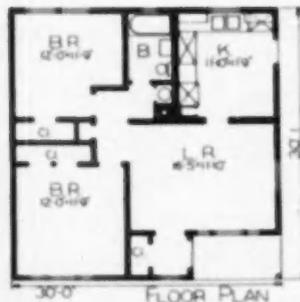


TYPICAL rough framing for window shows employed sub-sill for trim nailing



FRAMING for typical window introduces a employed sub-sill on which the regular sill of window frame is placed. Sub-sill provides solid nailing for stool and apron

work, two carpenters for floor framing, four for superstructure including roof framing, two for wall sheathing, two for exterior cornice work, two for window and door frames and miscellaneous items and one for laying roof shingles. This gets the house under roof ready for the plasterer and other trades. Building operations are conducted in a manner to keep all work moving along smoothly. Assur-



TYPICAL plan of two bedroom house which has found ready acceptance in this area. Left: one of the attractive exteriors



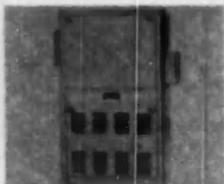
FOOTER forms for foundation walls are leveled accurately. 4' x 8' x 1/2-inch-thick plywood forms are numbered for re-use without delay. Double 2 x 4 walers, snap-ties and bracing hold forms straight

ance of a sufficient supply of work on hand keeps the sub trades moving along in line together with the men on the payroll, thus making it possible to complete the houses on time and keep up to a pre-arranged schedule.

A rather ingenious progress chart has been devised by Bonforte to keep an accurate account of the daily construction work done on each house. A large piece of cardboard with the various symbols indicated on it is posted on the wall of the office. A record of each house is kept in the file on which is drawn a rectangle representing the house. As the work progresses the respective symbol indicating its phase of work is filled in on the drawing. In this manner a person who is familiar with the chart and symbols can know in a moment the progress of any particular house in construction on the project. This chart is also of great value to the sales staff of the Bonforte organization, as it keeps them posted on the work in the field. They can accurately advise the purchaser who is waiting to get into his new house the construction progress as of that day.

Materials in the Bonnyville development include: U.S. Gypsum insulated Sheetrock; Johns-Manville asbestos shingles; Texaco and Certain-teed asphalt shingles; Curtis storm and screen doors; Andersen double-hung windows; Chamberlain weather strips; Libbey-Owens-Ford glass block; U.S. Gypsum rock wool insulation; Benjamin Moore paints; hardware from three manufacturers—Kwikset, Stanley, and Schlage; Amerak kitchen cabinet hardware; both Crane and Kohler plumbing fixtures; Coleman 30,000 BTU dual wall furnaces; Continental hot water heater, Armstrong linoleum; General Electric refrigerator, range, automatic laundry and electric clock; Telechron door chimes.

American Builder, February 1950.



AR2628—Lippman L-110 residence cooler. General Refrigeration Div., Yates-American Machine Co., Seattle, Wis. For air conditioning average size home at nominal cost. Cooler operates through dual work of blower-type waste air furnace. Four rows of cooling coils. All air passes through permanent filter.



AR2631—Electric range-water heater. Weidert Heater Co., Philadelphia, Pa. New combination has range top consisting of 28-volt roaster-baker, two full-sized cooking units set in a porcelain-on-steel top with 118-volt outlet for toaster or percolator in back splasher. In cabinet is 25-gallon water heater.



AR2616—Triple-Track storm window. Storm Windows of Aluminum, Inc., Marion, Ohio. Means "all-weather" triple track window has especially large glass surface. Has automatic inside lock for added safety. Combines storm cash screen and built-in permanent weatherstrip, eliminating drafts.

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AR2624—Transil. Bronze instrument Co., Inc., Kansas City, Mo. Bronze "Jig Collimator" was developed for use in assembly of airplanes, heavy machinery and similar operations. Instrument's features include extreme accuracy of bearing, a very short focus and accurate alignment of all factors.

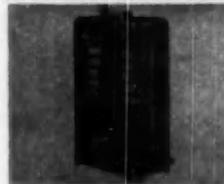


AR2617—Home Utility 6-inch saw. The Black & Decker Manufacturing Co., Towson 4, Md. Accessories include depth and bevel attachment, rip fence and saw-carrying case. With depth and bevel attachment, saw will cut to any depth from 1/8 to 1-15/16 inches, make 45 to 90 degree bevel cut in wood or ceramic.



AR2617—Curtis Pregline. Curtis Companies, Inc., Clinton, Iowa. Curative process reproduces natural grain of ponderosa pine as panels. Used in Curtis doors and other Curtis woodwork. Made of heavy divided wood, it is exceptionally resistant to warping, shrinking and swelling. May be lightly sanded.

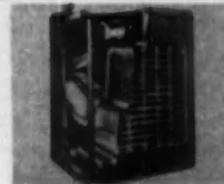
BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AR2626—Bradford gas-fired boiler. Bradford Manufacturing Co., Pittsburgh, Pa. Operates on all types of forced-flow hot water heating. No. 1067, for natural, mixed, and manufactured gas, has A.S.A. output rating of 1,067 square feet of equivalent radiation. Has input rating of 200,000 B.T.U.'s per hour.



AR2617—Steel access panel. Knapp Brothers Mfg. Co., Sycamore, Ohio. Has wide built-in plaster flange. Made of galvanized steel with prime coat of special paint baked on. Special "Snaplock" device assures positive locking and closing of door. Panel manufactured in a wide selection of sizes.



AR2629—Uel heater. UES series. Surface Combustion Corp., Toledo 1, Ohio. UES series may be used with natural, manufactured, mixed and LP gases. Has automatic pilot employing new exhaustless lever and switch design in conjunction with fan and limit control to prevent over-heating. Approved by ASA.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AR2674—Kimal insulation. Kimberly-Clark Corp., Neenah, Wis. Has reflective apparatus that protects against humidity and summer heat in addition to winter insulative value. Non-irritating. Stretched ply construction prevents sagging. Fire-resistant. Weighs only 100 pounds per thousand square feet.



AR2685—Rancho electric range. Westinghouse Electric Corp., Mansfield, Ohio. Chrome-plated tubing in place of conventional end panel in right side gives range appearance of a knee-hole desk, provides "look-away" space. Range is 36 inches wide, has four surface Ceram coils. Stevens BOOTH 100.



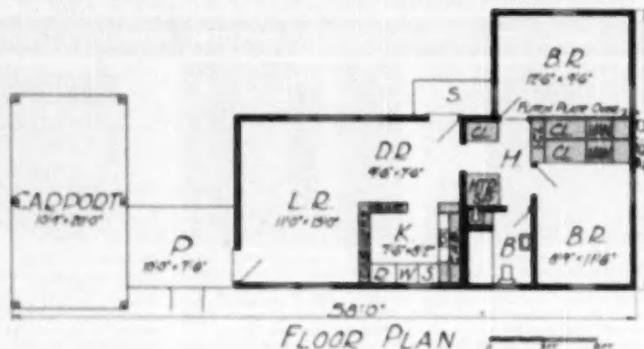
AR2673—Polarizer, PFD. Red Devil Tools, Irvington, N.J. Polisher weighs only 4 pounds 9 ounces. Its flexible brush rotates at the rate of 5,000 revolutions per minute. A felt buffing ring eliminates swirl marks. Brush and buffing ring total 6 1/2 inches diameter. Has base action spring and vacuum pressure.

Cabinet Wall Homes

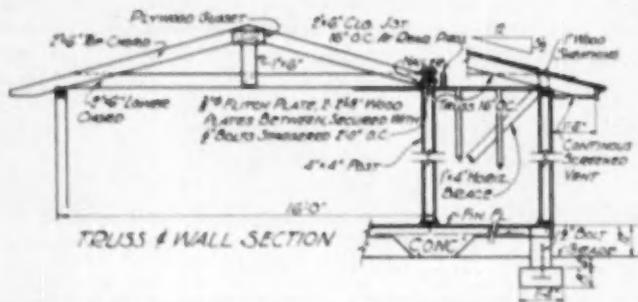
Extensive use of built-ins combined with site-fabricating methods reduces costs for Florida builder without loss of quality



SALES price of model house is \$7,370.66. Refinements obtained at additional cost



CULPEPPER house has 730 square foot house exclusive of carport and porch



SECTIONAL outline drawing indicating relation of site assembled wood trusses to fitch plate supporting truss ends. This condition occurs over cabinet-wall of master bedroom. Concrete slab thickness is increased under post or bearing wall as indicated

A LOW COST house of high quality was the aim of Horrie B. Culpepper of Tallahassee, Fla., head of the building organization that bears his name. The "cabinet-wall" house designed by Gilbert D. Spindel of Jacksonville, Fla., offered Culpepper his greatest opportunity for reducing fixed costs through the extensive use of built-ins and site fabrication.

Being a rather practical individual Culpepper was unwilling to venture out into a full scale operation until he had a chance to feel the pulse of the public. A model house was built and completely furnished. The response was more than gratifying as 23 signed orders were received before the model was completed. The enthusiasm continued unabated during the open house and the orders continued to increase.

Capitol Hills, which is now a fully developed subdivision, contains an area of 53 acres. Work started in 1947 and up to the time of the model house, 70 houses had been built. Since then 50 additional cabinet wall houses have been completed or are now in the process of construction. The prototype of the model house is offered to the veteran for \$7,270.66 with a down payment of \$270.66 and monthly payments of \$43.16 for 25 years. Additional refinements to the base house may be ordered during the construction period for an additional amount.

The fact that this builder's project is close to large lumber producing areas prompted him to take advantage of the economies this situation invited. Being the largest customer of a mill located only 20 miles from his base of operation Culpepper sends a crew of his own men to the mill to salvage the by-product consisting of culls and droppings. These are short members left over from long lengths of dimension lumber that are cut for



CONSTRUCTION view showing wood roof trusses on wall spaced 18 inches O.C.



FEATURE of front wall of house is the plywood panels placed between windows which are divided into squares and painted a deep blue shade. Wide wood shill at sill provides space for plants

specific purposes. Culpepper has his crew make up the rough framing unit of doors and windows from floor to ceiling at the mill using the culls for cripples.

The work done at the mill includes corners, tees, studs, floor joists and trusses. These are loaded in an orderly manner for delivery at job to be available to the mechanic as he needs the material. Lumber is distributed around the house and walls are then built on the ground and tilted into position on the floor.

The cabinet-walls that are used so extensively in this house eliminate the need of interior wall construction. These units include in their built-in features articles of furniture that help toward reducing the amount of money required by the purchaser for furnishings. This is an important fact often overlooked by the builder but seriously considered by earnest prospective buyers.

Materials used include JM Rock-wool insulation, U.S. Gypsum Rock-Lath, Gold Bond metal lath, Flint-kote asphalt shingles, Sherwin-Williams paints, Russwin hardware, both American Standard and Briggs plumbing fixtures, Jet-Flow space heater, Rheem hot water heater, Philip Carey metal medicine cabinet, Formica counter tops, R.O.W. windows, Higgins toilet seats, Pittsburgh Plate Glass Co. glass, and Vulco aluminum screens.

American Builder, February 1950.



AS20963—Flex gas connector. Techniflex Corp., Port Jervis, N.Y. A metallic tubing with female elbow at each end, for connecting gas range or similar appliances. 24 inches long. No extra elbow fittings needed since tubing will turn 90 degree elbow. Range can be moved for cleaning behind them.

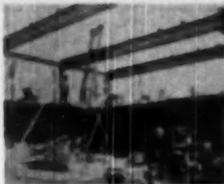


AS20962—Lapite packaged floor-sanding. Connor Lumber and Lath Co., Marshfield, Wis. Short length floor-sanding put up in cardboard cartons sealed to protect contents from dust and moisture. Carton contains material to cover 12 square feet of floor, eliminating figuring of additions for match and error losses.

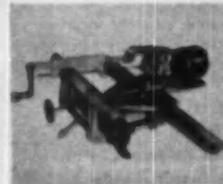


AS20965—Concrete mixer. Chain Belt Co., Milwaukee, Wis. 8 cu adjustable Discharge Moto-Mixer combines high discharge feature with horizontal drum mixer. Discharge of mixer can be elevated to a maximum height comparable to high discharge types of mixer or raised to intermediate points.

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AS20961—Inclined track material elevator. King Manufacturing Corp., Chicago, Ill. King Inclio-Track was designed to simplify elevating of materials to workmen. Manufacturer furnishes platform carrier and raising pulley; contractor builds own track to length with factory parts and pine lumber.



AS20964—Motor-driven saw filing machine. Burr Manufacturing Co., Los Angeles, Calif. Power is transmitted from 1/2 H.P. electric motor to filing arm by fully-enclosed gears. Filing mechanism moves a tooth at a time, generating as many strokes as necessary for any one tooth. Saw has rigid eye.

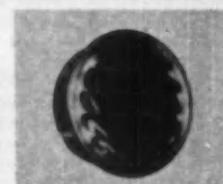


AS20967—Prefabricated house. National Homes Corp., Lafayette, Ind. This corporation produces two lines of houses: Deluxe line from two bedrooms to four bedrooms; Standard line from two bedrooms (as shown in photograph above) to three bedrooms. With or without basement. Stores 800TH 98.

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AS20966—Steelite for Gonite. Pittsburgh Steel Products Co., Pittsburgh 20, Pa. Above, warehouse constructed with use of Steelite for Gonite. Steelite is 24-inch galvanized steel wire mesh, 14 gauge, with double layer of fibrous water-proof paper backing cemented together with a specific compound.



AS20969—Midgeet louver. Midgeet Louver Co., 8 Wall St., Norwalk, Conn. Louvers are made of aluminum, completely rust-proof, in size from one to four inches. Installed by simply drilling hole and inserting unit. No nails or screws needed. Slotted and coved for light anchorage. Shop trucks, dry rot.



AS20968—Forced air gas furnace. Lennox Furnace Co., Marchington, Iowa. Models is 140,000 and 200,000 B.T.U. input sizes. Single port type burner is used for each 40,000 B.T.U. of input. Adjustable for any gas ranging from manufactured to LPG. Is equipped with cluster of narrow "clamshell" heat exchangers.

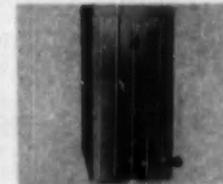
BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AS20967—Sandow. No. 16. J. D. Wallace and Co., Chicago 12, Ill. Completely enclosed upper wheel guard. Only required sawing portion of blade is exposed. Built-in light provides spot illumination. Anti-friction guides reduce saw blade steel crystallization. Has easily operated table adjustments.



AS20968—Raystone frameless tension screen. Keystone Wire Cloth Co., Hanover, Pa. An aluminum insect wire screen made on Raystone tension principle, quickly installed. Easily stored. Removable bar attaches screen to top of window. Bottom bar holds under slight tension. Available in many sizes.

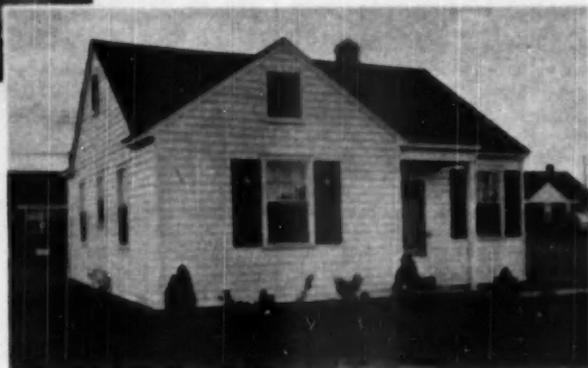


AS20966—Four-in-One winter air conditioner. Jackson and Church Co., Saginaw, Mich. For gas or oil, addition of component package makes unit \$1,000, \$800.00 or \$11,000 B.T.U. output furnace to give with expanding home. Has 12 gauge heat exchanger, fully automatic controls. Height is 60 inches.



Sound Methods and Materials Speed Sales Of Low-cost Homes

Memphis builder includes practical built-into-the-structure features, made possible by close supervision of men and materials



INTERIOR features include quality oak floors and plaster walls. Gas warm-air heating unit is concealed in living room wall. Above: one of typical exterior

THE technique of increasing sales-appeal of low-cost homes by offering some features normally found only in expensive housing is being practiced widely by builders throughout the country. Robert Parish of Memphis, Tenn., a strong proponent of the method, found ready sale for a project of 21 five-room \$6,775 houses in which were incorporated oak flooring on a concrete slab, plaster walls, oversized rafters and ceiling joists, roof and

sidewall insulation, 756 square feet of floor area plus 250 square feet of attic storage space, a disappearing attic stairway and other features.

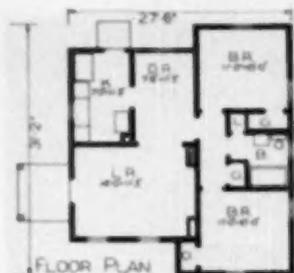
The price of the house includes a 65x115-foot \$1,000 lot. It was built at a cost of approximately \$7.64 per square foot. Parish bought materials carefully and supervised the project closely, taking care that waste and delays were cut to a minimum.

Construction details and floor plans are essentially the same for all of the homes. Conventional methods were followed for framing the roof and sidewalls, which include gables over projecting wings, cut into the main roof, and diagonal bracing in corners of exterior wall-framing for added rigidity. Since the construction crew was well-trained in this type of work, it was done without extra cost.

Drop siding of uniform width



ROBERT PARISH'S Dunmore subdivision in southern outskirts of Memphis was begun in December, 1948, completed the next May



FLOOR plan shows good-sized living room, four large closets. Rough-boarded area provides 250 square feet of storage space

was used for each house. Stereotyped exterior appearances were avoided by varying the siding on adjacent houses. Widths of six, eight and 10 inches were utilized.

All interior walls are built up of 2x4 studs, with three coats of plaster applied on both sides over gypsum lath. The bedrooms, living room and dining room are papered; and walls and ceilings of the kitchen and bath are covered with one prime and two finish coats of enamel.

Ceiling insulation consists of four inches of mineral wool, while insulating board sheathing, 5/8-inch thick, provides wall insulation. All windows and doors are weather-stripped.

The floors are select quarter-sawn oak, 2 3/4 inches wide and 25/32-inch thick. They are nailed to 2x4 screeds which are spaced 12 inches O. C. and bolted to concrete slab. A coating of hot asphalt was mopped on the 4-inch-thick concrete slab which serves as a sub-floor. Beneath the slab is a 12-inch gravel fill; and between the fill and the concrete slab is a layer of 30-pound felt half-lapped and mopped in with hot asphalt. Felt extends to the outside of the exterior foundation wall.

Exterior walls are 9 inches thick, supported by a continuous 8x20-inch concrete footing, 13 inches below grade.

Rafters and ceiling joists are 2x6 inches, with the former 20 inches O. C. and the latter 16 inches.

The kitchen has a series of built-in wood cabinets extending three feet high on the wall over the sink and at both sides of it. The floor covering is linoleum. Aluminum screens and frames are provided for all windows.

Financing in each case was with a \$6,000 25-year FHA loan, plus a veterans loan for the remainder. No down payment was required and monthly payments are \$50.

American Builder, February 1950.



AB25017—Powder-actuated driver. Mine Safety Appliances Co., Pittsburgh, Pa. Stud-cartridge assembly is fitted into steel barrel of driver. By rotating spring-loaded safety arm in handle and pecking tool against material, cartridge discharges, forcing stud into concrete. Uses 1/4 or 1/2-inch studs.



AB25015—New Texas Limestone Texas Quarries, Inc., Austin, Texas. "Roadometer" is split-face limestone in two-course height. Since this stone does not have to be faced at the job site, the firm states that it can be used of cuts comparable to stone siding. Provides attractive exterior for home.



AB25016—Crane "WB" door operator. H. W. Crane Co., Chicago 7, Ill. Operator may remain in car and open garage door by remote control. Opens or closes door, stops it at any desired height. Turns garage lights on or off. Floodlights driveway. Locks door securely. FHA approved.

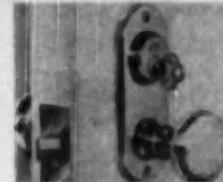
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AB25018—Coloring material for concrete. The A. C. Hara Co., Inc., Long Island City, N. Y. Powder, consisting of coloring mediums, fused aggregates, water-proofing and hardening elements and binders, is used in construction of colored sidewalks. Colored or black sidewalks have eye-appeal.



AB25019—Rex Fly-5 Skipper concrete mixer. Chain Belt Company, Milwaukee, Wis. Incorporates free pivoted hopper. Fan stationary charging gate allows loading of hopper while another batch is in the drum. Non-clogging. It is mounted above center line of drum, free from spatter of mix.



AB25013—Corbin tubular exterior door cylinder lockset. P. & S. Corbin Div., The American Hardware Corp., New Britain, Conn. Low priced, high quality. Standard Corbin 5-pin tumbler cast brass cylinder. Inside and outside trim brass metal. Operates from either side. Locks on inside by thumb turn.

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AB25014—Lodon bending machine. Midwest Manufacturing Co., St. Louis, Mo. Makes wood bending easy, accurate and automatic. Low initial and operation cost. Beads plowed, handbeared. Possible range of curved designs almost unlimited. Panel is bent by uniform heat and pressure applied at point of bend.

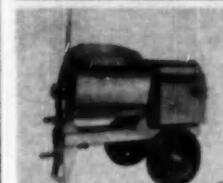


AB25017—Trumbull N75 Panel-board. The Trumbull Electric Manufacturing Co., Platteville, Conn. For economical group, branch circuit control of lighting distribution for stores, garages, residences. Heat molded phenolic sections contain six complete circuits which provide safe control. Fits stud walls.



AB25012—Algalite, light weight translucent building material. W. D. O'Morrow & Co., South Gate, Calif. For use as interior screens, partitions, skylights, green houses, patios, or wind breaks. Shatter-proof, material combines safety and beauty. Come in large and small corrugations and flat sheets.

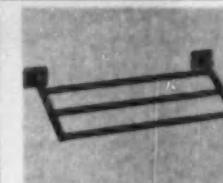
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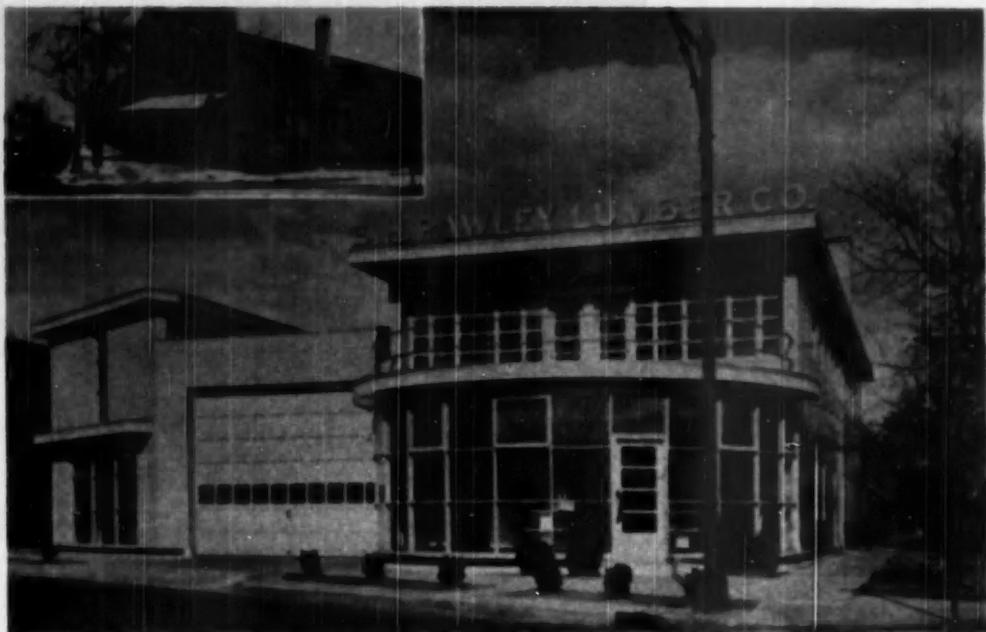
AB25014—4-P-PT plaster and mortar mixer. Gilson Brothers Co., Fredonia, Wis. Model available with two types of axle. Spring mounted axle is 55-inch fixed width for high speed trailing. Two position axle width can be changed from 30 inches wide for narrow doorways, to 50 in. for fast trailing.



AB25010—Model 3-35 gas-turbine powered chain saw. McCulloch Motor Corp., Los Angeles, Calif. One man can handle easily. Total weight, including blade and chain, 28 pounds. Develops full 3 H.P. Operates at full power in any position or at any angle. Two models available for construction work.



AB25011—Hall-Mark adjustable towel rack. Hall-Mark Co., Los Angeles 7, Calif. Rack can be adjusted to any one of three positions: straight out, 45 degrees, or down out of the way when not in use. Can be used for attractive guest towel display or for bath towel storage in the bathroom.



CONTRAST of old and new buildings suggest success of Pawley Lumber Co. New building has two showrooms: one on left for millwork.

Keeping One Step Ahead of Builder Needs

Operation of one of largest lumber firms in Wabash Valley, directed by a woman, is characterized by neatness, local confidence, enterprise



MANAGERS and assistants of various yards of Pawley Lumber Company are shown above assembled at dinner meeting. Pictured are, front row, left to right: Mrs. Elsie Pawley, John Bussing, George Dinkel, George Nagel, Leo Elliott, Clyde Brown, J. Harold Sussell (auditor). Rear row, left to right: Richard Allen, Fred Bussing, Dean Callahan, H. D. Ward, Howard J. Bollinger, Russell Butcher, Russell Crowder, Leslie O. Taylor.

FOR the past thirteen turbulent years, a woman has guided the affairs of the Pawley Lumber Company, Inc., of Terre Haute, Ind. Immaculately clean yards, spic-and-span stock arrangements, and fresh paint are testimonies of the feminine touch. Exemplary employee relations, eight fine lumber yards, a growing volume of business, and the newly remodeled general offices are proof of the success of this womanly tutelage.

Mrs. Elsie Pawley took over the management of the Pawley Lumber Company after the death of her husband, Stephen H. Pawley, in an automobile accident in 1936. The organization was originally founded in 1893 when the first Stephen Pawley and his son, D. H. Pawley, purchased a lumber yard in Dana, Ind. Shortly thereafter, Stephen H. Pawley, son of D. H. Pawley, became a member of the organization, eventually assumed its leadership, and expanded the business to include a total of seven yards throughout the Wabash Valley region of Western Indiana. Another yard, formerly owned by the Pierson Lumber Company, was added in 1943 by Mrs. Pawley.

The policy of the Pawley Lum-

ber Company has been built around the idea of service to the contractor and consumer. Broad, central alleys and easily accessible stock in yards encourage pick-ups from these plants. The warehouses of the yard shown above were rebuilt at the time of office remodeling.

Two draftsmen are regularly employed by the company. Their services are at the disposal of contractors and potential home owners. This company does not engage directly in construction. However, it works in close cooperation with local contractors to whom it directs possible customers.

The new building shown in the photograph (top, left) houses the general offices and the local office of the north Terre Haute yards. The semi-circular section was especially designed to utilize the acute angle portion of a trapezoid-shaped lot without distorting the rectangular pattern of the rooms. The glass used in this section was manufactured by the Pittsburgh Plate Glass Company. The overhead door which also enhances the facade of the building was manufactured by the Overhead Door Corporation. The general contractors for the office building were C. H. Garmong and Son, Terre Haute. The sheds were constructed by Fred C. Libbert.

The first floor rooms of the office building are equipped with indirect fluorescent lighting, $\frac{3}{4}$ -inch acoustical tile, and asphalt tile flooring. Second floor rooms are decorated with varying colors ranging from dubonnet to cream. One of the rooms on this level serves as a reception room for customers. An automatic hoist has been installed in this new building to facilitate the removal of cinders and refuse from the basement.

The company does build hog-houses and similar small farm sheds during winter months, especially. Since the company operates two mill shops and employs two full-time carpenters, the construction of these small buildings insures a year-round supply of work.

Evidence of success under Mrs. Pawley's management is afforded by the volume of business done. In addition, the number of persons employed has increased from 37 in 1936 to the present total of 67. The organization operates a fleet of 24 trucks.

Each one of the eight yards is under separate management. As a consequence, each yard is equipped to meet its local demands with a fair degree of understanding.

American Builder, February 1950.



AE20057—Portable A.C. electric generating plant. O. W. Onas & Son, Inc., Minneapolis, Minn. The 3,000-watt plant provides enough power to run fast-working, cost-cutting tools on every job. Provides electricity for lights, drills, planes, pipe-threaders and other equipment. Driven by gasoline engine.



AE20047—Lull Traveler material handling machine. Lull Manufacturing Co., Minneapolis & Minn. Lifts and transports loads up to 20,000 pounds. When lifting, jacks extending at 45 degrees brace against ground to act as stabilizers. Hydraulic jacks retract into truck body when material is loaded.



AE20048—'Hydra-Lift' ladder attachment. Anderson Products Co., Tulare, Calif. Automatically correct uneven ground conditions and provides maximum safety. Attaches to all types of ladders, wood or metal, straight or forked beam. Telescopic steel tubing automatically adjusts to width. Lightweight.

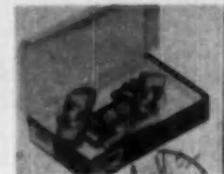
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AE20045—Figure-Mated Payroll Tax Index. Rapid Office Devices, Inc., Chicago 2, Ill. Computes official withholding tax, new 1950 Social Security tax of each employee in one operation. Index consists of finger-tip-controlled cylinder on which chart for whichever payroll period used is mounted. Fast, simple.



AE20046—Radio Model No. 1 automatic 8-inch ventilating fan. Shepler Manufacturing Co., Pittsburgh 12, Pa. For built-in installation in small rooms where wall space is limited. Recommended for powder rooms, kitchens, bathrooms. Built to fit all standard construction. Permits easy installation.



AE20047—Westlock marking and mortising tool set. Westwood Manufacturing Co., Los Angeles, Calif. Set consists of necessary chisels for marking and mortising slots for studs and strike plates. These, in proper class, enable builders to reduce labor and time necessary to install lock sets. Chisels forged from steel.

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AE20036—Loan-to type tubular steel ladder. Ell-Jax, Inc., Archbold, Ohio. Unit consists of 4-foot base section having 4-foot spread, one 4-foot and one 3-foot ladder and 3-foot head which affords plenty rest space. Entire ladder unit can be easily assembled or dismantled in a matter of a very few seconds.



AE20037—Type U-draft control for space heaters, floor furnaces. Shulte Manufacturing Co., Detroit 25, Mich. Works on horizontal or vertical flue pipe. To change from horizontal to vertical, remove adjusting nut, shift counterweight from horizontal to vertical stud. This draft unit is built into flue pipe.



AE20038—Pan-File Duo-Feed stapler. Fastener Corp., Chicago 14, Ill. Can be carried conveniently in pocket. Length, 5 inches. Weight $1\frac{1}{2}$ ounces. Holds 100 staples. By compressing stapling mechanism it willasten 12 sheets of paper as securely as two. Plastic barrel comes in 5 colors. Cap is of chrome.

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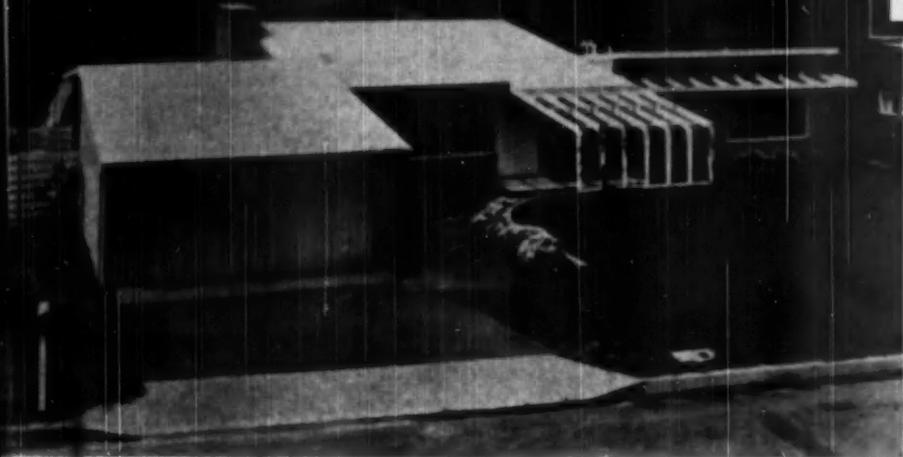
AE20039—Ash pit gas conversion burner. Hendley-Brown Heater Co., Jackson, Mich. ASA listed under latest requirements, burners equipped with either round or oval burner heads for round or rectangular furnace or boiler firepots. Capacity of each burner ranges from 40,000 to 100,000 B.T.U.'s.



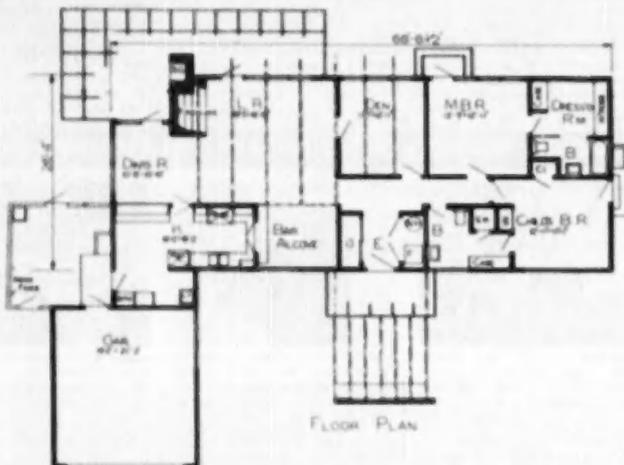
AE20040—Enclosed bucket elevator for use with three-compartment Bin-Batcher. Contraction Machine, Inc., Waterloo, Iowa. Controlled from ground level. Self-centering chute automatically extends when feeding either bin. Can load from dump truck into hopper. Unit's capacity per hour, 40 tons.



AE20041—Cabinet model humidifier. Walton Laboratories, Inc., Irvington 11, N.J. Both single and duplex models can now be obtained in either walnut or blonde mahogany grain. Units are automatically controlled and evaporate between 5 and 10 gallons of water into air per day, depending upon model.

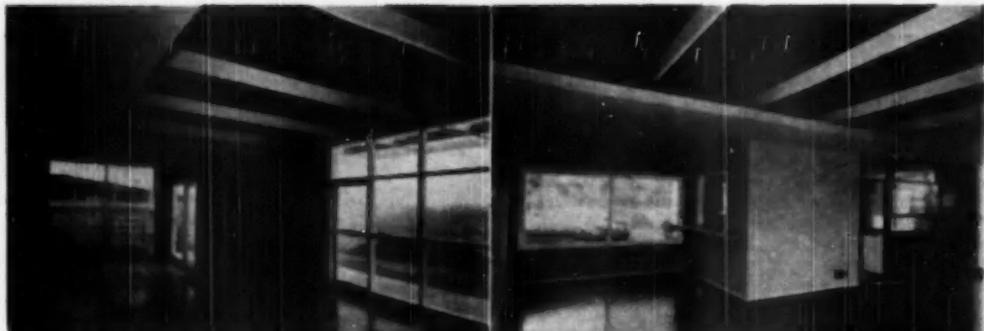


OPEN canopy, extending 10 feet from the front wall of this home, is formed by 2x7 stringers, five feet apart, and wood columns supported on brick retaining wall. Stringers continue over the living room ceiling.



Special Features Add to Appeal Of Modern Home

Small architectural details combined with bright colors make this an attractive house, both inside and out



EXPOSED rafters in living room are painted green; walls, gray. Dining alcove, right, is separated from kitchen by a counter

ATTRACTIVE color, ample storage space, adequate advantage of a site, and good small architectural details are commendable features of this home. Built for sale in Brentwood, Calif., it is offered at \$29,500.

A feature of the home from the front is the open canopy extending 18 feet from the wall of the house, resting on a brick retaining wall at the edge of the lawn. The 2x10-inch framing members are painted white. To the right of the entrance is another framework of 2x8's, on 24-inch centers, five feet long. Above them is a 2-foot overhang which goes across the entire front of the house. The front is stucco painted gray except for the boards and batts on either side of the door. These are white. The garage front of boards and batts is also white. The low pitched roof is covered with white gravel.

The massive front door is five feet wide and two inches thick and is weather stripped. To the left of the entrance is a guest closet with sliding doors eight feet wide. To the right is a similar closet which houses the water heater and furnace. Other storage space includes a wardrobe closet in the large dressing room near the master bath, two walk-in closets in the children's bedroom, additional wardrobe and closet space in the dressing room which is combined with the bath.

Over the living room, roof rafters are exposed giving a studio living room effect. The plastered portion of the ceiling is painted yellow; rafters are stained green, and walls are gray. Above the 2x10 roof rafters are 12-inch tongue and groove boards, also stained green. The 2x7 stringers below are five feet apart and extend to the outside of the house to form the pergola.

Construction was done by Burke & Wyatt, local builders.



U-SHAPED kitchen has yellow walls, green ceiling, yellow and grey rubber tile floor. *American Builder, February 1950.*



AE25084—Sun Vertical Blinds. Sun Vertical Sales Co., Grand Rapids 7, Mich. Separate strips that form louvers of blind are made of Colsonex Mullinard. Made in wide range of colors. Each fabric louver is removable for washing. No wrinkling or ironing. Without tapes or cords with concealed control rod. Congress **BOOTH 18.**



AE25086—Korrosal curve display. Sisco-Bolton Corp., 276 Fifth Ave., New York 10, N. Y. For details, complete display with two-inch detachable legs for use on sales floor, in window, or on walls. Unit features company's entire Korrosal curve line of nine different color samples and eighteen color samples of firm's curve base.



AE25088—Radiant baseboard. United States Radiator Corp., Detroit 24, Mich. Design permits complete, permanent installation before tacking and plastering to eliminate temporary heat need for winter construction. Units are installed above studs or in place. Four-inch special full-field protects unit during period of construction.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AE25089—Bilco metal Calladour. Bilco Co., 144 Hattuck Ave., New Haven 6, Conn. Made in either copper-steel or aluminum. Available in three standard sizes. Provides direct route to basement. Makes possible future installation of bulky equipment in basement, including deep freezer unit, heating equipment, oil storage tanks.

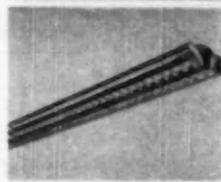


AE25092—Lemidall. Service Products Div., Woodall Industries, Inc., Chicago 18, Ill. New plastic-laminate panels of Tempered Masonite Foodwood base and plastic surface which resists heat, moisture, abrasion, and impact. Unaffected by water, soap, beverages, common solvents. Variety of colors and sizes. Stevens **BOOTH 171.**

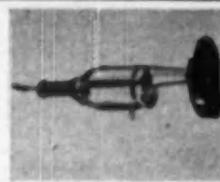


AE25091—Ranch plank flooring. E. L. Bruce Co., Memphis 1, Tenn. Pre-finished oak flooring in alternate widths with glued-in, colored pegs. Designed for ranch-style house. Has Bruce scratch top finish in medium dark, mellow "Decorator" shade. Strips are 7 1/2 and 9 1/2 inches wide, and standard 15/32-inch thick. Stevens **BOOTH 69.**

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AE25090—Slimline, Jr. luminaire. Edwin F. Guth Co., 2615 Washington Ave., St. Louis 2, Mo. Fixture designed for use with 4- and 8-foot Single Pin Slimline lamps. Admits 43 per cent of light up, and 57 per cent of light down. Has low brightness louvers and center reflector. Louvers hinge to either side. Top enclosing plate optional.

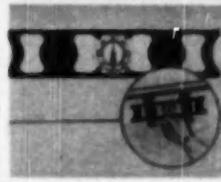


AE25077—Sill putty painter. Sill-sew, Inc., 8813 Buford Ave., Chicago 18, Ill. Designed to speed up removal of old mortar between bricks and tile on brick painting jobs. Light in weight. Dual-trigger switch and geared motor for trouble-free performance. Wheels are protected by sturdy guard. Used with standard discs.

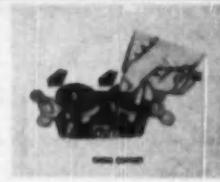


AE25096—Stoppall waterproofing. Stoppall Waterproofing Manufacturers, Inc., Kalamazoo, Mich. Waterproofing made in five types for concrete, wood, leather, textiles, and masonry. Liquid carrier in which solids and preservatives have been dissolved. Penetration and evaporates leaving pore-casting solids as integral part of material.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AE25098—Magna-Level. Buckeye Plastic Corp., 1220 Huron Rd., Cleveland 15, Ohio. Frame of alloy aluminum with Alnico permanent magnets. Sticks to round or flat surfaces at any angle, leaving hands free. Clock-faced angle gauge with gravity needle determines angle to 1/60 degrees. Size 8x2 inches. Weight 10 ounces.



AE25087—No-Shok safety duplex receptacle. Bell Electric Co., Chicago, Ill. Has built-in rotary cap which automatically closes outlet when not in use. For connection plug prongs, inserted into rotary cap opening, are used to turn cap so prongs can be pushed in; cap returns to closed position when plug is removed from outlet.



AE25088—Long Fibre rock wool batts. Johns-Manville Sales Corp., New York 16, N. Y. Long Fibre produces more resilient batts that spring to full thickness after compression. Fibres run parallel to length to prevent sagging. Made to easily cut with knife or saw. Made in two thicknesses, 18 or 23 inches wide. Stevens **BOOTH 14.**

Home Builder

By
William G. Irving,
Samuel S. Grossman

Town Advertising Associates,
Hoboken, N. J.

THERE is a big flaw of omission in the old adage that the world will beat a path to the door of the man who makes a better mousetrap. To be wholly true, the adage should add:

1. If it is simply but forcefully explained why the mousetrap is better.

2. If clear, explicit directions to the door are given.

3. If the maker of the mousetrap is properly identified.

No product—whether the most ingenious mousetrap ever contrived or the finest house for the money ever built—will evoke public demand unless the world is told about it. The process of telling consists, for the most part, of advertising.

Advertising is an art demanding training, experience and a high degree of skill and talent. The place to look for these qualities is in a recognized successful advertising agency. A recognized agency is one which has met credit, ethical and other requirements laid down by various publishers' associations. To determine whether an agency is recognized, call the credit or advertising manager of your nearest daily newspaper.

Care in Selecting Agency

The builder, in selecting an agency, should exercise the same care as he does in choosing his lawyer or physician. Friendship, or family or social considerations, should play no part; the choice should come not from the heart but from the head. To gauge an agency's effectiveness, the builder should:

1. Ask the agency under consideration to give him a list of its clients.

2. Ask each of these clients to rate the agency on (a) originality in copy, layouts and art; (b) attention to the client's particular

(Continued on page 224)

American Builder, February 1950.



A82634—Steeple Jack portable chain saw. Northwest Standard Products, 1460 Quincy NE, Minneapolis 17, Minn. Can be slipped on any two rings of ladder or mounted for stationary use. Will cut asbestos sheets or any type roofing. Made in cold rolled, hollow ground. Built-in pouch for holes.

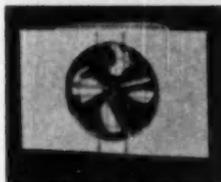


A82633—Balllocks. Eiler Co., Ford City, Pa. In two designs, anti-alpha unit (S-1961) and regular unit (S-1962). Working parts of two types are interchangeable. Has balanced piston, snap-action closing, shutoff stop, standoffs of red metal. Will work in tanks of any make but especially Eiler. Steves 800TH 41.

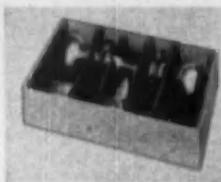


A82632—Gas range. Perfection Stove Co., Cleveland, Ohio. Acorn 48-inch deluxe range has wald-high stainless trailer with chrome-plated grid. There is storage drawer below burner and pull-out cooking chart. One giant and three standard-sized burners and broiler-sized oven. Oven has window and light.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



A82631—Window fan. Seco-Life Manufacturing Co., St. Louis, Mo. Seco Window Fans' air circulating capacity at high speed is sufficient for cooling and ventilating a three to four-room home during normal summer weather. Fan is also equipped to serve as standard air circulator in any home or office.



A82630—Tubular lock. Yale and Towne Manufacturing Co., Stamford, Conn. Yale standard tubular lock has minimum number of parts and is packaged for quick installation. Fits both right and left hand doors without reversing. Designed in six models, in all standard finishes, for all house doors.



A82629—Fast-flow gas-fired Hi-Dry winter air conditioner. Parley Furnace Co., Garwood, N. J. Steves 42,000, 55,000 and 70,000 B.T.U.'s at the register. Factory assembled, with all controls. Adaptable for low ceilings, smaller homes or beamless type homes. A.G.A. approved for liquefied petroleum.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



A82628—Trivell sink. American Radiator and Standard Sanitary Corp., P.O. Box 123, Pittsburgh 10, Pa. Trivell sink is equipped with a special garbage container between double compartments. Unit permits effortless garbage disposal at counter-top with no bending or stooping. Steves 800TH 63 to 64.

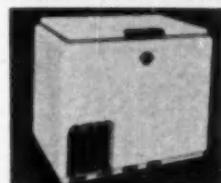


A82627—Thermopane double glass unit. Libbey-Owens-Ford Glass Co., Toledo 1, Ohio. New unit consists of an outer light of heat absorbing plate glass and inner light of regular polished plate glass, separated by layer of dehydrated air. This unit reduces transmission of solar energy. Congress 800TH 43.



A82626—Overhead Panolay heating unit. Ray and Night, Inc., Air-Heated Gas Equipment, Inc., Monrovia, Calif. These heating units have no fans to force air circulation or drafts. Heating is done largely by infra-red radiation. May be used for spot heating. Allows comfort at lower temperatures.

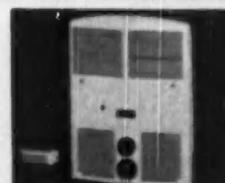
BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



A82625—Nine-cubic-foot freezer. Kalvinator Div., Nash-Kalvinator Corp., Detroit 21, Mich. Has storage capacity for up to 210 pounds of frozen foods in chest-type welded steel cabinet. Finished in white baked-on enamel. Unit is 36 1/2 inches high, 47 1/2 inches long, 25 inches deep. Steves 800TH 1.

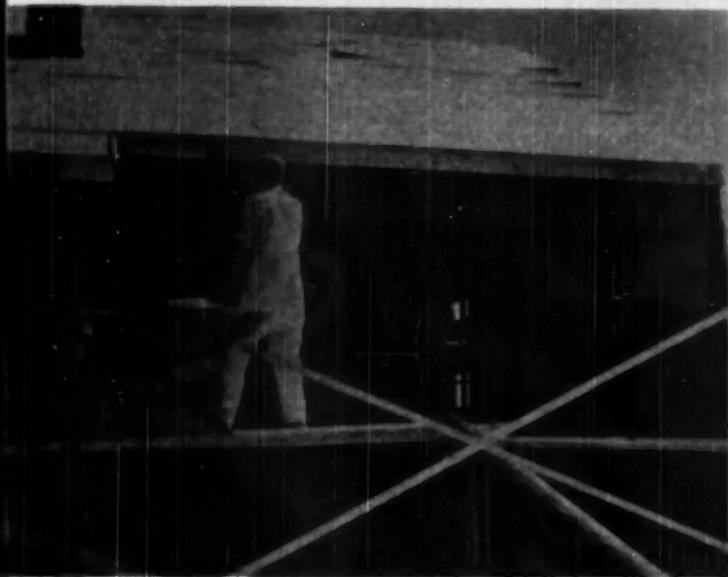


A82624—Save-A-Sink. Cincinnati Iron Fence Company, 2101 Florence Ave., Cincinnati 6, Ohio. Aluminum tray makes a drainboard out of flat-topped sinks. Protects sink tops and drains water from flat top surfaces. Will not scratch. Rubber feet give proper fit. Size: 19 x 14 inches. Surface for squaring joints.



A82623—Self-Aire wall furnace. Model 99-14. South Wind Div., Stewart-Warner Corp., 1814 Drovers St., Indianapolis 7, Ind. This is a convective type wall heater with "safety-sealed" combustion chamber and completely sealed vents for burning all types of gas. Unit on display at Steves 800TH 42.

Low-Cost Homes in Reinforced Stucco

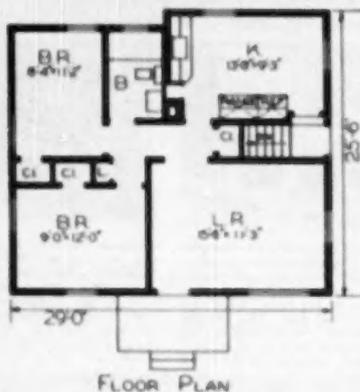


Homes, built with new type exterior wall construction for Detroit, find a ready market

USING stucco exterior walls, strengthened with a special type of steel reinforcing wire, offered something new to Builder Leo M. Riley, of Detroit, Mich. That was one reason he was anxious to try it, plus the fact that homes incorporating this type of wall construction had never been built in the Detroit area. In preliminary planning for a low-cost home project, Riley thought he could make cost savings in wall construction, and convert these savings into extras that would add sales appeal to the homes.

In three and a half months, the Riley organization completed 24 homes incorporating the method, and Riley says his planning proved right. He reports enthusiastic acceptance on the part of home buyers—the homes, completed in November last year, were sold before completion—and he plans to build more homes with reinforced stucco walls this year.

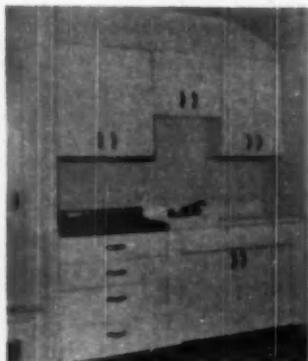
Part of the savings made in a sales price of \$8,195 for the 4-room houses went into extra tile for the kitchen and bathrooms, a kitchen ventilating fan, select oak flooring, steel cabinets and sink in the kitchen, steel windows,



FIRST coat of Portland cement stucco is applied over steel reinforcing wire that is held 1/4 inch out from side of wall by special furring nails. Another 1/4-inch coat of stucco will be applied, followed by two coats of cement paint

FLOOR plan, left, of house above was used in all homes in the 24-house Leo M. Riley project completed in Detroit

SALES of homes in Riley project were ahead of completion. Below: group of the 4-room houses priced at \$8,195



KITCHENS in Riley homes are equipped with ventilating fans, steel cabinets, sinks

American Builder, February 1950.



LEO M. RILEY

polished brass hardware throughout the houses, and for venetian blinds. Full basements and 48x110-foot lots were included in the sales prices.

The homes rest on 8x20-inch footings placed below the frost line. These support 8-inch concrete block foundation walls. Diagonal 1x6 subflooring is used, over 2x8 floor joists. Joists, 2x4 studs, and 2x6 rafters are placed 16 inches O-C. Interior walls are load bearing. Metal trim is used. Roof covering is 210-pound asphalt shingles over 1x6 roof boards laid tight. Blanket type cotton insulation is used in walls and ceiling.

The stucco walls were made by placing a layer of building paper and 25/32-inch sheathing directly on the outside of the studs. Over this, Key-mesh reinforcing wire, made by Keystone Steel & Wire Co., was placed. A special type furring nail holds the wire 3/4 inches out from the sheathing. Over the reinforcing wire, a 1/2-inch scratch coat of Portland cement stucco was applied, allowing it to embed the steel wire. After this dried, a second 3/4-inch coat of stucco was added, then two coats of cement paint applied to complete the job.

BRANDED PRODUCTS USED:

Plumbing fixtures, Briggs Manufacturing Co.; sheeting, Calcofax Corp.; Dexter hardware, National Brass Co.; Fenestra steel windows, Detroit Steel Products Co.; roofing, Flintkote Co.; Keymesh reinforcing wire, Keystone Steel & Wire Co.; Lavoire gravity furnace, C. A. Oles Manufacturing Co.; metal trim, Milcor Steel Co.; Youngstown cabinets and sinks, Mellis Manufacturing Corp.



AS2526—Adjustable steel truss. Reimann and Georger, Buffalo 5, N. Y. Truss suitable for all ceiling and overhead work of plasterers, masons, architectural contractors. Consists of two rigid vertical steel supports with diagonal braces equipped with clamps having sharp prongs to hold the wood beam.



AS2523—Fluorescent lighted bathroom cabinet, No. "W" series. F. H. Lamm Co., Cincinnati 4, Ohio. Available with frameless mirror or illuminated or with stainless steel mirror frame. Single switch operates both lights. Coordinate cabinet for electric razor, hair dryer. Provided with single outlet box.



AS2525—Model B-C Weyer impactor. Weyer Impactor Sales Co., Columbus 15, Ohio. For tamping floor base material, earth, and bituminous and dry material for driveway, parking lots. Impact, 1,200 foot pounds at speed of 100 blows per minute. Has self-governing, constant speed carburetor.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AS2522—Stanley interior residential sliding door hardware. The Stanley Works, New Britain, Conn. For single or multiple doors with or without panes. V-shaped track reduces friction to a minimum. Clamping screw on adjustable track assures perfect alignment of door with jamb. Quick, easy installation.



AS2516—Asphes asphalt flooring tile. Uvalde Rock Asphalt Co., San Antonio, Texas. Highly resistant to acids, alcohols, grease, and mild acid solutions. Difficult to dent or mar. Wide selection of through and through marbled hues. Tile is especially adapted for installation over any concrete subfloor.



AS2515—Clipper bolts. Clipper Manufacturing Co., Kansas City, Mo. Holds and automatically unloads virtually any material. Quickly and easily set up in any position on scaffold or parapet wall. Automatic unloading feature eliminates need of man on the scaffold. Automatic release clamps are available.

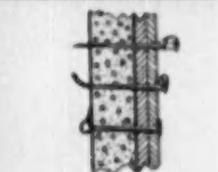
BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AS2518—Olympic handrail sliding. West Coast Stained Shingle Co., Seattle, Wash. Natural wood product has rugged character, heavy shadow line. Cut by hand from selected cedar trees. Butts run from 1/2 to 1 1/2 inches in thickness. Lengths vary from 4 to 14 feet. Bevelled, with rouse back.



AS2521—Rubber-coat skid-less floor enamel. The Wilbur & Williams Co., Boston 15, Mass. Chemical and gasoline resistant. Dries in one hour. Inexpensive and highly resistant to wear. Provides tough, lasting protection for basements, patios or garage application. Excellent where the traffic is heavy.



AS2527—Loc-nail. E. G. Building Fasteners Corp., 129 Park Ave., New York 17, N. Y. A nail of 1/2 or 3/4-inch stainless steel which is driven like ordinary nail. Automatically clinches itself. Its fine point prevents material displacement. Radial bending at back for positive clamping allows size variations.

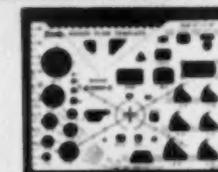
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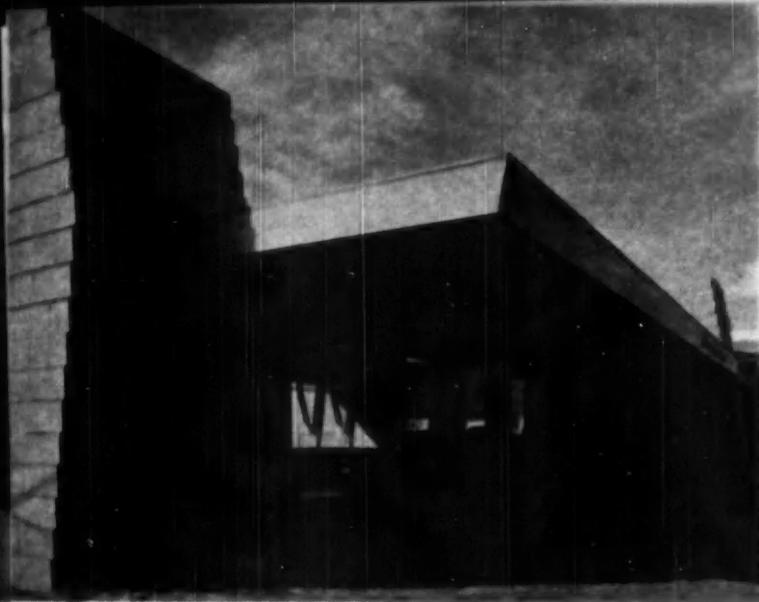
AS2528—Mobi-Air compressor. IKA-80. Ingersoll-Rand Co., New York 4, N. Y. Diesel engine. Portable. Starts easily, and after short warm-up period is shifted to full diesel operation by means of a single lever. Regulator slows speed to compress just enough air to hold required pressure, thus saving fuel.



AS2529—Mabo Floor Planner. Offered to Mabo asphalt tile dealer by Hochmelator, Inc., Pittsburgh, Pa. Stands table high from floor. Customer can arrange miniature 4x4-inch blocks of actual Mabo asphalt tile flooring into patterns and color combinations to suit his tastes. Full range of colors.



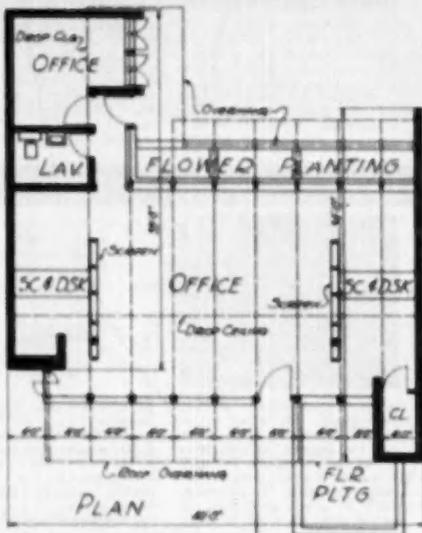
AS2523—Timely house plan template. Timely Products, Box 226, Columbus 9, Ohio. Plastic template with die cutouts for electrical and plumbing symbols, door swings, moldings and gutters. Roof pitch gauge included. Precise cutouts to 1/8-inch scale. Other templates are available in different scales.



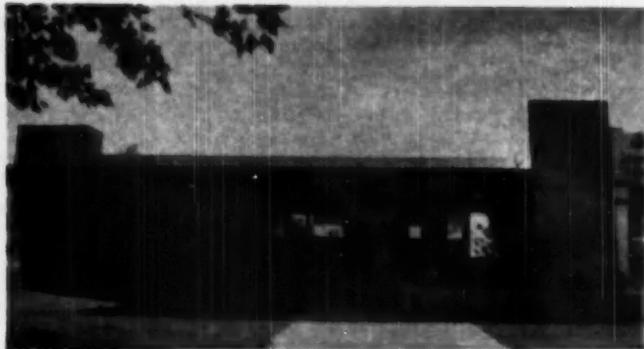
PLYM, overhang and glass wall provide unusual front detail

Modern Office At \$8.78 Per Square Foot

Commercial building of individual design is constructed at low cost through unusual use of conventional materials



PLAN is for one large room, with screen on each side of large counter affording two semi-private offices. Above: Overhang extends to interior, varying ceiling height



VIEW from front emphasizes bracketing effect of two dominating pylons. Concrete blocks are painted gray. Low concrete wall of planting area conforms to the horizontal lines of building

WHAT E. W. Gilland, owner of the Valley Escrow Co. in Southern California's San Fernando Valley, had in mind when he planned a new office building was a structure which would combine striking design with low-cost construction. Gilland's ideas were put into practice by John Lautner, Hollywood designer, and the result was an efficient, modern office—built at a cost of \$8.78 a square foot.

Located on a heavily-traveled thoroughfare, Ventura Blvd., at Sherman Oaks, the office attracts much attention from passing motorists. An unusual effect is offered by two large concrete block pylons which bracket the nearly solid glass front wall.

The pylons are built of reinforced concrete with a facing of concrete blocks. The vertical reinforcement of the pylons continues and becomes part of support for wall footings.

The plan is arranged so that the two side walls are solid masonry. Walls facing street and rear lot are composed almost entirely of glass, with supporting double mullions spaced four feet apart. These mullions in turn receive the roof and ceiling rafters above. Rafters are cantilevered out to form canopy across entire front.

The low canopy across front, with an underside of corrugated aluminum, extends for about eight feet into the office. Height of ceiling beyond canopy is raised, with appearance of greater height also emphasized by exposed ceiling rafters. Interesting lighting effects are made possible by different ceiling heights.

Free use of exposed interior structural members, both wall and roof, not only add to rugged effect of structure but also serve as means of reducing over-all costs. This type of construction is particularly conducive to rapid construction because of elimination of interior finish.



EXPOSED ceiling rafters and double mullions, and concrete blocks painted gray help form natural, rugged interior. The concrete floor is painted a dark brown.

American Builder, February 1950.



AEROFLEX—Draftless ventilation window unit. Solar Air-Flo, Inc., Sittart, Ind. Lowered sections are placed at top, bottom, or sides of stationary window pane, glazed with single, double, or triple plate glass. Made with wood or aluminum parts. Equipped with built-in rust-proof screens. Stevens 800TH 171.



ADBESTOS—Adbestos siding and shingle collar. Int-States Building Materials Co., Fort Worth, Texas. Big Chief line of cutters are manufactured in two sizes, 22-inch blade length weighing approximately 27 pounds, and 33-inch length, about 32 pounds. Blade castings are made of a high-grade aluminum alloy.

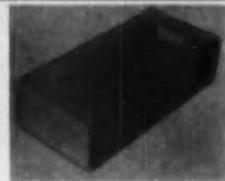


HEAVY-DUTY truck. Chevrolet Motor Division, General Motors Corp., Detroit, Mich. Heavy-duty Chevrolet stake truck in 1950 line has a 141-inch wheelbase and accommodates load of more than five tons. Metal has 12-foot platform, is widely used in all types of hauling. Truck line has 20 series.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



TRESCHER—Trescher Construction Products Corp., Los Angeles, Calif. Profit Trescher is mounted on Case tractor. Has attachment for loading dirt after trenching. Ditches to depths of more than 48 inches in widths of from 12 to 18 inches. Equipped with eight forward "creep" speeds, two wheel speeds.



CLEAN BRICK. Detroit Brick and Block Co., Detroit 14, Mich. Meets A.S.T.M. grade SW specifications for quality brick. Hard, silica-base brick high temperature and high pressure used in autoclaves. Has high mortar affinity. Average compression break point: 6710 pounds per square inch.



DOLE THERMOSTAT, air control. Dole Valve Co., Chicago 12, Ill. An automatic individual room temperature control for homes using forced warm air heating systems. Instrument includes a thermostat which automatically operates valve of especially designed register. Proportions heated air.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



VESTA Thel-T steel basement window. Vesta Steel Products Co., Inc., 247 Colomade Ave., Buffalo, New York. An economy model window of rigid riveted construction. Made from hot rolled steel "T" sections. Possible to open halfway or fully. Firm also makes basement screen and a storm sock.

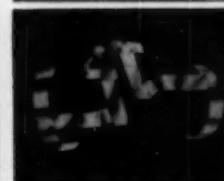


ALUMINUM storm window and steel residence casements. Coca Steel Products Corp., Chicago 98, Ill. Coca storm windows are manufactured of specially designed extruded aluminum sections, glazed with double strength glass. Have rubber weathering seal and ventilator. Stevens 800TH 111.



FORMSTONE, hand sculptured real stone wall finish. The FormStone Co., Baltimore 23, Md. For new construction and renovation of exteriors and interiors. Applied over any surface—concrete, weatherboard, brick, stucco, plaster block, or concrete block. Franchises, and training in application.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



DAN-B Safety fluorescent lamp guards. Dan-B Equipment Co., Hillside, Ill. Provides protection against possibility of falling fluorescent lamps in continuous run, end-to-end lighting installations. Trapped resilient steel. Can be sprung aside for reamping, cleaning. Can be quickly installed.

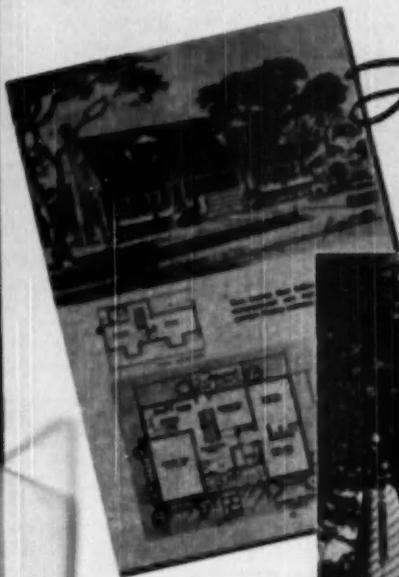


INS-COTTON, fire-retarding cotton insulation. Taylor Building Manufacturing Co., Taylor, Texas. Available in versatile types to meet most insulation needs, including open face, fully enclosed and reflective. Lightweight, easy to handle, and install. Long lasting material. Sound deadening effect.



VALVET GLO, China Glo, cyclotriized paints. Pesti-Kule, Inc., Cleveland, Ohio. Permits exact matching in color of walls and woodwork. Packaged under trade name of Valvetone, firm's washable oil paint. One coat covers all wall surfaces, including plaster, brick or cement, wallpaper.

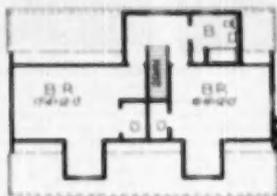
From Rendering To Finished Product



RENDERING and floor plan (Above) of this home designed by Rudolph A. Maters, New York architect, first appeared in *American Builder*, April, 1949



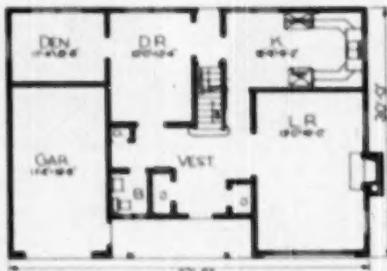
COMPLETED home, built by H. B. Jacobson & Co. for Mr. and Mrs. Fred A. Clark in Arlington Heights, Ill., as it appears today, right



SECOND FLOOR PLAN

Originally appearing as a rendering in *American Builder*, this home, now in completed form, fills a home owner's needs

VESTIBULE and hallway on first floor permit easy access to all rooms, as floor plan, left, shows. These areas also add appearance of greater size to downstairs rooms as illustrated by the living room directly off hallway (Below)



FIRST FLOOR PLAN



American Builder, February 1950.

ALARGE centrally located vestibule and hallway permit easy access to all rooms in this home. Any room, upstairs or down, with the exception of the den may be reached without walking through another. Though the vestibule and hallway occupy about 16 per cent of the total first floor square footage, more than the usual amount in a home, the owners and architect felt the value free circulation added to the house was well worth the use of space for this purpose. The home, designed by Rudolph A. Matern, New York architect, was originally presented in the form of a rendering and floor plan in the April, 1948, issue of *American Builder*. Because it could be adapted to their needs as well as oriented to a deep corner lot, it was selected by Mr. and Mrs. Fred A. Clark, Arlington Heights, Ill., and built for them by H. R. Jacobson & Co., local builders.

Exterior of the home is a combination of Lannon stone and cedar siding on the front, and cedar siding on the sides and rear. A sheltered entrance to the vestibule and garage is achieved by recessing part of the front wall 4 feet 6 inches back from the edge of the roof. In front of the entrance, a flagstone walk, laid in concrete over a gravel fill, blends attractively with the Lannon stone on the front of the house.

The home, as originally planned by Matern, offers a good opportunity whereby a builder can complete the four downstairs rooms, and leave the upstairs portion to be completed by owners when they choose. In the Clark home, two large attractively finished bedrooms and a bath are accessible from a U-shaped hallway at the head of the stairway. Ceilings and walls of the entire house are well insulated.

A full basement is provided. The 10-inch poured-concrete foundation walls are waterproofed on the outside, and rest on 10x20-inch concrete footings. The concrete basement floor, 4 inches thick, is placed over a 4-inch gravel fill. Floor joists are 2x10, 16 inches O.C. Over 1x8-inch diagonal subflooring, 15-pound felt is laid, then 1x2-inch strips, topped with 13/16 select oak finished flooring. Floor joists, 2x4 studs and 2x10 ceiling joists are 16 inches O.C. Interior wall covering is lath with three coats of plaster.

Storage space consists of one closet on each side of the vestibule, a closet in the downstairs hall, a walk-in type wardrobe closet in the master bedroom and in the spare bedroom, a linen closet in the upstairs bathroom, and ample kitchen cabinet space.

American Builder, February 1950.



A82824—Stanley-Carter Weatherstrip Groover W31, Stanley Electric Tools, New Britain, Conn. For grooving tops of doors to accommodate weather stripping, and window sash for spring sash balances. Has one H.P. motor. With cutter furnished, will cut a 1/2-inch groove to a full 1/2-inch width.

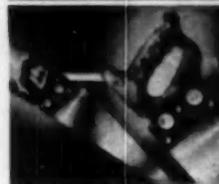


A82825—Macomber light steel trusses, Macomber, Inc., Canton, Ohio. All parts of truss roof system are available. Bottom chord provides secure nailing for ceiling lath which may be attached with large head roofing nails or others specified with ceiling material. Unique in framing design, span.



A82826—Lomax monumental series of extruded aluminum windows. Craft Steel Products, Inc., Jamaica, N.Y. Provides ventilation by use of operator handle for one type building, and are adaptable for schools, office buildings, hospitals, fine residences and other structures. Screens may be used.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



A82828—Geometric hand saw, Geometric Saw Co., Inc., Auburn, N.Y. Does the work of a regular hand saw, surface incision tool saw, outside square, inside square, level, plumb, ruler, straight edge and protractor. Manufactured in two crown models, eight teeth to the inch and 10 teeth to the inch.



A82827—Folding aluminum awnings, Bon-dal, Inc., Saratop, Tenn. Raised from in- or outside. Of permanent heavy gauge aluminum construction. Variety of colors are listed on. Fire, rain- and wind-proof. Lever design shuts out sun rays, admits diffused light. Screens attached for winter and summer.



A82829—Port-A-Pipe electric pipe threading tool, Far-ided Sales and Engineering Co., 1943 Grand River Ave., Detroit 21, Mich. Threading tool for use with Ridgid, Oker, Nys, Toloids, and Beaver dielectric, adaptable for use with extra hard steels. Capacity 1/2 to 2 inch pipe. Has 1/2 H.P. motor.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



A82833—Wet griddlestone, Bolca Crane Co., 94 Central Ave., Toledo 7, Ohio. Perigonal speed remains constant as wheel wears due to self-adjusting friction drive that also eliminates countershaft belt. No water-guard is needed. Tool rest is 2 1/2 x 5 inches, permits grinding angles from 0 to 90 degrees.



A82834—Coconut window operator, H. S. Goffy and Co., Inc., Philadelphia 48, Pa. No. 106 operator for aluminum casement sash has die cast aluminum housing and crank handle. Arm of alloy. Easy operation assured by angle drive worm and gear design. Has soft finish, never rusts or needs paint.



A82835—Fast-lav, William Schoenck and Co., Inc., Swans City, Pa. A combination cabinet lavatory and vanity made in two units. For use with any brand of plumbing fixture. Of hardwood construction with baked enamel finish in beige, gray-green, or light grey. Counter tops finished in Micarta, in four colors.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



A82836—Bathroom cabinet, Standard Steel Cabinet Co., Chicago 41, Ill. Equipped with adjustable side mirrors. Model 1258, has 1x24-inch door-mirror with 8x20-inch side-view mirror. Cabinet interior is 13 1/2 inches. Contains three shelves. Requires wall opening of 14 3/8 inches. Plate glass mirrors.



A82837—Forest hard board, Forest Fiber Products Co., Forest Grove, Ore. New board for walls, ceilings, table tops, partitions, and other uses, made from Douglas Fir timber. Uniformly produced to resist chipping, breaking, cracking, and staining. Smooth surface for finish by spraying, baking, brushing.



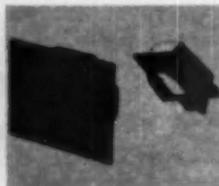
A82838—No-Gard automatic door bottom, Modlenburg-Guncan Co., Oklahoma City, Okla. Door bottom allows full weatherstripping action to raise and to clear carpets and rugs automatically when door is opened. Provides mild contact with floor when closed 22, 24, 42 and 48-inch lengths. Made of rust-proof metal.



A82626—Greaseceptor. J. A. Zure Mfg. Co., Erie, Pa. A grease interceptor that separates grease from waste water through principle of floatation. Perforated baffle plates quiet water, permitting grease to separate and rise to surface for removal. Available in varied sizes for various needs.



A82628—Gas-Therm gas floor furnace. Gas-Therm Div., Motor Wheel Corp., Lansing 1, Mich. 81,000 B.T.U.-input. 23½-inch over-all depth. Waterproofed to within 19 inches of floor. Vented. Equipped burner. All-in-one control. Available with Dual-Wall register. Cutting dimensions 26½x19½ inches.

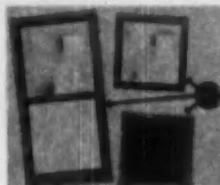


A82629—Fireplace ash dump and cleanout door. Superior Fireplace Co., 1728 E. 12th St., Los Angeles 21, Calif. Ash dump occupies space of one brick, of 12 gauge steel, O.D. 9½x9½ inches. Has patented hinge. Cleanout fits brick courses, of cast aluminum or stamped steel, O.D. 10½x7½ inches.

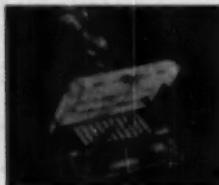


A82630—Wetla's kitchen ventilator. Wetla Appliance Co., Inc., 244 Grand River Ave., Detroit 8, Mich. Sidewall model available in 8 and 10-inch sizes for any wall thickness. Has mirror finish cast aluminum grill, induction motor, outside one-piece cast aluminum shutter with sponge rubber seal.

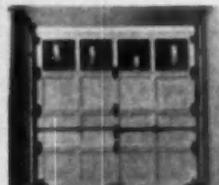
BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



A82632—Tifty combination storm and screen window. Angel Novelty Co., Pittsburg, Mass. Screened wood is used. Lower storm sash is stored in upper half while storm sash is in use in lower half in the summer. In cold weather, screen sash is stored in upper half while lower storm sash is used. Low cost.



A82633—Midget stapler for fifty jobs. Igread Products Co., Long Island City, N. Y. About the size of a package of gum, stapler binds up to twenty sheets of paper and carries 50 staples to a loading. Tool may be used for tacking paper, leather, or cloth. Made of chrome plated steel with plastic top.



A82634—Rollway garage door. Model 325. Wagner Mfg. Co., Cedar Falls, Iowa. Made in ten standard sizes ranging from 8½ by 7 feet. Doors are made of top quality white pine. Headroom required: 11½ inches; special 6-inch headroom door available. Has floating ball bearing track rollers.

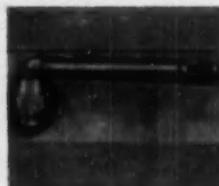


A82635—Flexitite aluminum windows. Fleet of America, Inc., 119 Pearl St., Buffalo 2, N. Y. Double, double-hung, and picture windows as illustrated in drawing. Sponge rubber strip behind weather strip permits removal of window for washing or reglazing. Screen and storm sash similarly removed.

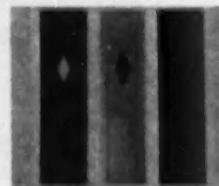
BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



A82636—MCW-400 and 610 trucks. General Motors Corp., Pontiac, Mich. Dual drive. Middle weight range. Great tractive ability. Extra load capacity for off-the-highway hauling as well as road use. Two of six new models in GMC's 1950 series, adding to wide selection of light, medium and heavy trucks.



A82637—Dynamatic door closer. New England Mfg. and Supply Co., 42 Church St., New Haven, Conn. Designed to eliminate maintenance, adjustments, oil applications. Will control any interior door weighing from 15 to 175 pounds. Sealed against dirt; not affected by temperature changes.



A82638—Shutters. Central Division Corp., 221 N. La Salle St., Chicago 1, Ill. Sturdifood shutters are made of 5/16-inch laminite tempered Fibradwood. Will not split, crack, or splinter. Shutters come in two lengths: 54 and 60 inches, both are 14 inches wide. "Two-coat" factory-finished.



A82639—All-angle hand drill. Cummins Business Machines Corp., Chicago 40, Ill. 360-degree angle head attachment for ½-inch capacity drills gets at "right spots." Will fit any ½-inch cap. Drill equipped with model 328 Jacobs chuck. Head quickly removable. Housing grooved to fit hand.

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TECHNICAL GUIDE for Builders and Craftsmen

Correctly Proportioned Footings for Homes

THE soil under footings behaves in a manner very similar to that of an elastic solid, even though it may be slightly plastic. Up to the yield point, settlement will be nearly proportional to the load. In other words, a loading of 2000 pounds per square foot will cause a settlement twice as great as that caused by a load of 1000 pounds per square foot. Also, as with elastic solids, when the load is removed a certain readjustment, or recovery, will occur. The yield point of the soil is the point at which the settlement (load ratio) appreciably increases. Above that point the amount of settlement is entirely unpredictable, and, for tested soils, the safe loading is generally assumed to be $\frac{1}{2}$ of the loading at the yield point. In the absence of tests, a safe loading of 2000 pounds per square foot may be assumed upon almost any well drained inorganic soil.

In very few cases is the soil pressure under the footings of residences so great as 2000 pounds per square foot. When the dead load only is considered, the soil pressure under the footings of an ordinary two story frame house, with both floors wall-bearing and the usual 12-inch footings, is usually between one-fourth and one-third of that amount. In accordance with the theory of elasticity, even

with soil pressure so low some slight settlement is inevitable, for the settlement (loading ratio) is constant.

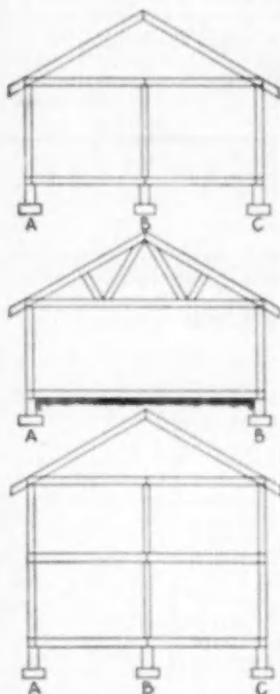
The correct design of footings does not necessarily consist of simply providing wide bearings; for though settlement may be minimized by so doing it may still be uneven and destructive. It is more important that the bearing area of footings be proportioned to the loads they carry, for then settlement may be equalized at all points under the structure, and the effect of such settlement minimized. Provided, of course, that the bearing soil does vary in nature or consistency at different points. A muck hole, a pocket of quicksand, or an out-cropping of stone or shale, can cause serious complications. A large boulder allowed to remain in its natural bed in a footing invariably causes trouble. Take it out, and fill the depression to the bottom of the footing with good gravel.

In most residences and small business buildings the entire roof load, that of the upper stories, if any, and the first floor load, if the floor is of standard joist type, are borne directly by the side walls, with the assistance, probably, of a central longitudinal wall or a joist-bearing girder. The end walls support little if any dead load excepting their own weight, and practically no live load. Although some obsolete city ordinances arbitrarily specify a certain width of footings for such cases, such provisions may usually be interpreted to mean *minimum* widths, for certainly there can be no valid objection to increasing the width of the footings at points of heavy loading. Special consideration should be given to interior footings, for center walls or joist bearers may carry $\frac{1}{2}$, or, if the joists are continuous, up to $\frac{3}{4}$ of the total floor load. Proper proportioning of footings should not be difficult under such circumstances if the actual intensity and distribution of the live loads can be determined.

Special consideration should be given concentrated loads. Footings under chimneys and fireplaces are almost invariably out of proportion with the footings under the structure proper. Unequal settlement occurs within a few years, for evidence of which we have but to look at the unsightly cracks in the plaster around the chimneys and fireplaces in practically 100 per cent of our homes over five years old. Chimneys and fireplaces usually are, and should be, practically free standing, with no increment of live loading. In some cases, however, the loading is decidedly eccentric, and care should be taken that the gravity center of the load coincides with the geometrical center of the footing.

In houses the actual intensity and position of live loads are always more or less unpredictable. It is necessary to provide for a 40 pound per square foot distributed live load on floors if they are to be strong enough to withstand possible concentrated loads such as stoves, pianos, refrigerators, et cetera. This live load allowance would amount to 7680 pounds upon the floor of a 12 foot x 16 foot living room, where *actual* live loading will probably never exceed $\frac{1}{4}$ of that amount. In a 12 foot x 12 foot bedroom this

(Continued on page 170)



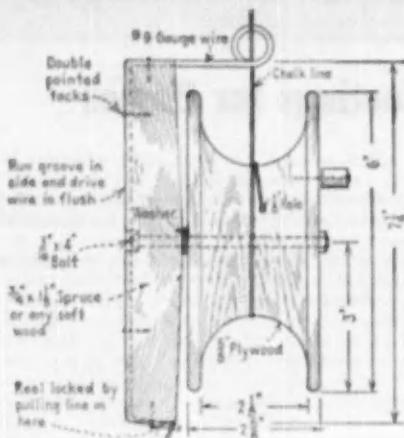
DISTRIBUTION of loads: A—*one-half* roof load, dead and live; *one-fourth* ceiling load, dead; wall load, dead; *one-fourth* first floor load, dead and live. B—*one-fourth* ceiling load, dead; partition load, dead; *one-half* first floor load, dead and live. C—*same* distribution as A

A — *ONE-HALF* roof load, dead and live; wall load, dead. B—*same* loads as A

A — *ONE-HALF* roof load, dead and live; *one-fourth* second floor ceiling, dead; *one-fourth* second floor load, dead and live; *one-fourth* first floor load, dead and live; wall load. B—*one-half* second floor ceiling load, dead; *one-half* second floor load, dead and live; *one-half* first floor load, dead and live; partition load. C—*same* distribution as A

TECHNICAL GUIDE for Builders and Craftsmen

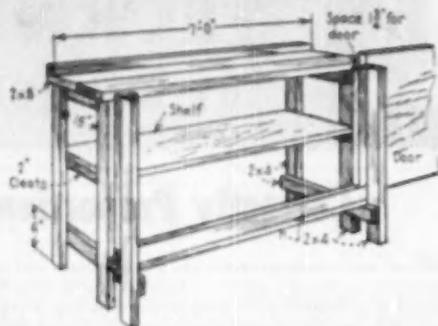
How to Make a Reel for Chalk Line



THIS reel will conveniently hold 200 feet of carpenter's chalk line. The line can also be rewound as rapidly as the mechanic can walk. The wire loop at top of reel, through which the line passes before being rewound, prevents line from becoming tangled or knotted. Line is locked in position at bottom of frame as shown on drawing. When purchasing a new line obtain a package of cotton dye and color the line. It will then last longer.—Submitted by J. G. Caldwell, San Mateo, Calif.

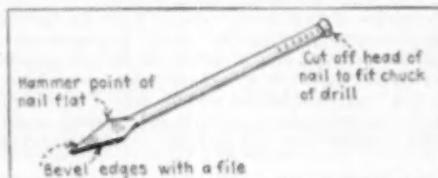
Let your suggestion pay you five dollars (\$5.00) in cash. This sum is paid by American Builder for each short cut or job pointer that is accepted for publication. Send all material to Architectural Editor, American Builder, 79 W. Monroe St., Chicago 3, Ill.

How to Make a Table for Planing Doors



ATABLE for planing doors can be built easily and quickly on the job. The extension, which is built integral on one side of the table, is constructed with a continuous slot for holding doors tightly in position, while edges are planed to fit and for installing hinges on side rail of door. Top of table is handy for placing tools and other material required as well as the intermediate shelf.—Submitted by John Shular, Bristol, Conn.

How to Make a Home-made Drill Bit



AN altered finishing nail or other type nail may be successfully used when a drill bit breaks and replacement cannot be immediately made. The nail selected should be approximately the size of the bit required. Nail is then placed on a hard surface such as a vise and the point is hammered flat. A file is used to put a bevel edge on two faces of the flattened surface. Cut off the head of nail so shank will fit tightly in chuck of drill. Nail will not break and is less expensive to replace.—Submitted by Herbert A. Raedeke, Park Ridge, Ill.

HOW TO DO IT * HOW

No. D-64 . . . Multiple Use Sliding Table

THE photographs and drawings of this month's Better Detail Plate illustrate the design and construction of a sliding table and "pass-thru", a feature that is growing steadily in popularity.

The pass-thru is particularly well adapted to houses of functional plan and design and houses where rooms serve a dual purpose. In this house one end of the living room also serves as a place for dining. The architect in this case has designed a table that is easily moved into position in either room. When the table is in a closed position in living room, the portion that protrudes serves as an end table with drop panel at counter line closing up the pass-thru opening; the remainder of the table is in the kitchen. When extended into the living room, the table seats four people.

The dish cupboard above the table has doors that open

into the living room and kitchen. Submerged in the light shelf extending across the living room wall above cupboards is a down-Ette of fluorescent tubes that lights the table below. Remainder of dining room is lighted indirectly from tubes in light shelf.

In front of the corrugated glass panels on the adjoining wall are open shelves, with one section enclosing a silver chest. Shelves are open at both sides, causing the books to stand out in sharp relief against the sunlight. The natural finish of the birch table, cupboard and open shelves is thoroughly in keeping, and provides a pleasant contrast to the striated redwood plywood surfaces of adjoining walls and the soffit of the light shelf.

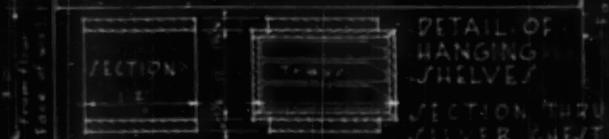
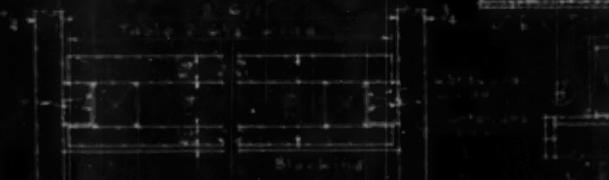
The measurements given on the detail plate and the construction methods are suggestions. They necessarily will vary, depending upon conditions.

Data courtesy of Douglas Fir Plywood Association, Tacoma, Wash.

AMERICAN BUILDER'S BETTER DETAIL PLATE

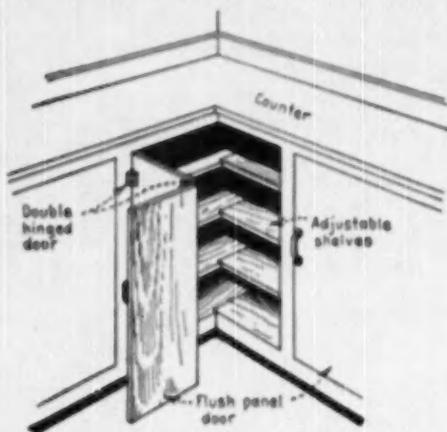
Designed by H. J. Alexander for American Builder

NO. D-64 - MULTIPLE USE SLIDING TABLE



TECHNICAL GUIDE for Builders and Craftsmen

How to Obtain Free Access to Corner Cabinet

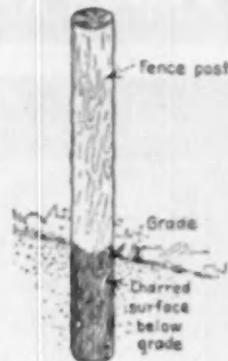


WHEN kitchen cabinets are placed at the intersection of walls, the area below the counter line often becomes difficult to get into because of its extra depth.

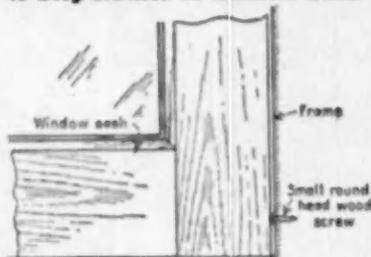
The sketch above suggests a method that will make this space more accessible through the elimination of the conventional corner vertical frame. A vertical frame member is placed approximately 12 inches on each side of the intersection with the top horizontal frame member acting as a cantilever over to the intersection. Adjustable shelves are supported by lapping one over the other. Double hinged doors provide easy access to cabinet area.—Submitted by John C. Shanholz, Winchester, Va.

How to Prevent Wood Posts from Rotting

WHEN building a fence or anything where posts are required, this builder has the submerged portion of the post charred in preference to crosscutting. He builds a small fire on the job and subjects each post to the flame until it is well charred. This method has proven effective against rot.—Submitted by John Menkveld, Grand Rapids, Mich.



How to Stop Rattles in Window Sash



WINDOW sash in old houses that have become loose in their frames can be quickly and effectively stopped from rattling by placing a small roundhead wood screw into the window frame next to the sash. This takes up any side play caused by space between the window sash and frame. If the rattling is extensive, a screw can be placed on each side of the frame.—Submitted by Roger Isetts, Kenosha, Wis.

HOW TO DO IT * HOW TO DO IT

No. G-4 . . . Store Modernization Details

THE PROBLEM: To stress two floors as major selling and display areas and to tie in the second floor display windows as an integral part of the store front.

To make the second floor window as prominent as the main floor show windows.

To create a warm and inviting effect with the use of stone, shrubs and natural wood on exterior and interior.

SOLUTION: A maximum amount of store front area devoted to glass and the use of materials generally found in the construction of homes.

MATERIALS AND COLORS: The door jamb, wood between second floor windows and sign background are red oak with a natural finish. Perma-stone facing of piers to represent structural piers for the support of building above, finished in three or four shades of a grayish lavender. Floor and bulkheads are red verona terrazzo with white Portland cement and red color pigment added to gain brilliance to floor and to complement colors in piers.

The interiors of show windows are covered with "Mar-balia" wallpaper in aqua and gold marbledization. Curtains on second floor behind windows are gray ninon. These operate on tracks concealed in ceiling and can be operated from open or closed position.

CONSTRUCTION: To obtain an open, all glass effect, new steel beams and uprights were installed at second and third floor levels to receive floor construction. Awnings were omitted from the front of this job and sun shades were installed in show windows. This makes a neat appearing front at all times of the day.

Sign letters are porcelain enamel, set on pins free from the red oak sign background. The portion of the front wall above the sign background was left undisturbed and the entire wall up to the coping line was painted a light chaux color. This color had sufficient value to make the store a bit more prominent than the adjoining buildings, and yet in no way detracted from the store front area.

How-To-Do-It Painters Continued on Pages 162 and 174



TECHNICAL GUIDE for Builders and Craftsmen

APPLICATION FACTS On Red Cedar Shingles

OUTSTANDING features of Certigrade shingles, the red cedar shingles approved by the Red Cedar Shingle Bureau, are their high crushing strength, durability, light weight and low rate of expansion and contraction with changes of moisture content.

Well-manufactured red cedar shingles have established an excellent performance record in roof applications where exposure to weather is greatest. They have also proved adaptable for economical use on sidewalls.

Roof Application

Shingles are suitable for use on all roofs that have sufficient pitch to insure good drainage. Certigrade shingles may be laid with the standard exposure (covering 100 square feet with four bundles) on roofs of not less than one-quarter pitch. The standard exposures for 16-inch, 18-inch and 24-inch shingles are 5 inches, 5½ inches and 7½ inches. On roofs with less than one-quarter pitch, the shingle exposures should be reduced to 3½, 4¼ and 5¼ inches respectively.

For example, instead of laying 16-inch shingles so that the distance between the butt lines of the shingles is 5

Covering Capacities of CERTIGRADE Shingles

Including the Number of Square Feet Covered by Four-Bundle Squares and Single Bundles for Exposures Given.

Exposure Inches	Sixteen-inch Shingles		Eighteen-inch Shingles		Twenty-four-inch Shingles	
	4-Bundle Squares	One Bundle	4-Bundle Squares	One Bundle	4-Bundle Squares	One Bundle
3½	70	17½	.....	.....	.....	.....
4	80	20	70	17½	.....	.....
4½	90	22½	80	20	.....	.....
5	100*	25	90	22½	.....	.....
5½	110	27½	100*	25	.....	.....
6	120	30	100	27	80	20
6½	130	32½	110	29	90	22½
7	140	35	120	31	90	24
7½	145*	37½	130	34	100*	25
8	160	40	140	36	100	26½
8½	170	42½	150*	38	110	28
9	180	45	160	40	120	30
9½	190	47½	170	42	127	31½
10	200	50	180	44	133	33
10½	210	52½	190	47	140	35
11	220	55	200	50	147	36½
11½	230	57½	209	52	155	38
12	240*	60	218	54	160	40
12½	.....	.....	227	57	166	41½
13	.....	.....	236	59	172	43
13½	.....	.....	245	61	180	45
14	.....	.....	254	63	186	46½
14½	.....	.....	.....	.....	192	48
15	.....	.....	.....	.....	200	50
15½	.....	.....	.....	.....	206	51½
16	.....	.....	.....	.....	212	53
16½	.....	.....	.....	.....	.....	.....
17	.....	.....	.....	.....	.....	.....
18	.....	.....	.....	.....	.....	.....

*Minimum exposure recommended for roofs.

†Minimum exposure recommended for single-covering on side walls.

‡Minimum exposure recommended for double-covering on side walls.

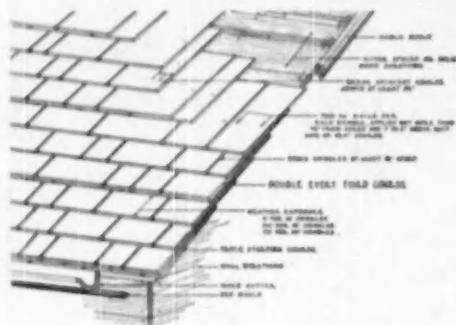
Data and illustrations through courtesy of Red Cedar Shingle Bureau, Seattle, Wash.

inches, this distance should be lessened to 3½ inches. With this reduction of exposure, four layers of shingles are assured throughout the roof area. As an example, if it is necessary to lay shingles on a porch roof of one-eighth pitch, it is good practice to choose 18-inch shingles for this purpose and to lay these 4 inches to the weather.

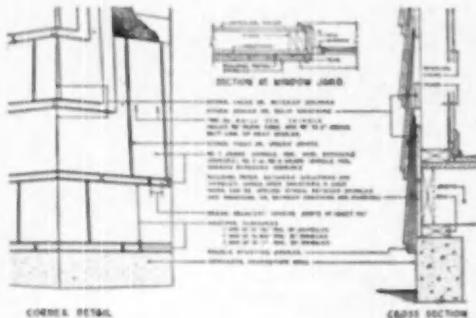
While shingles last for long periods on steep roofs, the exposure cannot be increased beyond a point equivalent to the length of the shingle minus one inch, divided by three. In all roof construction there should be three layers of wood at every point, to insure complete freedom from leakage in heavy rainstorms.

Sidewalls

In new sidewall construction, either tight sheathing or spaced sheathing is used, although tight sheathing is more widely accepted. In mild climates, however, sheathing spaced apart on centers equal to the shingle exposure and shingled with red cedar shingles provides a very satisfactory and inexpensive wall. Building paper should be used with such construction, either between the shingles and sheathing or between the sheathing and studding. Not only is spaced sheathing satisfactorily used on residences in mild climates, but it is also effective for use on certain types of garages, implement sheds and other structures where protection from the elements is a major factor.



RED CEDAR shingle four-ply roof. Roof offers both protection and beauty, with double courses producing deep shadow lines.



DETAILS of red cedar shingle ribbon sidewall application

Old Man Winter

never bothers

RO-WAY OVERHEAD TYPE DOORS



Will the garage doors you specify run the risk of being frozen shut... blocked by snowdrifts... jammed by frost-raised floors?

Not if you specify Ro-Way Overhead Type Doors! With Ro-Way it's always fair weather—because:

Snow's no problem. Even with a heavy drift against it, a Ro-Way glides right up. No need to shovel snow for door clearance.

Won't freeze shut. "Icing Up" is another worry Ro-Way owners just don't have.

Frost-raised floor can't jam it. A smooth-rolling Ro-Way lifts right up—or snugs right down to the level of the floor.

Wind's no hazard. Huff or puff, wind can't blow open a Ro-Way Door—or bang it shut.

Unaffected by moisture-swelling. Even if jams or sections become moisture-swollen, a Ro-Way still operates smoothly, easily.

Rolls up-in-and-overhead—out of the way. Always protected from the weather when opened. Inner surface never exposed.

So let Old Man Winter do his worst—he'll make no trouble for Ro-Way Doors. Or you—if you specify Ro-Way for all your residential garages. * ROWE MANUFACTURING COMPANY, 764 Holton St., Galesburg, Illinois.

* Also available for commercial and industrial installations.

• Only 3 1/4 inches of headroom! That's all our Model 31 requires. Write for details now.

Nationwide sales and installation service.
See your classified telephone
directory for names and addresses
of Ro-Way Distributors.



There's a Rollway for every Doorway!

The Personal Touch

By R. E. Saberson

SALESMEN, front and center! The next step in the demolition of the once great housing shortage will consist of an all-out demonstration of efficient, personal salesmanship . . . the weakest link in our distribution chain—the tie that connects but does not bind the ultimate consumer to any particular industrial product or service.

Despite the fact that we are doing right well in our round-the-clock research laboratories and that the fertile brains of our inventive geniuses never cease working, it still takes a personal contact to complete the final sale of the products that emerge in ever-increasing quantities from our streamlined factories.

Were it not for this fact, there would be fewer furrowed brows showing up under the receding hairlines of our leading industrialists . . . be they manufacturers of better mousetraps or builders of the dream houses of tomorrow.

Sales Must Keep Pace

The unadorned facts of the matter are that the great majority of American concerns are far more skilled in production than in distribution. Only a rare few have the ability to step up the efficiency of their sales organizations to keep pace with their constantly increasing production schedules.

While it does not apply with equal force in the housing industry as in most others, there is in effect in America a tendency which comes close to being a mania . . . *We must produce X per cent more goods each and every year than in the preceding twelve-month period.* Unless all concerns, big or little, great or small, can spin the wheel just a little faster year in and year out, they are "losing ground."

This dubious policy of continually increasing supply regardless of demand leads eventually to over-production simply because we do not have the ability to step up consumption at the same rate as we speed up production. Until we reach the time when we can do so or are willing to let well enough alone we may be sure that we shall get into trouble sooner or later.

Nineteen-fifty will mark the end of the profit trail for many a concern that has mastered the problems of production but has not been able to

do the same thing in the distribution end of their respective businesses. Already we detect signs of distress in the frantic price appeals now appearing in the daily papers.

Price Reductions Not the Answer

Strange, isn't it, how we turn to price reductions in an effort to stimulate demand, when in most cases, Mr. Ultimate Consumer regards the slash as nothing more than a signal which tells him to wait for more and bigger cuts that are almost sure to come? "Drastic reductions" actually are two of the scariest words in our distribution lexicon. Nevertheless, they are used with careless abandon in all but the comparatively few cases where the policy is to stabilize the price structure rather than to upset the apple cart.

Naturally, there are many who will insist that "everything is too high" and that the only modicum of relief will be found in substantial price reductions. Unfortunately, such a situation invariably is accompanied by a drop in earning power. We can't have our cake and eat it too.

All of which takes us back to our original premise. If we are going to keep on hiking our production schedules we must make corresponding improvements in our distribution facilities else we will eventually be in hot water.

Now distribution is made up in a large part of personal salesmanship . . . the human touch that causes the ultimate consumer to put his signature, firmly and confidently, on the dotted line. The big job ahead lies in the area of human relations . . . the ability to bridge the gap between the final seller and the man who is to adapt the finished product to his own use.

No method of bridging this gap by other than personal contact has ever been invented. Mail order houses claim to have come close, but the fact remains that there are many human beings involved in each transaction who can gum up the works in a manner that will result in the permanent loss of customers.

The far flung housing industry will never be blessed with any substitute for personal salesmanship. It, or any great mail order house, will never be able to apply the catalog technique

to the point where houses will be sold successfully by correspondence. Future competition in the housing industry will not come from this direction, but the struggle for the order will be none the less severe through the lack of this source of supply which has waxed powerful in nearly all other lines.

The absence of such a threat, which plays a leading role in the whole distribution picture, does not spell easy going for the housing industry. It merely means that the job of selling must be done personally—something that is far more difficult than the development of a printed page of unvarying efficiency which will do its stuff effectively in the distribution of certain items.

Personal Selling Important

It is the housing industry's dependency on the personal selling that constitutes its major problem in the highly competitive days to come. So far, the going, since war's end, has been comparatively easy. The emergency rush in which anybody could sell anything that savored of shelter has gradually given way to better homes at lower prices. But eventually a good house at a satisfactory price will have to be backed up with quality selling in order to insure a profit.

Nineteen-forty-nine was a good year, and the housing industry came down the home stretch in a burst of speed that smashed practically all existing records.

It would be just as sensible to assume that such speed can be maintained indefinitely as it would be to assume that a Derby winner can keep right on going round and round the track indefinitely at record-breaking speed.

How long can the home building industry keep up the pace? Nobody knows the answer for sure. But of this we may be certain: It now is time to shift some of the emphasis from production to distribution . . . from building houses to selling them. America is producing as it never produced before in industry after industry. As competition for the consumers' dollar grows more intense it behooves the home building industry to look well to the efficiency of its salesmanship for it is the quality of the personal, final touch that will play an increasingly important role from here on.

Modern *Personalized* heating for modern apartments

IN AKRON

PARKVIEW APARTMENTS, South Hawkins Ave.

The Hendrich Hall Harter Company, Builders and Operators

Photograph shows part of Parkview Manor consisting of 17 buildings housing 98 suites. Last

word in modern conveniences, individual Gas-Fired Janitrol Winter Air Conditioners provide personalized heating for each family unit.



Basement installations of Janitrol units are extremely compact, clean and easily accessible. Some type units are often installed in closets or hallways immediately adjacent to individual apartments.

IN BUFFALO

HIGHLAND COURT APARTMENTS,

Typical of Several Multiple Units built by R. C. Dewey, Inc.

Janitrol Triple Service Systems are exclusive equipment with this builder. Efficient operation and low maintenance costs influenced Mr. R. C. Dewey's choice of

Janitrol for servicing 200 family units. Providing convector radiation with forced hot water circulation, the Janitrol units also supply hot water for all domestic uses.



One compact Janitrol Unit supplies hot water for heating as well as for daily household hot water needs. Units are also widely used for radiant panel heating systems, either gas or oil fired.

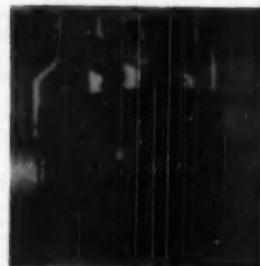
IN CHICAGO

27 APARTMENT UNITS, North Cicero Ave.

E. L. Anderson and Company, Builders and Contractors

These ultra modern apartments reflect typical Swedish architecture. Each building containing nine apartments is serviced by a Janitrol boiler providing a forced

flow of 200° hot water. Each apartment is provided with a thermostat control for both the convectors in living quarters and small cast iron radiators in bathroom and kitchen.



Janitrol Cast Iron Boiler with gross output of 486,000 b.t.u./hr. Forced hot water system is maintained by continuous pump operation.

TIME-TESTED

TIME-PROVEN

Janitrol

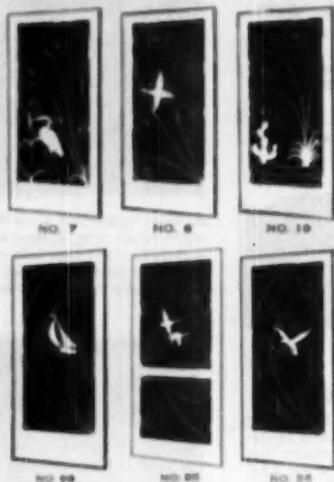
GAS FIRED WINTER AIR CONDITIONERS • UNIT HEATERS
GRAVITY FURNACES • BOILERS • GAS AND OIL FIRED
TRIPLE SERVICE HOT WATER SYSTEMS

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Complete specifications on typical Janitrol installations for apartments, industrial and commercial buildings and homes are available in A.I.A. file folders. Send for your copies today, there's no obligation, address—

Builders Service
SURFACE COMBUSTION CORPORATION,
TOLEDO, OHIO.

ORNAMENTAL IRON by Coffman



Here's How to
BEAUTIFY
Any House At Low Cost!

Small homes can be "dressed up" with real "eye appeal" and distinctive charm for very little money with

Coffman Hand-Wrought SCREEN DOOR GRILLES

Makes homes more attractive, easier to sell. Puts on the finishing touch of beauty that appeals to women. Also saves the screen, strengthens the frame.

STOCK DESIGNS As Low as \$15.00*

Despite the high quality of these handwrought iron grilles with their forged drawn points, graceful lines, and beautiful spirals—they are standardized for economy.

*F.O.B. Factory

STOCK SIZES For All Doors

Simple to order, just check dimensions of your door and dimensions of inside screen opening. Grilles are available in stock sizes for all stock single panel, two panel and combination storm doors. Information on special sizes sent upon request.

Write Department AB, P.O. Box 1113, for free catalog of designs, sizes and prices.

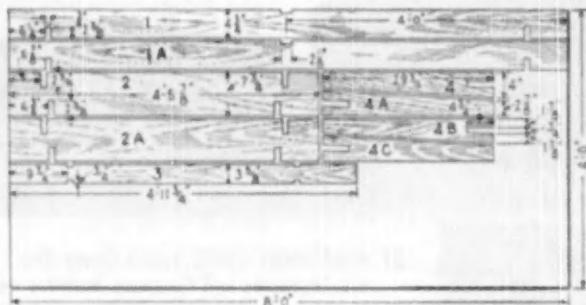
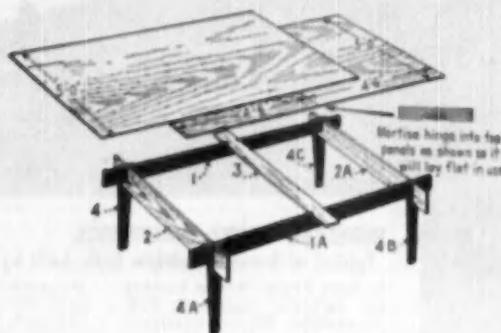
Manufacturers of the Original
"Complete Builders Line"
of Hand-Wrought Ornamental Iron

The R. J. Coffman Co. Inc.
ORLANDO, FLORIDA



TECHNICAL GUIDE for Builders and Craftsmen

How to Build a Utility Table



THIS all-purpose plywood table is of regulation size and height for table tennis. It can also be put to innumerable other uses depending on whether it is to be used indoors or outdoors. When purchasing material for the table tell the lumber dealer where it is to be used. Exterior-type plywood is manufactured with waterproof adhesives so it can be used under all weather conditions; and interior-type plywood is produced with adhesives for interior use. Top panels and framing members are $\frac{3}{4}$ inch thick.

The top may be made from one piece—a 5 foot x 9 foot plywood panel—or from two pieces, 5 foot x 4 foot 6 inch each, hinged in the center. A hinged top will require less storage space. If top is hinged see diagram above for procedure.

The pieces for the base may be cut from one 4 foot x 8 foot panel (as shown), or one 8 foot x 30 inch panel.

On one of the panels, carefully mark the frame pieces to dimensions, shown on the diagram above, and cut them with a sharp hand-saw.

The notches in the various panels should be accurate in width. They can easily be made by drilling a hole at the bottom line and sawing each edge into the hole. The corners can be trimmed with a chisel. Sand all edges. The table is now ready for finishing.

To obtain a light stain finish for general use inside, apply a resin sealer, followed by a stain coat, then a flat or gloss varnish as a wearing surface. Seal the underside of the top with one or more coats of the resin sealer. Finish all edges with sealer and other coats.

The base may now be assembled. The simple lock joints hold the base rigid without the use of any fastenings. It may be readily taken apart and stored until needed again.

American Builder, February 1950.



7 OUT OF 10

Want Wood Cabinets in the Kitchen

That's Why Roddiscraft Cupboard Door Stock Can Mean Profits to You

Surveys show that over 70% of new homes have wood kitchen cabinets. Multiply this by the 900,000 new residence units forecast for '50. Here's a rich and ready market waiting for you. Get your share with Roddiscraft Cupboard Door Stock.

Roddiscraft Cupboard Door Stock has clear, full length edge strips bonded to a well-seasoned staved lumber core. Hardwood crossbanding and sound standard thickness Birch faces complete the five-ply assembly. All stock is belt sanded to a smooth finish at the factory.

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". In lengths of 48", 54", 60", 66", 72", 78", 84", 90", and 96". Order from complete warehouse stocks the sizes which will cut most economically for your installations.

Use GE Testolite® Decorative Plastic Laminates for all Kitchen Work Surfaces.

*Reg. U. S. Pat. Off.

Roddiscraft
RODDIS PLYWOOD CORPORATION
 MARSHFIELD, WISCONSIN

NATIONWIDE Roddiscraft WAREHOUSE SERVICE

Cambridge 29, Mass. 229 Vassar St.	Los Angeles 11, Calif. 2640 E. 54th St.
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Cincinnati 2, Ohio 457 E. Sixth St.	Minneapolis 6, Minn. 4601 W. State St.
Dallas 10, Texas 2900 Medall St.	New York 55, N. Y. 920 E. 149th St.
Detroit 14, Mich. 11815 E. Jefferson St.	Port Newark 1, N. J. 102 Marsh St.
Houston 10, Texas 2422 Sabine St.	Philadelphia, Pa. Pias. St. Delaware Ave.
Kansas City 2, Kan. 25-53 South-west Blvd.	St. Louis, Mo. 4452 Duncan Ave.
L. I. City, N. Y. Bayview & Greenpoint Ave.	San Antonio, Texas 777 N. Cherry St.
	San Francisco 24, Cal. 245 Williams Ave.

UP

LUXURY-TRIM
New design... new quality... better value and longer lasting chrome-plated fixtures.

utility

LUXURY WARE
Styled for enduring beauty... engineered for maximum utility.

Design

Matched Styling of U-R Fixtures and Trim . . . with spontaneous sales appeal

Your customers are proudly telling their friends about the beautiful new Universal-Rundle ensemble they bought from you. That's another reason why the unequalled quality of luxurious Universal vitreous china and enameled cast iron fixtures is easier to sell.

Enhanced by the beautiful new Luxury-Trim chrome-plated fittings, these U-R ensembles will win the instant approval of your most particular prospect.

Write for U-R "get acquainted" literature today. The sound dollar values and the sound quality values in Universal fixtures will mean more profits for you.

Universal-Rundle

UNIVERSAL-BUNDLE CORPORATION
NEW CASTLE, PENNSYLVANIA

PLANTS IN New Castle, Pa.; Camden, N. J.; Allentown, Pa.; Redford, Calif.

Catalogs and HOW-TO-DO-IT INFORMATION

692—SPECIFICATIONS FOR ALUMINUM WINDOWS

—Issued by the Aluminum Window Manufacturers Association, 299 Cedar Ave., Takoma Park, Washington 12, D.C., booklet of specifications covers double-hung, casement and projected types of aluminum windows. Specifications are confirmed by the Pittsburgh Testing Laboratory.

693—EIGHT SIZES OF GAS BOILERS

—for steam, vapor, hot water and radiant panel heating systems, using manufactured, natural, or mixed gas, are described in bulletin PM 12-0002 issued by the Automatic Heating Division of the General Electric Co., Bloomfield, N.J. A.G.A. output ratings range from 76,800 to 345,600 B.T.U.'s. Bulletin includes dimensions, specifications.

694—HOW TO SET UP WALL FORMS

—Series of new bulletins illustrating and explaining how to set up Symons concrete wall forms are available from Symons Clamp & Manufacturing Co., 4249 W. Diversey Ave., Chicago 39, Ill. Complete detailed step by step instructions are given, as well as a blueprint of model foundation giving complete dimensions and a chart indicating materials necessary for the job.

695—HOW PLASTIC IS USED FOR MODERN STORE FRONTS

—For retailers, store architects and designers and for plastics fabricators, Rohm & Haas Co., Washington Square, Philadelphia 5, Pa., has published a new booklet which shows how its acrylic plastic, Plexiglas, can be used on store exteriors. Titled "Plexiglas for Modern Store Fronts," it illustrates more than a dozen applications.

696—HARDWOOD PLYWOOD COMMERCIAL STANDARD

—No. CS35, effective with new hardwood plywood production since December 1, 1949, is available in printed form from the Southern Plywood Manufacturers Association, 728 W. Peachtree St., N.W., Atlanta, Ga. New standard supersedes Commercial Standard CS35-47, and incorporates major changes in glue types, maximum veneer thicknesses and test requirements, and minor changes in grades.

697—SPECIFICATION GUIDE TO SHEET COPPER INSTALLATION

—New 23-page master guide is now available from Revere Copper and Brass Incorporated, 230 Park Ave., New York 17, N. Y. Prepared expressly for architects, sheet metal contractors and others interested in or using sheet metal in building construction.

698—STEEL SHELVING AND STREAMLINED WORK BENCHES

—A 12-page catalog featuring steel shelving, clothing lockers and other steel equipment has been published by Precision Equipment Co., 3714 N. Milwaukee Ave., Chicago 41, Ill. New type heavy duty steel shelving and streamlined work benches are among the many types of steel equipment offered.

699—SLIDING DOOR HARDWARE

—Catalog presents complete line of Kennatrack hardware, including new improvements in firm's line for 1950. New 400 series has full floating ball bearing axle construction, and an improved carriage design. Catalog is available from Jay G. McKenna, Inc., Elkhart, Ind.

(Continued on page 166)



New modern interiors featuring beautiful Marlite Wood and Marble Patterns.

Send for this helpful information! →

Now! get your share of this profitable business ... with Marlite!

Beautiful new Marlite plastic-finished wall and ceiling panels in striking Wood and Marble Patterns make possible interiors like these—creating profitable, year 'round markets for builders.

Think of the many interiors you can install with these authentic patterns—in offices, stores, banks, hotels, restaurants, funeral homes, institutions and a host of other important markets.

With Marlite, you offer customers beauty that is permanent . . . walls that eliminate costly periodic painting and redecorating . . . durable finishes that are as easy to clean and maintain as the finest china.

Marlite goes up fast over old walls or new, is easy to cut and fit, does away with troublesome wall preparation. Choose from many decorator colors and patterns. Your prospects are reading about the economy of Marlite in widespread advertising now. Take advantage of it!



MARSH WALL PRODUCTS, INC., Dept. 203, Dover, Ohio
Subsidiary of Masonite Corporation.

- Please send 4-color Wood and Marble Patterns folder showing typical installation pictures.
- Information on new Sound Film available for applicator training.

NAME _____ TITLE _____

FIRM _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

Connor

"Laytite"

Maple and Birch

FLOORING

(LONG LENGTHS WIRE TIED)

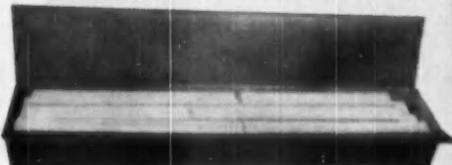
in CARTONS

1. Have retail sales appeal.
2. Keep flooring clean and dry.
3. Keep moisture content more uniform.
4. Make inventory easy—contents are plainly marked for grade and scale.
5. Give buyers exact cost of 10 sq. ft.
6. Save time in laying mixed lengths without breaking several bundles.

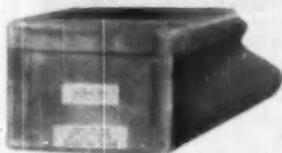
MFMA SPECIFICATIONS

CONNOR "LAYTITE"
PACKAGED FLOORING

Certains keep flooring dry and clean.



Assorted lengths save time in laying.



Each carton
labeled for
easy inventory.

The CONNOR LUMBER and LAND CO. Sales Office
MARSHFIELD, WISCONSIN

Catalogs

(Continued from page 164)

700—METAL WINDOWS AND DOORS—A 44-page catalog offered by Ceco Steel Products Corp., 5601 W. 26th St., Chicago 30, Ill., deals specifically with the firm's steel windows, doors and operators, a line so complete and flexible that buildings of any size or type may be equipped. A 1950 edition, the number of this catalog is A.I.A. File No. 16-E. Drawings, installation details, and specifications are presented.

701—"HOW TO HEAT SMALL AND MEDIUM-SIZED HOMES COMFORTABLY"—A comprehensive 21-page catalog issued by Mechanical Home Systems Co., Inc., 1791 Howard St., Chicago 26, Ill., describes radiant-perimeter heating, radial heating, trunk and branch systems, ductless "controlled air," and the firm's furnace specifications. Illustrated with drawings, catalog contains excellent how-to-do-it pointers.

702—PORTABLE LIGHT AND POWER OUTLETS—Two-color, 12-page bulletin on the String-a-lite line for portable light and power transmission is issued by Dept. A-72, Mines Equipment Div., Joy Manufacturing Co., Henry W. Oliver Bldg., Pittsburgh, Pa. Numbered SI-202, the bulletin describes and illustrates latest designs of assemblies that are dirt and moisture proof and oil-resistant.

703—FITTINGS FOR HOT WATER HEATING SYSTEMS—Bulletin on B&G Monoflu fittings contains pertinent data concerning sizes of fittings, both iron and copper, together with illustrations of their proper use. Available from the Bell & Gossett Co., 8200 N. Austin Ave., Morton Grove, Ill.

704—APPLICATION OF LAMINATED PANELS—Attractive 12-page catalog issued by The Upson Co., Lockport, N. Y., illustrates and describes several different applications of Upson laminated panels. Specifications and installation data are given.

705—SIMPLIFIED PHYSICS OF THERMAL INSULATION—is title of 44-page booklet, a new edition, issued by Infra Insulation, Inc., 10 Murray St., New York 7, N. Y. The booklet is replete with facts about heat transfer, vapor and vapor flow, condensation radiant heating, and other information pertinent to the subject of insulation and insulation values.

SERVICE COUPON—CLIP and MAIL to CHICAGO

Readers Service Department (February, 1950)
American Builder,
79 W. Monroe St., Chicago 3, Ill.

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

Number _____

Name _____

Street _____

City _____ State _____

OCCUPATION* _____

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

NOW... another exclusive
CURTIS achievement

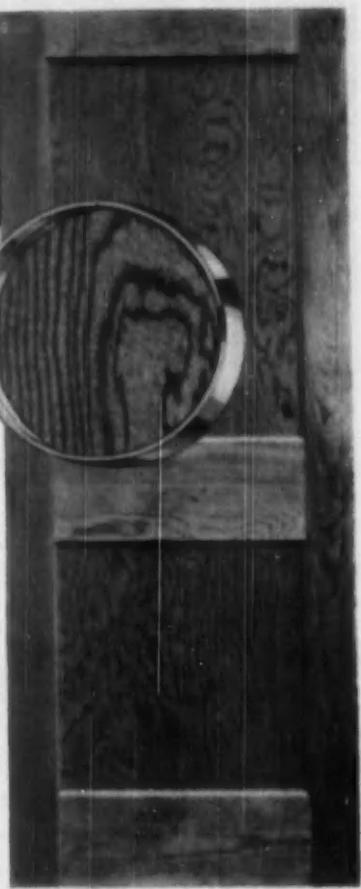
the NEW PRESPINE

Now Curtis adds another major advantage to Prespine—the all-wood panel material that provides new value in Curtis doors, cabinets and other woodwork! Today, by an exclusive Curtis process, the beautiful natural grain of ponderosa pine is accurately reproduced on Prespine. Here is another example of the way Curtis research constantly enhances woodwork beauty and utility.

Remember, Prespine is available only as used in the production of Curtis Woodwork . . . and at no extra cost. Read about its advantages below—then mail the coupon for additional information.

Here's What's New About Prespine!

1. Made by an exclusive Curtis process that duplicates the natural grain of ponderosa pine on Prespine.
2. Prespine can be lightly sanded before finishing, if necessary.
3. Prespine can be painted, stained, shellacked, waxed, lacquered, varnished, enameled or blanded.
4. Prespine can be cleaned or washed after it is finished.
5. Prespine is fadeproof and lightproof. It has been subjected to rigid tests which prove its lasting durability.
6. Prespine, when it is finished, is weather-resistant—withstands rain, snow, excessive humidity or sharp changes in temperature.
7. Prespine can be quickly and economically finished by skilled or semi-skilled labor.
8. Because of the nature of Prespine, there can be no grain raising or consequent checking or blistering of the finish.
9. Prespine door panels can be replaced as easily as ordinary door panels.
10. All exterior Curtis Prespine doors are treated with toxic-water repellent solutions to resist termites and decay.



Note the remarkable, natural grain appearance of Prespine

PLUS

these famous Prespine features

Made of finely divided wood by an exclusive Curtis process, Prespine panels withstand warping, shrinking and swelling. Prespine resists heavy impact blows . . . won't mar, dent or scratch readily . . . won't splinter or chip. It has superior rigidity . . . provides an ideal bond for paint or stain.



Prespine is used in most Curtis flat panel door models, including interior, exterior and garage designs.



Curtis Company Service Bureau
AB-1P Curtis Building, Clinton, Iowa
Gentlemen: I want to know more about Prespine as used in Curtis Woodwork. Please send additional information.

Name.....

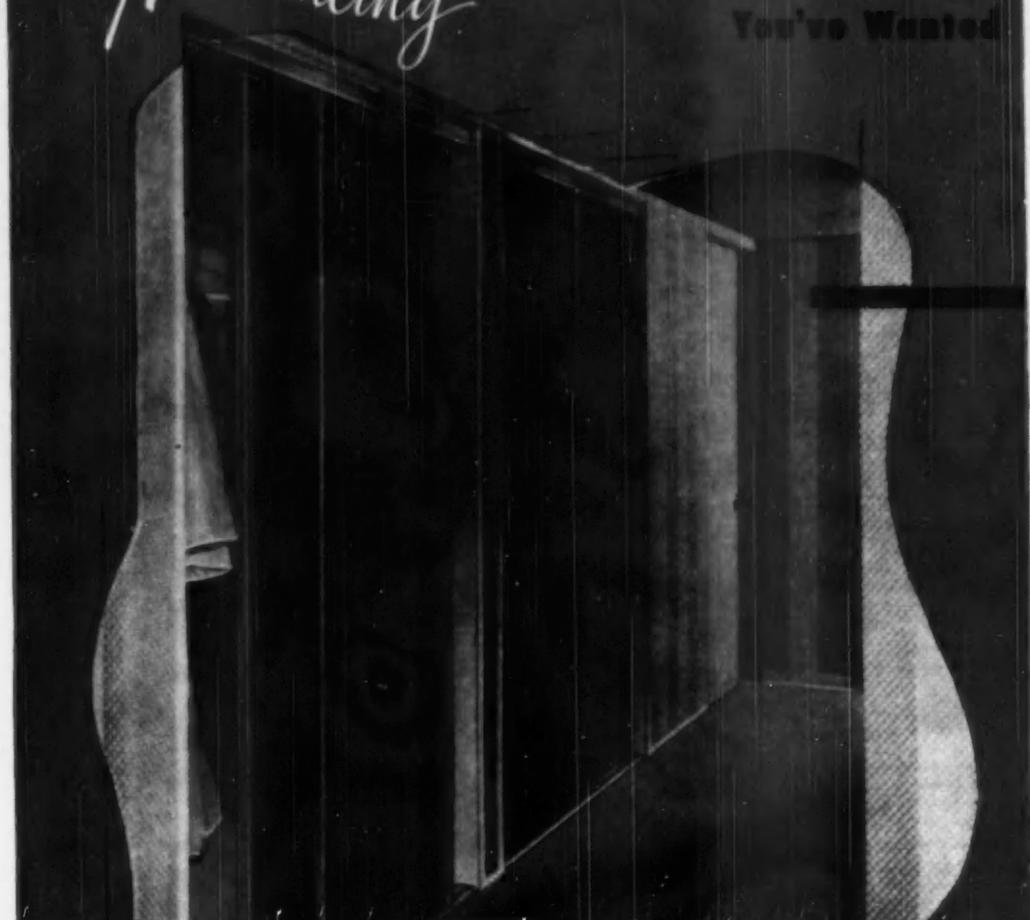
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City..... State.....

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THE MODERN...

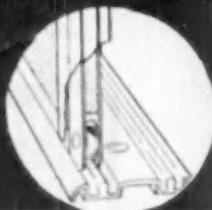
You've Wanted



UNIQUE FEATURES OF DESIGN



TOP ROLLERS* Strong spring tension arms keep brass rollers in firm contact with upper track... prevent rattle and provide for variation in ceiling to floor height. **TOP TRACK*** Made of extruded aluminum alloy, it conceals rollers with its deep volutes.



BOTTOM ROLLERS* Brass rollers and extending side plates insure a clear track and smooth gliding action. **FLOOR TRACK*** Track is of extruded aluminum alloy, smoothly finished. The roller track is depressed below threshold for protection.



SIDE TUBES* Made of rust-resistant steel, the 1" square tubes provide added reinforcement for rigidity of panels. **PANELS**... Smooth Masonite Tempered Presswood can be economically painted, stained or papered as desired for beautiful decorative effect.

Made in U.S.A. by R. J. S. Brown, Detroit, Michigan. All dimensions in inches. In some models there is a 1/2" increase back, see R. J. S. BROWN, A. I. A.

*Designed by Woodell, Patented 2111648.

LOW COST... SLIDING DOORS

for Wardrobes, Closets, Rooms, Cabinets

Glide-All SLIDING DOORS*

Now, for the first time, you can have sliding doors in a complete, factory-assembled package! New Glide-All Sliding Doors are furnished in heights to accommodate floor to ceiling installation and in widths up to 48", complete with unique Woodall-designed rollers and tracks to accommodate up to 10 panels for a 40-foot span. Standard sizes are 8 feet in height and in widths to fit openings of 4, 5, 6 and 8 feet.

Save on Construction Costs

Glide-All Sliding Doors economically solve a problem in new building by providing up to 50% more usable room and closet space than swinging doors allow. And with floor to ceiling installation, eliminating the high cost of the usual framing,

bracing, plastering, etc., the economy is apparent.

Modern, Beautiful Appearance

Glide-All Doors are made of Masonite Tempered Plywood in natural finish which can be painted, stained or papered as desired to harmonize with room decor. With its streamlined valance and decorative finish, a Glide-All Door installation helps give rooms a beautiful, modern appearance.

Smooth, Dependable Operation

Glide-All Sliding Doors are constructed of modern materials, selected for fundamental soundness, proper functioning and economical production. They are expertly engineered by Woodall to provide smooth, rattle-free, dependable operation for years of reliable service.



This installation of Glide-All Doors shows modern wardrobe appearance. Economical installation shows cost.



Every inch of space is within easy reach in this wardrobe with Glide-All Sliding Doors. More usable room space, too.



Installed easy as A-B-C

- A** Top track (provided in size and length desired) is mounted on ceiling with screws. No drop headers required unless desired.
- B** Bottom track is merely screwed to floor. No costly, tedious work involved.
- C** Doors are mounted in tracks by pushing door up in upper track to compress top roller springs—then engaging lower rollers with floor track. Doors are ready to operate smoothly and quietly on their lifetime bearings.

See New Glide-All Folder

Get more details on Glide-All Sliding Doors from our new descriptive folder. See it in Booth 181, Architects-Builders Files or send to the nearest Woodall. See folder below for your copy.



VISIT OUR BOOTH No. 181

AT THE NATIONAL HOME BUILDERS SHOW
STEVENS HOTEL, CHICAGO, FEB. 19-23

* A PRODUCT OF

WOODALL INDUSTRIES INC.

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29-10 Northern Blvd., Long Island City 2, N. Y.

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See ALUMAROLL'S

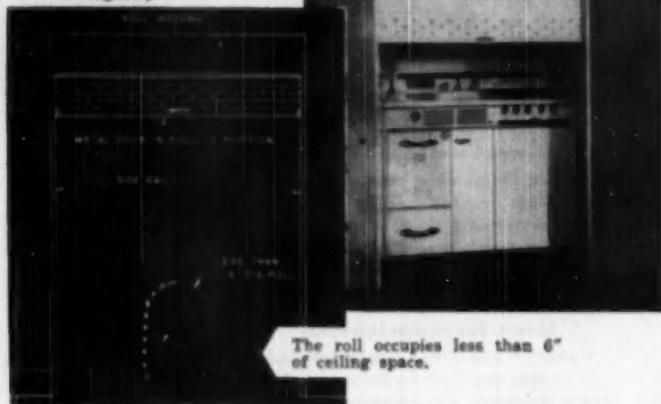
"Show Piece"

BOOTH 19 - NEW PRODUCTS DIVISION, N.A.H.A. SHOW

The Aluminum ROLL-UP Kitchenette Door

A Typical Installation

(Also installed in Hudson Towers, North Bergen, N. J. — A 218 Apartment Dwelling. Architect—Erwin Gerber. Builder—Kay Construction Co., Morris Winograd.)



The roll occupies less than 6" of ceiling space.

For Kitchenette, closet doors, etc.—This metal roll-up door is priced to meet the price of all or any type of closure.

But look at these Added Features—

- For cubic economy — a real space saver.
- For sparkling good looks — Baked on enamel finish.
- For ease of installation — Furnished to your size specifications with side rails.
- For compactness — Rolls-up to less than a 6" diameter roll. No swing out or fold space needed.
- For ease of operation — A counterbalance spring roller.

The Aluminum Roll-Up Kitchenette Door has passed metropolitan building code requirements. — Approved by the New Jersey F.H.A. office and the New Jersey Tenement House Department.

SEE BOOTH 19 New Products Division (Congress Hotel, Chicago) of the National Association of Home Builders Annual Convention and Exposition.

COMPLETE FILE DATA-MAIL COUPON

Builders, Contractors, Architects, — attach return coupon to your letter head, you'll receive a prompt reply, including complete file information, detail and installation print with minimum and maximum size specifications plus pictures of actual installations.

Orchard Bros., Inc.
67 Meadow Rd., Rutherford, N. J.
Please send full information about ALUMAROLL Kitchenette doors
I am a Dealer Contractor Builder
Name
Address
City State

Correct Footings

(Continued from page 153)

allowance would amount to \$760 pounds, and the actual loading would probably never be more than 1/5 of that figure. Definitely, then, residence footings which are designed for full live loads are not correctly proportioned. Though the soil pressure may be very low under parts of the structure which carry no live loads, such as chimneys, fireplaces and end walls, the soil pressure under parts which do carry live loads will be much less, for the loads for which they were designed are not there, and in all probability never will be.

In most sections of the country roof live loadings are entirely comparable with live floor loadings. It is hardly practical to design a roof for less than 15 or 20 pounds per square foot live load, for it would be unsafe for men to work upon it. And yet 20 pounds per square foot is equivalent to 24 inches of new fallen snow, or about 5 inches of solid ice, and to produce 20 pounds per square foot wind pressure requires a wind velocity of 100 miles per hour. Granted that in some parts of the Northwest live loads of 30 to 40 pounds per square foot are common, it is equally evident that in Southern sections a load of 15 pounds is unheard of. In Southern latitudes, live loads on roofs could, and should, be almost or entirely ignored when designing footings.

It should be remembered that practically all live loads on floors and roofs of houses, with the exception of the furnishings, are either intermittent, moving, shifting or short time loads. Loadings of this kind do not cause permanent settlement of footings unless the bearing soil is seriously overloaded. Serious settlement requires time, and the soil which is stressed by short time loadings will show a certain amount of recovery when the loads are removed.

All dead loads must be considered when designing footings. All live loadings cannot be entirely ignored, but full design live loads on residence floors at any one time are very improbable. Even the probable maximum live load is almost certain to be of short duration. The following method of proportioning footings takes these facts into consideration, with some allowance for contingencies.

Use the full dead load and 50 per cent of the probable maximum live loads when designing footings for homes. For upper floors the live load allowance might well be decreased to 30 per cent.

**BIG MONEY for You
Behind this Machine!**

Cash in!



**BE YOUR OWN BOSS—
SAND NEW AND OLD FLOORS**

Step behind this American Machine—and you can *step up your earnings!* Right now in your community—there's a real opportunity for you to *make money* all year 'round by starting a floor sanding business of your own.

Here's something that's "right down your alley"—if you want steady and pleasant indoor work—a good substantial income with earnings of as much as \$25 and more a day—an opportunity to operate as a sub-contractor in new construction and as a separate business when you sand older homes.

No experience or special schooling needed—sanders are easy to operate—you can start sanding floors and *make money* the first day your machines arrive. Prospects everywhere—new and old homes. No large investment—the cost of floor sanding equipment is usually

much smaller than the cost of a new car. The overhead is low and you need no elaborate offices, workshop, storeroom or trucking equipment. Many men operate from their own home and use a regular passenger car to transport their equipment from job to job.

Thousands of men have been successful in floor surfacing. Many operate alone and hundreds who started out singly have built up larger organizations. Age makes no difference. Men are actively engaged in this business from 18 to 80 years old. In floor surfacing you let the machine do the work. It's a future that can bring you a lot of satisfaction and *steady money!* Send for "money-making" booklet entitled "Opportunities in Floor Surfacing"—use coupon and enclose 25c in coin or stamps to cover handling.

**FREE DEMONSTRATION of American Equipment
can be arranged without cost or obligation**



A Big Operator

Ben W. Kenney, veteran Bootman of Kansas City, Mo., started years ago in floor sanding and has steadily expanded this business. Today Ben and Fozzie C. Kenney operate the Armo Floor Co. with a total of 19 American Floor Sanders, Spinner Edgers and Polishers ... 3 trucks and a trailer.

A One-Man Business

Ed Clavin lives in a Michigan city of 20,000 population. He has an American floor sander and an American Spinner for the edges, closets and stairs and also an American Maintenance Machine for dirt sanding, steel wooling and polishing. He averages 75 to 100 floor jobs per year in residences, some schools and public buildings.



**A
FLOOR MACHINES**

Send Coupon Today!

The American Floor Surfacing Machine Co., 311 E. St. Clair St., Toledo 3, Ohio.

Enclosed find 25c in stamps or coin for booklet "Opportunities in Floor Surfacing", telling me how I can start my own floor sanding business.

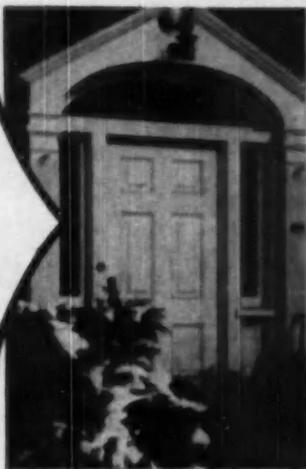
Please arrange a FREE demonstration of American Equipment. No obligation.

Name _____

Street _____

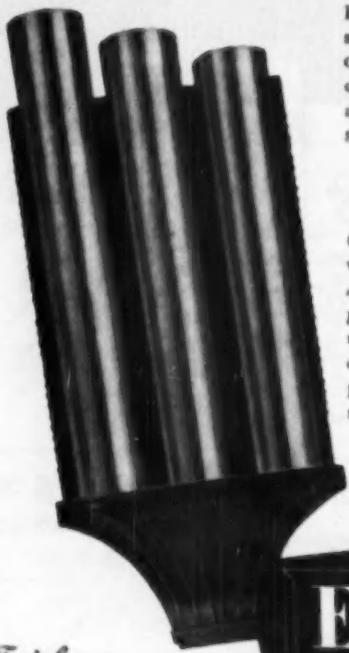
City _____ State _____

No place
to be
"penny-wise"!



Selling a house starts at the front door... and nothing makes as pleasing a first impression as the melodious response of an Edwards CHORDETTE Electric Door Chime! These little extras are mighty important, builders say, in today's buyers' market!

STYLED BY A FAMOUS DESIGNER



Perfect touch to every decorative scheme is the classic simplicity of CHORDETTE... styled by famous designer, Larelle Guild. In chrome and white or mahogany and brass. SIZE: 11½" high, 5" wide, 3" deep.

OFFERS 3 MUSICAL ADVANTAGES

(1) Announces front-door callers with melodious chord *continuing as long as entrance button is pressed.* (2) Sounds a sequence of two symphonic notes as a rear-door signal. (3) Unmatched tone purity assured by Edwards' exclusive Sonoscope testing.

Chordette
ELECTRIC DOOR CHIME

EDWARDS
Door Chimes

Edwards Company, Inc., Norwalk, Conn.
In Canada: Edwards of Canada, Ltd.

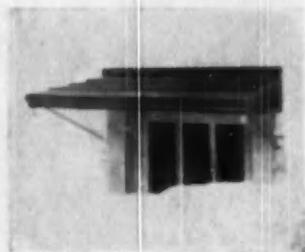
Fairfax DOOR KNOCKER CHIME



NON-ELECTRIC CHIME a musical hit with everyone! Looks like a knocker...sounds like a chime! No wires, no time or trouble installing!

PRODUCTS ON REVIEW

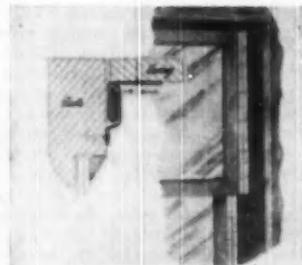
(Continued from page 152)



AB250411—All-metal door canopies. Air Control Products, Inc., Coopersville, Mich. Protects doorways against ice, rain, snow, and sun. Finished in three colors: green, blue, and tile red. Flashing nails or screws to house; heavy steel brackets screw canopy to house. Projects 30 inches.



AB250410—Sectional all-steel tilt-up garage door. Morrison Steel Products, Inc., Buffalo, N.Y. Requires five inches of headroom. Factory assembled, ready for installing. Baked-on grey finish. For standard 8 x 7 foot opening. Also 8½ foot opening. Merchandising outlets now being organized.



AB250412—E-Z-ON weather strip. Robert N. Baltz and Co., Box 1061, Chicago 90, Ill. An all-metal interlocking weather strip for surface installations, double hung windows of wood or metal, that requires no rabbeting or dismounting of sash. For use on old or new windows. CH 9-gauge zinc.

SUPER SALES MAGNET!



PITTSBURGH INTERLOCK PLASTIC WALL TILE

**THERE MUST BE A REASON
WHY PITTSBURGH "INTERLOCK"
OUTSELLS ALL OTHERS!**

It's patented "interlocking" feature, backed by our national advertising program, is attracting thousands of customers all over the country!! Pittsburgh "Interlock" is styled in decorators' good taste in hundreds of luxurious color combinations! Exclusive! It "locks" on wood, plaster, stone, or non-porous surfaces "for a lifetime"!

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... 25% faster installation means lower cost per job! No grouting! No clean-up problem! More satisfied customers! **BIGGER** profits for you!

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Modern, timeless beauty of
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Cheerful and bright! And so
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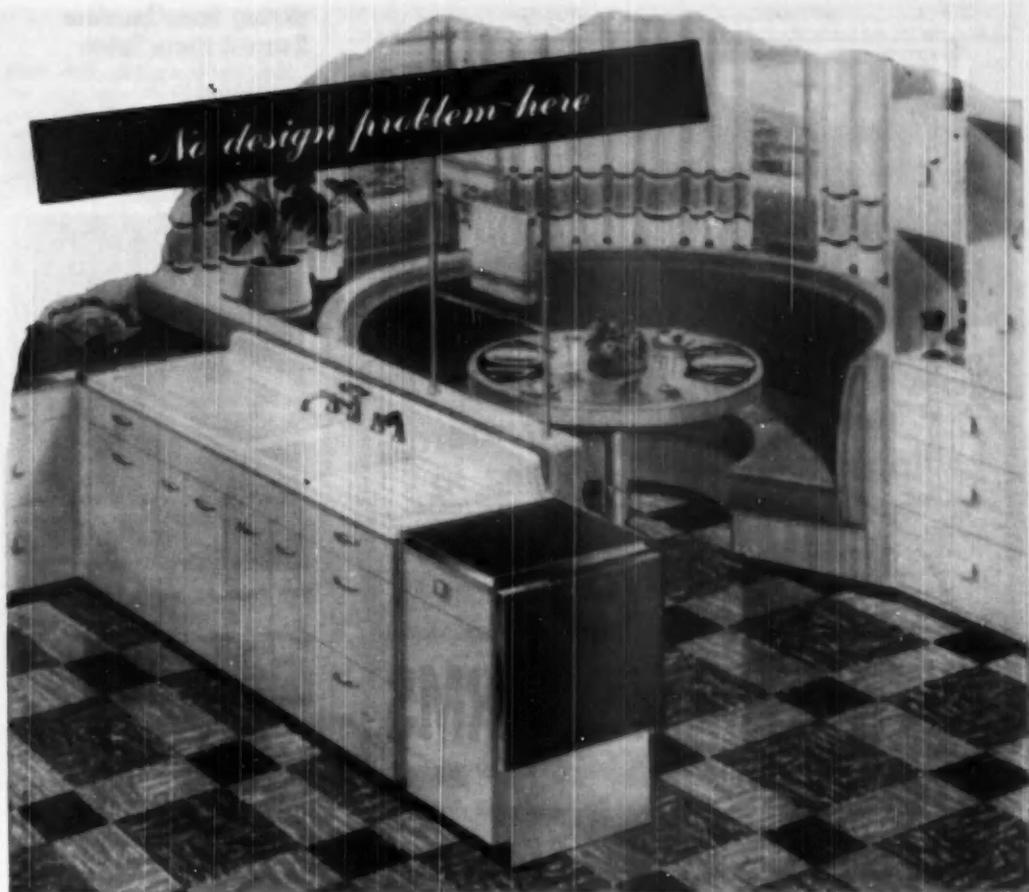
Please tell me how Pittsburgh "Interlock" can be a
Super Sales Magnet to attract **BIGGER** profits for me.

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State _____



Fixtures courtesy of American Radiator & Standard
Sanitary Corporation, Pittsburgh, Pa.

Patterns: XZA 800-Deer Gray-401 5A Bright Red-ZWA 701 Plaid

... when you start with **FREMONT** rubber tile floors

To build smart room interiors, start with smart, colorful flooring. Whether your particular problem happens to be a den, entrance hall, bath, kitchen or nursery, Fremont's 17 beautiful fade-resistant colors are ideally matched for room color harmony. Fremont floors are easy to lay, create continuing customer satisfaction because they require so little care and outlast other types of flooring. Next building job, give serious thought to installing Fremont Rubber Tile. It works wonders in making a gracious, liveable room.

**SEE US AT BOOTH 180, MEZZANINE, STEVENS HOTEL
NATIONAL HOME BUILDERS EXPOSITION.**

Fremont Rubber Company

310 McPherson Highway, FREMONT, OHIO

MAKERS OF: Rubber Tile • Rubber Tile Adhesive • Vinyl Plastic
Cove Base • Counter Covering • Sponge Rubber
Rug Cushion • Rubber Rugs

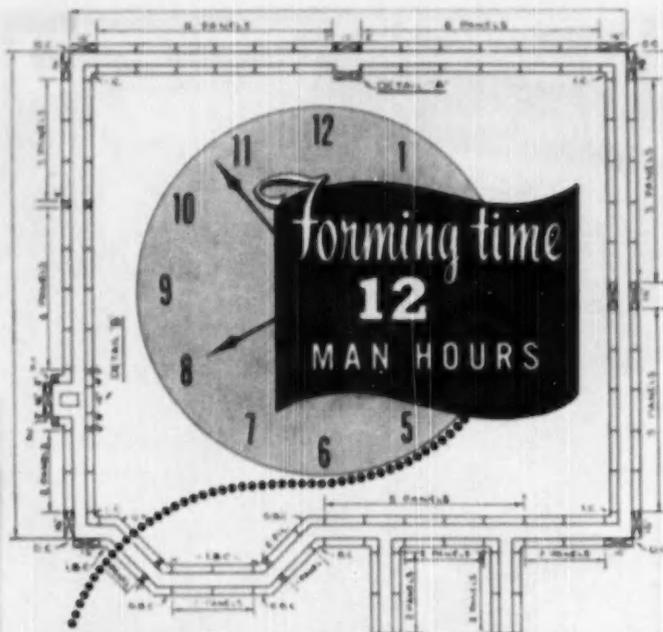
Please send me without obligation a copy of your full-color brochure, "Fremont Opens the Door".

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CITY _____ STATE _____



WITH SYMONS FORMS

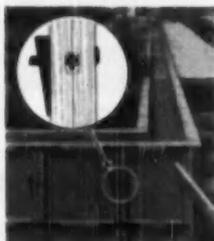
Here you see a typical house foundation form layout that can be set-up by 3 men in 4 hours. There are 1734 square feet of forms. Cost of erection at \$2.00 per man hour is \$24.00 or 1 1/2¢ per square foot. Stripping can be completed within 2 hours at a cost of \$6.00 or 1/2¢ per square foot.

TOTAL COSTS PER SQUARE FOOT OF FORMS

Setting-up	1 1/2¢
Stripping	1/2¢
Form Cost (per use)	1 1/2¢
Tie Cost	1/2¢

Forms average 75¢ per square foot. With 30 uses (100 uses is common) the per-use cost is 1 1/2¢. Ties hold 8 square feet of forms. At 6¢ each the tie cost is 1/2¢ per square foot.

Symons Forms are available completely made up ready for use or you may purchase the hardware for building your own forms. Forms can also be rented with 60-day purchase option. Paid rentals apply on purchase price.



JUST 3 PIECES!

1. Connecting Bolt
 2. Form Tie
 3. Wedge
- Form ties break back into concrete — connecting bolts and wedges can be used again and again.



SYMONS CLAMP & MFG. CO.
4301 West Diversey Avenue, Chicago 29, Illinois

Please send me the items checked:

- Information regarding Symons Panel Forms
- Catalog and Prices Construction details Samples
 Labeled and estimate form plans being sent under separate cover

Information regarding other Symons Products

- Column Clamps Bar Ties and Tie Chains
 Safety Shores Scaffolding

Name _____

Address _____

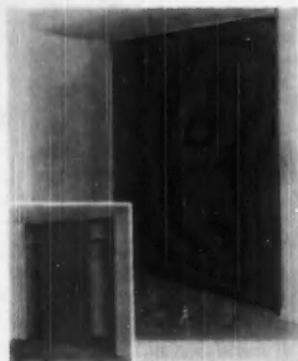
City _____

Zone _____

State _____

Sliding Doors Increase Unusual Room Space

New, low-cost sliding doors made of Tempered Presdwood are announced by Woodall Industries, Inc., 3500 Oulton St., Skokie, Ill. Complete with roller assemblies and tracks, the doors are for wardrobes,



NEW "Glide-All" sliding doors for homes

closets, rooms and cabinets of homes. The "Glide-All" doors feature floor to ceiling application, eliminating framing, bracing and plastering, and increasing usable room space.

Panels are furnished in widths to 48 inches, and as many as ten panels may be accommodated by tracks to cover a span up to 40 feet. Spring tension arms keep top rollers in firm contact with upper track, and lower rollers ride on floor track.

To install, the top track is screwed to the ceiling, the bottom track is screwed to the floor, and doors are set in by inserting top of door in upper track and pushing up to compress top roller springs and then engaging lower rollers with floor track.

Panels are produced in standard sizes of 96 inches high by 24, 30 1/2 and 36 1/2 inches.

Ideas For New Kitchens

A promotion piece published by the M and M Wood Working Co., 2301 N. Columbia Blvd., Portland 3, Ore., offers 16 ideas for well-planned kitchens, telling how to build them with Malarkey plywood and patented flush cupboard door stock.

Presented as Catalog 671 on page 126 in the December, 1949 issue of *American Builder*, no price was listed for this promotional piece. The M and M Wood Working Co. advises that a price of 10 cents each is charged for this literature. Each attractive folder carries a bill of materials for each of the 16 ideas.

YOUR CUSTOMERS EXPECT YOU TO RECOMMEND THE BEST



3 REASONS WHY IT PAYS YOU TO RECOMMEND

HEATFORM

The *Superior* Heat Circulating Fireplace
• most efficient and durable of all •

1 delivers more heat

- more effective heating surface
- heating chambers around the throat and dome as well as the firebox
- air passages at each end of and through the throat connect upper and lower heating chambers
- air contacts all heating surfaces without use of fans
- larger cool air inlet and warm air outlet capacity

2 more years of service

- ribbed reinforced firebox controls warpage and adds greater strength
- unobstructed flow of air over all heating surfaces removes heat faster, thus preventing metal from reaching deteriorating temperatures
- round air passages across the throat reinforce its construction - prevents dome sagging - insures proper operation of damper
- no exposed metal parts beneath chimney to rust-out

3 easier to install

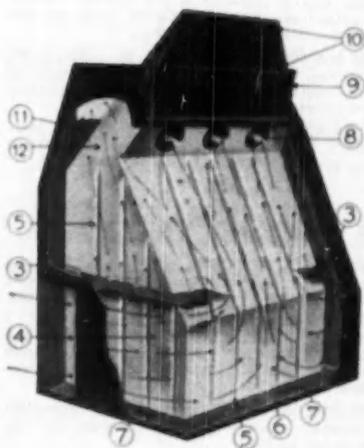
HEATFORM is a perfect guide, hearth to flue, consisting of firebox, throat, dome and built-in damper around which masonry walls are easily built.

Heatform is nationally advertised . . .

in American Home, Better Homes & Gardens, Household, House Beautiful, Southern Agriculturist, Sunset, Small Homes Guide and others.

THERE IS NO SUBSTITUTE FOR HEATFORM*

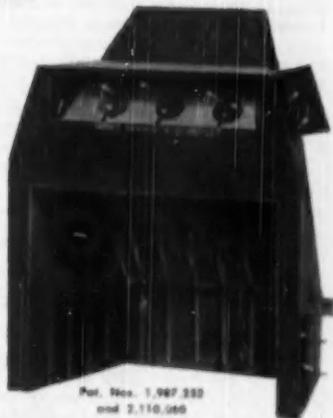
- designed and manufactured by the pioneers of the heat circulating fireplace industry and used in homes and cabins all over America.



KEY TO PHOTO
AT LEFT - SHOWING
REAR AND SIDE VIEW

- with part of outer metal cut away showing the inside lining of firebox and arrows showing contact of air to all heating surfaces.
1. Horizontal baffle plates which direct a large volume of air inside to the lower rear heating chamber and over the hottest of the metal
 2. Large air inlets at floor level
 3. Ribs individually die formed into the boiler plate add strength and neutralize expansion
 4. Location of rear cool air inlet
 5. Bottom view of air heating chambers
 6. Superheating, connecting round air passages through the throat
 7. Heat control damper has undulating paper friction control to regulate draft
 8. Smoke dome
 9. Side air passages from lower to upper heating chamber
 10. Inner lining of the throat

PHOTO AT RIGHT - front view of HEATFORM



Pat. Nos. 1,987,833
and 2,110,060

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SUPERIOR FIREPLACE COMPANY

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601-N NORTH POINT ROAD, BALTIMORE 6, MD.

BOOK REVIEW



READERS of this page have probably noticed before now that a fair number of the books we review here each month are not necessarily new publications. This is not because there is any lack of new building titles published each year, but rather because we want to bring to the attention of *American Builder* readers those books, both new and not-so-new, that we think are among the best works on a particular building subject.

Then, too, we feel that there is not much point in giving space to a bad review of a new book when it is clear that there are a number of excellent standard works that have gone through edition after edition and which are still the best books in the field. We are quite sure that these are the books our readers want to know about.

Masonry Simplified

By J. Ralph Duleff and Gilbert Townsend. Volume I: 268 pages, illustrated, 7 1/2 inches by 8 1/2 inches. Volume II: 406 pages, illustrated, 7 1/2 inches by 8 1/2 inches. American Technical Society. Vol. I, \$4.50, No. 26 on opposite page. Vol. II, \$5.00, No. 27 on opposite page.

This two volume study (either volume may be bought separately) of masonry construction is a good example of books that were copyrighted in 1948 and since that time have maintained their original high position in the trade.

Volume I carries the sub-title, TOOLS, MATERIALS, PRACTICE, which indicates that this first book is strongly slanted toward basic masonry principles. Important principles they are, too, as can be seen from a list of chapter headings—Lime, Its Manufacture and Application; Mortar Types, Properties and Uses; Concrete Characteristics and Mixing; Blueprint Reading; Concrete Masonry; Structural Clay Tile; Brick Masonry; and Masonry Sidewalks, Driveways, Floors, and Steps. The chapter on Blueprint Reading is especially good in that it has been written to order for the mason and deals directly with masonry details as they are shown in blueprint plans.

A glance at the chapters in Volume II, PRACTICAL CONSTRUCTION, gives a good idea of the broad treatment given the practical side of masonry work: Building Forms for Concrete; Design and Construction of Footings; Foundations and Waterproofing; Beams and Lintels and Their Use; Column Design and Construction; Chimneys and Their Construction; Fireplace Design and Construction; Walls and Partitions; and Septic Tank Systems—all operations described in line with the best modern practices.

Two of the most useful features of this fine pair of books is the fact that they are written in good, solid, down-to-earth language that most of us can understand without having a dictionary at our elbow, and they are packed with hundreds of clear pictures and drawings that show just how each masonry job should be carried through to completion.

It is our guess that in one way or another these books will give the reader a fine lot of "know-how" that could otherwise be secured only through years of on-the-job experience.

A SPECIAL

Here's an easy way to get new essential information that will help you increase your income. Every volume a standard work by leading authority. Remember—it's the informed builder who is the successful builder.

ESTIMATING

1. **THE BUILDING COST CALCULATOR.** By John K. Smith. A system for arriving at building construction cost by use of schedules giving cost of standard units of construction at varying costs of labor and materials. \$10.50.
2. **SIMPLIFIED CARPENTRY ESTIMATING.** By J. W. Wilson and Clail M. Rogers. Everything needed to "take-off" a bill of materials from set of plans and specifications for a frame house—with many helpful quick-reference tables and short-cut methods that simplify the work. \$3.00.
3. **THE BUILDING TRADES HANDBOOK.** Ready reference on building subjects—mathematics, architectural drawing, structural design, materials and methods. \$1.75.
4. **CONTRACTOR'S MATERIAL LIST.** A 10-column take-off form for complete listing of materials and labor costs. \$1.00.
5. **SPECIFICATIONS.** Full set of detailed house specifications (and item index), with spaces for inserting the pertinent descriptive data. \$3.00.

CARPENTRY AND BUILDING

6. **HOUSE CONSTRUCTION DETAILS.** Compiled by Nelson L. Burbank. Exact working guide on every detail of house construction from foundation to finish. Tells dimensions, materials, processes, step-by-step working methods. \$4.50.
7. **HOUSE CARPENTRY AND JOINERY.** By Nelson L. Burbank. Every step of carpentry in and around a house, clearly explained and illustrated. Covers every job from foundation forms to interior trim. \$3.95.
8. **PRACTICAL JOB POINTERS.** More than 850 "tricks of the trade," short cuts, kinks and modern methods of doing all kinds of carpentry and building repair jobs. Cross-indexed for quick reference. Fully illustrated. \$4.00.
9. **ARCHITECTURAL GRAPHIC STANDARDS.** By C. G. Ramsey and H. B. Sleeper, A.I.A. Structural detail drawings for all types of small and large buildings. \$6.50.

THE STEEL SQUARE

10. **STEEL SQUARE POCKET BOOK.** By Dwight L. Stoddard. Illustrated and worked-out problems of laying out common rafters, hiped, octagon, hexagonal and circular roofs, roofs of uneven pitch, and curved roofs. \$1.25.
11. **SIMPLIFIED ROOF FRAMING.** By J. Douglas Wilson and S. O. Werner. Tells how to frame gable, hip and unequal pitch intersecting roofs. Contains short-cut methods, clear and practical explanations. \$2.00.
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PLAN BOOKS

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BOOK ORDER SERVICE—

14. **HOUSES FOR GOOD LIVING.** By Royal Barry Wills, A.I.A. Photographs and floor plans of 24 fine homes by a leading architect. \$4.95.
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19. **MODERN METHODS OF HOME HEATING.** Standard heating systems illustrated with 17 floor plans showing heating outlets, 40 photos of equipment and installations, 25 boiler and piping connection diagrams, and 11 heat loss calculating tables. \$3.50.
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21. **RADIANT HEATING.** By T. N. Adlam. A practical guide to design and installation of radiant heating, snow melting, and radiant cooling systems together with step-by-step procedures. \$6.00.
22. **HOW TO DESIGN AND INSTALL PLUMBING.** By A. J. Mentham, Jr. Every step in the design and installation of the plumbing system, to fulfill requirements indicated in blueprints and specifications, explained and illustrated. \$3.50.

PAINTING AND DECORATING

23. **PRICE GUIDE FOR PAINTERS AND DECORATORS.** Tables covering practically every type of work done by the painter and decorator, with suggested prices based on various wage scales. \$1.25.

24. **PAINTING AND DECORATING CRAFTSMAN'S MANUAL.** Sponsored by the Painting and Decorating Contractors of America. \$2.95.

BRICKWORK AND MASONRY

25. **HANDBOOK OF BRICK MASONRY CONSTRUCTION.** By John A. Mulligan. For mason contractors, estimators and construction engineers. \$3.50.
26. **MASONRY SIMPLIFIED, Vol. I.** By J. Ralph Detsell and Gilbert Townsend. Complete explanation of the tools, materials and practices of masonry—including blueprint reading, use of concrete block, clay tile and brick, building masonry sidewalks, driveways, floors, and steps. \$4.50.
27. **MASONRY SIMPLIFIED, Vol. II.** Practical masonry procedures in the various phases of construction, from building forms for concrete to constructing fireplaces and septic tank systems. Includes discussion of handling new products such as glass blocks, waterproofing mixtures and insulating blocks. \$5.00.

ELECTRIC WIRING

28. **INTERIOR ELECTRIC WIRING AND ESTIMATING.** By Albert Uhl, A. L. Nolan and C. M. Dunlop. How-to-do-it book on interior wiring and cost estimating. \$1.75.
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Manufactured by the

PAINE LUMBER CO., LTD.

Oshkosh
Wisconsin

ESTABLISHED 1853

Sunshine for Sale

(Continued from page 123)

project and containing 750 square feet of area is priced at \$7,175. The houses represented by this price are placed upon lots averaging 65,100 feet and included in the sale price are a refrigerator, gas range, automatic water heater, venetian blinds and full tile baths with colored fixtures. The house is of concrete blocks stuccoed on the exterior, resting upon the perimeter of a concrete slab floor. Asphalt tile is utilized as a floor finish. The interior walls are furred and gypsum drywall applied both to side walls and ceilings. The roof has a low pitch and is covered with composition roofing. The interior walls and ceilings are painted in interesting pastel colors. Veterans pay as little as \$25 down with carrying charges complete at \$45 per month.

A Poured Concrete House

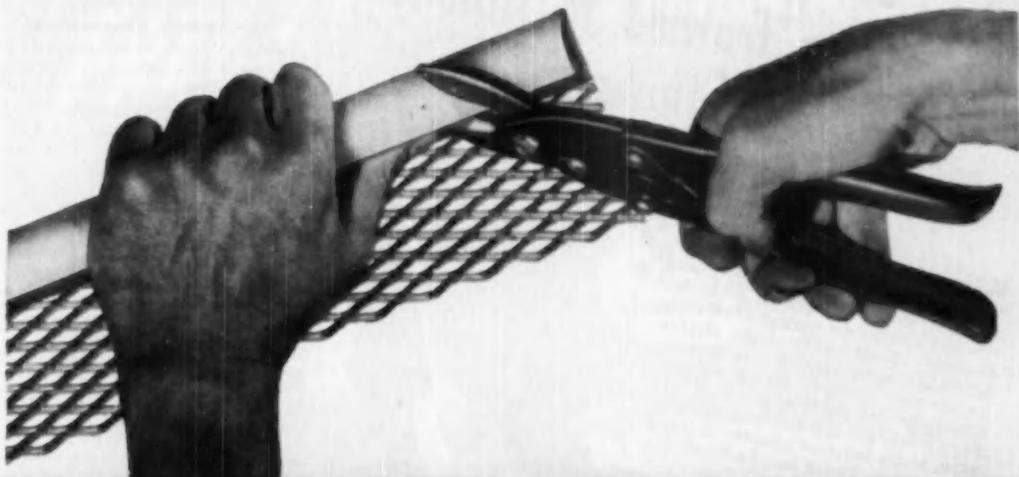
Unique in character was a monolithic house resting on a floor slab with side walls, interior partitions and roof all poured in one process by a tremendous controllable cement mixer called a "cannon." The side walls are eight inches thick, the roof a 6-inch slab and interior partitions are four inches. Only closets are framed in wood. The rough structure is then stuccoed on the exterior and plastered direct without furring inside. Composition roofing is applied to the top slab. The house contains 800 square feet and sells for \$7,550.

A Home of Good Value

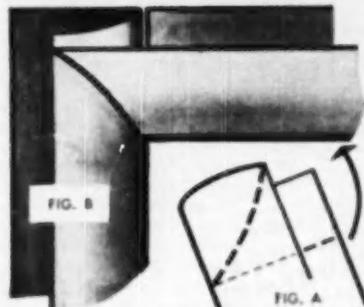
Somewhat higher in the price scale is a 1000 foot, two bedroom home that sells for \$9,925 and 1130 square foot house with three bedrooms that carries a price label of \$10,950. On both of these houses FHA has awarded commitments within \$100 of the selling prices on the basis of 25 year mortgages. With a \$100 down payment and a monthly carrying charge of \$77.50 on the larger of the two, the homes have been purchased and occupied as fast as completed. No "For Sale" signs appear anywhere. They have concrete block perimeter walls, stuccoed outside and furred and plastered inside. The floors are of joist construction with subfloors, oak finish floors and ventilated crawl spaces underneath. The roofs are low pitched, about 30 degrees, and covered with a locally made cement tile of Spanish pattern. The interior is ventilated by a ceiling fan exhausting into the attic, and the homes are provided with an abundance of steel frame windows with ample screened

(Continued on page 182)

American Builder, February 1950.



Time-Saving Construction Tip — with Milcor Steel Casing (for doors and windows)



How to make this time-saving cope-joint

Cut one length of Milcor Steel Casing with lathers' snips as indicated by dotted line in Figure A. Cut the other length square. Slip the first length over the second as shown in Figure B. That forms a perfect, permanent, tight joint.

Milcor Steel Casings (for doors and windows)



No. 60 Expansion Casing



No. 60 Short Flange Casing

Easy way to make a better, tighter steel-casing joint — faster

Here's a simplified cope-joint for Milcor Steel Casing. It saves expensive construction time on every job — because it's easier, faster — and permanently tight. (See the diagram illustration at the left.)

Milcor Steel Casing offers additional savings on overall building costs. It cuts time and costs amazingly on erection, plastering, and finishing. And that's just the initial saving. The permanence of Milcor Steel Casing keeps on saving — on maintenance, refinishing, and decorating — for years and years.

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This trade mark on electric tools tells you the most important thing you want to know about tools.

When you buy an electric tool you have to take somebody's word about gears, motor, bearings, shaft, switches, power, etc. Whose word about tools could be more reliable than the word of "Stanley"—tool makers for over 100 years. On an electric tool the name Stanley means the tool is quality built, thoroughly tested and honestly rated. Covered by a generous guarantee and serviced by a network of Stanley Service Stations. See your dealer or write for complete catalog. Stanley Electric Tools, 492 Myrtle St., New Britain, Connecticut.

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**Stanley-Carter 25
Power Plane, largest,
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spiral cutter and 18,000
r.p.m. 1 h.p. motor re-
moves wood five times as
fast as by hand...
Feet as by hand...
paper-thin cuts or heavy
cuts up to ½". Leaves
smooth, waveless surface
with or against grain.**



**Stanley
Corner Wings
Bolt Roster
(MS B) 12 h.p.,
18,000 r.p.m.,
motor does the
work 6 times
faster than by
hand. Perfectly set
face for bolts. Easily ad-
justed for hinge thickness.
Assures perfectly hung
doors with just the right
clearance.**

Sunshine for Sale

(Continued from page 180)

ventilating sections. The prices include range and refrigerator.

Outstanding Development

Essex Village, an outstanding development with a complete shopping center contains an extensive 608 rental project, together with one story duplexes and single dwellings. Various types of construction have been utilized including frame covered with siding, shingles and stucco and stuccoed concrete blocks. Roofs in the project are generally pitched and covered with the same sort of Spanish tile as have been previously described. Prices are comparable, for the various types to other "askings" in the area. One unique feature in merchandising lies in the method of selling the duplex buildings. Instead of dividing them into separate units on the center of the party wall, they are sold as a whole with one side rented. In making the sale the lease and the security deposit are transferred to the purchaser to insure his ability to maintain the monthly payment on his mortgage. The price for the complete duplex buildings is \$14,950.

Wage rates in the Miami area are comparable with Chicagoland, some trades slightly higher, some lower. It accordingly becomes possible to draw some comparisons in the way of construction costs. In features of design and space allotment the two localities do not differ materially, but in climatic demands Chicagoland is burdened with many extra costs. Add deep foundation walls with thoroughly insulated slabs. Add side wall and ceiling insulation and ventilated open attic spaces. Add weather stripping or storm windows or both. Add heating plants that run from \$500 to \$1000 with chimneys or necessary vents. Add basements, found necessary in many local sections, and you build Southern Florida costs to the asking prices in Chicagoland, almost to a penny. The comparison establishes the fact that home builders, the nation over, are of the same mind. They seek to serve the home seeking public at the lowest possible prices commensurate with conservative operation and are making an enviable record in that respect.

B. T. Roe Heads Sales For Tracy Manufacturing Co.

Recently appointed vice president in charge of sales for Tracy Manufacturing Co., Pittsburgh, is B. T. Roe, who was formerly director of distribution for the Crosley Division, Avco Manufacturing Corp. He is widely known in the electrical appliance distributing field.

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TO SPEED
CONSTRUCTION
USE
PAINE
COILED
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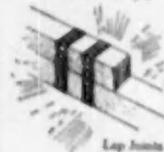
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IRON

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1001 USES ABOUT THE JOB

Everywhere you turn there's a job for Paine Hanger Iron that will help you to conserve labor and reduce your costs. This simple, yet amazingly versatile product can be bent or twisted to fit your exact needs. It can be used for hanging pipe, cable, conduit and numerous other items. It can be used for strengthening construction.

Hanger Iron may be installed with nuts and bolts, screws or nails. It is $\frac{3}{4}$ " wide and 20 gauge in 10' zinc-plated coils. Perforated with holes for $\frac{1}{4}$ " bolts on $\frac{1}{2}$ " centers. Reduce your construction costs—ask for Paine Coiled Hanger Iron from your supplier today.



THE PAINE COMPANY

2959 Carroll Avenue

Chicago 12, Illinois

OTHER PRODUCTS

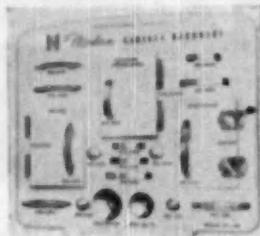
- Spring Wing Toggle Bolts
- Expansion Anchors
- Sudden Depth Drills
- Wood Screw Anchors
- Pipe and Conduit Clamps and Straps

- Hanger Iron, perforated
- Expansion Shells
- Star Drills
- Malleable Straps
- Special Hoisting and Fastening Devices

WRITE FOR CATALOG

National Lock Offers New Cabinet Hardware

In announcing their new No. 150 cabinet hardware assortment, the National Lock Co., Rockford, Ill., presents four new items in their line: Forged brass hardware, a new type



New National Lock Co. display board concealed hinge, concave knobs, and a distinctively styled die cast handle. In addition, the No. 150 offers the complete Deluxe and Aristocrat matched sets.

Popular finishes such as bright brass, dull brass, dull bronze, bright chromium and dull chromium are stressed by the company as adding to the sales-desirability of many of the hardware items.

Offered as an assortment, with well-balanced quantities of each item, the No. 150 also provides a display board requiring minimum counter space.

C. A. Pynn New Van Packer Vice President

Chester A. Pynn, for the past two years president of Homecrafts, Inc., of Floral Park, N.Y., has been made vice president in charge of distribution of the Van Packer Corp., manu-



CHESTER A. PYNN

facturers of precast chimneys with headquarters in Chicago, officials of the company recently announced in New York.

Pynn had previously served 13 years as manufacturer's agent for the A. O. Smith Corp., Milwaukee, Wis. In his new position, Pynn will be in charge of international distribution of the precast chimney.

American Builder, February 1950.

You build 'em...

BRIGGS

Beautyware

IN COLOR
sells 'em!



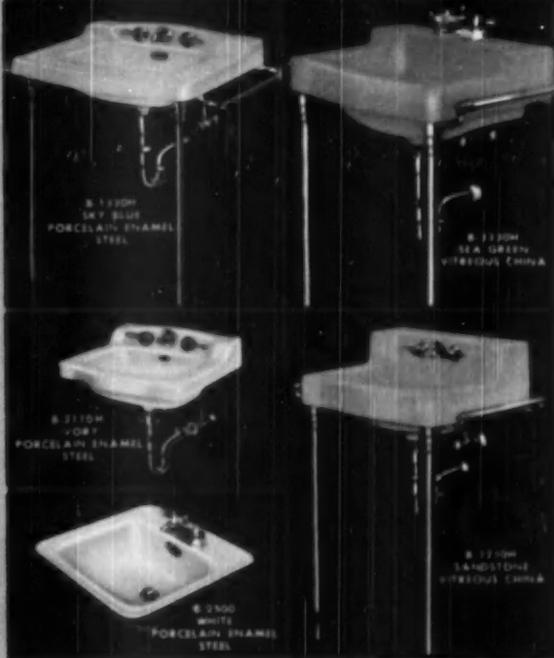
BRIGGS FOUR FAMOUS FIXTURE COLORS

shown here in the best-selling vitreous china and porcelain-enamel steel lavatories.

Adds only a few dollars
to cost of each home...
gets back all your dollars
...plus profits... faster!

Here's why! Surveys prove that people want colored bathroom fixtures. In the last big national survey, 64% of all families interviewed said that they thought color was definitely smarter, newer, more modern . . . and that given a choice at a reasonable price they would take colored over white fixtures every time. Now Briggs brings them—and you—colored fixtures at a price so reasonable it is revolutionary! Only 10% more for Briggs beautifully styled stainproof fixtures in color than for white! Every word of that statement is worth its weight in gold to you. Not only because it means faster sales . . . but it may well be the sales-clincher between one of your houses and some other builder's house 6 blocks away. Get on the hand-wagon! Start using Briggs Beautyware colored fixtures today! Briggs Manufacturing Company, 3001 Miller Avenue, Detroit 11, Michigan.

NOTE: 10% additional charge for colored ware applies to complete sets including Briggs brass fittings.



Completely modern, attractive in design, and beautifully laid out, the new 210-family Greener Cleveland Apartments in Forest Hills, New York, are equipped with dependable Spencer Boilers. Builder: Ben Olson; Heating Contractor: Soling Heating and Cooling Company; Architect: Philip Birnbaum.



WIDE SELECTION

You have 76 different models to choose from, ranging in size from 290 to 42,500 net load, steam.

CHOICE OF FUELS

You can adapt Spencer Boilers to all common fuels—oil, gas, coke, and anthracite or bituminous coal.

EASY INSTALLATION

You will appreciate the *flexibility* that Spencer offers. All models are adaptable to either front, rear, or side installation when automatic firing is used.

QUICK STEAMING

You can assure owners of immediate heat whenever they need it. Special built-in coils provide instantaneous service hot water.

MINIMUM REPAIRS

You can be sure that Spencer heavy-duty construction throughout means extra dependability, extra trouble-free service.

EASY CLEANING

You can easily explain to owners that all Spencer Boilers are designed for easy cleaning.



Constructed in accordance with ASME requirements. Fully approved by the Steel Boiler Institute.

For better apartment heating, specify Spencer

When planning apartments—and other types of residential or commercial structures—you'll find many advantages to specifying Spencer for heat and hot water. Note (at left) just a few of the many reasons why Spencer has earned an outstanding name among professional men and owners alike.

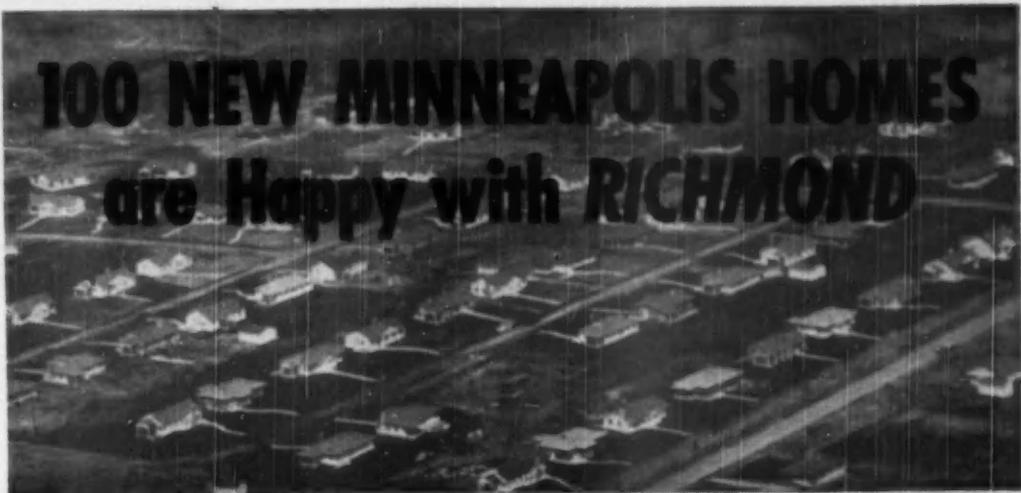
For further details on the complete line of Spencer Boilers, write, wire, or telephone today.



THERE IS A SPENCER for every building, for every fuel

For homes, small buildings..... 29 models
 For small apartments, light commercial uses..... 13 models
 For large apartments, heavy commercial uses..... 34 models

100 NEW MINNEAPOLIS HOMES are Happy with RICHMOND

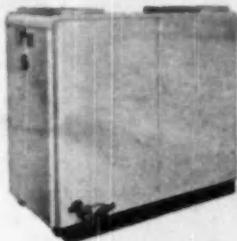


Aerial view of Woodlawn Park, Minneapolis. These 100 new homes built by Wilkorp, Inc. all have Richmond Plumbing Fixtures and Richmond Gas-Fired Winter Air Conditioners—distributed by Globe Plumbing Supply Company. Plumbing installed by Tabaka Plumbing—heating installed by Welter Heating Company.



The Richmond Phoenix 7 piece, close-coupled (close seat), plate 5-217

The Richmond Gas-Fired Winter Air Conditioner, type 218A



The Richmond Stratton flat-top sink, plate 219



The Richmond Iroquois recessed bath, plate 225



The Richmond Corbin shell-top lavatory, plate 637

Richmond Plumbing Fixtures and Winter Air Conditioner Installed

Richmond proved a wise choice for these fine new homes in Minneapolis's Woodlawn Park Section. The four Richmond Plumbing Fixtures and the Air Conditioning Unit installed in each of the 100 homes bear the famous Richmond stamp of quality—quality of appearance and quality of performance.

Whether it's a single replacement or a large development, you can be sure when you select Richmond. You can be sure of efficiency in operation and beauty of design. You can be sure of satisfied clients—happy with Richmond serving their plumbing and heating needs.



RICHMOND

RICHMOND RADIATOR CO.—AFFILIATE OF REYNOLDS METALS CO.



Phoenix 7



218A



Stratton



Iroquois
recessed bath

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

Please send me the latest literature and information on the Richmond line of fine plumbing fixtures. No obligation, of course.

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Company _____

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ADDS LIVABILITY... by offering moisture protection millions know they can count on! No other cement paint has so many satisfied users... so much word-of-mouth advertising! When you say "BonDEX"—it's accepted as the Best!



ADDS SALEABILITY... For BonDEX comes in 12 beautiful colors as well as gleaming white. It decorates as it protects... adds beauty and distinction to masonry surfaces inside and out! Sales become easier when you use BonDEX.

BONDEX users are BonDEX boosters! That's why it is the best-known, best-accepted brand on the market... **OUTSELLS ALL OTHER CEMENT PAINTS COMBINED!**

BonDEX seals the surface of masonry—protects against moisture both indoors and out! It guards against surface disintegration. It adds color, beauty... satisfaction and saleability to all types of masonry buildings.

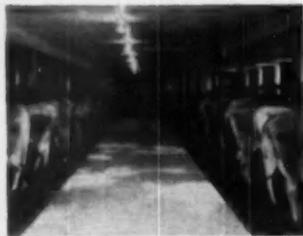


THE REARDON COMPANY: St. Louis 8
Chicago 8 • Los Angeles 21 • Bayonne, N. J. • Montreal 1

Minnesota Dealer's Farm Department Stresses Good Barn Insulation

Ever since its organization thirty years ago, The Kruse Company, Rochester, Minn., building material dealer, has recognized the importance of the farm market, and has served rural trade through a special Farm Department. There is considerable dairying in the area and the company has placed special emphasis on good dairy barn construction.

When Clifford V. Hicks, manager of the Farm Department, joined the firm eleven years ago, one of his first duties was to inspect a dairy barn that became and still is an effective selling argument for insulation.



INTERIOR of barn. The 8-foot alley in center permits a tractor and mowers spreader to drive through for cleaning.

"Mr. Kruse wanted me to see that particular barn," Hicks commented. "Because it was a demonstration of an insulated and an uninsulated wall in service under identical conditions. It had the further distinction of being the first cavity wall around here. The owner had conceived the idea himself of building an 8-inch concrete block outer wall, and a 4-inch block inner wall, with a 1-inch air space between. He figured this air space would provide the insulation.

"He came in to discuss the construction with Mr. Kruse, who pointed out that calling this a 'dead air space' was a misnomer, because the air would circulate and set up convection currents that would carry away heat, and in addition heat would radiate across the space. The farmer was partly convinced; enough, anyway, so he agreed to pour vermiculite fill insulation into the cavity; but he wasn't thoroughly convinced, and on the East wall he left out the vermiculite above and between two windows, just to see what would happen. When I first saw the barn, it had been in service almost two years. I asked the owner how it was working out. He pointed to the area between the two windows. That uninsulated space was dripping wet, while

American Builder, February 1950.

the rest of the wall was so dry you could strike a match on it. Whenever one of our farm customers talks about the insulation value of dead air space, I tell him to go out and look at that particular barn. Ever since this first job was installed, and we saw its outstanding results, we have recommended vermiculite insulation for a good, dry wall. Before vermiculite insulating concrete became available, we recommended vermiculite fill for cavity wall insulation. Now we use the 1:16 mix of vermiculite concrete."

Another dairy barn serves as a demonstration of well-planned remodeling and the way in which adequate insulation and ventilation can make a cold, wet barn warm and dry. This barn, 36 by 100 feet, was 14 years old. It had a single 12 inch block wall with no insulation, and frost and moisture collected on the walls so thickly that water ran down the alleys.

Eight years ago, the farm was sold, and the new owner wanted to dry up the walls. Hicks recommended lining the interior with cream-colored 4-inch clay tile, leaving a two inch cavity between the new and existing walls. Wall ties were placed, and the void was filled with vermiculite. Storm windows and a thermostatically-controlled ventilating system were installed. There was no more trouble with moisture, and the barn is comfortably warm in winter. Also immediately apparent was the improvement in the health of the herd, and the reduction in mortality of young calves.

In conjunction with the Farm Department, The Kruse Company maintains a drafting department; and this has been an important factor in increasing rural business. No charge is made for planning, drawings, or blueprints.

"We feel that our obligation to our customer does not end with selling merchandise," Hicks explained. "We want to help him in every way we can and give him the benefit of our experience."

"When a customer comes in, we find out, first, what type of building he wants. Then we discuss the best way of building it, and recommend the materials that will do the job best. We give him the approximate cost. If he decides to go ahead, we make a careful estimate."

"We help our customers to locate their buildings. We have a transit, and we go out and give them grades."

"When the job has gotten under way, we get out to it once or twice to see that the materials are being used as they should be."

American Builder, February 1950.

DRAMEX

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COLORS LIKE PAINT
RESURFACES
LIKE PLASTER!



ONE COAT... fills plaster cracks—covers blemishes—gives you a NEW WALL beautifully colored and finished. It's ideal for reconditioning and redecorating old walls—inexpensively!



ONE COAT... turns wallboard into beautiful "living room" walls. Many beautiful surface finishes are possible. And it's so easy to apply. Ideal for "dry wall" construction in new homes or old.

DRAMEX... mixes with water—stays mixed without restirring—colors without streaking—is bluish-proof—dries in 4 hours—becomes plaster-hard—requires no sizing! AND DRAMEX WALLS CAN BE REPAINTED WITH OIL PAINT!



THE REARDON COMPANY: St. Louis 8
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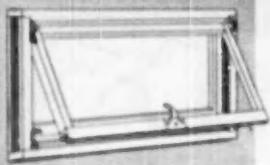
ANDERSEN Windowalls

4 Complete
WOOD
Window Units



ANDERSEN GLIDING WINDOW UNITS: Sash glide from side to side in plastic sill tracks. Sash can be removed. Fully weatherstripped. Single light or horizontal glazing. Equipped with screens and double glazing.

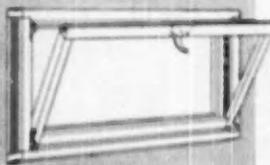
ANDERSEN BASEMENT-UTILITY WINDOW UNITS



Packed in cartons, completely set up for quick installation. Includes screen. Storm sash optional. Modular sizes.



REVERSIBLE SASH



Ingenious hardware permits hinging of sash at top or bottom. Removable sash can be reversed in a matter of seconds.



MANY ABOVE-GROUND USES

In stack or ribbon groupings, or singly, this Andersen unit has many above-ground uses. Ideal for cabins, garages, farm and commercial buildings.

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



ANDERSEN PRESSURE SEAL WINDOW UNITS: This double hung window unit is the newest idea in window manufacture. Invisible pressure strips eliminate all weights and balances and force each against packing strip to close all cracks. Flush front freely in rain, and are instantly removable. Easy to install. Completely weathertight.



ANDERSEN CASSENETT WINDOW UNITS: Wide variety of sizes, including picture window combinations. Colorful-Lig unit. Come complete with hardware, weatherstripping, and inside screens and double glazing. One-light, horizontal or out-up glazing.

Windowalls
ANDERSEN

ANDERSEN WINDOWALLS® are precision wood window units manufactured by the Andersen Corporation, Bayport, Minnesota. They provide all the advantages of wood windows at their best... wood that insulates, wood that blends with the home.

*TRADEMARK OF ANDERSEN CORPORATION

Andersen Corporation • Bayport, Minn. • Window Specialists



HOUSING projects of this type, which will be owned and rented by public authorities, are the bulk of building in Britain today

Mister 'Iggins' 'Ouse

**Britain's building industry has one customer
—the government's socialization of the industry itself appears to be next step on timetable**

By W. H. Schmidt, Jr.,

Corresponding Editor

GOVERNMENT is virtually the only house-buyer and is rapidly becoming the exclusive landlord of Great Britain. Hence, the home building industry—as yet privately owned for the most part—has to get along with a monopoly customer.

Is public housing a good thing for Britain? Two elementary criteria would seem to be: (1) the pace of providing housing, and (2) the relative cost of that housing.

First and foremost it must be emphasized that, today, housing is a more potent political issue in Britain than it is even here in the States. Politicians rise or fall on how well the public think they get people "under roof." Hence, as may be expected, everybody is paying special attention to the job of building houses; vast sums of public monies are being poured out in subsidies; and materials and labor therefore are accorded special favors. But, despite this concentration of mind and matter, the record is not nearly as good as it was before the war.

At the present time, when housing is a national issue, fewer than 200,000

"houses" (dwelling units) of a permanent character are being produced in a year. Back in 1938, when there existed no appreciable shortage of housing, the private builders built and/or sold off some 350,000 houses. (In the United States, with three times Britain's population, only 406,000 dwelling units were produced in 1938.) And virtually all of these houses were for private owners and without subsidy, for public housing had, for some years, remained static under a conservative government regime.

It is estimated that 750,000 dwelling units in Britain were destroyed by enemy action in World War II. Furthermore, for six long years of war, no new home building was possible. And, as in the United States, population growth and a flurry of postponed marriages further deepened demand. Yet, in the entire four years from V-E Day to the end of June, 1949, only 528,000 permanent-type houses were produced in Britain, or an average of 132,000 a year. Compare this with 350,000 built in 1938! (Government propaganda claims that

almost one million dwelling units were provided in the four-year period, but of these, 473,000 units were of temporary construction, the result of conversion of existing buildings, requisitioned empty private properties or abandoned military hutments—leaving 528,000 as the actual comparable production of the period.)

Cost Colossal, Too

Not only is the rate of building poorer than prewar, but the over-all cost is very much greater. In terms of the Englishman's low average income it is colossal. It isn't necessary to take the word of a conservative for this: In 1948 the so-called Girdwood committee of inquiry reported to the socialist minister who appointed it that the cost of the average dwelling unit in a public housing project had risen from about \$1600 prewar to \$4800 in 1948, or three times.* And unlike the building

(Continued on page 194)

*All dollar values in this article are based on the old rate of four dollars to the British pound sterling, an representing more accurately what prices mean to the average Englishman's pocketbook than would the new rate of exchange.

*Closed
the
Sale!*



R-O-W Removable Wood Windows

"I can wash both sides indoors!"

They had looked over a number of attractive homes. All had the usual "blender" mortgage appliances. Then they were shown a home with an extra something—R-O-W wood windows that are REMOVABLE. That closed the sale.

The sales appeal of R-O-W REMOVABLE windows costs little or no more than ordinary windows. R-O-W's spring cushion action automatically adjusts for swelling and shrinking caused by weather changes.

OVER FOUR MILLION IN USE. Consumer acceptance for R-O-W Windows has been built by national advertising in BETTER HOMES & GARDENS, AMERICAN HOME, and SMALL HOMES GUIDE. It's the window women want.

MERCHANT BUSINESS: Demonic merchandising and display helps are available to make your home selling easier. Fill out and mail the coupon today for merchandising samples and more information about the wood window with SALES APPEAL.



STANDARDIZE ON

Removable

Opens Easily

Weatherstripped

See R-O-W Windows at the 1950 National Association of Home Builders Show, Booth No. 81. See Sweet's Architectural or Builders File.

When in New York see R-O-W at Architects Sample Corp.

TYPICAL CONSTRUCTION DETAILS

SCALE



R-O-W SALES COMPANY

1130 ACADEMY • FERRISDALE 20, MICHIGAN

PLEASE Send more information on R-O-W
—the window with sales appeal to

Name _____ I am
Company _____ Architect
Address _____ Builder
City _____ Zone _____ Dealer
Date _____ Carpenter-
Contractor

Use this SALES FEATURE on your windows

It's economical and easy to combine weatherstrip protection with trouble free sash balancing



... at the blueprint stage

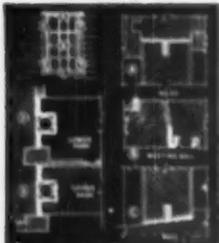
Specify MASTER NO-DRAFT SASH BALANCE

Here is "finger tip" control for your clients and a maintenance free unit that does away with all double-hung window trouble. Wood sash are the best windows when properly installed and the Master No-Draft spring balance is a proven combination which saves money and time in installation and a definite selling feature for home owners.

The Master sash unit is quality equipment fabricated from non-corrosive metal and may be had in stainless steel for locations subject to salt air.

For new or old window installation get the facts today. Send coupon now.

Visit the Master Sash Balance booth at the National Association of Home Builders Show at the Stevens in Chicago, Feb. 19-23. We'll be in space 117 and will be glad to demonstrate our product.



MASTER METAL STRIP SERVICE

1720 N. Kilbourn Ave., Chicago 29, Ill.

Please send me, without obligation, complete information about Master No-Draft Sash Balance

NAME

ADDRESS

CITY ZONE STATE

Mister 'Tiggins' 'Ouse

(Continued from page 192)

prices in the States, which have dropped somewhat during the past twelve months, costs in Britain have climbed steadily upward since the date of the Girdwood report—some estimate as high as 10 per cent.

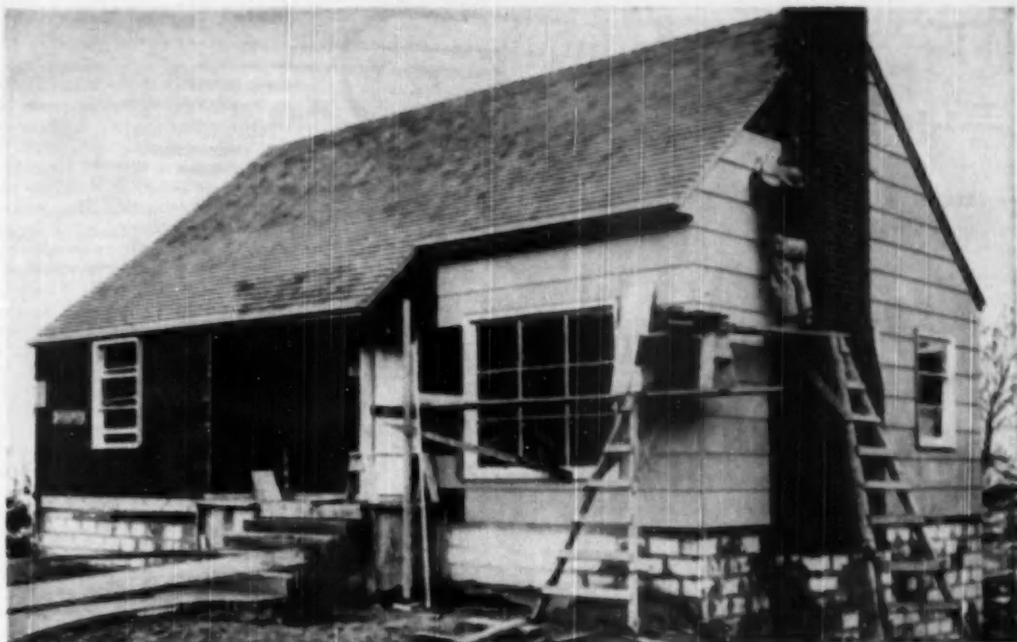
This increase is not—as may be supposed—due entirely to increased labor and material costs. If the cost of housing be related to national income, differences in prices and wages are automatically cancelled out, because the cost of housing is measured in terms of its effect as a charge on the whole economy. In 1938, according to the Girdwood report, 2.9 per cent of the national income of Great Britain was invested in the building of new houses. Today, 2.6 per cent—or a little less proportionately—is being invested. But the nation is receiving back only 56 per cent of the number of houses it enjoyed in 1938. So the burden is about the same, but the yield has been cut in half.

Comparison of absolute costs of British and American houses is impossible because of wide differences in wages and standards of comfort. But an important British builder, with experience as a contractor in other countries (including the United States), estimates that the cost of a new house in Britain is about five times the annual income of its renter or purchaser, compared with only two-and-one-half times his annual pay in the United States. In short, to get a roof over his head, the average Britisher must pay out, proportionately, twice what it costs his American counterpart. And this does not take into account, of course, the fact that his house may lack such ordinary American amenities as central heating and concealed plumbing.

Government Extravagant Customer

British builders interviewed by the writer attribute an important share of the decrease in production rate and increase in cost of housing to the fact that the government is the principal customer of their industry. Shortly after it came to power in 1945 the Labor government instituted a peacetime system of licensing, under which a person ordering a new house or any substantial improvement or addition to an existing building has to obtain a license for the job. For this permit he has to go to his local housing authority which is directed to issue permits for private owners at a ratio of one house for every four built for public ownership by the authority itself. This ratio, it must

(Continued on page 196)



You'll find it ***Doubly Satisfactory***
to use **WELDTEX** Siding

This unique new building material makes money for builders, saves money for homeowners.

You'll be happy when you discover that by using Weldtex Siding you can do quality work quickly...at a saving.

Made of patented 3-ply Weldtex Striated Plywood in exterior grade, these modern siding panels are pre-cut to 48" long by 15 7/8" wide and 3/4"

thick. When you consider only 22 of these panels cover an entire square of surface, you get some idea of the speed with which you can work using Weldtex Siding. And the finished job is weathertight, with a minimum of seams and strikingly handsome.

Homeowners will like the fact that they get a beautiful exterior that adds to the value of their home...yet which shows them important savings.

Weldtex Siding takes paint and other exterior finishes perfectly. It's approved by the FHA on Federal Housing jobs. And can be used over

any type of sheathing, or fits perfectly on 16" studs. We suggest that you use 1 3/4" hot-dipped galvanized finishing nails spaced 6" on center horizontally, 4" on center vertically. A 2" lap prevents water backup.

Don't fail to get complete information on this newest and most economical way to finish a house with smart, modern beauty that gives double satisfaction to builder and owner. Write today for our free folder containing complete product data on Weldtex Siding, and some important tips on installation. It's yours for the asking.

WELDWOOD Plywood

Weldwood Plywood is manufactured and distributed by:

UNITED STATES PLYWOOD CORPORATION U.S.-MENDEL PLYWOODS, INC.
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Distributing units in Albany, Baltimore, Boston, Brooklyn, Buffalo, Chicago, Cincinnati, Cleveland, Detroit, Fresno, Glendale, Hartford (East), High Point, Indianapolis, Knoxville, Los Angeles, Milwaukee, Newark, New Hyde Park (L. I., N. Y.), New York, Oakland, Philadelphia, Pittsburgh, Portland, Ore., Richmond, Rochester, San Francisco, Seattle, Spokane, St. Paul, Washington, D. C. Also U. S.-Mengel Plywoods, Inc., distributing units in Atlanta, Birmingham, Dallas, Houston, Jacksonville, Kansas City, Kans., Louisville, Memphis, New Orleans, San Antonio, St. Louis, Tampa, Va. Canada: United States Plywood of Canada, Limited, Toronto. Send inquiries to nearest point.

Weldwood® Hardwood Plywood
Douglas Fir Weldwood
Mengel Flush Doors
Douglas Fir Doors
Overhead Garage Doors
Molded Plywood
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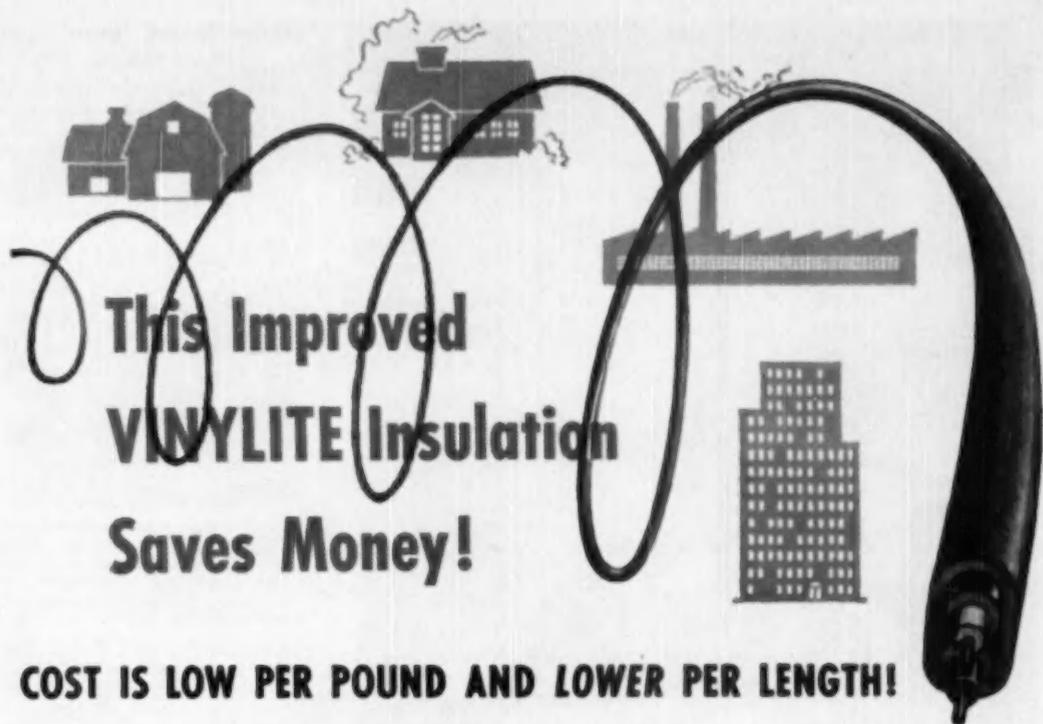
Tekwood® (paper-faced plywood)
Weldwood Glue® and other adhesive
Weldtex® (striated plywood)
Micarta®
Flexwood®
Firite®
Weldwood Fire Doors
Weldwood Flush Vanner Doors

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Plastics and Wood
Welded for Good

Interior grade Weldwood Plywood is guaranteed for the life of any building in which it is installed.



This Improved VINYLITE Insulation Saves Money!

COST IS LOW PER POUND AND LOWER PER LENGTH!

Even better in performance—and lighter in weight—than comparable insulation materials is a recently developed VINYLITE Plastic insulation for general-purpose building wire.

Because this VINYLITE Plastic insulation weighs less than others—each pound goes further, cuts cost of the improved wire.

Electrical and physical properties given to wire by this new insulation are excellent—rated by Underwriters' Laboratories as suitable for Types T and TW, and for exposure to oil up to 140 deg. F. (60 deg. C.).

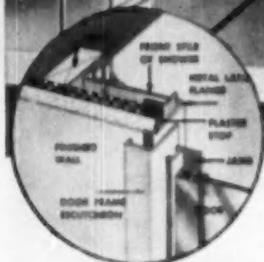
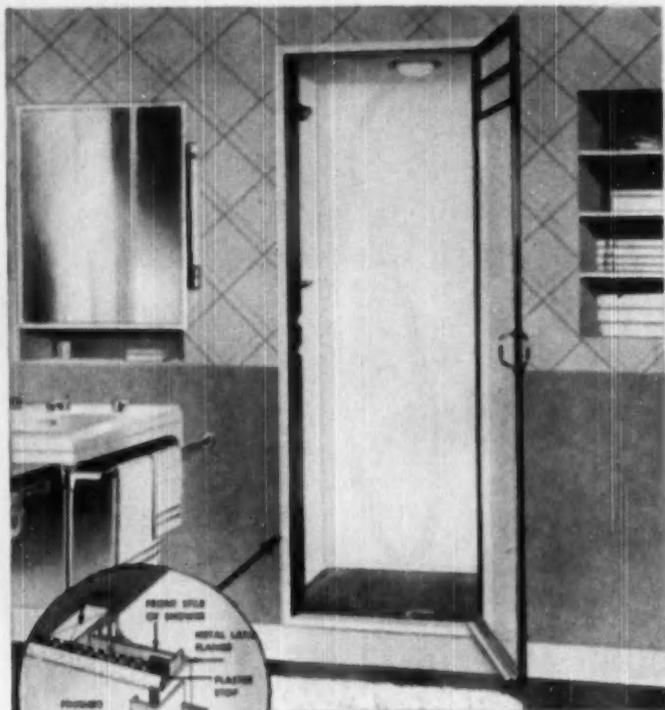
Other important qualities are low-temperature flexibility, resistance to high-temperature deformation, water and oil resistance, in

addition to the other VINYLITE Plastic insulation advantages of long life, easy pulling, small diameter, and permanent colors.

Some outstandingly successful uses of wire insulated with the improved VINYLITE Plastic include general-purpose building wire, as well as insulation and jacketing of fire alarm and telephone systems. For full information, or names of manufacturers, write Dept. HK-64, today.

Visit the National Plastic Exposition,
Navy Pier, Chicago, March 28-31

Vinylite
BRAND
PLASTICS
BAKELITE
DIVISION
UCC



Completely built-in the bathroom

a new shower designed
for Builders

BUILT-IN *Cadet* SHOWER, DESIGN 19B

... with Precast Terrazzo Receptor

Completely recessed, door flush with wall of bathroom, no exposed metal panels.

Beautiful in appearance—clean interior, no screws or projecting fastenings to mar the bright white, smooth enameled finish.

Permanently water-tight—no mortar joints to crack and leak.

Installed cost is much less than tile or other built-on-the-job showers. Only one trade required for installation.

Size, 36" x 36" x 80"—curtain or saphyr door as illustrated, bonderized, galvanized steel walls, baked-on synthetic white enamel—will not rust.

Install a Fiat 19B Cadet on your next job. You will find this shower readily accepted by home buyers.

FIAT METAL MANUFACTURING COMPANY

THREE MANUFACTURING PLANTS

Chicago 13, Illinois Long Island City 1, New York

Los Angeles 23, California

In Canada: Fiat showers are made by Paralein and Metal Products, Ltd., Orillia, Ontario

FIAT

Please send catalog of Fiat Showers, Receptors and Doors. Also builders bathroom floor plan sheet.

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COMPANY _____

STREET _____

CITY _____

ZONE _____ STATE _____

Mail to Fiat Metal Mfg. Co., 1209 Roscoe St., Chicago 13, Ill.

Mister 'Iggins' 'Ouse

(Continued from page 196)

authority of Aylesbury (population 20,000), some 40 miles distant from London, completed 508 houses, compared with 72 houses completed for private owners, and had under construction 182 houses, compared with just 2 being built for private use.



UNIONS to which these employees belong favor nationalization of the home building industry. Behind these men is a form mold for the construction of houses by the "no fines" concrete process, wherein walls are poured on the site.

Under the Housing Act of 1946 nearly one-half the cost of building and maintaining authority houses in Britain is paid for by the taxpayers. Of this subsidy, three-quarters is borne by the national treasury, and the other quarter by local property owners. This burden is not "one-time"; it will go on as long as the buildings and present law exist. That subsidization of this proportion does not make for economy or wise expenditure is self-evident. The Girdwood report points out that, while the average cost of a public-owned dwelling unit in 1947 was \$5,600, the maximum allowable cost of a private unit was \$5,400.

As shown above, building for public authority is much slower than for private buyers; the Girdwood report admits it. Plans by government bodies cannot be changed quickly in response to variations in supply of materials, while private builders erecting for sale to individuals—as demonstrated here in the United States—can marshal labor and materials with great flexibility and keep up production rates even in time of short supply. There is ample evidence that the red tape associated with the building of houses for public authorities only compounds and intensifies the delays and high costs in all British building resulting from administrative restrictions.

Says the National Federation of Building Trades Employers on this score: "The experience of the past (Continued on page 200)"

American Builder, February 1950.



Hardware...

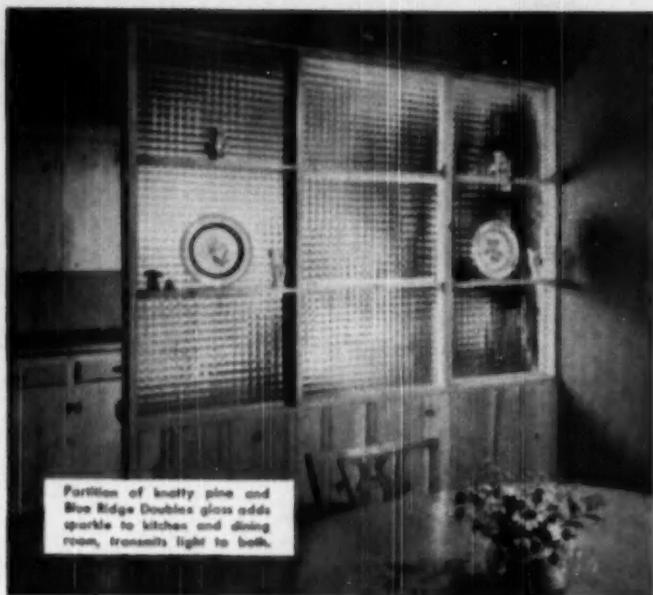
with an aim—You'll agree it's to your advantage, when you order hardware items of common use, to know that they are of better than common quality—aimed in manufacture to fit accurately, perform better, endure longer. Stanley produces them in full gauge, clean and bright, neatly packaged for easy identification.

and a name—Each piece conforms to the Stanley standard of dependable quality—the name to specify. The Stanley Works, New Britain, Connecticut.

STANLEY

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HARDWARE • TOOLS • ELECTRIC TOOLS • STEEL STRAPPING • STEEL



Partition of knotty pine and Blue Ridge Double glass adds sparkle to kitchen and dining room, transmits light to both.

How to build-in the

Luxury Look...

Economically

Partitions of Blue Ridge *Patterned Glass* can be used to add appeal to even the smallest house . . . build-in luxurious decoration for two rooms at once. And you save on papering and painting!

Blue Ridge *Patterned Glass* passes light from room to room . . . makes homes brighter, more attractive. Over 20 distinctive patterns provide privacy, create smart effects in every room.

To meet special needs, Blue Ridge Glass may be Securitized (heat tempered) for greater strength and *Satinol**-finished for greater obscurity. Ask your L-O-F Glass Distributor about it. You'll find it surprisingly inexpensive . . . practical even on modest building budgets. *®



"New Adventures in Decorating"

This idea book shows actual installations of Blue Ridge *Patterned Glass* in large and small homes. Write for your copy, Blue Ridge Sales Division, Libbey-Owens-Ford Glass Company, 8325 Nicholas Building, Toledo 3, Ohio.



Mister 'Iggins' 'Ouse

(Continued from page 198)

few years makes one thing abundantly clear—namely, that low cost building and high productivity are not possible in a situation in which most things which the builder requires or wishes to do can be obtained or done only by virtue of a license or official fiat. Living from hand to mouth in this manner makes forward programming of any job or series of jobs very difficult, if not impossible, and very much increases overhead costs." The official Girdwood Report itself points out that, "The difficulties of obtaining



SOME 473,000 dwelling units built since the end of the war in Britain are of temporary construction

labor and material), the necessity to comply with various controls and the numerous and detailed forms, records and returns now required, have all necessitated not only more staff but staff of higher qualification and with higher salaries than in prewar days."

Town & Country Planning Act

"And that ain't all," as the barker said. Superimposed on the whole maze of restrictions and licenses and ratios designed to ration labor and materials is the Town & Country Planning law, which places in the hands of a Central Planning Board—appointed, paid and directed by a Minister of Town & Country Planning—dictatorial powers over the use of all land in Britain. This enactment of "The King's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons" says, at the outset, that it is designed "to give power of control over the use of land" and to "secure the recovery for the benefit of the community of development charges in respect of certain new development." In plain language, the government has the power to prescribe whether a plot of land should be devoted to agriculture, roads, recreation, timber-growing, residence, or garbage-dumping, and to tear down, reconstruct or build—or order any of those things to be done—any house or other facility, by whomever owned, to gain this end.

(Continued on page 202)

ANNOUNCING THE WORLD'S

Most Beautiful, Most Versatile,
GARAGE DOOR



Patents pending on construction principles and manufacturing process.

Crawford MARVEL-LIFT *Stylist*

**"THE GARAGE DOOR
OF 1000 FACES"**

The quickest, easiest, thriftiest way to give your homes STRIKING EYE APPEAL FROM THE STREET is with the new Crawford Marvel-Lift Stylist

Here's a brand new, patented construction, garage door that gives you unlimited scope for putting brilliant, striking, eye-arresting **PERSONALITY** into **EVERY** home at trifling extra cost.

Any design, traditional or modern, that you or your client may fancy can be applied to the **STYLIST** by means of stock moldings combined with beautiful color schemes. The same design can be repeated on front door and shutters, if you wish, and you can easily imagine what a stunning effect such a novel and colorful ensemble will produce.

For the **FIRST** time, you and your customers can have decorator's custom styling in a ready-built, popular-priced garage door. And you can make this styling the basis of an over-all decorative scheme that will make every home you build a standout for **STYLE** and **PERSONALITY**.

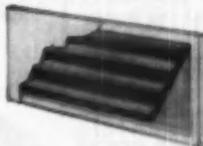
Every house can be different, distinctive, individual, and your prospects will **SEE** this immediately. This is a sales advantage that alert builders will grab and go places with. As you can see, it costs almost nothing extra, but what it adds can be worth plenty. Lights are available on factory orders.

Call your local Crawford Door Sales Company listed in your Yellow Pages. Dealership inquiries are invited.

Visit Booth 39 at NAHB Show at the Hotel Stevens



The **STYLIST** slides up inside the garage, safe from wind, rain, snow and ice.



PATENTED HERCULES CORE OF 3-PLY HARDWOOD is laminated and molded to shape under 300,000 lbs. pressure at high temperature producing permanent waterproof bond. Blocks are built in for locks either side.

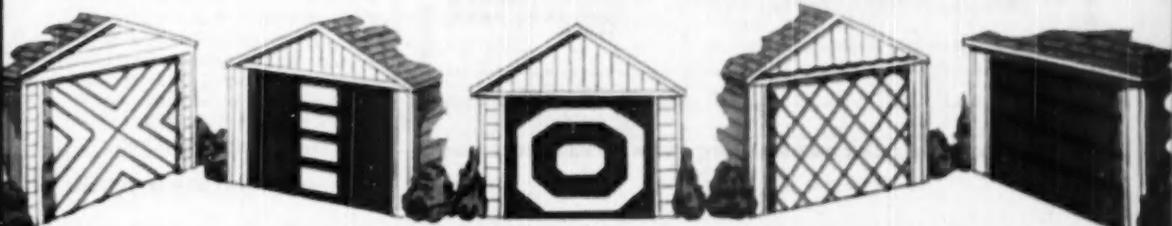
Crawford Door Company

Main Plant: 28-401 St. Jean Ave., Detroit 14, Mich.



FABRICATING PLANTS in Portland, Tacoma, Los Angeles, San Francisco, Dallas, Kansas City, Chattanooga, Milwaukee, Hudson, Mass., Cadillac, Ottawa, Canada.

DISTRIBUTING WAREHOUSES in 67 major cities. **SALES AND SERVICE** companies everywhere.



STURDY, EFFICIENT, FOOL-PROOF, NEW

B. AND R. UNDER-REAMER

PATENT PENDING

HUNDREDS OF SATISFIED CONTRACTORS PRAISE THE

B. AND R. UNDER-REAMER

PAT. PEND.

"Does the job I've been trying to get done ever since I've been in the building business. The only reamer that does the job to required specifications. I wouldn't be without one."

W. M. MORROW
McKinney, Texas

"Used the reamer I purchased from you a year ago, on every job since. Does a perfect job, which pleases me, the owner, the architect, and the F.H.A. Inspector."

N. H. BELL
Aliso, Texas

"Heartily recommend your B. & R. Reamer as the best I've ever used. Operates easier, and with less expense."

F. C. CONNER
Lawsville, Texas

1. UNDER-REAMS
2. FLATTENS
3. CLEANS

Typical Cross-Section of Reamed pier footing.



PIER HOLES

TO F.H.A. SPECIFICATIONS

NOW . . . this SINGLE PIECE OF EQUIPMENT does ALL THREE STEPS—under-reaming, cleaning, and flattening pier holes for grade-beam foundations. Experienced operators under-ream a hole in 2 minutes . . . arrives in 5 or 6. A tremendous saving over conventional "spousing" method. Eliminates use of spous completely!

PAYS FOR ITSELF THE FIRST 3 HOUSES YOU BUILD! Some contractors claim it liquidates itself the very first job—in time and concrete saved. As every hole is exact in size, exact amounts of concrete can be prepared—no waste!

MADE FROM CASE-HARDENED STEEL. The positive high-ratio worm gear control mounted on handle reduces draft to minimum, letting operator open cutting colters any desired amount. Center-shield deflects dirt into bucket. With colters closed, bucket filled with dirt is brought to surface, leaving hole perfectly clean! Genuine plow-steel blades. Produces 17" pier base, with 1 1/2" outer rim. Base extends 4 1/2" up barrel. Standard B. & R. Under-Reamer suitable for 9" hole, 10" wide. Extensions any desired length 22 a foot extra. Other widths available on order at extra cost—write for prices.

\$97.50

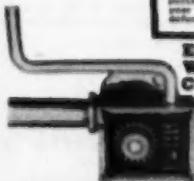
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MONEY BACK GUARANTEE

Use 30 days, if not completely satisfied, purchase price cheerfully refunded. Give your unconditional guarantee receipt before we start the job and workmanship.

EASY OPERATING WORM GEAR OPENS COLTERS TO CUT A

17-INCH PIER HOLE BASE AT ANY DESIRED DEPTH



ORDER NOW! BE READY FOR THE SPRING BUILDING BOOM

OR SEND **FREE** DESCRIPTIVE FOLDER FOR . . .

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ENCLOSED IS CHECK FOR \$ UNDER-REAMER(S) AT ONCE

PLEASE RUSH ME DESCRIPTIVE LITERATURE ON THE B. & R. UNDER-REAMER

NAME _____

ADDRESS _____

CITY & STATE _____

Mister 'Tiggins' 'Ouse

(Continued from page 200)

And further, the government may collect from any individual whatever it deems represents the increased value of his land resulting from whatever cause. In short, if a builder should seek to develop a real estate project on land hitherto used as pasture, the government may order him to pay, in cash, a sum representing the difference between the value of land as farm soil and as a residential plot. It is said that this sum may run as high as \$1000 a house—constituting a price increase of as high as 25 per cent.

While this pernicious act seems to place a great deal of responsibility for its administration on local authorities, the centralized Ministry actually wields the stick. Whatever its political tenets, local government is not allowed to refrain from socializing the land. The Act says the Ministry may, by mandamus, require a local authority to acquire land or carry out "any development which, in the opinion of the Minister, ought to be carried out." And, if the Minister is in a frightful hurry, in acquiring land or facilities he doesn't have to wait for the legal period of negotiation to expire. And payment for land acquired, or to recompense for depreciation to private property resulting from government development schemes, may be made in government stock—which, at the present time, is subject to serious fluctuations in price.

There are other controls—too numerous to mention. One, for example,—the Buildings Restriction Act of 1946—allows "any officer of an authority responsible for enforcing a building law or planning control" to "enter any premises at all reasonable hours" to find out if any work is being carried out contrary to planning control or to obtain information for local housing or planning authorities.

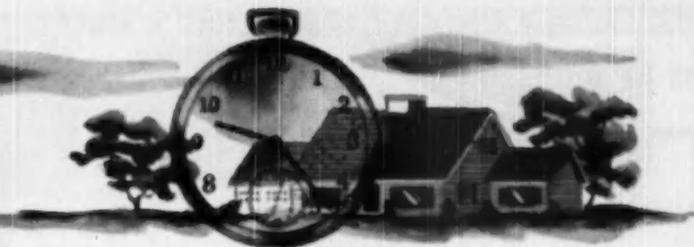
Output Falls

An important factor in high cost and low output in Britain today is that, while the labor force in building is about equal to what it was in 1938, its output is only half. The reasons are not hard to find.

Britain suffers from over-employment; there are more jobs than workers. No one needs to work to establish a good reputation so he won't be the first employee to be laid off.

There is too little difference in pay between skilled workers and unskilled laborers. In general, the lowest-paid building employee gets about 80 per cent of the rate of the most skilled.

(Continued on page 204)



WHAT'S THE SENSIBLE WAY

TO CUT BUILDING TIME?

It's simple and easy to cut down the time needed to build any structure. To do it requires no change from conventional methods. A simple system of coordinating the sizes of the materials that go into the job is all that is needed. Known as *modular design*, this system is now the national standard. Building materials are sized on a 4-inch "module" or unit of measurement to save time, labor and cost in construction!



WOOD . . . BETTER THAN EVER

WITH MODULAR DESIGN! Wood has always been the ideal material for windows, sash, frames, screens, storm sash and other woodwork products. Warm to the touch, wood *insulates* against heat and cold. Easily painted, stained or varnished, it holds finishes lastingly. Woodwork products are moderate in cost—precision made for quick installation. Toxic preservative treatment at the factory enhances their long life—provides extra resistance to staining, decay, insect attack or humidity. And today, leading woodwork manufacturers add an EXTRA advantage—MODULAR DESIGN!

ANSWERING YOUR QUESTIONS

ABOUT MODULAR-SIZE WOODWORK



Q. HOW DOES MODULAR DESIGN HELP ON THE JOB?



In installing windows, for example, there is ONE standard opening. This opening takes any design of modular-size window. There's less cutting, less trimming, less waste of material.



Q. WHO STANDS BEHIND MODULAR DESIGN?

Leading organizations in the building industry such as the Associated General Contractors of America, American Institute of Architects and Producers' Council endorse modular design. The U. S. Housing & Home Finance Agency recognizes modular coordination as a cost reduction system.



Q. ARE MODULAR-SIZE WINDOWS EASY TO OBTAIN?

Yes. Modular standard windows, window frames and screens are fast becoming available in all localities, thus simplifying specification procedure and assuring a ready source of supply.



Q. HOW DOES MODULAR DESIGN BENEFIT THE OWNER?

It gives him more for his building dollar. Modular design also simplifies repair and replacements of windows. In addition, the consumer can get not only his windows but his frames, storm sash, screens, trim, window shades, venetian blinds, etc., in standard sizes to fit modular openings.

GET ALL THE ANSWERS—MAIL THE COUPON!

Ask your lumber dealer to give you the facts about modular-size windows, frames, screens and other woodwork. Find out for yourself why modular window planning can cut your costs and put you in a better competitive position. Or, mail the coupon for our free, illustrated folder.

NATIONAL WOODWORK MANUFACTURERS ASSOCIATION

332 SOUTH MICHIGAN AVENUE • CHICAGO

This seal of approval identifies woodwork products which meet N.W.M.A. minimum standards of toxic preservative treatment.



National Woodwork Manufacturers Association
332 South Michigan Avenue
Chicago 6, Illinois

Gentlemen: Please send me your folder, "New Savings for Builders."

Name.....

Address.....

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

Silent as a shadow

and smooth as silk!



For Thin-Wall Installations

Those who know agree on one thing—vanishing doors must be noiseless and effortless to operate. And that is why more and more builders insist on R-W Silver Streak Vanishing Door Hangers and Track... it's got exactly what they want.

Specially designed for lightweight vanishing doors in thin-wall pockets built in standard 2" x 4" studded partitions, Silver Streak is also for use on parallel residential wardrobe doors 4" or more in thickness. The hanger wheel, made of fine-weave cloth base bakelite, and equipped with high-finish ball bearings, gives longer wear and quiet super-smooth operation.

The track is extra heavy section, hard composition extruded aluminum. Screws are easily inserted. Only rounded surfaces of the floor guide come in contact with the door groove, preventing scraping and assuring smoother quieter performance.

For maximum satisfaction and economy, the logical choice is R-W No. 1019 Silver Streak.



Richards-Wilcox Mfg. Co.

A HANGER FOR ANY DOOR THAT SLIDES
AURORA, ILLINOIS, U.S.A. Branches in all principal cities

Specialty Door Hangers & Tracks • Fire Doors & Frames • Garage Doors & Equipment
Industrial Conveyors & Frames • School Wardrobes & Partitions
Elevator Door Operating Equipment

Mister 'Eggins' 'Ouse

(Continued from page 202)

The Girdwood report itself points to this lack of incentive as an evil, and advises the British to look at American practice. In 1927 more than 24,000 masons were employed in Britain. Today—when the need is incomparably greater—there are only 11,000 available. The trouble does not appear to lie in union restriction of entrants into the crafts; the fact is simply that no man wants to serve a long and difficult apprenticeship learning an exacting trade when he can earn almost as much immediately as a common laborer. In recognition of this need for greater incentive, the National Federation of Building Trades Employers and the leaders of the national super-union of employees have agreed to allow individual firms to negotiate bonus schemes with their employees so as to allow the average worker, by speeding up his output, to earn 20 per cent more than normal. But local union officers look with suspicion on such schemes as "speed up," and, it is claimed, most employers paying bonuses use them to raid labor from competitors, and not to increase production.



LOCAL governments have been in the house-renting business on a large scale since 1918. These publicly-owned houses in a suburb of London were built in the late Twenties.

Craftsmanship is also below par in Britain. Even union heads admit it. At a recent convention of building trades employees, a high official declared that the dominant need of the business is a revival of craftsmanship; he implored the skilled older heads to pass along their knowledge to "the lads" and to their less-experienced adult colleagues. To illustrate the "don't care" attitude which is ruining British standards of construction: a committee of builders and architects researching new methods of construction for the building industry recently invited a high union officer to send representatives. While entirely sympathetic with the idea, the union officer said it would be futile to do so—not necessarily because the men opposed progressive methods but because "they just don't give a

(Continued on page 206)

THE MOST COMPLETE LINE IN THE INDUSTRY

FOR GAS

Type 101 Gravity Furnace—Steel, 20,000, 133,000 Btu input.

Type 102 Winter Air Conditioner—Steel, Two sizes, 101,000, 205,000 Btu input.

Type 103 (A) Furnace—Steel, Floor-to-ceiling, 20,000, 20,000 Btu input.

Type 104 Winter Air Conditioner—Steel, Two sizes, 101,000, 205,000 Btu input.

Type 105 Gravity Furnace—Cast iron, Two sizes, Two sizes, 61,000, 81,000 Btu input.



Type 106 Winter Air Conditioner—Cast iron, Five sizes, 67,000-137,000 Btu input. In increments of 22,000 Btu.

Type 107 Winter Air Conditioner—Steel, Two sizes, 101,000 and 205,000 Btu input.

Type 108 Winter Air Conditioner—Steel, One size, 61,000 Btu input.

Type 109 Gravity Furnace—Steel, One size, 61,000 Btu input.

Type 110 Winter Air Conditioner—Steel, One size, 101,000 Btu input. In increments of 22,000 Btu.

Type 111 Winter Air Conditioner—Steel, 11,000-175,000 Btu input. In increments of 22,000 capacity.

Type 112 Gravity Furnace—Steel, 20,000-20,000 Btu input. In increments of 22,000 capacity.

Type 113 Gravity Furnace—Steel, Suspended type, 61,000-81,000 Btu input.

Type 114 Gravity Furnace—Steel, Suspended type, 61,000-81,000 Btu input. Ready advanced for program controls.

FOR OIL

Type 201 Winter Air Conditioner—Steel, Pressure-atomizing burner. Four sizes, 100,000, 130,000, 201,000, and 235,000 Btu output.

Type 202 Gravity Furnace—Steel, Pressure-atomizing or recirculating burner. Two sizes, 50,000, 130,000 Btu input.

Type 203 Winter Air Conditioner—Steel, Type 201 plus circulating and filter unit. 100,000, 201,000 Btu input.

Type 204 Winter Air Conditioner—Steel, Vertical installation. Two sizes, 100,000, 130,000 Btu input.

Type 205 Conversion Burner—Pressure-atomizing type. 1 to 2 gal. per hr. 12" or 20" lead tube length.

Type 206 Conversion Burner—Pressure-atomizing type. Flexible connection from 1 to 2 gal. per hour.

FOR COAL

Type "F" Gravity Furnace—Cast iron, Five sizes—From 20" to 28" diameter, 50,000-171,000 Btu output.

Type "FB" Winter Air Conditioner—Cast iron, Type F and burner-filter unit combined. Five sizes—100,100-234,000 Btu output.

Type 301 Gravity Furnace—Steel, Five sizes 20", 22", 24", 26", 28". Also 16 square cabinet.

Type 302 Winter Air Conditioner—Steel, Type 301 and burner or filter combined. 100,000, 214,000 Btu

Type "WB" Gravity Furnace—Cast iron, One size—62,000 Btu output at 1000 lbs.

Type "WB-72" Forced Air Furnace—Cast iron, Type "WB" plus forced-air circulating unit. 12,000 Btu output at 1000 lbs.

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Insure the success of every job you deliver by a wise choice of heating equipment — fuel-thrifty Mueller Climatrol. More than 93 years of outstanding leadership justify your choice. And you have a complete line to choose from — for every size home, every type of heat, any of the three popular fuels. Standardize on Mueller Climatrol for all your jobs, and you're sure of satisfied customers. Write for complete details. L. J. Mueller Furnace Company, 2106 West Oklahoma Avenue, Milwaukee 13, Wisconsin.



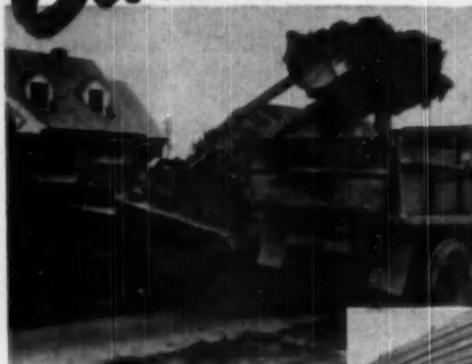
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WITH FOURTEEN INTER-
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- * 3 cu. yd. Light Materials Bucket
- * 1 cu. yd. Rock Bucket
- * Teeth For All Buckets
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- * V-type Snowplow
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- * Drag Bucket
- * Tine Fork
- * Rock Fork

Weight with standard bucket, 16,200 lbs. . . . 40.76 drawbar hp. . . . diesel-powered . . . hydraulic operation. The only completely new tractor in its power class!



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Mister 'Iggins' 'Ouse

(Continued from page 204)

ha-penny." Entrance into the building field during the war of a large number of undesirables—both among employees and employers—to "patch up" bomb damage undoubtedly accounts for some of the low estate of craftsmanship in Britain today. But more important it would appear to this writer, is the lack of incentive induced by a "dead level" socialist government, which emphasizes rights and needs, foments class war and soft-pedals the aims of productivity and good workmanship.

Government Against Home Ownership

The most important "fact of life" for the British builder is that his government is opposed to an extension of home ownership by individuals, and seeks as its ultimate goal to have everyone housed in a building owned by a local authority, at a weekly rent. A recent government pamphlet went out of its way to point out — somewhat apologetically — that "home ownership is not however being discouraged" (italics mine), but went on to state that "personal need and not money is the decisive criterion for securing a house." "Need" does not make for individual ownership; it points clearly to authority landlordism.

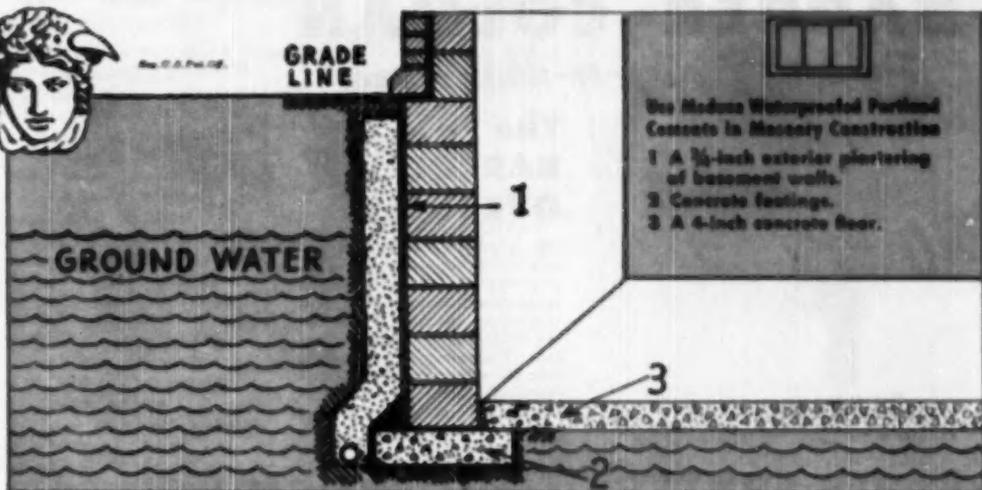
The record is clear. While, as shown, the rate of building for private ownership in the early days of the one-to-four ratio reached or exceeded its proportion, private building has now been discouraged to a mere trickle. No national aggregate figures were available to this reporter, but he added up all dwelling units reported as "under construction," as of June 30, 1949, in all political subdivisions making up metropolitan London (comprising about one-sixth the population of Britain), and found that 27,523 were for the account of borough or town housing authorities or the London County Council, while only 1,782—or six per cent of the total—were for private ownership.

An industry which finds that government is becoming virtually its only customer—as these figures would appear to indicate—better worry about its future. Yet the British building industry, on the whole, appears quite nonchalant about the fact. Many private architects say they welcome the scope, "social planning" and funds which public housing affords. Unlike most of their counterparts in the States, big home builders in Britain also build large public works—such as dams and docks—and they enjoy big government contracts too much

(Continued on page 208)



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Only a few inches of wall separate the new basements you build from their greatest enemy . . . ground water! Upon the sound construction of that narrow wall depends the future of the home. Properly constructed with Medusa Waterproofed Gray Portland Cement, the foundation will always ward off ground water, protecting the home owner against the expense and trouble of a damp or wet basement!

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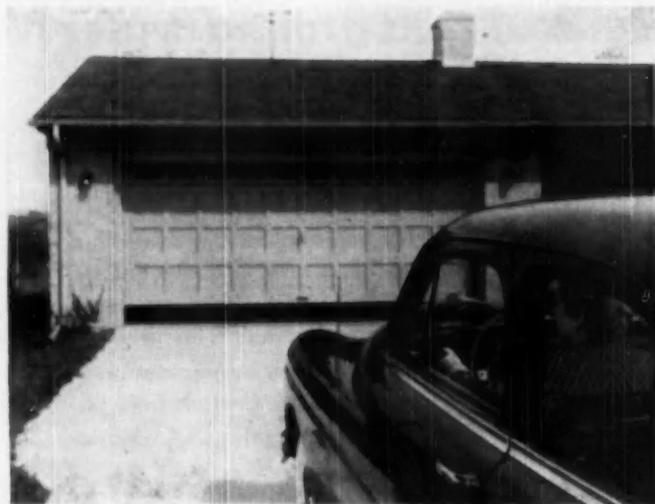
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Chicago, the Stevens Hotel, February 19th to 23rd, at the Annual Convention and Exposition of the National Association of Home Builders—see the favorite Model 50 Barcol OVERdoor set up for hand operation, and the new

Model 31 Barcol OVERdoor equipped with the newest Barcol Electric Door Operator and Radio Control. See why these quality products are worth considering for every new or remodeled up-to-date home.

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Mister 'Tiggins' 'Ouse

(Continued from page 206)

to worry about a little thing like public housing. Many of them say, frankly, that they believe in public housing. And, for the most part, British home builders have never opposed the idea of public housing, on the premise that "a little dose of public funds might help the economy—and us".

The seeds of public housing in Britain go back as far as 1890, when local authorities were empowered to provide quarters for slum dwellers, but the power was optional and no national subsidy was involved. Real public housing began in 1919, when the local governments' power became obligatory: i.e. they had the positive duty of providing for the housing needs of the "working classes" not likely to be met by other means, and had call on the national treasury for the purpose. Between 1919 and 1939 one quarter of the houses built in Britain were for ownership by government authorities. When the act was passed, private builders flocked to get authority contracts. At no time, so far as this writer is aware, did they, officially and as an industry, protest this injection of pure socialism into the business of owning and renting houses.

Now they have their reward. Not only is government their biggest customer, and the chief landlord of Britain, but that same government now shows strong signs of taking over the home-building industry itself. For many years certain local housing authorities have constructed houses with their own directly-employed labor force. Many other authorities employ large staffs to repair the houses they own. Now the powerful building trades unions have gone on record as favoring nationalization of the building and construction industries as a whole, and the government itself throws out hints from time to time that it will some day take over the contractors. Workers are being told that, as public servants, they would have continuity of employment and all the welfare amenities of working for the state. It is true that, for the present—while the "heat is on" from the public for more housing, faster—the left-wing Minister of Health is soft-pedaling his doctrine of "direct labor schemes" and even admonishing some housing authorities which build houses themselves that their production compares unfavorably with private builders. But there is no doubting his ultimate intention to nationalize the house building industry to the same extent

(Continued on page 212)

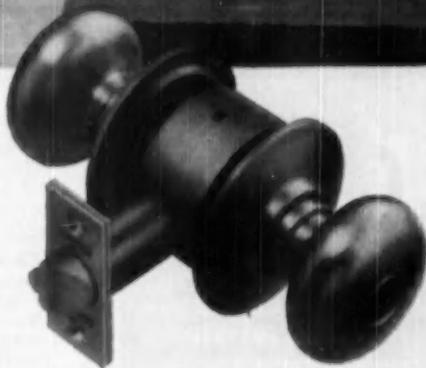
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*Fritz B. Burns, President of Kaiser Homes, selected
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maintenance costs for his firm's vast residential
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Over 100,000 Schlage Locks
used in Kaiser Homes... \$8,250, \$9,950 price range

Kaiser Homes has built and sold more than 7,000 homes during the past 4 years. In Panorama City, new 2,000 house Kaiser development in the heart of the San Fernando Valley, Schlage locks are being installed in all dwellings now under construction. Fritz Burns states that, "We know the dependability of Schlage locks from years of building experience. During our California building program, we have used over 100,000 Schlage locks in Kaiser Homes in the \$8,250 - \$9,950 price range. They deliver the trouble-free service we want our customers to enjoy while they save us time and money in maintenance and in ease of accurate installation."



Schlage "A" Lock
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Schlage booklet No. B630 illustrates new designs and mechanical details. A postcard will bring a copy... promptly.

FIRST NAME IN CYLINDRICAL LOCKS

American Builder, February 1950.

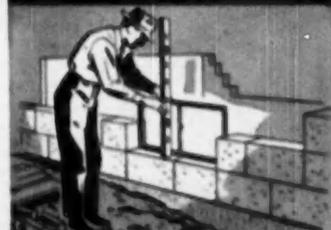
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A NEW PACKAGE

GLAZED... no glass or putty problem



EASY TO HANDLE



EASY TO INSTALL



EASY TO OPERATE

All basement windows pretty much alike? *Not any more!*
Look at these features of Fenestra's* entirely New Basement Window:

- Easy installed—standardized in sizes to fit concrete block.
- Glazed—no problem of glass or putty.
- Sturdy—made of hot-rolled casement window sections.
- Weathertight—casement-type double contact all around.
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AVAILABLE IN 3 WAYS

1. Package A—Basement Window, glazed, with Screen and Storm Panel Insert, in carton.
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3. Basement Window unglazed—Screen available separately also.

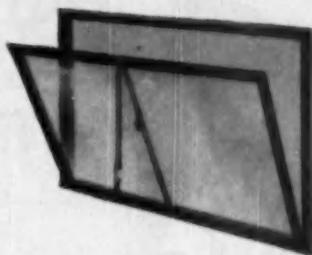
Choose the setup that best fits your needs—that will best suit your homeowners.

Remember, with Screens and Storm Panel Inserts you can offer homeowners the most complete Basement Window on the market today. Screen held in by two screws. Clip-in Storm Panel Insert provides economical insulation. Three sizes: 2 lights—15" x 12"; 2 lights—15" x 16" and 2 lights—15" x 20". For full information call the nearest Fenestra office, listed in the yellow pages of your telephone directory, or mail the coupon.

PLACE YOUR ORDER NOW FOR SPRING DELIVERY!

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WINDOW



GLAZED AND CARTONED

◀ COMPLETE UNIT WITH SCREEN AND STORM PANEL INSERT



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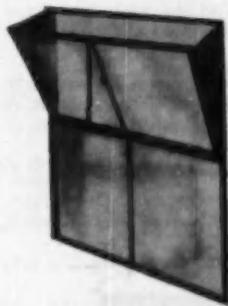
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NEW *Fenestra* UTILITY WINDOWS

For garages, shops, dairy barns, building areasways, etc. 2' 9 $\frac{1}{4}$ " wide by 3' 6 $\frac{1}{2}$ " high. Construction and quality features same as the New Fenestra Basement Window. New package means easier handling, easier installation—windows are delivered in good condition and stay in good condition. Available in three ways:

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Want more profitable building contracts? Take the straight line to the construction market — use **DODGE REPORTS**. Don't waste time on dead-end leads where jobs are let before you have a chance to bid! Use **DODGE REPORTS** . . . you can be first, in the right place — at the right time; you know who to see and when to see them.

Right in your own business area every day, a definite number of real prospects get plans under way for

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You can follow up these profitable job opportunities with **DODGE REPORTS**.

You are told exactly *where* each job is located — *what* type of materials will be needed — *who* is involved in each project (name of owner, architect, engineer, contractor) — *when* the plans will be ready for figuring and when bids must be submitted.

This is information TO HELP YOU GET PROFITABLE BUSINESS. It saves you time and "leg work." It enables you to base your estimates upon known facts . . . to time your bidding . . . to close deals at the proper moment for effective results.

Let us show you, without obligation, how **DODGE REPORTS** can mean *your* first step to profitable building contracts.



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The *American Builder* has entered into an agreement with University Microfilms, Ann Arbor, Mich., to make its issues available to libraries in microfilm form.

One of the most pressing problems facing all types of libraries today is that of providing adequate space for a constant flow of publications. Periodicals, because of their number and size, pose a particularly difficult problem.

Microfilm makes it possible to produce and distribute copies of periodical literature on the basis of the entire volume in a single roll, in editions of 30 or more, at a cost approximately equal to that of binding the same material in a conventional library binding.

Under the plan, the library keeps the printed issues unbound and circulates them in that form for from two to three years, which corresponds to the period of greatest use. When the older paper copies begin to wear out or are not called for frequently, they are disposed of and the microfilm substituted.

Sales are restricted to those subscribing to the paper edition and the film copy is only distributed at the end of the volume year.

The microfilm is in the form of positive microfilm and is furnished on metal reels, suitably labeled. Inquiries concerning purchase should be directed to University Microfilms, 313 N. First St., Ann Arbor, Mich.

In the Next Issue
"National Home Week for 1950"
A Preview of Plans of
Builders, Dealers, Scatters

Mister 'Iggins' 'Ouse

(Continued from page 208)

he has already brought about the nationalization of the house *owning* and *renting* business.

The United States, it would appear, is now at the point in the road toward socialism at which Britain stood 30 years ago in 1919. Here, too, local housing authorities are to be set up to go into the business of owning and renting houses subsidized by a combination of national and local taxes. Public funds are to be poured into the building business. Will the lure of easy money (for a short time) silence the tongues of American home builders—or will they continue to speak out against the idea of public housing? Britain's builders chose the former course. And see what is happening to them.

American Builder, February 1950.

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new colors in **Suntile**



Send today
for this **Suntile Color
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guide to the profitable
use of color in building
and selling...

to make your houses more beautiful
...and more salable!

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Now, in addition to the long-wearing, easy-to-clean-and-maintain advantages of Suntile, you get exclusive, new colors and color combinations for your residential building.

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That's because Suntile is expertly manufactured and expertly installed. Every job is guaranteed by a man who really knows tile, your Authorized Suntile Dealer.

Write us today for your Suntile dealer's name and for your **FREE** copy of the new **SUNTILE COLOR PALETTE FOLDER**. Address: Dept. AB-2, The Cambridge Tile Manufacturing Company, Cincinnati 15, Ohio.

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Bright with color • Right for life

SUNTILE OFFERS YOU BOTH . . . BETTER TILE . . . BETTER INSTALLATION

This is the way to
balance windows . . . and
weatherstrip them too!



Combination

SASH BALANCE AND WEATHERSTRIP UNIT

Do two jobs at once on any double-hung window. Here is an installation on an economy frame giving an all metal sash run. Or simply "cup" old or new wood parting beads. Allmetal Sash Balance give stable sash—provides finger-tip control—cuts labor and material costs and provides better windows by weatherstripping as well as balancing. Send for complete information now.

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2243 North Knox Avenue, Chicago 39, Illinois

Gentlemen: Please send me complete information and prices.

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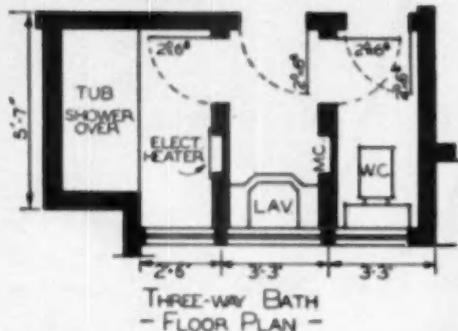
State _____

A Three-way Bathroom for Small Houses

Partitions enclosing each fixture in three-way bathroom to provide multiple bathroom conveniences in medium-priced houses with minimum cost is innovation of coast builder

BORIS ELIEFF, builder and contractor for the Southern California Investment Company, has developed a new three-way bathroom which is intended to furnish the convenience of two bathrooms in a house selling for less than \$10,000 (generally with only one bathroom) with a minimum construction cost.

The bathroom fixtures of this new plan are parallel, arranged against a common wall. Within the bathroom as a whole, the closet, lavatory, tub and shower stall areas



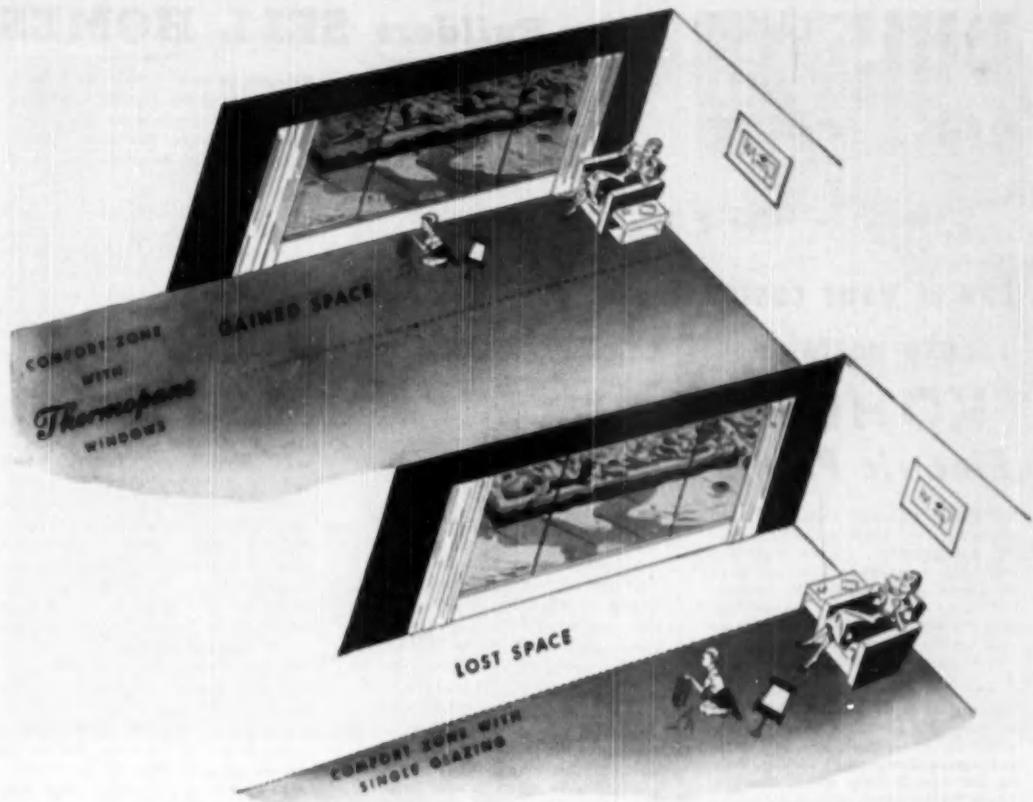
THIS plan could be rearranged for adaptation to any problem

are separated from each other by partitions. In addition, the closet and lavatory spaces have separate entrances from the main hall. Thus, the three smaller enclosures of the bathroom assure privacy for three people simultaneously.

Mr. Elieff has employed this three-way bathroom layout in 30 two-bedroom homes recently constructed in Bell, Calif. for the Southern California Investment Company. The principle involved—that of maximum use of floor space—is a basic one in Mr. Elieff's building. Sliding doors were also used in these residences to eliminate wasted areas. As much space as possible has been made to serve double functions within the houses.



FRONT view of house equipped with the three-way bathroom



HOW TO *Gain Space* WITHOUT ADDING IT

You can make small homes . . . small rooms . . . more tempting to buyers, at no extra cost with *Thermopane*® insulating glass.

How? By avoiding "low-comfort zones". Make floor space usable all the way to the windows in wintertime. There's no chilly feeling sitting near *Thermopane* because a sealed-in blanket of air keeps the inner pane warmer.

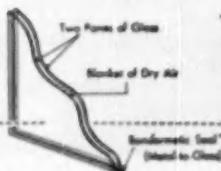
That extra wintertime living space is something home buyers can readily appreciate . . . it's a real selling "plus" for you. "Sales appeal greatly increased", one builder reports.

If you wish, you can actually *save money*—cut your costs—by using *Thermopane*. A 13' x 20' room, for example, might be cut to 13' x 17'

without making it look smaller IF you have a window wall to "open it up" to the outdoors. Glaze the window wall with *Thermopane* and you will still be giving the buyer as much *usable* wintertime space because there is no "low-comfort zone". And you will find that a *Thermopane* window wall can be put up for no more than a conventional wall with double-hung windows.

Double-hung, casement and picture windows in wood or metal sash are available from your dealer. Some builders in the East have developed special framework for window walls which has been very successful. For a list of *Thermopane* standard sizes, get in touch with your Libbey-Owens-Ford Distributor. Or write us.

FOR BETTER VISION SPECIFY THERMOPANE
MADE WITH POLISHED PLATE GLASS



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MADE ONLY BY LIBBEY-OWENS-FORD GLASS COMPANY

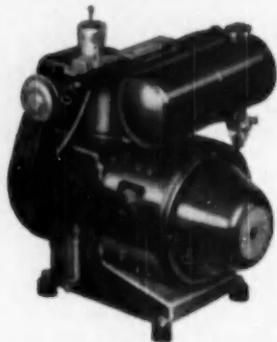
3225 Nicholas Building, Toledo 3, Ohio



Lower your costs! ... use portable **KOHLER** Electric Plants

Use a compact, portable model for small power needs, or a larger model for heavier power requirements, and watch how fast your costs come down! More and more builders are discovering that Kohler Electric Plants quickly pay for themselves in time and labor saved. Portable models are exceptionally lightweight, economical to operate, and give years of efficient service.

When you build in outlying districts, you can carry your own low-cost power supply with you. Even where there is power-line service you'll save the trouble and expense of arranging a hook-up. During the busy building season ahead, a Kohler Electric Plant will help you handle more jobs, more profitably. Sizes range from 350 watts to 10 KW. Write today for folder K-9, Kohler Co., Kohler, Wisconsin.



Model 750M25, 750 watts, 115 volt AC. Manual control. Convenient double carrying handle. Length 20 1/2", width 13 1/4", height 20 1/4". Weight 130 lbs.

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Electric Plants • Air-cooled Engines

How Builders **SELL HOMES**

EDITOR'S NOTE: This is the last in an exclusive series of articles on sales ideas offered by successful builders from all parts of the country. Questions are from letters written to W. F. "Bill" Atkinson, who some time ago conducted an inquiry on sales methods used by builders. The first article in the series appeared in the October, 1949, issue of *American Builder*.

To build confidence among home buyers, "you do for them in the fat years what is expected of you in the lean years," says a Kansas City, Mo., builder.

"To build confidence in the buyers' minds with relation to us and our homes, we started with the first buyer in our addition several years ago. After they had lived in their house a day or two we made a personal call and asked if they had noticed any defects or had any gripes at all. If so, we immediately fixed them. Nine times out of ten a very small item appeared in their minds as a pretty serious item. Most of our prospective buyers are people who know someone who has bought a home from us. When we tell them in our sales talk that we stand behind our product, they believe us," the builder states.

"Another good will feature we use is to always send bulbs or a bush to each buyer for a Christmas present. Also whenever a baby is born we send flowers to the mother at the hospital. From all this we get thank you notes which I have saved in a scrap book. I use these as testimonials and find they are sure fire methods of building confidence."



BUILDING CONFIDENCE—A builder in East Pasadena, Calif., who also builds buyer confidence through giving immediate attention to complaints says, "One of the most important things we have developed is a follow-up system.

"When a complaint is made, one copy is sent into the field to the craftsman, another kept in the office. When the craftsman takes care of the complaint, or has a reason for not doing so, he writes it on his slip of paper and returns it, and this is then put in the file. You may ask what this has to do with the selling of houses, but I have found over a period of 25 years that your customer is your best salesman.

"In the present tract that we are just finishing of around 400 homes," he says, "in checking back we found that we have sold over 50 per cent on recommendation of owners already in the tract. Frankly, this has been our experience down through the years. And while this method of handling complaints involves some

work, we consider it one of the most economical sales angles that we have. It is not perfect, but it gives to the owner a feeling that we are interested in his own individual job and he takes pride in telling his friends that he got a 'good deal.' In this way the recommendations are unbelievably high."

SIZE OF SALES FORCE—"The only other thing that I would suggest for many builders is—overhaul your sales force," the East Pasadena builder continues. "Frankly, we operate on a schedule and perhaps what we believe might not apply to someone who builds 50 to 200 houses and then must dispose of them. We start one house and finish another every day, five days a week, straight through the year. Outside of our sales manager we only have one or two salesmen at the most. The sales manager closes every deal. In this way we are much more able to control statements and promises, if such, made by any of the men. We do not let the salesmen close the deals themselves. The sales manager interviews and makes every deal final. In this way we get away from promises and statements of questionable ethics and such as that."



SEVEN SELLING AIDS are listed by a Memphis, Tenn., builder:

- (1) The application form gives ideals of the community to buyers and enables us to screen for better applicants.

- (2) Safety signs are put up in all subdivisions.

- (3) A garden club is started in the community under the experienced guidance of a landscape architect.

- (4) Sold signs are put up on homes as soon as contracts are signed.

- (5) Community spirit is emphasized by guidance in economics in home owning through competent advice to buyers on the best use of limited expenditures to make the home more desirable.

- (6) No repairs, except emergency, are made by the organization except upon receipt of letter from owner. This encourages the buyer to "feel wishes are being granted," says the builder, and it "eliminates trifling complaints, and enables us to have an

(Continued on page 218)



NOW...See How the Keystone System Helps You KEEP YOUR BUILDING PROFITS UP

These days the builder who "goes one better" than the next contractor has an edge when it comes to turning his time and money into profits.

That's where this 44-page Keystone System Book helps you. It suggests how you can build attractive houses at lower cost . . . and still add the extra features that appeal to home buyers. It gives you the reasons why building with modern reinforced concrete stucco makes good sense. It tells you how you can build stucco

houses that are strong and durable . . . by using the Keystone System and Keymesh Reinforcing.

Contractors and trade authorities say that the Keystone System of Stucco Application is the most helpful guide to better stucco application they have ever seen. It's certain to be of value to you—whether you are building stucco homes now or may build them in the future.

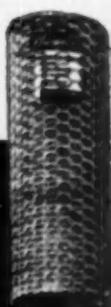
Write for your free copy of the Keystone System Book today.

Keystone Steel & Wire Company

PEORIA 7, ILLINOIS

Manufacturers of Keymesh Reinforcing • Welded Fabric • Tie Wire • Nails

**Modern, Durable
Stucco Calls for
KEYMESH**

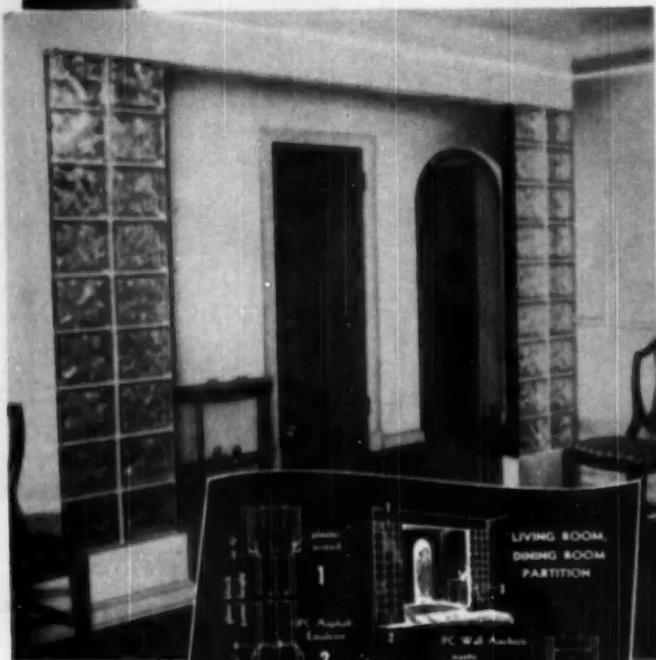


Keymesh

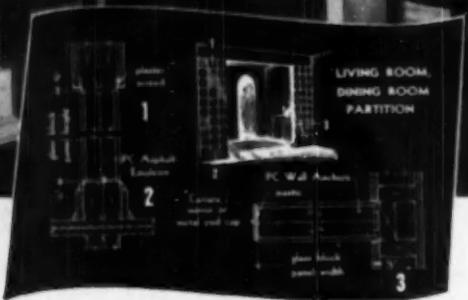
REINFORCING FOR STUCCO,
OVERCOATING AND PLASTER



Give your homes more "come on" with PC Glass Blocks



HOW TO MAKE rooms
look larger... better
lighted... more eye-ap-
pealing... is shown by this
interesting use of PC Glass
Blocks as a partition.



AND WHEN YOU DO, you'll find, as many builders already have discovered, that you've given your home the *extra value* that buyers are looking for.

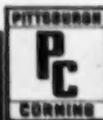
One way in which you can utilize PC Glass Blocks to turn interest into sales is by installing a few of them as a partition between rooms. Light is thus shared by both rooms—by day or night. Besides, PC Glass Blocks give home buyers actual money-saving advantages. Repairs or replacements are seldom needed. There's no painting involved. Having more than twice the insulating value of single-glazed windows, they don't require storm sash when used in

exterior panels. They're easily cleaned, too. And, being non-transparent, they assure complete privacy, wherever applied.

Why not get all the details by filling in and returning the coupon for a copy of our descriptive, fully illustrated booklet. It's free and there's no obligation on your part. Do it now.

Pittsburgh Corning Corporation
Dept. A-20, 201 Fourth Ave.
Pittsburgh 22, Pa.
Without obligation on my part, please send me your FREE
booklet on PC Glass Blocks in all kinds of homes.

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



GLASS BLOCKS

The mark of a modern building

Distributed by Pittsburgh Photo Glass Company; by W. P. Fuller & Co. on the Pacific Coast; and by Holter Glass Ltd. in Canada.

New Builders Sell

(Continued from page 216)

efficient, economical system of taking care of small complaints."

(7) A maximum of legitimate publicity and a minimum of advertising is used.

★ ★ ★

A FURNISHED HOME in the project helps sell, reports a Buffalo, N.Y., builder. His average priced homes, with three bedrooms, are on lots that are fully graded, seeded, and landscaped. "We spent quite a lot of money on shrubbery and landscaping (in a recent project), and put in some good sized shade trees along the streets. We had one of Buffalo's largest department stores furnish the house, and they furnished it on a budget, in other words, kept their costs down. They advertised it in the papers and over their radio program and we, too, did the same.

"We spent a considerable amount of money advertising, and the results were that we sold 47 houses in about six weeks, and the department store told us that they felt it was a very successful undertaking for them.

"Otherwise, our sales effort is confined to keeping a finished house always available, plenty of signs directing people as to how to find it, and some interesting, readable classified advertisements pertaining to the house and the development.

"We think a furnished house is probably the best way to sell houses over anything we have tried."

★ ★ ★

HANDLE EACH HOUSE INDIVIDUALLY—"I feel one thing that has aided in the rapid and successful selling of our homes," states an Albany, N.Y., builder, "is that we handle each house individually as far as selling is concerned. We do not use a model house or show any house before it is entirely completed; this includes all decorating, grading, lawn, sidewalks, etc., ready to live in. We then hold open house for this particular property by using newspaper display ads containing a picture of the house, and talk only about this house to all prospects. By this method we sold all of this year's production, except two, the first day they were offered.

EMPHASIZE COLOR—"We emphasize color in all our homes regardless of price," says the Albany builder. "All rooms, except kitchens and baths, are papered and woodwork coloring blended with the background of the wallpaper. Kitchen ceilings are painted in gay tones. Bathrooms are

(Continued on page 220)

See...
**What
 Every
 Builder
 Wants...**



Every builder wants to win the woman's favor because she's the one who decides which new home to buy. She hates noisy bells and kitchen smells which make her home unfriendly. She loves the warm, friendly tones of a NuTone Door Chime—and the sweet, fresh kitchen air that a NuTone Kitchen Ventilating Fan provides. Sell more new homes faster by appealing to the woman with these NuTone home features she loves and wants.



Door Chimes



Luminous Pushbuttons



Transformers

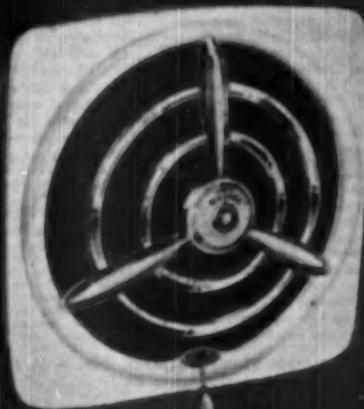
In 1950, millions of women are going to hear about "Noisy Bells and Kitchen Smells" in NuTone's tremendous national advertising campaign. Plan NOW to have NuTone Door Chimes and Kitchen Ventilating Fans—as well as NuTone Electric House Numbers, Luminous Pushbuttons and Transformers—in all your new homes. Ask your Architect or Wiring Contractor to include all these NuTone home-selling features in their estimates.



Electric House Numbers

FREE CATALOGS ON REQUEST
NUTONE INC.,
 Dept. AB, Madison & Red Bank
 Roads, Cincinnati 27, Ohio.

TO HELP SELL HIS HOMES *Faster*

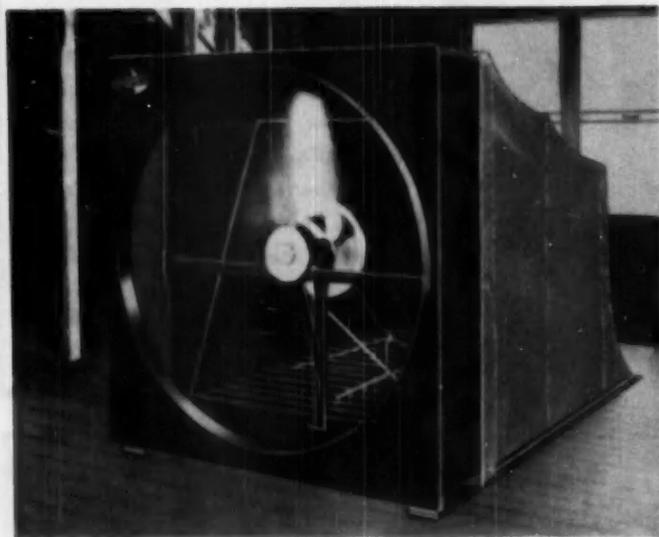


New!

LOWER PRICES

on Emerson-Electric

BALL-BEARING ATTIC FANS for vertical or horizontal installation



Above, fan with Corona Plenum Chamber and automatic ceiling shutter. May also be installed to discharge vertically, mounted over automatic ceiling shutter, without plenum chamber.



Substantial price reductions on Emerson-Electric's complete line of ball-bearing Attic Fans make a complete Home Cooler Fan installation a better-than-ever investment in summer comfort for your clients in 1950!

Equipped with ball-bearing motors and special ball-bearing pillow block shaft mountings, these powerful fans are designed for 5000 hours service without re-lubrication. They offer exceptionally long, quiet service, in addition to ease of installation. Built to run efficiently, when mounted vertically, horizontally or at any angle. In low attics, a space of 2½ feet above the joists is sufficient

for vertical discharge installations. Available in blade sizes 30", 36", 42" and 48", with capacities up to 19,350 cubic feet of air per minute. Save half the installation cost on this, tested, economical home cooling system for your clients, by installing it during original construction! See your electrical contractor or write for Home Cooler Fan Bulletin No. 404.

SPECIFY EMERSON-ELECTRIC KITCHEN FANS

Provide for a Kitchen Ventilating Fan... to which, away heat, smoke and cooking odors, prevent spread of greasy vapors to walls and drapes. Easy to install in any type of construction. Models for wall or ceiling installation.



THE EMERSON ELECTRIC MFG. CO. • St. Louis 21, Mo.

EMERSON
MOTORS • FANS



ELECTRIC
APPLIANCES

New Builders Sell

(Continued from page 218)

Painted to harmonize with the general color scheme. Exterior colors are varied, even to the point of mixing hybrid colors. This idea has been extremely successful.

"Some feature in each house has been advantageous to us," he reports. "In our lower priced houses we supply some one extra feature—a built-in dressing table, a corner china cabinet or a special attractive shelf in the kitchen for toaster or phone, etc.—something different in each house.

FLOOR FINISH A FEATURE—"One thing that has more or less become a trade mark for our homes and which we strived and worked towards is the floor finish. This is a must. I insist upon it being done my way, and it has paid off. We will get several hundred people through a home on an "Open House Sunday," and I will say without fear of doubt that a high figure of three will not comment on the floors. We use all select red oak and I personally supervise all finishing. This I believe has been the most successful idea.

"One other successful idea," he concludes, "is the use of trees. We are favored in one particular development with very beautiful trees and a great quantity of them. We make it a point during excavation and grading to be somewhat careful and cautious so that every possible tree may be left standing. We let the owner decide if there are too many and then cut them as he desires."

★ ★ ★

PERSONAL CONTACT SYSTEM—"Our most successful method of selling is through a personal contact system," says a Beloit, Wis., builder. "As we receive inquiries regarding homes we get as much information as possible regarding the party and type of home wanted; the number of rooms wanted, type of heating plant, whether or not an attic is required for future rooms, number in family, where employed, possible price range they are interested in. If we are unable to sell them at the moment we put a card in our file and later drop them a line or if possible telephone them regarding a home being completed which meets their particular requirements. In a small city our size, we find that people like this personal touch.

★ ★ ★

A Burlingame, Calif., builder suggests seven main aspects of selling homes, with alternative methods to use if these basic aspects are not sufficient:

(Continued on page 222)

American Builder, February 1950.



**This Screen
makes the
difference**

you'll sell door and sash units **FASTER** with
SCREENING woven of

Firestone Velon®

Tough, lightweight Firestone Velon makes the difference in the life and the shape of the screens you sell... in the volume of business you do. Velon can't rust. Velon is resilient, won't stretch out of shape. Whether you make up your own sash and door units or stock them ready-made, be sure to specify this superior screencloth. Three colors—aluminum grey, forest green, bronze brown; 11 widths; priced right for cooperative selling.

For full information and samples, ask your supplier or write either of these authorized weavers:

SWIFT MANUFACTURING CO., COLUMBUS, GA.

PLASTIC WOVEN PRODUCTS, INC., 51 CAMDEN ST., PATERSON, N. J.

®TRADEMARK
FIRESTONE PLASTIC CO., POTTSTOWN, PA.



Check these consumer advantages and see why **FIRESTONE Velon** sells itself!

- Rust and corrosion proof
- Cannot "bleed" or stain the housefront
- Never needs painting or varnishing
- Tensile strength, averaging 32,000 or more pounds per square inch
- Will not dent, bulge, or break under normal impact
- Resists sun fading—cannot be damaged by salt water, industrial smoke, dirt, grease, most acids and alkalis
- Velon cuts with a scissors—leaves no sharp ends



When you plan the building of a new home or the modernization of an old kitchen, you can be sure that you will please your clients, if you consider these three important features:

Beauty because the housewife wants the hours she spends in her kitchen to be in cheerful, colorful surroundings.

Utility because she wants the kitchen to be sanitary in order to reduce kitchen drudgery to a minimum.

Durability . . because she wants her investment to give her a lifetime of service and satisfaction.

Just Line Radiiluxe Custom Built Stainless Steel Cabinet Sinks and Tops

give her all these advantages. In addition, they harmonize perfectly with any color and decoration scheme and add the final touch of elegance and refinement to any modern kitchen.

Note these Exclusive **JUST Radiiluxe** Features:

- Custom Built to meet every Personal Taste
- Patented In-Built Anti-Splash Rim in bowls
- Patented Double Pitched Drainboards
- Seamless Electrically Welded Construction
- Rounded Corners in Sink Bowls
- Die Formed Raised Edges
- U-Type Steel Reinforcing Channels under Drainboards
- Sound Deadened Drainboards and Bowls

Write today for Illustrated Literature B-2 and Name of Nearest Factory Representative



JUST Manufacturing Co.
4610-50 W. 81st Street, Chicago 56, Illinois

New Builders Sell

(Continued from page 230)

(1) Select the best possible location that can be secured with the price range desired.

(2) Have an architect, or other competent designer, prepare a compact but livable plan.

(3) Prepare adequate specifications to insure that maximum value will be delivered at minimum cost.

(4) Train a good construction crew to secure maximum efficiency in turning out a really well built home.

(5) Be sure that the price of the finished product is strictly competitive with other homes of like quality and location.

(6) Arrange the best financing possible so that no one can offer a better deal as to down payment and monthly payments.

(7) If the foregoing program is not sufficient to bring in the prospects, then:

(a) In addition to tract sign boards, start classified advertising.

(b) Start model homes, changing location and style of model homes as required.

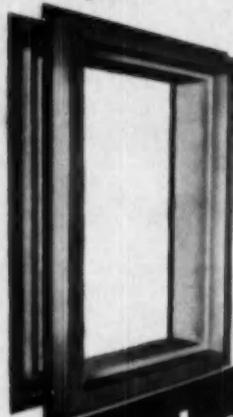
(c) Do some display advertising.

(d) Start "putting the heat" on salesmen to: "Contact various home owners, to whom homes previously have been sold in various tracts, to get a list of their friends who may be interested in securing a new home. Secure prospect list through other sources—friends, business acquaintances, and clubs. Chambers of Commerce in our various communities publish lists of newcomers and indicate whether they are renting or purchasing. Renters are prospective purchasers and may be contacted through the mail or by telephone. Our advertising may point out special features, such as 'an expandable house.' We try to point out desirability of the new homes with larger windows, better accessibility to gardens, advantages of ranch type homes, and all of the other ideas we think of to coax a family out of the rented apartment or old home into one of the new modern homes we are erecting."

READ
"Prefabricated
Homes Up-to-Date
and Down-to-Earth"
MARCH, 1950
American Builder

How Contractors and Builders can Save MONEY and TIME

on Every Window Opening



Savings of \$5 or more per opening are reported from many projects. And the time saved on a job may mean the difference between profit and loss. The fact that two carpenters can set 64 frames in an 8-hour day indicates the speed of work.

One-der Window Frame is the modern, one-shot way to savings.

One-der Window Frame

Patents
Pending

The Complete One-piece Metal Frame for metal sash

Works with Casement, Double-Hung or Awning type
Windows and in any type of wall construction

The window buck is built around this one-piece rigid frame and set in the stud wall. No fitting or adjusting is necessary.

The frame carries its own flashing outside and continuous weather-stripping flange inside. It requires no trim, inside or out; no plaster or

wallboard returns; no finished carpentry.

The unit comes Bondarized and with a prime coat baked on. Only one coat needed to finish. Thus it saves two-thirds on cost of paint and another two-thirds on painting labor.

See it at Chicago!

National Association of Home Builders
Annual Convention, February 19 to 23
Congress Hotel (New Products Division)



Meantime, see your Dealer or write

ONE-DER WINDOW
Sales Company, Inc.

2109 Third Ave., North

Birmingham 3, Ala.

Advertising . . .

(Continued from page 145)

needs; (c) results achieved, and (d) reasonableness of production charges.

3. Obtain an "outside" opinion from advertising executives employed by publications in which the agency customarily purchases space.

At this point, the builder who erects less than 20 units a year, may comment: "This may all be very fine for the big development fellows, but what reputable agency will give a darn for my business?" If this builder has in mind the mammoth agencies, whose tremendous overhead forces them to snicker at any account billing less than \$250,000 a year, he is right. But there are literally hundreds of smaller reputable and recognized agencies which would welcome his account.

Our own agency, Town Advertising Associates, handles several of the largest builder accounts in the New York metropolitan area, whose combined annual billing runs well into six figures. At the same time, we handle much smaller accounts. On some of them we lose money, but more than make it up when one of these little fellows goes on the big time, taking us right along with him. Some of the most treasured "oaks" in our office were once "acorns." The same holds true in scores of agencies throughout the country, where far-sighted managements will take all the "acorns" they can get.

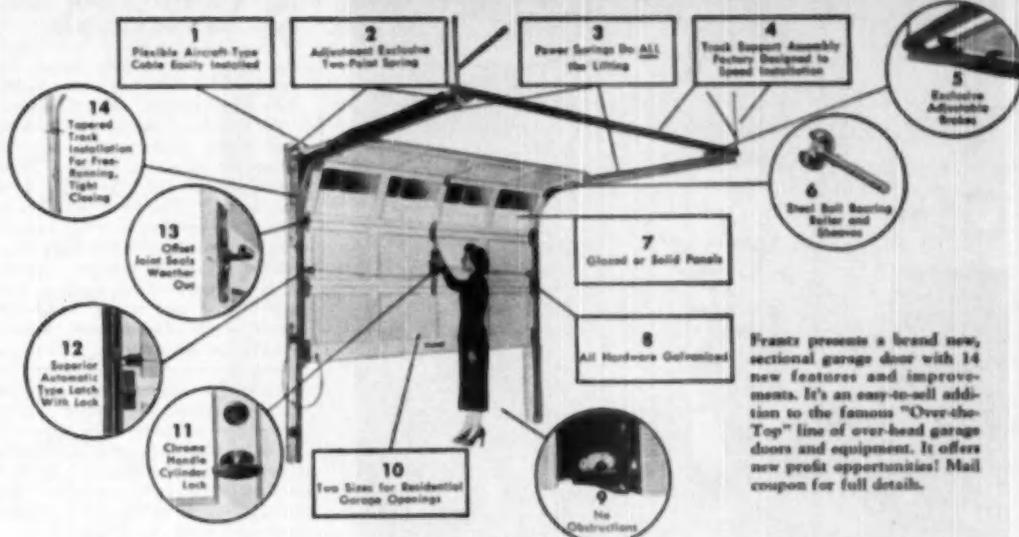
What Agency Can Do

Hence, at no extra cost except for production charges, the small builder can avail himself of expert advertising counsel and help. His agency, if he has chosen wisely, will give him up-to-minute facts on the comparative pulling power of various publications and other media under consideration. It will assist him in arriving at a sound formulation of his advertising budget. It will shoulder—in expert fashion—all the creative tasks. In short, a good agency will make the builder's advertising dollar work overtime.

It is on the creative end that the agency's value becomes most apparent. Many builders, who place advertising direct with publications, entrust this task to space salesmen. With all due respect for these fellows—some of our best friends are space salesmen—they are, for the most part, neither copy writers nor artists, and they probably will be

(Continued on page 226)

NEW SECTIONAL TYPE **OVER-THE-TOP** GARAGE DOOR
14 WAYS A BETTER BUY



Frantz presents a brand new, sectional garage door with 14 new features and improvements. It's an easy-to-sell addition to the famous "Over-the-Top" line of over-head garage doors and equipment. It offers new profit opportunities! Mail coupon for full details.

1. Flexible, rust-proof, aircraft-type cable. Factory assembled for quick installation.
2. Perfect door balance obtained by two-point adjustment (end of power springs and by chain on cable).
3. Turn of handle releases lock and door automatically rises to full open position.
4. Rigid steel framework anchors springs, spaces track correctly, and controls brake pressure.
5. Adjustable brake prevents door slamming or rebounding. Steel corner plate protects door.
6. Ball-bearing rollers with floating axles provide easy, bind-free operation.
7. One section of 4 panels open for installation of glass or plywood.
8. All hardware (except springs and angles) are coated with rust-resistant zinc or galvanized finish.
9. Opening is completely clear when door is open. Only 13 1/2" of headroom are required.
10. Doors are available for openings 8' wide x 7' high and 9' wide x 7' high.
11. Chrome, auto-type handle and brass, flush-type, cylinder lock.
12. Jimmy-proof spring latches engage at each side as door is fully closed.
13. Rabbed offset joint between each door section seals out wind, water, snow.
14. Tilted vertical track with graduated hangers provides tight close-fitting, yet easy-opening door.

Here is a sectional garage door made by Frantz, pioneer manufacturer of over-head garage doors and builders' hardware. It's completely new in more than a dozen ways. The new No. 200 is easier and quicker to install, less costly to buy, and more satisfactory in service than ordinary sectional doors. Get all the facts at once . . . coupon brings installation details and specifications.

FRANTZ

GUARANTEED BUILDERS' HARDWARE

FRANTZ MANUFACTURING CO., STERLING, ILLINOIS

American Builder, February 1950

MAIL THIS COUPON FOR FULL FACTS...

Frantz Manufacturing Company
 Department 200-B
 Sterling, Illinois

Rush me full information about the new
 "Over-the-Top" sectional-type door.

Name _____
 Company _____
 Address _____
 City _____ Zone _____ State _____

More Sales-Appeal—More Eye-Appeal ...with These Folding Doors



Successful builders have been quick to recognize the added sales-appeal Modernfold Accordion-type Doors give to their houses. They've found them a good means of turning prospects into buyers.

Modernfold Doors cost no more than ordinary swinging doors. For, in figuring the cost of a Modernfold Door, you save the price of trim, jamb, hardware, painting, etc. Modernfold Doors are priced as low as \$26.00 (F.O.B. New Castle).

And Modernfold Doors offer so much more. The colorful beauty of their fabric covering—the sturdy, trouble-free metal frame—the saving of so much valuable wall and floor space—and where you use large Modernfold Doors, flexibility of space.

So, plan for Modernfold Doors in the homes you build and sell. They're a real sales-maker. Be sure to have the full story by mailing the coupon today.

Look in your telephone directory under "doors" for the name of our installing distributor.

NEW CASTLE PRODUCTS
New Castle, Indiana
In Canada: Raymond Mfg. Co., Ltd., Montreal



New Castle Products
P. O. Box 830, New Castle, Ind.
Gentlemen:
Please send me full details on Modernfold Doors.

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

Advertising . . .

(Continued from page 224)

the first to admit it. Even if he had the required talent and background, the space salesman just does not have enough time to sit down and carefully compose an advertisement that will hit the home-seeker squarely between the eyes. This is a job for a professional molder of sales appeal—the copy writer with plenty on the ball, the fellow whose daily bread depends on his ability to weave words into a bell-ringing sales message.

So you have canvassed the field and finally chosen your agency. Then the question arises: "How much leeway am I going to give this outfit?" The ideal situation is where the builder, once his budget and advertising schedule have been settled, leaves all creative aspects to the agency—themes, copy, art, type faces and sizes, etc.—but checks each advertisement before publication for accuracy. The more a responsible, reputable agency is permitted to operate under its own creative steam, the more determined and effective is its effort to produce advertising that will pull. Conversely, the more the agency is hampered and restricted, the more does its selling effort labor under irksome handicaps.

Suggestions From Builders

This does not mean that the builder can offer no suggestions or ideas. Knowing that the builder lives day by day with his work and has a front-row seat on the market, the good advertising man realizes that the builder can contribute much. The danger arises when the builder, hurling his weight around as the man who foots the bill, seeks to ram half-baked ideas and amateurish notions down the advertising man's throat. In such circumstances it often takes a truly intrepid man to brave loss of the account by voicing an emphatic "No!" The builder may carry his point, but if, as so often happens, it results in ineffectual—even harmful—advertising, he has paid out hard cash for mere satisfaction of his ego.

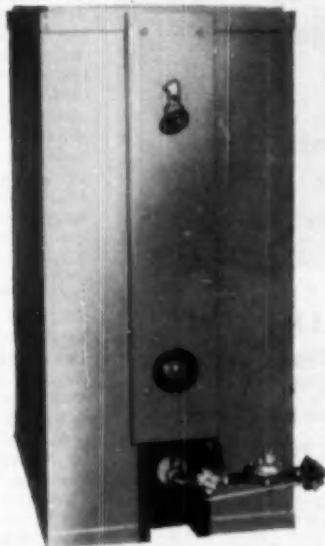
A question of even more importance to the builder is: "How much shall I allocate for my advertising?" It would be ideal if we could set down here a clear, simple formula which would embrace every condition and contingency likely to arise in a sales program anywhere in the United States. Unfortunately, we cannot do this—and

(Continued on page 228)

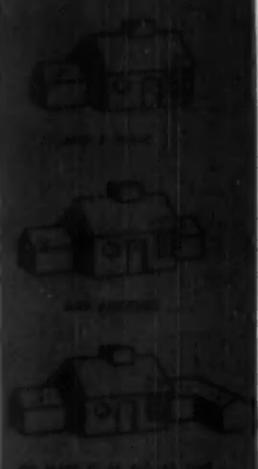
Jackson & Church's

*Four-in-One** **BUDGET FURNACE**
designed to grow with the home

*oil
or
gas*



STANDARD FOUR ROOM HOME



SENSATIONAL IN THESE RESPECTS:

1 . . . Proven highest efficiency for either gas or oil. Permits change from oil to gas or gas to oil in conditions permits. 2 . . . Proven to add capacity freely. 3 . . . A space heater — adds the convenience of heat in any room.

Here's a brand new heating idea . . . a winter air conditioner, for gas or oil, designed by J&C engineers, that requires the addition of only a component package to make it either an 85,000 . . . a 100,000 . . . a 112,000 . . . or a 120,000 Btu output furnace.

FOUR FURNACES IN ONE! It can actually grow with the home. Start with a four room home, and as the family and income increases . . . enlarge

the home without changing furnaces. Simply change a small, low-cost package and increase the output of the J&C "Four-In-One" to meet increased heating needs.

The "Four-In-One" is a quality unit . . . with 12 gauge heat exchanger, top quality cabinet and burner, and fully automatic controls.

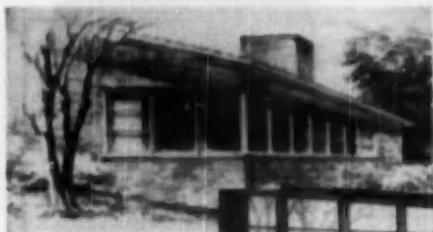
An original design . . . engineered, warranted and built by Jackson & Church Company.



... AMERICA'S LARGEST AND MOST COMPLETE WARM AIR HEATING LINE ...



JACKSON & CHURCH CO. SAGINAW, MICHIGAN
"Work well done since '81"



Pella CASEMENT WINDOWS PROVIDE CUSTOM WINDOW EFFECTS from STOCK SIZE UNITS

Pella Casement Units can be combined into more than 300 different sizes of varying width and height. Installation cost is cut to a minimum because all Pella Casement Windows are completely assembled and pre-fitted at the factory. Pella Casements, in modular dimensions, fit right into specified rough openings.

CHECK THESE CONVENIENT, LOW-COST Pella FEATURES

ROLSCREENS — Pella casements are equipped with inconspicuous, convenient Rol-screens that roll up and down like window shades. Rol-screens eliminate putting up, taking down, painting, repairing and save valuable storage space.



DUAL GLAZING AND WEATHERSTRIPPING — All Pella Casements are dual glazed to insulate against winter cold and summer heat . . . weather-stripped to eliminate drafts.

EASY TO OPERATE — Pella's patented hinge design and construction assure easy operation.

FITS ALL TYPES ARCHITECTURE — Pella Casements fit snugly into wood, frame, brick, brick veneer, stone, etc. They convey dignity and stateliness to Colonial architecture . . . enhance Cape Cod "costiness" . . . lend breadth to Modern or Spanish styles and sturdiness to half-timbered English.

3-LIGHT WIDE UNIT — Only Pella can build these wide casement units, made possible because of Pella's patented hinge design, superior sash construction and steel inner frame.

For Further Information, see our catalog in SWEET'S ARCHITECTURAL AND BUILDING FILES



ROLSCREEN COMPANY, Dept. B-4, Pella, Iowa

Without obligation, send me PELLA CASEMENT DETAIL file a complete set of drawings showing sizes, applications and various combinations of Pella Casement units.

Name _____
 Firm _____
 Address _____
 City _____ State _____

PELLA CASEMENTS • ROLSREENS • VENETIAN BLINDS

Advertising . . .

(Continued from page 226)

strongly doubt whether anybody else can.

The picture is so complicated by variables that it is tremendously difficult to arrive at even a loose formula for a particular region, let alone the country as a whole. Influencing advertising costs are such fluid factors as the state of the market, the number and kind of media which must be used to tap the market, the rates of these media, the particular market sought, the competitive situation, the efficiency of the builder's sales organization and the popular appeal of the home in respect to price, terms, location, design, construction and equipment. Obviously, a home which strikes popular fancy will cost less to merchandise than one not so favored, even though the latter's price may be less.

How Much To Spend

In the New York area many builder-developers are operating on a rule-of-thumb whereby they allocate for advertising a sum based on approximately one per cent of a unit's selling price. It is virtually certain that this basis will have to be revised upward as the market continues to swing in the buyer's favor and competition sharpens.

The best advice we can give about formulating an advertising budget is:

1. In selecting an agency, choose one, if possible, with a solid background in real estate merchandising problems.

2. Discuss your entire cost setup with the agency's representative. If you are not candid and honest, you will hinder him in helping you arrive at the best estimate of what your advertising cost per sale should be.

3. If you have chosen your agency wisely, its representative will be skilled and experienced in tackling merchandising problems. His counsel on your advertising budget should be given the same weight as any other expert's advice.

4. Do not regard your advertising budget as inflexible. Conditions may spontaneously arise which may force you to readjust your sights.

Advertising When Market Falls

The above point raises a question which, as far as we know, has never been satisfactorily or absolutely answered. Should the builder attempt to buck a falling market? By "falling market" is meant a true

slump, not a normal seasonal lull. One school of thought maintains that when the sales curve plunges, the builder throws good money after bad by continuing to advertise. Another school holds that the only way to stop a downward trend is to redouble the merchandising effort, which means even more advertising than before.

We are inclined to support the conservative school—with reservations. We believe that a *true* downward trend warrants a trimming of advertising sails by the builder. But there is a sharp difference between trimming and furling. Complete abandonment of advertising is likely to bring sales stagnation, since no effort is made to tap the hard core of sales potential that persists even in a sadly sagging market. Moreover, the builder who vanishes from public notice for an appreciable period loses promotional ground fast and finds himself that much behind when the upsurge starts, especially if his competitors have continued to advertise through the slump. It should be borne in mind that the public forgets—but fast!

When the sales curve dips—and it cannot be attributed to seasonal factors—the builder should not immediately start hacking at his advertising program. Rather, he should wait long enough to determine whether the dip is merely temporary or is the unmistakable first stage of a long-term trend. If all available evidence convinces him that it is the latter, he may work out, with his advertising counsel, a restricted schedule. If a large user of display, he may reduce his space or even shift the bulk of his advertising to classified. In addition, he may become more selective in his choice of media, electing to hunt with a rifle rather than a shot-gun. He may do other things to cut down, but he must not permit the public to forget him.

When To Use Classified

The foregoing suggests another frequent query: "When shall I use classified and when display?" Like so much else concerned with advertising, it is virtually impossible to lay down a definitive rule. Generally, where many units are concerned and the builder's advertising budget is in proportion, there is little or no question about the use of display.

It is when the budget is relatively small that the builder's advertising expert must weigh many factors, paying particular attention to the
(Continued on page 230)



Pella ROLSCREENS

FIT ALL TYPES and MAKES OF WINDOWS

ROLSCREENS provide freedom from screen troubles! Once in place, always in place. No putting up—no taking down! No painting! No seasonal repairs! No storage space required. By minimizing window screen maintenance, ROLSCREENS pay for themselves over the years.

The exterior beauty of windows is preserved by ROLSCREENS because they are made of neutral colored AluminA wire cloth and installed on the **inside**. ROLSCREENS cost no more than good quality flat-frame screens.

Made by makers of
FAMOUS PELLA VENETIAN BLINDS
and CASEMENT UNITS

When annual maintenance and labor costs are considered, ROLSCREENS actually cost less than ordinary screens.

10-YEAR GUARANTEE assures that clients will be satisfied with ROLSCREEN performance.

Roloscreen Details in Handy File Pack for installing on all types and most makes of windows. Ready for tracing right onto your plans.

MAIL COUPON

ROLSCREEN COMPANY,
Dept. 3-1, Pella, Iowa.

Without obligation, please send **FREE** new file of ROLSCREEN details and specifications in A.I.A. folder.

Name _____

Firm Name _____

Address _____

City & Zone _____ State _____

Make Sales Easier!



INSTALL *Pyrofax* GAS

In Homes beyond the Gas Mains

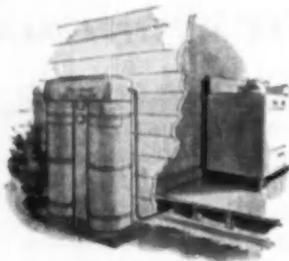


Gas Is Preferred!

Two out of three women prefer to cook with gas—and beyond the gas mains the choice is "PYROFAX" gas. It is clean, quick and economical, not only for cooking but for water heating, refrigeration, and room heating as well. No matter where you build, you can offer home buyers all the advantages of the preferred fuel . . . gas.

Turn "Shoppers" Into Buyers

Give them the fuel they want—install PYROFAX bottled gas service. Installation is quick and easy—low in cost—no expensive tanks to buy—no special wiring—no changes in construction needed. Supply is guaranteed in writing.



Nationally Advertised Appliances

Magic Chef and Caloric ranges, Servel refrigerators, Ruud and Bryant water heaters, and other gas appliances are available for use with PYROFAX Gas—from our distributors in 30 states east of the Rockies.

Pyrofax

Superior BOTTLED GAS Service



For full information see SWEET'S CATALOG, or address Dept. A.E.

PYROFAX GAS DIVISION

Union Carbide and Carbon Corporation
30 East 42nd St. **UCC** New York 17, N. Y.

"Pyrofax" is a registered trade-mark of Union Carbide and Carbon Corporation.

Advertising . . .

(Continued from page 229)

estimated time that it will take before his client sells out. Faced with a restricted budget and fairly long duration before sellout, the expert's emphasis will be on the repetitive and cumulative values of the less expensive classified. If he can, he may launch the campaign with display to gain initial impact and then shift to fairly frequent classified insertions, especially if the classified columns of the media in the target area command public respect. Often an effective program consists of a judicious combination of display and classified.

Far less dramatic than display, classified in newspapers with real pulling power, nevertheless, can be strong sales medicine. In the Spring of 1949, Town Advertising Associates conducted an all-classified campaign for a North Jersey development of 60 homes priced between \$11,500 and \$12,000. Three New York and two Jersey dailies were used. The development was sold out in three months at an average advertising cost of \$35 per sale.

What Makes Good Display

When wrought by inept hands, marked by lack of imagination and originality, a display advertisement often merely grunts instead of singing out. The elements that make a good display ad are:

1. Generous use of white space to command notice by contrast, to heighten readability and to lend dignity and class.
2. An impressive-sized illustration of the home done by an artist skilled in enhancing the appearance of the dwelling and its setting.
3. A provocative headline carefully calculated to stir the reader's interest sufficiently to make him go through the rest of the ad.
4. Sprightly, original copy which shuns blatant exaggerations and such overworked, threadbare words and phrases as "quality," "superb," "matchless," "top value," "must be seen to be believed," "once in a lifetime," "bargain" and a host of other rheumy, broken-down verbal nags that have been trudging through real estate ads ever since the first primitive man offered his cave for sale.
5. An attractive, distinctive format which, through repeated use, becomes one of the advertising identifications of the builder.
6. Generous-sized type which can be easily read, with readability further enhanced by spaced-out lines

(Continued on page 232)

American Builder, February 1950.



The Original Structural Insulating Board

Asphalt Treated Throughout . . . Every Fiber Protected

36 YEARS EXPERIENCE. Not only is INSULITE the original structural insulating board, but it is also the original *waterproofed* structural insulating board.

As far back as 1915 (long before similar products were ever produced), INSULITE was being specified for double duty service in important building projects. (See old historic photo above and note that even at that early date, the untouched banner in the photo emphasizes the moisture-resisting qualities of INSULITE.)

INSULITE Graylite products are asphalt treated *throughout* — not merely a surface coating. Every fibre in the board — inside and outside — is thoroughly - safely - adequately protected. That's why INSULITE resists moisture so amazingly well. If a storm wets INSULITE Sheathing (Bildrite or Graylite) before the job is finished — don't worry. No permanent harm is done.

Waterproofed Bildrite Sheathing and Sealed Graylite Lok-Joint Lath also combine to control another serious moisture problem . . . vapor condensation in walls. The double asphalt coating of the sealed Lath on the warm side of the wall retards vapor travel, while the vapor breathing characteristics of Bildrite on the cold side permits escape towards the outside. Send for new leaflet describing approved construction methods that control frost and moisture damage in walls.

Reg. U. S. T. M.

INSULITE DIVISION, MINNESOTA AND ONTARIO PAPER COMPANY
MINNEAPOLIS 2, MINNESOTA

See Sweet's File for Builders — 2471

HOW TO CONTROL MOISTURE CONDENSATION IN WALLS

INSULITE DIVISION, MINNESOTA AND ONTARIO PAPER COMPANY
Dept. AB-250, Baker Arcade Bldg. Minneapolis 2, Minn.

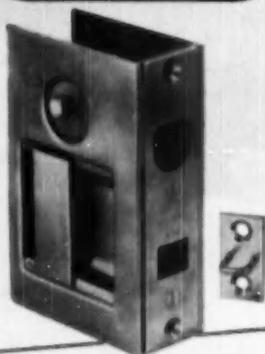
Send me this easy-to-understand leaflet showing how the approved INSULITE WALL OF PROTECTION controls moisture condensation in walls.

Name _____

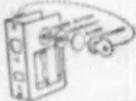
Address _____

City _____ State _____ 7-50

**NEW SERIES 500
RITE-LOCK
FOR SLIDING DOORS**



**NOW-FULLY
REVERSIBLE**



**3 ADJUSTABLE
WIDTHS FIT
1 1/2" - 2" DOORS**



Here is the most versatile lock for every sliding door application. It is adaptable to any requirement as to hand, security and finish... while the three standard sizes adjust to fit any door thickness, 1 1/2" to 2".

The thumb button, emergency or blank discs or cylinder can be interchanged from side to side on the job. This means that dealers can supply any combination required by merely stocking a few representative discs and cylinders in popular finishes.

Rite-Lock is easily installed by a simple cut-out without any mortising. The escutcheon measures 4 1/2" x 2 1/2". All exterior parts solid brass. Write us on your letterhead for the new Adams-Rite Catalog 49.

CYLINDER DEADLOCK FOR SLIDING DOORS

This cylinder deadlock operates by cylinder from one or both sides. Fits all standard cylinders with adapter cone furnished (specify when using Yale or Sargent cylinder). Solid brass face, strike and bolt. Heat treated aluminum alloy case. Use your own cylinders and trim. Also used as jimmy-proof lock.



MADE IN U.S.A.



MADE IN U.S.A.

ADAMS RITE MANUFACTURING CO.

Advertising . . .

(Continued from page 230)

and what the advertising man calls "lots of air" between paragraphs.

7. A smartly designed signature, which lingers in the reader's memory.

8. When necessary, clear specific directions about reaching the particular home or development being advertised. If you think many prospects may get lost, use a map.

Illustration Is Vital

The illustration of the home is so vital to good display advertising that the subject requires elaboration. The builder need only reflect on the success of various heavily illustrated magazines to realize how picture-minded the public is. A skillfully executed illustration, prominently displayed, delivers a wallop that seldom can be approached by copy. The illustration should be the finest obtainable. The cost may come high, but the impact on the reader pays handsome dividends.

We much prefer drawings to photographs because the coarse screen employed in the making of newspaper half-tones almost invariably weakens the quality of a photograph. In addition, many homes of fine exterior design photograph poorly, particularly those with natural-grain finish, and they can only be done justice by an artist trained to bring out architectural subtleties that the camera often misses.

Many display advertisements about homes, in our opinion, lose impact because they are cluttered not only by too much copy, much of it in microbe-sized type, but also by a multiplicity of themes. It has been said that the reading of a newspaper should not be made a physical or intellectual exercise. The same holds true of advertising. Stated another way, if the appearance of your advertisement makes people think that they will have to work to read it, it will be largely unread.

Stick To Simplicity

Format can be simple yet attractive. And copy built around one central theme is much more digestible and likely to pull than a jumble of themes. In the opening phases of a display campaign, it is often necessary to use much copy to acquaint the public with all of the home's features. After this has been done, however, it is advisable to change copy, devising a single

(Continued on page 236)



**Aristocrat
of
Hammers**

**Stanley
100Plus
Nail
Hammer**

THE "tops" in nail hammers. Made especially for those who take pride in owning the best tools. Fine alloy steel head is drop-forged, scientifically heat-treated and polished. Comfortable, selected hickory handle has distinctive octagon-shaped neck. "Evertite" handle processed for permanent tightness. Exceptional design gives extra striking power. Perfect balance makes work easier, faster.

The best hammer you can buy, the best you can use... heft the Stanley 100 Plus and "feel" the difference. See the complete display of Stanley Tools at your nearest hardware dealer's. Stanley Tools, New Britain, Conn.

THE TOOL BOX OF THE WORLD



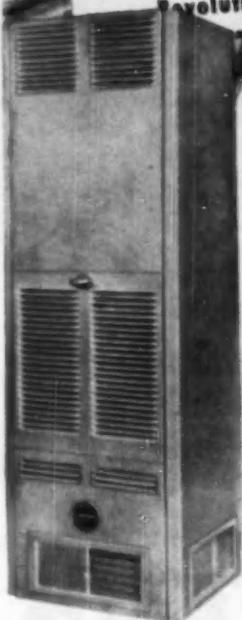
Reg. U. S. Pat. Off.

**HARDWARE • HAND TOOLS
ELECTRIC TOOLS • STEEL STRAPPING**

American Builder, February 1950.

1,000,000 NEW HOMES FOR 1950 ... NEED BETTER HEATING EQUIPMENT!

Revolutionary New Low Cost Way of Providing Warm Floors by Radiant Heat plus Circulated Warm Air with the New *International* Oil and Gas Furnaces



Originators of radial and radiant perimeter heating. International engineers have now developed new low cost furnaces for oil as well as gas to provide what the building industry has been seeking! Heat that is delivered into the floors provides warm floors, with a blanket of heat at outside walls. Closest floor to ceiling uniformity. Minimum ducting and installation expense. Low cost operation. Exclusive patented spring-suspension provides absolute quietness of operation. Compactly engineered; requires less than four square feet of floor space. Heats up to 8 rooms.

Home builders throughout the nation are finding the terrific sales advantage of furnishing this amazing new method of heating, which saves them money!

Smith-Hill, Chicago; Place & Co., South Bend; General Industries, Fort Wayne; Cottage Homes of Norfolk; Midwest

Housing, Janesville, Wisconsin; and New Century Homes, Clinton, Indiana are just a few of the nationally known builders who have adopted this International equipment for their houses.

Whether you are planning one — or a thousand or more homes — these new furnaces are designed to solve your heating problem.

Fill out and mail coupon for complete brochure on how the above and other national builders are helping to sell their homes this new way!



SOUTH-HILL HOMES, Park Ridge, Ill. Prize-winning community. "Planned heating uniformity and low cost operation. International 8 9 furnace sold in selling houses".



PLACE & CO., South Bend, Ind. August "Architectural Forum" feature. "Low cost heating installation with even distribution of heat. International 8 7 helps sell houses".



GENERAL INDUSTRIES, Ft. Wayne, Ind. February "Living" magazine feature article. "Seasonal heating with floor-to-ceiling uniformity of temperature".

SEE THE NEW *International* FURNACES AT THE NAHB SHOW • HOTEL STEVENS, CHICAGO!

Send this Coupon
for Complete
Information

To Furnace Division
INTERNATIONAL OIL BURNER CO.
3814 Park Ave., St. Louis 10, Mo.

- Send your brochure showing how nationally known builders are solving their heating problems of low cost with International equipment.
- I am enclosing plans and specifications. Please submit estimate for cost of complete installation in my homes.

Name _____ Address _____
City _____ Zone _____ State _____

International OIL BURNER CO.
SAINT LOUIS

To Make Your Homes



Get on the **CELOTEX**
REG. U.S. PAT. OFF.



It's more profitable to feature the brands the public knows best!

And Celotex, famous for over a quarter century as a pioneer and pacemaker in the building products field, is recognized everywhere as the Greatest Name in Insulation.



It's more profitable to feature the brands that are first in consumer preference!

And year after year, impartial surveys have shown that as many as 7 out of 10 people who ask for insulation products by brand name, ask for Celotex.



It's more profitable to feature the brand that's most effectively advertised!

And last year's Celotex advertising to stimulate the building of more homes, for example, scored one of the most spectacular successes in the industry... with the public and trade alike. What's more, the Celotex national advertising campaign for 1950 promises to be even more powerful, even more productive! Yes, for over 25 years you have always been able to count on Celotex for resultful advertising and sales promotion support!



Easier to Sell in 1950...



"Brand-wagon"

Yes!

Any way you look at it—it's more profitable to feature Celotex Products!

So climb aboard the Celotex "Brandwagon." Use famous Celotex Building Products in your 1950 homes. Feature, display, and promote the famous Celotex line. Tie in with the tremendous new advertising push Celotex is launching to stimulate home construction this year. Write now for your free copy of an informative new book on Celotex Building Materials. The Celotex Corporation, 120 South LaSalle Street, Chicago 3, Illinois.

Insist on Genuine

CELOTEX

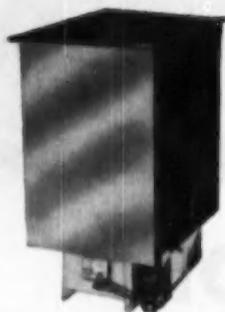
BUILDING PRODUCTS

THE CELOTEX CORPORATION • CHICAGO 3, ILLINOIS

**LOOK! The
H. C. LITTLE
Oil Floor Furnace
LIGHTS
ITSELF!**



An Exclusive
Feature...A Joy
in Any Home...
NO PILOT LIGHT
to Waste Oil or
Cause Soot and
Smoke. Just Care-
free Comfort,—
at Low Cost.



**AT LOW FIRST COST
and
LOW INSTALLATION COST**

this oil floor furnace provides small homes with a fully automatic, electrically controlled oil heating plant of high efficiency and BIG heat producing capacity.

**NATIONALLY ADVERTISED
FEATURES SELL HOMES:**

- Exclusive self lighting feature.
- Supreme comfort.
- Less housework, because of clean fuel and no soot.
- Burns low cost catalytic oil.
- No basement needed.
- No moving parts in burner to wear out.
- Listed by Underwriters.
- Factory guaranteed.



Dept. A-2, San Rafael, Calif.

Advertising . . .

(Continued from page 232)

theme for each new advertisement. Many of the copy techniques used in display can also be applied to classified, but the emphasis in the latter should be on presenting, as concisely and compactly as possible, an array of solid facts. Because it cannot be illustrated, the classified advertisement must seek through specific description to give the reader a clear, persuasive impression of the home's unique advantages and its outstanding features.

Indiscriminate use of time-worn, hackneyed words and phrases makes the reader suspect the advertisement's credibility. It also weakens the required factual description. A good classified advertisement actually amounts to an inventory of what is in the house, plus data about plot, price, terms and location.

For instance, rather than using a phrase like "charming living room," it is preferable to list the salient features of the room in a way that will make the reader himself conclude it must be a charming place. In the same way, rather than saying that the home is "convenient to everything," it is wiser to state—assuming it is so—that it is "1 block from 3 bus lines, 2 blocks from public school and shopping center." Being specific about your attractions pays off.

Like its big display brother, the classified advertisement should open with an arresting headline in larger type, if for no other reason than to attract the reader's eye as it races up and down the tightly packed columns. Smart use of white space in margins and between logical divisions of the copy and sub-heads in larger type will not only serve to attract attention but will greatly enhance readability. Obviously, competition for attention in classified columns is much more intense than in the display sections.

**Nelson Corp. Names New
Advertising Manager**

Robert F. DeLay has been named manager of advertising and sales promotion for the Herman Nelson Corp., Moline, Ill., the firm's president, Richard H. Nelson, announced recently.

DeLay's duties will involve the coordination of advertising and promotional activities of all Nelson divisions, including merchandised products, engineered products, portable products and unit ventilators.

**SAVE
CONSTRUCTION TIME
REDUCE
BUILDING COSTS
WITH VENTO
STEEL WINDOWS**

Save building time and reduce your material costs with Vento Steel Windows. Home owners prefer them.

- 1 Basement Windows that open at top or bottom, partially or fully—double weathering contacts—provisions for storm sash and screen.
 - 2 Utility Windows for use in farm or small industrial buildings, garages, etc.
 - 3 Barn Windows that control ventilation—prevent drafts.
 - 4 Steel Casement Windows with corners mitered, electrically welded and ground smooth—of heavier construction than most steel windows of comparable price. Provisions for storm sash and screen. Has gracefully designed rope hardware with standard cam action locking handle.
 - 5 Matching Picture Windows and Specially Fabricated Linets to complete your house.
- SEND COUPON** for full information on how to reduce costs and build better houses with VENTO Steel Windows!

VENTO STEEL PRODUCTS CO., INC.
247 Colorado Ave., Buffalo 15, N. Y.

Send me the data on Vento Steel Products.

Name _____

Address _____

My building supply dealer is _____

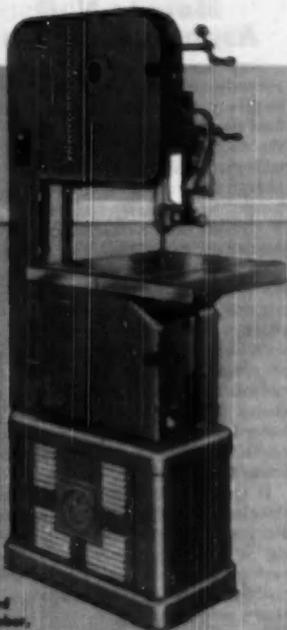
**VENTO STEEL PRODUCTS
CO. INC.**

247 COLORADO AVE., BUFFALO 15, N. Y.



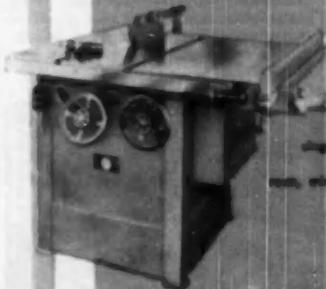
NEW 16" BAND SAW ▶

Speed construction of your buildings with this fast, accurate machine for wood and plastic cutting. Big capacity—16" blade, 18" x 17" table. 8 blade speeds—meets practically any requirement. Easy to operate and completely safe. Saves time and labor, cuts woodworking costs.



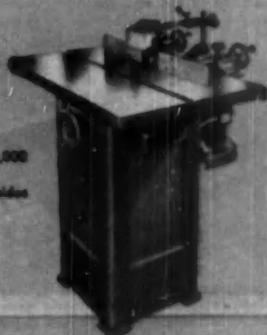
NEW 12" TILTING ARBOR SAW ▶

Capacity 48". Table 48" wide x 38 1/2" deep. 3 h.p. 3 phase motor or 3 h.p. single phase. Blade capacity 1 1/2" wide. Saw speed 2600 r.p.m. New rip fence locks front and rear, micrometer adjustment "T" slots for arbor gauges. New improved safety guard and splitter. Exclusive "Synchro Split Drive".



2 SPEED, VERTICAL SPINDLE SHAPER ▶

Cutter spindles are interchangeable and fully protected by adjustable guards. Two speeds 7000 and 11,000 r.p.m. Spindle 17" long, journaled on two pre-lubed ball-bearings. Guides quickly adjusted or easily removed. For heavy duty operation.



3 ways.

Walker-Turner Designing can help you to cut building costs

Builders are more aware today, in a buyer's market, of Walker-Turner designing. For design is at the bottom of the high operating efficiency of Walker-Turner woodworking machines. And the more efficiently you can build, the lower your building costs.

Actually, this emphasis on design is nothing new with Walker-Turner. New machines (such as those shown) are constantly being added to the line. But the safety, accuracy, ease of handling and economy of Walker-Turner machines are due to the fact that they've *always* been built with the building industry's needs in mind.

For full information about these and other cost-cutting machines in this complete line, see your local Walker-Turner dealer, or mail coupon for catalog.

SOLD ONLY THROUGH AUTHORIZED DEALERS

KEARNEY & TRECKER
MILWAUKEE
WALKER-TURNER DIVISION
MILWAUKEE, WIS. 53207

Walker-Turner Div., Kearney & Trecker Corp., Dept. AB2, Plainfield, N. J.

Please send me a copy of the Walker-Turner Catalog.

Name

Firm

City Zone State

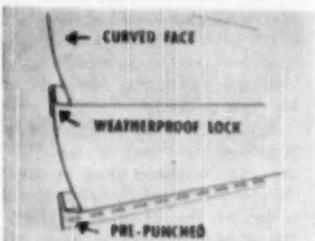
This siding has permanent, flawless beauty!

The beauty and quality of Kaiser Aluminum Siding can never be marred by knots, splits or sawing scars! It's precision produced, low in cost. Its flawless beauty will last generations!

Permanent, baked-on paint finish can't chip, crack or peel.



STRONG, DENT-RESISTANT. Can't rot, warp, crack or rust. Made of highest grade aluminum. Fire-resistant. Can't be damaged by termites.



CURVED SURFACE. installed under tension, makes rigid, sound-resistant, insulating siding with weatherproof joints, beautiful shadow lines without wrinkles. Easy to apply. Low construction costs!

Meets FHA requirements for new construction. Write for free AIA file. Kaiser Aluminum Siding is produced by Kaiser Aluminum & Chemical Corporation.

Kaiser Aluminum SIDING

Sold by Kaiser Aluminum & Chemical Sales, Inc.
Kaiser Building, Oakland 12, California

How to Nail Asphalt Shingles

Any roofing material must be properly nailed to a sound deck if it is to give good service. The deck must hold the nails, and the nails must hold the roofing. To insure a roof that will give long, trouble-free service, enough nails of the right kind should be used and properly located.

It has been well-established that premature roof failures are almost invariably due to faulty application, not to the roofing material itself. For example, 3-tab, square-butt, strip shingles too frequently are applied with only four nails instead of six, as recommended by the engineering committee of the Asphalt Roofing Industry Bureau, and the nails are located too high in the shingle. As a result, the shingles are not anchored firmly to the deck.

It is not difficult to apply asphalt shingles correctly. In fact, contractors generally agree that asphalt roofing is easier to apply than other roofing materials. A few simple, easily-remembered instructions will assure proper nailing.

Size and Kinds of Nails

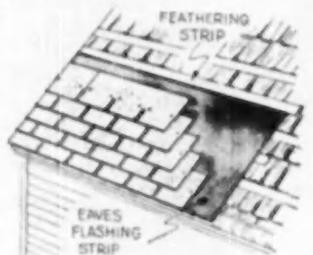
Use only galvanized roofing nails of 11 to 12 gauge, and with heads $\frac{3}{8}$ inches in diameter or larger.

Length of nails depends on type of work: Use $1\frac{1}{4}$ inch nails over new wood decks. Use $1\frac{1}{2}$ inch nails over old asphalt roofing. Use $1\frac{3}{4}$ inch nails over old wood shingles.

Nails should penetrate at least $\frac{3}{4}$ inches into roof deck.

Drive nails straight to avoid cutting the fabric of the shingle with the edge of the nail head.

Do not sink the nail head into the surface of the shingle.



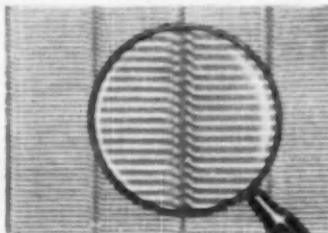
IN APPLYING asphalt shingles over an old wood shingle roof, first nail down all loose shingles. Split warped shingles and nail down the segments. Place bevelled wood "feathering strips" along the butts of each course of old shingles. Then apply an eaves flashing strip of asphalt roll roofing along the eaves. Use six nails in each three-tab, square butt, asphalt strip shingle.

(Continued on page 240)

New screening device keeps hottest rooms cooler!

Thin louvers set close together at an angle against the sun make Kaiser Aluminum Shade Screening the lowest cost screening and cooling device you can put on a window!

It deflects sun's hot rays without blocking the view. Thus, hottest rooms are as much as 15° cooler, yet light and airy.



PRECISION PRODUCED from tough, high grade aluminum. Can't rust or stain. Never needs paint. Adds extra beauty to any window, extra value to any home.



PROTECTS INTERIORS against sun fading. Low in cost. Easily installed. Keeps out insects. Available from sash and screen manufacturers and building material jobbers.

Write for free AIA file. Kaiser Aluminum Shade Screening is produced by Kaiser Aluminum & Chemical Corporation.

Kaiser Aluminum SHADE SCREENING

Sold by Kaiser Aluminum & Chemical Sales, Inc.
Kaiser Building, Oakland 12, California

American Builder, February 1950.

Prices start at
\$19500

Including motor
F.O.B. Newark, Ohio
Subject to change
without notice!
Easy time payments!

DELTA

MULTIPLEX

low-cost, portable job shop!

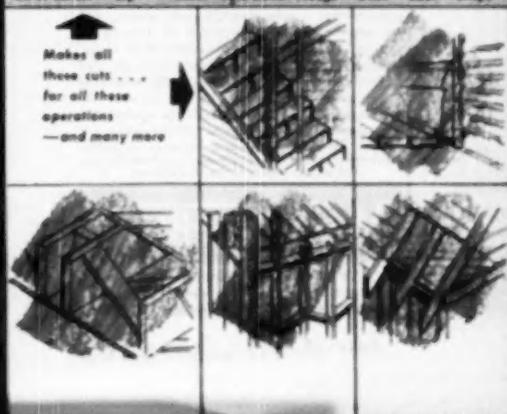
Exclusive Double
Radial Action



Helps you sell more houses!

Makes money for you these ways:

Helps you get more
remodeling jobs!



Makes all
these cuts . . .
for all these
operations
—and many more

Power Tool Division
ROCKWELL MANUFACTURING CO.
6363 E. Vienna Ave., Milwaukee 1, Wis.

Send me now Delta Multiplex catalog,
"Unlimited Applications."

Name

Title

Company

Address

City State

PRESTILE
QUALITY
protects your profits!



A satisfied customer is your best profit insurance. And Prestile's uniform, long-wearing quality assures satisfaction every time. For more profits and continued profits, it pays to push Prestile!



PRESTILE
The Great Tileboard of Learning Beauty

Clip this handy memo to your letterhead and mail today!

Prestile Mfg. Co. • 5810 Ogden Ave. • Chicago 38

We are interested in:

Prestile De Luxe Tileboard

Prestile Aluminum Mouldings

Please send literature and samples.

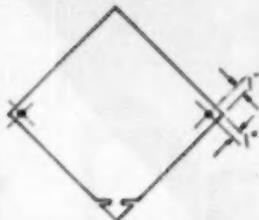
Your Name:

How To Nail . . .

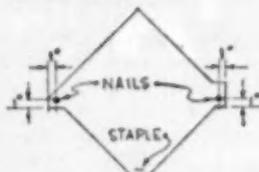
(Continued from page 238)



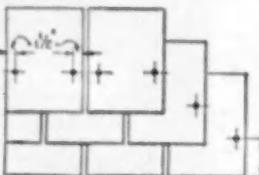
STAR SQUARE-BUTT STRIP SHINGLES:
—Use 6 nails in each strip. Locate the nails on a horizontal line 5 1/2 inches from the exposed butt edge; locate one nail one inch in from each end of the shingle; locate the remaining 4 nails 1 1/2 inches on each side of the center line of each cut-out; align the shingle before driving nails to avoid buckling; start nailing at the end nearest the shingle last applied and proceed to the opposite end



INDIVIDUAL HEXAGONAL SHINGLES (Interlocking Type):—Use 3 nails in each shingle; locate one nail in each corner one inch in from the diagonal edges; secure the lower corner of each shingle by inserting the locking device under the exposed edges of the adjacent shingles in the next course below



INDIVIDUAL HEXAGONAL SHINGLES (Secured with fasteners):—Use two nails and one fastener in each shingle; locate the nails one inch up from the lower edge of each shoulder tab, and one inch in from the end; apply the fastener to the lower corner of each shingle so that it secures the adjacent tabs of the shingles in the course next below, but not to the shingle in the second course below, which lies on the deck. The tab should never be nailed down



GIANT INDIVIDUAL SHINGLES (American Method):—Use two nails with each shingle. Locate the nail 6 inches up from the lower exposed edge of the shingle, and 1 1/2 inch in from the side edge

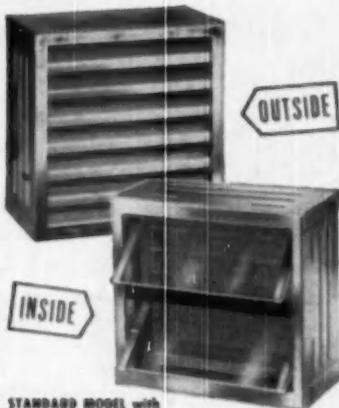
(Continued on page 242)

BIG NEWS
FROM
WEATHER-BLOC
Trade Mark Patent Pending

2 New Single Unit
GLASS BLOCK
VENTILATORS

ECONOMY MODEL with stainless steel louvers—permanent on the outside and adjustable on the inside—5% savings in cost. Available in 6-inch and 8-inch sizes.

UTILITY MODEL has permanent stainless steel louvers on the outside and adjustable glass louvers on the inside. Available in 6, 8 and 12-inch sizes.



STANDARD MODEL with GLASS LOUVERS INSIDE AND OUTSIDE
Blends in perfectly with glass block panels. 6, 8 and 12-inch sizes.

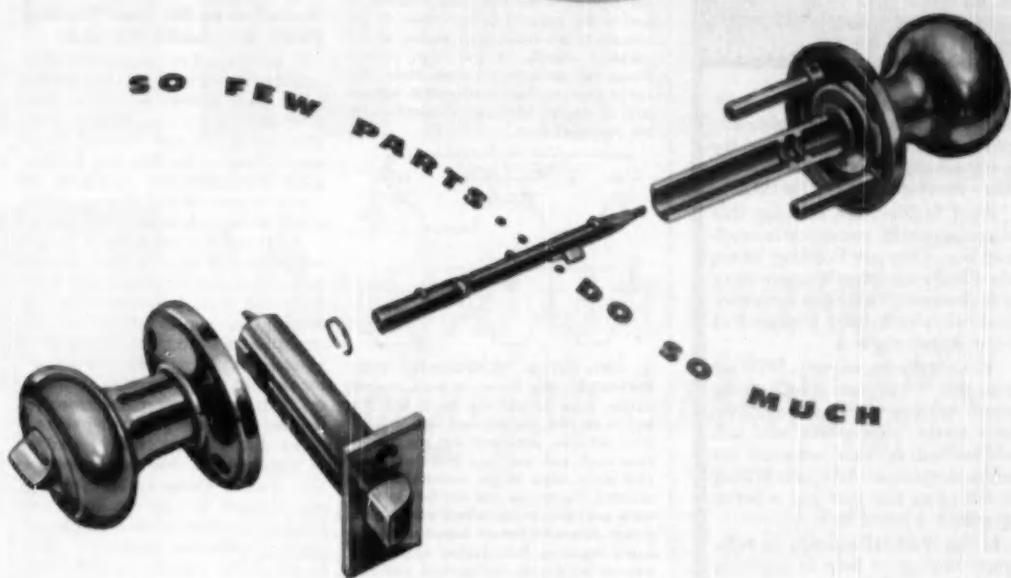
WEATHER-BLOC takes no longer to install than a single glass block—simply set in place of a glass block. Used in HOMES, STORES, OFFICES and INDUSTRY. **WEATHER-BLOC** offers controlled ventilation . . . aluminum screen inside retards rain, snow, dirt and insects . . . no sacrifice to beauty or privacy . . . permanent stainless steel body. Economy and Utility models are well adapted for basements and other low level locations where glass louvers might be subject to breakage. Can be installed in completed construction as well as new construction.

Available Through Your Glass Block Dealer or Jobber
Also Nationally Distributed by Wince Ventilator Co., Inc.
533 Brinker Street, St. Louis, Missouri

WEATHER-BLOC

Products of AIR RECTIFIER, INC.
3734 Southport Avenue Chicago 13, Ill.

SIMPLICITY makes *Kwikset Locksets*
one of America's outstanding tubular locks!



KWIKSET COMBINES STRIKING BEAUTY, HIGH QUALITY AND EASE OF INSTALLATION WITH LOW COST!

MANUFACTURED BY



DISTRIBUTORS

Petko
INDUSTRIES, INC.

1107 East Eighth Street
Los Angeles 21, California

he's
pre-sold
on features
that demand
ADEQUATE WIRING

Millions of dollars worth of appliance advertising has thoroughly sold prospective home purchasers on the many advantages of electrical living. They are convinced it is for them.

Alert builders are learning that they can put this conviction to excellent use. They are building homes electrically adequate to any reasonable demand of today and tomorrow. And—they're telling prospective home buyers about it.

You must wire, anyway. Why not turn this "must" into a real selling point? Adequate Wiring is one of the least costly "plus values" you can add to clinch sales and out-smart less acute competitors. Adequate Wiring in the plans also gets you a better appraisal—a better loan.

If you want information on Adequate Wiring, or help in applying this selling tool to your operation, the National Adequate Wiring Bureau will be glad to put you in touch with the local Bureau nearest you.

Just use the handy coupon.



**Selling's Less Tiring
With Adequate Wiring**

National Adequate Wiring Bureau
Department A 2

155 East 44th Street, New York 17, N. Y.
Please put me in touch with the nearest local Adequate Wiring Bureau. I'm interested in giving my houses more sales appeal.

NAME _____

COMPANY _____

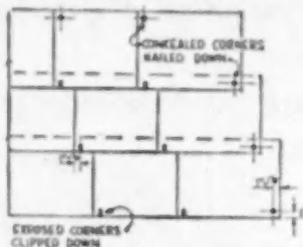
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CITY _____

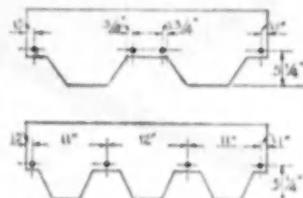
STATE _____

How To Nail . . .

(Continued from page 240)



GIANT INDIVIDUAL SHINGLES (Dutch Lap Method): Use two nails and one fastener in each shingle. When laying the shingles from left to right, locate the nails in the upper left and lower right hand corners one inch in from the side and one inch in from the top or bottom edge. When laying shingles from right to left, reverse the position of the nails. Use fasteners to secure the exposed lower corner of the shingle to the overlapped portion of the adjacent shingle in the same course. Never nail the exposed corner down. Use either non-corrodible wire staples applied with a stapling machine, or special copper fastening clips.



2. AND 3-TAB HEXAGONAL STRIP SHINGLES—Use 4 nails in each shingle. Locate them horizontally on a line $3/4$ inches up from the exposed butt edge. In 2-tab shingles, place one nail one inch in from each end, and one nail $1/4$ inch in from each angle of the cutouts. In 3-tab shingles, locate one nail one inch in from each end, and center a nail above each cutout. Align the shingle before nailing to avoid buckling. Start nailing at the end nearest the shingle last applied, and proceed to the opposite end.

Insulation Board Institute Re-elects Fairfield

M. C. Fairfield, general sales manager of the Insulite Division of the Minnesota and Ontario Paper, was re-elected president of the Insulation Board Institute at the trade group's recent annual meeting in Chicago.

D. D. Crandell, National Gypsum Co., was elected vice president. The following directors were named: E. C. Faulkner, United States Gypsum Co.; J. Z. Hoffmann, Flintkote Co.; W. R. Wilkinson, Johns-Manville Corp.; D. M. Pattie, Wood Conversion Co.; and Marvin Greenwood, Celotex Corp.

Promotion Placard Offered To Retail Lumber Dealers

An attractive promotion placard to help lumber dealers sell Maple, Beech and Birch flooring is offered by the Northern Hardwood Flooring Manufacturers Association.

This promotion follows the recent distribution of two dealer-aid leaflets to lumber and material dealers throughout the country. A more elaborate promotion campaign will get under way in 1950, according to W. C. Abendroth, president of the Maple Flooring Manufacturers Association.

Base of the display placard is three 10-inch strips of 25/32-inch Northern Hard Maple. The placard is 8 1/2 x 13 1/2 inches, printed in three colors.

Gas Burner Automatically Switches to Oil Heat During Peak Gas-Load Periods

A new type of gas burner that automatically switches to oil fuel at times when gas is in short supply has been developed by the Gas Service Company and the Midwest Research Institute of Kansas City, Mo. The development is particularly significant in view of a possible coal shortage which would place peak demands on gas.

A recurrent problem faced by gas utilities is that high demands for gas house-heating often occur for brief periods of time; for example, during severe cold waves which tax the storage and production capacities of even the largest systems. The stand-by gas load maintained by gas suppliers is in many cases quite expensive, the cost to the company being several times that of an equivalent amount of base-load gas. For this reason the Gas Service Company believes that maintenance by the consumer of stand-by facilities offers a double advantage—affording peak-load relief to the utility company and assuring the consumer that automatic heat will always be available.

The equipment developed in Kansas City consists of a single unit designed to burn both types of fuel, with operation being entirely automatic. An outside thermostat automatically switches from gas fuel to oil fuel when the weather is severely cold, and back to gas when the temperature rises. In most areas the thermostat is set to change from gas to oil at 20 degrees F. Since there is a slight lag in the outdoor control, the switch back to gas is effected when the outdoor temperature reaches 25 degrees F.

On an annual basis the average home will use about 15 to 20 per cent oil and 80 to 85 per cent gas.

American Builder, February 1950.



Corbin E. Gorton
120 1/2 Welch Avenue
AMES, IOWA



Jack Neighbor
208 Kinridge Building
DENVER 2, COL.



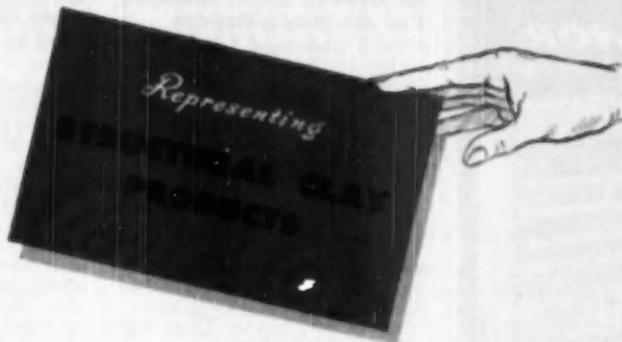
John M. Anderson
Central Building
SEATTLE 4, WASH.



George E. Solmat, Jr.
53 New Montgomery Street
SAN FRANCISCO 5, CALIF.



W. G. Demarest
Clay Products Ass'n of the S.W.,
Limefield Building, AUSTIN, TEXAS,
First National Building
OKLAHOMA CITY, OKLA.



Richard W. Otterson
341 State Street, Suite 410
NEW HAVEN 10, CONN.



Allan S. Platt
1949 Grand Central Terminal
NEW YORK 17, N. Y.



Arthur Stone
228 North LaSalle Street
CHICAGO 1, ILL.



Kenneth B. Harris
406 Barbett Building
CANTON 2, OHIO



S. M. McNeil
502 Benedum Trust Building
PITTSBURGH 22, PA.



James R. Horner
1518 Walnut Street
PHILADELPHIA, PA.

"Our job is to make
your job easier!"

Take a good look at the picture of the SCPI regional director in your area. Note his name and address and make a point of getting acquainted with him soon. He's a good man to know. Here's why...

Your regional director of SCPI was chosen because he's an expert at helping you. His calling card, in effect, means "at your service."

He knows brick and tile. He knows engineering. He knows the building business. He wants to know you.

You can count on him for sound advice on the best types of brick and tile to use on a given job, or for the latest information on how best to use them and how and where to

get them. He can even tell you how to set up a program for training more men to use structural clay products.

In short, he knows, or can find, the answers to a good many of your problems.

By so serving you, these regional directors are carrying out SCPI's programs for the building industry at the local level—bringing the benefits of our apprentice training, research, information and engineered housing services directly to you!

All you need do is tell your SCPI regional director your name, your address and your problem, and he'll welcome the chance to help you. Why not call on him, soon?



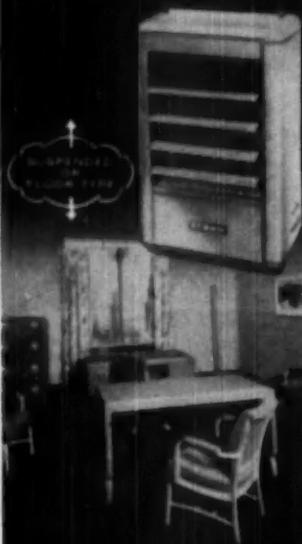
MAIN OFFICE

STRUCTURAL CLAY PRODUCTS INSTITUTE

1520 18th Street, N. W.

Washington 6, D. C.

Automatic
REZTOR
gas fired unit heaters



MORE BUSINESSMEN

will buy Reznor
unit heaters next
week than any
other make

That industrialists, merchants, dealers and contractors will buy more Reznor unit heaters next week than any other make is not new. It has happened for years. There's a reason for Reznor leadership. Write today.

- FULLY AUTOMATIC
- EXTRA LARGE FAN
- SPECIAL HEAT EXCHANGER
- STRONGER CONSTRUCTION
- MORE ECONOMICAL
- LOW COST INSTALLATION
- ALUMINIZED STEEL INTERIOR UNIT

Gas Unit Heaters Since 1888

REZTOR MANUFACTURING CO.

17 UNION ST. - MERCER, PENNA.

Charles Simonson Appointed Eastern Sales Manager For American Builder

The appointment of Charles Simonson as Eastern advertising sales manager of the *American Builder* has been announced by the directors of the Simmons Boardman Publishing Corp. He succeeds J. Sidney Crane, vice president, who has been appointed general sales manager of Simmons Boardman's transportation publications.

Simonson has served for the past three years as assistant Eastern sales manager, with headquarters at the New York office, 30 Church St.

In his new position, Crane will remain in charge of promotion for all publications and will continue to maintain headquarters in New York.

Crittall-Federal Changes Name to Crittall Inc.

Crittall-Federal, Inc., Waukesha, Wis., manufacturers of windows and doors, has announced the change of the corporate name of the company to Crittall Inc. The organization's board of directors pointed out that the change was made to achieve brevity for the title and that no change in organization, policy or personnel was involved.

Prominent Builders Serve As Instructors in C.C.N.Y. Light Construction Course

The Midtown Center of the City College of New York has announced the appointment of three prominent New Jersey builders as instructors in three of the technical subjects in the course, The Light Construction Industry—Merchandising, Materials, and Methods.

John S. Wright, executive vice-president of the New Jersey Home Builders Association and a former small home construction manager for a large construction organization, has been appointed to lecture on Job Management. R. D. Hudson, president of the Skytop Engineering Co., Montclair, N. J., who has specialized in building substantial developments will cover Construction Methods. Fred Naef of Naef Builders, Inc., of Summit, N. J., will give the instruction in Materials and Labor Estimating.

The Light Construction Industry Course—sponsored by the National Retail Lumber Dealers Association and the New Jersey Association—is designed as a basic training course for beginners in light construction or building material distribution. Lectures by representatives of building materials manufacturers are featured.

STOP PLASTER CRACKS



USE THE

**BURSON
CLIP SYSTEM**

A practical method for installation of gypsum lathing on wood construction. No special tools or methods of building are required. The clips insure firm, permanent attachment of gypsum lath to framing, yet provide the vital "slack" which allows the wood structure to settle, twist or warp without cracking the plaster.

• **BUILD YOUR REPUTATION**

You add to your reputation for quality work when you use BURSON CLIPS. The construction of flooring walls and ceilings insures you —

• **CUSTOMER SATISFACTION**

No more disgruntled homeowners over unsightly cracks . . . no more costly patching work.

**IT'S ECONOMICAL
AND EASY TO INSTALL**

Standard lathing nails are used with BURSON CLIPS, with 80% less nailing necessary. This speeds installation and cuts your labor costs.

FOR COMPLETE INFORMATION

WRITE TODAY

DEALER INQUIRIES INVITED

**THE BURSON CLIP
for
Suspended Ceilings**

The BURSON "C" CLIP for gypsum lathing on suspended ceiling construction eliminates tedious hand tying to furring channels and enhances the fire safety of the construction. Widely used in Industrial Projects throughout the country. Send for complete information.

WRITE TODAY

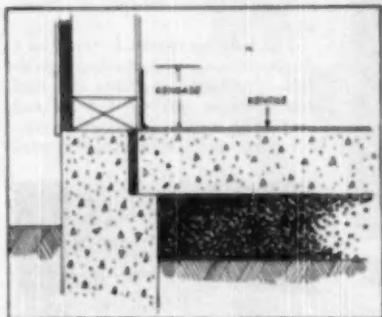


BURSON CLIP SYSTEM, INC.

2443 S. INDIANA AVE.

CHICAGO 16, ILL.

KENTILE GIVES NON-BASEMENT HOMES HANDSOME, LONG-LASTING FLOORS



Installs on concrete in direct contact with the earth—All fillers, binders and pigments in Kentile have high resistance to the alkali found in concrete. And Kentile's asbestos filler assures insulation against the cold and moisture in concrete floors. Equally ideal for installation on radiant-heated concrete slabs.

Also: Kentile can be laid over double T & G wood floors—or directly over firm plywood. Saves installation and labor costs because it can be laid tile by tile—eliminating the handling problems in laying flooring from heavy, hard-to-move rolls. Ready for use as soon as it is laid.

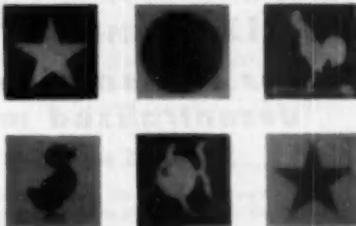
A CHILD'S BEDROOM like this gets hard usage—but that won't fade Kentile. Colors go clear through the tough, scuff-resisting material—can't wear off. Kentile stoutly resists dirt and stains—a few flicks of the mop and it's shining like new. The many desirable features of these attractive resilient floors are being brought to your clients' attention in leading magazines.



EVERY ROOM in the 6,000 Levitt Homes is floored with Kentile. Because it permits installation right over concrete on grade, Kentile helps cut construction costs in homes like this.



KENTILE
floors give you
freedom for design
at low cost.



IN ADDITION TO 23 COLORS and a wide variety of feature strips, you can select "Kentile" and "Themetile"—individual decorative touches for adding custom-made distinctiveness at low cost.

KENTILE.

The Permanently Beautiful
Asphalt Tile



DAVID E. KENNEDY, INC., 58 Second Avenue, Brooklyn 15, N. Y.
350 Fifth Ave., New York 1, N. Y. • 705 Architects Bldg., 17th and Sanson
St., Philadelphia, Pa. • 1211 N.B.C. Bldg., Cleveland 14, Ohio • 225 Moore
St., S.E., Atlanta 2, Ga. • Kansas City Merchandise Mart Inc., 2201-4 Grand
Ave., Kansas City 8, Mo. • 1440 11th St., Denver 4, Colo. • 4532 South
Kelle Ave., Chicago 32, Ill. • 1113 Vine St., Houston 1, Texas • 4501 Santa
Fe Ave., Los Angeles 50, Calif. • 95 Market St., Oakland, Calif. • 452
Stetler Bldg., Boston 16, Mass.



**ONLY THE
TRADE-WIND
CLIPPER
HAS ALL THESE
ADVANTAGES**

FOR the best method of ventilating kitchens, bathrooms, laundries, dens or other small rooms specify and install the Trade-Wind Clipper. This proven ventilator is the only small room unit that gives the home owner every worthwhile advantage.

Squirrel cage blowers, accepted and used in air conditioning systems and for forced air heating, are used exclusively in the Trade-Wind Clipper. This forced air discharge, located at the ceiling, traps all unwanted air and expels it instantly. Trade-Wind also has located the motor completely outside the greasy air stream. The motor stays clean indefinitely—requires less service—and is guaranteed for 5 years. No other small room ventilator combines all these outstanding advantages. In addition, Trade-Wind Clippers are easy to install—they are competitively priced*—and they make every new owner another salesman for the Trade-Wind line.

Get the complete story from your local supply source, or mail the coupon today.

*Important price reduction has just been made on Model 2501.

MAIL THE COUPON TODAY

TRADE-WIND MOTORFANS, INC.
5705 S. Main St., Los Angeles 37, Calif.

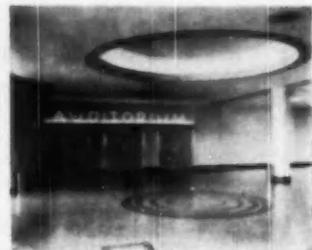
Please send me the complete story on the Trade-Wind Ceiling Ventilator.

Name _____

Address _____

Armstrong Cork Co. Adds New Auditorium to Main Offices

One of the most modern auditoriums constructed by an industrial organization for its own use has been completed by the Armstrong Cork Company at its general offices in Lancaster, Pa.



INNER lobby display room of Armstrong Cork Company's new 900-seat auditorium

The new 900-seat structure has a professionally-equipped stage, public address and lighting system, facilities for broadcasting, and an electric organ. It is constructed as a unit with foyer, cloak rooms, and a large area for permanent displays of company products.

The auditorium is designed primarily for such company activities as

conventions, exhibits, and business gatherings. In addition, the facilities will be made available for use by Armstrong employee organizations. The company's weekly half-hour radio program, "Armstrong Time," is broadcast from the stage with employees and their families in attendance.

The building serves in itself as a display of many of Armstrong's products—Corkboard insulates the roof and sidewalls and the hot air and ventilating ducts; magnesia pipe covering distributed by the firm is used

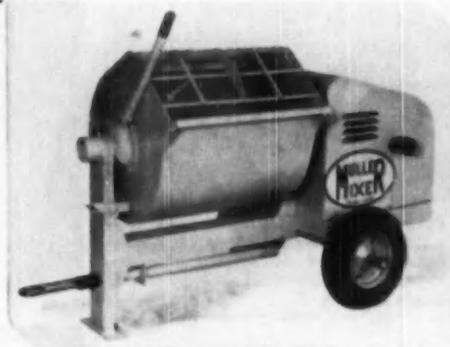


NEWLY completed 900-seat auditorium is shown above as it appears from stage

on the heating pipes; cork machinery isolation reduces the noise of equipment; Linostile is used on all floor areas; and acoustical materials used include Arrestone, Travertone, and Cushiontone.



Now a
**3 cu. ft.
PLASTER
and
MORTAR
MIXER...**



**for the small contractor, or for
decentralized mixing on large jobs**

With B. & S. engine drive \$320 . . . Electric motor drive \$300

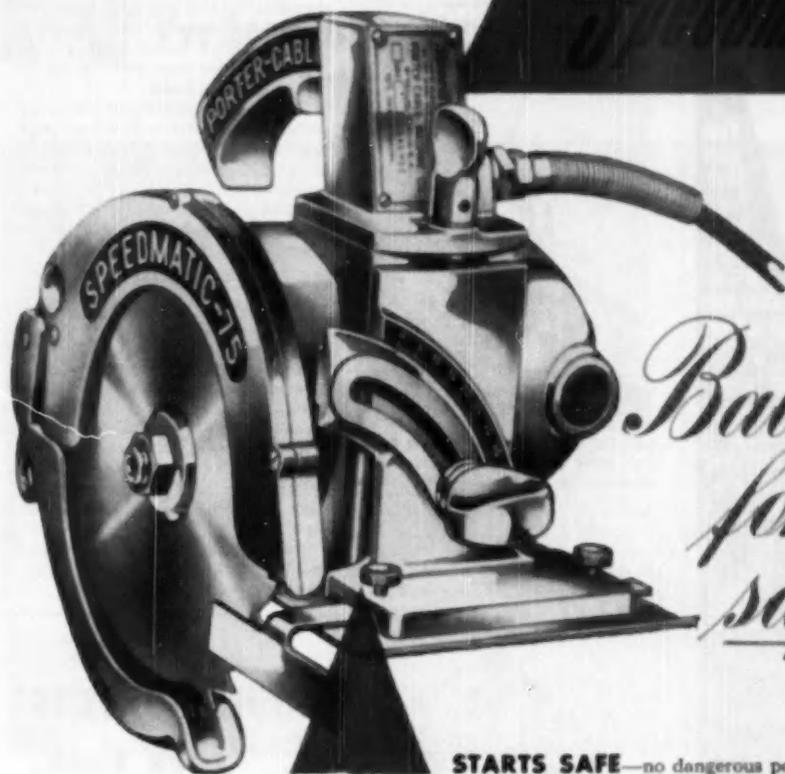
Here's a unit that will place your mixing on an efficient money-saving basis. Just wheel it to the spot nearest the work . . . goes through 30-inch doors. Charging height 32 inches . . . heavy-duty blades give end-to-end action for thorough mixing . . . bag splitter saves time. Hinged housing for quick access to engine and drive . . . hinged safety grating for easy cleaning. Long-life construction . . . heavy roller chain and machine-cut gear drive . . . trouble-proof stuffing box.

Literature on request

Also 6 and 10 cu. ft. plaster and mortar mixers, tilting and non-tilting concrete mixers, concrete carts, mortar boxes

MULLER MACHINERY CO., Inc.

Metuchen 4, New Jersey



*Balanced
for
safety...*

Balanced Two Ways...



1. WHEN YOU LIFT IT

You can actually suspend a Speedmatic from one finger—it won't tip, veer or twist. That's perfect Static Balance, first reason for better sawing.



2. WHEN YOU USE IT

Press the trigger—get that Speedmatic "Feel" in action. Note how easily it handles—how smoothly it cuts—how it "obeys" your guidance. No power jerk. Perfect Dynamic Balance.

STARTS SAFE—no dangerous power jerk when you press the trigger—helical gear drive makes blade enter the cut straight and true; prevents cramping.

SAWS SAFE—big, broad base of your Speedmatic is a real safety factor—keeps saw steady, easy to manage, readily sighted on the guide line from any sawing position.

STOPS SAFE—no dangerous lunge when you reach the end of your cut—saw's weight rests on main piece.

SAFETY is just one of Speedmatic's 6 superior features resulting from Speedmatic's exclusive 2-Way Balance. One demonstration will give you the whole performance story, including: Safety, One Hand Operation, Power, Accuracy, Smoothness, Durability.

Try a Speedmatic at your dealer's today.

And that's not all...

Your Speedmatic distributor has a complete line of these balanced, quality electric tools—saws, sanders, routers, mortisers, planes, grinders, floor sanders and edgers—and other masterpieces of balanced design.

The Balanced Line



YOUR DISTRIBUTOR HAS THIS PERFECT TEAM



YOU CAN SAVE TIME AND MONEY WITH EVEREADY BRIKSAW

The PERFECT TEAM

EVEREADY BRIKSAW and EVEREADY BRIKSAW blades give you lowest masonry cutting costs — you can actually save the cost of your EVEREADY BRIKSAW on one job and you can do better work faster.

CUT WET OR DRY

Take your choice change in a second from dry cutting to dustless wet cutting. Can be bought originally for dry cutting. Later inexpensive wet cutting kit can be installed in a few minutes.

MAIL THE COUPON NOW



CUT ANY MATERIAL IN 4 TO 21 SECONDS

- GLASS
 - CONCRETE
 - PIPE
 - BRICK
 - TILE
- Abrasive blades for dry or wet cutting. Diamond blades for wet cutting. A blade for any job.

THE SAW THAT HAS THESE EXCLUSIVE FEATURES

- Adjusts to hardness of material
- PRESSURE EQUALIZER
- 21 seconds to remove cutting head
- PORTABLE
- 4 seconds to adjust cutting head height
- "ADJUST-A-HEIGHT"
- Toe Mate provides exact angularity control
- "TOE MATE"

EVEREADY BrikSaw Co.

1505 S. Michigan Blvd., Chicago 5, Ill.
Without obligation send information on EVEREADY BRIKSAW and blades for cutting . . .

NAME _____
ADDRESS _____
CITY _____ STATE _____

Church 104 Years Old Moved 250 Miles With Aid of Crane

A 104-year-old Congregational Church was dismantled and re-erected with the help of a Lorain Moto-Crane



CHURCH is re-erected at Stratford, Conn., after being dismantled and moved 250 miles with the help of MC-416 Lorain crane

owned by Consolidated Building Wrecking Co., Inc., of Bridgeport, Conn. The crane traveled from Stratford, Conn., to Brookfield, Vt., a trip of 250 miles that included nar-

Bruce Exhibits to Feature Flooring for Ranch Homes

Exhibits of the E. L. Bruce Co., Memphis, Tenn., at lumbermen's conventions this year will have a western theme, emphasizing the company's newest product, Ranch Plank Flooring which was developed for use in the ranch style house.

Panels of the prefinished oak strips in alternate widths with walnut pegs will be used in the displays. A hostess in cowgirl costume will carry out the western motif.

Block and strip flooring and Bruce household products will also be included in the exhibits.

row, winding roads. There it was used to dismantle the church.

After the move back to Stratford, Conn., the crane was used to help re-erect the church as seen in the accompanying photograph. An eighty-foot boom was used with the crane.

It is estimated that the new owners of the church saved \$25,000 when the cost of their acquisition is compared with the probable cost of a similar new one.

The Moto-Crane used was manufactured by the Thew Shovel Company of Lorain, Ohio.



"TROUBLE SAVERS" save time, too!



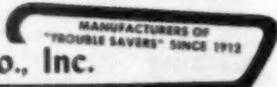
LADDER JACKS

- ONE-MAN Ladder Jacks (left) adjust to any pitch on either side of the ladder.
- Weight distributed on three rungs.
- New, rail-type jack (right) uses side rails of ladder for extra safety.

SCAFFOLD BRACKETS

- Erected and dismantled faster than you can build a make-shift wooden scaffold.
- 3 and 3½ ft. lengths—rail carbon steel.
- Nail, studding and bolt-attached types.
- Attachments to convert any one type to any other type.

Write for Catalog M; complete information on all "Trouble Saver" Scaffolding Accessories.



The Steel Scaffolding Co., Inc.

884 Humboldt Street, Dept. AS, Brooklyn 23, New York • Telephone: EVergreen 3-5310



"It doesn't cost any more to build houses with genuine Heatilator Fireplaces—and they're a lot easier to sell! I've been using them in my fireplaces since 1935."

Says Walter Kenney, Vice-Pres. and Chief Designer, George Wallace Realty Co., Buffalo Builders.



HERE'S a big extra selling feature that makes houses move faster—and costs you little or nothing! Build your houses around the cheery glow of a modern Heatilator Fireplace—the Fireplace that circulates heat instead of wasting it up the chimney. Savings in labor and materials usually more than make up for the small cost of the Heatilator Unit.

1. Assures correct operation. The Heatilator Unit is a scientifically designed, lifetime-built steel form around which you can build any style fireplace. It assures correct construction even by inexperienced masons and eliminates common faults that cause smoking.

2. Saves you time and money. The Heatilator Unit adds little or nothing to the cost of the finished fireplace because it's complete from hearth to flue and ready to install. It saves on expensive firebrick. It saves mason time and labor because all designing is done. You save valuable

time because the Heatilator Unit permits *unsuperheated* construction.

3. Circulates heat, saves fuel. The Heatilator Unit takes heat that is ordinarily wasted, and circulates it to every corner of the room... and to adjoining rooms as well. On cool Spring and Fall days, furnace operation is unnecessary. In mild climates, it's the only heating source needed.

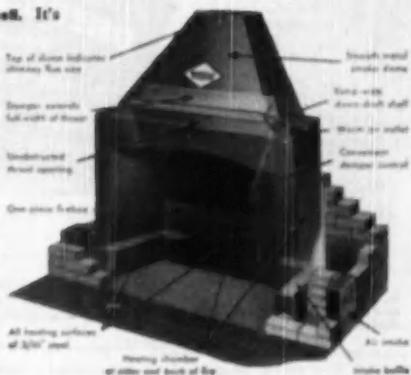
4. Makes any house easier to sell. It's the kind of quality comfort feature today's house-hunters are looking for! And they know the Heatilator name through over twenty years of national magazine advertising.

Write today for complete specifications and illustrations showing a variety of attractive fireplace designs employing Heatilator Units.

Heatilator Fireplaces are sold by all leading building material dealers. Accept no substitute. Look for the Heatilator name on the dome and on the damper handle. Heatilator, Inc., 632 E. Brighton Ave., Syracuse 5, N. Y.

"Heatilator is the reg. trademark of Heatilator, Inc."

**Heatilator
Fireplace**



HEATILATOR FIREPLACE

Closes Sales FASTER!

Presenting the **FIRST** and **ONLY**

controlled power

completely safe

semi-silent

Powder-Actuated Fastening Tool!

The **DRIVE-IT** 

U. S. Pat. Nos.
1,982,117
2,082,878
Other Patents
Pending



DRIVE-IT "300"

**DO IT WITH
DRIVE-IT!**



Installing structural
wall-ops, steel bars,
wood members, etc.,
at angles.



Roofing, lighting, fire
bricks, forming of roof
and ceiling slabs, etc.



Final maintenance
hanging shelving,
signs, etc.

Here's the powder-actuated fastening tool every contractor has been waiting for! It embodies all of the features our customer-users have requested . . . and more.

With the introduction of DRIVE-IT "300", the powder-actuated tool "comes of age". It's a streamlined beauty with such features as automatic extension barrel, flangeless drive-pins, controlled power and 40% greater penetration. It is as safe as a screw-driver, and retains all of the time-saving, money-saving advantages of this amazing fastening method.

Clip the coupon now and get the full story on the DRIVE-IT "300". It will be money in your pocket!

Distributors Coast-to-Coast

POWDER POWER TOOL CORPORATION
8712 S. W. Woods Street • Portland 1, Oregon

Canadian Distributors: AMMO-POWER TOOL CO., LTD.
Four of McLean Drive, Vancouver B. C., Canada



exclusive features of the
DRIVE-IT "300"

Controlled Power
with one powder charge
3-Way Safety - Most of the BANG is out!
Flangeless Drive-pins Permanent
Adjustable Safety Pad
Fires with a "Twist of the Wrist"

You bet I'm interested... Send me the story!

NAME _____

COMPANY _____

STREET AND NO _____

CITY AND STATE _____

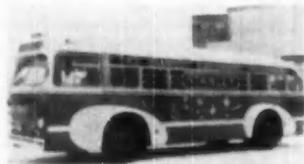
POWDER POWER TOOL CORPORATION 8712 S. W. WOODS STREET PORTLAND 1, OREGON

Stanley Works Announces New Mobile Display Unit For Builders Hardware

The Stanley Works, New Britain, Conn., is taking its diversified line of hardware products on a nation-wide tour of inspection for hardware wholesalers, retailers and builders in a specially constructed motor coach. Designated as the "Stanley Hardware Rollorama," the new mobile display coach will carry over 1,300 sample items in the firm's builders hardware line. It will visit all principal cities in the country where it will be displayed under the direction of trained factory representatives.

The Rollorama is constructed on a standard 36-passenger motor coach chassis with a modified body. The interior contains 24 hardware display panels which are uniquely arranged along the interior walls on both sides of swinging doors. Linoleum-topped counters with slanting front display panels give a modern store environment for the entire presentation. Interior fixtures are finished in prima vera. Forced ventilation and thermostatically-controlled heaters are installed. A lounge area is located at the rear of the coach where visitors may discuss requirements with representatives of the company.

Announcement of the Rollorama's itinerary will be made at a later date. Advance postcards will notify distributors when to expect the Rollorama in their territory. The Rollorama was designed and constructed by M. Rundbaken Displays, East Hartford, Conn.



THE Stanley Works hardware division "Rollorama" which will tour America displaying the complete line of builders hardware

George P. Merrill, general sales manager of The Stanley Works hardware division says: "The main purpose of the Rollorama is to assist the entire hardware trade by bringing a completely stocked showroom directly to the leaders' doors. Aboard the motor coach, a dealer may examine the Stanley line at first hand, get help in his hardware problems from the Stanley factory-trained representatives. On special blanks which will be provided he may also have orders placed through his jobber."

American Builder, February 1950.

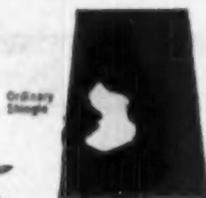
Sensational **FLAMING BRAND** Test...



SHOWS WHY ROOFS NEED
FIRE-CHEX

Ordinary Shingle

Fire-Chex



Heat from flames causes asphalt coating on ordinary shingle to burn, melt and flow, thus allowing flames to eat through highly-combustible felt (this would expose roof deck to flames). Patented asbestos-plastic compound coating on Fire-Chex resists burning, melting and flowing... actually "puffs up" to insulate felt from flames and prevent ignition.

Carey Fire-Chex asbestos-plastic shingles assure unmatched fire protection for valuable buildings and human lives... enhance the value of your building projects. This fact is dramatically proven by the flaming brand test shown above... a test you can easily demonstrate for your clients with the handy kit made available by Carey. Ask your Carey representative about it today.

YOUR CLIENTS WANT BEAUTY AND DURABILITY, TOO...

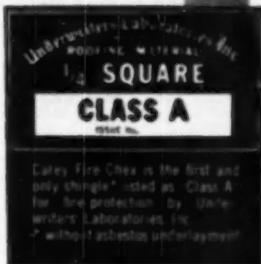
Carey Fire-Chex have both... in client-satisfying measure! They're made in a variety of rich new colors and blends, especially designed for application in copyrighted shadow-blend roof designs that cannot be duplicated... and they're extra heavy (325 lbs. per sq.) for extra durability and weather-resistance.

Whether your business is design or construction—insist on Carey Fire-Chex... the ultimate in fire-protection, beauty and durability... to help make any building a *safer* investment. (See Sweet's Architectural file for further information.)

Call in your Carey representative for full details.

AB-2

The Philip Carey Manufacturing Company, Cincinnati 15, Ohio.
In Canada: The Philip Carey Company, Ltd., Montreal 25, P.Q.



THE HOUSE OF

Carey

Bedroom Cabinets and Accessories • Coram Siding • Rock Wool Batts
• Tri-tone Shingles • Other famous products for home and industry

Architects requested
Home buyers want...

these Outstanding features of

AZPHLEX

Asphalt Tile



- ✓ More resiliency
- ✓ Lighter colors
- ✓ Greater color variety
- ✓ Brighter colors
- ✓ Grease resistance

.. PLUS ECONOMY!

Installation of AZPHLEX Asphalt Tile flooring adds a lot to the beauty, value and "livability" of any home — and the modest price tag on this premium-quality tile makes it perfectly in line for low and medium priced home construction! AZPHLEX goes in fast and with minimum difficulty... it has a protective, factory-applied wax finish that makes initial polishing easy... it is colorful and attractive... and it offers maximum resistance to the effects of animal, mineral or vegetable greases, alkalis, alcohol and mild acid solutions. It will take a very high polish — and keep it for an exceptionally long time; and its resistance to denting and marbling is unsurpassed.

"From results of national poll"

TO LAY BETTER FLOORS FOR LESS
AND HAVE THEM WORTH MORE —
STICK TO
PREMIUM-QUALITY

AZPHLEX

For detailed information see
your Acrow-Apblow Dealer—
or write direct to Dept. B.

**UVALDE ROCK
ASPHALT CO.**

Members of UROCK and AZPHLEX Asphalt Tile
FIRST BANK BLDG. SAN ANTONIO TEXAS

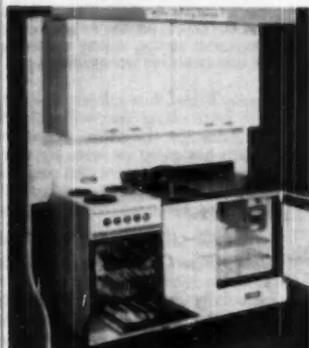
**New Standards Announced
For Pine Woodwork**

A commercial standard for standard pine windows and sash, the first of its kind ever published, has been announced by the Ponderosa Pine Woodwork Association. The new standards, which became effective Dec. 15, are expected to be particularly helpful to architects, builders and wholesale and retail distributors of woodwork products.

In addition to establishing specifications for standard sizes, layouts and construction details of stock pine windows, sash and screens, the standard is intended to effect economies for all concerned, from the producer to the ultimate consumer through a wider utilization of the products.

**Complete Kitchen
For a 5-Foot Space**

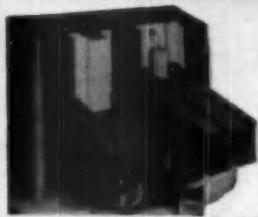
A complete kitchen that occupies five square feet of floor space is one of the many interesting new products to be shown at the Annual National Association of Home Builders Convention and Exposition to be held in Chicago, Feb. 19-23.



COMPACT kitchen occupies 5-foot floor space. Will be shown at NAHB Exposition to be held in Chicago Feb. 19-23

The kitchen incorporates an electric range with four cooking units and full-sized oven; a sink which can be equipped with a waste disposer; and a four cubic foot under-counter refrigerator. A special plastic counter top including sink and bowl fits over the refrigerator and sink cabinet, giving additional work surface. Above these appliances are two 30-inch wall cabinets for adequate storage of dishes and other items in small apartment homes. A more complete apartment kitchen can be formed with the addition of a free-standing automatic dishwasher which also fits a variety of counter tops. Kitchen is by Hotpoint, Inc., Chicago.

*The Milwaukee
Combination*
**SASH BALANCE
and
WEATHERSTRIP**



Available with or without bronze covers that completely hide spring, as shown above.

**PERMITS REMOVAL OF
SASH WEIGHTS, INSULATION
OF MULLIONS.**

Slash Labor Costs!

Simple installation allows one man to easily install 30 or more windows in 8 hours. No high-priced skilled labor needed. This means you can get more satisfied customers at lower cost... higher profit!

Tops in Operation!

Smooth, positive action; accurate balance; finger-tip control plus the perfect seal against draft, dust, moisture. No wood-to-wood contact. Prevents sticking windows and window rattle.

**EFFICIENT
LOW
COST**



**FOR OLD
OR NEW
BUILDING**

**ATTENTION MILLS AND LUMBER YARDS
IDEAL FOR PRE-FIT WINDOWS**

Can Also Be Sold in Single Unit Packages

Mail this coupon today!

Milwaukee Strip Service, Inc.
421-23 W. Linden Ave.
Milwaukee 8, Wisconsin

Please rush me folder A-1 and price list of Milwaukee Combination Sash Balance Weatherstrip.

Name _____

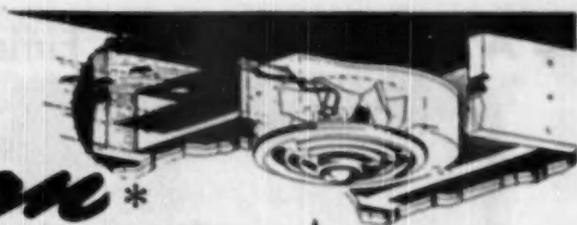
Address _____

City _____ Zone _____ State _____

American Builder, February 1950.

Blo-Fan*

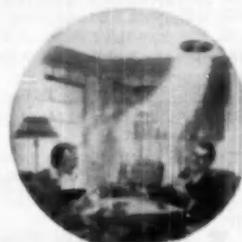
IS superior!



IN THE KITCHEN—Blo-Fan installs over the range, where it will whisk out steam, grease, and cooking odors as they rise before they spread.



IN THE BATH—Blo-Fan quickly expels steam from the bathroom—avoids foggy mirrors and steam-streaked walls—the air stays crisp and fresh.



IN THE GAME ROOM—Blo-Fan eliminates tobacco and other odors by removing stale air before it contaminates the drapes and furnishings. No morning-after odors.



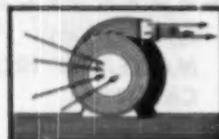
IN THE LAUNDRY—In any weather Blo-Fan keeps the laundry clear and fresh. Steam is expelled before it spreads, windows do not fog...air is kept dry and crisp.



HERE'S WHY!



FAN—75% of the air moved by a breeze fan is thrown from the blade tips. The center is weak when it meets resistance. A fan delivers volume, but it lacks power.



A BLOWER draws a smaller amount of air into the vortex, discharging it with great velocity, thus overcoming resistance. A blower delivers power, but it lacks volume.



Blo-Fan combines the volume of a fan with the power of a blower. The fan blades feed the vortex of the blower so the vanes are fully loaded. That's why *Blo-Fan* delivers more air with more power.



Spot Ventilation at the point of Air Pollution

*Trade Mark Reg.

Manufacturers of
PRY-LITES

... the modern recessed lighting fixtures with snap-on fronts.

Factories: Pomona, California; Newark, New Jersey
Warehouses: Los Angeles, San Francisco, Chicago

Stocked by more than 500 wholesalers in more than 350 cities

Pryne & Co., Inc. Box B-2, Pomona, California

American Builder, February 1950.

253

A Quick, Attractive Finish



Cabot's Stain Wax is quick and easy to use . . . with one application produces a soft, lustrous, easy-to-clean finish . . . available in a variety of attractive light shades including grays and white.

Development builders use Cabot's Stain Wax because it gives interior woodwork many unique and attractive effects . . . because it costs less and is quicker to apply than paint . . . because its clean, modern appearance appeals to today's home buyer.

Write for complete information and color card. Samuel Cabot, Inc., 224 Oliver Building, Boston 9, Massachusetts.

CABOT'S STAIN WAX

MONARCH CUTTER

FOR ASBESTOS SIDING AND SHINGLES
GUARANTEED 100% Non-Breakable

NOW, AT LAST
MALLEABLE IRON
CASTING

The Monarch Asbestos Siding and Shingle Cutter in malleable iron gives you the 100% guarantee against broken castings. Because of its metallurgical structure, malleable iron is the ideal material for this cutter. The Monarch gives greater toughness, higher resistance to corrosion and will stand up to heavy and repeated impact.

The Monarch has a front end nose punch, notcher, and precision cutting blades.

Angle gauge is optional.
27" Monarch . . . \$39.50
32" Monarch . . . 45.00
(FOB Fort Worth, Texas)

WRITE FOR FREE
DESCRIPTIVE FOLDER

TRI-STATES
Building Materials
Company, Inc.
P. O. Box 1476
Fort Worth, Texas



AVAILABLE IN
27" AND 32" SIZES

MAIL THIS COUPON

TRI-STATES BUILDING MATERIALS CO. AB
P. O. Box 1476, Fort Worth, Texas

Please send me, without obligation, information on Monarch Cutter in malleable iron.

Name: _____

Company: _____

Address: _____

Florida Apartments Designed For Room Air Conditioning

Wall openings for room air-conditioner window ducts are a construction feature of a new apartment building in Orlando, Fla. The owner,



EXTERIOR view of Orlando, Fla., apartments. Outside wall openings have been skillfully blended into the building design.



CARRIER De Luxe Air Conditioner unit, in corner of room, is feature of apartments

who air-conditioned each apartment with individual Carrier Corp. room units, has reported 100 per cent occupancy for the building, even in summer months. The air vents were planned as part of the design, harmonizing with other exterior decorations.

The individual units are installed in a corner of the room, permitting full-length window light and vision.

F. W. Dodge Corp. Plans Full Representation at NAHB Meet

All of the divisions of the F. W. Dodge Corp. will be represented at the NAHB convention in Chicago, Feb. 19-23. Company officials said that members of the sales staffs of each division, together with special marketing consultants, would be in attendance during the entire meeting.

One of the firm's displays will be a special demonstration of the Chicago Construction News, daily building trade newspaper.

See Selected Homes
MARCH
American Builder



REDUCE BUILDING COSTS

Pre-assembled DOORWAY CANOPIES
Pre-painted ALUMINUM SHUTTERS
Low cost PORCH RAILINGS

LOW COST
SAVES LABOR
AND MATERIAL

A STYLE
FOR EVERY
HOUSE

QUICK,
EASY
INSTALLATION

RIGID
CONSTRUCTION
MANY COLORS



LIGHT-SAVER
DOOR CANOPY



WESTWIND
DOOR CANOPY



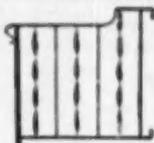
SLANT
DOOR CANOPY



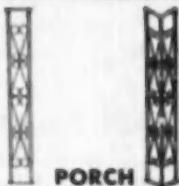
GABLE
DOOR CANOPY



STANDARD
PORCH RAILING



ARISTOCRAT
PORCH RAILING



PORCH
COLUMNS



LINE-AWAY
LAUNDRY DRIER



LIGHT-SAVER
AWNING



DAY-VIEW
AWNING



THRIFT
AWNING



CORONET
AWNING



FLOWER BOX



PLAIN PANEL FULL LOUVRE FULL LOUVRE BATTEN
SHUTTERS



VISOR
WINDOW CANOPY

DRESS IT UP . . . SELL IT QUICK

WRITE FOR CATALOG AND PRICES TODAY

FAWSCO MFG. DIVISION

FALLS STAMPING & WELDING CO.



1709 FRONT STREET

CUYAHOGA FALLS, OHIO

DISTRIBUTORS! DEALERS!

We're buried in SALES
... need help to dig out!

Art in Iron



A few years ago, we started making the finest ornamental iron work skill can produce. Our costs were low and, not knowing better, we sold direct to the building trade and architects.

THEN ...

A fast-talking advertising man said: "Use some trade papers!" We did, and what happened? We got swamped with orders.



NOW WE'RE ALL SNAFUED ...

We got behind and don't know when we'll catch up. We need help! If we can get out of the sales end, we'll have more time to manufacture and design.



SO.....

If you're a distributor or dealer who can handle the finest ornamental iron work made (nice profit—you'll like it) wire, phone or write. There's a lot of business all ready to be picked off. Plenty advertising help, too.



Write to Dept. A

ARTCRAFT
ORNAMENTAL IRON CO.

774 E. Hudson St., Columbus 11, Ohio

New Idea For Production-Line Building of Single Homes on Individual Lots

Individual homes constructed with all the savings of production-line building are being produced by the Schrader Development & Supply Co., St. Louis, Mo. The Schrader organization, a pioneer in the use of specialty crews and assembly line building in sub-division development, has a new plan for constructing a single home for an individual on his own lot.



WALL sections, porches and other building parts are produced and assembled in large plant utilizing fast power tools

In a large plant, Schrader pre-assembles walls, porches, and porch canopies sending them out completely finished. Using the latest in power tools and advanced building design, all interior doors are fit, locked, and ninged in the jamb and are ready to be nailed in the wall openings. Trucks and trailers deliver the building parts completely assembled to individual home sites and experienced crews erect and finish the house.

Actual construction of a Schrader home has averaged 40 working days. Stock piling of building materials and continued maintenance of full working crews for both on-site and plant operations have aided in maintaining unusually speedy production.

The home plan selected for the Schrader pre-assembled project measures 25 x 32 feet with almost 800 square feet of floor space and full basement. Two bedrooms, living rooms, bath and large kitchen complete the structure. The home is priced at \$7,875 with asbestos siding plus cost of sanitary sewer connection and garage. Brick veneer is also used with the customer paying approximately \$1,200 additional.

The foundation is of poured re-

inforced concrete. Exterior walls are framed in units in accordance with a key plan which is illustrated, using Insulite Bilbrite Sheathing applied directly over 2x4 studs placed 16 inches O.C. which are dulled to receive 1x3 horizontal strips serving as a nailing base for the asbestos shingles. Bilbrite Sheathing provides both structural strength and needed insulation. Dado saws are used by Schrader at his plant to accurately cut the 2x4 studs so that the furring strips may be let-in and form a flush surface.

Exterior walls are sided with asbestos shingles and roofs are of asphalt shingles. The floor is hardwood, except that kitchen and bath have inlaid linoleum. Interior walls are of dry wall construction, some painted, some papered, and bath and certain kitchen areas are finished with Insulite hardboard wainscoting sprayed with synthetic enamel after being cemented in place. The kitchen is furnished with a 54 inch deluxe cabinet sink, one 15x30-inch wall cabinet, one 36x30-inch wall cabinet and one 15-inch base cabinet. In the basement, there's a gas-fired automatic hotwater heater.

Gravity hot-air heating with a coal-fired furnace is the normal heating system supplied with the Schrader

(Continued on page 258)

Red Cedar Closet Lining

**Brown's
SUPERCEDAR**
NATIONALLY
ADVERTISED

Guaranteed 90% Red Heart or Better

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 that produced the pleasing aroma.

ALL WIDTHS PUT-UP
48 FT. TO PACKAGE

More home builders are specifying cedar lined closets today than ever and Brown's SUPERCEDAR is nationally advertised to thousands of new home prospects, architects and builders. SUPERCEDAR closet lining is surfaced, tongue and grooved, ready to put on with no waste. Packaged and sealed with the Geo. C. Brown label and guarantee, issued since 1888.

Product of
Geo. C. Brown & Co., Inc.
GREENSBORO, N. C. ESTABLISHED 1888

LARGEST MANUFACTURERS OF
ARTIFICIAL RED CEDAR IN THE WORLD

100% oil content
Suggest Cedar Lined
Closets to Every Home
Builder. There is
Nothing Better than



SEALED
PACKAGE
LABELED



Reversible

TO HELP YOU LOWER BUILDING COSTS

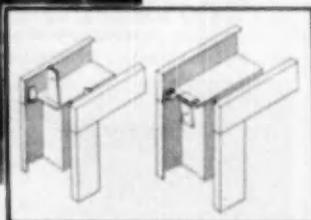


Richmond UNIVERSAL KNOCKDOWN
STEEL FRAMES

Richmond steel frame jambs are reversible so they can be used for either hand of the door. Hinges are welded to hinge jamb the same distance from either end. Latch cutout is centered in latch jamb. Jambs can consequently be used on either side of frame. Being reversible and coming in three pieces makes ordering easy and reduces to a minimum storage space required.

Check These Features

- ✓ Low in cost—sturdy in construction
- ✓ Made of best quality 18-gauge steel
- ✓ Available for interior and exterior openings
- ✓ Frames are neat appearing, stable, durable
- ✓ Rolled sections insure accurate dimensions and perfect fit when assembled
- ✓ Hinges welded to jambs in manufacture
- ✓ Jamb members are equipped with clips for nailing to studs or strap anchors for masonry walls.
- ✓ Frames eliminate need of casings
- ✓ Red oxide primer coat baked on at factory
- ✓ Sizes: Width—1'6" and up in 2" multiples
Height—6'6", 6'8", 7'0"



EASY TO ASSEMBLE

Frames readily assembled on job. Just insert metal tongues of jambs into mortise in head member and bend sufficiently for firm, square connection.

MAIL COUPON NOW
for full information about
Richmond Steel Frames

THE

Richmond
FIREPROOF DOOR CO.



P. O. Box 97, Friends Station

Richmond, Indiana

THE RICHMOND FIREPROOF DOOR COMPANY, DEPT. 2
P. O. BOX 97, FRIENDS STATION
RICHMOND, INDIANA

PLEASE SEND ME booklet giving full information about Richmond Steel Frames.

NAME _____

BUSINESS ADDRESS _____

CITY _____ ZONE _____ STATE _____

POSITION _____ TYPE OF BUSINESS _____

**For Quick,
Easy, Full-Powered
Sawing—This 6"
Bradford Can't Be Beat!**



**New Model 160
BRADFORD**



- Straight cut, 2" maximum; 1/4" minimum
- Bevel cut at 45°, 1 1/4" maximum; 1/4" minimum
- Net weight 10 lbs. 4 oz.

Here is a real heavy-duty 6" power saw! This new Bradford Model 160 is ruggedly constructed and fully powered to take on the *toughest* sawing jobs! It's light weight and finely balanced to give greater sawing accuracy with less effort. Powerful motor drives the blade at 4000 r.p.m. Arbor is mounted on sealed ball bearings. Constructed by craftsmen for craftsmen to give years of efficient service. Ask your dealer to demonstrate this precision power saw.

**THE BRADFORD
MACHINE TOOL COMPANY**

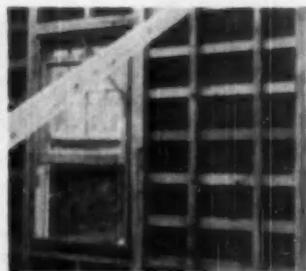
654 EVANS ST.
CINCINNATI, OHIO

New Idea for Production—

(Continued from page 256)

homes. In some cases a forced air, gas-fired heating plant has been installed.

When the pre-assembled building parts arrive at the site, the units are laid on the subfloor and assembled



WALL panels illustrating 2x4's end-sawn for receiving 1x3 horizontal wood nailing batten strips are shown here. Interior walls are of dry wall type using either paper or paint covering

according to the key plan. The door frames and pre-fit windows are nailed in place. The Bildrite Sheathing is all pre-cut to sizes required for each unit and is nailed in place after the door and window units have been properly placed. Then the asbestos shingles are applied. The wall is raised in place with the exterior being complete. First the front wall is raised; second, the rear wall; third, an end wall. Then all interior partitions are placed on subfloor. The fourth wall is then raised in place. All corners on exterior walls are bolted together. The partition walls are set and spiked in place. All roof rafters and ceiling joists are pre-cut in the plant and the building is put under roof in 3 1/2 days with a crew of four men. All rear porches, front porches,



HOUSES, 25x32 feet, have full basement

front porch hoods, and basement stairs are pre-assembled and painted, then taken to the building and erected. The interior trim for all windows and doors is pre-fit.

Since the beginning of their semi-prefabrication operation last spring, the Schrader Development & Supply Company has erected 30 structures using this newest idea in home building.

NOW!
IMPROVED
KORK-PAK
JOINT FILLER
Insulates against
HEAT LOSS!

Specify **KORK-PAK** Joint Filler for use between floor slabs and footings in beam-column bases and structural on grade and get the extra **KORK-PAK** insulating feature as well as a waterproof, reinforced, non-extruding filler that will keep the best effective filler at all times.

KORK-PAK is composed of cork granules bonded together with asphalt between two sheets of asphalt-saturated paper—it's waterproof and insect proof to assure positive joint filling for the life of the building.

KORK-PAK is the least expensive non-extruding joint filler made—low cost, coupled with its high insulation coefficient, makes **KORK-PAK** the ideal joint filler for any type of construction.

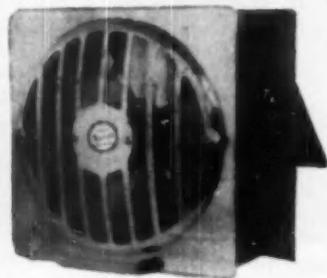


Write for complete details on **KORK-PAK**. See our Catalog in **SWEET'S**.

SERVICISED PRODUCTS CORP.

6051 W. 65th ST., CHICAGO 38, ILL.

**WESTAIR
KITCHEN VENTILATORS
CEILING AND SIDE WALL MODELS**



SIDEWALL MODEL

Highly polished cast aluminum grill, 16 inch Torrington blade, one piece cast aluminum shutter, wide overlapping, cast aluminum frame, for simple installation in old and new homes, easy to clean, pull chain automatically starts fan and opens outside shutter. When ordering specify frame or brick.

**5 YEAR GUARANTEE
LIST PRICE \$39.95**

**YOUR CUSTOMER DESERVES THE BEST
WHOLESALE PRICE CEILING FOR SIDEWALL**

**SINGLE UNIT . . . \$27.97
LOTS OF SIX . . . \$23.97**

WESTERN APPLIANCE CO., INC.
5450 Grand Blvd., Detroit 8, Mich.



Houses Sell Faster

Equipped with NORGE Appliances

Home buyers are more choosy now. They want more for their money. And they want a "packaged mortgage" so that they can pay the cost of necessary home appliances over a long period of time...the duration of their house mortgage. Builders everywhere find appliance-equipped homes sell faster, easier.

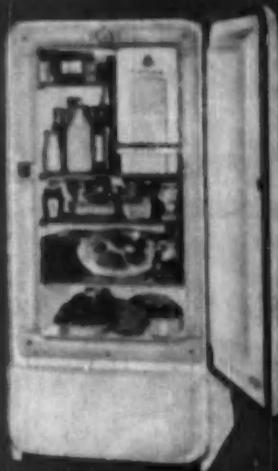
WISE BUILDERS INSTALL NORGE! and with Good Reason!

You know that in practically every case it's the woman who chooses the home. You know that the kitchen is the big selling point. And the kitchen equipped with Norge is a sure winner.

First, because Norge is a famous national brand. Every woman knows the name. Every woman recognizes the value. And the husband knows that "Borg-Warner" stands for the best in engineering.

Second, individual Norge appliances sell themselves... and your house along with them. Their beauty lends glamour and drama. And each appliance is jam-packed with the features every homemaker wants.

And the builder himself finds that the Norge price is right. So when you install Norge appliances, you add much more to the value of your house than the price of the appliances themselves. You assure yourself of faster-moving units... and greater profits.



When you install a Norge refrigerator in your home, you get more than just a refrigerator. You get a built-in feature that adds to the beauty and value of your home. It's a feature that's always there, always ready to help you keep your home in the best of health.

When you install a Norge refrigerator in your home, you get more than just a refrigerator. You get a built-in feature that adds to the beauty and value of your home. It's a feature that's always there, always ready to help you keep your home in the best of health.



NORGE Division, Borg-Warner Corporation, Dept. AB-2
Detroit 26, Michigan
Attn: Mr. S. J. McCarthy, Director of Contract Sales.

Please send me more information on the following appliances:

- | | |
|---|--|
| <input type="checkbox"/> Refrigerator | <input type="checkbox"/> Water Heaters |
| <input type="checkbox"/> Automatic Washer | <input type="checkbox"/> Gas Range |
| <input type="checkbox"/> Electric Range | <input type="checkbox"/> Home Washers |

NORGE

AMERICA'S FINEST HOME APPLIANCES - ENGINEERED BY BORG-WARNER

New!
FASCO
10 "CEIL-N-WALL"
KITCHEN VENTILATOR,
Model 1020



FAN AND OUTSIDE
WALL HOOD ASSEMBLY

For ceiling
mounting or in
inside wall, directly
above stove

- Designed in collaboration with America's largest builders... for quick, easy, inexpensive installation.
- New FASCO Turbo-Radial propeller, specially engineered for pressure through ducts... develops pressure unobtainable with ordinary fan blades... three-speed control.
- Unique air intake prevents air re-circulation at inlet.
- Outside wall cap—aluminum... rustproof—has built-in balanced louvers. Overhang keeps out rain, drafts, cold.
- Beautifully designed... superbly finished... priced right.

FASCO wall ventilators are used by America's largest builders... 15,000 IN LEVITY HOUSES ALONE! The new FASCO "CEIL-N-WALL" vent will be a leader, too!

WRITE, WIRE or PHONE for complete information. FASCO Industries, Inc., 20 Union St., Rochester 2, N. Y. (Phone HAmilton 1800).



Builders' Competition For 'Best Homes' Announced By Parents' Magazine

To spotlight the pacemaking work of the nation's leading home builders, the publishers of Parents' magazine have announced a contest that is intended to turn the eyes of American families with children on the building industry in an effort to find and select the best homes for family living built and sold in 1949.

To be eligible for competition, a house entered by a builder must be occupied by a family with one or more children, according to Mrs. Maxine Livingston, Family Home Editor of Parents' magazine. Entries will be divided into five regional groups according to geographical locations, and entries will be divided into two price groups based on actual selling price: 1) houses sold for not more than \$15,999 and 2) houses sold for from \$16,000 to \$25,000. Selling price to include the cost of land.

Entries will be selected for 1949 Merit Awards; one in each cost class for each of the five geographical regions. From the ten Merit Awards, one house will be selected for the 1949 National Merit Award for the "Best Home for Family Living."

Awards will be Certificates of Merit suitable for display and use in advertising by the winners. Parents' magazine will publish and publicize editorially the 1949 National Merit Award and reserves the right to do so with any or all of the nine 1949 Merit Award winners or with any other entries selected by the editors.

Entries must be received not later than May 1, 1950; prize winners to be announced early in July, 1950. Jury for Parents' magazine's Home Builders Competition will consist of the president of the National Association of Home Builders; Richard Bennett, A.I.A., Loeb, Schlossman & Bennett; William H. Scheick, A.I.A., Executive Director, Research Advisory Board of the National Research Council; Mrs. Maxine Livingston; and five regional advisors. Further details of the competition may be obtained by writing to Builders' Competition for Merit Awards, Parents' Magazine, 52 Vanderbilt Ave., New York 17, N. Y.

Perlite Plans Expansion

A \$100,000 modernization program which is expected to triple production capacity has been undertaken by the Perlite Manufacturing Co., Carnegie, Pa. T. C. Ward, company president, said that conveyor systems, bins and an additional furnace would be installed for processing the lightweight aggregate, perlite.

STAPLE—to save time speed up production



T-32 Gun Tacker

Replaces hammer and tacks at trigger rate speed. Shoots a staple whenever a tack can be driven. Ideal fastener for Carpenters, Insulators, Roofers, etc. Special screen and window shade attachments. Loads 150 staples—3/16", 1/4" and 5/16". \$3.50

Rustproof "Metal" staples available.



P-32 Hand Stapler

"Basher" lets hand-tack or staple. Ideal for taping, wrapping, mailing bags, etc. Same machine takes 1/4" and 5/16" staples. Loads 100 staples. \$2.00



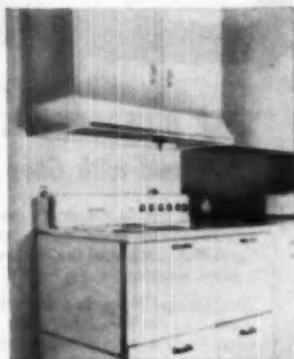
#105 Standard

Stapler, Tacker and Plier. Temporary and permanent stitch. Produces both of all steel and chrome Reeb. Fastens 40 to 60 sheets of paper. Loads 100 standard staples. \$1.50

Slightly higher in the West and Canada

BUY FROM YOUR LOCAL DEALER OR ORDER DIRECT—DEPT. AB

ARROW FASTENER COMPANY, INC.
20-28 Meuser St., Brooklyn 6, New York



The RANGE-VENTOR SELLS HOMES

Without a Range-Ventor even today's modern and beautiful kitchens are incomplete. Not only does this handsome, eye-filling piece of equipment capture and exhaust kitchen odors, grease and heat at their source—above the stove—but it is a selling feature that has instant appeal. It ventilates, it illuminates, it protects walls and cabinets... and it *sells* homes.

Send for Bulletin 580

Universal Blower Co.
Birmingham 2, Mich.

American Builder, February 1950.

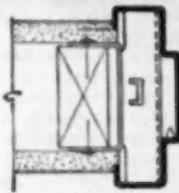


AMWELD

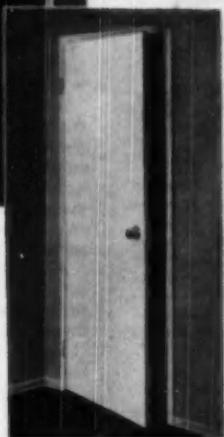
Interior STEEL DOOR and FRAME UNITS

Designed to meet today's modern construction standards, they blend with all types of architecture, and lend themselves to installations at rates up to five times as great as those where "assembled-on-the-job" units are used.

Doors are available in 1 3/4" and 1 1/2" thicknesses; 1 3/4" available as single-swing or double-acting. These doors may be provided with integral louvers or vision panels. Doors are factory rabbeted and bored for standard hardware. Frames and hinges are furnished as a one piece welded assembly. To insure parallel alignment, removable steel spreaders are welded to bottoms of the frames. Doors are furnished with a neutral color primer, electrostatically applied and controlled; frames are rust-resistant primed.



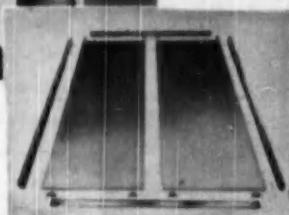
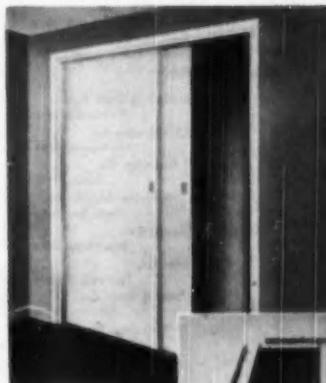
AMWELD Steel Frames are used in all types of wall construction.



AMWELD

Metal SLIDING CLOSET DOOR UNITS

Sliding closet doors have definite advantages in the saving in space and increased accessibility to closet content, *plus* saving in initial construction cost. Steel door panels are formed on four edges, fitted with finger pulls. Jambs, header and track — the same high quality and construction as door frames. Available for 3', 4', 5' and 6' openings — 2 doors. AMWELD Steel Sliding Closet Door Units are also available in packaged, knocked-down units. Here's a fast turnover, profit-making line that will pay you to investigate.



VISIT OUR BOOTH, No. 6,
at the
NATIONAL HOME BUILDERS SHOW
Congress Hotel, Chicago, Feb. 19-23

Building Products Division

THE AMERICAN WELDING & MANUFACTURING CO.

WARREN, OHIO



There's only ONE—

Various limes come from Ohio . . .
they're OHIO limes.

When more or less white . . .
they're called WHITE limes.

When sold for finished plaster . . .
they're FINISH limes.

Some may even come from Ohio, be
white, and be meant for finishing
limes . . .

Yet, there's only one OHIO WHITE
FINISH (our trade mark), that through
its consistent quality has gained favor
everywhere with architects and
builders, and is preferred by plasterers
for its good working qualities.

You too may rely on our twin brands:
OHIO WHITE FINISH and HAWK
SPREAD WHITE FINISH. Scientifically
processed from hand picked, kiln
burned dolomitic limestone, they are
always of uniform good quality, 99%
pure.

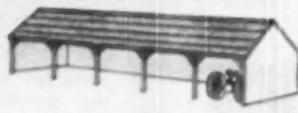
They are easily recognized by the Zig-
zag Bags.

The OHIO HYDRATE & SUPPLY Co.
WOODVILLE, OHIO



Sales Ideas for Builders Who Do Farm Construction

Contractors and dealers who do
business in rural areas can give firm-
ers two easily understood reasons
why a machine shed is an inexpensive
building to own.



OPEN SIDED machine shed, top, appeals
to farmers because of its inexpensiveness.
Framing lumber, siding, roof deck sheath-
ing and asphalt roofing are the only major
materials required. This type of shed pro-
tects farm implements from all except the
most severe storms. The enclosed shed is
slightly more elaborate in construction
and frequently includes a repair shop as
well as machinery storage space.

First, a machine shed usually will
pay its own cost by preventing rapid
rusting and depreciation of machin-
ery. The vulnerable working
parts of tractors, harrows, cultivators,

hay rakes and similar implements are
exposed, and if machinery is allowed
to stand outdoors it can become
harmfully wet in even a light rain
fall.

The second reason is that a ma-
chine shed is simple to construct and
costs relatively little. Advantages far
outweigh the expense.

The most popular type of machine
shed is open along one or both sides
and closed at the ends. It is covered
by a gable roof. There is no need for
doors or windows. A dirt floor usual-
ly is sufficient.

Much of the protection afforded by
this sort of structure is provided by
the roof, and thus it is important that
reliably weathertight roofing be se-
lected. Asphalt roofing serves this
purpose and also contributes to low-
cost construction because it is in-
expensive and easy to apply.

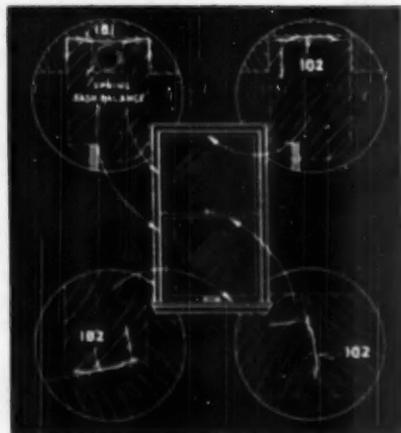
Another type of machine shed is
enclosed completely, with one end
equipped as a repair shop. This ar-
rangement makes machinery con-
veniently accessible for repair work
regardless of the weather.

Both types are preferred by some
farmers. The open-sided shed is used
for storing bulky machinery while the
enclosed shed has space for smaller
implements and repairs.

HETTINGER'S

Triple Seal

PATENT NO. 1,773,190
WINDOW COMBINATION



Thousands of dealers are now
getting their TRIPLE SEAL require-
ments from these jobbers and
many others.

American Sash & Door Co.
Kansas City, Mo.
E. E. Bach Millwork Co.
Minneapolis, Minn.
Bardwell-Robinson Co.
Fargo, N. D.
Builders Wholesale Supply Co.
Sioux City, Iowa
Carr & Moshi Co.
Des Moines, Iowa
W. P. Fuller Co.
Portland, Oregon
Houston Sash & Door Co.
Houston, Texas
Indiana Wholesalers, Inc.
Evansville, Ind.
Rock Island Lumber Co.
Buffalo, N. Y.
Scott Graff Co.
Duluth, Minn.
Texas Sash & Door Co.
Fort Worth, Texas
Whitmer-Jackson Co.
Richmond, N. Y.

Many profitable trade areas still
open. We welcome dealer and
jobber inquiries.

SASH BALANCES AND SPRING BRONZE METAL WEATHERSTRIPPING
Complete Unit Carton Packaged—Any Size \$3.50

SEE YOUR LUMBER DEALER

THE WEATHERPROOF PRODUCTS CORPORATION
329 Westport Road Kansas City 2, Missouri Jefferson 3133



*No Itching
No Scratching
No Coughing*



INSULATION
COSTS LESS APPLIED

Because Lo-K Insulation contains no harsh particles that irritate the skin and get into workmen's throats—because it costs so little because it is the lightest weight of all commonly used insulating materials (.875# per cu. ft.)—because it has a 1½" range for easy, time-saving fastening—builders everywhere find that its applied cost is less than that of any other commonly used insulating material.

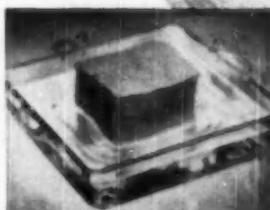
Furthermore, it has greater insulation value (.24K factor)—is flameproofed—resists moisture—does not deteriorate with age—will not mildew or attract vermin.

For better insulation at lower cost, try Lo-K. Compare the cost. Ask your workmen which insulating material they prefer to use. Lockport Cotton Batting Co., Lockport, N. Y.



GIVE IT THE BLOWTORCH TEST

You will find that it won't flame—merely chars without flaming—won't melt or fall apart. That's why it acts as a fire stop. Furthermore, Lo-K's flameproofed qualities are permanent.

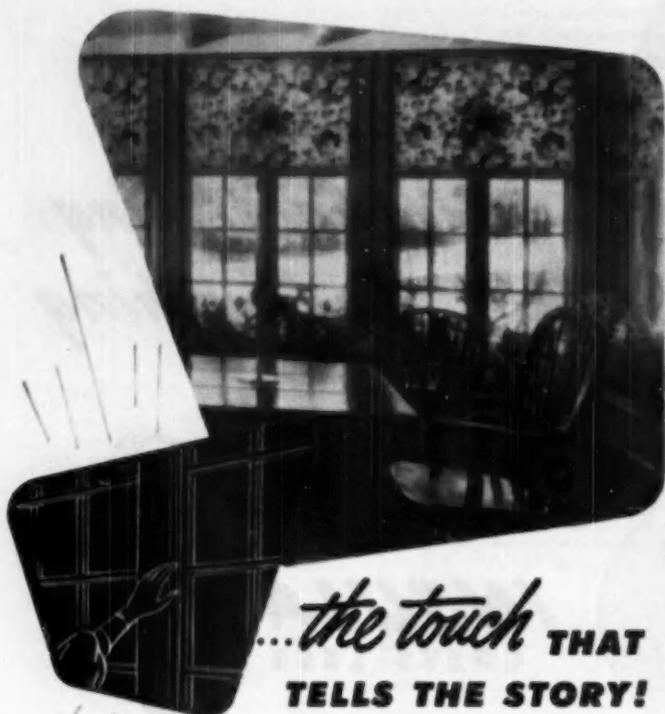


TEST IT FOR MOISTURE RESISTANCE

Floot it for days on top of a pan of water. Because Lo-K does not absorb moisture by capillary attraction, only the part in contact with the water will be wet.

Available in either open or enclosed blanket types—and with aluminum foil or asphalt Kraft paper vapor barrier.





...*the touch* THAT
TELLS THE STORY!

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

for friendly living

Ponderosa Pine
WOODWORK



Your copy of a helpful booklet on Ponderosa Pine windows and doors is yours for the asking.

Ponderosa Pine Woodwork
SAB-2, 38 South Dearborn Street
Chicago 3, Illinois
Please send me a copy of "Today's Idea House."
(Please print).

Name

Address

City Zone State

Chicago's New Code Not Expected To Stimulate Construction

The new "performance" building code recently passed in Chicago will benefit all types of construction in the long run, but it is doubtful that it will produce an immediate boom in small home construction within the city limits, according to the Chicago Metropolitan Home Builders Association. And few, if any, prefabricators will be able to adjust their designs and operations to meet the rigid small home regulations of the amended code Martin C. Huggett, executive vice president of CMHBA, reported.

A serious obstacle to rapid building progress within the Chicago city limits, according to Huggett, is the "compromise" amendment reached by Mayor Martin H. Kennedy December 29 after a two year struggle between the building industry and civic groups backing the "streamlined" code, and plastering groups opposing it.

The compromise amendment permits construction of non-bearing partitions of materials having:

- 1) A fire resistance rating not less than a wood stud partition covered on both sides with one-half inch exterior grade plywood.
- 2) A flame spread rating not to exceed thirty.
- 3) Withstand an impact equivalent to 60 pounds to 3½ feet.

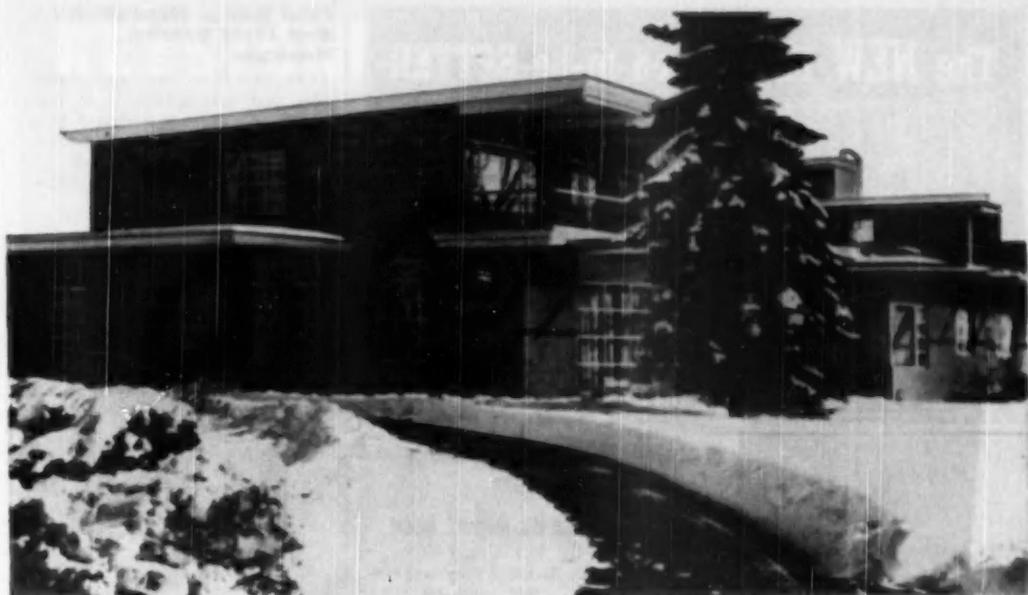
The acceptability of virtually all materials under paragraph 3 will remain uncertain until the building code administration is set up and the tests are defined more clearly, Huggett said.

In any event, according to Huggett, it appears that the performance requirements established in the new code will require the use of materials that will increase the cost of small homes built outside the fire zones in the city materially above the cost of homes now being built in suburban areas outside of the city limits.

Other obstacles to volume home building within the city were cited by the Chicago Metropolitan Home Builders Association.

The first is the extension of "fire limits" in which frame construction is barred to the point where they now embrace 175 of 211 square miles within the city. The most desirable areas for small homes now fall within the "fire limits."

The second is the shortage of land priced low enough to be included in a "small home" package price. Seeking to break this shortage, the Committee on Housing Development of the CMHBA is working closely with
(Continued on page 266)



Residence of Harry L. Roges. Architects, Berninger, Hoag & d'Estremont; builder, Percy Swank

56

CASEMENT WINDOWS PERFORMING PERFECTLY IN EVERY SEASON, IN ANY WEATHER

	<p>Operator 4703W is a precision-built instrument. Its internal gearing was originated by, and is an exclusive feature of, the Getty Company. Because every component of this operator is of the highest quality, its maintenance cost is negligible.</p>
<ul style="list-style-type: none"> • Full length of cold rolled steel worm engaged at all times • Teeth precision machined at exact operating angle • Housing of Zamac alloy, solid bronze or brass • Heavy brass channel guide, cadmium-plated steel operating arm 	<ul style="list-style-type: none"> • Internal gear construction • Operates through screens • Operates on casements carrying built or extension frames • Easily installed, lubricated for life • Corrosion-proof

ANY CASEMENT WINDOW is only as good as its operator. The operator is the control tower of the window's flight. It must secure it instantly, rigidly, in any position desired. It must respond to the touch of a finger. Being an interior fixture, the operator must be graceful; having to live a lifetime of twists and turns, it must have guts.

That's why architects, builders, contractors, casement manufacturers, building material dealers, hardware jobbers and dealers specify, use and carry the Getty line. That's why *Getty operators are found on more casement windows than all other operators combined.*

Write for our descriptive brochure B. It contains complete information on our three operators (internal gear, external gear, horizontal drive) and our specialty hardware for every type of wood and metal casement.

H · S · **GETTY** & Co., Inc.

3348 NORTH 10th STREET

PHILADELPHIA 40, PA.

The NEW Engineered-to-be-BETTER

HASKO

ARCH-KOR FLUSH DOOR

- HOME-OWNERS like its enduring beauty
- CARPENTERS like its workability and easy installation
- EVERYONE likes its modest price

The Hasko Arch-Kor door is a better door . . . that costs no more than ordinary doors.

It is built of selected materials throughout. No seconds or rejects are hidden behind the face panels. It is built on a new principle of engineered door construction which permits manufacturing savings . . . so Haskelite can give you better materials and superior quality at conventional prices.

The Arch is a fundamental engineering form. It is the strength member in bridges, buildings, and other structural achievements of ancient and modern times. The principle of the Arch is used to produce the exceptional strength and warp-resistance of the Hasko Arch-Kor door.

This new hollow-core door is of balanced, cross-grained construction to give exceptional resistance to warping.

Because we use selected straight grained materials in the rails and stiles, the door edges plane smoothly and easily, hinges are mounted quickly and cleanly — screws hold permanently. This workability makes faster, easier installation a sure thing with the Hasko door. Up to 1" in width and 2" in height may be trimmed if necessary. Double lock blocks permit 8-way hanging.

You owe it to yourself to find out all the details and specifications of this door that lets you give your customers a better buy. If your lumber merchant does not yet have full information, drop us a letter or postcard for the new Hasko Door bulletin.

WHOLESALE: Write today for information



HASKO

HASKELITE MANUFACTURING
CORPORATION
Grand Rapids 2, Michigan

Fred Kaiser Honeywell's New Field Service Manager

Creation of a new management sales post and promotion of four branch and regional managers have been announced by Tom McDonald, vice president in charge of sales for the Minneapolis-Honeywell Regulator Company.



FRED KAISER

Fred Kaiser, midwest regional manager for the company since 1943, has been promoted to field sales manager. This position is new to the company, McDonald said. Kaiser joined Honeywell's New York office in 1926.

Clarence L. Peterson, who has been Pacific regional manager for Honeywell, will succeed Kaiser in the midwest area. Gavin S. Younkin, formerly Los Angeles branch manager, will assume Peterson's former duties. In addition, the appointment of Reginald C. Cushing as the San Francisco branch manager has been announced.

Chicago's New Code

(Continued from page 264)

representatives of the Chicago Land Clearance Commission, the Chicago Plan Commission, the Cook County Housing Authority, the Housing Authority of the State of Illinois and other governmental bodies. These groups are seeking a formula for private industry-government co-operation that will encourage construction of both small homes and private rental apartments within the city.

Until these groups succeed in a program for acquiring land for private development through co-operation of government bodies, the majority of home building must continue in the suburban areas, Huggert said. Of the approximately 28,000 dwelling units begun in 1949, in the Chicago Metropolitan area, more than two-thirds were outside the city limits. This ratio will probably continue throughout 1950, despite passage of the Chicago building code.

KEYSTONE *Frameless Tension Screens*

*for Single
or Multiple Dwellings and Institutions*

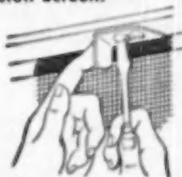


Meshness is keynote of new "Eliot" apartments recently completed by Segal Construction Corporation of South Orange, N. J. Window at right has Keystone Frameless Tension Screen, window at left is unscreened. Screen does not detract from architectural beauty note absence of bulky frames.

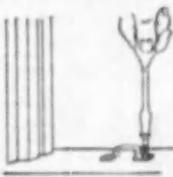
Beautiful New England Garden Apartments are completely equipped with Keystone Frameless Tension Screens. Iver Dunndor of A.E.J. Dunndor Construction Co., Summit, N. J., builders, says, "We feel this type of screen is a great improvement over regular frames. The main reason for using, particularly in a Garden Apartment, is for quick installation, and where storage is a problem, the screens can be rolled and stored in a small area. Also being aluminum mesh screens of strong construction there is no problem of maintenance and painting which, of course, is a great improvement."

Here is the modern answer to the screen problem which saves the builder time and money and makes the home more salable. Builders have saved up to 25 minutes per window and at the same time given their home buyers the finest in insect wire screens. Write for new installation and measurement data and the name of nearest dealer today.

HOW TO DO IT . . . A few screws and simple sill brackets are all you use to install this Pre-fitted Keystone Frameless Tension Screen.



Round headed screw installed in top blind stop holds removable top bar bracket.



No bulky hardware on sill . . . just a cool, small permanent bracket.



Catch of sill engages sill fixture. Note that fixture is easily adjusted for proper tension.



Keystone

KEYSTONE WIRE CLOTH CO.
Haverhill, Pa.



Gentlemen:
Send latest specifications, installation data and prices on
Keystone Frameless Tension Screens.

Name

Attention of

Street

City State

AB

sell your trade the whitest
white cement



A whiter white cement
that gives greater beauty
wherever used...widely and
consistently advertised to your customers.

Trinity Portland Cement Division,
General Portland Cement Company
111 W. Monroe St., Chicago; Republic Bank Bldg.,
Dallas, 816 West Fifth St., Los Angeles

as white as snow



... for white or colored stucco ...



cast stone ... TERRAZZO ... cement paint



... concrete architectural units ...



and for many light reflective uses

E-A-S-Y
 • installation
 • operation
 • maintenance
 • on the purse

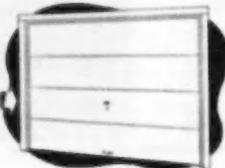
The CAPITOL Taper Seal GARAGE DOOR

is a Profitable Door for you to recommend and install. Customers like these self-selling, Taper Seal features: beauty — feather-touch operation — balanced action — complete weather protection — long, trouble-free life — reasonable cost. For you — faster sales — greater profits. Sizes: 8'0" x 6'6"; 8'0" x 7'0"; 8'0" x 7'6"; 8'0" x 8'0"; 9'0" x 7'0"; 9'0" x 8'0"; 10'0" x 7'0"; 10'0" x 8'0"; 10'0" x 9'0"; 10'0" x 10'0".

**Now! THE NEW
CAPITOL STREAMLINE
FLUSH-PANEL**

For Faster Sales

See Greater Profits



— stronger, longer lasting — combines beauty and economy. Panels are electrically bonded (not nailed) to each side of the frame — insures rigidity — prevents warping and distortion. Sizes: 8'0" x 7'0"; 8'0" x 7'6"; 8'0" x 8'0"; 9'0" x 7'0". Thickness — 1 3/4".

See your lumber dealer or write us for prices.

CAPITOL PRODUCTS

118 SOUTH THIRD STREET • SPRINGFIELD, ILLINOIS

WITH A **VITROLINER CHIMNEY**
YOU GET A

"Tailor
Made"



ROOF FLASHING & FLUE HOUSING

VITROLINER type "E" Flue is individually designed and completely fabricated to fit your roof pitch—no cutting or fitting—just assemble handy light weight sections. Anchors to ceiling joists and extends through roof opening as illustrated.

Functions as a complete chimney—replacing all brick masonry. Used nationally by builders and contractors—time tested, proven practical and successful. Used extensively in F.M.A. construction and listed for all fuels by Underwriters Laboratories. Available in any quantity.

LOW INITIAL AND
INSTALLATION COST

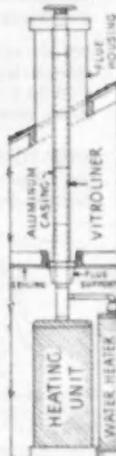
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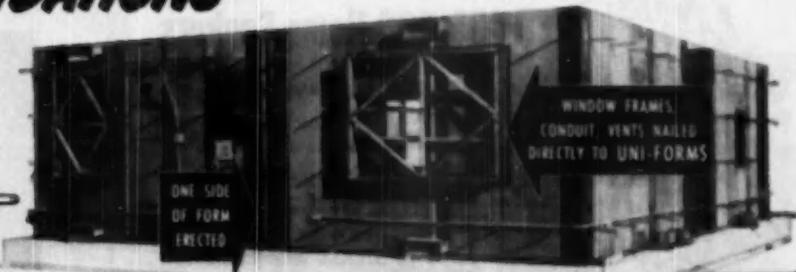
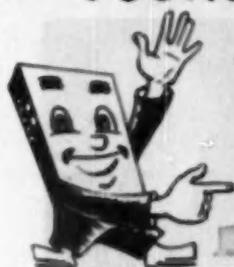
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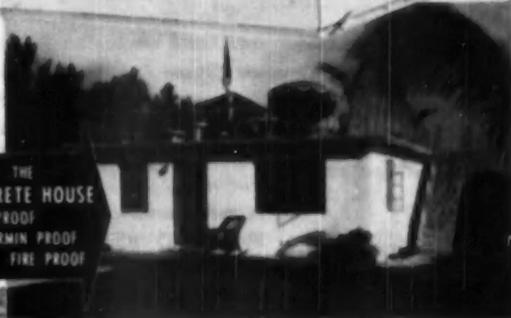


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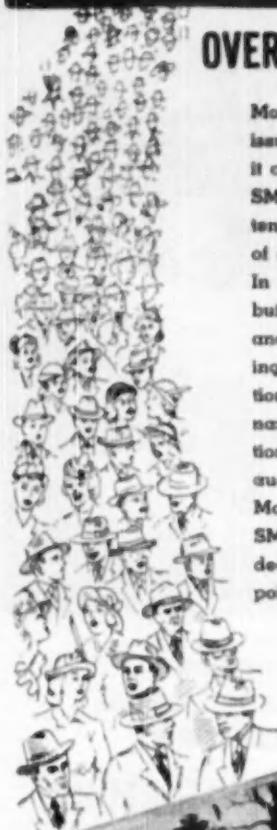
In the pages of **SMALL HOMES GUIDE** building products manufacturers, builders and home owners have a common meeting place. Articles on design—construction—equipment—interior decoration—financing and maintenance hold the attention of **SMALL HOMES GUIDE**'s vast audience.

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sell materials
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for the million
new homes that
will be built
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FROM COAST TO
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Cecil W. Farrar and F. B. Mahoney Given New Posts With Richmond Radiator

John J. Hall, president of Richmond Radiator Company, has announced the election of Cecil W. Farrar as vice president and general manager of sales and F. B. Mahoney as vice president and general manager of manufacturing.



CECIL W. FARRAR

Farrar has been associated with the plumbing and heating industry for more than 30 years. Formerly president of the Excelso Products Corporation, he joined Richmond as sales manager of the plumbing division in 1945. In 1948, he was appointed director of sales promotion for all Richmond products.



F. B. MAHONEY

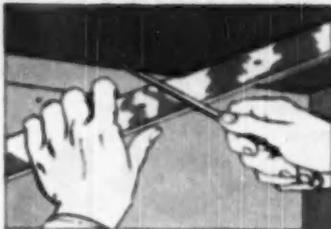
Mahoney joined the Richmond Radiator Company as general factory manager in 1944. Prior to that time, he was vice president in charge of production for the Ellwood Company and previously was vice president and director of manufacturing for the Humphreys Manufacturing Co.

Mr. Leonard P. (Cy) Jenkins has been appointed Assistant Sales Manager, Plumbing Division of the Richmond Radiator Company. Mr. Jenkins, who joined Richmond in April 1946, was formerly Director of Sales Promotion for the Barclay Company of Newark, N. J., and Assistant Sales Manager of the Service Supply Corp., Philadelphia, Pa.

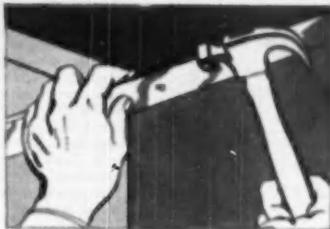
American Builder, February 1950.

How to apply Stainless Steel counter edging

... this new easy way

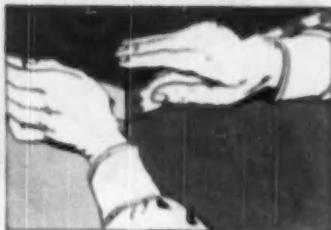


- 1** File 90° V-slot in lip at point to be bent. CHROMTRIM stainless steel counter edging is easier to cut because the core is aluminum. Use three-cornered or square file.



- 2** Nail moulding up to corner

CHROMTRIM is pre-punched and supplied with oval-head, nickel-plated drive screws which seat flush, need no countersinking.



- 3** Use palm-of-hand pressure

to form moulding around square corner. CHROMTRIM stainless steel edging is easier to bend. Then continue nailing . . . extra holes easily punched.



NEW. Now you have your choice of aluminum or 13 new stainless steel metal mouldings in CHROMTRIM quality.

It's easy-cutting stainless steel, too—some shapes solid and some with a light stainless cladding over easy-cutting, rust-proof aluminum core.

Choose the matching groups you need from the complete CHROMTRIM line of

over 200 shapes, ready-cut, punched, each length individually wrapped to protect the finish.

See your CHROMTRIM distributor or write for illustrated Price List No. 8, to R. D. WERNER CO., INC., 295 Fifth Avenue, New York 16, New York. In Canada: R. D. Werner Company, Ltd., Ontario.

Dealers: Investigate the new "Pick-of-the-Pack" CHROMTRIM Deal—choice of 38 consumer shapes and a merchandiser with each order of 14 shapes.

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LOOK FOR THE MOULDINGS
IN THE RED-STRIPED JACKETS

Easy to Buy.. Easy to Apply



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SAWS

SIX SIZES—BLADE CAPACITIES TO 12"
SAFER—EASIER TO HANDLE
FAR MORE POWERFUL!

- 1 SAFETY-LOCK SWITCH—positive protection against accidental starting.
- 2 EXTRA WIDE REINFORCED STEEL SAFETY BASE for better balance—easier to handle, safer to use.
- 3 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.
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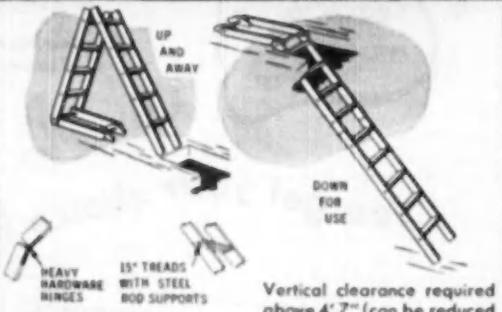
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Economy
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DISAPPEARING LADDER
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for HOMES - GARAGES - ATTICS
LOW COST - EASY INSTALLATION - EASY TO OPERATE
FITS MOST ANY SCUTTLE HOLE SIZE WITHOUT ALTERATION



Immediate delivery on finished floor to finished floor sizes of 9' 2" or less. Vertical clearance required above 4' 7" (can be reduced if necessary). Horizontal space on attic floor required 4' 6".

Shipping weight 22 lbs. (nominal wt.) Write for further information.

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Johns-Manville CEILING PANELS

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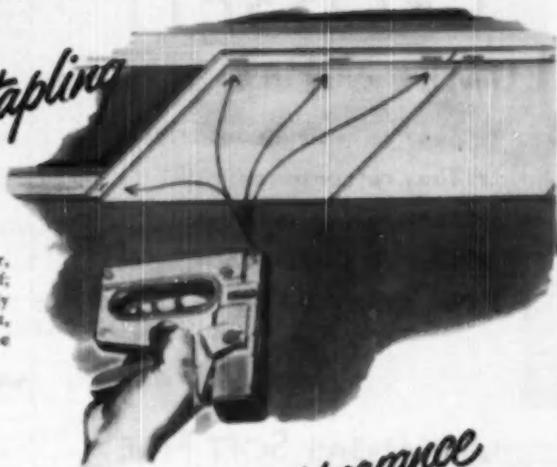


Application is easy

● J-M Decorative Ceiling Panels are easily and quickly applied on new or existing construction. All you need to do is install furring strips at right angles to ceiling joints, and nail or staple the Panels in place. Detailed instructions come with each carton.

You can save time by stapling

● By using a trigger-type automatic stapler, you can cut application time by one-half; and tests show that staples hold as securely as nails. Thanks to the J-M Lightning Joint, all staples or nails are concealed in the finished job.



*Attractive appearance
sells additional jobs*

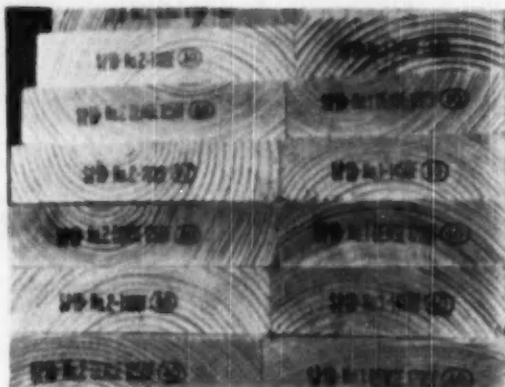
● Panels come pre-decorated in ivory or white, and all have the durable Glazecoat finish that is smoother, harder, and more beautiful than ever. Your customers will be delighted with the new and attractive ceiling. Without fuss or muss, the room is ready for use in a matter of hours. One job sells another—and the potential market is unlimited.

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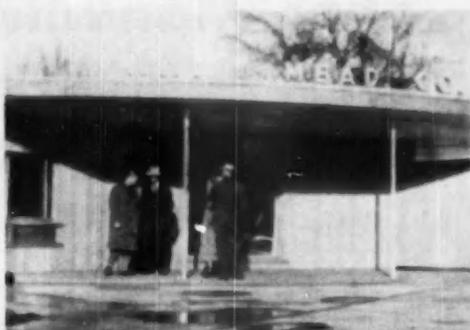


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**A Modern Office
For Used Car Dealers**

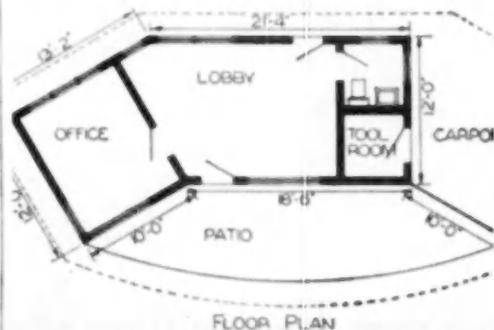


A CANOPY, six feet wide, with flush lights on under side, extends across front

THIS used car-lot office can be readily moved since it is constructed on a single concrete slab separated from the main slab, covering the entire lot, by a waterproof membrane. High gloss paint was used on the exterior—vertical red fir 6-inch siding. The interior walls are finished with large panels of birch veneer. The ceiling is covered with 12-inch x 24-inch insulating board. Two electric heaters with blower fans furnish heat. Floors are covered with asphalt tile. Roscoe Perkins, Oregon builder, constructed this office for May and Mead Co., Eugene, Ore.



PYLON 24 feet high, with steel frame, accentuates design motif



FLOOR PLAN

SEMI-CIRCULAR floor plan of this building is integral part of unique design. Plan is functional, with carport at right conforming to shape and position of office on opposite side of lobby. Broad patio is located for easy access to all parts of building.

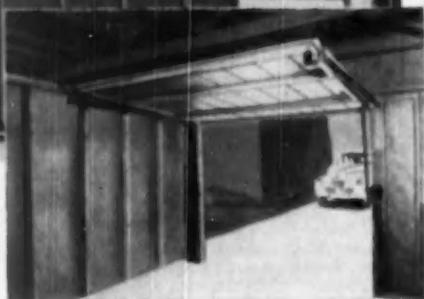
COMPARE GLIDE-AWAY WITH ANY OTHER CONVENTIONAL GARAGE DOOR



SEE FOR YOURSELF WHY GLIDE-AWAY ALL-STEEL, FULL-RECESSING DOORS ARE EASIER TO SELL...EASIER TO INSTALL!

COMPARE . . . and see for yourself why Glide-Away wins popularity immediately with home owners and builders everywhere. Glide-Aways are made of welded Bonderized steel that resists rust and corrosion; double hat channel section construction gives them extreme rigidity; pre-assembled, one-piece jamb strip and weather seal assures foolproof installation; cable-controlled double door lock permits fingertip operation from interior without disturbing outside lock handles. Only 1/2" of headroom is required. These and many other features make Glide-Away outstanding!

See Glide-Away demonstrated in Booth 16 at the National Association of Home Builders' Show, Feb. 19-23, Hotel Stevens, Chicago, Ill.



Note how the Glide-Away space-saver, lamb-type hardware hugs the door jamb. Smooth, effortless gliding action is accomplished without sacrificing interior space. Hardware is made of N-A-X high tensile steel. Arms are welded square construction.

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STEEL DOOR DIVISION

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How to cut costs—that's your big problem today. And PACEMAKER is the answer. This new Burnham oil burning boiler shows the way to substantial savings. It's the *lowest priced* cast-iron boiler on the market... but it's built to Burnham quality standards. And better yet it's factory assembled. That cuts costly installation time practically in half.

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PRE-CAST CONSTRUCTION CHAMBER—Refractory is built into base before you get it.

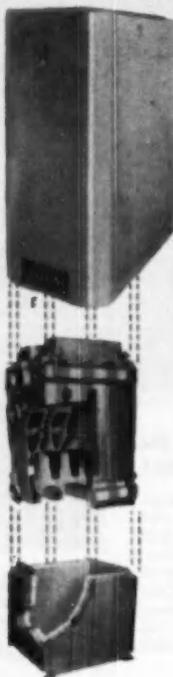
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CONTROLS—All mounted on front of boiler directly above oil-burner, for easy wiring.

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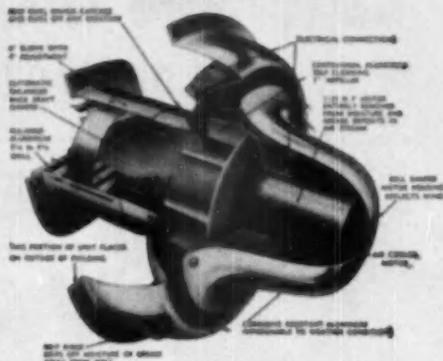
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BY

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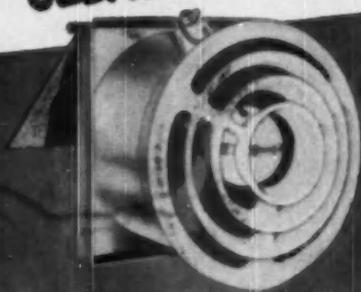
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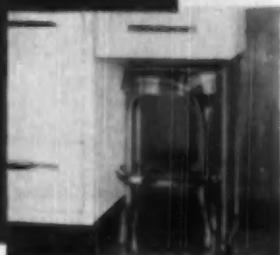
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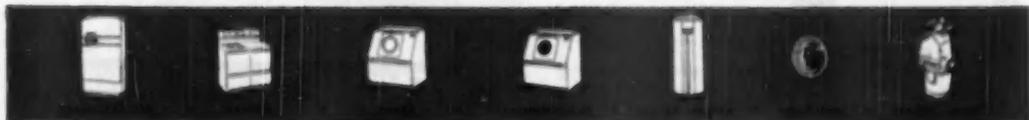
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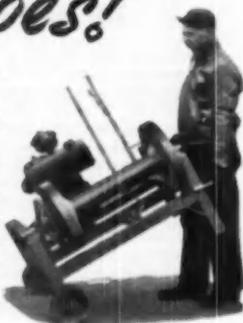
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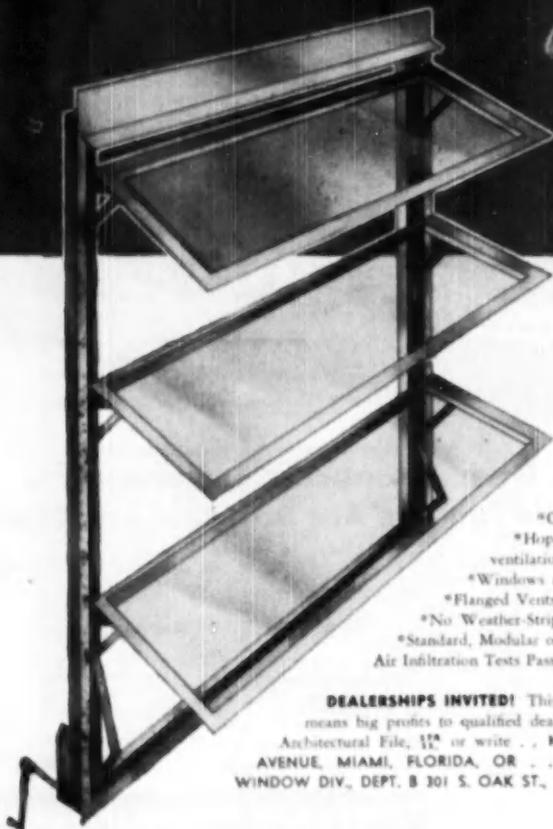


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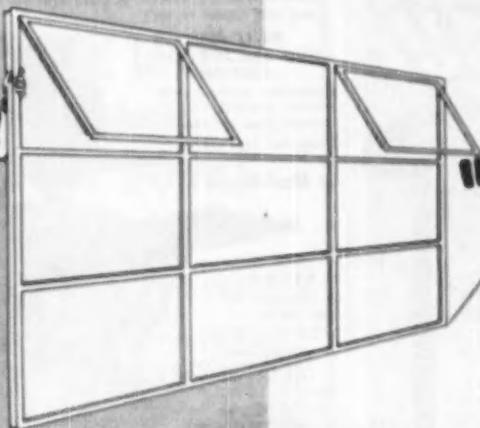
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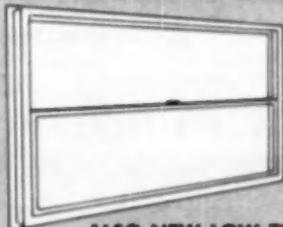
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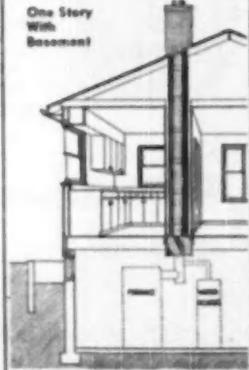
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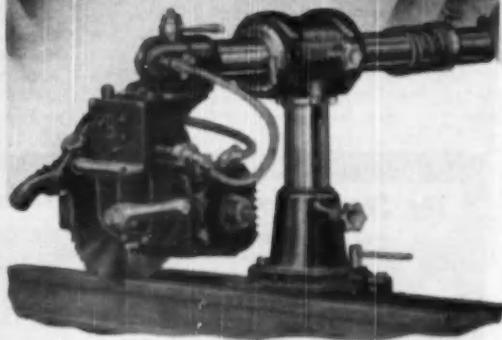
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(Continued from page 91)

now that I could never come close to gaining the effects we have now. Take that flame red on the front picture window in the model home. That's just a little bit of accent color but we've gotten a lot of wonderful comments on it. Now, I might think of putting that color there, but I wouldn't do it. I wouldn't have the nerve. It sounds radical but it looks great. The same thing is true of the whole approach to color design. I've always used asphalt shingles, because of their color as well as for economy, ease of application and other reasons, but I never made it an absolutely strict rule to pick the roof color first and always to let the roof color set the tone for the whole house. However, that really works. Be careful about picking your blended roof color and every other color fits right in.

"One of the biggest advantages of having color schemes planned for an entire development before work begins on a single house is that it permits contractors and subcontractors to do more bulk buying of materials—and, as every builder knows, buying in large quantities means saving money. With a complete color planning job done in advance, exact

amounts of colored materials, such as paint, can be readily figured in advance. It's another example of how detailed planning—with color as with precutting of lumber—costs less than doing it bit by bit as work goes along."

Among the other choices which buyers make, they particularly appreciate selecting their own wallpaper. All the rooms, except the bathroom, are wallpapered with the papers the buyer wants. Raymond manages this by arrangement with several home furnishings stores in the New Milford area. Shopping at any or all of these stores, the buyer chooses his wallpaper. He has an allowance from Raymond of fifty cents a roll. If the paper costs more than this, the buyer pays the difference. If the cost is fifty cents or less, the buyer pays nothing directly. Then Raymond gets the paper from the store and has it applied according to the buyer's instructions.

"Why not do it that way?" Raymond asks. "We're giving them nothing except choice—and that doesn't cost us anything."

For bathroom fixtures, the buyer chooses from among white and four colors—pink, blue, green and yellow.

For the custom-built, leatherette-covered breakfast nook set in the

kitchen, he chooses dark red, royal blue, green, brown, aqua, medium blue, gray, light blue, russet, chartruse, medium red, yellow, pink or ivory.

Each of the Raymond Ranch Homes has 1,044 square feet of usable living space, exclusive of the garage. There is a full-height basement under approximately half of the house. Walls and ceilings are fully insulated. Walls are plastered. Floors, except in the kitchen and bathroom, are oak. Plumbing is copper. Heating systems are forced air.

The minimum lot size is 75 by 100 feet. Some irregularly shaped lots are larger. Raymond is providing paved streets, sidewalks and curbing. All utilities are available.

To conserve space, the hallway connecting the bedrooms and bathroom was kept as small as possible. The hall includes a built-in linen closet.

The bedroom closets are equipped with floor-to-ceiling, sliding, louvered doors. Raymond says these closets are mothproof because "there's never a moth where there's light and air." The builder points out that he learned this from the manufacturer of a moth-destroying device.

Raymond takes particular pride in

(Continued on page 312)



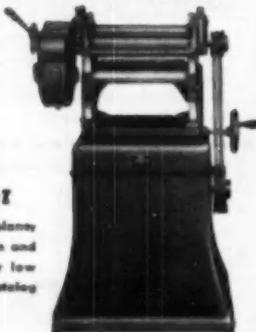
The Sensationally NEW Low-Priced

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.

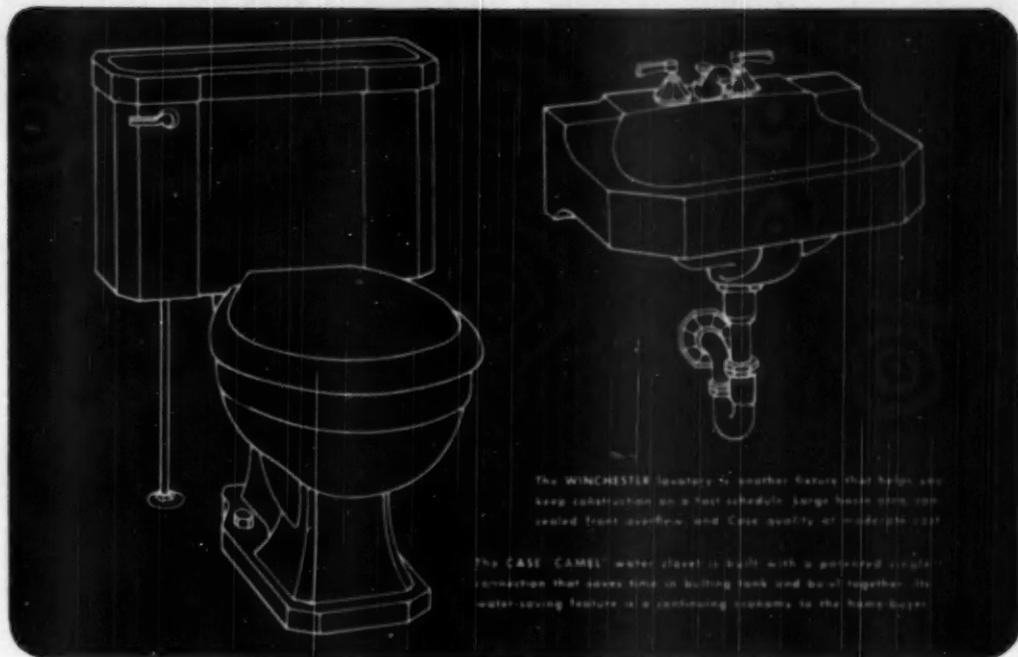
The PARKS Heavy-Duty 12" x 4" Planer

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-LL, 1546 Knowlton St., Cincinnati 23, O.

SELECTED for faster building...



The WINCHESTER lavatory is another fixture that helps you keep construction on a fast schedule. Large basin offers easy sealed front overflow and Case quality of workmanship.

The CASE CAMEL water closet is built with a patented simple connection that saves time in building tank and bowl together. Its water-saving feature is a continuing economy to the home buyer.

INSTALLED for faster selling!

These Case fixtures of genuine vitreous china help to accelerate construction because easy and rapid installation is engineered into their design. Put them in and let them sell for you. Their qualities of style, convenience and easy maintenance are convincing demonstrations of the value that makes houses move fast.

Case quality lavatories and water closets are available in styles to attract buyers for homes of every type and price.

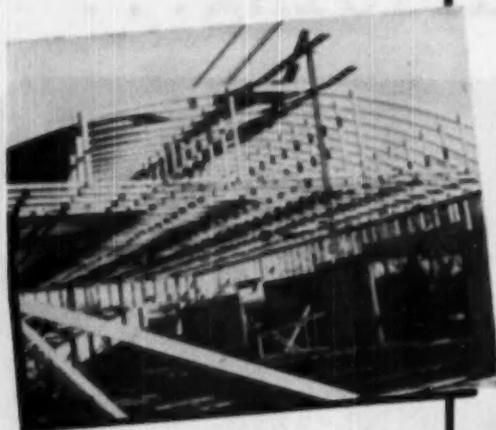
Distributed nationally through wholesalers listed in Classified Telephone Directories. W. A. Case & Son Mfg. Co., Buffalo 3, New York. Founded 1853.

Case

**Vitreous China
Plumbing Fixtures**

MULTIPLY BY 57

...to get the wrong answer!



● Five men assembled, positioned and fastened about 12 of these Rilco Arches per hour ... had all 57 up in less than one working day!

Take a minute to estimate how long it would take six of your best carpenters to cut, fit and assemble an arch like the ones used for the Lyman Lumber Company Warehouse at Wayzata, Minn. Now, multiply that by 57 ... because that's how many you'd need on this job. And, mister, that is a wrong answer ... and it's even wrong-er when you figure the wage rates for six men!

But the right answer didn't take any figuring at all. The contractor specified Rilco Type 70 tied arches with a 44-foot span. They arrived in a freight car fifteen feet from the site. All the carpentry crew did was to assemble them, hoist them into position and bolt 'em down!

Rilco Trusses for practically any sort of commercial building come to the job completely pre-fitted. Every bolt hole is drilled at exactly the right spot. Every piece of connecting hardware is furnished. And Rilco Trusses, glue-laminated under pressure, are stronger than most "on-the-job" trusses your men could build.

Don't run the chance of getting a wrong answer... get Rilco Arches instead.

RILCO

WORKS WONDERS
WITH WOOD

Laminated PRODUCTS, INC.
1667 FIRST NATIONAL BANK BLDG., ST. PAUL 1, MINNESOTA

BESSLER

THE QUALITY DISAPPEARING STAIRWAY



Extensively used throughout the United States

Adds sales appeal and extra value to any home.

The panel is the only part visible when the stairway is closed.

The metal parts are all made of pressed steel.

Each stairway is packed with complete installation instructions.

Our 25 years of experience in the disappearing stairway field are at your service.

Made
In
Seven
Models

Write today for literature and details.

THE BESSLER DISAPPEARING STAIRWAY CO.
1900 E. Market St. Akron 5, Ohio

TO PREVENT THE
POSSIBILITY OF
POISONOUS CARBON
MONOXIDE IN THE
BUILDINGS YOU
BUILD

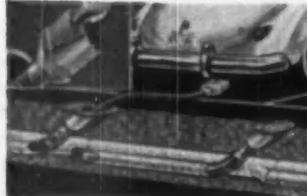
Install "NATIONAL"

The Approved Garage Ventilation Equipment

Standardized engineering simplicity that lends perfectly to new garage buildings—efficiency, appearance, economy of installation and shop working conditions. The method of exhaust gas removal used by "National" is recommended by health departments, insurance companies, architects, building contractors and building codes in most cities and states. 4 different types of systems to choose from. Complete packaged units—ready to install. Nothing else to buy—low in cost.

Illustration shows sectional view of "National" under-floor disappearing tube installation. Note that tube disappears without entering main trunk line—for balanced flow of air through main duct and perfect exhaust gas removal.

Write for complete literature and costs.



THERE ARE MORE "NATIONAL" SYSTEMS IN OPERATION IN THE UNITED STATES AND CANADA THAN ALL OTHER TYPES OF SIMILAR SYSTEMS COMBINED. LITERATURE AND FULL INFORMATION ON REQUEST.

THE NATIONAL SYSTEM OF GARAGE VENTILATION
World's Largest Manufacturer of Exclusive Garage Ventilation Equipment
Dep. 7A, 316-320 N. CHURCH STREET, DECATUR, ILLINOIS

You'll make a *greater profit*
with a **GILSON Mixer**



3½ ST

Home builders standard
half bag sifter for con-
crete or mortar.

THERE are two good reasons why Gilson mixers make more money for you. Reason No. 1 is low initial cost — the best price on the market. Reason No. 2 is quality construction — features like semi-steel drum base, chain drive, Timken roller bearings that add up to more years of productive service. No wonder thousands are in use today, everywhere — and there are over 27 models from which to choose. Write today for an informative, well illustrated bulletin and the name of your Gilson distributor.

GILSON BROTHERS CO. Frederic, Wisconsin
Manufacturers of Contractor's Equipment Since 1910

**Trouble Free
STARLINE
CANNON BALL
DOOR
HANGERS**



For Warehouses • Hangars
Barns • Other Farm Buildings

**EASIEST TO STOCK -- EASIEST
TO SELL -- EASIEST TO PUT UP**
(No Brackets Needed)

Starline Cannon-Ball Door Hangers roll like a ball in a self-cleaning track. Long roller bearings cannot pile up or wear unevenly. Factory lubrication protects from rust and insures fingertip operation. They have an oven bearing on both sides of the slot, no matter how the building may warp or sag . . . or no matter how the track is sprung or tilted. Storm Apron prevents storms from blowing in over top of door. Weather strip prevents rain, sleet and snow from washing down behind the door from above.

SEND FOR DETAILS ON CONTRACTOR'S PREMIUMS FOR STARLINE'S COMPLETE LINE OF BARN EQUIPMENT



STARLINE, INC., Harvard, Illinois 633
Please send me complete details on contractor's premiums.

Name _____

Address _____

City _____ State _____

American Builder, February 1950.

Window Dressing that helps sell homes?



**LUMITE* rustproof screens
on every window increase buyer
acceptance and satisfaction!**

Long-lasting LUMITE screens are a practical, useful "extra." They're woven of durable saran plastic . . . guaranteed never to rust . . . never to stain sills or side-walls. They're unaffected by salt-air, smoke, rain or snow . . . never need protective painting! They mean years of care-free screen protection for your owners. Check the low cost of providing your homes with LUMITE screening!

Sold by hardware, lumber, building supply
wholesalers and screen manufacturers!

FACTS FOR ARCHITECTS AND BUILDERS

Resists Acid, Alkalies and Solvents — Essentially none.

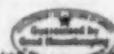
Non-inflammable — But softens at about 240° F.

Tensile Strength, Ultimate (of Element) — Up to 40,000 lbs. per square inch.

Impact Strength — Greater than conventional screening.

Installation — Cut with ordinary scissors. Fold cut edges under ¼". Tack or staple the screening smoothly and evenly every ¼". Because of inherent characteristics, LUMITE will gradually draw itself into a snug, firm fit.

*Registered
Trade-mark



woven saran screening

For free samples and information write Dept. B-1

LUMITE DIVISION, CHICOPEE MANUFACTURING CORP.,
OF GEORGIA, 47 WORTH STREET, NEW YORK 19, N. Y.

**CLOSE CORNERS
ARE NO PROBLEM
NOW!**

**Bostitch T5 Tackers
DRIVE STAPLES IN WITHIN 1/16" OF INSIDE CORNERS**

When a Bostitch T5 Tacker sticks its tiny nose into your business, you save time, money and work. It simplifies back-breaking ceiling jobs and close, difficult corner work. You just place the tacker, squeeze the handle and the staple shoots all the way in. No missed shots, no marred surfaces, no bruised fingers! One hand free for faster, more accurate positioning. Try Bostitch T5 Tackers on your next painting, insulating or metal lath job. You'll notice a big cost-cutting difference.

**Quick, easy way to
attach cornerite**

Attaching cornerite becomes an easy one-handed job with Bostitch H2 Self-Feeding Hammer. The just-right-length staples fasten the metal lath securely to the plaster base without going through to the studs. This floating "tie-down" guards against cracked plaster due to settling of the structure.



Application time cut in half

More and more roofers are shifting to Bostitch H4 Self-Feeding Hammer. No wonder! A flick of the wrist drives home a sturdy 3/4" staple like a two-pointed nail. No smashed fingers, no infected mouths. Long, one-arm reach cuts down staging needs. Cuts hours off new roofing jobs.



INVESTIGATE BOSTITCH — For installing insulation, attaching tie-down paper or roofing, metal lath, etc., you'll find that Bostitch fastens it better and faster at lower cost. Fill in coupon below for more facts.

BOSTITCH, 504 Mechanic Street, Westerly, Rhode Island

I'm interested in more information about time-saving, cost-cutting Bostitch machines for applying:

- Insulation Paneling Building Paper
 Roofing Metal Lath and Cornerite

List other applications:

Name _____ Title _____
Firm _____
Address _____
City _____ Zone _____ State _____

BOSTITCH
AND FASTER
testates it better, with wire

ALL TYPES OF MACHINES
FOR APPLYING STAPLES
ALL TYPES OF STAPLES
APPLIED BY MACHINES

Trademark "Bostitch" Registered U. S. Pat. Off. and Foreign Countries.

**Easier to
BUY
Easier to
SELL
Easier to
INSTALL**



ALDRICH
Compact **BOILER-BURNER UNITS**

Here are compact, complete, packaged boiler-burner units in sizes for home and industry, for low-pressure steam and hot water heating and/or hot water supply.

They're economical to buy and use; easy to install in minimum space with a minimum of skilled labor. Six sizes in the Aldrich Series "B" Heat-Pak are rated at 118,000 to 808,000 BTU an hour... 6 sizes for hot water supply with ranges of 125 to 850 GPH at 100 degrees rise.

All Aldrich boilers are available for either oil or gas firing with burners readily interchangeable.

If you buy, sell, specify, or install boiler-burners, write for information about Aldrich.

The Popular New



ALDRICH *Bantam*

FOR MODERN LOW-COST HOMES

This outstanding boiler-burner unit, designed especially for the modern 4 to 5 room home, stands only 45" high, occupies 20" x 33" of floor space. Rated at 100,000 BTU, it can be adapted to steam, hot water, or radiant heating systems, and provides domestic hot water in excess of FHA requirements. Models also available for hot water supply only.

**ALDRICH
OIL BURNERS**



Skillfully engineered, precision-built for economy and trouble-free service.

No radio interference from motors and transformers. Burners flange or base mounted. Model CX: .75 to 2 GPH. Model SAX (shown) with interchangeable draft tubes and air cones: .75 to 4.50 GPH. Model BX: 4 to 8.50 GPH. Model JU Heavy Duty: 7 to 19 GPH.

**ALDRICH
COMPANY**

A subsidiary of Ingersoll Corporation, Inc.

111 E. Williams Street
Wyoming, Ill.



Choose

the exact instrument
you need from these three
LOW PRICE MODELS

1

Finest 12" Dumpy Level available anywhere — gives you more features you want, more accuracy, more durability at less money than any other instrument. It has dust and dirt-free internal focusing and has coated optics for clearer, distortion-free, sharper images.



Model
No. 8014
Price \$130.00
complete with
tripod

2

Here's the standard convertible level for the country for the past 30 years! No other instrument has the recognition and acceptance as given to the David White Carnegie Improved Convertible level. Now it's available to you with complete dust and dirt-free internal focusing and coated optics for clearer, sharper, distortion-free images.



Model
No. 7096
Price \$150.00
complete with
tripod

3

The David White "Universal" level-transit is the most practical and complete builder's instrument on the market. Now available in a new improved model—complete with internal focusing, coated optics—guarded vertical arc—in fact every possible feature to assure you lifetime durability and extreme accuracy.



Model
No. 3000
Price \$165.00
complete with
tripod

CHOOSE the exact instrument you need from these three.

Compare their outstanding features, their precise, yet rugged construction, their accuracy and their price with all others. Then you'll see why we say you'll buy "right" when you buy a David White. For complete information on any one or all three of these instruments, consult our nearest dealer — or write direct to David White Co., 311 W. Court Street, Milwaukee 3, Wisconsin.



We offer complete, prompt repair service on all makes of instruments — levels, transits, theodolites, etc.



..for my **Bilco** **CELLADOOR**

Yes, thousands of satisfied home owners are saying just that to their builders. Why? Because only with a Bilco Celladoor can they get complete convenience, pleasure and full use of their basement.

Bilco CELLADOORS HELP YOU TOO, MR. BUILDER

- 1. THEY SAVE YOU MONEY.** By giving your workmen direct access to basement area during construction, Celladoor installation saves countless steps, and pay for themselves in costly man hours saved. Hung in 10 minutes or less, Bilco Celladoors cost no more than old fashioned wooden hatchways.
- 2. THEY SELL HOUSES.** You're miles ahead of competition with Bilco Celladoors on your houses. No other feature is so quickly recognized as a plus value by a prospective home owner. Your customers appreciate the fact that copper-steel Celladoors mean no future replacement expense.
- 3. THEY'RE A BUNCH TO INSTALL.** Just one easy operation when you're ready to pour capping or sidewalls and steps. Doors come complete with installation bolts, knocked down and compactly packaged for ease of storage and handling.

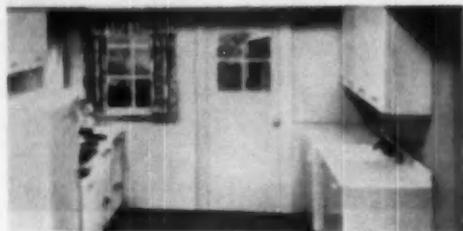
Leading building supply dealers carry Bilco Celladoors in stock. If yours doesn't, write us directly for complete details, specifications and installation data. And do your dealer a favor. Send us his name so that we can tell him how dealers, builders and home owners all profit through Bilco Celladoors.



THE BILCO COMPANY
185 Mallock Avenue, New Haven 6, Conn.

Make your projects pay off these successful

Cash in on the sales success of these building projects! Equip your homes with the timesaving, worksaving, moneysaving advantages of the General Electric Complete Kitchen Package. Your houses will sell faster and you'll gain more prestige—as these delighted builders will tell you!!!



"Everything for approximately \$65.00 a month — includes taxes, interest, and principal." That's what attracted and sold prospects who saw this Oman & Sons home equipped with a complete General Electric Kitchen-Laundry!

← "Sold 125 houses
in 10 days!"

Arthur H. Oman

• Mr. Arthur H. Oman of ARTHUR OMAN and SONS, Brockton, Massachusetts, says:

"We sold all the houses in ten days, due to the right combination of houses and appliances. Tens of thousands went through the Model Home . . . were favorably impressed with the complete line of General Electric appliances."

"We sold 54
the first week end!" →

J. J. Carey

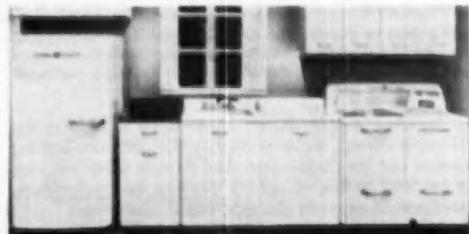
• Mr. J. J. Carey of HUTCHINSON and CAREY, Denver, Colorado, says:

"We offered three bedroom houses for \$9850. The first week end we sold 54 and they have been moving steadily ever since.

"We feel that General Electric equipment contributed in a great measure to this successful operation."



General Electric range, refrigerator, automatic washer and steel cabinets are included in the \$9850 Hutchinson and Carey homes. Today any home buyer can afford a G-E Kitchen-Laundry.



"A low-cost luxury home with fully equipped General Electric Kitchen worthy of a \$30,000 home!" That's how Kensington advertised and sold 250 \$9900 to \$10,990 houses in 10 days!

← "Sold 250 houses
in 10 days!"

Nathan Brisker

• Nathan Brisker, President of KENSINGTON ESTATES, INC., Brentwood, Maryland, says:

"The phenomenal success of our project, in our opinion, is due to a soundly built house well planned, good financing, and the complete General Electric Kitchen. The public deserves better living in the lower-priced home!"

fast... just as builders do!!



**"Sold our 67 houses
the first Sunday!"** →

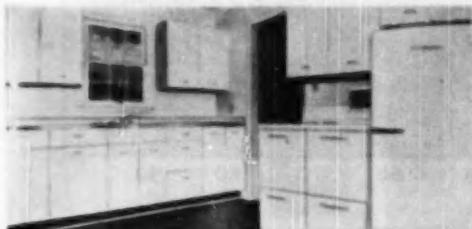
E. A. Ballin

• Mr. E. A. Ballin of Hewlett Harbor Construction, Inc., East Rockaway, L. I., N. Y., says:

"Our model house was featured in national magazines and thousands visited it. The item which caused the greatest comment was the G-E Kitchen. We sold the entire development—67 houses—the first Sunday!"



In the Ballin Houses there are complete General Electric Kitchens! Today it's possible for you to offer General Electric Kitchens at a price any homeowner can afford!



The buyer of this Spurr Home saves on operation and maintenance of efficient General Electric appliances... often enough to cover the slight increase in monthly payments.

← **"Sold not only the 40 houses,
but 37 additional!"**

Mark S. Waggener

• Mr. Mark S. Waggener, President of SPURR HOMES, INC., Denver, Colorado, says:

"We held open house for 3 days... sold not only the 40 houses under construction, but 37 additional on the basis of many factors in the house, particularly the General Electric Kitchen!"

**"Sold 44 houses
from 1 sample in 1 day!"** →

Ralph Talbot

• Mr. Ralph Talbot, President of the Talbot Building Co., Baltimore, Maryland, says:

"We produced a sample home here with complete General Electric Kitchen... advertised it one Sunday. At the close of business we sold 44 houses to be built at Loxbeare." (A week later a total of 71 houses were sold!)



Included in each of the 160 Talbot homes are the following: General Electric dishwasher and sink, 52-gallon electric water heater, electric range, Disposal[®] and cabinets!



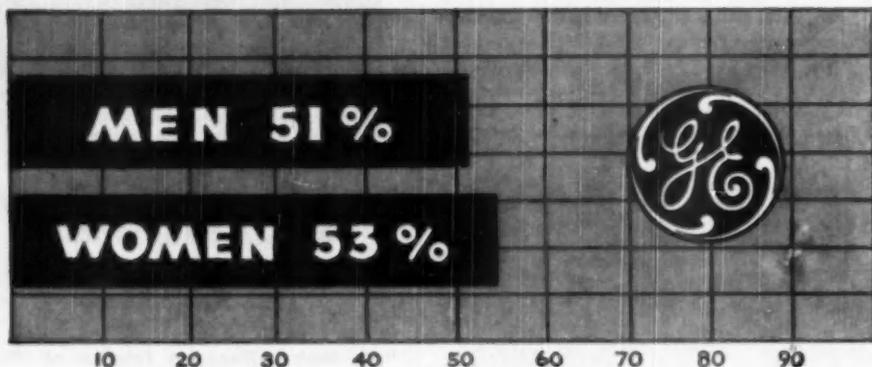
To help you sell
more houses...

faster →

General Electric offers you merchandising

1

**High national acceptance for
General Electric equipment means
faster turnover for your homes!**



People prefer General Electric appliances to all other brand names combined!



**Join in . . . make
the #1 winner
work for you!**

National surveys show that your prospects prefer General Electric appliances over all other brand names!

You owe it to yourself to take advantage of this high consumer preference . . . a preference that helps pre-sell your houses.

a complete program!!

2

**Include electrical living
for as little as
\$4.80 a month!**

You offer your prospects the added advantage of complete electrical living when you include the G-E Kitchen Package in the long-term realty mortgage.

Everyone who can afford a home can afford an extra few dollars a month for a General Electric Kitchen! Further, the economical operation, low maintenance and long life of General Electric appliances may offset the slight increase in monthly payments!

3

**Tested builder
advertising and
promotion plans!**

Your General Electric distributor is ready to offer you a complete merchandising program, supported by tested builder advertising and promotional material . . . all designed to help you sell your homes faster.

Make the most of these tested plans that have helped so many builders throughout the country. Contact the General Electric distributor in your area.

4

**Architectural Consulting
Service for you!**

Visit the General Electric Home Bureau in Booths No. 74 and 75, and sit down with us at our roundtable. There will be General Electric planning experts there to talk with you about your 1950 projects.

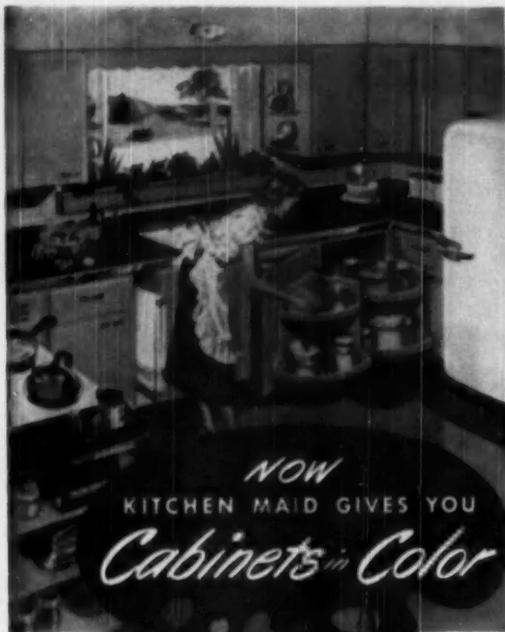
Our Architectural Consulting Service, we believe, can be of great assistance to you in designing and improving kitchens and layouts for your houses!

You've all to gain by bringing your house plans to Chicago. However, if you can't be at the Convention, contact your G-E distributor, or just address a note to us and we'll see that you receive all the facts you need. Home Bureau, General Electric Company, Bridgeport 2, Connecticut.



You can put your confidence in—

GENERAL  **ELECTRIC**



4 BEAUTIFUL SHADES PLUS WHITE

Now it's color in cabinets—these Kitchen Maid Cabinets proved and approved so many years by architects and builders. Color that gives them more buyer appeal—gives you more latitude in planning and selection. Four beautiful shades plus white will spearhead the Kitchen Maid parade of features in 1950. Plan now to choose and use these outstanding cabinets at every opportunity. Capitalize upon the durability, the flexibility, the warmth and friendliness of wood. Write for valuable planning booklet sent free to architects and builders.

COMPARE THESE FEATURES AND YOU'LL AGREE KITCHEN MAID IS TOPS

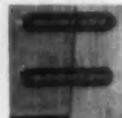
- Modern Flo-Line Styling. No dust catching edges
- Solid Hardwood Furniture Construction plus new compositions
- Aluminum Drawers—quiet, easy to operate, won't chip or rust
- Four-coated Resinized Doors with quiet, cushioned action
- Permanent Wooden Shelves—safe for fine china and glassware
- Convenience Features and Accessories for every purpose
- Wide Choice of Standard and Special Units including sinks and sink fronts.
- Countertops built complete in any length, of stainless steel, plastic or linoleum in wide choice of colors
- Four beautiful standard cabinet colors and white—Miss Green, Desert Sand, Serene Blue and Twilight Grey
- Valuable Planning Help from experienced dealers.



Aluminum Drawers



Exclusive Flo-Line Cabinet Styling



Hardwood Furniture Construction

Look for this sign in your dealer's window. It signifies his skill as a member of the nation's oldest kitchen planning organization.



THE KITCHEN MAID CORP.,
562 Broadway St., Andrews, Ind.
Please send me booklet containing 10
practical kitchens with details, 1 set on
 Architect, Builder, Dealer.

Name _____
Address _____



... and open or close garage doors from within the car.

The new, improved CRANE "300" AUTOMATIC DOOR OPENER with Magic Circle Remote Control brings home owners much added comfort and safety.

Engineered to perfection, highly efficient, designed especially for the 1-car garage . . . and amazingly low priced.

The CRANE "300" is simple to install, plugs into any light socket, no wiring necessary; and it operates very economically.

Write TODAY for Bulletin AB 250

H. W. CRANE CO. 1443 W. LAKE STREET
CHICAGO 7, ILLINOIS

Specializing in industrial and residential door operators for 25 years

Ualco

WORLD'S *Lowest* PRICED ALUMINUM CASEMENT WINDOWS!

Write for complete facts on the finest selling ALUMINUM CASEMENT WINDOWS IN THE WORLD

UNION ALUMINUM COMPANY
INC.
SHEFFIELD, ALABAMA

World's Largest Manufacturer of Aluminum Casement Windows

HOW TO INSULATE RADIANT HEAT FLOORS

with
ZONOLITE
Vermiculite Concrete



With Zonolite Concrete Aggregate your radiant heat jobs will assure rapid heating, better temperature control, and important fuel savings. Heat loss into the ground can be greatly reduced if you follow these simple steps:

On a level well-drained base prepare a 5 or 6-inch fill of coarse stone or gravel, tamped smooth and firm. On top of this, lay a moisture barrier of one or more saturated felts.

Pour 4 inches of Zonolite concrete and allow it to set. Zonolite Aggregate replaces sand, in proportions of 1½ bags of Zonolite Aggregate to 1 bag of portland cement, providing up to 16 times the insulating value of ordinary concrete.

Next the radiant heat pipes or ducts are placed, and ordinary concrete poured to a thickness of at least 1" over the top of the pipes. A 2 x 8 sill insulates against lateral heat loss and serves as a carpet nailer.

Write us for full details on any concrete or plastering job where insulation is important. Send for valuable booklet, "ZONOLITE VERMICULITE INSULATION AND LIGHTWEIGHT AGGREGATES."

ZONOLITE COMPANY

Dept. AB-20, 135 S. La Salle St., Chicago 3, Ill.

ON BUILDING JOBS OF ANY SIZE

You're ahead 4 ways.



WITH **BIL-JAX**
TUBULAR STEEL
SCAFFOLDING

1. Absolute Safety for workers
2. Less time to erect, dismantle
3. Increased job efficiency
4. Adaptable to any job!

Why put up with the time and money waste of old-fashioned scaffolding. Let Bil-Jax Quick Action Scaffolding increase safety, efficiency and profits on every off-the-ground job. Available on a sale or rental basis.

Other Bil-Jax products: Scaffold Brackets, Maintenance Trestles with and without locking casters, Horizontal and Lean-to Ladders. Catalog and full information on request. Write . . .



BIL-JAX INC.

ARCHBOLD
OHIO

American Builder, February 1950.

CHROMEDGE
has the
MOULDINGS
YOU WANT
for
WALLBOARD
INSTALLATION

WALL TRIMS

CAP TRIMS

COVE TRIMS

BATHTUB COVES

OUTSIDE CORNERS

INSIDE CORNERS

**and Chromedge
does a better job!**

Chromedge gives you a wide choice of trims for easier, quicker handling of any panel-type wall covering installation. They feature deep lip recesses that anchor materials firmly in place. Made of sturdy aluminum alloy, they're noted for *dimensional stability*. They can't rust, chip, crack, craze, or fade.

Matched sets are another Chromedge feature. They provide uniform beauty from floor to ceiling — coves, corners, wainscot cap, and wall paneling. One popular matched series is shown in the circles, above; another in the row of sketches across the bottom (1/2 actual size.) Sets are available in sizes for all gauges of wall material up to 1/2 inch. Other Chromedge shapes for wallboard are shown in half-size sketches at right. For any moulding need on floor and wall covering jobs, insist on Chromedge!

The B & T Metals Co.
Columbus 16, Ohio



Reinforced construction assures maximum strength.



AllianceWare distinctive modern design complements any bathroom styling.



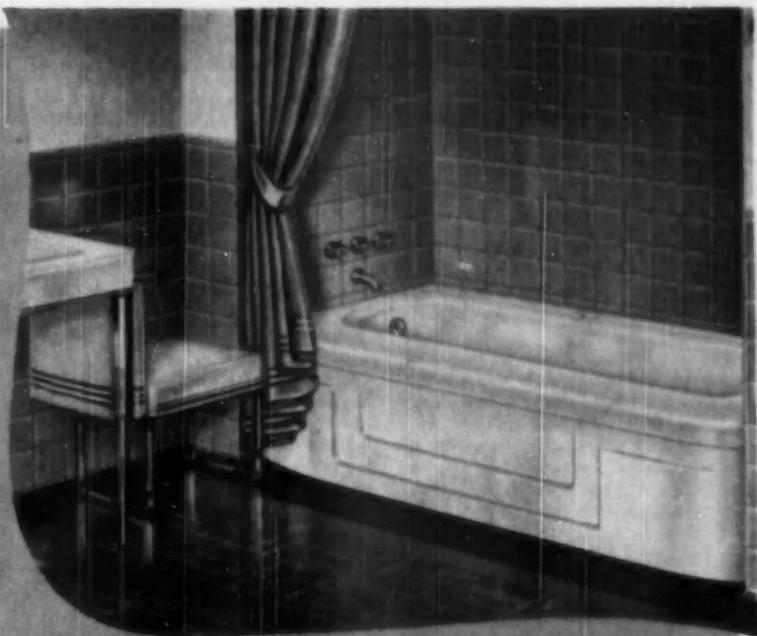
Gleaming, stainproof porcelain enamel surface cleans easily.



An integral wall guard prevents water seepage.

Heavy gauge sheet steel used in AllianceWare formed metal tubs.

Sheet steel usually used in formed metal tubs in accordance with Federal specifications.



*These AllianceWare Quality Features
Maintain the beauty of*
AllianceWare Bathtubs

THE distinctive features of AllianceWare design and construction appeal to builders and home owners alike because they quickly realize AllianceWare is the sanitary-ware that stays young.

Made of formed metal, porcelain enameled with a stain-proof, lustrous finish, AllianceWare possesses first of all complete rigidity coupled with exceptional strength. The steel used in AllianceWare tubs is a much heavier gauge than the minimum thickness allowed by Federal specifications for formed metal tubs.

A one-inch integral wall guard flange forms a ledge which permits the running of wall tile or plaster to the edge of the tub, thus providing a permanent water-tight seal of tub to walls.

AllianceWare tubs are readily installed by merely nailing

ALLIANCEWARE, INC., Alliance, Ohio
Bathtubs • Lavatories • Sinks

two vertical supports of the correct height to the studs with a horizontal member spiked between the verticals. According to F.H.A. requirements, this is the only method of installation which eliminates the effect of costly shrinkage in lumber. Anchor lugs mounted to the tub hold the tub permanently in position against the wall.

You can select AllianceWare with the assurance of complete satisfaction for both yourself and your owners. Your plumbing contractor can give you full details of AllianceWare. Or write us for catalog sheets.

AllianceWare
MADE IN U.S.A.



You'll find many a job for this

WELDWOOD LUMBER STAVED CORE DOOR!

There are many applications
... Residential, Commercial, Institutional
... for this new Flush Veneer Door

Many of your customers are looking for just exactly the door you can offer them with this newest addition to the Weldwood line.

The solid lumber core provides a satisfyingly "solid" feel. It also means you can hang the door from either side, and it's especially adaptable to custom-cut lights and louvres. Hardware goes in quickly, easily, permanently.

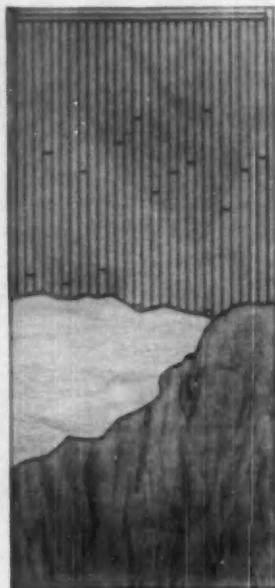
All bonding is done with 100% waterproof phenolic glue, so that you can safely recommend this door for either exterior or interior use.

These new all hardwood Weldwood Doors are furnished with faces of

richly figured hardwood veneers in all the popular species. Made in a wide variety of standard sizes; thicknesses: 1 1/4" and 1 3/4" from stock, also available in 2" and 2 1/4".

In short, the Weldwood Lumber Staved Core Door gives you an opportunity to offer customers a quality product that combines convenience and easy working with versatile, durable, trouble-free beauty.

Your lumber dealer or nearest Weldwood branch or distributing unit has complete information on this new Weldwood product. Get complete details today.



UNITED STATES PLYWOOD CORPORATION

55 West 44th Street, New York 18, N. Y.

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

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SOLID SECTION EXTRUDED
ALUMINUM AWNING WINDOWS

*New
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An outstanding development in awning type windows. An entirely new conception which lends itself to the new design in architecture. Combinations of picture windows and perfectly ventilated units can be made using our standard mullions, bays and corner construction.

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AMERICA'S OLDEST CASEMENT WINDOW MANUFACTURER

CROFT STEEL PRODUCTS, INC.
1-4 MARKET STREET - JAMESTOWN, N. Y.

WAGNER ELECTRIC
Automatic DOORMAN

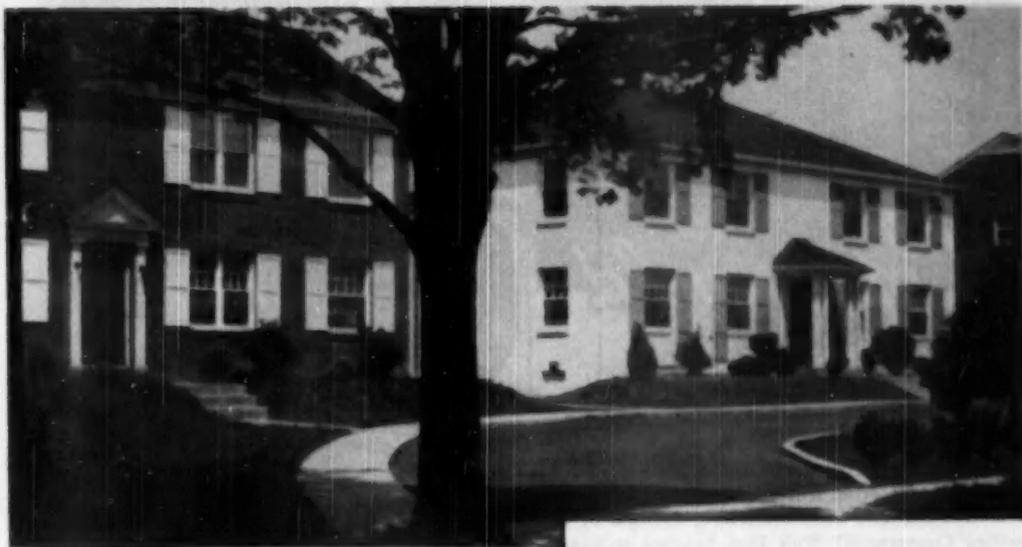
Easily Installed
ON ANY TYPE OF
OVERHEAD DOOR

Here's a low-cost electric push-button garage door operating unit that has proved itself by compiling a record of more than 100,000 opening and closing operations without requiring service. It can be furnished to operate your present doors by (1)—Radio control button in car (2)—Magnetic control button in car or (3)—Key control button on driveway. Write for Bulletin AB-50—and, if you are interested in new doors, ask for information on "Glideover" and "Rollkey."

Dealer franchises for several excellent territories are still available.

WAGNER MANUFACTURING CO.
CEDAR FALLS, IOWA

Look-Ahead builder E. G. Taylor features BENDIX WASHERS IN NEW APARTMENT DEVELOPMENTS



"Better living" bonus is standard practice with this foremost Richmond contractor

Scores of units completed and occupied, and more a-building . . . with a Bendix in each kitchen. That's because Mr. Taylor knows that the female half of the househunting family has a big influence on the decision.

To her, the idea of less work on washday has plenty of appeal. To her the name "Bendix" means more than any other. To the builder that's a selling point that keeps homes rentable or saleable in bad times as well as boom times.

That's why more and more builders are including the Bendix automatic Washer and Bendix automatic Dryer in their plans . . . and in their packaged mortgages. To the buyer, the extra cost is only a few pennies a month. To the builder it's extra dollars in profit.

Write for details of our special builder discount plan. Bendix Home Appliances, Inc., South Bend 24, Indiana.

Come see us at the Builders' Show!

Our Welcome mat will be out in front of Booth 15, Exhibition Hall, Stevens Hotel, February 19 through 23. Men who "talk your language" will be on deck to answer your questions and show you the world's favorite line of automatic home laundry equipment.

BENDIX
automatic
Home Laundry
WASHER-DRYER-IRONER

NEW BENDIX AUTOMATIC WASHER

No space-stealing set-tubs needed when you install the only washer in the world that can soap, soak, wash, rinse and damp-dry—all by itself. Reversible door available on all models. The Bendix with its smooth, flat top provides an extra working surface . . . same height as kitchen counters.

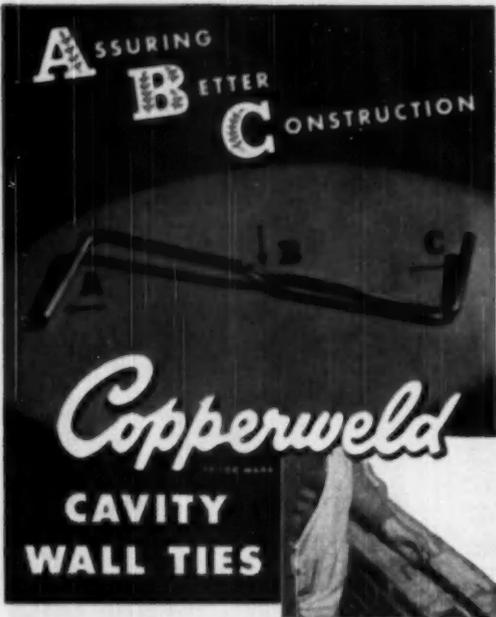


NEW BENDIX AUTOMATIC DRYER

A "Box of Sunshine." No clotheslines clutter up yards when your houses are equipped with Bendix automatic Dryers. Compact, space-saving. Fluff-dries a whole washer load of clothes in minutes. Reversible doors on all models to make your space planning simpler. Exclusive outside venting. Gas or electric models available.



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You can build extra security into your cavity wall structures and give them everlasting strength by installing Copperweld® Wall Ties. Leading architects and builders rely on Copperweld Ties to provide a permanent bond for the entire life of the wall. And here's why:

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Time-tested Copperweld Nails and Staples will help you do a better construction job. They are strong, easy to drive, and non-rusting.



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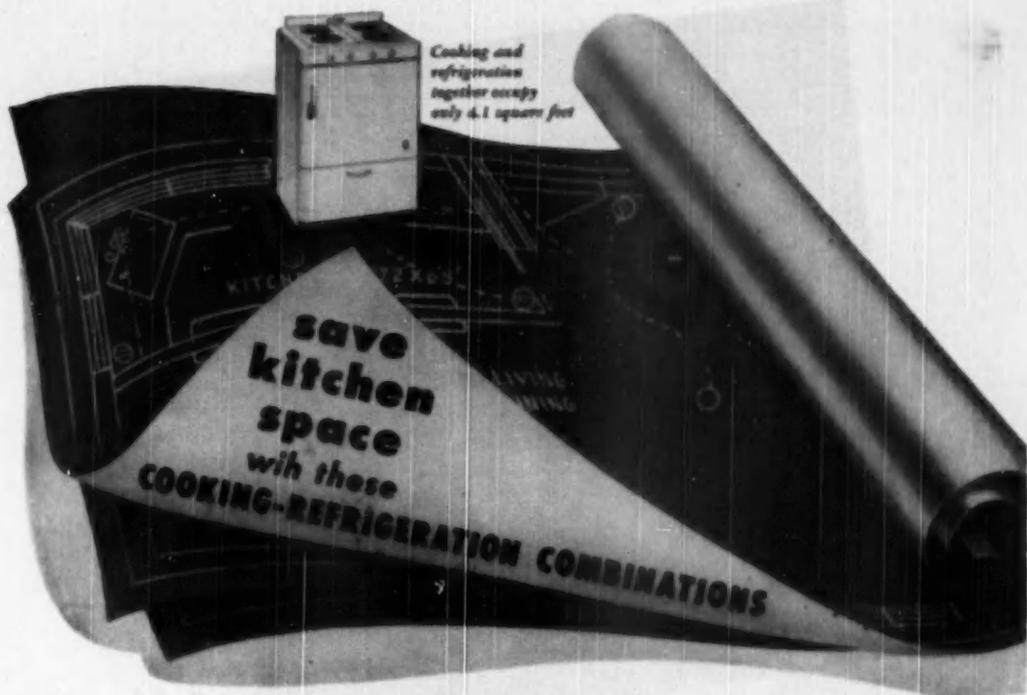
Can't Buy a Better Many-Purpose Saw because only Guild offers so many quality features at the price . . . *Cuts Faster*, there's speed and power in that 2000 rpm motor. *Handles Easier* because it's extra light, superbly balanced. *Performs More Smoothly*, thanks to helical gear drive. *Perfectly Accurate* with cutting line always visible. *Extra Safe*; guarded, balanced for safe starting, cutting and finishing. *More Durable*, thanks to Balanced operation plus sturdy, polished aluminum housing. *Adjusts Easily* from 1/8" to full 2" cut. *Blows Sawdust* off cutting line—away from motor. *Does Everything*; saws, rips, ploughs, dados, cross cuts, grooves—works on lumber, plywood, plastic, composition, asbestos board, tile, even light metal. Numerous attachments available to increase its application. You'll be satisfied—plus!

The Guild A-6 has proved thousands of times that it's mighty useful to have around the job. Convince yourself—watch it perform at your Porter-Cable dealer's today.

IF YOU
WANT ECONOMY
IN A QUALITY 8" SAW
It's the GUILD A-6 for you! Cuts Full 2" Slightly larger and heavier than the GUILD A-5—has all its outstanding features. Built for a big day's work, yet costs ONLY **\$87.00**

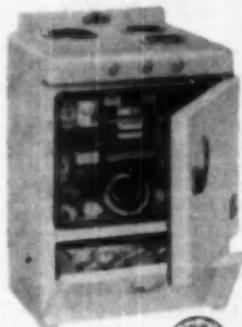
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3022 N. Salina St., Syracuse, N. Y.
Manufacturers of SPEEDMATIC and GUILD Electric Tools

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Cooking and refrigeration together occupy only 4.1 square feet

save kitchen space with these COOKING-REFRIGERATION COMBINATIONS



◆ ALL-ELECTRIC GENERAL CHEF

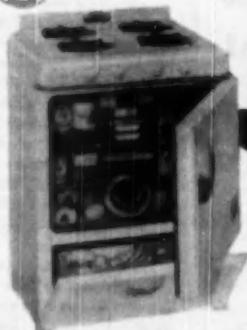
Four cubic foot General refrigerator with vegetable bin, and three-burner electric cooking combination. This is the 220-volt model, with one 2150-watt and two 1000-watt burners. Also available in 115-volt model, with two 850-watt burners, to plug into any household line—one plug for range and refrigerator both. All burners are solid closed T-K units. The top removes for easy cleaning on both models. Dimensions: 39" height; 27-1/2" width; 23" depth over handle.



◆ GAS-ELECTRIC GENERAL CHEF

Four cubic foot General refrigerator with vegetable bin, and four-burner gas cooking combination. The full-size Lincoln Brass burners use natural, manufactured, or L-P gases, and are easily removable for cleaning. Dimensions: 39" height to top of grates; 27-1/2" width; 23" depth over handle.

Also available—the four cubic foot General refrigerator with Formica table top, or without table top for built-in installations.



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General Chef combinations make kitchens practicable in small space... at low cost.

New flexibility for the architect and builder is provided by General Chef cooking-refrigeration combinations—for motels, hotels, apartments, resorts, cabins, small homes, guest houses, bars, offices, hospitals, etc.

General Chef quality and performance are first class. Thousands have been produced—all well-made, attractive units with triple chrome-plated hardware, hermetically sealed Tecumseh compressors, 7-station temperature control, and high-quality burners.

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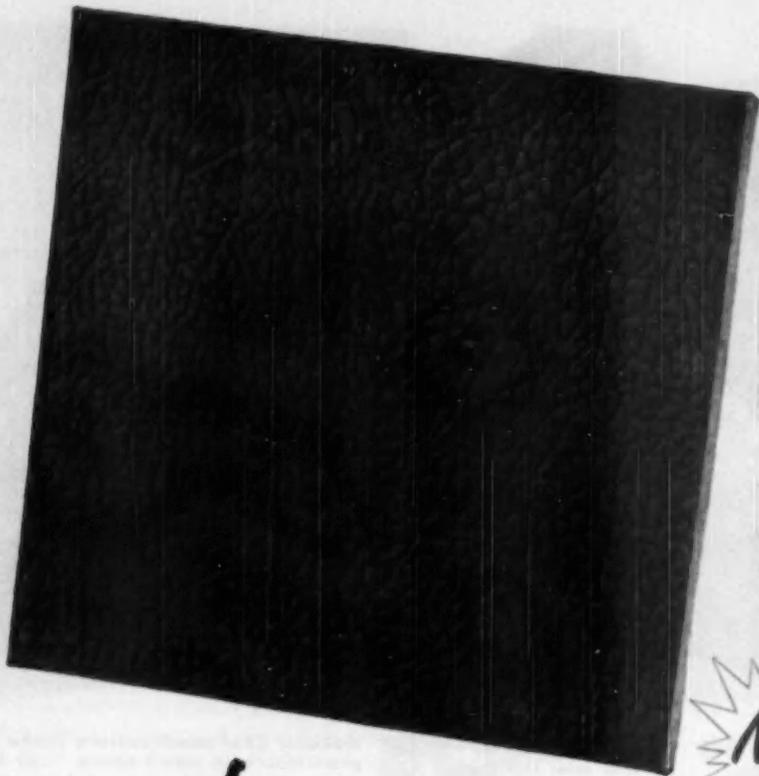
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**... FLINTKOTE'S Sensational
New Developments
in Interior Insulation
Board Products!**

LETH-R-GRAIN INSULATION BOARD

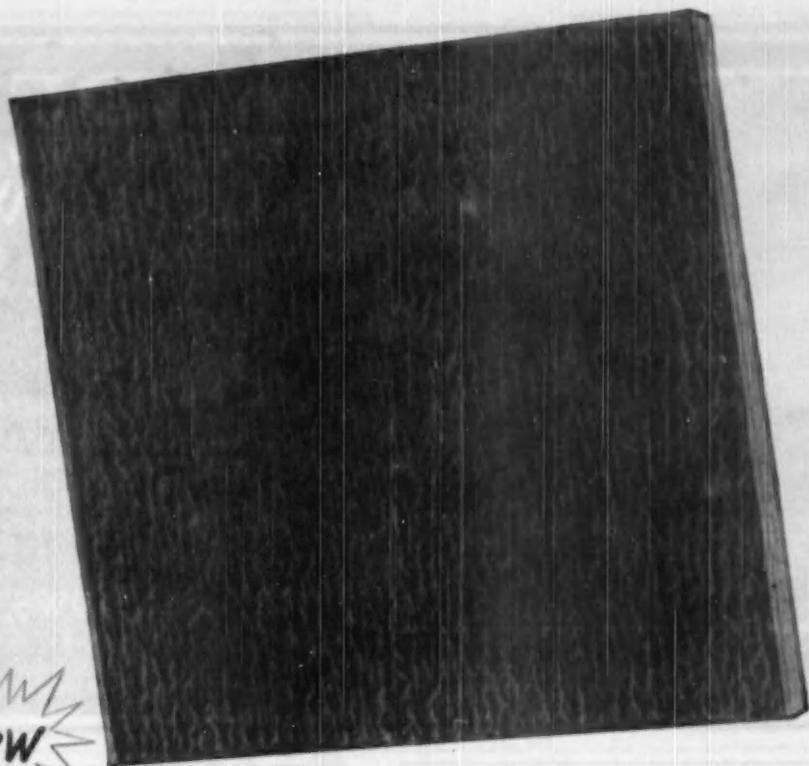
adds even more versatility to this popular, low-priced product for interior finishes.

Get ready for increased business . . . as soon as you begin showing customers this spectacular new Flintkote development.

With a rich, simulated leather finish that closely resembles fine split cowhide . . . *Leth-R-Grain* Insulation Board is just the thing to spark up interiors of dens and recreation rooms with eye-catching beauty at purse-pleasing prices.

Recommend it for wainscoting, decorative panels or overall wall treatments. The big panels, 8 foot long in 3' and 4' widths, go up quickly and easily . . . and do the three-for-one job of providing structural walls, insulation and striking decorative beauty *all at once!*

The new *Leth-R-Grain* Insulation Board is available in morocco red, antique brown and jade green . . . and has a rugged, washable, scuff-resistant finish that combines years of serviceability with that luxury look that customers love. And you'll find commercial properties excellent prospects, too. So don't fail to take advantage of the business opportunities that are yours with this versatile new Flintkote Product.



TEXTURED DESIGN

in two striking colors brings new decorative beauty to Insulation Board Plank

And here's the newest thing in an old favorite. You know how well customers received Flintkote Insulation Plank when it was introduced. Well, show them this new *Textured Design* . . . and then watch the result.

We call these two new numbers *Gray-tex* and *Green-tex*. This new finish gives this popular material an arresting beauty for use in a variety of interiors.

Like all Flintkote Insulation Board Plank, these two new products have blind nailing joints for fast, neat installation AND the *Flame Resistant Surface Finish* conforms to U. S. Dept. of Commerce Commercial Standard CS42-49 Class F.

Don't fail to tell customers about both these sure-to-be-popular numbers right away.

THE FLINTKOTE COMPANY

Building Materials Division

30 Rockefeller Plaza, New York 20, N. Y.



AND ALL THE OTHER FLINTKOTE INTERIOR INSULATION BOARD PRODUCTS HAVE EXCITING NEW IMPROVEMENTS!

FLINTKOTE BUILDING BOARD is an economical insulating and structural board 4' wide, available in a number of lengths. The factory-finished White surface can be painted without priming, or installed without further treatment. Flame resistant surface finish conforms to U. S. Dept. of Commerce Commercial Standard CS42-49 Class F.



FLINTKOTE INSULATION TILE BOARD comes in 4 sizes and 4 colors (White, Green, Gray and Decoblend . . . a pleasing blend of coral tones). Blind nailing joint insures a neat installation. Flame resistant surface finish conforms to U. S. Dept. of Commerce Commercial Standard CS42-49 Class F.

In addition to the same colors as the Tile (above), **FLINTKOTE INSULATION BOARD PLANK** is available in the new *Gray-tex* and *Green-tex* finishes. Widths are 8", 10", 12" and 16"; lengths: 8', 10' and 12'. Flame resistant surface finish conforms to U. S. Dept. of Commerce Commercial Standard CS42-49 Class F.



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



Boville Apartments, Charlotte, N. C.
 Charles W. Cowan, Charlotte, N. C., Architect
 Walbridge Construction Co., Charlotte, N. C., Contractor

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1818 The Name Guarantees 1950

In this southern apartment building, the broad eaves shelter the windows from the noon-day sun, and the wide-opening HOPE'S STEEL CASEMENTS give full ventilation.

In a northerly building, the perfect operation and fit of HOPE'S WINDOWS would be valued for their weather-tight protection from chill winds and, if both north and south, owners report that maintenance costs are the lowest ever experienced. Builders, too, find that Hope's Windows are not expensive to install as compared to other construction of comparable quality.

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 Jamestown, N. Y.

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The ANTIMITE System has been nationally recognized as a Leader for over 20 years in scientific termite control . . . scientifically engineered and planned to aid our operators in developing the highest degree of efficiency and permanency in termite control.



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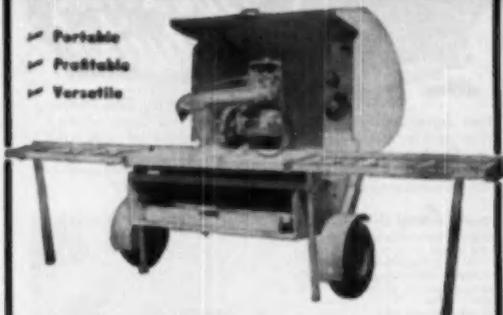
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Model A-8"
2 5/8" cut
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\$65.00 WT. 10 LB.

the 4" Saw with "Big Saw" Features

Cuts 2-1/2" square ed. 2" dressed lumber at 45°; 1 1/2" built-in depth and bevel adjustments. Write for Cat. S-12

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Powerful Fred W. Wappat Electric Hand Saws are low in cost—high on quality—they're the product of over a quarter century's experience in making fine electric hand saws. Fred W. Wappat-designed gears, turbine-cooled motors, simple, single-point lubrication increase efficiency and minimize off-the-job repair time and general maintenance. Hundreds of thousands of feet can be cut before a Fred W. Wappat Saw needs attention other than lubrication and blade sharpening.

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ALL CUTS
IN SMALL HOME
CONSTRUCTION**

\$73⁹⁵

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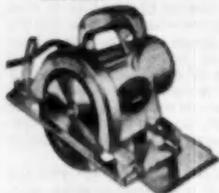
8 1/2" Mall Saw
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3-inch Capacity—8 1/2-inch Blade

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(12 lbs) Saw. For Right or Left Cutting.**

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Makes straight cuts up to 3 inches in rough or dressed lumber, 11/16" minimum with depth adjustment, 45-degree bevel cuts to 1-11/16 inches. Aluminum and magnesium alloy housing makes it light and easy to handle. Available with right or left blade with 115V or 230V AC-DC motor. \$66.45 without Bevel Shoe Attachment.



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6" Blade—3" Capacity

Cuts everything from wood to steel. Makes straight cuts up to 2" in dressed lumber, and 45-degree bevel cuts from 1/2" to 1-11/16". Available without bevel-shoe at \$54.95. Six other models with 2 1/4" to 4 1/2" cutting capacities.

\$61⁹⁵ Complete with Bevel-Depth Attachment

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NO SPECIAL TOOLS NEEDED . . .

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WOLMANIZED Pressure-Treated Lumber stops costly damage due to wood decay and termites. It gives your customers better construction and prevents trouble that neither you nor building owners want to experience.

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3. Where wood is in contact with concrete or masonry.
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6. Where wood is exposed to moisture in humidified buildings or farm buildings.

FREE BOOKLET WORTH READING

Get all the facts on how **WOLMANIZED Pressure-Treated Lumber** stops wood decay and termites. Write today for this valuable booklet.



AMERICAN LUMBER & TREATING COMPANY

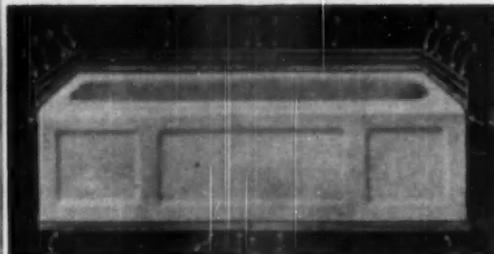


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Branch Offices: Baltimore, Boston, Jacksonville, Fla., Los Angeles, New York, Philadelphia, Portland, Ore., San Francisco, Washington, D.C.

For **SURE**
protection
build with...

**WOLMANIZED
PRESSURE
TREATED LUMBER**

For Trouble-Free } Specify
Bath Tub Edges } **LUCKE**
Leak-Proof Bath-Tub Hangers
No Leaks • No Cracks • No Repair Expenses



The Modern Way to Prevent Leaks

There is no excuse for cracks or leaks or repair expense in good building. Leading architects specify **LUCKE** to overcome this problem. Lucke Hangers build tubs into wall.

**Sold by Leading Plumbing
Supply Houses**

MANUFACTURED BY

W. B. LUCKE, Inc.
Wilmette, Illinois



**USE Bostwick... SAVE ON LABOR
AND COST OF MATERIALS**

Bostwick Metal Casings are made of warp-proof metal, perfectly shaped for easy application around doors, windows and other wall openings.

Use of Bostwick Casing saves you time and money by eliminating tedious and unnecessary steps like sanding and wood finishing, and they are readily formed to perfect mitres.

Bostwick Casings result in a better finished job that's smoother, more spacious looking and much easier to sell.

Best of all, Bostwick Casings actually cost less than wood—both in construction time and in cost of materials!

So don't delay. Consult your dealer today for complete information on Bostwick's entire line of easier handling metal lath and metal lath accessories.

THE BOSTWICK STEEL LATH COMPANY
103 HEATON AVENUE - NILES, OHIO

STA-TITE

STEEL BRACES

for bridging wood joists



- Save Time
- Save Work
- Save Nails
- Save Space
- Save "Spalls"
- Save "Fizes"

Sta-Tite Steel Braces are made of half hardened channel steel with flanged ends that hold firmly so floors can't buckle or bulge. Nailing, sawing, nail starting not needed. Flange ends firmly wedged and permanently locked in position by a hammer blow. One small nail through each end guarantees firmness. Braces can't split or warp. Nested 100 in a box 2 1/2" x 2 1/2" x 18".

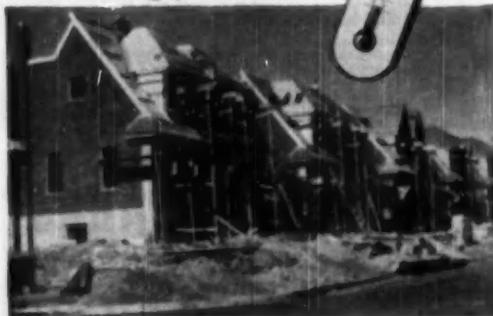
STA-TITE STEEL BRACES
give high efficiency at low cost.

WRITE TODAY FOR COMPLETE INFORMATION
Some jobber territory still open

BELOIT STEEL INDUSTRIES, Inc.
307 City Hall Bldg. Rockford, Ill.

WATERPROOF IN FREEZING WEATHER!

with **CRYSTAL**
Silicone Water Repellent
Non-Freezing!
Lastingly Effective!



Construction jobs are speeded up in cold weather with **CRYSTAL** exterior waterproofing... applied quickly by brush or spray on dry brick, stone, concrete block — AT TEMPERATURES BELOW FREEZING!

Only **CRYSTAL** has all these advantages:
ONE COAT. Crystal penetrates, waterproofs entire depth. One gallon covers 100 to 200 sq. ft. of surface.
TRANSPARENT. Invisible after application. Will not change surface color, texture.
STAINPROOF. Makes surface self-cleaning.

WURDACK CHEMICAL COMPANY
Send for detailed information and literature.
4956 Tyler Ave. St. Louis 9, Mo.

American Builder, February 1950.

Save with Individual* VIKON METAL TILES

buy only the number you need!



Here is the metal tile that is easily installed on existing walls or ceilings without expensive alterations or disconnection of fixtures. On new construction **VIKON TILE** permits economically erected walls or wall boards to be used as a satisfactory base. Can be applied over any smooth surface. Recommend *Individual Vikon Metal Tiles*, your guarantee of client satisfaction.

- 27 fade-resistant decorator colors and stainless steel
- will not warp, crack or craze
- resists heat and household chemicals
- fire-resistant, waterproof, seals out insects
- particularly adaptable to remodeling

*"The Original Individual Metal Tile" Established 1926.
See our catalog in Sweet's Files

STEEL · ALUMINUM · STAINLESS STEEL

VIKON TILE

BEAUTY · ECONOMY DURABILITY

MAIL THIS COUPON TODAY

VIKON TILE CORPORATION

Dept. 18

Washington, New Jersey

Please send me, without obligation or cost, a full-color descriptive brochure and sample of Vikon Metal Tile. I am interested in tile for:

My home As a dealer As a contractor

NAME _____ Please Print

ADDRESS _____

CITY _____ STATE _____

Mass Production

(Continued from page 286)

the kitchen plan. He calls attention to location of kitchen at one end of the house. This is intended to give the housewife easy supervision of almost the whole interior while she does her kitchen work. Through one archway, she can see into the living room and part of the bedroom hallway. Through the other hallway (if her house is the dining room model), she can see into the dining room, into the rest of the hallway and into one bedroom. From the front kitchen window, she can see the porch and the front yard. From the rear window, she can see into the back yard. Through the window in the outside kitchen door, she can see part of the yard at one side.

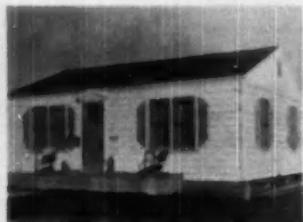
Standard equipment in each kitchen is a range, cabinet sink, cabinets, washer and the breakfast nook set. Size of the kitchen is ample for informal meals.

Architect for the Raymond Ranch Homes development is Fred J. Roughgarden of Hawthorne.

Interior decoration of the model house was done by Mrs. Raymond, who also is doing other interior decoration for which the builder is responsible.

\$2,400 Two-Bedroom Houses, Owner-Finished, Produced by Fort Worth Builders

A Fort Worth, Texas, building firm, O'Neal and Foster Construction Co., is producing two-bedroom homes at the rate of two a day and selling them for as low as \$2,400, with no down payment and \$30.33 monthly



ONE of O'Neal and Foster's low-cost homes

payments. The firm has produced more than 400 homes in the last two years in Fort Worth and is now operating in Dallas and San Antonio, where two additional houses are being produced daily in both cities.

O'Neal and Foster make two types of homes, both having two bedrooms. The smaller one is 20x28 feet and the larger 24x28. Each has living room, kitchen with ample dining area, bath,

hall, two large closets and a small one. Each contains wiring, partitions, unfinished dry wall application, exterior doors, windows, interior trim around doors, and base. Each is a finished house except for plumbing, interior textoning and painting, floor sanding and finishing and interior doors. The firm believes that many owners prefer to make the finishing touches themselves.

The smaller house, if placed on a lot and foundation furnished by the purchaser, is sold with no down payment and \$30.33 monthly payments. The larger, under the same circumstances, requires \$200 down and the same monthly payments. If the firm furnishes the foundations there are down payments of \$150 on the smaller and \$350 on the larger.

A technique developed in the production of the homes was begun by M. L. O'Neal two years ago with a capital investment of \$500 in saws, a stock barn, and forms; and these are still the principal components of the company's operations. The forms, built by O'Neal himself, speed production of wall sections and so simplify construction that most of the homes are currently built by student labor from a nearby theological seminary.

The construction crew consists of

(Continued on page 314)

INCREASE PRODUCTION 100%
with **KEN Corner LEVEL**

In 15 minutes you can determine the finishing savings in time and effort in erecting corners, window openings, and doors, in all buildings. The **NEW KEN CORNER LEVEL**, is the greatest improvement since the original invention of the level. It will double output production during any 15 minute period of working time. Multiply that saving by the number of 15 minute periods in a working day that you will know what kind of production increase you can expect with more accuracy and less effort. With the **NEW CORNER LEVEL**, the masons working at the same speed will build two to six times faster than the old fashioned, wood level. Besides, it provides and squares TWO sides of a corner at ONE time. The "G" bars form 2" (2") and the each corner brick in steps, protruding and leveling all sides, corners, and top, with a single movement.

The bubble is adjustable for providing a better, incline, or sloping surface. Level sizes 18", 24", 30", and 48". **NEW CORNER LEVELS** are being successfully used by builders, masons, and carpenters, everywhere. **SEND Post Card for information.**

SINGER-KENNEDY CORP.
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Manufacturers of Automatic Process Temperature Control and Flow Control
FACTORY SEPARATORS Refrigeration & Refrigeration 2, Radio 18, Rhythm 2,
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Refrigeration 2, Reheat City 2, Refrigeration 3, New York 1,
Refrigeration 22, Rhythm 22 and Rhythm 23, Rhythm 24, Rhythm 25,
Type A. DISTRIBUTORS IN PRINCIPAL CITIES

CONTRACTORS! BUILDERS! Save time, labor and expensive lumber

Steel wall forms for garages and basements. Steel forms for steps, sidewalks, footings, garage slabs and driveways.

POLLMAN ADJUSTABLE STEEL FORMS

Speed-up concrete work... easy to set up and remove. Time saved means more profit to you.

Pollman Adjustable Steel Forms are uniform made. Replacement parts are available.

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AGENTS WANTED

Pat. Pend.

END ICE HAZARDS

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• SIDEWALKS
• STEPS with

SOLVAY
Calcium Chloride

SOLVAY SALES DIVISION
ALLIED CHEMICAL & ICE CORPORATION
43 Rector Street, New York 6, N.Y.

Red Devil FLOOR CONDITIONING EQUIPMENT



RED DEVIL TOOLS, IRVINGTON 11, N. J., U. S. A.

READYBUILT FIREPLACES

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Large variety of attractive models in brick, stone, wood, etc., available.

Furnished complete—ready to be installed in hour's time of handy man—shipped anywhere.

DEALERS, BUILDERS and HOMEOWNERS write for catalog and full information.

THE READYBUILT PRODUCTS CO.

1705-23 McHenry St.

Baltimore 23, Md.

PRECISION folding stairway

- No springs—Actuated by counterweights
- Easy to operate
- Safety treads on steps
- Insulated door panel
- Requires no attic space
- Shipped in one package

Write for full information
PRECISION PARTS CORP.
Nashville 7, Tennessee



earns **100 a MONTH** in spare time

with FOLEY LAWN MOWER SHARPENER

"I did nearly \$100 worth of business in May, sharpening and repairing lawn mowers in my spare time"—says R. D. Faurett. You can sharpen 3 or 4 hand mowers an hour at \$1.50 to \$3.00 with the Foley or 1 or 2 power mowers an hour at \$5.00 to \$8.00 each.

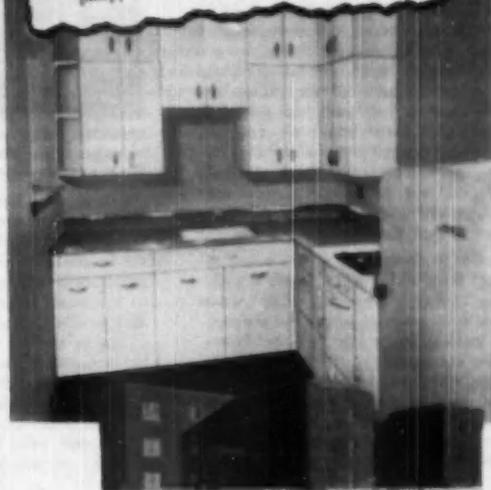
FREE BOOK—"HOW TO SHARPEN POWER MOWERS" shows just how to sharpen any make of power lawn mower with the Foley. Low prices, only \$98.50 to \$139.50—easy payments. Write today—no salesman will call.



FOLEY MFG. CO., 191-4 Foley Bldg., Minneapolis 10, Minn.
Send FREE BOOK "How to Sharpen Power Mowers" and FREE PLAN on each power sharpener listed.
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ADDRESS _____

FOR YOUR INSPECTION

SLAVENS APARTMENTS, 806 State Street, Bettendorf, Iowa. Cost approximately \$225,000. 28 modern apartments, each with 3 or 4 rooms and separate gas heating systems. All apartments completely Kitchen-Kraft equipped by Onthank-Davidson Company, distributors.



"ONE OF THE SMARTEST THINGS I DID WAS TO INSTALL Kitchen-Kraft KITCHENS,"



... says J. B. SLAVENS, Owner, Slavens Apartments, Bettendorf, Iowa

"You've got to build apartments and homes to please the average woman," says J. B. Slavens, owner of beautiful Slavens Apartments, "And it's amazing how the women who have seen my new apartments remark about the attractive, compact kitchens. Yes, I emphatically recommend Kitchen-Kraft complete kitchens as a wise investment for any builder."

The Slavens Apartment building is just one of hundreds of apartments and homes where Kitchen-Kraft Kitchens are winning admiration from prospective owners and renters. Kitchen-Kraft fits perfectly into your building plans—no matter what style or size kitchen you have in mind. All sizes of cabinets, fillers of standard specifications from stock to fit any space. Kitchen-Kraft Kitchens make homes easier to sell... apartments easier to rent.

PROMPT DELIVERY OF ALL KITCHEN-KRAFT EQUIPMENT ASSURED. SEND TODAY FOR PRICES AND LITERATURE.



MIDWEST MFG. COMPANY • GALESBURG, ILLINOIS

\$2,400 Two-Bedroom

(Continued from page 312)

10 men, all common labor. Studs, ceiling and floor joists and all dimensional timber are cut according to a standardized plan. Studs and plates are placed on a form constructed of 8x8 timber, and nailed. Entire wall sections are built at once, siding added, and the gables finished simultaneously. In the meantime, another man cuts rafters and ceiling joists and another builds windows. All the component parts of the house are made at the mill and transported to the building site where a foundation has been poured and is ready for raising the wall sections. Floor joists and girders are laid, wall sections put up, rafters and gables added, windows put in and the roof decked.

Up to this point, it has taken 10 men three and one-half hours to make the various components of the house and four hours to set up the skeleton, a total of seven and one-half hours. The completion of the house is sub-contracted to one man, who applies composition shingle roofing, lays the oak flooring, puts up interior walls and trim. Normally, two men can finish three houses in one week.

Artist's Drawings Help Builders Sell Homes

A young Los Angeles artist, R. C. Qvale, has built a business for himself by helping builders sell houses with the use of his art work.



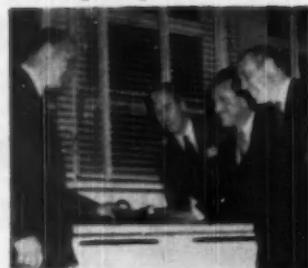
THIS DRAWING, originally in full color, is typical of the work produced by R. C. Qvale and Associates for nation's builders

Qvale, who had been making delineations for architects and larger builders, decided that this was a service almost any builder could use. His solicitations among small builders led to the establishment of a mail order business that is now nationwide.

The procedure works like this: A builder sends Qvale a floor plan and an elevation of the house of which he wants a drawing. The artist, in turn, furnishes an 11 x 18-inch drawing in full color viewing the house from its advantageous angle. Lawn,

trees, trim, shutters, and other features are accentuated in the art work. The cost of such a drawing is approximately \$50. Glossy prints of it for advertising purposes are provided at 65 cents each.

Murray Corp. Host to Press



EXECUTIVES of the Murray Corporation of America and the Home Appliance Division, Scranton, Pa., were recently hosts at a trade press preview of new home appliances being introduced by the firm in 1950. Discussing features of the new range are (from left), R. C. Gould, Murray Corp. president; H. C. Berensrud, Home Appliance Division sales manager; C. H. Menap, vice president in charge of sales, Murray Corp.; and T. W. Hardy, Murray vice president in charge of the Home Appliance Division.

Two Great MONEY MAKERS For BUILDERS

Here are two mixers every builder should own. They speed up work, save many man hours a year and are known everywhere for their quality and rugged construction. See your CMC distributor or write for catalogs.

WONDER "SUPER SIX" HOE TYPE MIXER

Mixes cement, mortar, portland plaster with hair or fibre. Has replaceable long lasting drum liners—for extra years of service. Triple mixing hoops. Sealed Timken bearings on both ho and jack shafts.



WONDER 3 1/2 TILTER. The original and still the greatest value to small job mixers. Quality construction featuring Figure "B" mixing action. Quickly spotted anywhere, as shown in above photo. You know this mixer and can buy it with assurance it is the best in the field.



10 Day Trial No Deposit

WARREN-KNIGHT TRANSIT-LEVEL

This instrument is made for the Builder or Contractor who wants that his work turns out efficiently with up to date equipment.

This instrument gives you what you have always wanted in a low priced instrument—high power telescope—level lens—compass—glass level—precision circle—vertical arc with clamp and tangent—large sight—steady construction—U.S. Standard—Thorough low maintenance costs.

SAVE TIME in making layouts and in giving lines and grades.

SAVE MONEY by reducing labor costs.

For complete details write for new Bulletin F-59 Liberal allowance for your old instrument



Transit-Level No. 38-b
\$260
Made also without compass and arc at lower prices.

WARREN-KNIGHT CO.
136 N. 12th St. PHILADELPHIA 7, PA.

SAVE A DAY or more on every staircase you build



(left) Measuring Tread

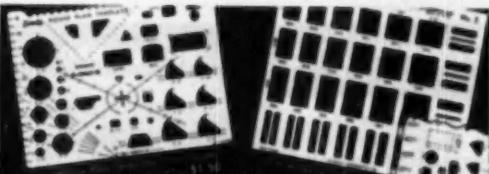
ELIASON STAIR GAUGE
In 30 seconds gives you GOYS correct length and angle of stair treads, risers, about stairs, etc., ready to mark boards. Each end marks and locks at any LENGTH OR ANGLE. Adjustable from 20" up. Saves a day or more, increases your profits \$25 or MORE on each staircase. Fully guaranteed. Only \$12.50 each with order, or C.O.D. plus postage.

Order today, or send for circular.



Marking Board

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TIMELY DRAFTING TEMPLATES
Speed and simplify plan drawing. Transparent—precise cut-outs. Make uniform symbols with a flick of a pencil. Worth cost on one job. Thousands in daily use. See your dealer or order direct postpaid.

TIMELY PRODUCTS, Box 2945, Columbus 9, Ohio

E-Z MARK BUTT GAUGE

HANG THAT DOOR THE PROFESSIONAL WAY!

Makes a clean-cut deeply etched profile. Remove chips. Repeat on jamb. Hang door!



Comes in 1", 1 1/2" and 2" (Std.) sizes. If dealer can't supply, send only \$1.00 with order, pay postman balance plus postage C.O.D. in Canada, 25c higher per order. No C.O.D. State sizes wanted.

Comes with Leatherette Case

E-Z MARK TOOLS
P. O. Box 8377 Los Angeles 16, Calif.
Dept. A



Eliminate COSTLY ACCIDENT HAZARDS with Strong, Safe Equipment

GOLD MEDAL LADDERS
In ladders, it's practical economy to buy the best... and that means the safest, the strongest and the best suited to service and maintenance work. GOLD MEDAL Ladders satisfy all conditions. In design, construction and safety, GOLD MEDAL Ladders are uneexcelled... for nearly three-quarters of a century, they have met the rigorous test of on-the-job service. Inspected by Underwriters' Laboratories. Use GOLD MEDAL Ladders to cut your accident rate and save costly lost time.

EXTENSION LADDERS—Top strength in design and construction. Equipped with steel rung brackets, automatic safety locks, rope and pulley. In sizes from 20' to 52'

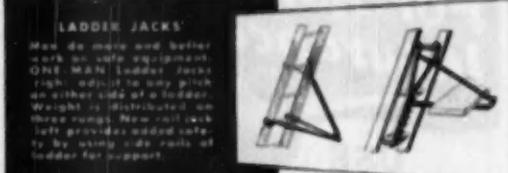


UNDERWRITER STOP LADDERS—Heavy duty, rung back, knee braces and knee rests. Safety spreader. Sizes: 4' to 20'.



SINGLE LADDERS—Equipped with rung braces and toe rests. Lightest, most compact of its type. Standard sizes from 8' to 24'.

SAFETY PLATFORM LADDER—Ideal for general work with wide platform, rung back, steps knee-braced and knee-rested. Sizes: 7' to 16' height of platform.



LADDER JACKS
Make do more and better work on safe equipment. ONE MAN Ladder Jacks rich, adjust to any width on either side of a ladder. Weight is distributed on three rungs. New rail jack lift provides added safety by using side rails of ladder for support.



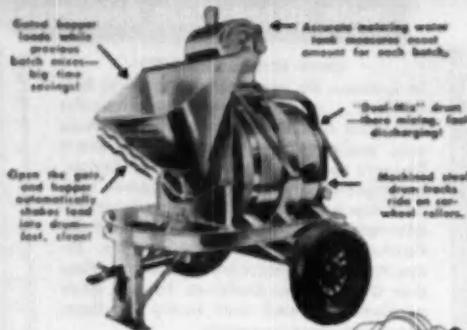
SCAFFOLD BRACKETS
Simplify installation of safe working platforms for many types of sidewalk work. Trouble savers are light, easy to handle and extra strong. Made of rail steel in most attached, studing and bolt-attached types. They do not bend!

Manufacturers of:
GOLD MEDAL Tubular Steel Scaffolding—Safety Scaffolding Machines—Junior Safety Springing Scaffolds—Steel Sidewalk Bridges—Ladders, Light Ladders—TROUBLE SAVERS' Sectional Steel Scaffolds—Steel Scaffold Brackets—Adjustable Steel Trusses

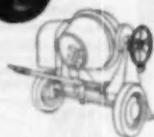
Write for ladder bulletin, "Invest in Safety and Economy"
THE PATENT SCAFFOLDING CO., Inc.

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BRANCH OFFICES: Albany • Allentown • Boston • Chicago • Cleveland • Dallas • Detroit • Kansas City, Mo. • Los Angeles • Miami • Milwaukee • Philadelphia • Pittsburgh • San Francisco • Seattle • St. Louis

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JAEGER 3 1/2 "AUTO-LOADER"



You cut costs and boost profits when you mix 12 to 15 yards more concrete daily with no more manpower. And, you can do that with the Jaeger 3 1/2 "Auto-Loader." It's the fastest half-bag mixer made. Catalog M-8 tells why—shows the complete Jaeger line. Write for it.



3 1/2 End-Discharge
Type. Also 65, 115 and
165 Power loaders.

THE JAEGER MACHINE COMPANY

Columbus 16, Ohio
Leading Distributors in 139 cities
sell and service Jaeger equipment.

PUMPS • COMPRESSORS • HOISTS • PAVING EQUIPMENT

**For Rain
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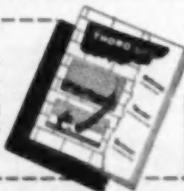
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Applications of THOROSEAL may
be made over exterior surfaces of
foundation walls as work progresses.

THOROSEAL to
seal the surface,
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Finish. Costs are
substantial and
beautiful.

Our NEW 28-page
brochure has four
pages of speci-
fications. WRITE
FOR IT TODAY.
NO. 127.



STANDARD DRY WALL PRODUCTS
BOX X NEW EAGLE, PENNSYLVANIA

316

BOCA-Code

(Continued from page 105)

Conference and Southern Building Code Congress. This movement toward standardization of building codes should not stop until all are reduced to one workable uniform code applicable to every city, town and village in the nation.

This is not an unreasonable thought when a few simple facts are considered. Pure water is pure in every community. Fire is the same regardless of location. Materials are exactly the same no matter what their eventual destination might be. Sanitation and safety are basic. Only people and their thinking are different—and that is the main problem. If we can change attitudes, we will have the solution.

Home builders are expected to produce about 1,000,000 new houses in 1950. At a conservative average cost of \$7,500 per unit the grand total is \$7,500,000,000. The best engineering and code authorities in the nation estimate that the BOCA standard code can save at least 5 per cent in building costs. This would mean a saving of \$375,000,000 to home buyers in the United States without any sacrifice whatever in safety, sanitation, permanence or healthful living.

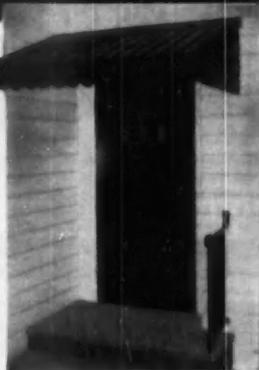
Doorway TO YEAR 'ROUND PROFITS

EVERY DOORWAY
IN YOUR TERRITORY
OFFERS POTENTIAL
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HASTINGS
alumi-SHIELD

DOORHOODS

Prevent sloppy, slippery porch-
step help avoid serious accidents; keep
stormy weather out of doorways and
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any home or building. Built of 300
gaug aluminum aluminum . . . so
designed that strong interlocking
segments fit easily into any door
opening. Will not sag, rust or
corrode. Air vents in side give adequate
ventilation. Available in choice of
7 attractive color combinations or
solid colors. Lustrous enamel finish
is permanently bonded to the metal
before forming. Will not crack, chip
or peel.



**YEAR 'ROUND PROTECTION
FROM SNOW, RAIN, SLEET**
HASTINGS alumi-SHIELD doorhoods
and awnings are fireproof, rustproof,
weatherproof. May be assembled and in-
stalled quickly, easily, profitably . . . on
any type of building—wood, brick, stone.

GET YOUR SHARE OF NEW BUSINESS

METAL TILE PRODUCTS, INC., Dept. 208 Hastings, Michigan

Send no additional information an alumi-SHIELD doorhoods and awnings. I am Dealer, Distributor, Contractor, Architect.

NAME _____ FIRM _____

ADDRESS _____

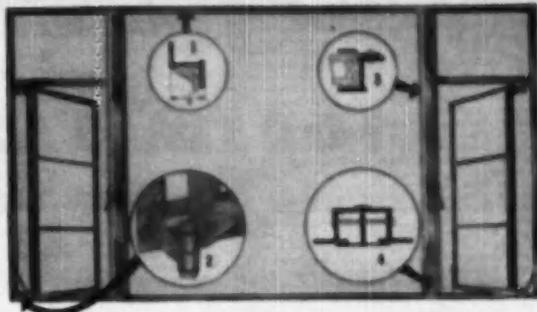
CITY _____ STATE _____

American Builder, February 1950.

ALCASCO ALUMINUM CASEMENTS

- ① **FULL 1 1/2" SECTIONS**—Available only in Alcasco... structurally stronger. Putty retaining groove — built into each section and designed for easy outside glazing. Assures a firm bond of putty to aluminum, eliminating breaking and cutting putty.
- ② **EXTENSION HINGES**—Solid aluminum... Sturdy and trouble free... Full supporting. Stainless steel pin ensures correct ventilator operation at all times.
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- ④ **INTERLOCKING MULLIONS**—Easy to assemble — Simple to install... Form a perfect weather seal due to precision fabrication.

give you 4 big sales advantages!



Alcasco Aluminum Casements also have many other "plus" features that experienced builders and home owners look for. All corners are electrically flash-welded to give greater strength... more rigidity... smooth finish.

Clean superior workmanship is apparent throughout. There has been no stinting on materials or fabrication methods to make the finest all aluminum casements by Alcasco.

Write for full details.

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ALCASCO
ALUMINUM**

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Quality



in the well SLIDING DOOR FRAMES
and WARDROBE HARDWARE

see our catalog in Sweet's
or write **NORDAHL**

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IMMEDIATE DELIVERY



Wood Structures of practical design for clear-span construction

Our trusses and beams save you money and time. Shipments made immediately—fully assembled!

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Ask for cost



AMERICAN Roof Truss Co.

6856 Stony Island Ave., Chicago 40, Illinois... PLaza 2-1772
Established 1922

You SHOULD KNOW HOW



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CAN HELP YOU...

A-make more money... B-give greater service to your customers... C-increase your sales. Write for information and a copy of "The ABC's of Making Money"

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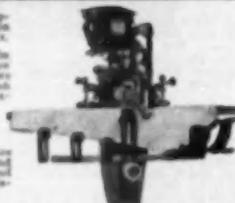
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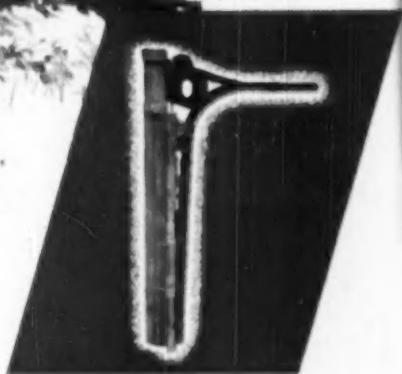
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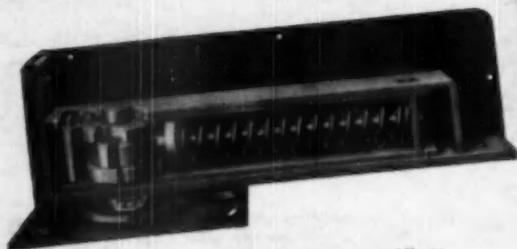
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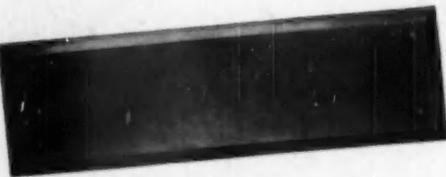
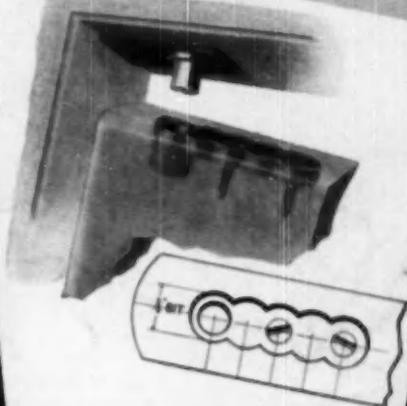
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