

TECHNOLOGY DEPARTMENT

PUBLIC LIBRARY

AUG 11 1947

DETROIT

AUGUST 1947

PRICE 35 CENTS

# AMERICAN BUILDER

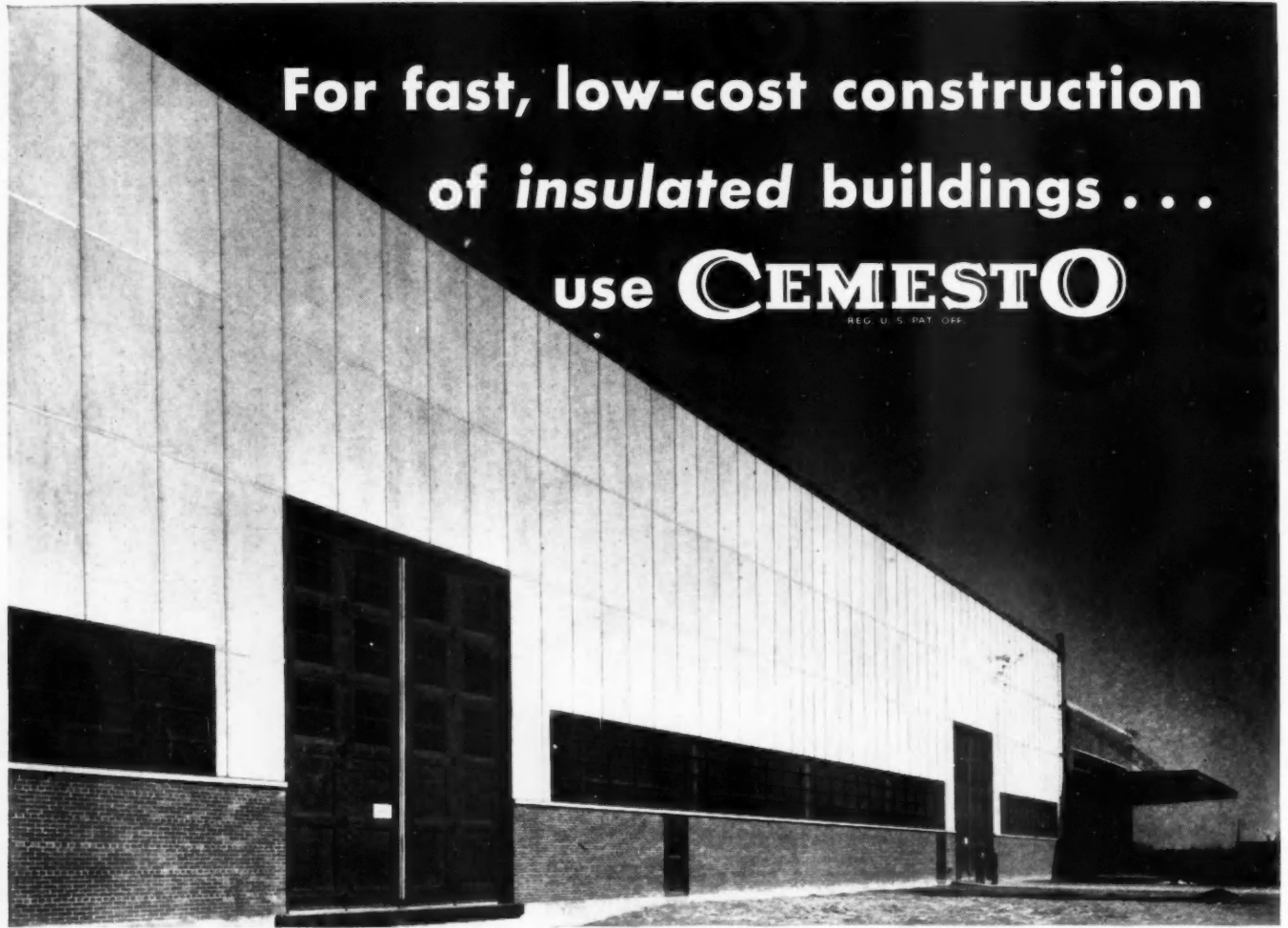
WORLD'S GREATEST  
BUILDING PAPER



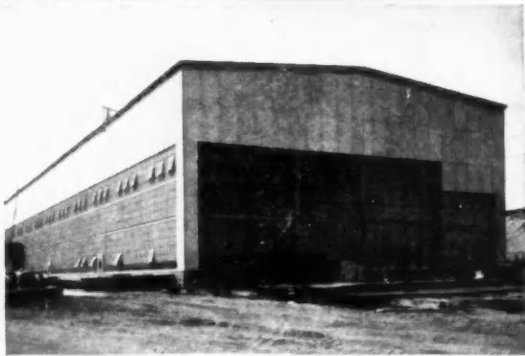
**Preassembled Wall Sections  
Speed Seattle Apartment Project**

For fast, low-cost construction  
of insulated buildings . . .

use **CEMESTO**  
REG. U. S. PAT. OFF.



Albert Kahn Associated Architects and Engineers, Inc.



**S**HOWN HERE are only a few of the many commercial and industrial buildings built better and faster with Celotex *Cemesto* Board.

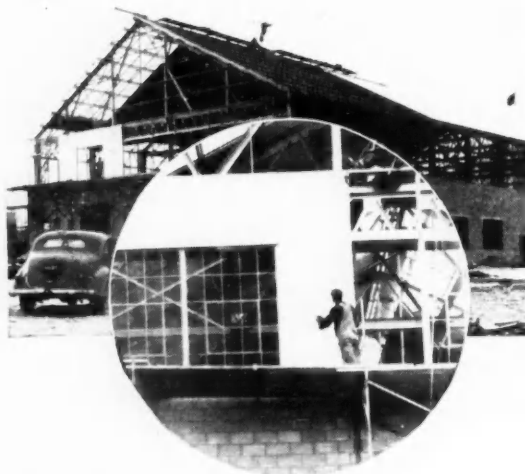
Cemesto is perfect for speedy, low-cost construction of insulated buildings. It offers thermal insulation, weather resistance inside and out, structural strength and siding . . . all at *one low cost*. In addition, Cemesto core is Ferox-treated to resist dry rot, fungus growth and termites.

Cemesto comes in standard size sheets in 1 1/8", 1-9/16" and 2" thicknesses; can be easily cut to fit job conditions; can be attached by nailing to wood, by bolts or clips to steel.

Thus Cemesto is an ideal material for use in exterior walls, roof decks or interior partitions. It does not require painting, so maintenance costs are low.

Write the Architectural Sales Service Department for complete details illustrating several methods for applying Cemesto for roof decks, exterior walls or interior partitions.

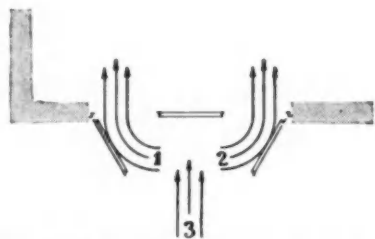
If you wish to furnish the architects' or engineers' plans to us, we will be glad to prepare shop erection drawings showing Cemesto panels required, together with estimate on cost of material pre-cut to fit.



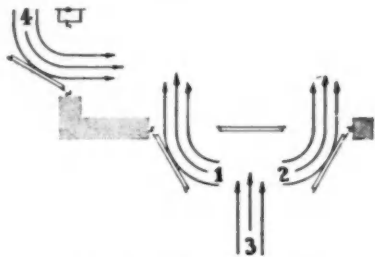
**THE CELOTEX CORPORATION • CHICAGO 3, ILLINOIS**

Published monthly by Simmons-Boardman Publishing Corporation, 165 W. Adams St., Chicago 3, Ill. Subscription price, United States, Possessions and Canada, 1 year, \$3.00; 3 years \$7.00. Foreign countries: 1 year, \$10.00; 3 years, \$20.00. Single copies, 35 cents. Entered as second-class matter Oct. 11, 1930, at the Post Office at Chicago, Illinois, under the act of March 3, 1879, with additional entry as second-class matter at Mount Morris, Illinois. Address communications to 165 W. Adams St., Chicago 3, Illinois.

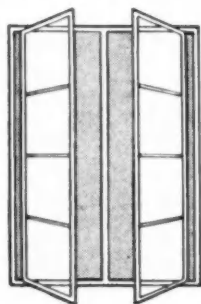
# HOW TO CATCH A BREEZE *on the Bounce*



**VENTILATION FROM 3 DIRECTIONS—ONE WINDOW.** For breeze from right, open left vent only (1). For breeze from left, open right vent only (2). For head-on breeze, open both vents (3).



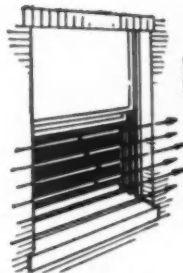
**VENTILATION FROM ALL DIRECTIONS—TWO WINDOWS.** By adding a casement to the second wall, air coming from a fourth direction can be deflected into the room (4).



**DOUBLE SWING LEAVES PERMIT 100% VENTILATION.** Ordinary windows can't open more than 50%. A casement with double swing leaves permits full opening.



*Air deflected in,*



*Air passes by.*

Today's modern cars use a deflector to bring in fresh air—why not the modern house? Notice in the illustration above how a casement window even traps breezes blowing parallel to the wall and "bounces" them into the room.

The diagrams at left show how you can provide better ventilation with standard Fenestra Steel Casements. When hot, sultry weather comes, what a booster an owner of Fenestra Casements will be for you! And remember these better-made steel windows always operate easily—whatever the weather. Write for full information on the latest standardized types and sizes. Detroit Steel Products Company, Dept. AB-8, 2260 East Grand Blvd., Detroit 11, Michigan.

UP-TO-DATE HOUSES CALL FOR UP-TO-DATE WINDOWS

**OTHER ADVANTAGES, TOO.** Easier opening, always. Permanently weather-tight fit that reduces heat loss. Easier and safer cleaning. More daylight per opening. Finer appearance. Better screens, inside. Made *right* by America's oldest and largest steel window manufacturer.

*Fenestra*



RESIDENCE STEEL CASEMENTS



## How to Keep a Home Owner Free of a "Ball and Chain"

● Architects and builders are well aware that Bituminous Coal is the most economical and most dependable of all home-heating fuels.

And the advantages of coal heat become even more obvious as stoker developments make coal an "automatic" fuel as well.

So what can you do when a client *insists* on some other fuel for his new home? Simply this—keep him free of a "ball and chain" by making it possible for him to change his mind later on—and turn to coal.

Just be sure his house plans include: (1) *A chimney with sufficient flue capacity to burn coal efficiently;* (2) *Sufficient space adjacent to the heating unit for eventual coal storage and stoker installation.*

These sensible precautions involve but trifling cost—and they may add greatly to the future value of a house.

Coal supplies uniform, *steady* warmth throughout every portion of each room. For there's always a fire in the furnace—no "pop on and pop off" periods that permit accumulated heat to rise to the ceilings and leave floor areas dangerously cold. That, plus its low cost, is why more than 4 out of every 7 homes in the United States now heat with coal!

**BETTER AND BETTER THINGS ARE COMING FROM COAL!**



As you undoubtedly know, the modern research facilities of the Bituminous Coal industry are hard at work not only to make coal a still better fuel, but also to devise new, low-cost *automatic* equipment that will make coal-heating even cleaner, more comfortable, more convenient, and more economical. This makes it all the more important that every new home built today be planned to permit the eventual burning of coal—no matter what fuel may initially be selected.

**BITUMINOUS  COAL**

**BITUMINOUS COAL INSTITUTE**  
Washington, D. C.

**Affiliate of NATIONAL COAL ASSOCIATION**



FOR REMODELING

DOUBLE DUTY  
INSULITE GIVES

# Double FOR THE MONEY!

*Look at it this way:*

Most remodeling jobs need new walls and ceilings. Walls and ceilings need insulation. Therefore why not use a material that gives you *both* for the cost of one?

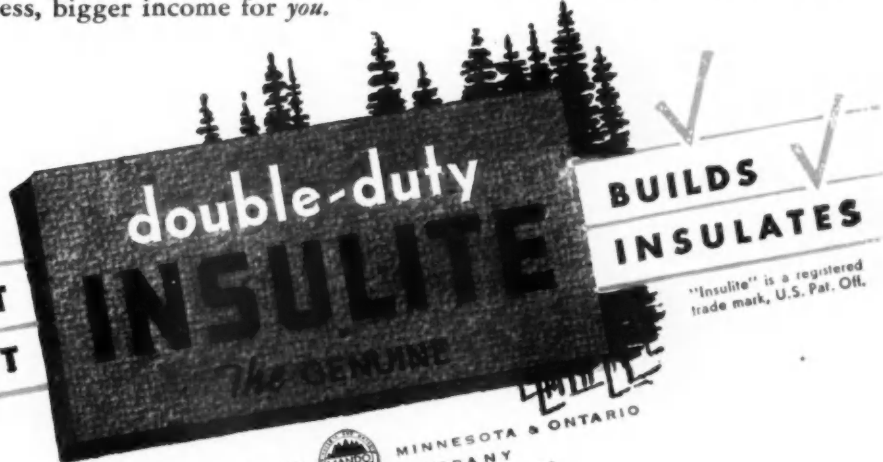
Double-duty INSULITE is made to order for that kind of a job. It does *two* things for the price of one:

(1st) *It Incloses*

(2nd) *It Insulates*

From one material, you get walls PLUS insulation. A better job — finished in faster time — at a safe competitive cost. Those large boards saw easily and fit into place without trouble. They go up fast but they hold the cost down. And they *insulate* as they build. That's double for anyone's money. More satisfied customers, more repeat business, bigger income for you.

INSULATES AS IT  
BUILDS AS IT



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

INSULITE DIVISION  
PAPER  
MINNEAPOLIS 2, MINNESOTA

MINNESOTA & ONTARIO  
COMPANY



*"My customers  
are delighted with  
UPSONIZED CEILINGS"*

"Gentlemen:

I don't very often write a letter like this, but I am glad to tell you how satisfied I have been with Upson Panels.

There is nothing finer, in my opinion, for repairing cracked and falling plaster than Upson Panels. They transform the ceiling into something that is mighty attractive as well as permanent.

I have used Upson Panels for a great number of years and whenever one of my customers has a cracked plastered ceiling to be done over, I think I am doing him a real service to suggest Upson Panels because I know it will be permanent and beautiful.

Very truly yours,  
R. D."

(Name on request)

Here is a typical letter from one of the many carpenter-contractors throughout the country who know the undisputed customer-appeal of Upson Wall and Ceiling Panels.

In thousands of homes throughout the nation, carpenters have demonstrated the CRACKPROOF beauty and utility of Upson Quality Panels. They have seen how quickly and easily cracked plaster can be re-covered with Upson Panels... giving new livability, permanence and added value to the home.

Yes, thousands of carpenters use and endorse Upson Panels. You can do your customers a great favor by recommending it to them, too!

**THE UPSON CO.**

Lockport, New York



PACEMAKER IN CRACKPROOF PANELS

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

# AMERICAN BUILDER

AND BUILDING AGE

F O U N D E D — 1 8 7 9

**AUGUST**

**VOLUME 69**

**1947**

**NO. 8**

## C O N T E N T S

### AMERICAN BUILDER and BUILDING AGE

(originally "Carpentry and Building") with which are incorporated National Builder, Permanent Builder and the Builder's Journal, was founded Jan. 1, 1879. Names registered in U.S. patent office and Canadian registrar of trade mark. Published by the SIMMONS-BOARDMAN PUBLISHING CORPORATION, 105 West Adams Street, Chicago 3, Illinois; 30 Church Street, New York 7, New York.

Samuel O. Dunn, Chairman of the Board; James G. Leno, Vice-President—Assistant to Chairman; Henry Lee, President; Roy V. Wright, Vice-President and Secretary; Robert H. Morris, J. S. Crane, C. J. Wageman, Vice-Presidents; John T. DeMott, Treasurer.

#### Other Offices

Washington 4, D.C.: Nat'l Press Bldg.  
Ann Arbor, Mich.: 1080 Stein Road  
Seattle 1, Wash.: 1038 Henry Bldg.  
San Francisco 4: 300 Montgomery St.  
Los Angeles 14: 530 West Sixth St.  
Dallas 4, Texas: 2909 Maple Ave.

#### SUBSCRIPTION PRICE

United States and Possessions and Canada, 1 year, \$3.00; 3 years, \$5.00; foreign countries, 1 year, \$10.00; 3 years, \$20.00 Single copies, 35 cents each. Subscribers are requested to state company connection, nature of business, title or position. Address W. L. Taylor, Circulation Manager, 30 Church St., New York 7.

Field Staff: C. L. Conley, C. R. Hartung, Ralph I. Henry, Joe Sanders, Dick Whittington.

Copyright 1947 by Simmons-Boardman Publishing Corporation



Members of the Associated Business Papers (A.B.P.) and of the Audit Bureau of Circulations (A.B.C.) Printed in U.S.A.

<b>Publisher's Page</b> .....	<b>11</b>
<b>Our Readers Say</b> .....	<b>14</b>
<b>Trends</b> .....	<b>19</b>
<b>On and Off the Record</b> .....	<b>30</b>
<b>Monthly Review of NAHB</b> .....	<b>35</b>
<b>Editorial</b> .....	<b>87</b>
<b>544 Rental Units Under Way</b> .....	<b>88</b>
<b>Engineered House Construction—One Pipe Steam Heating</b> .....	<b>92</b>
<b>Holyoke Builds "Precision-Built" Homes for Vets</b> ....	<b>98</b>
<b>Well Planned House for a City Lot</b> .....	<b>102</b>
<b>Western Style Invades the Eastern Area</b> .....	<b>103</b>
<b>Lumber Dealer Builds Demonstration Home</b> .....	<b>104</b>
<b>Colonial Homes That Live Through the Ages</b> .....	<b>106</b>
<b>Home Builder's Own Power Equipment Does the Heavy Work</b> .....	<b>108</b>
<b>Electrical Radiant Ceiling Heat</b> .....	<b>112</b>
<b>Los Angeles Builders Show the Truth to Local Press</b> ...	<b>114</b>
<b>Meeting the Market</b> .....	<b>116</b>
<b>Tech Home—the Steel and Concrete House</b> .....	<b>118</b>
<b>Small . . . Yet Sufficient</b> .....	<b>120</b>
<b>Southern Hospitality with a Modern Motif</b> .....	<b>122</b>
<b>Downtown Sample Sells Homes</b> .....	<b>123</b>
<b>Displays+Parking=Good Business</b> .....	<b>124</b>
<b>Who Is the Postwar Builder?</b> .....	<b>125</b>
<b>Mansions or Cottages with Concrete Block</b> .....	<b>127</b>
<b>Seven Model Houses Show Today's Values</b> .....	<b>130</b>
<b>How-to-Do-It Department and Better Detail Plate</b> ....	<b>132</b>
<b>New Products</b> .....	<b>134</b>
<b>Catalogs</b> .....	<b>148</b>
<b>Index to Advertisers</b> .....	<b>180</b>

Samuel O. Dunn, Publisher      Edward G. Gavin, Editor  
Robert H. Morris, Business Manager

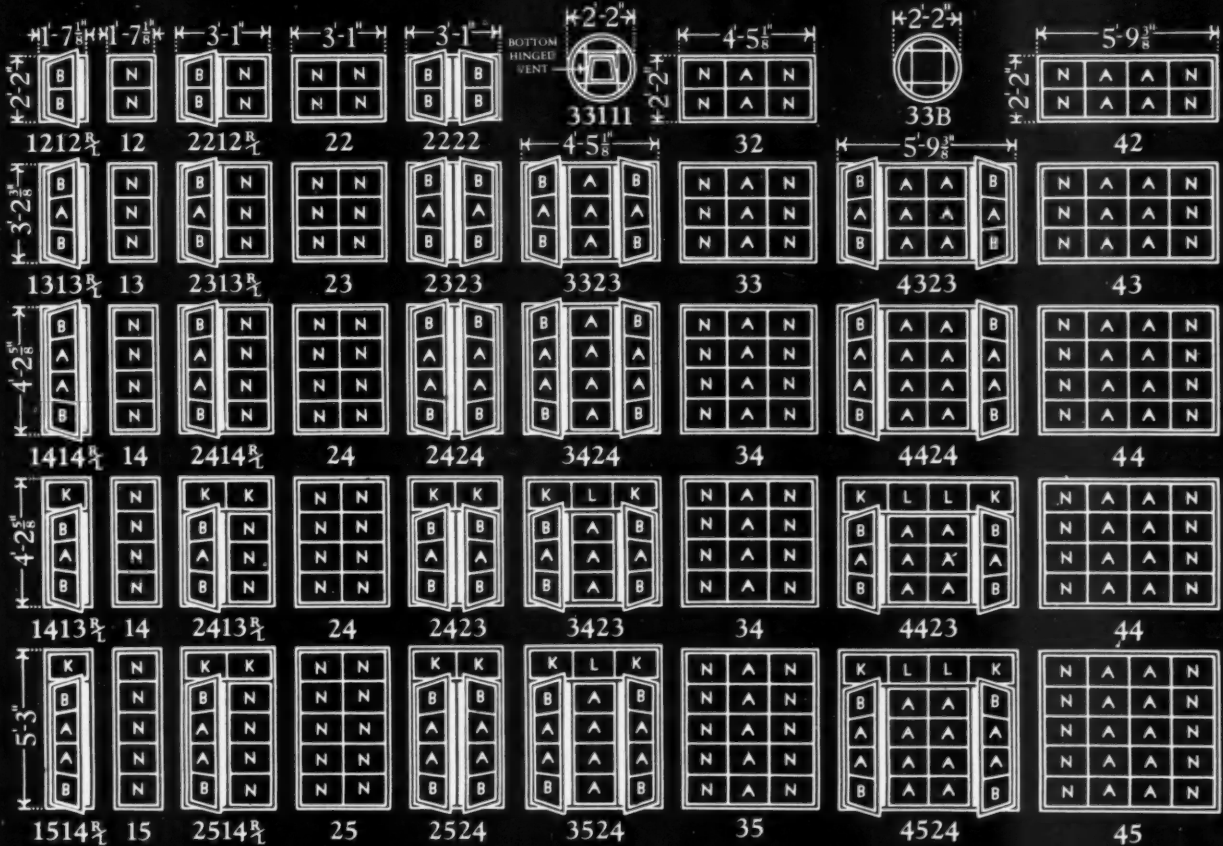
Lyn E. Arent, *Managing Editor and Art Director*; B. H. Wambolt, *Associate Editor*; Sterling H. Albert, *Eastern Editor and Research Director*; Arthur V. Hansen, *Architectural Editor*; Bernard L. Johnson, *Western Editor*; Dola Parr, *Production Director*; Richard Gavey, *Research Assistant*; Margaret C. Carroll, *Assistant to the Editor*.

Editorial Office, 105 West Adams Street, Chicago 3.

AMERICAN BUILDER HAS THE LARGEST CIRCULATION OF ANY TRADE JOURNAL IN ANY FIELD

# 1818 HOPE'S 1947

## KEEP BUILDING COSTS DOWN BUY HOPE'S WINDOWS NOW AT ONLY **20%** ABOVE PREWAR PRICES



TYPES AND SIZES OF HOPE'S RESIDENCE (HOLFORD) CASEMENTS AS RECOMMENDED BY THE METAL WINDOW INSTITUTE

SEND SCHEDULE OF YOUR REQUIREMENTS FOR OUR PRICES. COMPARE THEM WITH CURRENT PRICES OF WOOD WINDOWS AND REMEMBER THE ADVANTAGES OF STEEL OVER WOOD. STOCKS ARE AVAILABLE IN WAREHOUSES IN ALL MAJOR CITIES.

### HOPE'S WINDOWS, INC., *Jamestown, N. Y.*

THE FINEST BUILDINGS THROUGHOUT THE WORLD ARE FITTED WITH HOPE'S WINDOWS



# "KEEPS 35 CARPENTERS BUSY"



## THE MONARCH UNI-POINT PORTABLE RADIAL SAW CAN CUT YOUR COSTS, TOO

present time, we have under construction a new project, Garden Apartments, Dumont, New Jersey, which will provide 106 3 1/2 room and 4 1/2 room apartments, and the construction being brick veneer calls for a tremendous amount of framing. At the present time, this Uni-Point keeps 35 carpenters busy and the amount of work being turned out on it each day is largely instrumental in the lowering of production costs in a manner which makes us feel that the machine has more than paid for itself already.

Very truly yours

TRYON CONTRACTING CORPORATION

*Edwin Hille*  
Edwin Hille

EH:1j

**STILL ANOTHER USER** cuts production costs with the Monarch Uni-Point Portable radial saw . . . gets more work done per man-hour . . . ups his profits!

"Paid for itself already, on one project," says this builder of Garden Apartments at Dumont, N. J. And here's why the Monarch Uni-Point Model TNT can do the same for you:

**25% FASTER.** Exclusive Uni-Point principle slashes sawing time 1/4—not in exceptional cases but in average use. Saw enters wood at same point always, regardless of crosscut angle. No repositioning of lumber when changing angle of cut. No trial starts—you save lumber as well as time.

**GOES EVERYWHERE.** Made of magnesium, light weight and designed to save space, it's the most compact 12-inch radial saw ever built. Any light socket provides ample power for beveling, mitering, compound mitering, ripping, shaping, dadoing. . . . Full 3 x 16-inch crosscut and 20 1/2-inch ripping capacity—yet two men carry it with ease.

**PRICE DOWN 20%.** Spectacular acceptance of this radically improved saw has resulted in a recent price cut of nearly 20%. New low price includes blade and carrying frame.

**DETAILED BOOKLET FREE.** Get the whole story of how the Monarch Uni-Point Portable brings bigger building profits within your easy reach. Write for large illustrated booklet today.

### SAFER!

No jutting arm on a Monarch Uni-Point Portable! Instead, saw assembly is rigidly fixed to end of arm; arm glides back and forth with the saw as saw is moved—never pokes forward to get in your way or obscure your vision.



Old-style fixed arm  
Cumbersome.  
Dangerous.



Uni-Point Safety Arm  
Full vision. Safe.

# American Saw Mill Machinery Co.

Manufacturers of Saw Mill and Woodworking Machines

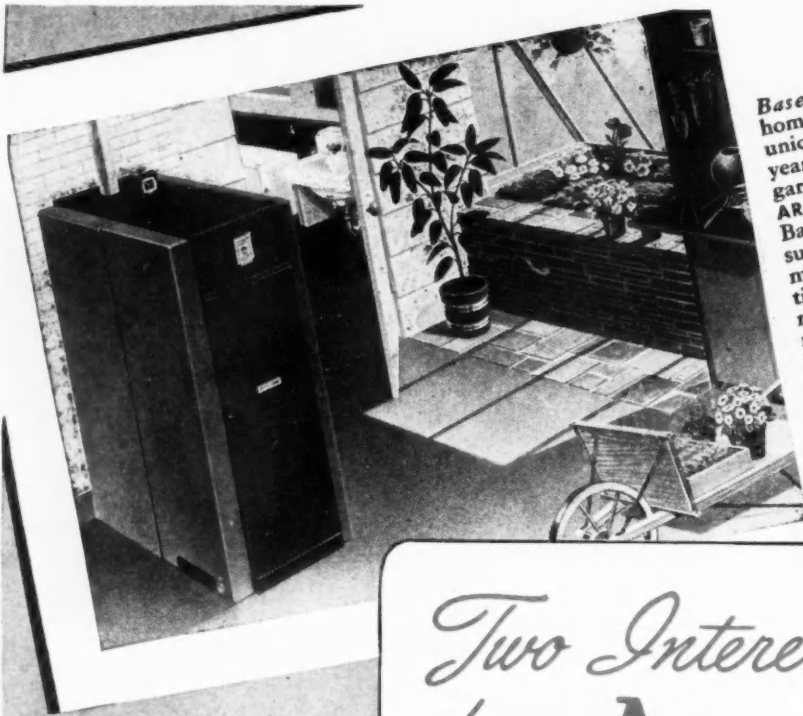
50 MAIN STREET • HACKETTSTOWN, NEW JERSEY

Factory Branches:

CHICAGO,

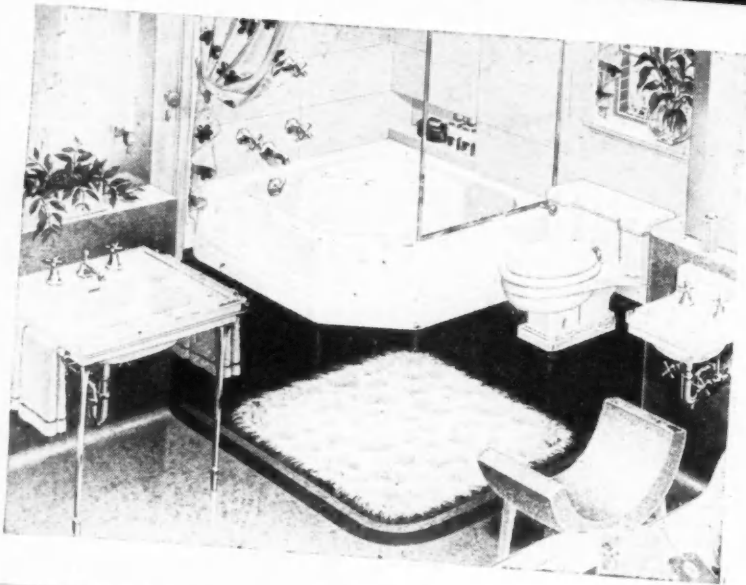
SAN FRANCISCO,

BIRMINGHAM



**Basement Conservatory.** For homes built on sloping lots, this unique downstairs room is a year 'round hobby corner for garden enthusiasts. The new **ARCOLINER Oil Boiler** (Wet Base), provides an abundant supply of clean, efficient, automatic heat. Correctly proportioned heating surfaces with multi-finned flues insure maximum heat absorption. Waterways that extend below fire chamber provide extra heating surface and help keep floor cool, thus making this model also ideal for first floor installation. For use with the Arcoflame or any other standard burner.

## Two Interesting Ideas from **AMERICAN-Standard**



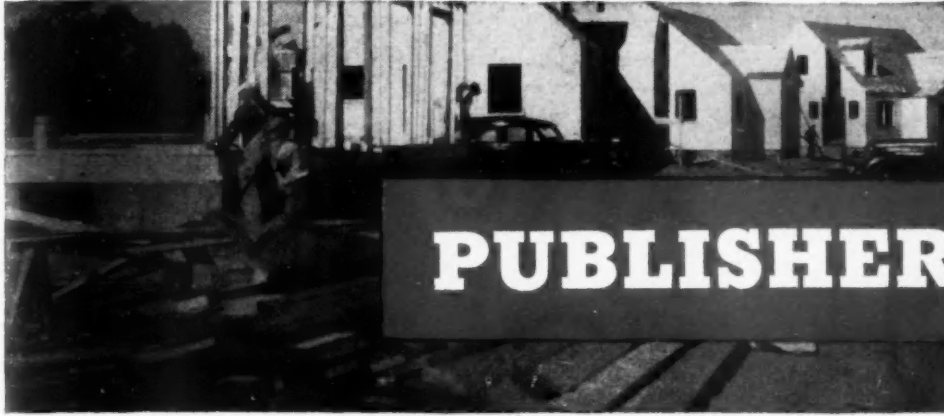
**De luxe Bathroom.** Designed to satisfy the desire for really luxurious living. Fixtures are distinctively beautiful, efficiently engineered and durably constructed. The modern, roomy **NEO-ANGLE Bath**, occupying space only about four feet square, is of rigid cast iron with a heavy coating of gleaming, easy-to-clean, acid-resisting enamel. The graceful **NEOLYN Lavatory**, the quiet **MASTER ONE-PIECE Closet** and wall-hung **MADENTA Dental Lavatory** are of genuine vitreous china. All four fixtures are available in a wide range of harmonizing colors. Exposed metal is of non-tarnishing Chromard.



■ Both of these rooms owe much of their attractiveness and functional fitness to the American-Standard products they contain. Their modern styling and exceptional efficiency are two good reasons why more American homes have heating equipment and plumbing fixtures by American-Standard than by any other single manufacturer. Why not use these finer products in the homes you design, build or remodel? For complete information contact your Heating & Plumbing Contractor. **American Radiator & Standard Sanitary Corporation**, P. O. Box 1226, Pittsburgh 30, Pennsylvania.

*Serving the Nations Health and Comfort*

**LOOK FOR THIS MARK OF MERIT**—It identifies the world's largest line of Heating and Plumbing Products for every use . . . including Boilers, Warm Air Furnaces, Winter Air Conditioners, Water Heaters, for all fuels—Radiators, Convectors, Enclosures—Gas and Oil Burners—Heating Accessories—Bathtubs, Water Closets, Lavatories, Kitchen Sinks, Laundry Trays, Brass Trim—and specialized products for Hospitals, Hotels, Schools, Ships, and Railroads.



## PUBLISHER'S PAGE

### ***An Inside Job on Private Enterprise***

**M**ANAGERS of business have the principal responsibility for making the private enterprise system work. This is especially true of managers of Big Business. The failure of recovery in 1933-1940 was mainly due to policies of the New Deal government. But the collapse and depression in 1929-1932 were mainly due to managements of business, especially of Big Business, which, disregarding sound economic principles, adopted policies incompatible with the successful working of private enterprise.

It is necessary to keep the *entire system* working successfully in order to conduct *each part* of it profitably. Monopolistic efforts to make important parts of it maintain or increase profits regardless of the effects on other parts, cause the entire system to break down, as in 1929, and everybody to lose.

The worst blow dealt the system of private enterprise since the war is the agreement recently made by the coal mine operators with John L. Lewis and the United Mine Workers to raise wages 45 cents an hour. And apparently the blow was struck by Big Business. The available evidence indicates that it was the representatives of mines owned by Big Business who first agreed to the settlement, and made it despite the opposition of operators of other mines.

Ever since the war there have been predictions of a recession or depression of which there have as yet been no signs. If a recession or, worse still, a depression does come, the representatives of business who caused this settlement with John Lewis will be chargeable with a heavy responsibility for it. Labor unions in other industries will exert powerful pressure for equally costly settlements. Leaders of other industries should present the utmost resistance possible to this pressure. For the more of such settlements are made, the more inflation of prices there will be and the more unbalanced the national economy will become. Inflation of wages and commod-

ity prices caused the collapse of business in 1920-1921. Lack of balance between industrial and farm prices and inflation of stock market prices largely caused it in 1929. Inflation of any kind always disturbs or destroys the balance in the national economy which is essential to the successful working of the private enterprise system.

The surrender of the coal mine operators to Lewis affords another illustration, of which there have been many, that serious economic troubles can be caused by failure of business leaders to assume the responsibilities of the leadership which they have accepted, as well as by government and labor unions. Congress had just passed over the President's veto the Taft-Hartley labor union reform bill which was intended to protect the public from abuses of labor union power, and especially to prevent a threatened strike by the coal miners or a harmful settlement with them. It was the plain duty of the mine operators to the public to use the new law for the purpose for which it was intended. They made no effort to use it, and now propose to pass along the cost of their indefensible settlement in increased prices for the public to pay.

This paper has published many criticisms of policies promoted by labor leaders, radical politicians, socialists and communists tending to undermine and destroy private enterprise. But an attack on private enterprise from the inside can be as damaging and indefensible as an attack on it from the outside. It is the especial responsibility of business leaders to make the *entire system* of private enterprise work; and when, for whatever reasons, they do an *inside job* on it, they put themselves in the same category as those who attack it from the outside.

*Samuel O. Druan,*

# ANDERSEN *Windowalls* . . . . LOOKOUT POINT FOR BEAUTY



These windows that are walls . . . these walls that are windows . . . are a perfect expression of a design trend that has been accepted universally by progressive architects and designers.

Here ANDERSEN Wood Casement Units are arranged on either side of an expansive picture window—and, beyond, a corner installation is formed by a combination of the same out-swinging casements.


Note the emphasis placed on operating sash—providing ample ventilation for this lakeside home. This is the way to combine view, sunshine, ventilation and weather-tight comfort. It's the ANDERSEN WINDOWALL way.

McEnary and Krafft, architects, designed this installation, and specified ANDERSEN Complete Window Units to bring their inspiration into reality.


See details in Sweet's—or write Andersen directly.

*Andersen Corporation*  
BAYPORT • MINNESOTA


A  
MA  
S  
A  
YO  
RE




5-436—  
ture wit  
Instant  
head, a



370—O  
indexed  
valve ac  
ings. A  
ture.



598—A  
sink fixt  
chrome  
clusive

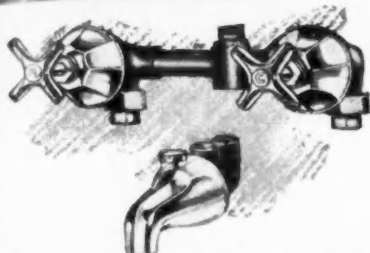


140-D—  
bibb an  
close va

116-C—  
and all  
valve co

The Sa  
ngular  
in tub  
borac  
alves.  
contact  
iprese

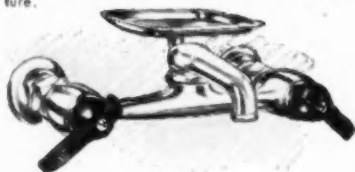
A FEW OF THE  
MANY POPULAR  
*Salter Fixtures*  
AVAILABLE FOR  
YOUR PLUMBING  
REQUIREMENTS



S-436—Automatic 2-Valve Bath and Shower Fixture with convenient lift lock type diverter for full instant pressure in tub or shower. Complete with head, arm and trip lever waste.



370—One-piece Masterpiece Lavatory Fixture with indexed lever handles and long life "EZE" close valve action. For lavatories with 4" center openings. A distinctive, compact chrome lavatory fixture.



598—A popular Deluxe Masterpiece Swing Spout sink fixture with attractive handles and removable chrome metal soap tray. Constructed with exclusive Salter "EZE" close valve design.



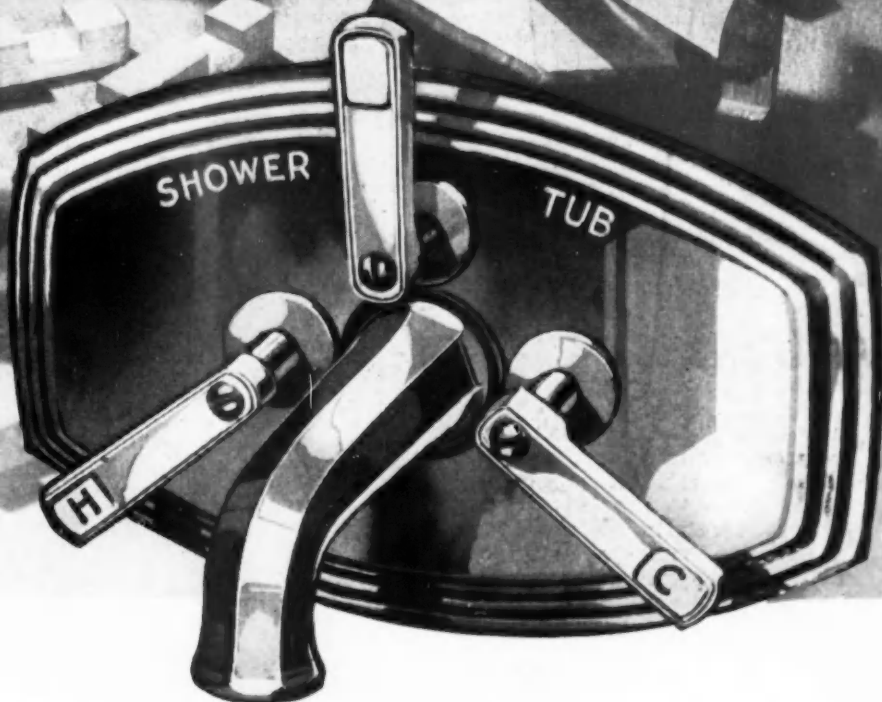
140-D—Single sink faucet with adjustable flange bibb and 4 arm indexed handle. Salter "EZE" close valve construction.



116-C—Sink faucet with solid female flange bibb and all metal lever handle. Salter "EZE" close valve construction.

The Salter-Glauber line, in addition to regular trim, includes plumbing items such as tubular goods, rough brass valves, laboratory fittings, and waterworks valves. For detailed information please contact your local jobber or Salter sales representative.

# Simplified Construction & Design FOR EASY, FOOLPROOF INSTALLATION

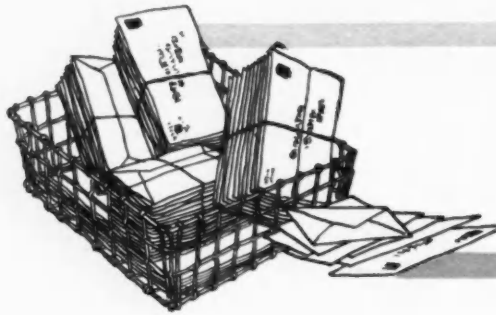


There are no puzzles to be worked out when installing Salter-Glauber Masterpiece Fixtures. For they are designed with a minimum of parts and each unit is factory assembled, tested and guaranteed to be perfect in every respect. In addition, the standardization of most working parts and incidental trim, enables us to provide unprecedented quality in volume production. Plumbers, contractors and home owners all benefit by the extras found in Salter-Glauber Masterpiece Fixtures . . . Start specifying Masterpiece quality today.

S-500 — Compact Gothic Plate Diverter Bath and Shower Fixture. Cast one piece body with 2 3/4" center openings. Now furnished with polished chrome brass plate.



**H.B. Salter MFG. CO.**  
MASTERPIECES IN BRASS  
20 Ninth Street, Marysville, Ohio  
and division THE GLAUBER BRASS MFG. CO., Lima, Ohio



## Our Readers Say:

### Scores material prices

*To the Editor:* The carpenters of Tuscarawas County certainly beg to differ with Cortright's Column. In the homes built in this vicinity, labor certainly was no comparison to the cost of materials. On a \$4000 to \$5000 home, in which lumber was \$2000 to \$3000, the carpenter labor was only \$400, which certainly proves that the material is the item where price decrease is needed. Any number of people won't build for that reason only—not for the wages.—CARPENTERS OF TUSCARAWAS COUNTY, Ohio.

### Capitalism vs. Communism

*To the Editor:* I am for your factual editorials, and I believe they have done much good in cleaning up the mess our government was pushed into. I believe the capitalist system the best yet for the poor man. In fact it is the only system where a poor man has the opportunity to become rich; and it is the best system for any man to raise his standard of living. There is nothing which can or will produce the better things for living than free enterprise with competition. I hear and read much that if we have a depression our people will turn to communism. I would like to ask why. It would mean permanent slavery. Why don't you show some people (non-thinkers and politically ambitious demagogues) just what the people have in "Commie" states and their unfortunate existence and future. These non-thinkers believe they would have their every wish gratified, without doing a day's work for anyone.—M. JAYNE, Oklahoma City, Okla.

### Housing standards

*To the Editor:* Of course, all I know is what I read and see. In the May issue of *American Builder* you gave us some mighty nice pictures of some of the large developments of homes, and they are attractive from a picture standpoint.

Last week I spent a night and day with a nephew of mine who has made the mistake of obligating himself for one of those \$7450 jobs.

Where brick work is featured, whoever stacked the brick left them in joints ranging from almost dry to one-half inch and some of the buttered joints were never buttered, or dropped out and never pointed.

Canvas tacks seem to be scarce from the sags and impressions on the ceilings. The walls give one the impression the paper was started from the base and pushed upward and wherever it wrinkled

in the angle, it just stayed wrinkled. And sandpaper! I just suppose there wasn't any available.

There are so many wrongs that one can see that it gives one cause to wonder what it is like where one cannot see.

It sure burns me up when I think of the deal these veterans are getting, and how they will feel when the thrill of being in a house sort of wears off. They won't have to know much about construction to see what they have bought.

It seems to me that somebody should begin to do a little rejecting, and make some of these developers understand that they have to start building something besides four walls and a roof.

However that may be all FHA wants. I don't know. I just know what I see and read.—LAURENCE COLLINS, Nacogdoches, Tex.

### Life magazine article

*To the Editor:* I have read with interest an editorial comment issued by your Chicago office in connection with a recent article in the magazine *Life*. I subscribe heartily to what your paper says about the *Life* article. The criticism which is being heaped on the heads of the building industry is uncalled for. Houses do cost more but relative to other prices, they are not as high as lawn mowers, tires, automobiles, clothing and many other articles which might be mentioned.

In this connection I am sure you will be interested to know that as far as our contribution to building is concerned, we have raised our wholesale prices on floor covering and wall material only an average of 38 per cent over our 1939 prices, in spite of the fact that some of our raw materials are up as high as 400 per cent and our labor 75 per cent. Improved technology and volume are responsible for our low selling price, even in spite of these increases, and while linoleum for floors and walls is only a small part of the average home, we feel that we are contributing to the effort which *American Builder* is making in the interests of convincing the public that the house today is really a good buy as compared to the many other places that the consumer invests funds when he spends hard-earned money. The only thing for the average home seeker to do in buying a house is to be sure that he gets good quality—that is the important thing today. After all, a house is a permanent acquisition and usually lasts from 30-40 years, so that the investment is one that

repays itself many times, whereas many of our other expenditures for automobiles, radios, refrigerators, etc., soon become obsolete and the principal sum has to be reinvested in four or five years.—R. K. AUSTIN, Congoleum-Nairn Inc., Kearney, N. J.

### Lincoln's government

*To the Editor:* I wish there were some way of impressing on the minds of the people of this great land that we still—despite the events chronicled by Garet Garrett in his excellent treatise "The Revolution Was," and subsequent similar doings—have the kind of government that Abe Lincoln spoke of so well. Henry J. Taylor and others are trying to awaken the minds of men. It is difficult to show them their errors. People must be disillusioned from thinking that the government is some separate entity apart from their own being. They must recall that when this great land was taken over from the Indians, the people banded together and decided for the general good of society that some of them should leave the farms and shops and ships and handle the business of running the community and country for those citizens who were engaged in the arts, science, and trades. Those so delegated to handle community affairs were to be compensated by those remaining at their own trades, and had cash to spend only as given out of the pockets of the delegating citizens. This is still so, but somehow the delegates in many cases seem to forget it, and, what is worse and more evil, so do the paying people.—DONALD F. McCAHILL, The Stanley Works, New Britain, Conn.

### English visitor comments

*To the Editor:* I arrived from England a few weeks ago to visit my daughter and recently came across a copy of the *American Builder* at the Teaneck Library. I found it most interesting and appreciate your claim for it as the World's Greatest Building Paper.

I am specially interested as I was a contributor to the *American Builder*, as it was then, sixty years ago. My first contribution was no more than an essay on the advantages of study; my next a few notes on the difficulties of estimating, which were used as editorials. Other articles followed in later issues. At that time, 1887-1888, I was living in Cleveland, Ohio, where the paper was published.—W. J. LAWRENCE, West Englewood, N. J.

# Truscon offers a complete line of METAL LATH ACCESSORIES for practically every PLASTERING NEED



With the acquisition of new manufacturing facilities and products, Truscon now offers you a complete line of metal lath accessories that enables you to meet a big market demand for these building needs. Truscon also manufactures a complete line of metal lath including Diamond Lath, Herringbone Doublemesh, 3/8" Ribplex, 3/4" Self-Sentering, Stucco Mesh, Hollow Partition Studs, Channels and Tie Wire. Write for free descriptive catalog of entire Truscon Metal Lath and Accessory line.

**TRUSCON STEEL COMPANY**  
YOUNGSTOWN 1, OHIO  
Subsidiary of Republic Steel Corporation

Manufacturers of 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.



Fourth of a series: The Crane Sunnycrest Kitchen

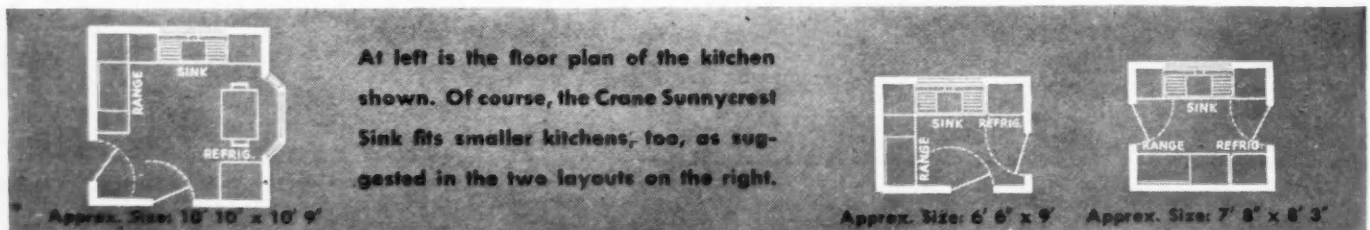
**your homes deserve a**  
*Kitchen like this*

Picture Mrs. Home Buyer when she steps into this cheery Sunnycrest Kitchen. There'll be a sparkle in her eye to match the gleam of the smart Crane sink.

But there's more than eye-appeal here! There's step-saving convenience in every inch . . . plenty of storage space, too. And look at the Sunnycrest Sink with its finger-tip *Dial-ese* controls, its extra deep basin, its spacious double drainboards, its lustrous, acid-resisting vitreous enamel surface.

In bathrooms as in kitchens, the broad Crane line covers every taste and every building budget. Again in heating, Crane meets every need, hot water, steam or warm air, burning coal, coke, oil, or gas.

You will find a condensed catalog of the Crane line in the 1947 Sweet's Builders' File or a copy of this catalog will be sent on request. For further information on product or delivery date, call your Crane Branch.



**CRANE**

NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS

CRANE CO., GENERAL OFFICES:  
 836 S. MICHIGAN AVE., CHICAGO 5  
 VALVES • FITTINGS • PIPE  
 PLUMBING AND HEATING





*Saw with the saw that's easy to use in any position*  
**DON'T JUST SAW IT...**

# SKILSAW IT!



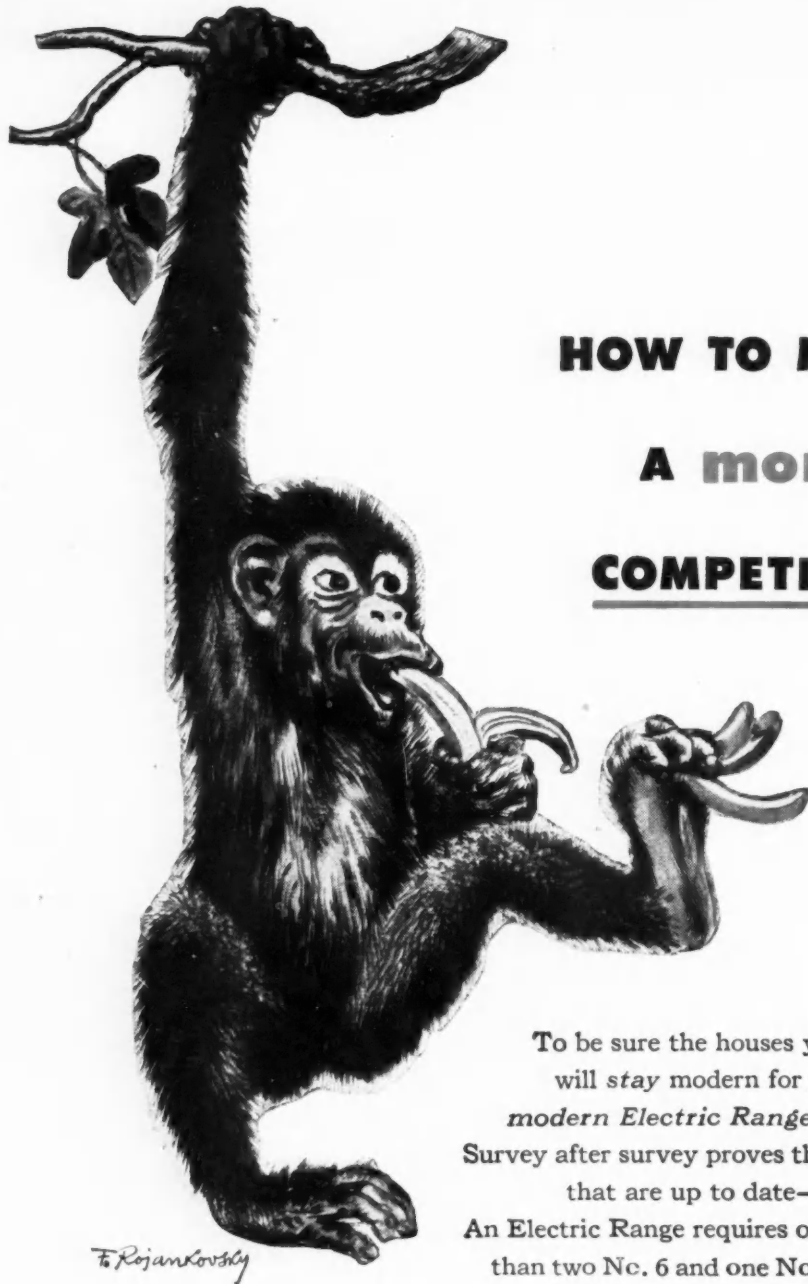
**ELECTRIC**  
**SKILTOOLS**  
**PNEUMATIC**



MADE BY SKILSON, INC.

A wonderful combination of perfect balance, compactness, minimum weight and ample power makes SKILSAW the handiest saw you can own. It's the result of a quarter century of pioneering in the portable saw field. Ask your distributor today about a demonstration.

**SKILSAW, INC.**  
3033 Elston Ave., Chicago 30, Ill.  
Factory Branches in Principal Cities



## HOW TO MAKE A monkey OUT OF COMPETITION!

To be sure the houses you build today are modern, and will stay modern for years to come, *wire them for modern Electric Ranges!*

Survey after survey proves that Mr. and Mrs. America want homes that are up to date—homes with Electric Ranges.

An Electric Range requires only: 3-wire service entrance no smaller than two No. 6 and one No. 8 wires from the point of termination of the power supply company's wires to the distribution panel; a 60-amp. switch with overload protection and a three-wire circuit from the distribution panel to a range outlet in the kitchen. Make this your minimum wiring specification.



Electric Range Section NATIONAL ELECTRICAL MANUFACTURERS ASS'N., 155 E. 44th St., N.Y. 17, N.Y.

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

**TO KEEP THEM MODERN...**

*wire your houses*  
**FOR ELECTRIC RANGES**



# TRENDS

BUILDING MATERIAL — EQUIPMENT — APPLIANCES

**L**AATEST estimates of the Bureau of Labor Statistics put nation-wide starts of permanent non-farm residential units at 725,000 dwellings in 1947. This is a downward revision of the Bureau's estimate of 1,000,000 permanent starts made earlier in the year, but the present estimate indicates that starts will exceed 1946 starts of 670,500 permanent units by eight per cent. If the present estimate is realized, 1947 will be the best home building year since 1928 when 753,000 units were started.

### Controls Virtually Eliminated

The building picture is further brightened by the removal of building restrictions for the most part under the new federal rent law signed by President Truman on June 30, which abolishes all restrictions in non-residential construction except for the building of facilities for amusement and recreation. Limitations on floor area for new residential buildings are off.

Under the new law, housing accommodations never previously rented are not subject to rent control. This applies not only to old dwellings but to those constructed or remodeled after February 1, 1947. Elimination of rent ceilings on new buildings is expected to stimulate speculative building of residential dwellings. Many builders who had refrained from erecting new buildings under floor area limitations and rental ceilings are now expected to go ahead with building plans. Solid indications of a big market show up in continued high earnings of the public, backlog of purchasing power, and a record crop of marriages just reported by U.S. Public Health Service.

### Material Prices Leveling Off

For most materials there are indications of increasing adequacy of supplies. However, current output of some materials may not be sufficient to meet needs in all areas, particularly for such products as millwork, hardwood flooring and sheet metal products. Prices of construction materials are leveling off. The increase in April was a fraction of one per cent over the previous month. Compared with April 1946, the composite wholesale price index of the Bureau of Labor Statistics advanced 41.3 per cent to April 1947, with paint and paint materials and lumber registering the largest gains, 62.5 per cent and 59.6 per cent respectively.

Since 1941 the wholesale prices of all commodities have risen 60 per cent as compared with a 65 per cent average increase in the price of all building materials. Many building material items

have advanced substantially less in cost than the average, including brick and tile, cement, plumbing and heating and structural steel.

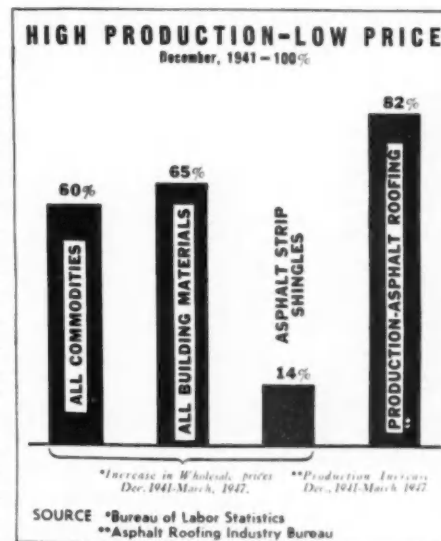
### High Production—Low Price

Typical of building material items which have advanced less in cost than the average is asphalt roofing. The Asphalt Roofing Industry states that peak production has largely offset higher manufacturing costs by lowering unit costs, enabling the industry to sell its products generally at a lower price than in 1926, the base period for computing the rise and fall of wholesale prices. Since December 1941, the industry reports an 82 per cent increase in production, an increase in manufacturing costs ranging from 25 to 50 per cent, and only a 14 per cent increase in the wholesale price of asphalt strip shingles, proof that high volume can keep prices down when costs are up.

### Veterans Have Borrowed \$4.2 Billion

The Veteran's Administration reports that by the end of May 736,687 ex-service men and women had borrowed a total of more than \$4.2 billion under the G.I. Bill to buy or build homes. Considering that it is estimated that there are 15,000,000 veterans of World War II, this would indicate that approximately one of every twenty veterans has bought or built a home since his separation.

Defaults of home loans amounted to only 183 by the end of May, or one default for every 4,025 loans granted. These defaults cost the Veterans' Administration \$305,098.



## Home Buyers Want ELECTRIC WATER HEATERS

Surveys\* show that women want Electric Water Heaters because of the following advantages: (1) SAFE (fumeless, flameless); (2) CLEAN (smokeless, sootless); (3) ADAPT-ABLE (short hot water lines; no flue or vent); (4) TROUBLE FREE (as electric light); (5) ECONOMICAL (plenty of hot water all the time at low cost).

Be sure the water heating equipment in homes you build offers all these advantages—install modern Electric Water Heaters.

\*1944 NEMA survey revealed 3 times as many women preferring Electric Water Heaters as owned them at that time!

Electric Water Heater Section  
NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION  
155 E. 44th Street, New York 17, N. Y.

B & F • CLARK • ELECTROMATIC • FOWLER • FRIGIDAIRE • GENERAL ELECTRIC • HOTPOINT • HOTSTREAM • JUD WHITEHEAD • KELVINATOR • MONARCH • NORGE • PEMCO • REX • RHEEM • BEIDELHUBER • SELECTRIC • SMITHWAY • THERMO-GRAY • THERMO-WATT • UNIVERSAL • WESTINGHOUSE

IN A HOUSE WIRED FOR AN ELECTRIC RANGE IT'S

EASY TO INSTALL  
AN *Electric*  
WATER HEATER!

**JUST**  
*stock 'em*  
**AND YOU'LL**  
*sell 'em*

**High-turnover  
 protective products  
 for those  
 everyday repair jobs**

Every home-owner and farmer nowadays has repair jobs he never got around to doing. Maybe he couldn't get the right materials. Maybe he couldn't find the time.

Here's your chance to cash in on that backlog of left-over repairs. Just display these Barrett specialties as a reminder to your customers. They're fast-moving items, in demand the year 'round. And they add up to a nice, steady source of extra business.

Why not make up an order for the Barrett representative when he calls, or write us direct? Thanks to enlarged production facilities and greater availability of containers, we can now supply your needs if you act promptly.

**THE BARRETT DIVISION**

ALLIED CHEMICAL & DYE CORPORATION

40 Rector Street, New York 6, N. Y.

2800 So. Sacramento Avenue  
 Chicago 23, Ill.

Birmingham  
 Alabama

**BARRETT SHINGLES AND SIDINGS . . . ROLL ROOFINGS . . . ROCK WOOL INSULATION . . . PROTECTIVE PAINTS . . . OTHER BUILDING PRODUCTS.**

\*Reg. U. S. Pat. Off. †Trade-mark of Allied Chemical & Dye Corporation.



1. BARRETT LIQUID ELASTIGUM\* Roof Coating



2. BARRETT PLASTIC ELASTIGUM\* Roof Cement

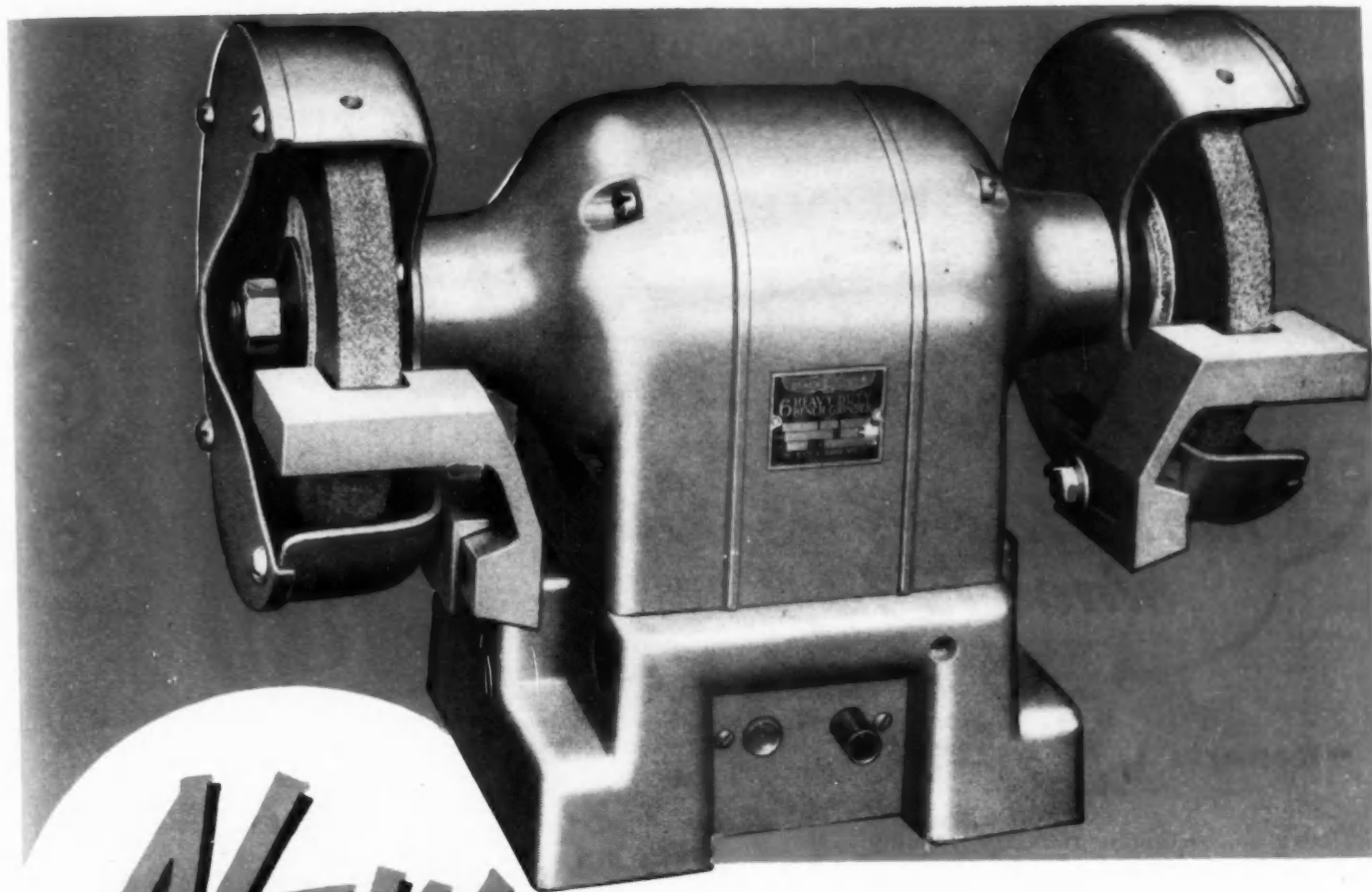


3. BARRETT EVERJET\* Paint



4. BARRETT HYDRONON† Paint





# NEW 6" HEAVY-DUTY BENCH GRINDER

for FASTER Tool Sharpening . . . Grinding . . . Wire Brushing!

From streamlined housing to internal engineering, the new Black & Decker 6" Heavy-Duty Bench Grinder is designed to turn out better work in the shortest possible time. It will speed up all your work by keeping a sharp edge on axes, spades, twist drills, chisels, other tools. You can equip it with Wire Wheel Brushes for cleaning all tools, for buffing and burnishing . . . and with wheels to handle many different grinding jobs.

Study the important facts on this Tool, shown at the right. Then ask your nearby Black & Decker Distributor for full information on these useful new Bench Grinders. Write today for your free copy of our latest catalog to: The Black & Decker Mfg. Co., 666 Pennsylvania Ave., Towson 4, Maryland.

LEADING DISTRIBUTORS  EVERYWHERE SELL

# Black & Decker

PORTABLE ELECTRIC TOOLS

### READ THESE FACTS on this Useful Tool

- Modern streamlined die-cast housings improve working clearances and decrease weight. Modern engineering means maximum efficiency.
- Powerful "constant-speed" motor, built by Black & Decker, mounted on ball bearings, maintains high operating speed under load.
- Wheel guards and covers made of steel to give extra protection. Ample room for standard three-section wire wheel brush without changing the guard.
- U-shaped tool rests fit around grinding wheel for improved support in tool sharpening. Adjustable for wheel wear.
- Machined hole in base of Grinder provides for mounting attachments.
- Two-pole push-button switch is recessed in housing to prevent accidental contact, yet remains easy to reach.
- Standard equipment includes two 6" grinding wheels; medium grade for rough, fast work . . . fine grade for finish grinding and tool sharpening.



**BRUCE FINISHED FLOORS**  
*have saved us  
 more than \$45,000  
 since 1942!*

**-Reports L. H. MILLS**  
*Leading Chicago Home Builder*

Here is an outstanding record of economy and performance that speaks for itself. The use of Bruce Finished Floors in 948 units saves \$45,000 and 3,792 working days! The reason—the elimination of costly, time-consuming sanding and finishing on the job.

Throughout the country, builders choose Bruce Finished Flooring because it saves them time and money . . . and because it gives home owners more beautiful floors with a superior, longer-lasting finish.

**E. L. BRUCE CO.**  
 Memphis, Tenn.



Lawrence H. Mills  
 President  
 Jack Alan Mills  
 Vice President  
 William F. McHugh  
 Asst. Vice President  
 Edward B. Baier  
 Sec'y and Treas.

**MILLS AND SONS**  
 and Associated Companies  
**REALTORS ... BUILDERS**

*Main Office*  
 7610 Grand Avenue : Chicago 35, Ill.  
 Lackawanna 1402 : Elmwood Park 2500

*Brokerage  
 Management  
 Home Building  
 Insurance*

June 3, 1947.

E. L. Bruce Co.,  
 Memphis, Tenn.

Gentlemen:

As you know, we began purchasing Bruce Finished Flooring from Barr & Collins, in 1942, and have been using it exclusively in all of our housing construction. In fact, I understand that we were the first in the Chicago area to change over to this new type of hardwood flooring. Therefore, I am sure that you will be interested in the following data from our records.

- (1) Since 1942, we have installed Bruce Finished Floors in a total of 948 individual houses in our projects at Racine, Wis., and Elgin, Franklin Park, Ivanhoe and Elmwood Park, Ill.
- (2) On these four and five room units we have realized a saving in flooring costs averaging \$45 to \$50 per unit through the elimination of "on-the-job" finishing. This totals more than \$45,000 on all units completed to date.
- (3) In addition to the actual dollar savings mentioned above, we have gained many valuable days' working time ordinarily required for sanding and finishing. I couldn't even begin to estimate the value of this saving alone, but I think it is sufficient to point out that at a minimum average of four days per unit, this amounts to 3,792 working days.

Of course, Bruce Finished Floors have many other advantages, but I think that the above is sufficient to tell you why Mills and Sons have been and will continue to be enthusiastic boosters for these fine floors.

Also, I want to take this opportunity to congratulate E. L. Bruce Co. on their stabilized price policy. I was surprised in looking over my lists the other day to find that the list price of Bruce Finished Flooring is actually less in many cases than that of some unfinished strip floorings.

Keep up the good work.

Sincerely yours,

MILLS AND SONS  
 BY:

*Lawrence H. Mills*  
 President.

LHM:EH

**BRUCE FINISHED FLOORS**

# King John to John King ...

*An idea borrowed from feudal times*



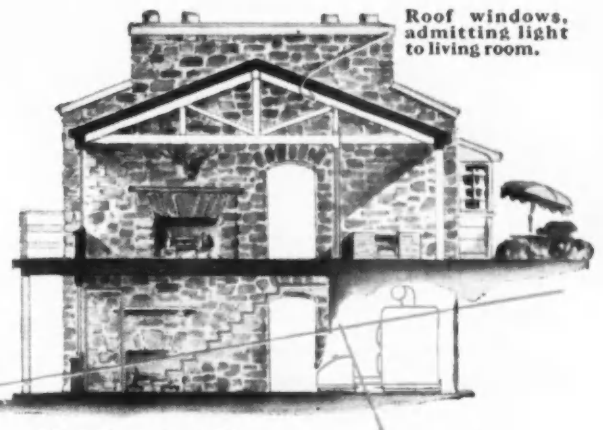
Front view, showing house — wide balcony and grade level basement entrance.



A house fit for a king. Barbecue oven reminiscent of the great fireplaces where spitted fowl and venison once turned before banqueting knights. Open slide doors and the living room porch, a single spacious room with massive floor-to-ceiling stone wall, exposed Gothic style trusses and a vast fireplace for stag's antlers.

Other features that will endear this house to "John Kings" include a second floor balcony running the length of the house, and an arrangement combining ground floor convenience at the back of the house with second-floor privacy at the front — all presented in the smart, modern manner.

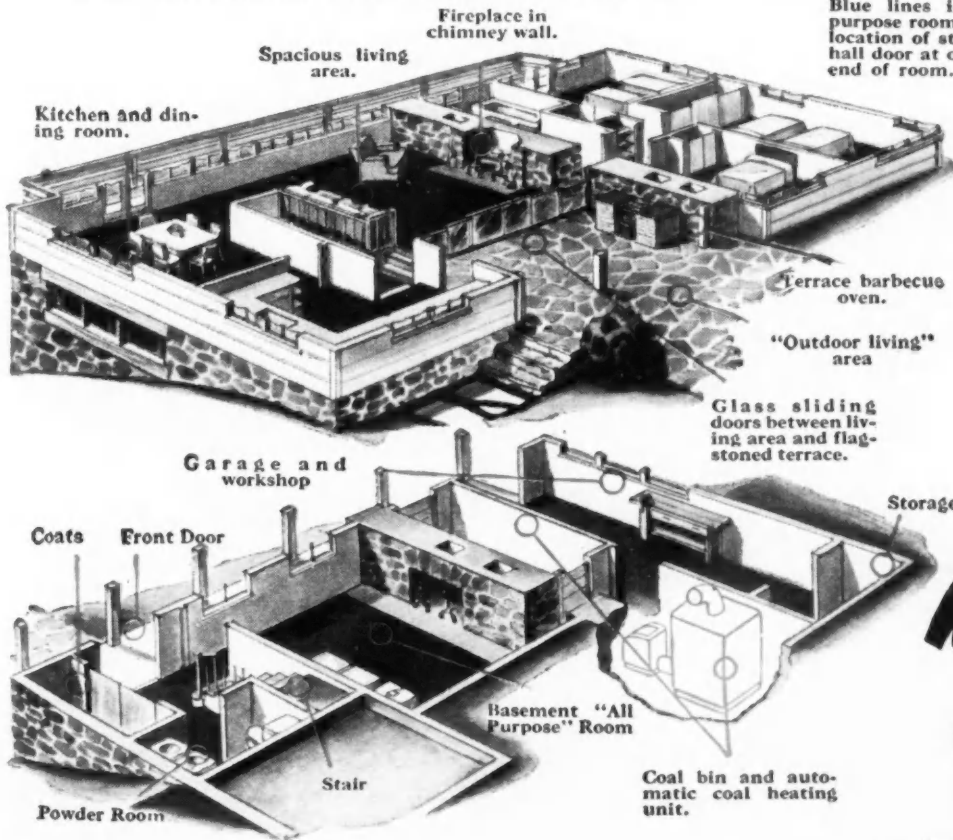
And the smartest of all features is the design for coal heat — for which King John would have given a king's ransom.



Roof windows, admitting light to living room.

Blue lines in "all-purpose room" show location of stair and hall door at opposite end of room.

Natural slope 1/6 steeper if desired.



The choice of the millions of smart Americans who heat with coal is *Fuel Satisfaction* — the superior, all-purpose *bituminous coal* mined along the Norfolk and Western. Fuel Satisfaction gives even, healthful heat . . . clean heat . . . economical heat — and will still be keeping home fires burning when other fuels are exhausted.

## Norfolk and Western RAILWAY

CARRIER OF FUEL SATISFACTION

Powered to Build Better Profits . . .

# ADVANCE-DESIGN CHEVROLET TRUCKS

## WITH THE CAB THAT "BREATHES"

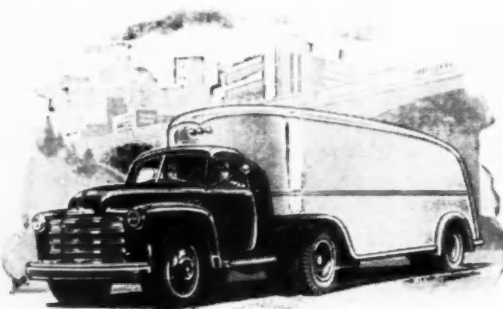
America's first ADVANCE-DESIGN trucks, featuring the larger, roomier cab that "breathes"! The unique new cab almost literally "inhales" fresh air and "exhales" used air,\* assuring day-long driver comfort and efficiency. Other new features and innovations make these the trucks to see *first* at your Chevrolet dealer's!



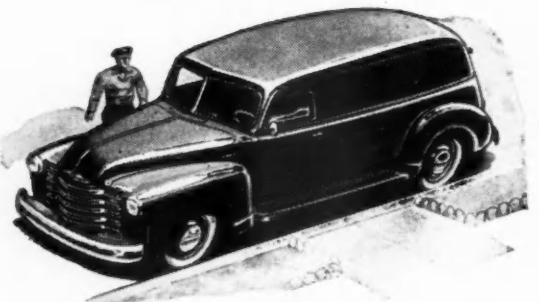
Extra-economical and powerful Chevrolet VALVE-IN-HEAD ENGINES are time-savers, profit-makers! There are exclusively designed HYDRAULIC TRUCK BRAKES, too, with greater brake-lining contact for quick, safe stops!



More efficient loading in stake and high rack bodies—more **LOAD SPACE** in panels and pick-ups. Chevrolet truck **FRAMES** are new, stronger and sturdier, designed to carry greater loads for a longer time!



Better load distribution, due to **LONGER WHEELBASES. FULL-FLOATING HYPOID REAR AXLES** mean extra pulling power! They're geared for the load!



\*Fresh-air heating and ventilating system optional at extra cost.



## CHEVROLET TRUCKS

FOR TRANSPORTATION  
UNLIMITED



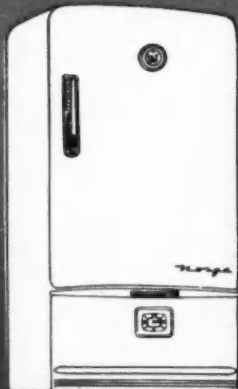
CHEVROLET MOTOR DIVISION, General Motors Corporation, DETROIT 2, MICHIGAN

Your Chevrolet dealer can supply standard or special equipment for your specific hauling needs.





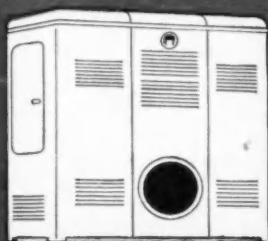
GAS RANGES



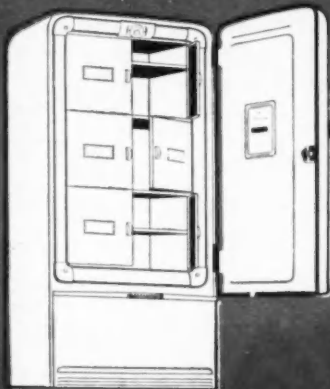
REFRIGERATORS



ELECTRIC RANGES



HOME HEATERS



HOME & FARM FREEZERS



WASHERS



ELECTRIC WATER HEATERS

## FROM THE LAUNDRY . . . TO THE LIVING ROOM

These vital home services are superbly performed by Norge: Water is heated, clothes are laundered, food is cared for and cooked, rooms are kept warm.

*Satisfaction-equipped* is an apt synonym for *Norge-equipped*.

Norge is the trade-mark of Norge Division, Borg-Warner Corporation, Detroit 26, Michigan

SEE  
**NORGE**  
BEFORE YOU BUY

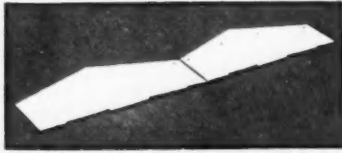
Products of  
BORG-WARNER



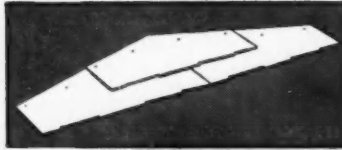
# American Colonial — the asbestos shingle

that's **EASY TO APPLY**

... and it provides the most beautiful low-cost asbestos roof ever developed



**1. Applied like any Strip Shingle**—Each American Colonial is an asbestos strip equivalent to 5 ordinary shingles.



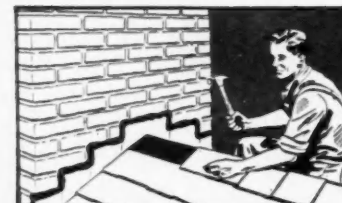
**2. Self-Spacing Feature Saves Time**—Shingles are lined up over the points on the preceding course.



**3. Automatic Alignment**—No chalk lines necessary, no delays measuring courses. Any roofer could actually lay American Colonial Shingles blindfolded.



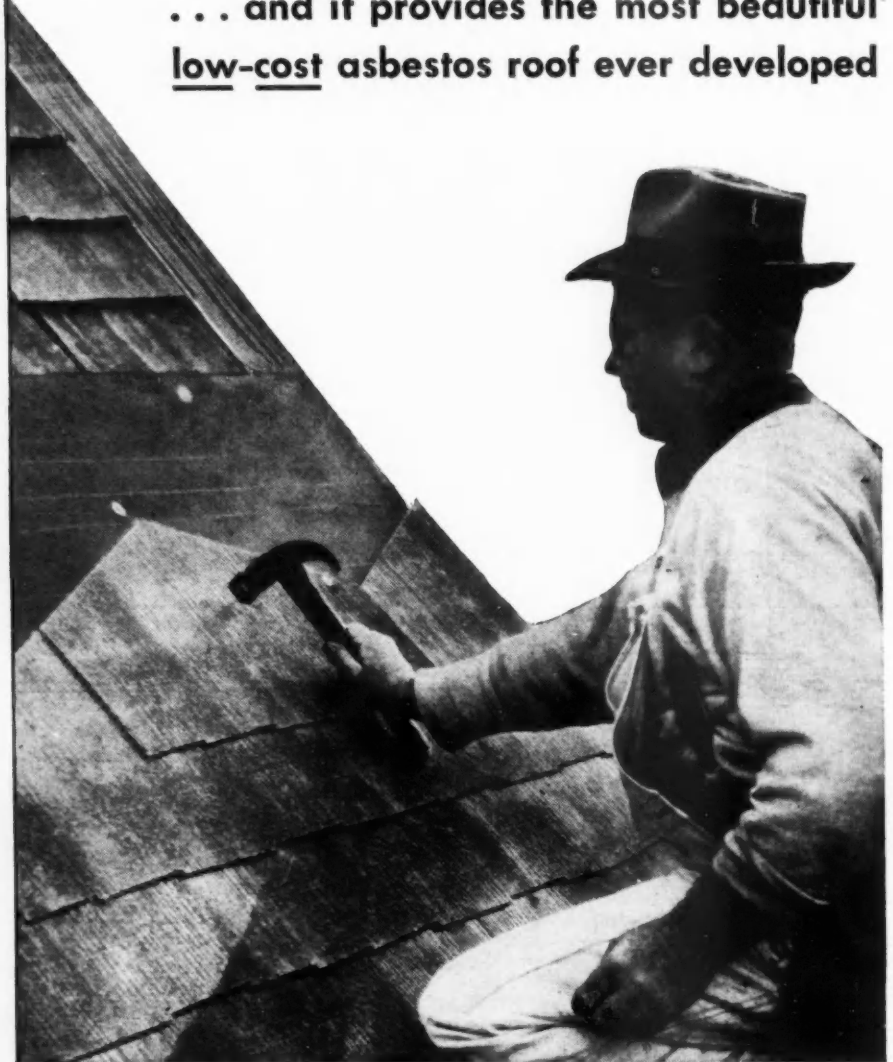
**4. Easy to Handle**—Bundles weigh about the same as asphalt strips. Use only 80 pieces per square. Only 4 nails per shingle, in pre-punched holes.



**5. Easily Applied on Ridges**—Special Hip and Ridge shingles supplied in exactly the same textured grain, the same beautiful, weathered appearance and colors as the main roof shingles.



**6. Cutter Speeds Application**—When shingles must be cut to fit around valleys, dormers, along the rake, etc., a shingle cutter does the job easily, quickly—right on the roof.



**BUILT TO LAST 35 YEARS PLUS**—Thousands of J-M Asbestos Shingles have now been in service 35 years and more. They're still as fireproof, rotproof, and weatherproof as the day they were applied. No signs they won't last another 35 years or more! That's why we say American Colonial Asbestos Shingles last 35 years PLUS. Johns-Manville, Box 290, New York 16, N. Y.



# Johns-Manville

# A Short Cut...

## to Bigger Profits

### WITH MODEL 70

# Mall Saw

REG. U.S. PAT. OFF.



# \$105<sup>00</sup>

IN U.S.A.

7<sup>1</sup>/<sub>4</sub>" Blade—2<sup>1</sup>/<sub>4</sub>" Cutting Capacity

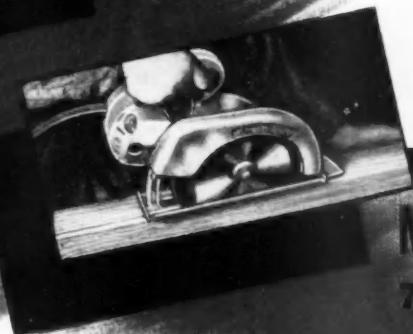
Also available in 2", 2<sup>7</sup>/<sub>8</sub>", and 4<sup>1</sup>/<sub>2</sub>" capacities

The speed . . . power . . . and versatility of the MallSaw adds extra profits to every contract. It finishes sawing jobs faster—cuts costs—eliminates waste. Master-of-all-cuts—it cross-cuts, rips, bevel cuts to 45 degrees, multiple cuts, dados, grooves and cuts light gauge metals. Comes complete with combination blade, lubricant, wrench and metal carrying case.

*Your Dealer can supply you*



CROSS-CUTTING

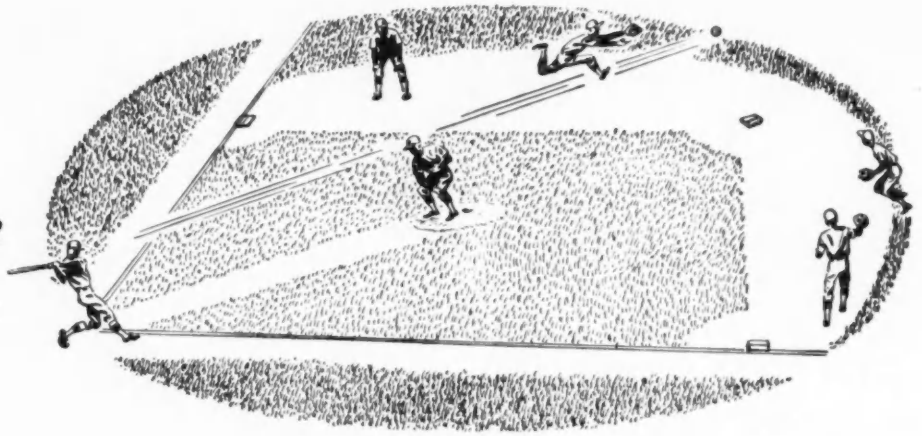


RIPPING ON THE BEVEL

## MALL TOOL COMPANY

7737 South Chicago Avenue  
Chicago 19, Illinois

*It's  
Where You Are  
That Counts —*



## Roddiscraft Warehouses Are Where It Counts When It Comes to Service

### Nationwide Roddiscraft Warehouse Service

Cambridge 39, Mass. . . 229 Vassar St.	Long Island City, New York . . .
*Chicago 8, Ill. . . 1440 W. Cermak Road	. . . Review & Greenpoint Ave.
Cincinnati 2, Ohio . . 457 E. Sixth St.	*Los Angeles 11, Calif. . . 2860 E. 54th St.
*Dallas 10, Texas . . . 2800 Medill St.	Marshfield, Wis. . . . 115 S. Palmetto St.
Detroit, Mich. . . 11855 E. Jefferson Ave.	*Milwaukee 8, Wis. . . . 4601 W. State St.
*Kansas City 8, Mo. . . 2729 S. W. Blvd.	New York City, N. Y. . . 920 E. 149th St.
Louisville 10, Ky. . . 1201-5 S. 15th St.	*San Antonio, Texas . . . 727 N. Cherry St.

DEALERS IN ALL PRINCIPAL CITIES



### In Stock Service on Roddiscraft Doors and Hardwood plywood.

Roddiscraft Solid Core Flush Veneer Doors and Hardwood Plywood are now available in a number of stock sizes in all our warehouses. Also fir plywood, all kinds of lumber products and softwood doors.\*

### Distributors of Formica — Cabinet Tops

Sell two instead of one — sell Formica in combination with plywood to cabinet makers, furniture, and fixture manufacturers. Available in black or attractive colored patterns.

Roddiscraft offers a nationwide chain of warehouses to save you time and serve you better. Located at key distributing points throughout the country, our warehouses make Roddiscraft doors, plywood, and other lumber products available when you want them, where you want them.

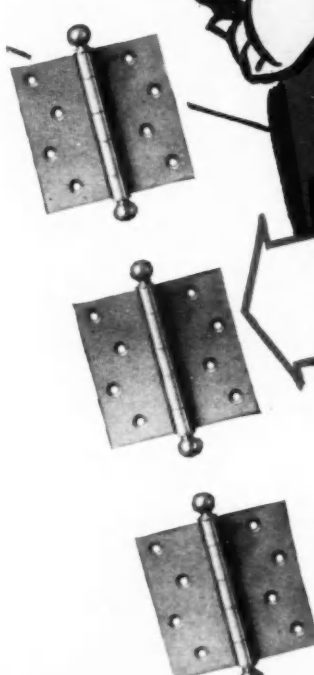
Roddiscraft warehouses offer on-hand service on doors and plywood in stock sizes. Our warehouse program has been carefully designed to serve you. At Roddiscraft warehouses you get the "bestest, fastest." Make use of our nationwide service to serve your customers.

# Roddiscraft

Roddis Lumber & Veneer Co.

MARSHFIELD, WISCONSIN

**THREE HINGES**  
*make 'em*  
**SWING EASY**



**VISIBLE Mark  
of Good  
Construction**

THE STANLEY WORKS  
NEW BRITAIN, CONN.

**STANLEY**

HARDWARE • HAND TOOLS • ELECTRIC TOOLS

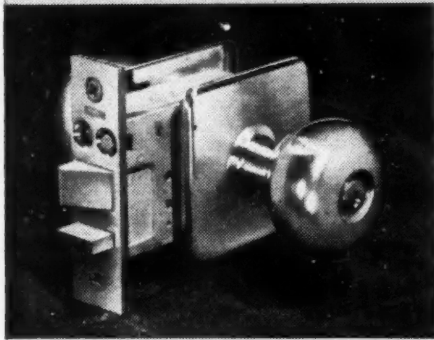
REMEMBER . . . . .

THREE HINGES TO A DOOR

ON THE  
RECORD AT  
SARGENT & COMPANY

THE  
NEW

SARGENT  
INTEGRALOCK\*  
PRECISION BUILT



Entrance door lock of  
LIFETIME QUALITY

● The Sargent Integralock\* is a new type of lock, completely modern both in appearance and in engineering design. It is easier and quicker to install because it is a pre-aligned factory assembly. It gives a lifetime of service without maintenance because it is made entirely of strong pressure-formed metals, it's tamper-proof and it contains 30% fewer moving parts. In all, it is one of the strongest, safest locks ever made and one of the handsomest to grace the entrance door of a home.

● Another new Integralock feature is the shear pin which has been engineered into the outside knob to prevent the knob from being forced. Under extreme torsion this pin gives way. Then the knob—freed from the mechanism—spins harmlessly. Yet the regular key to the lock will continue to retract the bolt in the normal way. The broken pin, like an electric fuse, is quickly and cheaply replaced.

● For the name of your Sargent distributor and further information about the Integralock, write to Sargent & Company, Water Street, New Haven, Conn.

Quick Delivery from  
Sargent Distributors Everywhere

\*Trade Mark



SARGENT & COMPANY  
NEW YORK • NEW HAVEN, CONN. • CHICAGO

News, Views  
and Comments

## On and Off the Record

**PROBE COLLECTIVISM**—House labor committee ordered an investigation into "what appears to be a move to bring about collectivism through increased federal housing programs." Congressman Gwinn of New York was appointed to head the investigation.

**BLAMES UNIONS**—Gwinn said that "the building trades are tying up all housing, including housing in whole cities and in some instances in states, unless private builders agree to terms calling for wages and overtime that they cannot pay if they want to sell their houses."

**UNIONS AS TOOLS**—Gwinn declared that unions clamor for more federal housing because only government can pay exorbitant prices by passing costs along to taxpayers. Unwittingly, said Gwinn, the unions are joining forces with the collectivists to get more public housing, the greatest avenue there is to collectivist society.

**HOME BUILDING PROGRESS**—First five months of 1946 saw 276,000 units started, 98,000 units completed. First five months of 1947 saw 280,300 units started, 300,000 completed. Reason for gains is increased production of building materials, improved distribution, increased efficiency at jobs.

**SMALL CITIES**—Observers watching curtailed programs in major cities wonder where 1947 gains are coming from. The answer is in small cities, towns and villages, where home building ranges from 20 to 100 per cent greater than last year. Small centers got practically no materials in 1946.

**EXPEDITING**—Under the first housing expediter, policy was to make the best showing possible for political reasons. Thus, great bulk of materials was channeled to major projects that would make news. This year, with more equal distribution, small centers are getting their share, and building that was deferred in 1946 goes ahead. There is hardly a population center in the nation with 500 people or more that does not have some new home building under way.

**THE PUBLIC**—Industry efforts to acquaint the public with the facts about building costs are beginning to bear fruit. Home buying public is slowly becoming reconciled to new price levels

brought about by new wage scale levels, and understanding that building costs will abate neither far nor fast.

**NEED FOR ACTION**—Now that Congress has gone home for the remainder of the year the need for positive action by the home building industry is at hand. Unless facts are marshalled before Congress reconvenes for a housing bill written by industry, or for refutation of claims of a need for a housing bill, the 1948 session of Congress will be deluged by public housing measures of all kinds. The next time industry might not be able to fight off the threat.

**PINCH HITTER**—Chicago Metropolitan Home Builders Association annual banquet and installation of officers had Chicago's Mayor Kennelly scheduled as principal speaker. Kennelly at last moment, while banquet was under way, sent word that he could not come. Earl Coulombe, popular New Orleans home builder, and national director, accidentally found the banquet, while on his way to his room in the Sherman Hotel. He was quickly rushed to speakers' table, introduced, and made one of the best extemporaneous addresses heard by home builders anywhere for a long time.

**LESSON**—Coulombe's fortunate and accidental appearance saved the day. All local home builders' associations, if they do not already do it, should send special invitations to all other home builders' chapters. A few visiting firemen on hand are a good thing under any circumstances, and there is always the chance that an informed industry speaker might be a valuable asset in the bull pen or on the pinch hitters' bench.

**EXPERIMENTING**—New techniques continue to be experimented with in connection with job site fabrication methods. Most builders seem to have reached the conclusion that most economical way to build if project has 20 or more houses is to set up a temporary shop at job site and power-cut all pieces, assemble many, and truck to individual houses. Problems in design and equipment of temporary job site shops are still in experimental stage. Builders' clearing house of information and experience would hasten standardization, cut costs.

**SUMMER WEATHER**—Final arrival of summer weather in cold, springless north has given great impetus to building operations.

# "High Cost" Complaints getting you down?



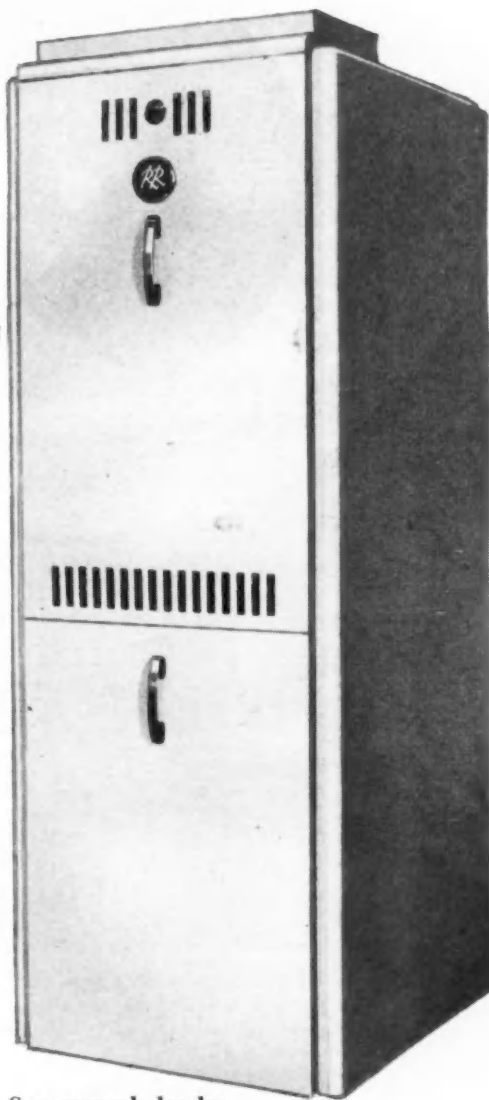
**AVOID THEM** by installing this  
**Richmond packaged conditioner**  
**... shipped completely assembled**

The Richmond Winter Air Conditioner can be quickly installed in basement or utility room—requires only about 4 to 6 sq. ft.

The smartly styled jacket with white "kitchen cabinet" finish is a mark of quality and good value throughout.

### Quick facts about the Richmond Gas Winter Air Conditioner

- Heat exchanger cast in one piece of chrome-iron alloy for long life
- Baked-on Dulux white enamel finish
- Completely packaged, quickly installed
- Spun-glass filters easily renewed
- Quiet—blower fan floats on rubber
- Clean—burns gas
- Four sizes: 66,000; 90,000; 115,000 and 140,000 btu input
- Carries both AGA approval and a one-year replacement guarantee



See your wholesaler or write Richmond Radiator Company, 19 East 47th Street, New York 17, N. Y., for name of nearest Richmond wholesaler.

FACTORIES AT METUCHEN, N. J., MONACA, PA., NEW CASTLE, DEL., UNIONTOWN, PA. (2)



## RICHMOND RADIATOR COMPANY

Affiliate Reynolds Metals Co.

Enameled Cast Iron Ware • Vitreous China • Perma-Gloss • Gas Boilers • Gas Winter Air Conditioners • Gas Gravity Furnaces • Radiators

# THE WONDER WOOD OF 1000 USES • MASONITE PRESDWOOD

Can be worked easily with carpenters' tools

Won't split, splinter, dent, rust or corrode

Dense, grainless, smooth, durable, strong

Can be bent permanently to curved designs

Takes almost any applied finish

Readily laminated, sawed, beveled, nailed, routed

Resists moisture permanently — no tendency to warp



Presdwood is ideal for all kinds of remodeling from kitchen to bathroom . . . for work surfaces, counter tops, cabinets, and built-in furniture . . . for walls, wainscots, and ceilings.

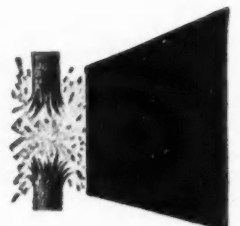
You can do things easier and better with Masonite\* Presdwood\* than with any other material. This smooth, strong hardboard is made from natural wood refined to a better, stronger wonder wood that can be applied easily and economically. Presdwood offers unlimited opportunity for handsome, durable construction, both interior and exterior. Use it for both new projects and remodeling jobs. Presdwood comes in large, flat panels — Untempered, or Tempered to extra hardness — at your progressive lumber dealer. For complete technical data write Masonite Corporation, Dept. AB-8, 111 W. Washington St., Chicago 2, Ill.

\*Trade-marks Reg. U. S. Pat. Off. "Masonite" signifies that Masonite Corporation is the source of the product.

THE LEADING HARDBOARD

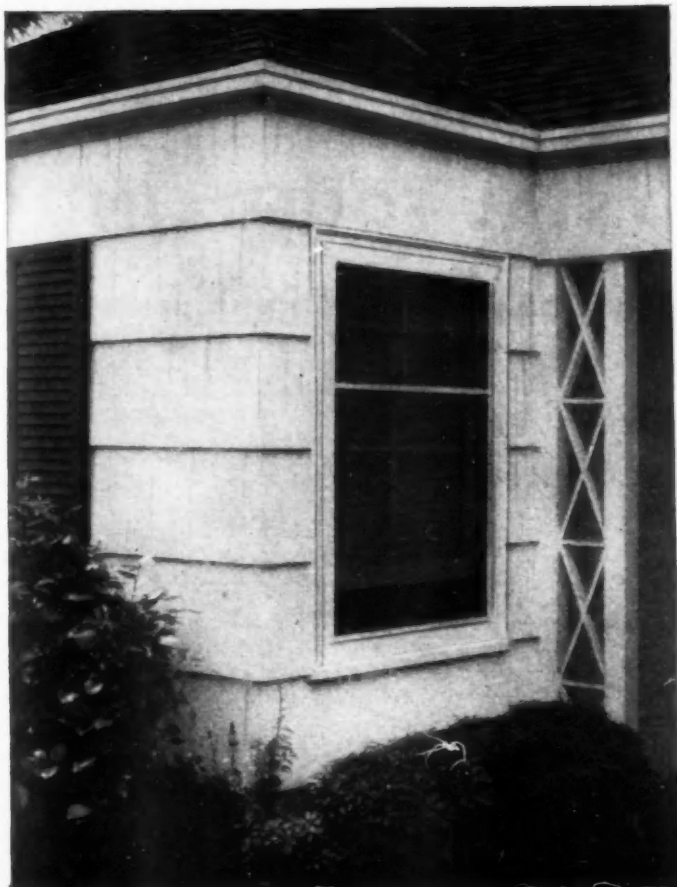
# MASONITE PRESDWOOD

Reg. U. S. Pat. Off.



FROM EXPLODED WOOD TO VERSATILE HARDBOARD





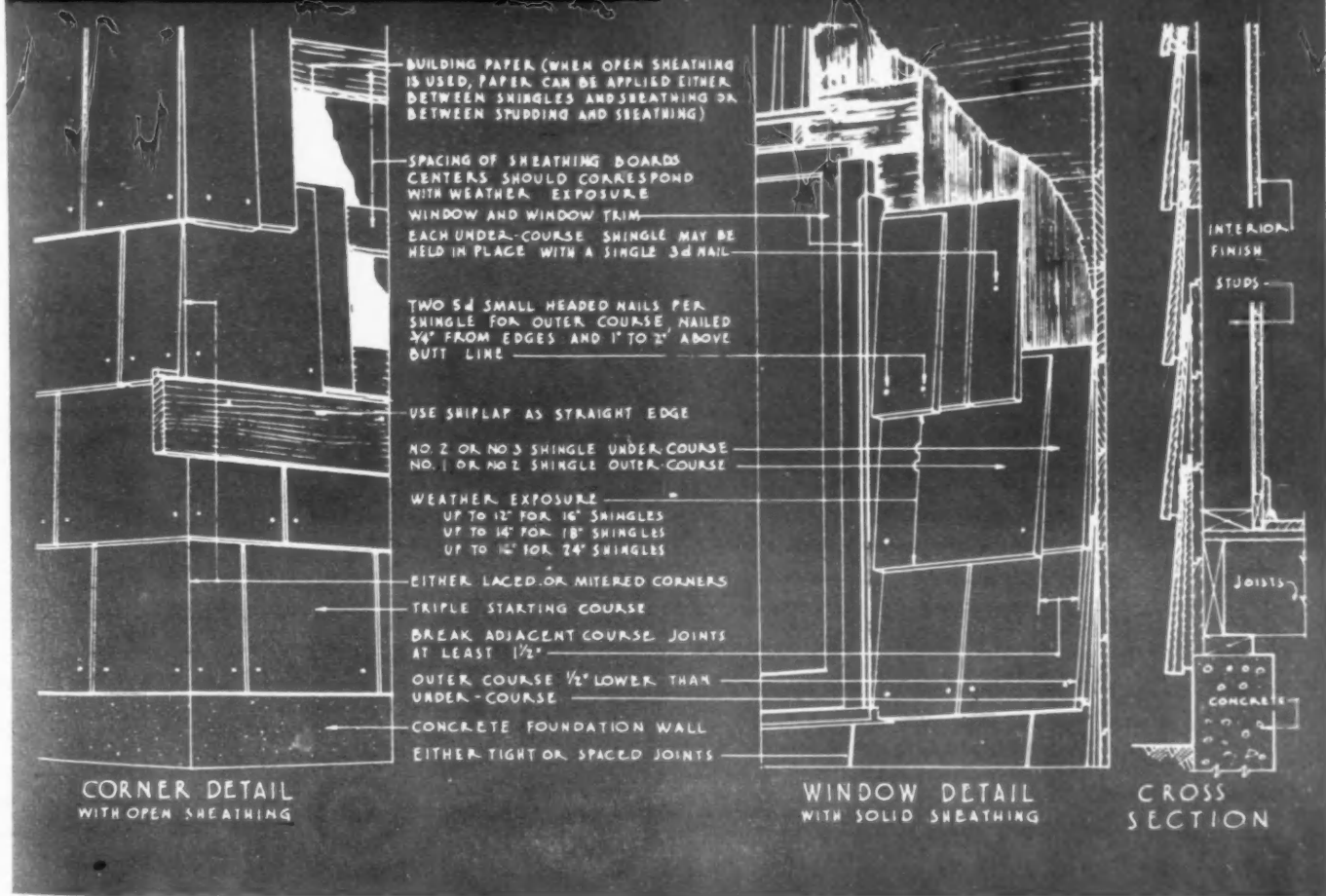
# Double-Coursing

## THE SIDEWALL OF TODAY

With the introduction of double-coursing, a new type of CEDAR SHINGLE and SHAKE wall construction is possible — and a new and charming pattern produced. The application is economical because of the wide weather exposure and the use of low grade shingles for the under course. A warm, tight, attractive job is assured with low maintenance cost. Note the charming and effective horizontal shadow lines.

*Blueprint of double-coursing detail mailed free on request.*

**RED CEDAR SHINGLE BUREAU**  
 5510 White Building, Seattle 1, Washington  
 or Metropolitan Bldg., Vancouver, B. C.

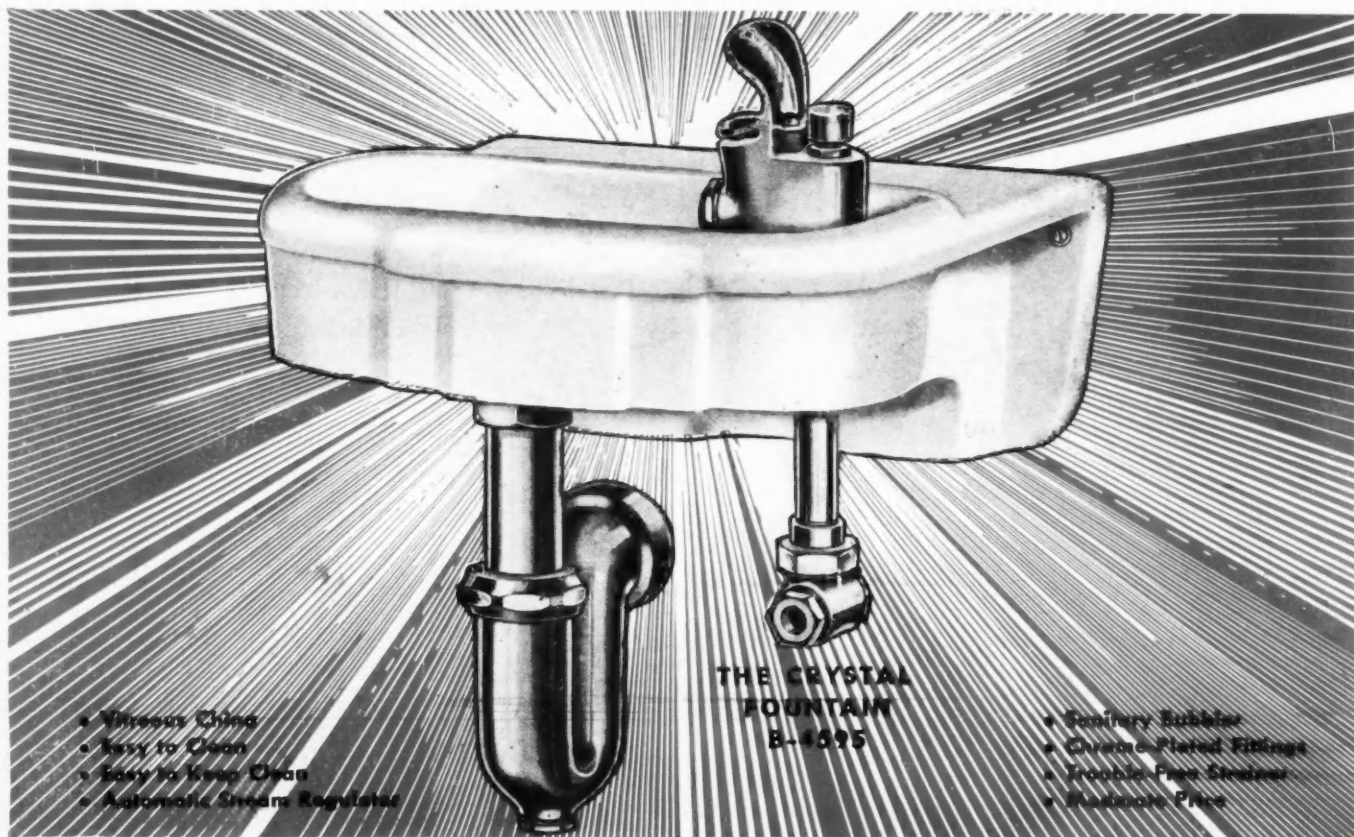


**SPECIFY CERTIGRADE CEDAR SHINGLES AND SHAKES**



# THE ELJER CRYSTAL FOUNTAIN

## Chrome-Plated Fittings — with Non-Squirting Bubbler



- Vitreous China
- Easy to Clean
- Easy to Keep Clean
- Automatic Stream Regulator

THE CRYSTAL  
FOUNTAIN  
B-4095

- Sanitary Bubbler
- Chrome-Plated Fittings
- Trouble-Free Strainer
- Resistant Piece

High in quality, low in price, the attractive Eljer Vitreous China Crystal Fountain features gleaming chrome-plated fittings and a *completely automatic* regulator that maintains a steady stream height—regardless of variations in supply pressure. Water *cannot* be squirted by placing a finger over the nozzle. That's a real plus-value in schools, factories and public buildings.

When planning, building or remodeling most all types of structures, you can wisely recommend extra Eljer Crystal Fountains in convenient locations at small additional cost. No other fountain in a comparative price range offers the features of the Eljer Crystal . . . and it's a money-maker, too. *For complete information, see your Eljer Distributor or write Eljer Co., Ford City, Pennsylvania.*

# ELJER CO.

FACTORIES AT FORD CITY, PA.  
SALEM, OHIO · LOS ANGELES, CALIF.

MAKERS OF FINE PLUMBING FIXTURES SINCE 1904



# MONTHLY REVIEW

NEWS OF THE NATIONAL ASSOCIATION OF HOME BUILDERS AND AFFILIATED ASSOCIATIONS

## Architectural Exhibit Committee Plans Display of House Designs

Cliff May, Los Angeles builder and chairman of the Architectural Exhibit Committee of the 1948 NAHB Convention and Exposition, met with his committee



CLIFF MAY

in Los Angeles in June to discuss ideas for securing and exhibiting the best house plans developed in the past year or two. In addition to Mr. May, committee members present were Martin Braun, architect and builder, Chicago; Walter Durham, architect and builder, Philadelphia; Cedric Roberts, Los Angeles; and Paul S. Van Auken, convention director, Chicago.

The consensus of the committee was that the best exhibition of house plans could be obtained through securing the cooperation of editors of building and architectural magazines, since these editors are recognized as outstanding authorities in assembling and presenting the type of information most interesting to builders and the public.

Accordingly, the editors of leading magazines in the building field have been contacted, and plans are under way to group their presentations in a dramatic assembly of new house plans at the convention. The theme of the exhibit will be "Assisting the Builder through Magazine Research."

Tentative plans include assigning a space to each cooperating magazine in which the editors can use their own ideas, based on certain standard rules and regulations as to height and possibly other limitations which will not restrict full expression by each individual magazine. Several suggested subjects are "How to Build for Less Money," "People Want Sensible Things," "Yardstick Houses," "Short Cuts and How to Do It."

## NAHB 1948 Convention and Exposition to Be "Biggest Ever"

Convention Director Paul S. Van Auken and Convention Chairman W. Hamilton Crawford announced recently that since the 1948 NAHB convention will be too large to find accommodations under a single roof in Chicago, meeting rooms and exhibit space in the Congress Hotel have been reserved in addition to the usual space in the Stevens Hotel.

In the Congress Hotel, one block north of the Stevens, space for thirty additional exhibits has been obtained. These exhibits will be housed in the Casino Room on the street level just off Michigan Avenue. The convention program, in the early planning stages, is expected to limit general sessions to the afternoons only. Efforts are being made to develop a series

year, have assigned liberal quotas to the convention committee. It is expected that all delegates will be accommodated in leading downtown hotels. Unless attendance surpasses liberal estimates it will be unnecessary to house anyone outside the loop.

Exhibit plans and the convention prospectus are nearing completion, and will be mailed to all prospects for space and former exhibitors about Sept. 15. Preparation of the prospectus is being pushed in order to accommodate many manufacturers who already have written for information.

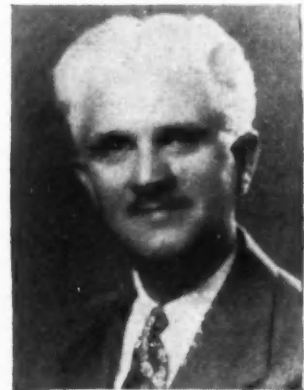
Association members from all parts of the country have been heard from with regard to what they want to see in the



W. HAMILTON CRAWFORD

of demonstration clinics to be held on the first three mornings of the convention under the auspices of the building trades associations. The clinics, to include practical demonstrations of plastering, brick laying and other trades, will be scheduled for the Congress Hotel, with the general sessions in the afternoons to take place in the Grand Ballroom of the Stevens. The close proximity of the two hotels, and the fact that many of the delegates will have rooms in the Congress, is expected to make the use of both hostels a practical solution of crowded conditions for exhibits as well as meetings.

Mr. Van Auken stated last week that hotel accommodations for the convention delegates and visitors will be greatly increased next year. Larger quotas of rooms in the Stevens and nearby hotels have been obtained, and several loop hotels, unable to house NAHB delegates last



PAUL S. VAN AUKEN

exhibits. The preference, without exception, is for exhibits of new building products. A number of informal surveys indicate a desire on the part of builder members to see anything that is new and applicable to 1948 homes. There is no preference as to the kinds of products. The entire range of items from basic materials and equipment to minor items and gadgets is included. The convention leaders, therefore, are urging manufacturers to make every effort to feature new products in their convention exhibits.

Enlargement of exhibit space available to manufacturers by taking additional floor area at the Congress Hotel, plus the fact that more and better hotel accommodations will be available presages a 1948 Convention and Exposition which bids well to break all the previous fine records which have been established by the nation's greatest home building show.

**Plan Now to Attend or Exhibit at the NAHB Convention February 22-26, 1948**

## New Hampshire Home Builders Organize



SHOWN above: (L. to r.) standing—Harry D. Easler, William J. Tobin, and Charles R. Brunelle. Seated—Angus M. MacNeil, Carter Ruggles and Harry J. Tobin, all of whom participated in the New Hampshire group organization meeting.

The steadily growing number of NAHB affiliated state associations has been increased by the recent formation of the Home Builders Association of New Hampshire. The organization meeting was sponsored by President Harry C. Jones of the Manchester (N. H.) Federal Savings and Loan Association and Angus M. Mac Neil, president of the Home Builders Association of Greater Boston. William J. Tobin of Washington, representing NAHB, addressed the meeting on the importance of strong local organizations in the national association and pointed out the many services provided local groups by the Washington office.

Temporary officers named include: Romeo P. Morin, president; David W. Davidson,

vice president; and Eugene L. Tougas, Jr., secretary-treasurer. In addition to these men, the following were appointed to the board of directors: Albert W. Lacroix, Philibert Paquette, Lionel J. Provancher, Harry C. Jones, Harry R. Sundeen, Joseph Dallaire and Leon Keyser.

In his acceptance of the temporary presidency, Mr. Morin said: "The home builders of New Hampshire, every one of them, want to build more homes for a larger proportion of our people. In order to accomplish this, prices must be reduced. That is fundamental. By the concerted efforts of this association it will be possible not only to strive for reduced costs but to keep at a high level building practices."

## Milwaukee Home Builders Install R. A. Lainey, New President

Nearly 300 home builders and their guests attended the annual installation and dinner dance of the Milwaukee Builders' Association recently in the Crystal Ballroom of the Hotel Schroeder.

President for the coming year, R. A. Lainey, succeeded Frank Kirkpatrick, retiring presiding officer and national director. Other officers installed were Francis C. Wilson, vice president; Frank Beverly, treasurer; and Roy R. Sawyer and Forrest W. Trumpf, directors.

Highlight of the meeting was an address by the guest of honor, Edward R. Carr, NAHB president. The evening program also featured the presentation of the John D. Edwards Award to the Wisconsin American Legion, which was represented by Grover C. Fillbach, vice commander of the state organization. The award is made annually by the Milwaukee association to the individual or group making the greatest contribution to the building industry during the year.



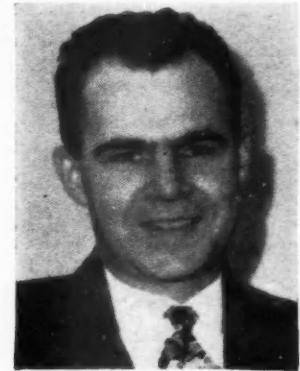
PHOTOGRAPHED during the Milwaukee Association's annual installation are—l. to r. (seated) Frank Kirkpatrick, NAHB president Carr; (standing) R. A. Lainey and G. C. Fillbach.

## Jim Hoag, NAHB Staff Member, Resigns to Enter Building Field

The well known former director of the Membership Department of NAHB, Jim Hoag, is now associated with the G. J. Goudreau Company, builders, of Cleveland, O. Mr. Goudreau, past president of the Home Builders Association of Greater Cleveland, was 1946 secretary of the national organization and chairman of its membership committee.

In his new position Mr. Hoag will act as executive assistant to Mr. Goudreau. His primary responsibility will be to handle sales and publicity in connection with the Goudreau firm's current development, "Colonial Colony." In the future he will actively participate in the company's program to build a Section 608 rental project, the opening of a new subdivision, as well as the future development of several industrial sites.

A native of New Jersey, Mr. Hoag grad-



JIM HOAG

uated from New York university after specializing in real estate subjects. Prior to becoming a member of the NAHB staff he held the rank of Lieutenant in the Navy. His four years of service included tours of duty in South America and China on special security missions.

## W. L. Greene Named Assistant to FHA Commissioner Foley

The appointment of Walter L. Greene of Washington, D. C., as Assistant to the Commissioner of the Federal Housing Administration was recently announced by Commissioner Raymond M. Foley. He succeeds William D. Flanders, who resigned to return to private business.

Mr. Greene, who joined FHA in August, 1934, was born in Owensville, Kentucky,



W. L. GREENE

was educated in the schools of New York City and entered the real estate business in Plant City, Florida, in 1914. After serving as cashier of the First National Bank of Plant City, and as auditor of the National City Bank of Tampa, he went to Miami in 1920 as executive secretary of the Miami Realty Board. In 1928 he went to Birmingham as sales manager of the Jemison Companies, engaged in real estate mortgage financing and investments.

When the Birmingham office of FHA opened on August 15, 1934, Mr. Greene became executive assistant to the Director and served in that capacity until May 1937, when he went to Washington as Underwriting supervisor. In 1941 he was named assistant to the first assistant commissioner and in January 1946 was appointed Zone Commissioner for Zone IV.

## Donald Crittenden Named Executive Officer by Memphis Builders

The Home Builders Association of Memphis has recently enlarged its staff by the appointment of Donald Crittenden as executive vice president.

Announcement of the appointment was made by W. F. Fay, chairman of the committee chosen to select an executive officer, who said: "One of Mr. Crittenden's principal duties will be the handling of the home show, to be sponsored by the Association, April 11-18, next year."

Mr. Crittenden, a resident of Memphis for 26 years and widely known in both the automobile and building materials business, took over his new duties early last month. In addition to his business activities, he is active in the Scottish Rite and the Shrine.

Mrs. Neva Wash, executive secretary of the organization, who has been in charge of its office duties since its inception, will remain on the same work, Mr. Crittenden's appointment being for additional association functions.

## Cortright's Column

By Frank Cortright

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



**The home building industry** is fed up with the "experts" who consistently condemn the home building business and consistently ignore facts.

In the months following the war, public housers discovered that we weren't building many houses—since the government prevented us from doing so. With great satisfaction they said, "Look, home builders are falling down on their own job. The rate of building homes is deplorable."

**Then step by step** we fought our way back into operation. Since that time our rate of production has mounted steadily. Now it is rolling along at remarkable speed, considering all circumstances.

But the viewers-with-alarm haven't caught up with what is going on. They are still moaning about the building boom busting; about 1947 expectations falling short; about what they call a "lag" in home building.

**The facts show** that these people—not the builders—are off the beam. The performance turned in by our industry the first five months of this year has been tremendous.

When President Truman delivered his blast on signing the decontrol bill at the end of June, he casually dismissed some significant figures. Instead of paying the tribute the figures demanded, the framers of his message chose instead to have the President call for the same old panacea—the Tait-Ellender-Wagner Bill. And they deplored the progress of the building industry.

**The fact is** that the 270,000 starts in 1947 exceeded the number started last year. And as for homes delivered during the first 5 months last year, only 118,300 were completed as compared to 300,000 for the same period this year. In other words, we're starting more and completing more than twice as many.

The present rate indicates at least 750,000 completions this year, which would exceed any year's production since the peak year of 1926.

**Now a new factor has** entered the picture. With the limitations on home building largely decontrolled, the industry can be expected to demonstrate what it has said it would do if it will work as a team.

As never before, each industry segment must cooperate, and there are continuing signs of lack of agreement. Builders in some sections of the country still report a shortage of certain essential materials. Wage demands of labor increase apace with continued restrictive practices.

**While these conditions last,** home builders remain at a disadvantage no matter how sincere their efforts may be to produce their potential maximum output.

Labor's production, purchasers' financing aids, and conditions of our buyers' market will all determine whether the present high rate of production can be continued.

**During the war period,** this industry produced magnificently. Now we have our own private battle and the same surmounting of obstacles must be accomplished—no matter what the hurdles may be.

**Beyond that,** it's about time the public was permitted to see through the smoke screen of public housing propagandists and for our press to give the industry just recognition for a job well done to date—with bright promise of new production records ahead.

## Portland Home Builders Develop Effective Labor Relations Plan

The Portland Home Builders Association, Inc., and the Building and Construction Trades Council of Portland and vicinity have developed a sound, workable program to eliminate disagreements between employer and employee. According to Edwin Sandberg, president of the Portland association, it will go far toward increasing productivity, eliminating work stoppages

and providing for teamwork on the part of everyone.

The two organizations have appointed committees, which will meet regularly to discuss mutual problems. Herman A. Schmitt, prominent in the local association's affairs, was appointed to act as chairman of the home builders group by President Sandberg.

## Chicago Home Builders Hold Annual "Keynote" Banquet and Installation



VIEW of speakers' table at Chicago Metropolitan Home Builders' annual dinner.

The Chicago Metropolitan Home Builders Association was enthusiastically launched upon the eighth year of its existence at its annual Inaugural Dinner, held in the Grand Ballroom of the Sherman Hotel, June 26, before a gathering of more than a thousand members and guests.

The meeting, while something of a gala event, was at the same time expressive of a grim determination to take possession of events and make the vast program of housing work in spite of all obstacles and pitfalls. Men prominent as leaders in the Association since its inception participated and led the train of thought and purpose into a serious vein.

Former national and local president Joseph E. Merriam opened the meeting, introducing the guests at the speakers' table and presented retiring president Arthur E. Fossier an eloquent expression of appreciation in the form of a hand illuminated scroll.

Mr. Fossier urged upon the builders the necessity of observing the highest ethics in the conduct of their affairs and their relations with the public.

George F. Nixon, founder of the Association and one of the founders of the NAHB, acted as toastmaster. He read a message from Illinois' Governor Dwight H. Green and, as a special token of thanks, honored Kenneth Schuham with his selection by the Board of Directors as the Association's "Most Useful Member," a distinction which was inscribed upon a framed parchment scroll.

Nathan Manilow, newly installed president, disclosed frankly the difficulties besetting the home building industry and proposed remedies possible of accomplishment. After many grateful acknowledgments he launched into a declaration of future policy that would serve to help solve many of the existing problems.

## Whiteside Succeeds Burrows as President of Peninsula Builders

At its regular annual meeting in June the Peninsula General Contractors and Builders Association, Inc., of Burlingame, Calif., elected James A. Whiteside to succeed retiring president Frank F. Burrows. Mr. Burrows was made a director.

Shown in the photograph to the right, other officers chosen include: Front row—(l. to r.) Mr. Whiteside; Frank A. Poirier, vice president; and Mr. Burrows. Standing—Axel V. Johnson, director; Harry E. Smith, executive vice president; James H. Arthur, secretary-treasurer; C. H. Bessett, director. Director Richard Delucchi is not shown.

Outgoing president Burrows made a comprehensive report of the activities of the association during his tenure. The report covered the group's participation in national matters pertaining to housing as well as reviewing the numerous activities on the local level. An item of particular interest was the announcement that six months' negotiation with Bay Counties District Council of Carpenters on a wage scale had been concluded. The new wage, running from late in June through April, 1948, is \$2.00 per hour for a forty hour week, with no overtime.



GENERAL satisfaction seems to be the attitude of the newly elected officers and directors of the Peninsula General Contractors and Builders Association, Inc., shown in the above photograph, taken following its recent annual meeting.

## Grand Rapids Builders Frolic

Members and guests of the Builders and Traders Exchange (Grand Rapids, Mich.) took advantage of nearly 150 reservations late in July to visit nearby Detroit, inspect housing under construction in that area, and witness a double-header game between the Detroit and New York baseball teams.

Travelling on the Pere Marquette Railroad's newest modern streamliner the Grand Rapids builders are reported to have virtually "taken over" the train for this excursion and to have given noticeable vocal support to the Detroit ball club.

## Rhode Island Home Builders Mark First Anniversary with Banquet


Choosing the occasion of their first anniversary, the Home Builders Association of Rhode Island recently celebrated with an extraordinarily well-arranged and attended dinner in the Narragansett Hotel Ballroom in Providence.

Chief speaker was Hon. Charles P. Sisson, former attorney general of the United States and attorney general of Rhode Island. The mayors of Pawtucket, Ambrose P. McCoy; Cranston, Hoyt W. Lark; and Warwick, Albert P. Ruerat, brought to the builders the greetings of their communities, and wishes for continued and increasing success.

The speaking program was opened by Rhode Island Home Builders president, Anthony Gianci, who turned the meeting over to Toastmaster Jesse L. Johnson, appliance sales manager of the Providence Gas Company. Mr. Johnson introduced the other speakers, George F. Mackie, Rhode Island State Director for FHA; Charles E. Dockser, vice president, and Charles R. Brunelle, executive secretary, of the Home Builders Association of Greater Boston.



*our best salesmen go through hell - for you!*

 In the merciless Weather-Ometer, **CAREY** shingles, sidings, roofings, coatings, are tortured with blistering heat . . . frigid cold . . . blazing sunlight . . . torrential downpours. A scant few weeks in this "manufactured hell" is more punishment than you'd expect any building material to take in a housetime of normal service. And any **CAREY** product that can't weather rough weather here isn't good enough for your customers. Results: the uniform goodness of **CAREY** products wins continuing customer satisfaction . . . makes 'em the best salesmen we have.

**THE CAREY WEATHER-OMETER** is just one example of how Carey's thorough and

intensive research proves-in products under tougher-than-average conditions. It's part of the painstaking program that's made **CAREY** a leading producer of quality building materials for 74 years.

**RESEARCH AND DEVELOPMENT** facilities at **CAREY** have been doubled. Here, we'll strive to push the quality level of **CAREY** products to even higher levels. And

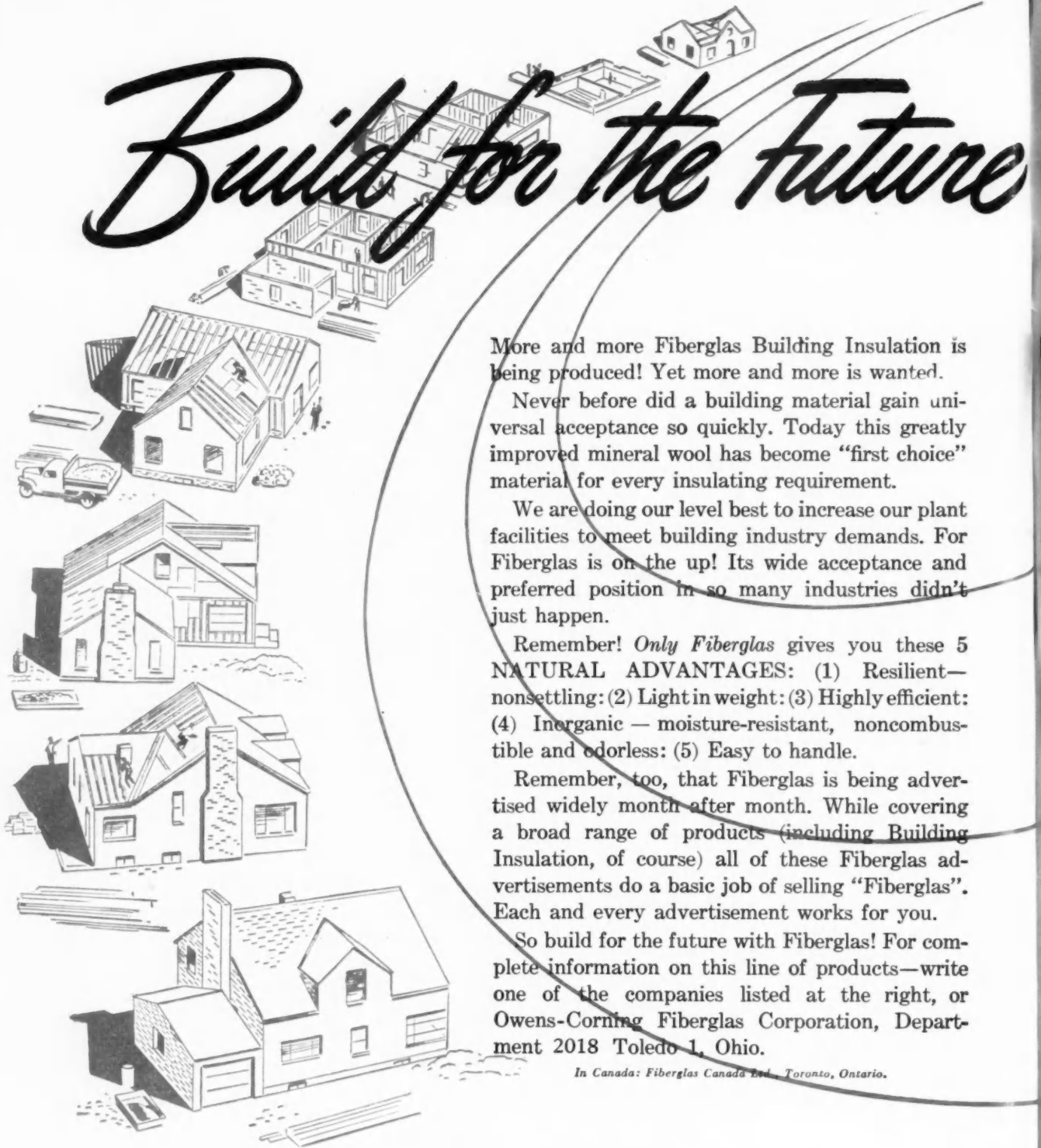
here Carey's men of science will continue their endless search for new and better products to serve the building industry.

**YES**, our best salesmen go through hell . . . for you and your customers. Why not take advantage of that and put them to work building good-will and new business for you? It pays to make full use of

the **Carey** line

- Asbestos Shingles and Sidings
- Asphalt Roll Brick Siding
- Roof Coatings and Cements
- Asphalt Shingles and Roofings
- Rock Wool Insulation
- Asbestos Coverall Wallboard
- Waterproofing Materials
- Miami-Carey Bathroom Cabinets and Accessories

In Canada: The Philip Carey Co., Ltd.  
1557 MacKay St., Montreal 1, P. Q.



# Build for the Future

More and more Fiberglas Building Insulation is being produced! Yet more and more is wanted.

Never before did a building material gain universal acceptance so quickly. Today this greatly improved mineral wool has become "first choice" material for every insulating requirement.

We are doing our level best to increase our plant facilities to meet building industry demands. For Fiberglas is on the up! Its wide acceptance and preferred position in so many industries didn't just happen.

Remember! *Only Fiberglas* gives you these 5 NATURAL ADVANTAGES: (1) Resilient—nonsettling: (2) Light in weight: (3) Highly efficient: (4) Inorganic — moisture-resistant, noncombustible and odorless: (5) Easy to handle.

Remember, too, that Fiberglas is being advertised widely month after month. While covering a broad range of products (including Building Insulation, of course) all of these Fiberglas advertisements do a basic job of selling "Fiberglas". Each and every advertisement works for you.

So build for the future with Fiberglas! For complete information on this line of products—write one of the companies listed at the right, or Owens-Corning Fiberglas Corporation, Department 2018 Toledo 1, Ohio.

*In Canada: Fiberglas Canada Ltd., Toronto, Ontario.*

OWENS-CORNING  
**FIBERGLAS**

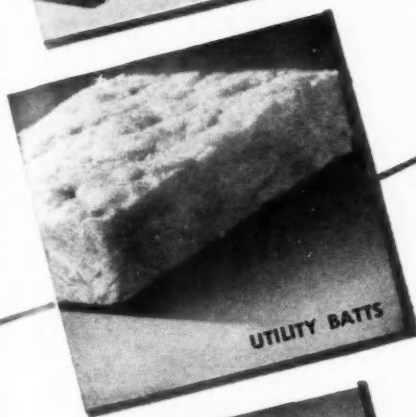
T.M. REG. U.S. PAT. OFF.



# e with FIBERGLAS



BATT-BLANKETS



UTILITY BATTS



POURING WOOL



ROLL-BLANKETS

*"Just naturally  
BETTER"*

### Distributed by

- ARMSTRONG CORK COMPANY, Lancaster, Pa.
- CERTAIN-TEED PRODUCTS CORP., Chicago, Ill.
- THE FLINTKOTE COMPANY, New York, N. Y.



## Timken Oil Heat for 3,000-home project!



A stairway recess is more than enough space for a Timken Oil Boiler. Its great compactness, fine appearance and complete quietness permit locating it in living quarters—cutting cost and conserving room.

**T**HREE THOUSAND modern homes in 12 months—each with its own landscaped lot—for sale to veterans at only \$6,990 (or rental at \$60 per month)!

These new homes are complete with range, refrigerator, automatic washer, metal kitchen cabinets, built-in bookshelves, Venetian blinds—and owners also will enjoy the finest heating money can buy—Timken Silent Automatic Oil Heat with the thrifty Timken Wall-Flame.

This, in a nutshell, is the story of the giant housing project launched this year by Levitt & Sons at Hempstead, Long Island.

Choice of Timken for supplying both automatic heat and hot water for Levitt Homes is more than a testimonial to the high public esteem in which the name *Timken* is held everywhere.

It is also a tribute to Timken economy, compactness, appearance and quietness—qualities that make Timken Oil Boilers ideal for small home construction.

Interesting? Yes—not only to owners and builders, but particularly interesting to holders of the Timken Dealer Franchise!

### *The Royal Family of Oil Heating*



OIL  
BURNERS



OIL  
BOILERS

## **TIMKEN** *Silent Automatic* **OIL HEAT**

TIMKEN SILENT AUTOMATIC DIVISION  
The Timken-Detroit Axle Company  
JACKSON, MICHIGAN



OIL  
FURNACES



WATER  
HEATERS

# Announcing OAKTRED

THE ONE-PIECE FLOOR THAT HELPS SELL THE HOUSE



*Oaktred is the type of flooring often used in luxurious residences like this...*

OAKTRED, the modern durable one-piece flooring is now in large scale production at the request of the National Housing Agency in order to make this quality flooring available to a much wider field of building operations for both single and multiple dwellings at an economical price.



*...now available because of large scale production for low-cost housing like this.*

# OAKTRED

THE MODERN ONE-PIECE FLOORING

OAKTRED flooring, a scientifically formulated composition, is poured in place and sets in one piece. It is seamless, sanitary, fireproof, insect and rodent proof. It is resilient and does not dent, rut or splinter. OAKTRED insulates against heat and cold. It is not a floor covering but a permanent flooring composed of kiln-dried oak flour, asbestos fibres and chemical binding agents.

WRITE FOR FULL PARTICULARS,  
DELIVERIES AND PRICES

**KOMPOLITE**  
**BUILDING MATERIALS INC.**

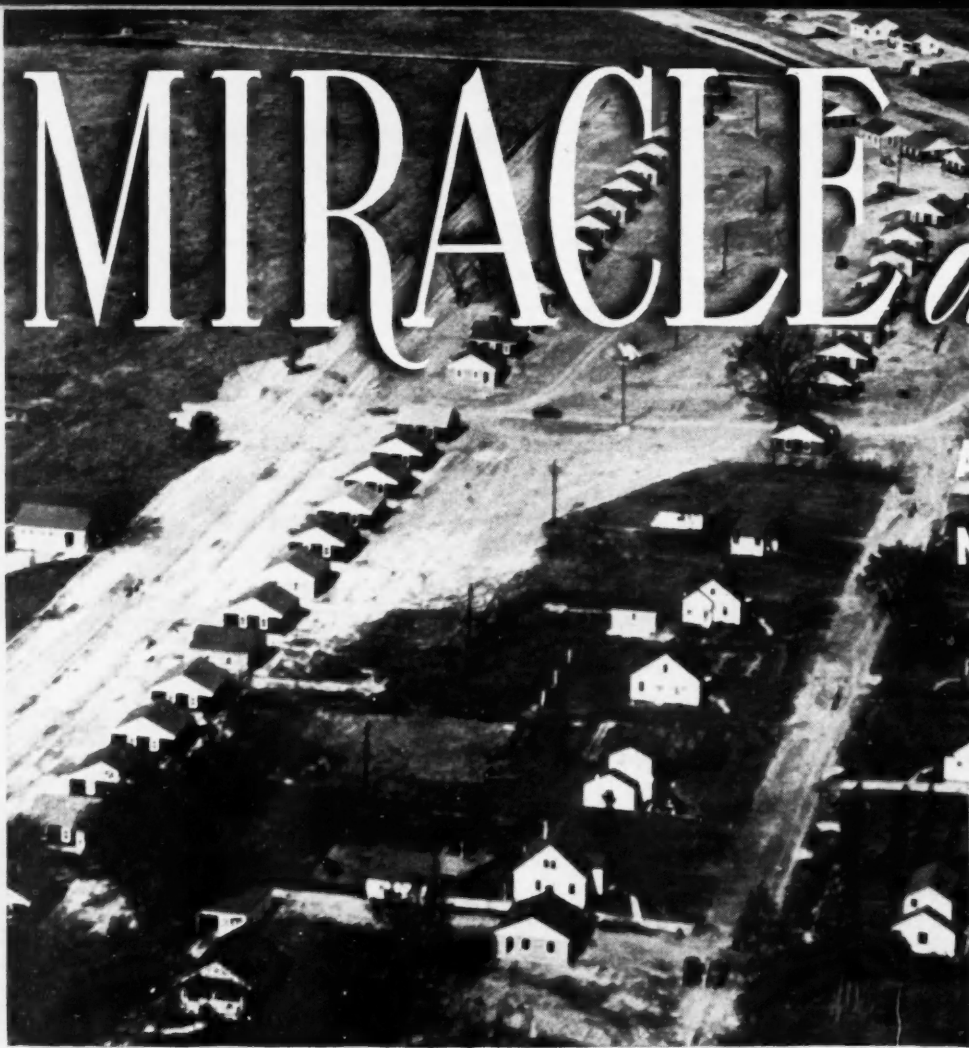
111-115 Clay St., Greenpoint, Brooklyn 22, N.Y.

For 40 years KOMPOLITE MEANS FLOORS FOR EVERY REQUIREMENT — Plastic Marble, Terrazzo, Composition, Cement Finish, Asphalt Tile, Rubber Tile, Cork Tile and Industrial Flooring.

OAKTRED is available for immediate delivery. Comes in a standard oak color and in dry form. Requires only water for mixing on the job. Installed by a mason. Sets in 4 to 6 days and is then sanded and finished. Can be finished in a variety of ways and scored, if desired, to any pattern. Produces a beautiful and durable floor that increases the saleability or rentability of any residence.

# MIRACLE *in Peoria*

A HOUSING REALITY--  
NOT A HOUSING PLAN!



**HUNDREDS OF MOR-SUN U-4-G GAS-FIRED FORCED AIR FURNACES SUPPLY HUNDREDS OF G. I. HOMES WITH YEAR ROUND INDOOR COMFORT!**

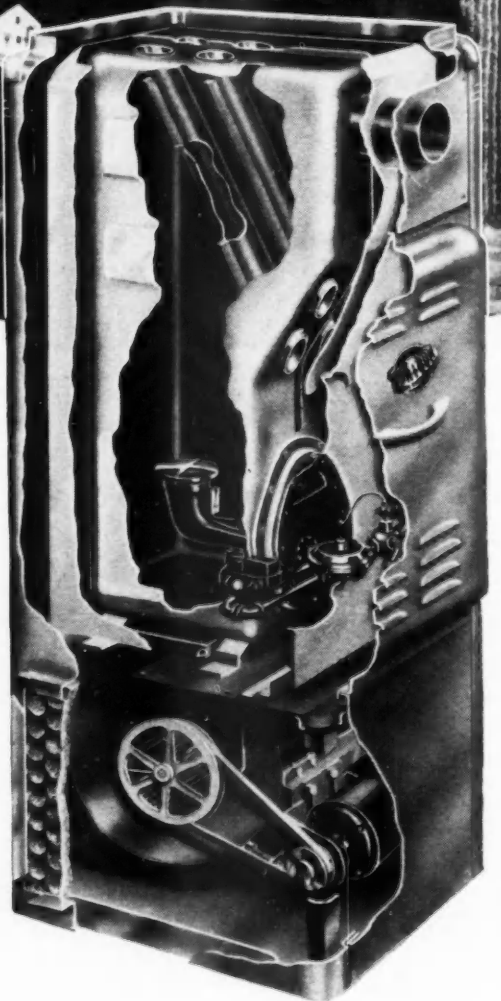


Hundreds of G.I. families are living in prefabs\* in Peoria—and every one is equipped with a MOR-SUN Heating System!

And what a system! With a house heat loss of 45,000 BTU's, the MOR-SUN packaged gas-fired forced air furnace—with an output of 58,000 BTU's—in a centrally located service room—took only three hours of two men's time\*\* to install (including the runs to the various rooms)!

Each of these hundreds of G.I. families has more than a heating plant—each has a MOR-SUN U-4-G\*\*\* that supplies year-round indoor comfort!

You Get MORE with a MOR-SUN!



\*General Contractors — Best Construction Co., Peoria

\*\*Heating Contractors — Lee Wagener Co., Peoria

\*\*\*MOR-SUN Midwest Sales Representative —

F. C. Evans, St. Louis



**MORRISON STEEL PRODUCTS, INC., BUFFALO 7, N. Y.**

*"The Sun Never Sets with MOR-SUN"*

HOW TO TAKE THE

*Chill* OFF ECONOMY

Economy is a "must" in the design and construction of many a home today. But economy need not be cold and repellent. At modest cost, Curtis Woodwork can add the extra charm and convenience that mean so much to the home owner—as witness this Curtis entrance (Design C-1767). One of many new Curtis entrances, it is priced for the modest building budget. All Curtis entrances are toxic and water-repellent treated.



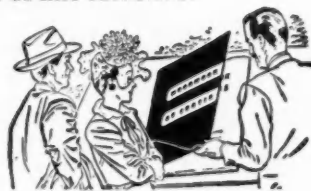
For the small home or apartment—for dining room, bathroom, or any room—these Curtis cases will fit in for almost any use. They may be built-in in corners or walls, or set out in the room. (Curtis Design C-6571.) Priced to meet the smallest budget. Curtis offers a selection of eighteen styles of wall and corner cases. All are shown in large size in the new Curtis catalog.



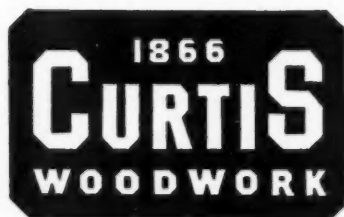
When in New York, visit the Curtis Woodwork display at Architects' Samples Corporation, 101 Park Avenue.

Nothing makes a room more homelike than a well-chosen built-in cabinet. This one (Curtis Design C-6558) is suitable for any room of the house. It is also made for corner installation. One of many new designs.

The "magic touch" for making a room modern and friendly is a Curtis mantel. This design (C-6049) has an inspired simplicity, yet it is smart enough to meet today's demands. Like all Curtis Woodwork, it is built with the precision of fine furniture.



Have your Curtis dealer show you the big new Curtis Woodwork Style Book—an entirely new and different way of presenting the Curtis Woodwork line. Measuring 15 x 19 inches, this book contains 100 pages of beautiful woodwork styles and decorative ideas in natural home settings—many photographs in full color.



Curtis Companies Service Bureau  
AB-8W Curtis Building  
Clinton, Iowa

Gentlemen: Please send me your book on the new Curtis Woodwork line.

Name.....

Address.....

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

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

HERE'S ANOTHER GOLD BOND AD IN

THE SATURDAY EVENING  
**POST**

telling over 2,152,000 expanding families how to "find" new rooms right in their present homes. Many builders and contractors tell us that this series of colorful ads is doing a wonderful job for them and for the whole building industry.

National Gypsum Company, Buffalo 2, N. Y.



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

Ask your local Gold Bond dealer how you can remodel your attic!

**For a pair of Admirals who've outgrown their cribs...**

"Lucky we thought of fixing up that waste space in the attic when Jack and Alan got too big for the little spare bedroom. They call it the 'Sail Loft' and they're the cockiest pair of sea-going youngsters on our beach (street, to you!) It was an easy job, too, with modern Gold Bond Building Products!"

Yes, modern building material research has come to the rescue of thousands who, during the housing shortage, have been faced with the need to provide more room for growing families and extra accommodations for new families. Because of this research, modernizing an attic or a whole house is no longer a haphazard, time-consuming job. It's no longer something to apologize for.

In new building, too, you can bank on Gold Bond

products every time to give you a longer lasting, better looking job. Take Gold Bond fireproof gypsum sheathing, for example. The big husky panels under the clapboards or any other exterior finish add structural strength and weather-proofing, plus really effective fire protection for the wood framing. And all this for dollars less than old style sheathing!

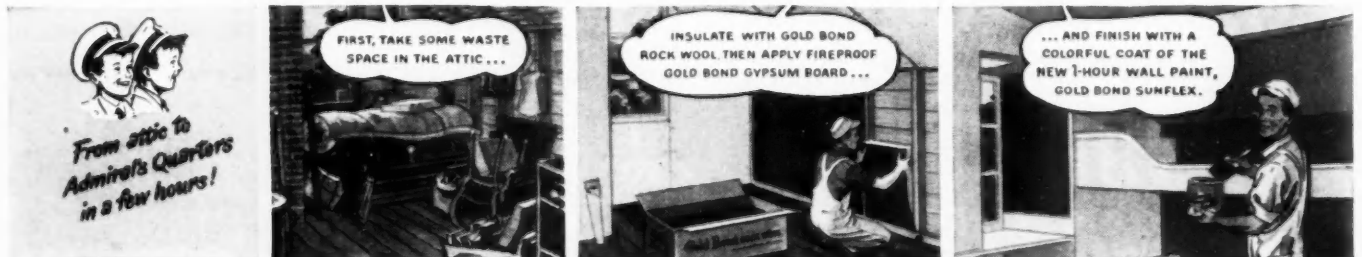
For inside walls that will last a lifetime there's strong fireproof Gold Bond Gypsum Lath and Plaster. And for quick artistic decoration at low cost there is Gold Bond Sunflex, an amazing new wall paint that dries in an hour with no "painty" smell. It's yours in all the colors of the rainbow! For added year 'round comfort...for a cooler house in summer and for real fuel savings in winter...there's

fireproof Gold Bond Rock Wool. Cuts heating bills as much as 40%. In houses already built you can have this trouble-free insulation "blown" right into outside walls and under roofs.

These are just a few of the more than 150 Gold Bond products, researched and engineered to help you build or remodel better...to help you build stronger to last longer! You can get them from your local Gold Bond lumber and building material dealer. He'll be glad to give you a hand in every way he can. So when you start your plans, see him first!

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

Over 150 tested Gold Bond Building Products for new construction or remodeling add greater permanency, beauty and fire protection. These include wallboard, lath, plaster, lime, sheathing, wall paint, insulation, metal and sound control products.



From attic to Admirals' Quarters in a few hours!

# LIFE INSURANCE EXPERTS PROVE FORD TRUCKS LAST UP TO 19.6% LONGER!



**N**O LONGER need you guess about which make of truck to buy! Now you can know, beforehand, *which* one of all five sales leaders has delivered the longest service, which has the longest life-expectancy! Ford!

And the proof is *certified* proof! Certified by the same scientific methods used by life insurance companies in computing their rates!

**4,967,000 Trucks Studied.** Wolfe, Corcoran and Linder, noted New York Life Insurance Actuaries, assembled the records of all trucks of the five sales leaders registered from 1933 through 1941—a total of 4,967,000 trucks! Then they prepared *truck* life-expectancy tables in the same identical manner in which they prepare *human* life-expectancy tables for life insurance companies.

**Ford Wins!** Up to 19.6% longer life for Ford Trucks! Up to 19.6% longer life than the four other sales leaders! That's what the certified truck life-expectancy tables prove! The reason? Ford knows how to build trucks to last longer. Ford Trucks are built stronger! See your Ford Dealer today. He'll show you why it's good business to wait for the truck with the longest life-expectancy—Ford!

*Certified proof*

**FORD TRUCKS LAST LONGER**

**The life-expectancy of a Ford Truck is:**

- 13.1% longer than that of Truck "B"
- 3.2% longer than that of Truck "C"
- 7.6% longer than that of Truck "D"
- 19.6% longer than that of Truck "E"

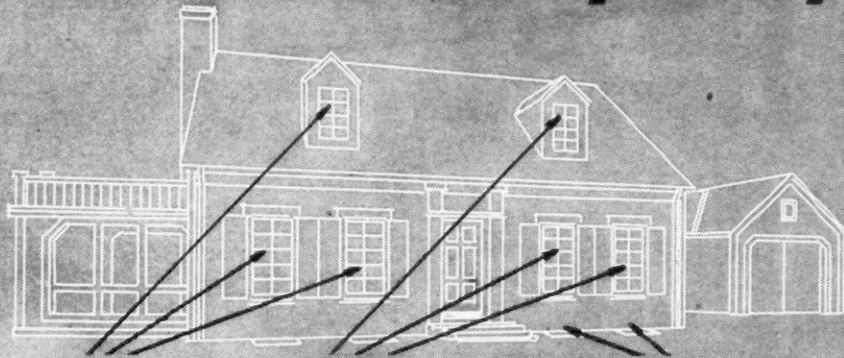
**OFFICIAL ACTUARIAL CERTIFICATE**

Based on the application of sound and accepted actuarial methods to the actual experience as measured by truck registrations, we hereby certify that, in our opinion, the accompanying table fairly presents the relative life-expectancy of the trucks involved.

**WOLFE, CORCORAN AND LINDER**  
Life Insurance Actuaries, New York, N. Y.

# Here's

## How to save money 3 ways



**WINDOWS**  
No repair costs  
Rot proof

**SCREENS**  
Cost less than  
old style screens

**BASEMENT WINDOWS**  
No repair costs  
Termite proof



*In construction products* **CECO ENGINEERING**



# a Way to Reduce Home Building Costs !

Have you ever asked yourself "How can home building costs be reduced?" Now, that's a practical question—and here at Ceco we have an answer. Certain Ceco products *will reduce* home building costs. Take steel windows for example: They cost less installed, because there are no hidden costs to overlook, such as hardware, prime coat, accessories, additional labor costs. Then, too, steel windows last, and last, and last. There is no need for repair—they cannot rot . . . they are bonderized and painted for protection against rust. And that goes for steel basement windows, too. Another way to save is provided by Ceco metal frame screens. Installed, they actually cost less than old-style screens, are factory finished—need no on-the-job painting, trimming or fitting. So, to reduce home building costs, recommend Ceco metal casements, basement windows, and metal frame screens.

## WHY SPECIFY CECO?

Ceco does more than design and manufacture fine construction products. Besides their wealth of technical engineering skill there is available construction knowledge gained by 35 years of experience on the job. In 23 offices strategically located from coast to coast, Ceco stands ready to help you reduce home building costs. Call on Ceco today!

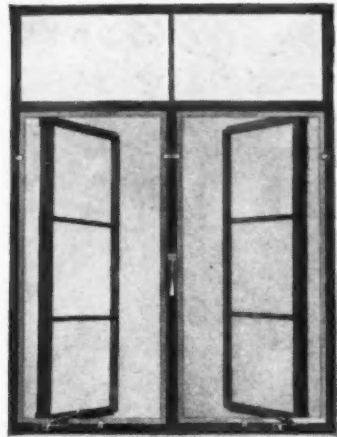
### CECO STEEL PRODUCTS CORPORATION

GENERAL OFFICES: 5701 West 26th Street, Chicago 50, Illinois

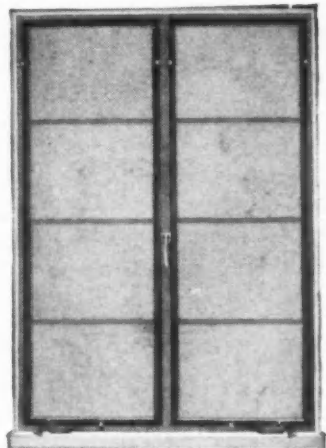
Offices, warehouses and fabricating plants in principal cities

**CECO  
STEEL**

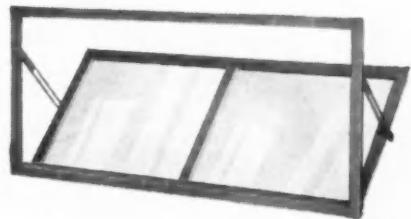
*makes the big difference*



Ceco steel casements are precision engineered, provide tighter weatherseal. They give 30% more light and allow controlled ventilation up to 100%. Easily washed outside from the inside . . . no risky ladders.



Note the trim appearance of Ceco metal frame screens. They come in standard types and styles for every purpose. They are custom built from steel, bronze, or aluminum and are wired with rust-proof screen cloth.



Ceco's economy basement windows are easy to install and easy to open and close. They are designed to provide partial or full ventilation in the basement. Newly designed combination storm window and screen also available.

#### Partial list of other Ceco Products

- Combination All-Aluminum Storm-Panel-and-Screen for Wood Windows
- Meyer Steelforms
- Reinforcing Steel
- Steel Joists
- Roof Deck
- Metal Lath and Accessories
- Highway Products
- Corrugated Roofing

*Now you can*

# MEET THE HUGE DEMAND

*for*

## FINE WELDWOOD HARDWOOD PLYWOODS



*For the first time since before the war, Weldwood Plywood is available in large supply . . . in a wide variety of fine cabinet hardwoods!*

And you'll find eager acceptance for Weldwood among your customers . . . both for building and remodeling.

Why? Because . . . even in the face of serious shortages . . . we've carried on a vigorous national advertising campaign to sell Weldwood to home-minded Americans. As a direct result of this advertising, almost half-a-million prospective users have written for more complete information.

We've told them all the entire Weldwood story. They know, for instance, that Weldwood has striking decorative beauty *plus* high structural

strength. They know, too, that Weldwood can be installed quickly, easily and economically . . . either for remodeling or new construction.

And your customers know this: Weldwood's first moderate cost is the last. It's guaranteed against splitting, cracking or warping for the life of the building in which it's installed.

Take advantage of this knowledge . . . and the acceptance that comes with it. Recommend and use genuine Weldwood Plywood. It's modern material of *proved* quality and demand.

You can get detailed information on the wide variety of sizes and veneers now available from your nearest USP office or representative.

### WELDWOOD Plywood

*Weldwood Plywood and Mengel Flush Doors are products of*

UNITED STATES PLYWOOD CORPORATION

New York 18, N. Y.

THE MENGEL COMPANY

Louisville 1, Ky.

*Distributing units in* Baltimore, Boston, Brooklyn, Chicago, Cincinnati, Cleveland, Detroit, Fresno, High Point, Los Angeles, Newark, New York, Oakland, Philadelphia, Pittsburgh, Rochester, San Francisco, Seattle. Also U.S.-Mengel Plywoods, Inc. distributing units in Atlanta, Dallas, Jacksonville, Louisville, New Orleans, Houston, St. Louis. *In 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  
Armorply\* (metal-faced plywood)

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

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



Plastics and Wood  
Welded for Good

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



**NATIONAL  
ADVERTISING**

**Your new home should have windows  
of ALCOA ALUMINUM**

Make sure your new home has all the work-saving, cost-saving advantages of aluminum windows. Then cross window troubles off your list forever. Easy to open, aluminum windows never warp, shrink or swell. Easy to clean, they have no deep, dirt-catching corners to slow up housework. Just wipe off the frame along with the glass. Aluminum's satiny surface stays smooth and lustrous. Economical, too! Windows of Alcoa Aluminum never require protective painting, never stain adjoining surfaces. Leading window manufacturers build windows of Alcoa Aluminum in a variety of standard types and designs. For the names of these manufacturers, write to ALUMINUM COMPANY OF AMERICA, 1914 Gulf Building, Pittsburgh 19, Pennsylvania.

**Here's Why:**

- NO STRAINING TO OPEN**
- NO PAINTING**
- NO ROTTING**
- NO RUSTING**
- NO STAINING**
- NO SWELLING**
- NO SHRINKING**
- NO RATTLING**
- NO DRAFTS**
- NO UPKEEP**

MORE PEOPLE WANT MORE ALUMINUM FOR MORE USES THAN EVER



**LIGHTER**  
to live with

WINDOWS OF **ALCOA** ALUMINUM

107

BY H. H. HARRIS & GARDNER, JUNE, 1947

**Another reason why  
Home Buyers  
want Windows of  
ALCOA  
ALUMINUM**

Here's what home buyers want—long-lasting, trouble-free aluminum windows. Month after month, Alcoa national advertising tells home buyers why aluminum windows are better windows. Cash in on this extra sales advantage. For homes that sell, include windows of Alcoa Aluminum.

You'll find that aluminum windows reduce on-the-job labor costs. They are delivered to the job complete, ready for glazing. They are easy to install. No painting is necessary.

Aluminum windows are available now in a wide variety of standard types and sizes. For information, write to ALUMINUM COMPANY OF AMERICA, 1914 Gulf Building, Pittsburgh 19, Penna.

MORE PEOPLE WANT MORE ALUMINUM FOR MORE USES THAN EVER

**ALCOA** FIRST IN **ALUMINUM**



IN EVERY COMMERCIAL FORM

Does it have  
good locks  
and hinges?



Of course!  
You've often seen  
them advertised  
in the Post!

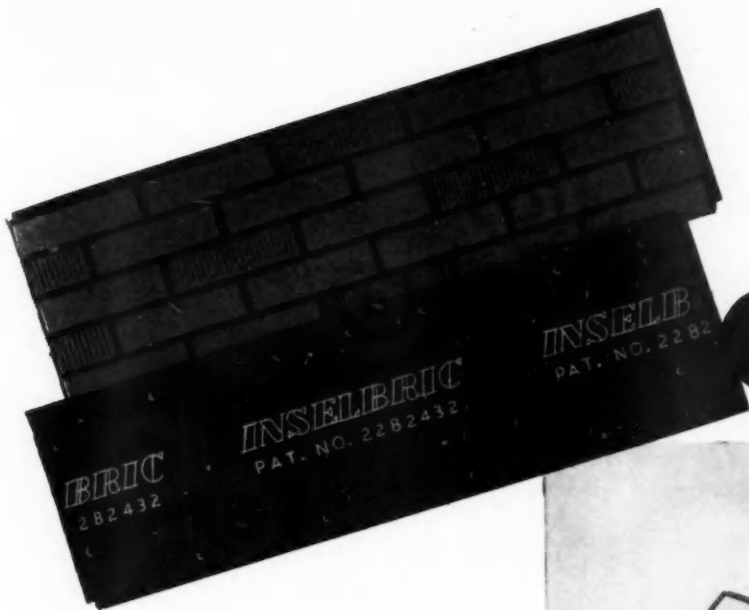


IF QUALITY IS THE QUESTION — "IT'S POST-ADVERTISED" IS THE ANSWER!



PEOPLE KNOW AND PREFER  
POST-ADVERTISED PRODUCTS

THE SATURDAY  
EVENING  
**Post**



*There's only*

**ONE**

**INSELBRIC**

and only  
**INSELBRIC**  
 has  
**TRADE-MARK  
 PROTECTION**



Your Inselbric trade-mark is important. It's your protection against imitations. Many products may look like Inselbric, but only Inselbric gives you such exclusive features as *Anchored Face, Encased Nailing, Precision Shiplap and Copper Reinforced Corners*. So make sure it's genuine—look for the name stamped proudly on the back of every panel. *That's trade-mark protection!* The key to customer confidence and successful merchandising. And that's why alert dealers are identified with **INSELBRIC**.

Write for our Inselbric Store Plan Today

*The Nation's Fastest Selling Insulated Brick-Design Siding*



**MASTIC ASPHALT CORP.**  
 Makers of Inselbric and Inselstone  
 SOUTH BEND, IND. • ELIZABETH, N. J.

**JONES & BROWN, INC.**  
 National Distributors of Inselbric and Inselstone  
 PITTSBURGH, PA.



## 3000 BENDIX WASHERS BOUGHT FOR LEVITT HOMES

**Leading Long Island builder sells complete homes as fast as he can build them!**

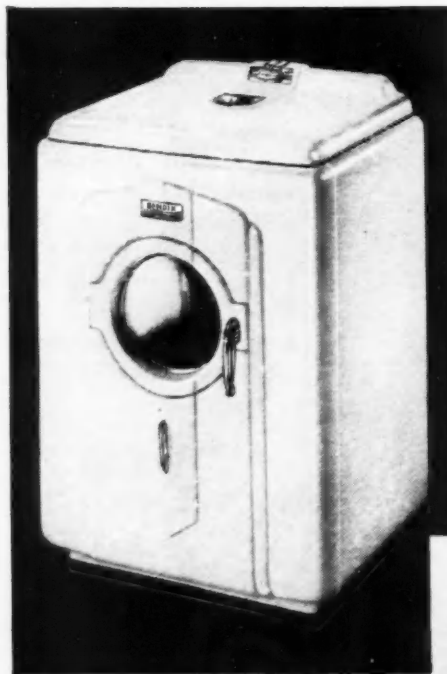
Levitt and Sons, Manhasset, L. I., one of the nation's foremost operative builders, offer *complete* homes that include items usually listed as extras. As noted in the May ARCHITECTURAL FORUM, a test group of thirty Levitt homes were recently offered to the public. That same day, without benefit of advertising, those homes were eagerly bought. Three thousand Bendix Washers recently purchased by Levitt will make more *complete* homes available soon on a "package mortgage" basis.

To the builder, the Bendix is a natural for making a home "complete"—and worth a premium price. It has tremendous appeal, yet is simple to install, and requires only 4 square feet of space. To the housewife, it's the world's most wanted washer, does all the wash while she isn't even present—and saves her half the soap other washers require.

Let the "Sign of a Smart Builder" tell customers that your house is complete!



This lawn sign is available through your local Bendix dealer or distributor. To your customer it means that the house is planned for her convenience, ready to live in, and worth a premium price.



BENDIX HOME APPLIANCES, INC.  
SOUTH BEND, INDIANA



### BENDIX WASHER A "MUST" Says ALFRED S. LEVITT

"The finest appliances for making life easy are made in this country, but darn few of us have been able to afford the most important ones. We've built thousands of homes and we think that by this time we know what people want and need.

"This year, in every one of the 3,000 dwellings to be built by us, we shall install Bendix automatic Home Laundries. Each goes into a package mortgage, and the home owner has the luxury, ease, and convenience without feeling the payment for it.

"A year ago we decided that the Bendix was a 'must'; today we have more than 10,000 families on a waiting list."

# BENDIX automatic Washer

My  
is ro

M

Res  
and cl  
system  
instan  
wear  
repres  
Conve

MODERN  
BEAUTY

My first choice  
is radiant heat!



My first choice  
is convection heat!



**Modine Convector Radiation gives you these  
two heating principles blended into one!**



### RADIANT HEATING

Mild, radiant heat in just enough quantity to offset heat loss from window areas — that's what those arrows represent, coming from the Modine Convector Panel below the window. To this we add . . .



### CONVECTION HEATING

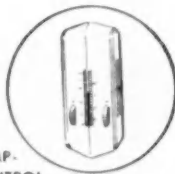
Warmed air circulated by Convection Heating. Hot water or steam passes through copper heating unit which draws cooler, floor-line air into bottom of convector where it's warmed, rises and then passes out through grille.

**Result:** Dependable new heating comfort for moderate cost homes and apartments . . . distinctive room charm and cleanliness without unsightly radiators! Yes, Modine Convector Radiation provides a modern, blended heating system for modern living — a heating system that makes possible individual room control — that responds almost instantly to sensitive automatic controls — that gives you gentle air circulation without the use of moving parts that wear out. If you're planning to build or modernize, think of Modine Convector Radiation . . . look for Modine's representative in the "Where-to-Buy-it" section of your phone book . . . or send in coupon below for new, free Convector Booklet! MODINE MANUFACTURING CO., 1701 Racine Street, Racine, Wisconsin.



MODERN  
BEAUTY

CLOSE TEMP-  
ERATURE CONTROL



EASY TO  
INSTALL



ADDS TO  
LIVING SPACE



PRICED  
FOR TODAY'S  
HOMES AND  
APARTMENTS



**Modine**  
**CONVECTOR RADIATION**  
The Modern "proved by use" heating method

Modine Mfg. Co., 1701 Racine St., Racine, Wis.  
Yes! I want your new free booklet containing complete facts on Convector Radiation. Please send it today!  
NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_  
STATE \_\_\_\_\_

*ONLY* with  
**ZONOLITE\***

**Can You Do All These  
 INSULATION JOBS!**



INSULATE ATTICS AND SIDEWALLS



INSULATE ROOF, AND FLOORS IN  
 BASEMENTLESS HOUSES



INSULATE INTERIOR WALLS WITH A  
 PLASTER THAT RESISTS CRACKING  
 —RETARDS FIRE

● There is only *one* insulation that meets *every need* . . . and that's ZONOLITE brand vermiculite. Thus, to make sure that you provide *complete* trouble-free insulation . . . no complaints, no call-backs, use and recommend Zonolite—the rotproof, verminproof, termite-proof insulation that *will not burn!* It's as permanent as the earth itself! Zonolite Insulation brings you more profit-making opportunities . . . gives you more satisfied customers!

**KNOW ZONOLITE PRODUCTS—USE THEM!**

**ZONOLITE FILL INSULATION**—Easy to install between joists in attics and between studs in sidewalls. Weighs about 6 pounds per cubic foot. Won't irritate workers' hands! No masks required!

**INSULATING CONCRETE**—Ideal for insulating concrete roofs and for floors in homes, commercial buildings and farm structures. To make Zonolite Insulating Concrete simply mix with ordinary cement instead of sand. Weighs as little as 16 pounds per cubic foot when mixed.

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



Zonolite Loose Fill



Zonolite Insulating Concrete



Zonolite Insulating Plaster



\*Zonolite is the registered trademark of Universal Zonolite Insulation Co.

**UNIVERSAL ZONOLITE  
 INSULATION CO.**

Dept. AB-87, 135 S. La Salle St., Chicago 3, Ill.

Universal Zonolite Insulation Co.  
 Dept. AB-87; 135 S. LaSalle St., Chicago 3, Ill.  
 Please RUSH me complete information on  
 ( ) Zonolite Granular Fill Insulation, ( ) Concrete, ( ) Plaster.

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



**SEE YOUR LOCAL LUMBER AND BUILDING MATERIAL DEALER**



# Bradley Pre-finished Hardwood Floors

GIVE THEIR OWNERS THE UTMOST IN BEAUTY AND  
SATISFACTION PLUS THE ADVANTAGE OF SUBSTAN-  
TIAL SAVING IN COST OVER UNFINISHED FLOORS



Until we are again in position to accept new  
business, dealers and builders are invited  
to write for literature and specifications.

**BRADLEY LUMBER COMPANY** *of Arkansas*

WARREN, ARKANSAS

*Manufacturers of Pre-finished (STRAIGHT-LINE) Hardwood Flooring*

in

OAK . . . BEECH . . . PECAN

BRAND  
BRADLEY

# Where can you get your kind of Real Estate Loan?



## **ANSWER:** From Prudential.

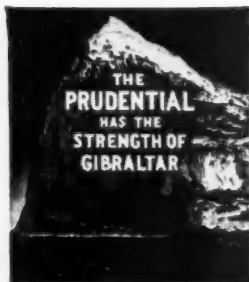
For Prudential offers a *complete* financing service: conventional, F. H. A., construction, G. I., individual building sites, subdivisions, residential, suburban, apartment, industrial, mercantile.

And Prudential makes every size of loan—from the smallest to the largest type of building project.

Prudential *convenience*, too, is something for you to consider.

There are Prudential Mortgage Loan branch offices in principal cities, representatives in most principal towns. They understand and are sympathetic to local conditions and problems. They can give you "on the ground" financing—swift, efficient closings, no red tape.

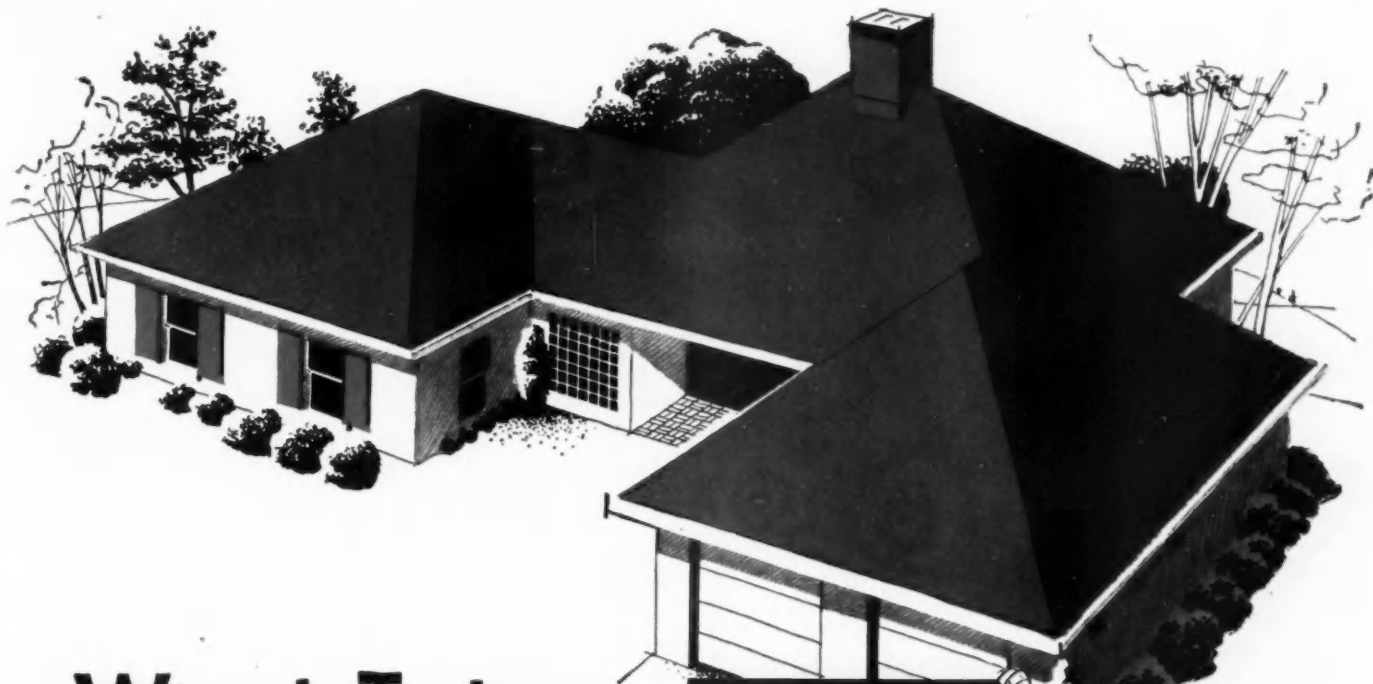
Get in touch with your nearest Prudential branch office or representative. Or write to Mortgage Loan Department C, The Prudential Insurance Company of America, Newark 1, N. J.



***America's Foremost Home Lender***

# **PRUDENTIAL**

**HOME OFFICE: NEWARK 1, N. J.**

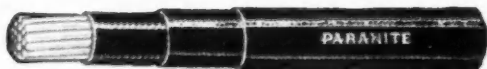


# Wired Today— for 1997!

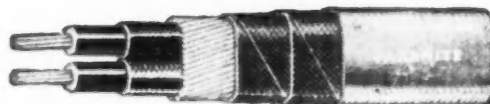
**Statistical  
Quality  
Control**

IF IT'S **PARANITE** IT'S RIGHT!

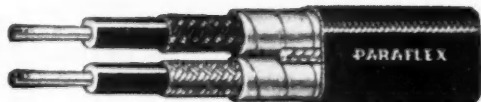
....That's why new 1947 homes wired with Paranite Building Wire—Paraflex—ABC Cable—Service Cable—will have the same efficient electrical service in 1997 and beyond! For every bit of Paranite wire or cable is made under the watchful eye of SQC—Statistical Quality Control! Nothing is left to chance—scores of tests, graphs, measurements—figures and figures—by columns and rows of columns—are drilled and marshalled by our statisticians—are compiled and *analyzed*, while the individual operations are still in progress....With our goal set high and Statistical Quality Control guarding each individual operation, you can confidently recommend and use Paranite wires and cables in all residential construction today for lasting satisfaction in 1997!



**Building Wire**  
Types R—RH—RW—T—TW



**Service Entrance Cable**



**Paraflex**  
Non-Metallic Sheathed Cable



**A. B. C.**  
Flexible Metallic Cable

**DISTRIBUTED  
THROUGH  
WHOLESALEERS**



## **PARANITE WIRE AND CABLE**

Division of **ESSEX WIRE CORPORATION**  
**FORT WAYNE 6, INDIANA**

WAREHOUSES AND SALES OFFICES: \*Atlanta, Ga.; \*Chicago, Ill.; Cleveland, Ohio; Dallas, Texas; \*Detroit, Mich.; \*Kansas City, Mo.; \*Los Angeles, Calif.; \*Newark, N. J.; Philadelphia, Pa.; \*St. Louis, Mo.; \*San Francisco, Calif.

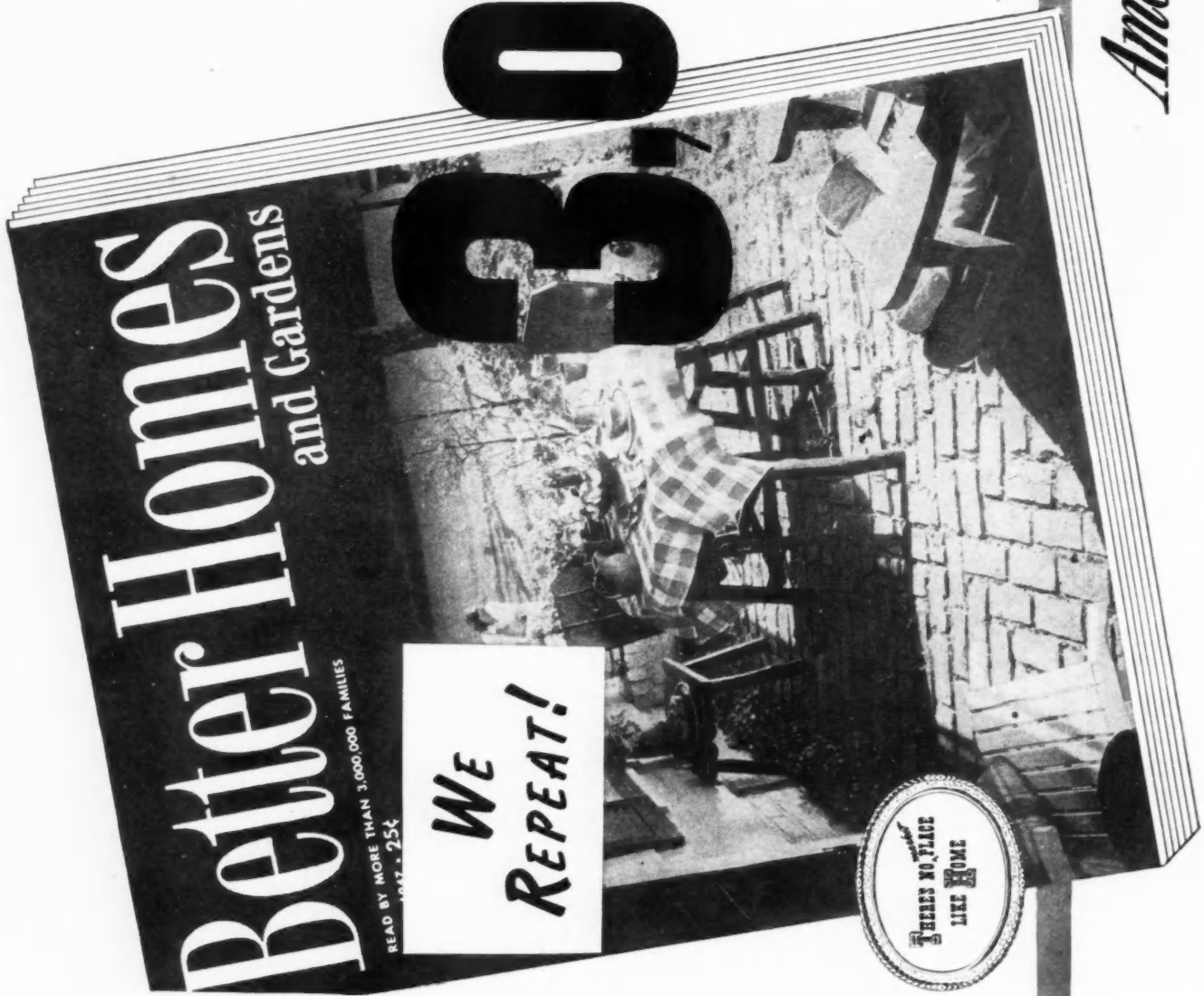
**ELECTRICAL WIRES AND CABLES "BETTER THAN CODE REQUIRES"**

*Circulation Over*

**3,000,000**

Yes, 3,000,000. Three million. Husbands and wives — heads of families — 3,000,000 of them — with good incomes — pore over Better Homes & Gardens for the help it gives them in living better in a better home. (Cover to cover, ads and all.) It's 100% service that screens out casual readers, and gives you this active homemaking market that spends billions every year.

These 3,000,000 families are the heart of the building market — they're the families who not only build their own homes as soon as they can, but who keep on modernizing and changing and improving them. No maker of building material or equipment can afford to overlook this particular 3,000,000.



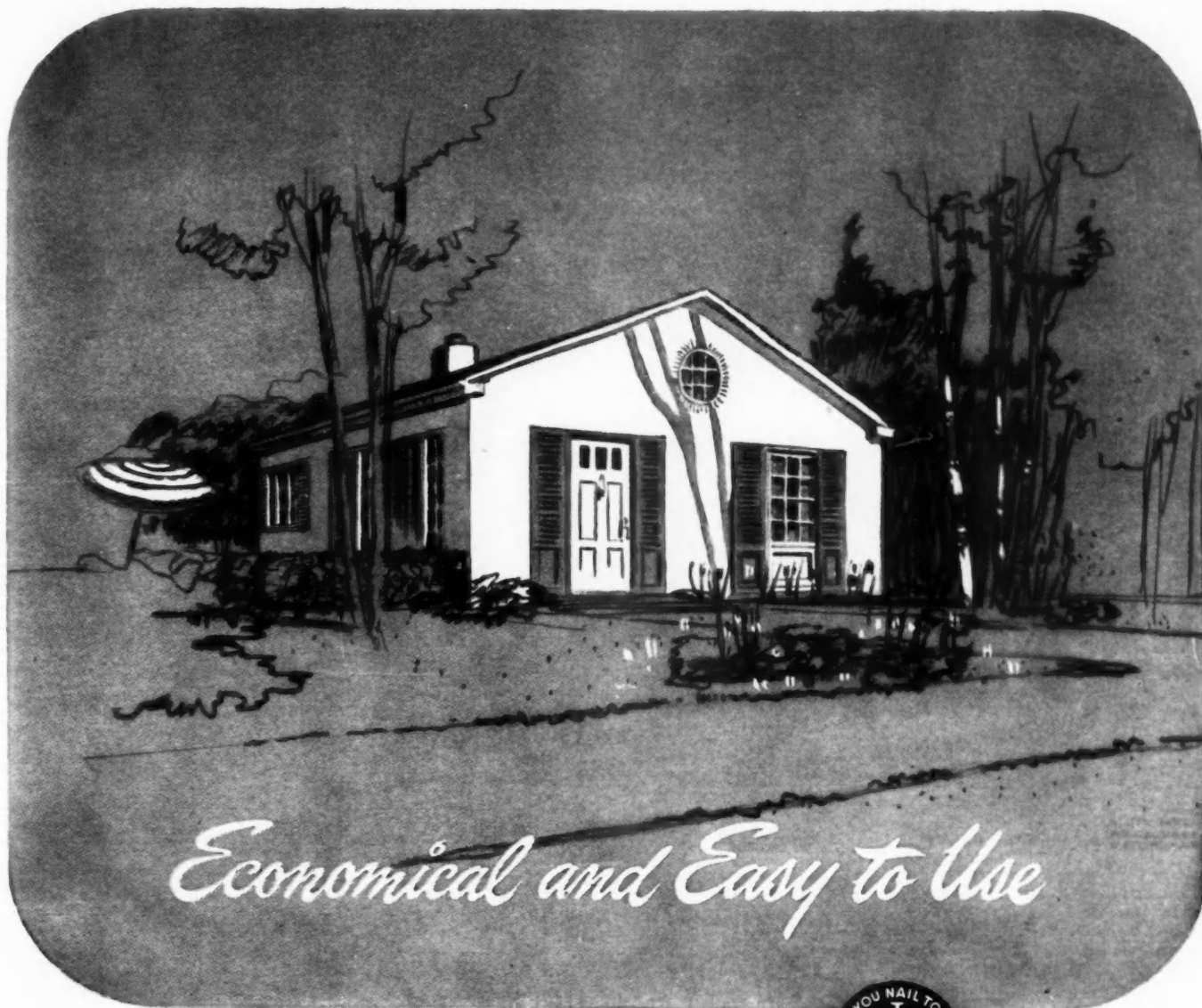
**Better Homes**  
and Gardens

READ BY MORE THAN 3,000,000 FAMILIES  
1947 - 25¢

**WE  
REPEAT!**

THERE'S NO PLACE  
LIKE HOME

*America's First Service Magazine*



Stran-Steel framing is a building product of Great Lakes Steel Corporation



When they use Stran-Steel packaged framing for the first time, architects and builders alike are surprised that steel can be so easy to work with. Consisting of only a few basic types of framing members and fittings, the Stran-Steel system is simple and efficient. Yet it allows full flexibility of design. Practically any type of framing connection is possible, and any standard collaterals can be used.

Two unique construction features make Stran-Steel packaged framing ideally suited for light-load buildings. One is the fact that members can be quickly assembled with self-threading screws. The other is the patented *nailing groove*, an integral part of every Stran-Steel stud and joist. By means of this groove, collaterals can be nailed directly to the frame, just as easily as to wood.

By virtue of its efficiency, Stran-Steel is *economical*. To prospective owners it represents a sound invest-

ment in long building life, simplified maintenance and added fire protection.

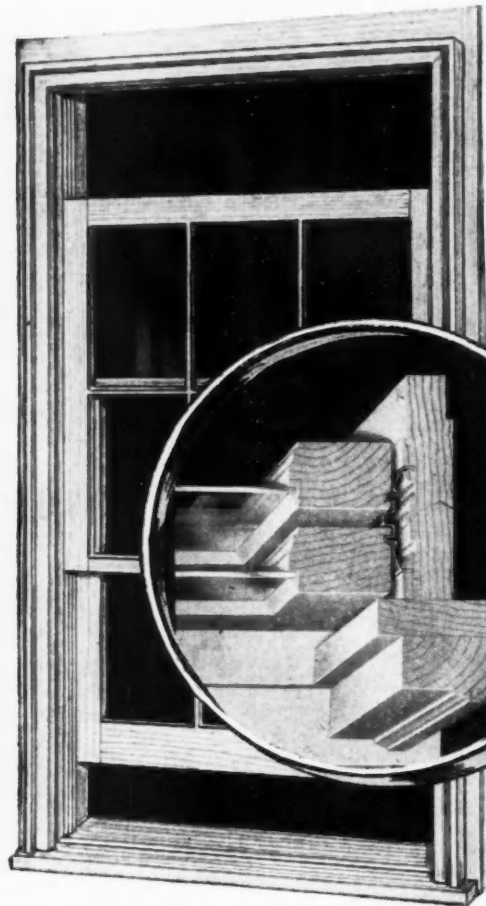


**GREAT LAKES STEEL CORPORATION**

Stran-Steel Division • Dept. 30 • Penobscot Building • Detroit 26, Michigan

UNIT OF NATIONAL STEEL CORPORATION

# WHY THE SUPERIOR WINDOW IS SUPERIOR




**B**ecause . . . Superior Windows are equipped with a special weatherstrip which insures easy, smooth sliding sash at all times.

This weatherstrip compensates for expansion and contraction in the sash due to climatic changes . . . no matter what the weather is—wet or dry, Superior Windows operate easily and smoothly.

The Superior Weatherstrip is one of many features that make Superior Windows superior.

Be sure to keep "Superior" in mind for the time when Superior Windows are more readily available.

THE **SUPERIOR** WINDOW IS A **BILT-WELL**  **WOOD WORK** PRODUCT

*Bilt-Well Interior Doors*  
*Bilt-Well Exterior Doors*  
*Nu-Style Kitchen Cabinets*  
*Bilt-Well Shutters*  
*Clos-tite Casements*  
*Bilt-Well Basement Windows*  
*Bilt-Well Combination Doors*

*Bilt-Well Louvres and Gable Sash*  
*Carr-dor Overhead Garage Doors*  
*Bilt-Well Corner Cabinets*  
*Bilt-Well Medicine Cabinets*

*Bilt-Well Ironing Board Cabinets*  
*Bilt-Well Mantels*  
*Bilt-Well Telephone Cabinets*  
*Bilt-Well Stair Parts*  
*Bilt-Well Unit Linen Cabinets*  
*Bilt-Well Breakfast Nooks*

Each window unit is installed with the Bilt-Well Superior cushion type, jamb liner weatherstrip. It is nailless, flexible; applied at Factory.

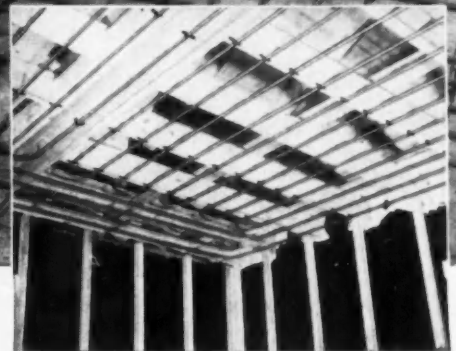
Easy sliding the year around. Swelling or shrinking will not affect the smooth weather-tight operation.

Sash may be removed easily and quickly without loosening or removing the weatherstrip.

Light, snug contact between sash and weatherstrip at all times, no stick, no dust, no draft.

Perfect counter-balancing at all points. Windows stay in any position. Balances guaranteed for the life of the building.

**CARR, ADAMS & COLLIER CO.**  
DUBUQUE, IOWA



**Best** for Radiant Panel Heating  
 ... AS WELL AS FOR RADIATORS, CONVECTORS AND RADIANT BASEBOARDS

Radiant heating has taken a firm grip on the interest of both home and industrial builders. More freedom in planning room arrangements—more comfort at lower air temperatures—greater cleanliness—lower operating cost... these are a few of the reasons people are asking questions about this *completely concealed* heating.

Successful radiant panel heating depends upon the use of comparatively large heating surfaces at *low temperatures!* What other heating method can satisfy these requirements as easily, accurately and economically as B&G *Hydro-Flo Heat—a forced hot water system?*

The simple, dependable equipment of a B&G *Hydro-Flo Heating System* positively controls the flow of water through the panels. It smoothly varies the water temperature to meet changes in the weather so that room temperature is maintained constantly at the comfort level. The system circulates water at any level, either above or below the boiler.

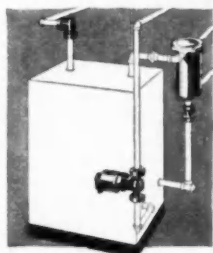
**Year 'round hot water an added feature**

The B&G *Hydro-Flo Heating System* provides an all year 'round supply of low-cost hot water for every household use. Remember that automatic clothes washers, dish washers and showers call for liberal quantities of hot water... that's why the economy of B&G water heating is a big selling feature! No separate heater needed—the same boiler that heats the house also heats the water for kitchen, laundry and bath.

If you haven't complete information on B&G *Hydro-Flo Heating Systems*, write today.



B&G *Hydro-Flo Heating* equipment can be installed on any hot water heating boiler.

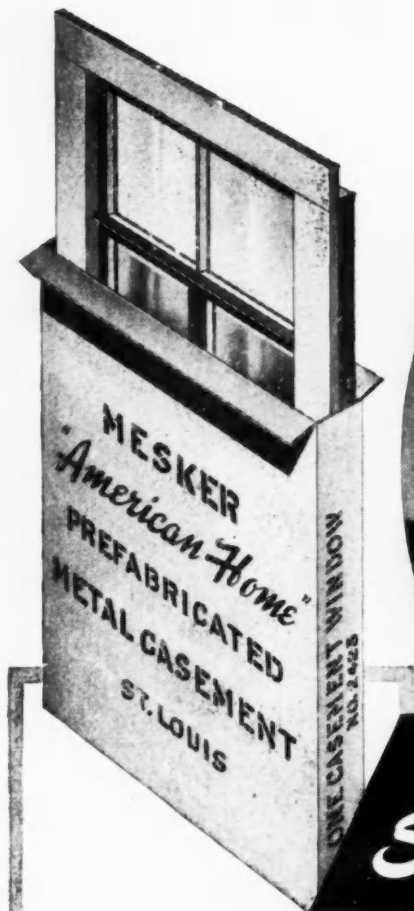


**Hydro-Flo<sup>®</sup> HEAT**

**BELL & GOSSETT COMPANY**

Dept. AD-11, Morton Grove, Illinois

REG. U. S. PAT. OFF.



## NEW PACKAGED WINDOW HELPS *SPEED COMPLETION*

### STEEL OR ALUMINUM "American Home" CASEMENT WINDOWS PREFABRICATED COMPLETE WITH WOOD SURROUND

- More exclusive features than any other window on the market.
- Nationally advertised for consumer acceptance.
- Quickly, cheaply, installed in frame, brick-veneer or brick construction.
- Harmonizes with any architectural style.
- The only metal casements designed for outside metal storm sashing.
- Rotary operator opens and closes with a twist of the wrist.
- Safely attached inside screens are interchangeable. No marking for storage—no painting necessary.
- Permanently weather-tight, cannot swell, shrink, warp, rattle or stick. Keeps heat in and weather out.

THE MODERN WINDOW  
FOR MODERN HOMES

Shorten the time from "out-go" to income in residential building by using *American Home* prefabricated packaged metal casements. Manufactured complete with wood surround by economical assembly-line methods in a modern plant, these new wonder windows cut time-consuming on-job operations to the minimum.

So simple to install any semi-skilled workman can complete the job in five minutes time. And *American Home* Casements give you a better-built house with greater sales appeal. Try them in a current job and see what a difference they make.

Stocked and sold by better Building Supply Dealers everywhere. Write today for descriptive folder. Mesker Brothers, Sales Div. AB87, 4342 Geraldine, St. Louis 15, Mo.

SINCE 1879

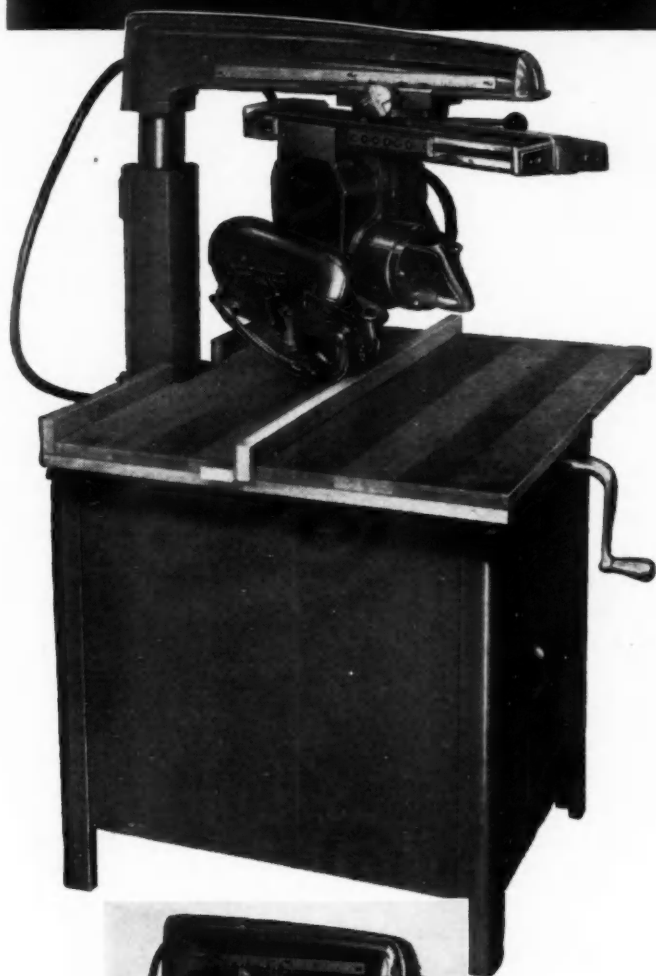
# Mesker Windows

RESIDENTIAL • COMMERCIAL • INDUSTRIAL



# BUILDERS-

*Check these Points*



MULTIPLEX is not just another radial arm saw. Enthusiastic users everywhere are praising MULTIPLEX saws for the additional plus features not found in any other make of saw.

- ✓ The Exclusive Versatile Elbow, or center pivoted track arm, gives it a distinct performance advantage over all other designs.
  - ✓ Left hand as well as conventional right hand miters are cut with ease on any angle (see illustration).
  - ✓ Circle Shaping, Dado Mitering any angle, right or left hand.
  - ✓ Circle Routing, Bevel Circle Routing.
- These are some of the advantages, found only in a MULTIPLEX, that speed up output and lower operating costs with greater ease of operation.

*Write for full information and name of nearest dealer.*

## MULTIPLEX

### *Radial-Arm Saws*

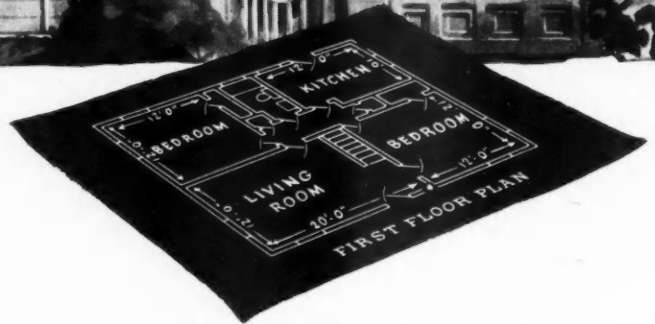
Optional for Models 30A and 40A -- A MULTIPLEX Radial Arm Drill Press, quickly and easily attached to and driven by the saw motor, offers exceptional flexibility in drilling, routing, planing, tenoning, carving and other operations.

★  
**RED STAR PRODUCTS INC.**  
3455 VEGA AVE., CLEVELAND 13, OHIO U. S. A.

**Yes . . . You Can Complete  
this GENERAL PLYWOOD home  
in only 2 weeks!**



**Available for Immediate Delivery!**  
Take advantage of the demand  
created by our national advertising!



Fast completion of homes means fast turnover of investment for you. And *all* of the conventional General Plywood Homes—like the Cape Cod shown above—can be completed in just two weeks! This is possible because General Plywood takes all the “ifs” out of home building for you. There are many models of General Plywood Homes, each of which comes to you as a *complete* package. You face no delay from shortage of structural materials . . . can quickly

build fine quality, real value homes of the type that people want. General Plywood Homes are permanent, attractive, sell at a reasonable price and allow you substantial profits! All construction details of General Plywood Homes have been approved by FHA, and meet requirements for G. I. loans.

*You are invited to visit a model village erected in beautiful Rock Creek Park in suburban Washington, D. C. This project is exclusively of General Plywood Homes. See or call General Plywood's national sales representatives at 1028 Connecticut Avenue, N. W., Washington, D. C.*

**GENERAL  
PLYWOOD**  
CORPORATION  
LOUISVILLE 12, KENTUCKY

General Plywood Corporation  
Box A-8, Louisville 12, Kentucky  
Please send me full details of General Plywood Homes.

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

Please check: ( ) Architect ( ) Builder ( ) Contractor  
Individual Desiring Home ( )

**Engineered for  
equal efficiency  
with OIL or GAS  
(AGA-approved)  
— converts to  
either fuel  
at low cost**



Type 101-201 illustrated equipped for oil.

**Here's the answer to restrictions caused by fuel shortages in your community:**

## Mueller Climatrol 101-201 Convertible Furnace

*In spite of present fuel shortages you can design new homes with all the utilities you would normally provide in long-range planning. Thanks to the Mueller Climatrol 201 Convertible Furnace, there's no need to let temporary restrictions limit your clients for years to come.*

If it's a gas shortage, you can install an oil-fired Climatrol for people who want gas and can't get it—exchanging the oil burner for a gas burner when the shortage is over. If it's a fuel-oil shortage, you can reverse the process.



With the Mueller Climatrol 201 Convertible Furnace, your client

can enjoy the benefits of automatic heat *at once*—with a unit designed to convert at low cost to the fuel of his preference when it is available. He gets the efficiency of an *oil-designed* job when he burns *oil*—and the efficiency of a *gas-designed* job when he burns *gas*.

Your recommendation of Mueller Climatrol is backed by the other great advantages of the Mueller line, including the "climate control" comfort of Climatrol, and the 90-year performance record of the Mueller name. Select Climatrol for every home-heating job, to protect the future comfort of your clients. Write for complete information today!

**L. J. Mueller Furnace Co.**

2016 W. Oklahoma Ave. Milwaukee 4, Wis.



**MUELLER**  
*Climatrol*

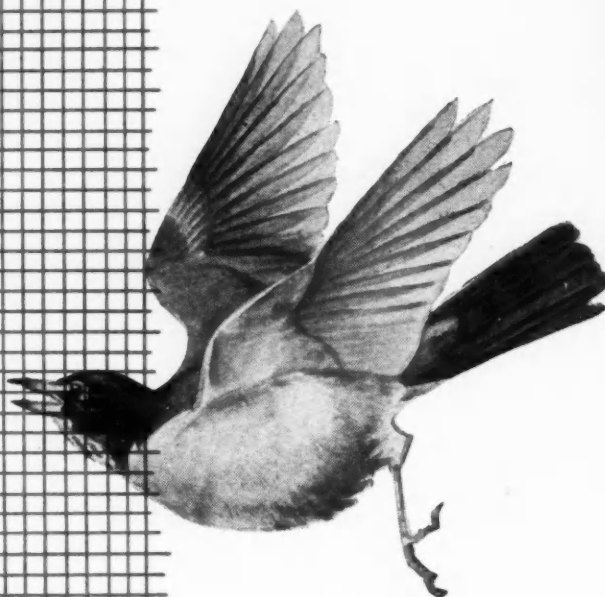
Reg. U. S. Pat. Off.

The Mueller Climatrol 202 Winter Air Conditioner consists of the 201 Gravity Furnace (shown at the top of the page) plus a blower package. Like the 201, the Winter Air Conditioner converts from oil to gas at low cost without loss of efficiency. Being a reversible unit, the blower package may be arranged on right- or left-hand side.

## Specify the screening that's feather-light

### Get these 8 Advantages

- Permanent — can't rust
- No upkeep—never needs painting
- Cannot "bleed," stain exterior
- Easier installation — handles like cloth, cuts with scissors
- Safer installation — no jagged edges or sharp splinters
- Greater impact strength
- One-fifth the weight of metal
- Tinted — to blend with any color scheme



**Firestone**

*Velon*\*

**TINTED SCREENING**

*Velon* will amaze you. It's one-fifth the weight of metal, takes a big load off installation and removal of screens. *Velon* is easier to set into frames, easier to tote around, easier to store. You can even leave *Velon* screens up all year round if you like — they're impervious to weather, salt air, any climate conditions. Yet *Velon* costs no more than good metal screening! Available in standard widths and gauges. Write Firestone, Akron for free full color booklet on *Velon*.





RIDGE CAP  
for Shingles  
RIDGE ROLL  
for all Sheet Roofs

FLASHING for Chimneys,  
End Walls, Side Walls,  
Gambrels

FORMED VALLEY  
for all types of roofs

GABLE END STARTER  
for Shingles and  
"Snap-Seal"

EAVE STARTERS  
for Shingles and  
all Sheet Roofs

CORNER POSTS, inside  
and outside, for Clap-  
board, Weatherboard.  
Also CORNER CAPS  
for Clapboard as shown.

ALL-PURPOSE ACCESSORIES  
FOR IMMEDIATE DELIVERY—  
SEE YOUR LOCAL DEALER!

# Accessories

## to make aluminum roofs Perfect and other roofs Better

Soundly engineered accessories like these are an *extra* reason why more and more architects will specify Reynolds Lifetime Aluminum Shingles or "Snap-Seal" Roofing for fine homes . . . and Reynolds Lifetime Aluminum 5-V Crimp, Corrugated and Weatherboard for every type of farm, commercial and industrial building.

They are an extra reason why builders like Reynolds Lifetime Aluminum, too . . . the right accessories solve application problems, reduce labor costs.

But besides their use with aluminum, these accessories can meet an urgent need of architects and builders in other types of roofing—wood, slate or composition. They are light weight, easy to handle,

handsome and good for a lifetime of service.

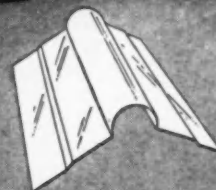
So by all means specify Reynolds Lifetime Aluminum for complete roofing and siding. But where other materials are indicated, take advantage of these accessories. Remember, they are immediately available, in any quantity—together with the *right* nails. See Sweets or write for literature . . . offices in principal cities . . . Reynolds Metals Company, Building Products Division, Louisville 1, Ky.



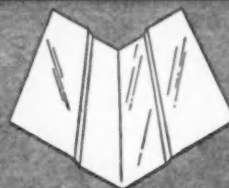
For 100% performance, use only the nails recommended by the manufacturer.

# REYNOLDS *Lifetime* ALUMINUM BUILDING PRODUCTS

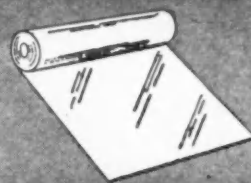
TODAY THE BASE PRICE OF ALUMINUM IS 30% LOWER THAN PREWAR



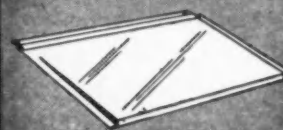
9 1/2" PLAIN RIDGE ROLL  
Made of .024" sheet, 10-ft.  
lengths, packed 10 to a bundle.



14" FORMED VALLEY  
Made of .024" sheet, 10-ft.  
lengths, packed 10 to a bundle.



ROLL FLASHING—ROLL VALLEY  
18" wide, of .020" sheet, (Roll  
Valley .027" sheet) supplied  
in 100-ft. coils.

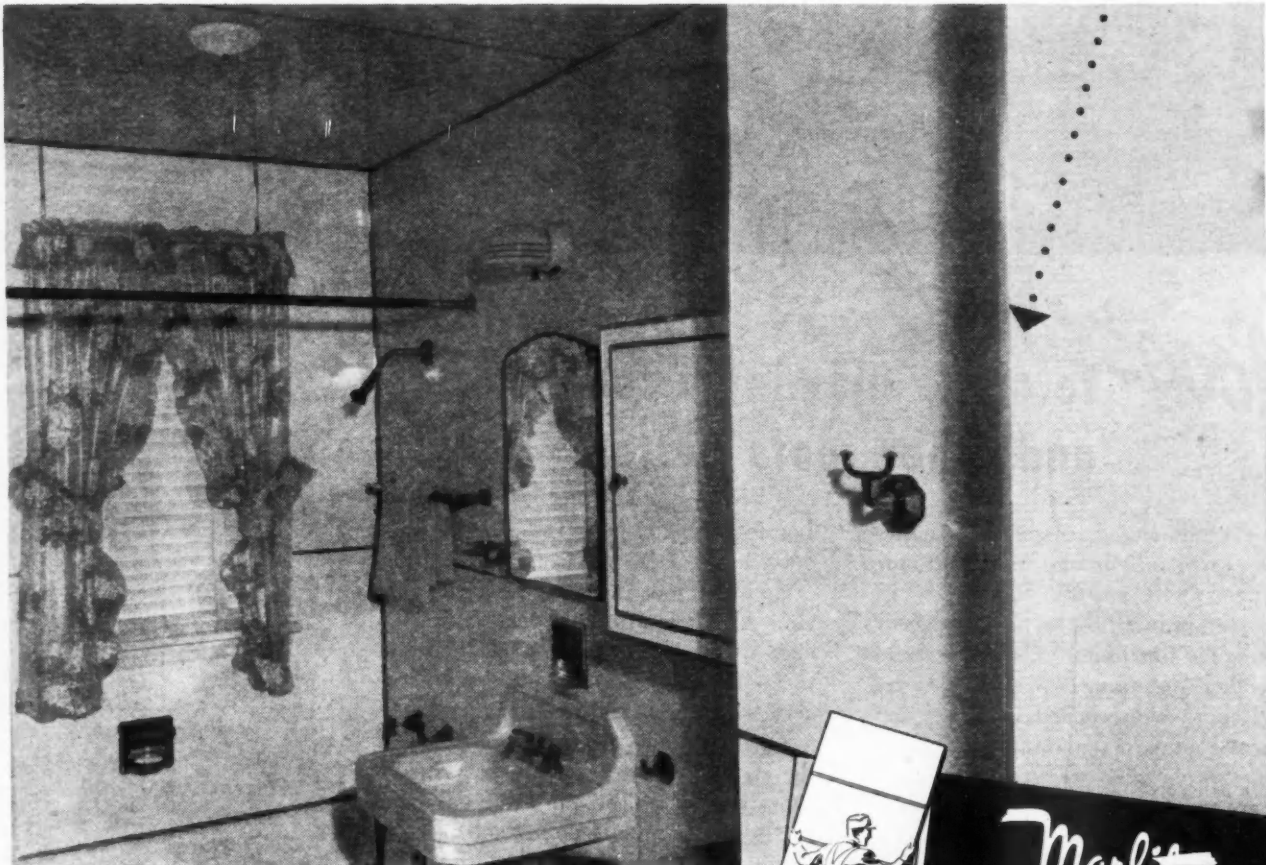


SHINGLES  
Interlocking, weather tight,  
covering all nails. Two sizes:  
8 x 14 1/2 and 5 1/2 x 18 1/2.



# For Lasting Beauty

- EASY TO INSTALL • EASY TO CLEAN
- NEVER NEEDS REFINISHING
- COLORS and PATTERNS for EVERY DECORATIVE TREATMENT



**Marlitz**  
PLASTIC-FINISHED  
WALL PANELS

In bathrooms and kitchens—in any room where lasting beauty and utility are essential—Marlitz plastic-finished wall and ceiling panels are ideal.

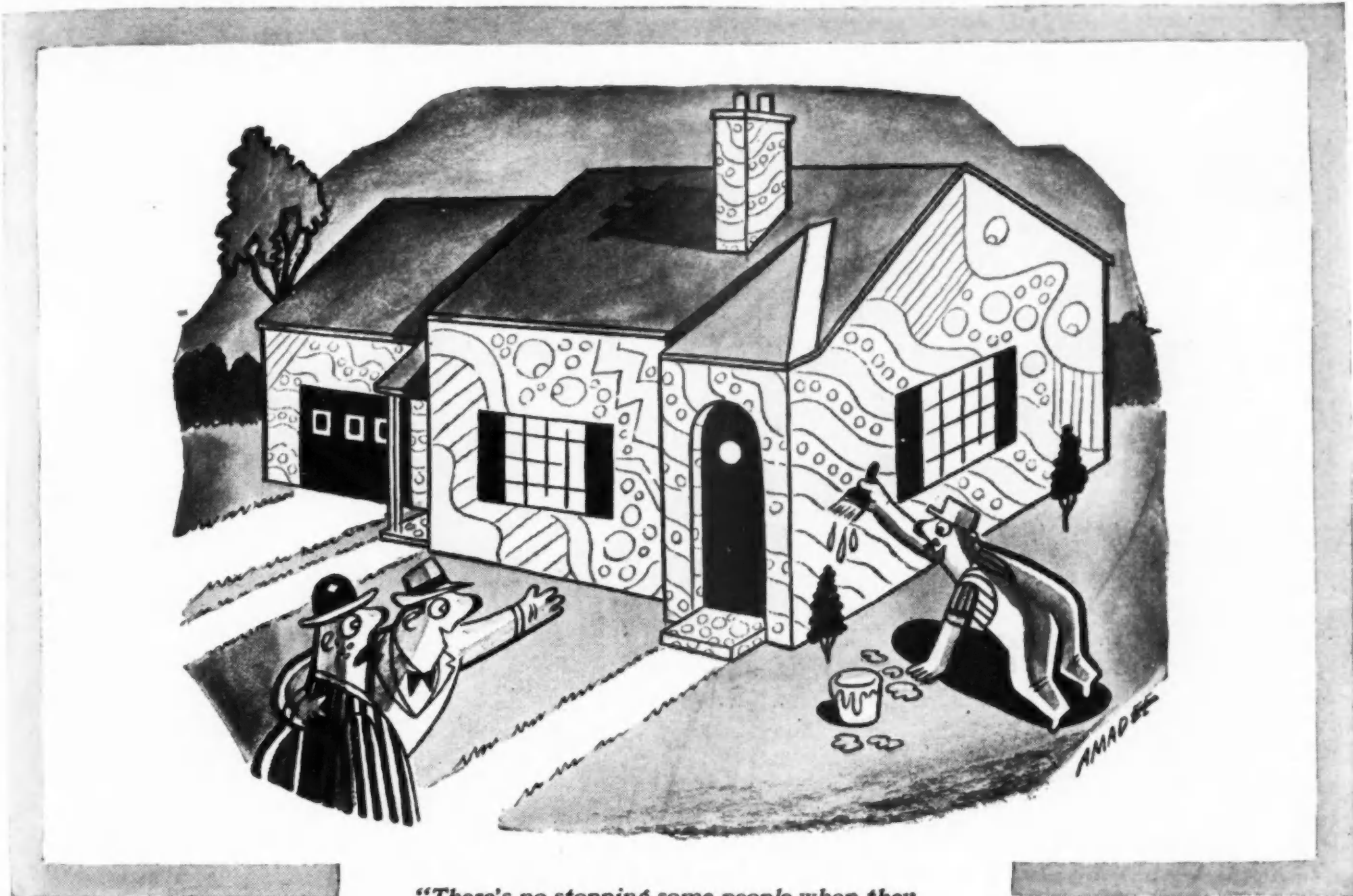
**Easily Installed.** Over old walls or new—Marlitz goes on in a jiffy, requires only regular carpenter's tools for installation . . . that's economy for you.

**Easy to Clean.** Wiping occasionally with a damp cloth restores all the nat-

ural Marlitz beauty—that's satisfaction for your customer. Sold by leading dealers everywhere, Marlitz is produced in a complete range of colors and patterns to meet any decorative requirement. See our Catalog in Sweet's File, Architectural, or write direct.

*For Creating  
Beautiful  
Interiors*

Marlitz production has reached an all-time high, but the tremendous demand for this versatile paneling makes it necessary to continue allocation of deliveries temporarily. Marsh mouldings and adhesives are available now Marsh Wall Products, Inc., 803 Main Street, Dover, Ohio



*"There's no stopping some people when they style their homes with Bondex colors."*

## To build pride of ownership . . .

# "exterior decorate" with **BONDEX** colors

It works like magic! Take a new house that seems drab and commonplace. Color style it with Bondex Cement Paint. Presto, you have a home that's individual, desirable and saleable.

it gives a double service—checks dampness by bonding with the surface, adds color. Specify Bondex to "mellow" concrete block, to beautify stucco, brick and masonry.

Bondex has become world famous because

*For outside walls, for basements  
For swimming pools  
For foundations*

### New Color Chart Shows 12 Shades

- |                   |                  |                |
|-------------------|------------------|----------------|
| Dutch White       | Carthage Cream   | Monastery Gray |
| Old Spanish White | Adobe            | Grotto Blue    |
| Oyster Shell      | Tropical Coral   | Ivy Green      |
| Antique Ivory     | Spanish Buff     | Brick Red      |
|                   | Also, Pure White |                |

*Write nearest Reardon office for your copy.*

**THE REARDON COMPANY** • ST. LOUIS 6  
CHICAGO 9 • NEW YORK 6 • LOS ANGELES 21 • MONTREAL 1

# **BONDEX**

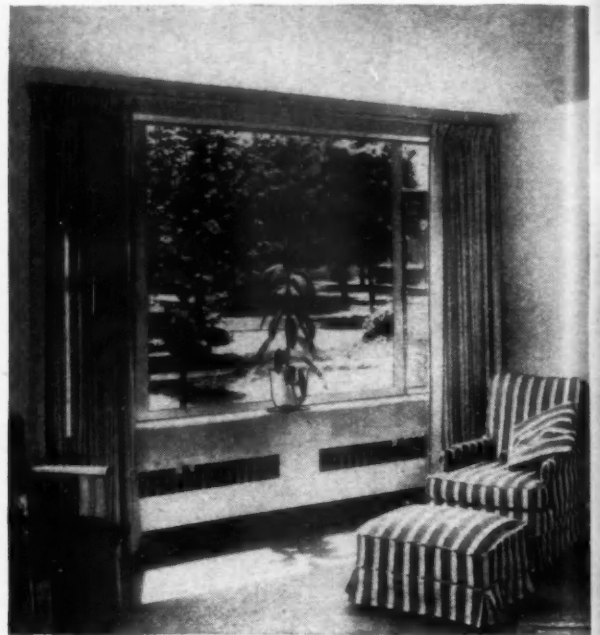
THE *Patented*  
**CEMENT PAINT**  
that outsells all other  
cement paints combined

# Extra Glass means B

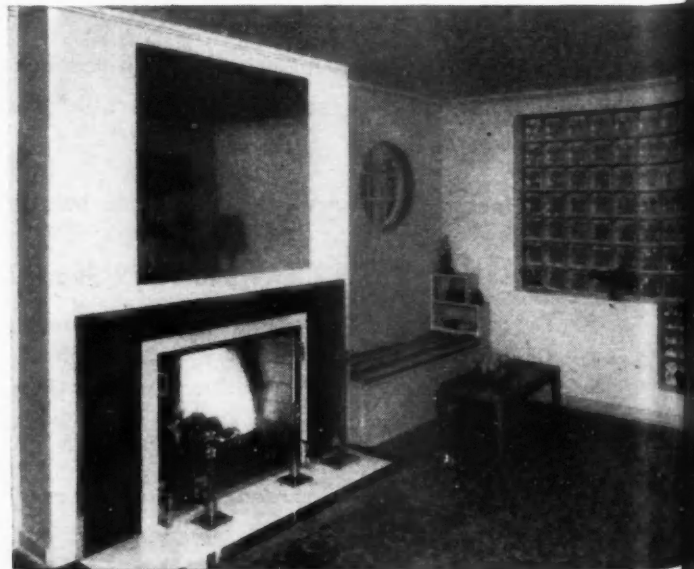


**Practically indispensable** in every home is at least one full-length door mirror. Every member of the family appreciates its convenience. "Pittsburgh" offers a wide variety of mirrors for many home uses. Mantel mirrors for the living room . . . "spruce up" mirrors for kitchen and entrance hall . . . applications like these have proved their popularity. They add sales appeal to every home . . . and help increase your profit.

**A fireplace surround** of Carrara Structural Glass will smarten up the fireplace area. Carrara is available in ten attractive colors and can therefore be used effectively with practically any color scheme. It's perfect, too, for walls or wainscots in bathroom and kitchen or for splash panels around stove or lavatory. (Note the wall mirror above the fireplace . . . it adds to the beauty of the room by reflecting all its color and movement. And the PC Glass Blocks admit plenty of daylight . . . at the same time excluding dust, noise or an unwanted view. Other popular uses: around the front door, over kitchen work surfaces, for interior semi-partitions.)



**Larger window areas** are more practical with Twindow, "Pittsburgh's" new window with built-in insulation. Twindow is made of two or more panes of glass with a sealed air space between them, and a stainless steel protecting frame. It is set as easily as a single pane of glass. With Twindow, heat losses are reduced, insulating efficiency is increased, downdrafts near windows are minimized, fogging is practically eliminated. Twindow permits your customers to enjoy the beauty of the outdoors through *insulated* windows.



PITTSBURGH PLATE GLASS COMPANY



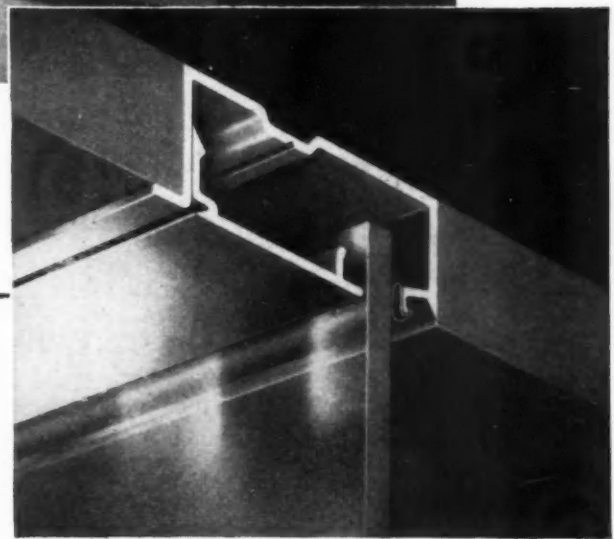
# Better Jobs / here's how "Pittsburgh" can help you...



The testimony of thousands of satisfied merchants shows that a new store front . . . of Pittsburgh Glass and Pittco Store Front Metal . . . means added sales appeal, more customers, increased business. "Pittsburgh" offers the contractor a complete line of glass products and store front metal for store remodeling work, and experienced crews of workmen to handle their installation. Consistent, sustained advertising has made "Pittsburgh" known to your customers as the leader in the store modernization field.

Two styles of Pittco Store Front Metal give you a wide variety of sashes, mouldings and bars for attractive glass settings. Pittco De Luxe is extruded metal, distinctively styled. That means sturdy members with clear, sharp profiles . . . an ideal metal for high quality store fronts. Pittco Premier is lighter in weight and more moderately priced than its famous companion line. Its graceful contours please customers and its quick, easy method of installation speeds setting time.

Illustrated . . . PITCO DE LUXE FLUSH TYPE SASH



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

\*Build it better with

# Pittsburgh Glass



"PITTSBURGH" stands for Quality Glass and Paint

Pittsburgh Plate Glass Company  
2236-7 Grant Building, Pittsburgh 19, Pa.  
Please send me without obligation your  
"Builders Kit" of illustrated literature.

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

*A Limited Number of  
American Builder Subscriptions  
Are Again Available!*

**NOW SERVES OVER 80,000 SUBSCRIBERS . . .**

It is a pleasure to state that we are again in a position to accept a limited number of new subscriptions from those who are connected with the building field.

If you would like to have an up-to-date source of information covering the light construction industry—American Builder will give you the latest information on:

- *new and improved products, materials and equipment*
- *new and more efficient methods of construction*
- *estimating • financing • land development*
- *and merchandising and selling*

Also to be included in future monthly editions are:

- *articles, designs and plans of homes, stores, motels, summer establishments, small town airplane hangars and roadside stands*
- *one complete blueprint in each issue—comprises a series of blueprints of modern homes*
- *Monthly Review of National Association of Home Builders*
- *American Builder Better Detail Plates*
- *Practical "How-To-Do-It" features*

Be prepared for the progress ahead by sending us your order today.

## NEW SUBSCRIPTION ORDER

**AMERICAN BUILDER, 30 CHURCH STREET, NEW YORK 7, N. Y.**

- Enter my subscription to American Builder for **THREE YEARS** (36 issues) at your reduced rate of \$5. My remittance of \$5 is enclosed.
- Enter my subscription to American Builder for **ONE YEAR** at your regular price of \$3. My remittance for \$3 is enclosed.

Your Name .....

Street .....

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

NAME OF YOUR FIRM .....

Please indicate your position in the above named firm:

If Owner of Business, please state .....

If not, give Title or Position .....

### PLEASE NOTE—

Kindly check your principal activity

#### Builders and Contractors:

- Builders and Contractors specializing in Residential or Light Commercial or Light Industrial Building.
- Contractors specializing in Heavy Building Construction.
- Builders and Contractors engaged in both Residential or Light Commercial or Light Industrial Building and Heavy Building Construction, *not specializing in either.*
- Contractors specializing in all types of Heavy Construction *other than Buildings.*
- General Contractors engaged in Heavy Construction of both Buildings and other than Buildings, *not specializing in either.*
- Special Trade Contractors, contracting for only such parts of Building Construction as carpentry, masonry, plumbing, roofing, heating, ventilating, electrical, painting, concreting and excavating.

#### Distributors:

- Retail Dealers—lumber, building materials and installed equipment.
- Wholesalers, Jobbers and Manufacturers' Agents of lumber, building materials and installed equipment.
- Distributors of Construction Equipment.

If none of the foregoing applies, please advise the type of business with which you are affiliated:

Type of Business .....

# A NEW 4-POLE THERMAL MAGNETIC TRIP MULTI-BREAKER



TYPE MO4

Trips instantly  
on short circuits  
but holds on  
harmless over-  
loads

The popular MO  
2-pole Multi-breaker  
now increased  
to 4-pole range

Calibrated for  
the new National  
Electrical Code,  
wire ratings 15,  
20, 30 ampere

## 2-WAY PROTECTION FOR CIRCUIT WIRING

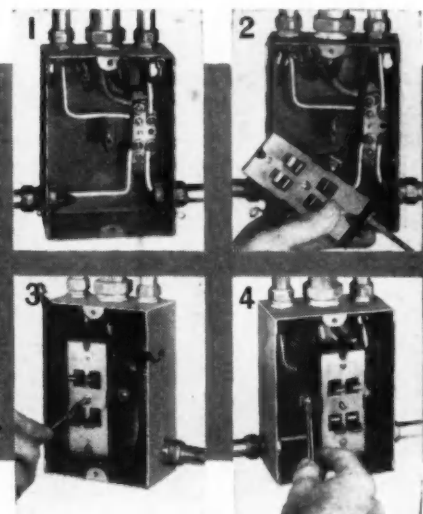
The magnetic trip functions in 1/50 to 1/100 of a second even on minor short circuits. This magnetic trip feature is combined with the time-tested thermal bi-metal element which provides time-delayed tripping on moderate overloads.

The MO4 MULTI-BREAKER is compact (5" x 7") having 4 single poles with circuit ratings of 15, 20, 30 amperes. Either top or bottom poles can be converted into a double pole circuit by inserting a handle tie bar furnished with the device.

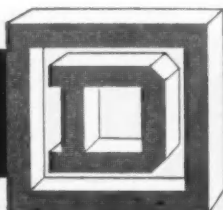
MO4 MULTI-BREAKERS are available for flush or surface mounting.

Ideal to install in GI homes, farms, prefabs where two lighting or appliance circuits and a small electric range circuit are required. Or in homes, farms, shops, stores, etc., where four lighting or appliance branch circuits are needed.

THE  
MO4  
IS  
EASY TO  
INSTALL



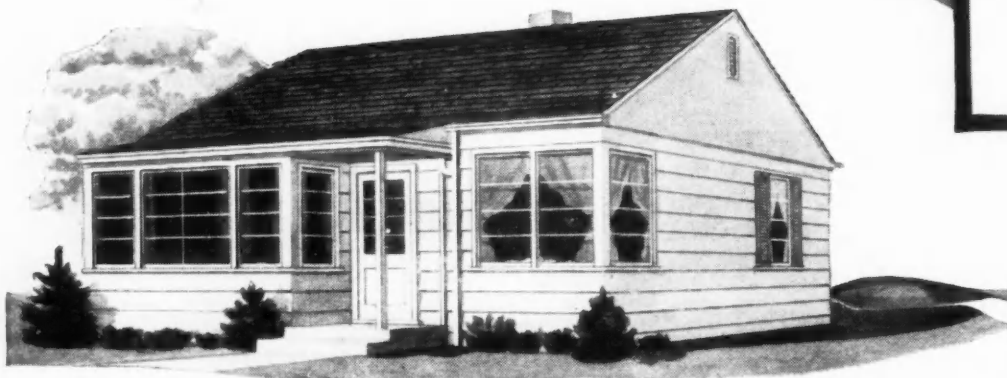
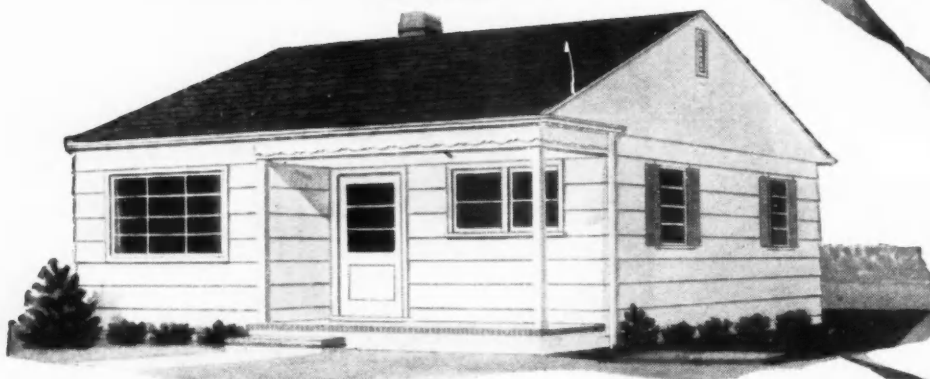
FOR COMPLETE DETAILS, WRITE FOR BULLETIN 4100. ADDRESS  
SQUARE D COMPANY, 6060 RIVARD ST., DETROIT 11, MICHIGAN



# SQUARE D COMPANY

DETROIT • MILWAUKEE • LOS ANGELES

# Another group of *Related designs*



*Enriching a Plan*  
that has  
**DEMONSTRATED**  
its  
**POPULARITY**

The new designs illustrated on these pages, together with the House of the Month, are now being released to lumber dealers who employ the Weyerhaeuser 4-Square Home Building Service.

# another *Business builder* in the WEYERHAEUSER 4-SQUARE HOME BUILDING SERVICE

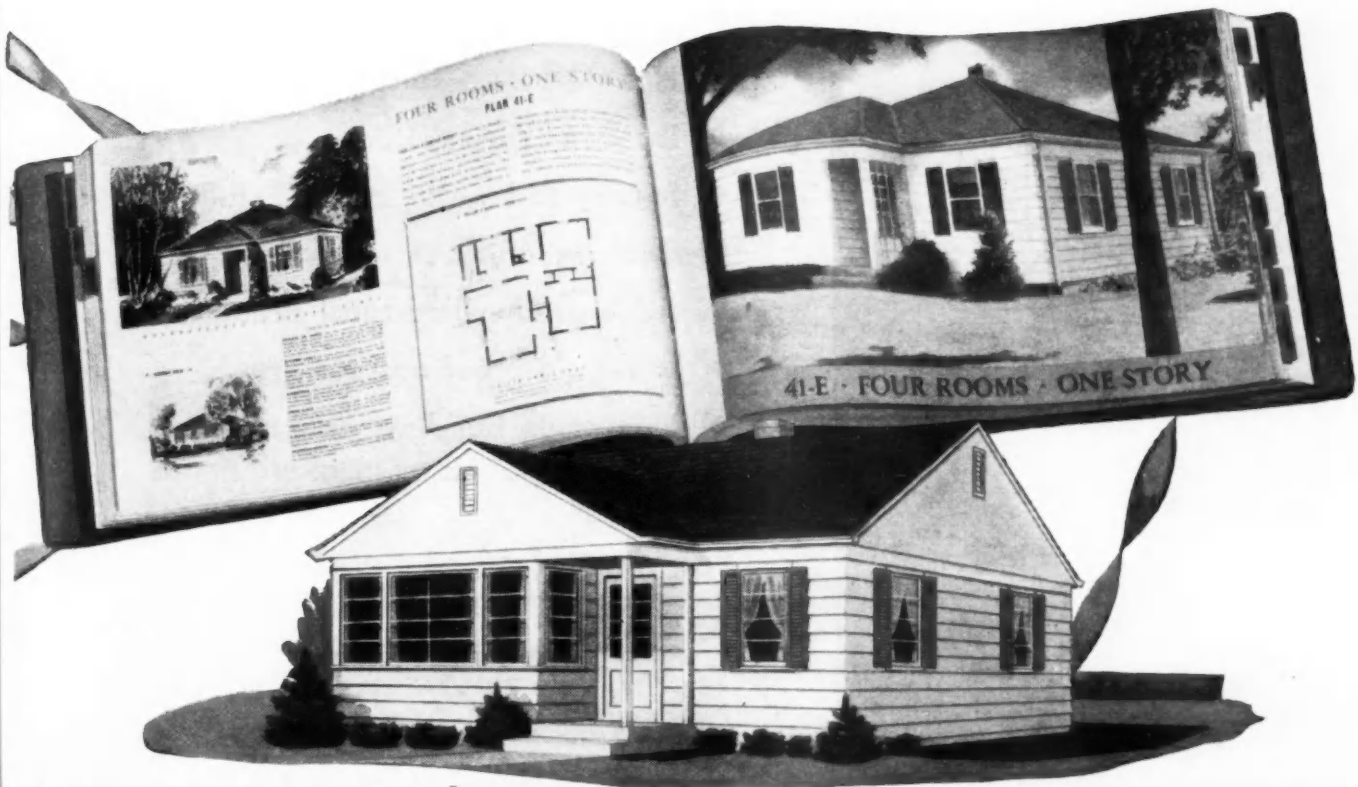
● One of the biggest problems facing the home builder who is planning to erect several houses in the same cost bracket and in a single neighborhood is to procure a practical, well planned interior with a variety of exterior treatments.

Illustrated here is a group of Related Designs developed from one of the most popular homes of the Weyerhaeuser 4-Square Home Building Service. These Related Designs have almost identical floor plans, but are designed with strikingly different exteriors. Last month you saw the first of a series of such groups. With these Related Designs, the home

builder is in a position to render a most valuable service to his customers and to a growing community. He is able to offer houses of proved popularity with a range of exterior treatments, every one of which reflects definite character—that quality of charm and attractiveness which skilled architects incorporate in their work. Here is variety, sound construction, and high salability.

For further information see your Weyerhaeuser 4-Square Lumber Dealer.

**WEYERHAEUSER SALES CO.**  
SAINT PAUL 1, MINNESOTA



**WEYERHAEUSER 4-SQUARE  
LUMBER AND SERVICES**

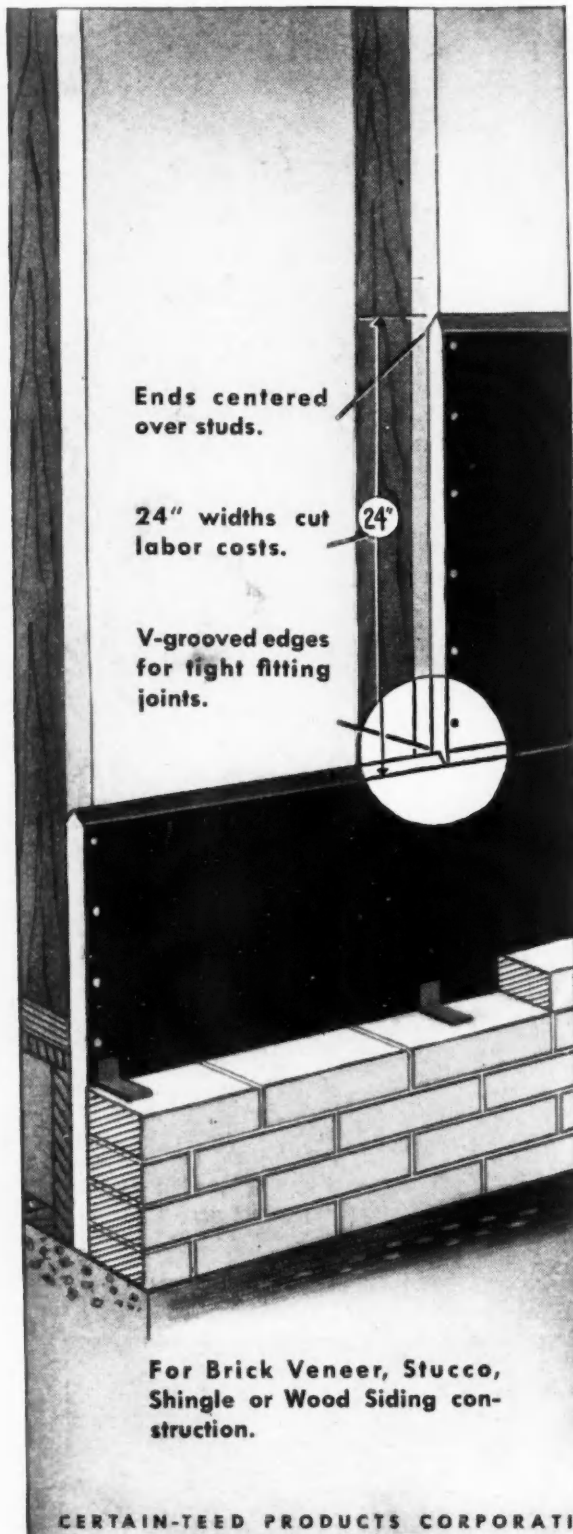
# WEATHER-SHIELD

stands for

LOW COST

EASY TO APPLY

FIREPROOF SHEATHING



*WEATHER-SHIELD* is the durable gypsum sheathing that:

- Repels wind and water
- Has V-tongued and grooved joints
- Does not shrink, buckle or warp
- Is easy to handle, cut and nail
- Comes uniform in quality and size
- Adds greater structural strength
- Is vermin-proof and rot-proof
- Eliminates building paper except where required by local ordinance

FOR EXTRA FIRE AND WEATHER PROTECTION  
FOR SAVINGS IN MATERIAL AND LABOR USE

*WEATHER-SHIELD*

a product of

*CERTAIN-TEED*

the well known name



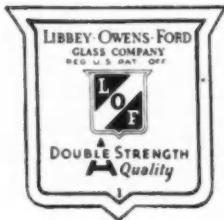
Architect: Robert Cerney, Minneapolis

## **T**O "ENLARGE" A ROOM... ADD A VIEW

Rooms don't have to be large to have a spacious feeling... if you open their walls with glass. Provide a clear view of the outdoors with its ever-changing color and beauty to put more "sell" in your houses.

Remember, glass is not an expensive material—and it requires no painting, papering or other finishing. It adds so much—for so little.

Greater use of glass is a mark of an up-to-date house. And the L-O-F label is a mark of quality glass—assurance to home buyers that better, clearer glass has been used. Libbey-Owens-Ford Glass Company, 4387 Nicholas Building, Toledo 3, Ohio.

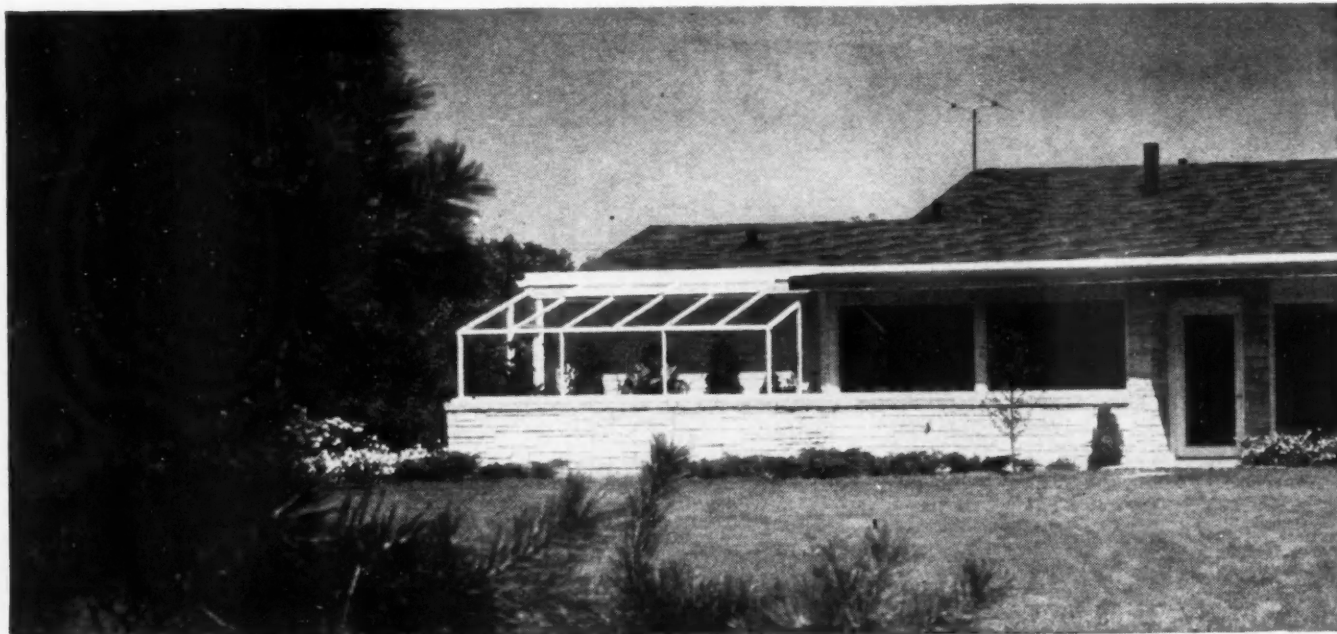


**LIBBEY · OWENS · FORD**

*a Great Name in* **GLASS**

**L·O·F also makes plate glass, Thermopane\* insulating glass, safety glass, Vitrolite\* colorful glass facing, Tuf-flex\* tempered plate glass and other flat glasses.**

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



## Many design innovations



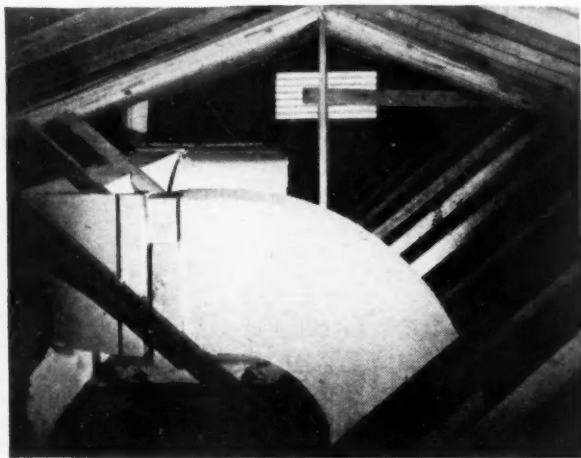
*Reprinted from House & Garden*

Servel-conditioned air emerges from this specially designed grille below living room windows to form a solid curtain between pane and room.

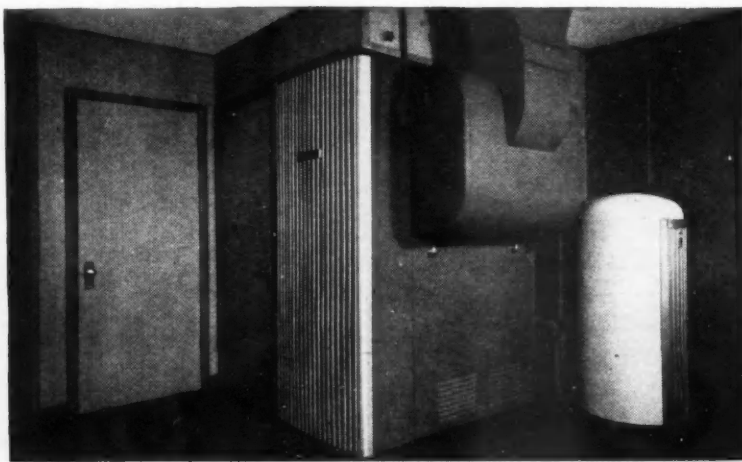
*Servel All-Year Gas Air  
Conditioning makes possible  
new high in year-round comfort*

TO INSURE maximum physical and psychological comfort in America's first all-sealed house, Howard M. Sloan and his architect, David S. Barrow, used solar heating and Servel All-Year Gas Air Conditioning. This unique combination not only provided a "new quality of living" the year round; it also made possible more efficient and economical design and construction.

The Sloan house uses the entire floor area as a radi-



Air returns to the Servel All-Year Gas Air Conditioning unit are conveniently placed in the attic.



Heart of the solar-radiant heated Sloan house is the Servel Conditioner. At right is Servel Ball-Type Gas Water Heater.





## in first all-sealed house

ant heating panel. Six separate ducts bring air from the Servel Conditioner to six plenum chambers under the various rooms. Openings under windows allow conditioned air to circulate from bottom to top of glass areas. It returns through openings in the ceilings. Outside air for ventilation is taken through unit, where it is cleaned and conditioned before being delivered to rooms.

The air supply ducts for the six zones in the house are equipped with splitter dampers where air leaves the Servel *All-Year* Gas Air Conditioner. Thus the flow of air to zones can be adjusted to provide the most desirable year-round temperatures in each room. What's more, distribution of heat generated by the sun is assured by the fan operating continuously in the Servel unit. In this way all rooms are kept at uniform ideal temperature and humidity, in winter as in summer.

Comprehensive tests on typical days show that there

is almost no stratification of air in the rooms. Findings reveal a maximum variation of one degree between floor and ceiling levels. And there is no overshooting of temperatures during normal heating operations.

In addition, the use of fixed windows eliminates window screens, window hardware, weather stripping as well as the need for a screen porch. Mr. Sloan states that "the economies in design and construction made possible by the Servel *All-Year* Gas Air Conditioner actually made it cost little, if any, more than an ordinary heating system!"

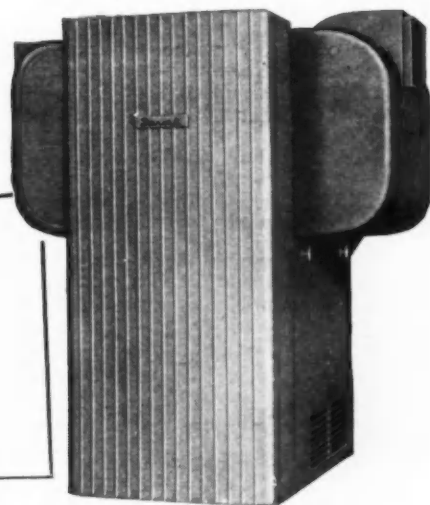
The Sloan house is a striking example of how Servel *All-Year* Gas Air Conditioning can help you design greater comfort and livability into any home—without appreciably increasing the cost. Get all the facts from your local Gas Company. Or write today to Servel, Inc., 1708 Morton Avenue, Evansville 20, Indiana.

### **TRIED . . . PROVED . . . SUCCESSFUL**

*(From Boston to San Diego . . . From Bismarck to Miami)*

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

**Servel**  
*All-Year* GAS AIR CONDITIONER



**WALLACE E. JOHNSON**  
 Memphis, Tennessee

Mr. W. C. Coleman  
 The Coleman Co., Inc.  
 Wichita 1, Kansas

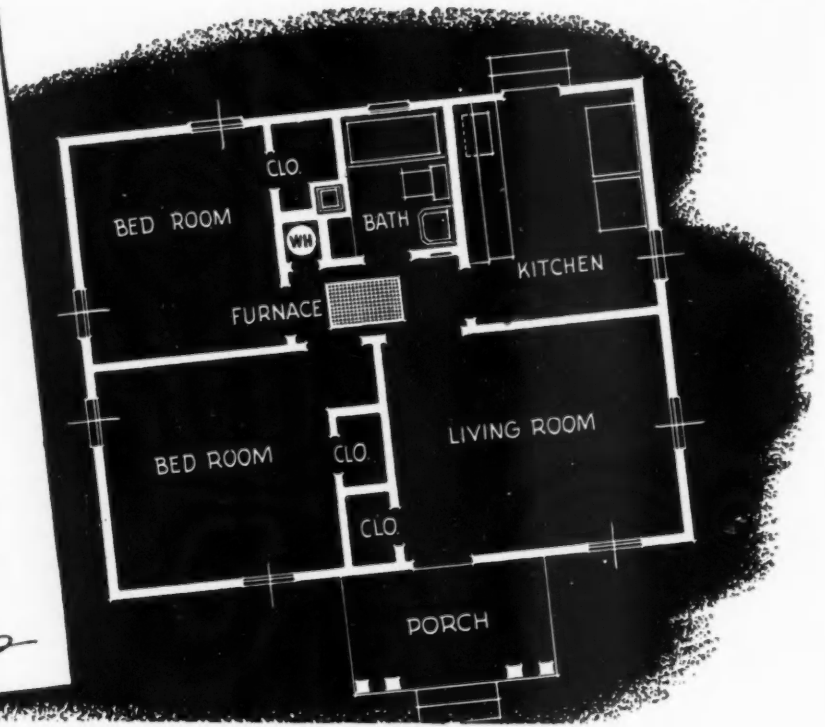
Dear Mr. Coleman:

We believe you should know about one "by-product" of Coleman Floor Furnaces, which we have encountered. We were originally interested in this type of heating because it allowed us to feature automatic heating for small homes, at a reasonable price. However, we are constantly impressed with the acceptance a Coleman furnace has with the public.

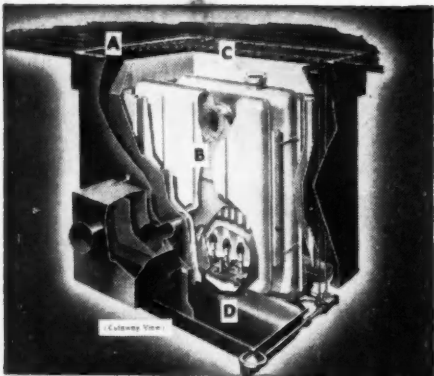
Though they are money-savers, we find many home-buyers look on them as evidence of "quality construction" in the finished house. In these times, when home building costs seem well above what prospects want to pay, public acceptance like this is a real asset to the seller, since the customer is better satisfied with the value he gets for his price.

Sincerely,

*Wallace E. Johnson*



# Turned To Coleman Floor Furnace To Cut Building Costs — Found It Really Helped Sell Houses, Too!



**How It Works!** Cutaway view shows how Coleman Floor Furnace produces the modern automatic, warm-floor heat that helps sell homes! Note how floor-level air is drawn through cool-air-chamber (A); how air is heated in warm-air chamber (B); how 78% open register (C) lets warm air flow into house fast. Patented streamlined bottom (D) speeds up warm air flow 35%.



**"Clean, Automatic Heat"**—3 Golden selling words for you! "No fuel-carrying nor fire-building; no ashes or fuel-dirt; less dirt in furniture, clothing, curtains and drapes"—this is powerful selling ammunition, to convince women they want *your* houses. Coleman Floor Furnaces, gas or oil or LP Gas models, help you make good this promise of a cleaner, easier-to-keep house.



**Easy, economical installation.** This photo shows a Coleman Floor Furnace in place—in the floor, not on it and not in the basement. No basement is needed, so often you can save the cost of excavation; and you save much costly duct work. Easy to connect with chimney and fuel line Models from 25,000 to 70,000 BTU input or equivalent; single or multiple installations.

**Mail Coupon Below, Today!**—for newest illustrated catalog and specification book of Coleman Floor Furnaces—gas, oil and LP Gas models. A money-making piece for your file! The Coleman Co., Inc., Room AB-660; Wichita 1, Ks.; Philadelphia 8, Pa. (Terminal Commerce Bldg.); Los Angeles 54, Calif.

**AUTOMATIC HEATING**

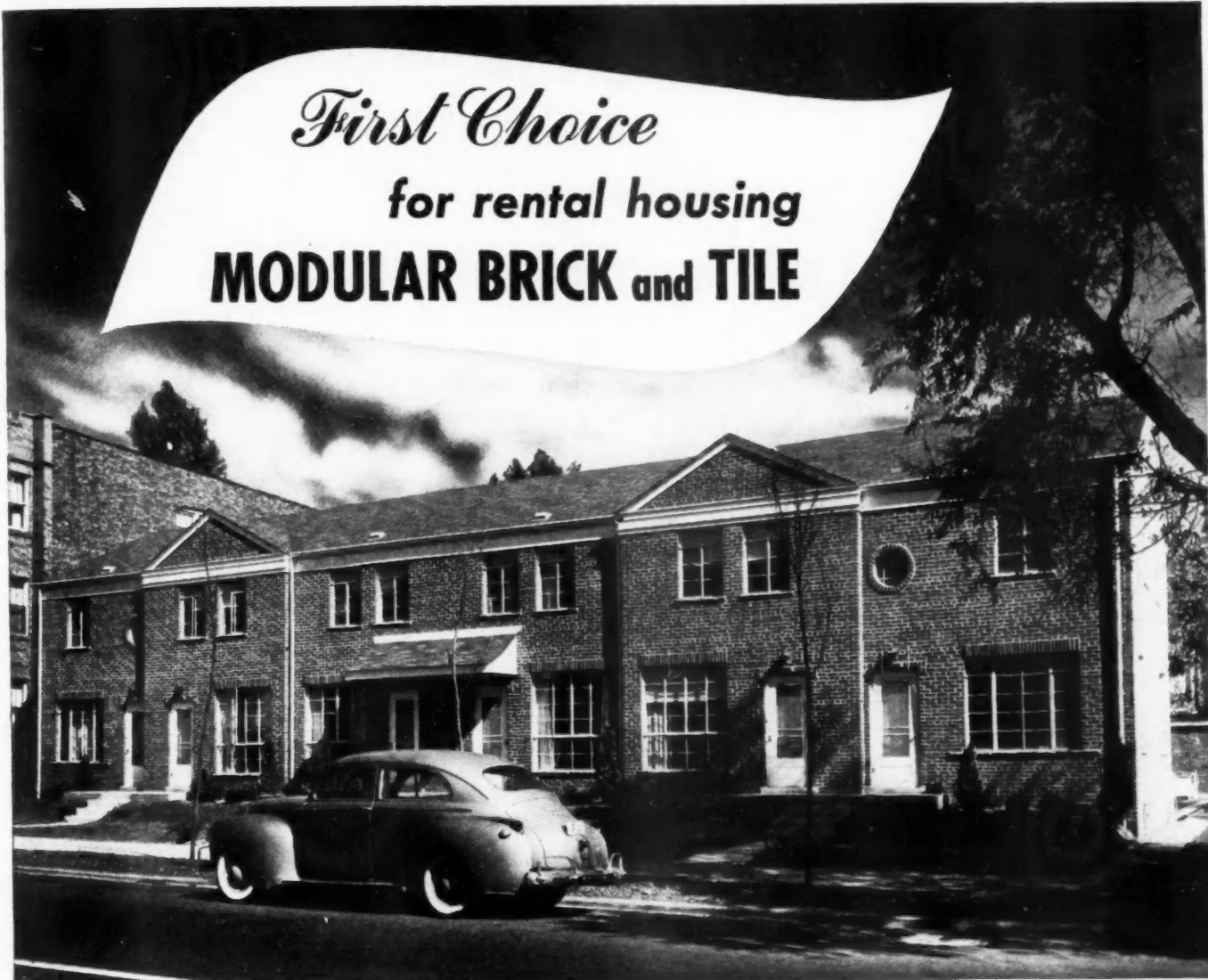


The Coleman Company, Inc.,  
 Builders' Contract Div.; Room AB-660,  
 Wichita 1, Kansas

Without obligation to me, mail at once my copy of newest Builders' catalog of Coleman Floor Furnaces.

Name \_\_\_\_\_  
 Company \_\_\_\_\_  
 Address \_\_\_\_\_  
 Town \_\_\_\_\_ State \_\_\_\_\_

*First Choice*  
 for rental housing  
**MODULAR BRICK and TILE**



**economical • fire-safe • beautiful**

Contractors and builders show great preference for brick and tile for rental housing.

For proof—note the great number of multiple-unit and two-family houses made of these materials. Probably you've built some yourself.

Lower first cost, less depreciation and repair, assurance of higher resale value are good reasons for building with brick and tile.

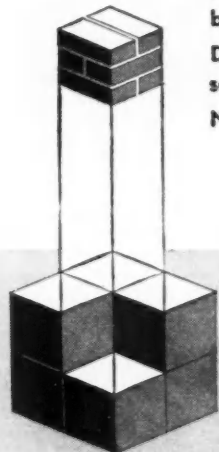
Durability, great structural strength, fire-safety and lasting beauty are others.

Now—in modular sizes—brick and tile mean

more savings . . . better housing because of earlier planning and estimating, perfect fit with other modular designed materials, less cutting and fitting, better workmanship, reduced construction time.

**NEW SMALL HOMES PLANS BOOK**

Our new plans book of 30 small homes, "Your New Home in Brick" is now available at 50 cents per copy. A FREE booklet, "Announcing Modular Sizes in Brick and Tile" is also available. For your copies, write Structural Clay Products Institute, Dept. AB-8, 1756 K Street, N.W., Washington 6, D. C.

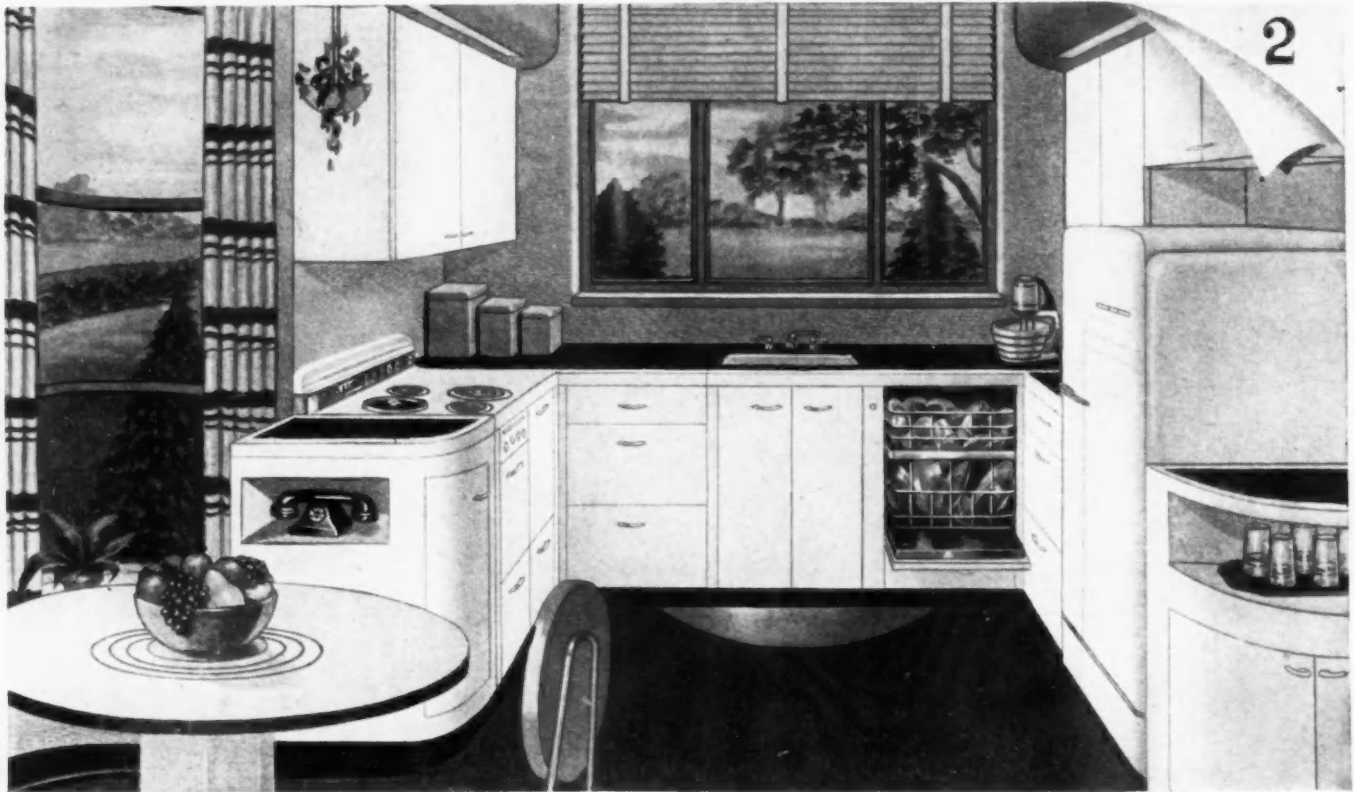


Now it will be built with Modular-Designed  
**BRICK AND TILE**



No. 2 in an important Hotpoint series

# What are America's FAVORITE KITCHENS?



## Hard-Hitting National Advertising Inspires Thousands of Inquiries about Hotpoint's Famous "Skylark" Kitchen!

**J**UST as fashion advertising dictates Milady's choice of clothes, so Hotpoint national advertising promotes the all-electric kitchen as the No. 1 choice in America's household heart. Indeed, the popularity of the "Skylark" kitchen indicates a profitable, tailor-made market for builders and architects. Such an estimate is factual—based on thousands of inquiries received by the Hotpoint Kitchen Planning Service about this cheerful, convenient kitchen. Potential customers... whether building or remodeling... are sold on the electric kitchen. *Astute builders will capitalize on this powerful trend.*

**LET HOTPOINT HELP YOU.** Hotpoint's Kitchen Planning Service is set up for your convenience—to tip you off on the short cuts in installing time and labor saving electric kitchens. The Portfolio of Personalized Kitchen Plans is chock-full of amazing suggestions that make good kitchens better. Send the coupon for this handy booklet. It's a "natural" to help your reputation for producing homes with the most modern kitchens—today and many years to come.

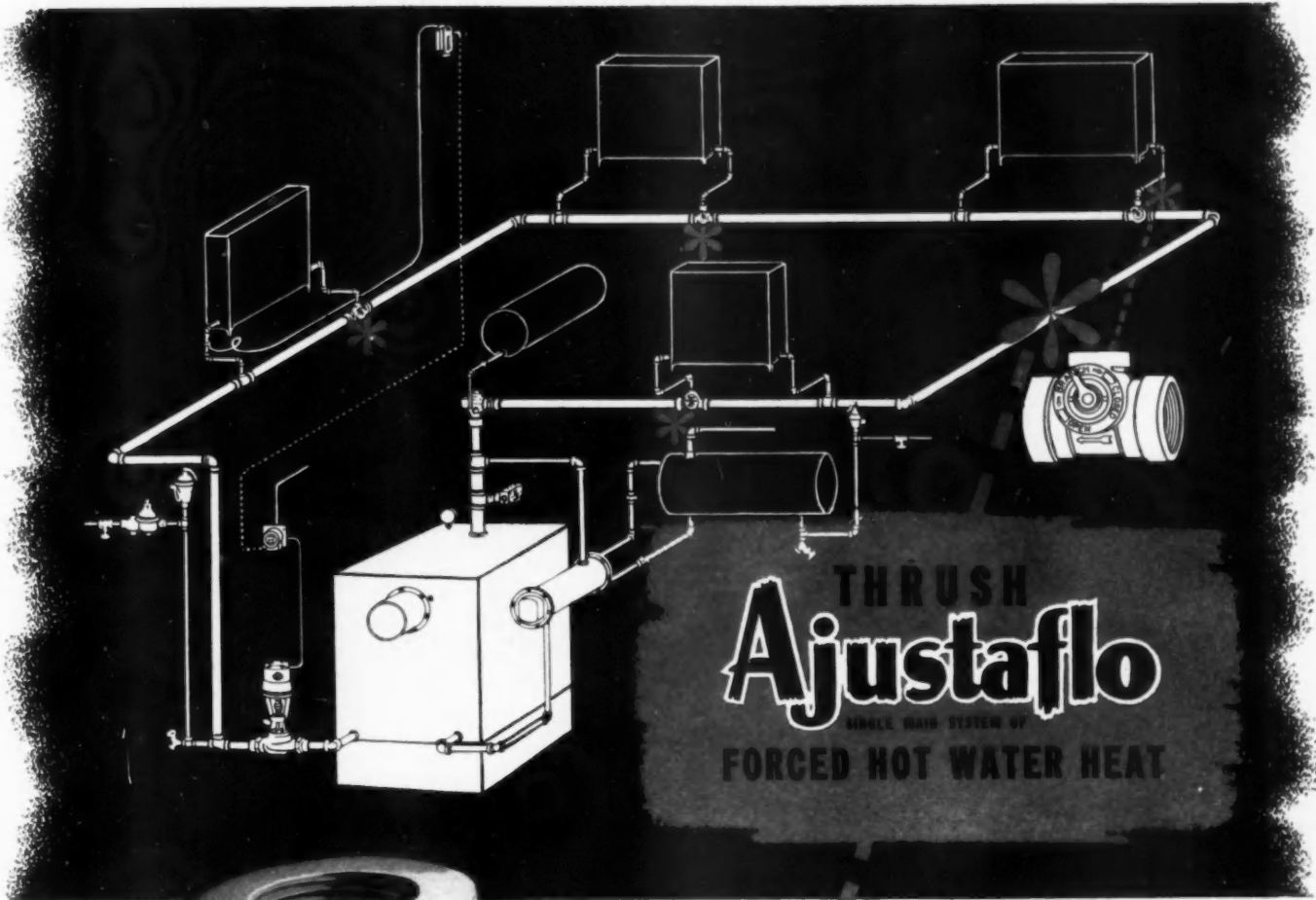


The Hotpoint Institute  
5641 West Taylor Street, Chicago 44, Illinois  
Without obligation, please send me your *Portfolio of Personalized Kitchen Plans*. This offer available in the United States, Territories of Hawaii and Alaska.

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

# Hotpoint

HOTPOINT INC. A GENERAL ELECTRIC AFFILIATE



THRUSH  
**Ajustaflo**  
SINGLE MAIN SYSTEM OF  
 FORCED HOT WATER HEAT



THRUSH WATER CIRCULATOR

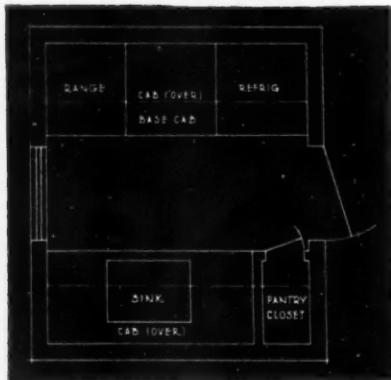


THRUSH  
FLOW CONTROL VALVE

**PERFECTLY BALANCED...**

and we mean balanced. The curved diverter in these new Thrush Adjustable Tees may be moved to control the amount of hot water diverted from the main through the radiators permitting accurate control of the heat output of each radiator. Balancing the system with these handy fittings is easy. They improve the efficiency of a one pipe forced circulating hot water heating system and simplify installation. Thrush Ajustaflo has many advantages over the conventional one pipe system. It is adaptable to every heating system, large or small, and may be used for modernizing and improving old heating plants with little cost or labor. For more information write Department G-8 or see your wholesaler.

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



# Kelvinator's NEW "SPACE-SAVER"

**Holds 50% more... uses no extra floor space!**

Here's the most practical refrigerator ever designed for small kitchens—Kelvinator's new "SPACE-SAVER"! Ideal for small homes and apartments, it offers 50% more storage—full 6 cu. ft. compared to the previous 4 cu. ft. model. *Yet it takes up no more floor space!*

And just look at these really modern features! 5 full-width shelves with *greater space between shelves*... *extra room* for tall bottles and bulky foods... *High Speed*

*Freezer* for frozen foods... "*Seal Tight*" Door Latch, Kelvinator's latest exclusive... beautiful snowy-white *Permalux* finish... perfect trouble-free performance of *Polarsphere*—the matchless cold-maker!

To solve your small kitchen problems, or to replace inadequate units—*anywhere*—count on Kelvinator's "SPACE-SAVER"! Write today for further information... NASH-KELVINATOR, Detroit 32, Michigan.

## Kelvinator



# AMERICAN BUILDER

## L D I T O R I A L

### **Rent Ceilings**

**D**URING the entire regime of OPA, rent ceilings were the only ones which actually were controlled at practically the 1941 level. Price levels of other commodities and services rose steadily, sometimes by means of black market evasions of the law, and sometimes with the grudging consent of OPA, when that agency was faced with a choice between accepting curtailed production of vitally necessary goods, and revising schedules upward to meet increased manufacturing costs. The increased costs principally were the result of increased labor scales. That the average rise in the prices of all commodities from 1939 to early 1947 was 87.5 per cent, and the building material price rise for the same period was 93.1 per cent should be no cause for wonder. The reason is that labor from the time a raw material source is tapped until a finished product is placed in the hands of a consumer, accounts for seventy to ninety per cent of the total cost of the commodity.

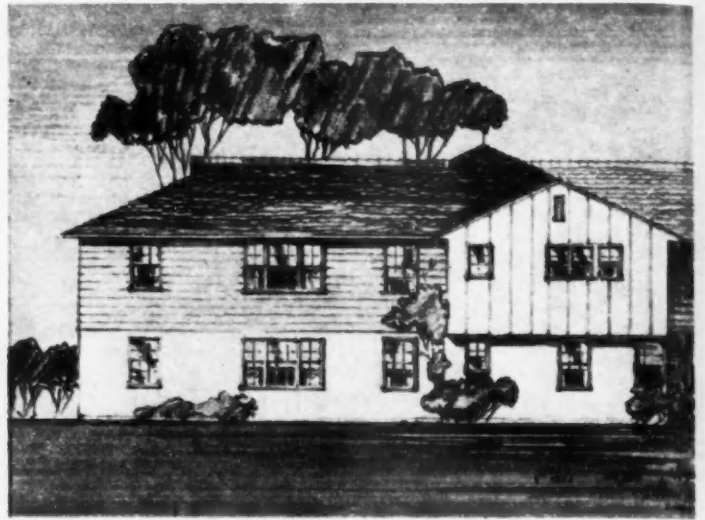
Thus, an attempt to hold price lines without holding labor wage scales was doomed to defeat at the start. It was manifestly impossible for the seller of any product to offer that product in 1947 for the 1941 price with a labor cost increase at every stage of manufacture, transportation and distribution. Whether it would have been possible or feasible for government to hold labor wages at the 1941 level is beside the point. The fact is that the 1941 labor wage scales were not held, and that prices had to rise, and did rise.

That rents did not rise beyond a ridiculously small average of four per cent is due to one inherent difference between rental properties and all other commodities and services. In the case of rental properties, the renter was already in possession of what he was paying for, and what he would pay for in the future. Protected by law from dispossession of the property, the renter had no need to become a party to black market transactions, or to lend passive or active aid to owners' pleas for higher rentals, in order to assure himself of continuing supply as he was forced to do in the case of foodstuffs, clothing and other necessities. The only recourse the owner had was to decrease or eliminate maintenance, with the result that the now inadequate supply of rental properties is in a bad state of disrepair.

There is little in the new rent control law that will provide incentive for the holders of risk capital to embark on widespread programs of rental housing construction, except in the localities where some form of subsidy is available to aid in the building of low cost rental projects. There is little in the new law to aid the owners of prewar rental properties to embark on maintenance and repair programs for the physical preservation of properties, and to make them more desirable.

The best that can be hoped is that mutual agreements for 15 per cent rental increases permitted between owner and tenant under the new law will enable the owner to hold the line against further property depreciation, and that in the interim before final removal of rent controls, he can begin making some necessary improvements to place the property in competitive position for rental when that competition sets in.

# 544 Rental Units Under Way



HEAVY earth-moving equipment, all owned by the contractor, leveled ground, excavated for footings and utilities, preparatory to above ground operations.

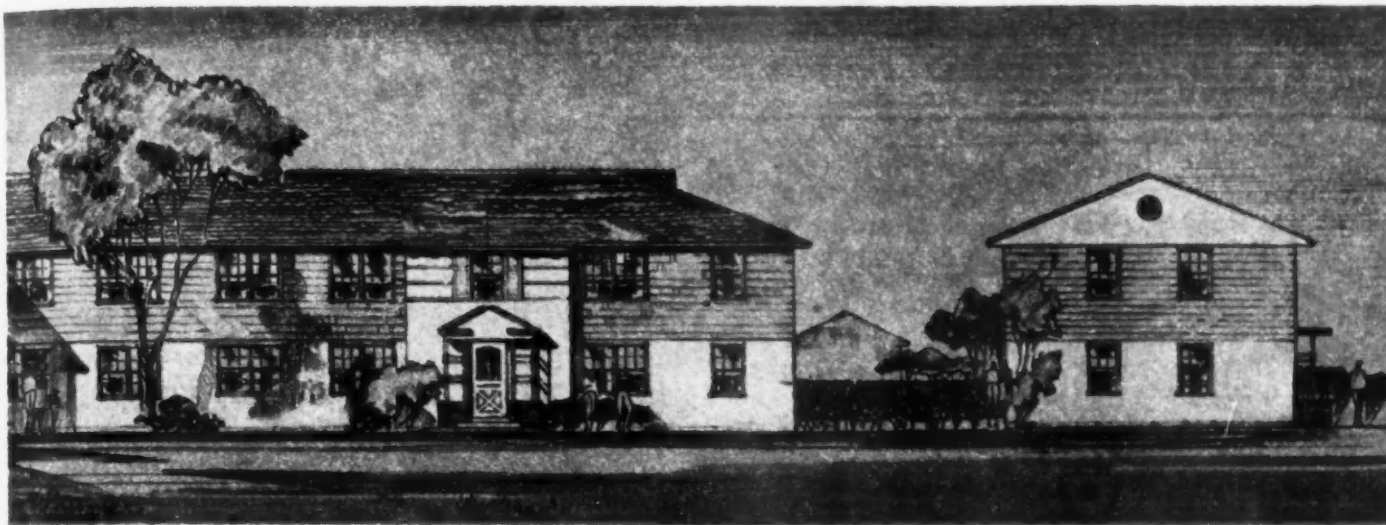
**N**ETTLETON & BALDWIN of Seattle are accustomed to doing big jobs in a big way. So, it is not surprising to find this firm of engineering contractors setting a record for speed and accomplishment on its Lake Burien Heights multi-family rental project, just south of Seattle on the Sound.

Breaking ground early in February on a rugged, wooded, 54-acre tract, more than 200,000 cubic yards of earth have been moved by large wheel-scrappers and bulldozers to level the site for the group of 44 two-story apartment buildings and the community shopping center. A complete drainage and sewer system has been put in and, when photographed by *American Builder* early in May, the foundations for about half of the buildings were already in place and the business center was up and under roof. A force of up to 300 men is employed on this job.

Making use of their war experience in handling a number of the war housing projects, Nettleton & Baldwin have carried over to this urgently needed rental housing project many of their techniques of mass production efficiency. Prominent among these is the building of stud partitions on jig tables alongside the power saws in the cutting yard.

Analysis of the building plans shows a large number of duplications in the walls and partitions of the 44 buildings making up the project. Advantage is taken of





**BUILDINGS** will be oriented to provide front garden courts, with service courts and children's play areas at rear.

**\$5,000,000 development by Nettleton & Baldwin, Inc., near Seattle, Wash., consisting of 44 buildings with 544 ultra-modern rental units, is one of the largest projects ever to be insured by FHA**

this situation, to cut costs and improve accuracy and quality, by nailing up the stud framing sections, horizontally, on accurately laid-out work benches. These wall units are labeled, stacked and hauled to the various buildings as needed.

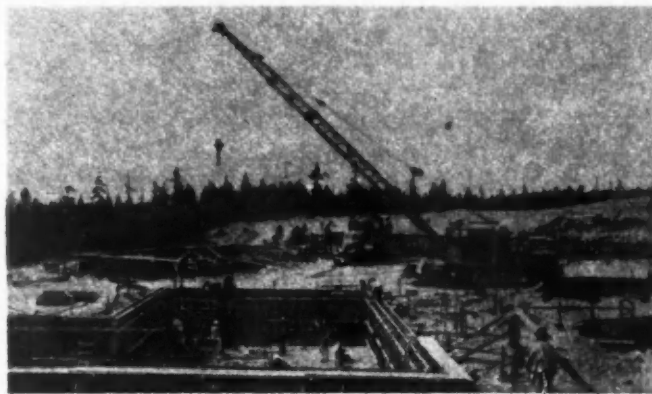
The project was designed by Miller and Ahlson, architects, who have for years been associated with large scale housing developments in the Northwest. In their site planning every effort was made to gain full advantage of the view of Puget Sound and the Olympic Mountain ranges to the west.

The site, part of the 54-acre tract, includes approximately 27 acres of fairly level building land which falls off steeply on the western side to a sweeping vista of forests and water in the distance. On the east it is bounded by a main highway between Seattle and the Bow Lake Airport.

The buildings are oriented to provide front garden courts and rear service courts. The entrance courts will be attractively landscaped with trees and shrubs and will have park-like sitting areas. The play areas in the service courts are designed for the safety of small children.

A project office is located at the south entrance with a maintenance shop adjoining. The management service will be very limited in nature, as each tenant controls his own heat with the use of the Ingersoll utility unit which combines heating, bathroom and kitchen plumbing and equipment, all in one "package." For special research connected with the engineering problems associated with the utility unit, the sponsors retained Lankton, Ziegele & Associates of Peoria, Ill., the inventors of the unit, as consulting architects. Ingersoll utility unit distribution

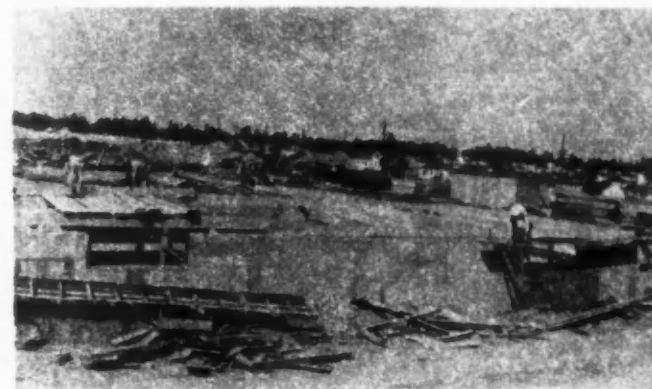
**Construction speeded by power equipment and shop fabrication of standardized building parts. Each apartment individually heated; 544 Ingersoll utility units, built in, solved for these builders, the bath, kitchen and heating equipment problem.**



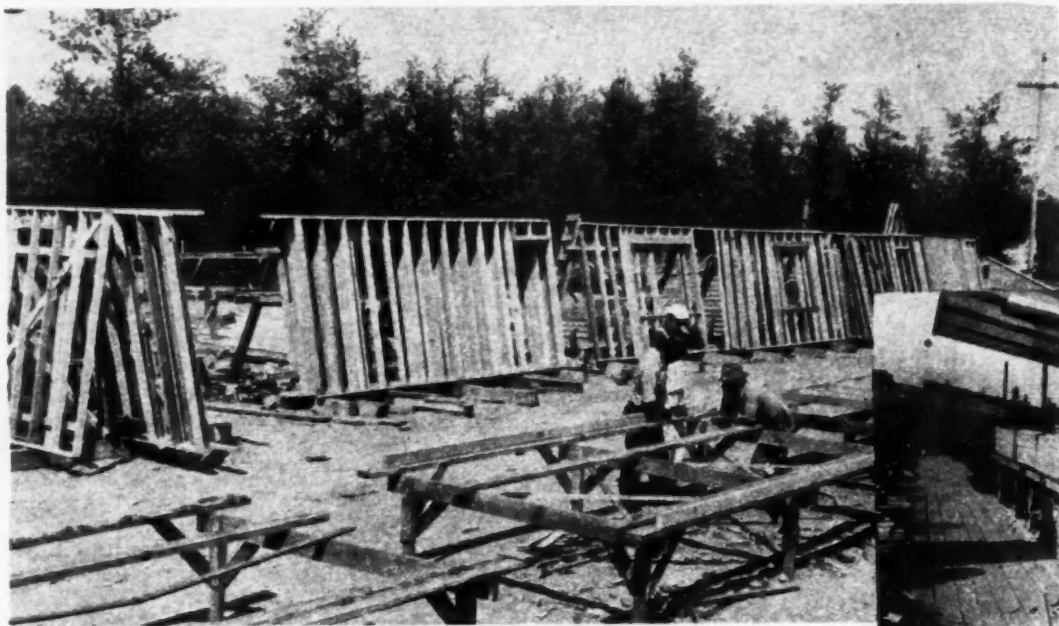
**FOUNDATION** forms are erected and ready-mixed concrete poured.



**WORKMEN** strip concrete forms and clean up foundation walls.



**FLOOR** joists ready for erection of preassembled wall units.



Mass production building efficiency and economy are being utilized on this large multi-family housing project. Framing lumber is pre-cut and then assembled on jigs in workshops located on the project site.



MORE than 200,000 cubic yards of earth had to be moved to level the site for 44 two-story apartment buildings and shopping center.

for the Pacific Northwest is being handled by Home Units, Inc.

The designers of these apartments adopted a set of three basic floor plans, plus one modified mirror reversal of the intermediate sized plan. In giving variety to the shapes of the resulting structures, several different combinations of the basics are put together or a basic may appear alone as an individual building.

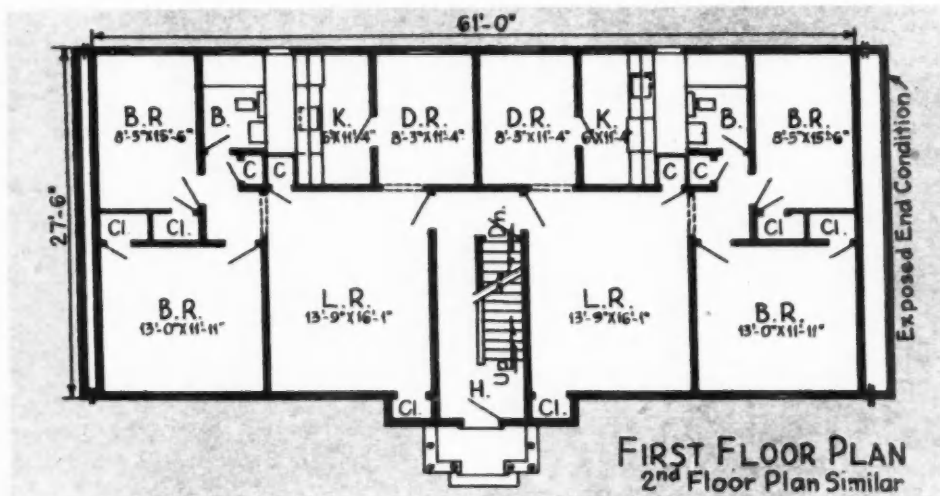
The "B" plan is Z shaped, the "A" and "C" rectangular. A total of 101 of these basics are combined to make up the structures.

The combinations of two "B"s produces a 66-foot long front court and the insertion of an "A" or "C" between the basic "B"s enlarges this court by 61 feet.

In one case there are two of the double "B" structures facing each other across a court which is closed at one end by an "A" structure. A large court shaped like a cross is the result.

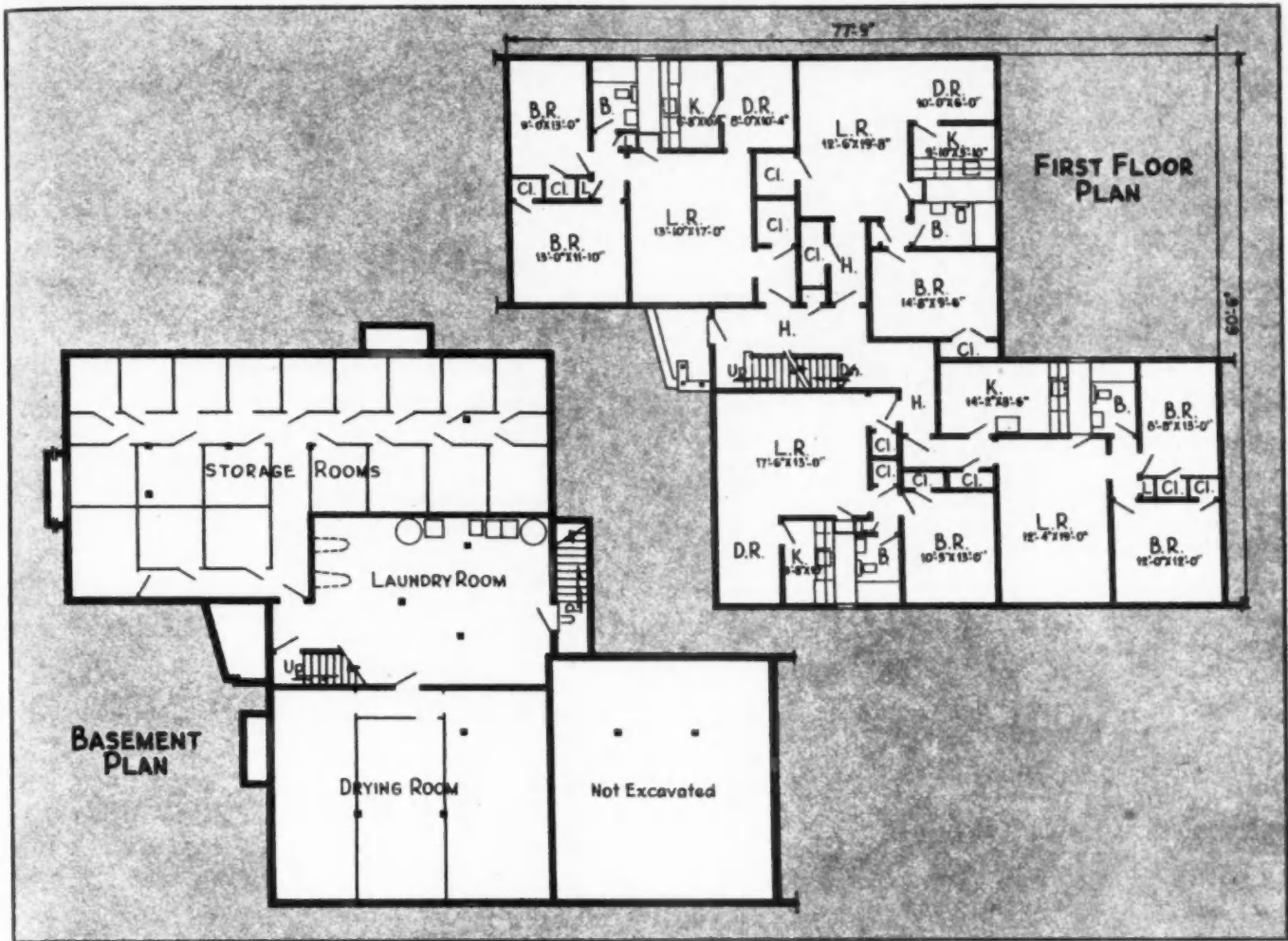
The major part of the buildings rest on concrete footings down to hardpan and a minimum of 18 inches clearance is provided between joists and the ground. Screen vents are specified near ground level.

Cedar and plywood are specified for the exterior fin-



FIRST FLOOR PLAN  
2<sup>nd</sup> Floor Plan Similar

THREE basic floor plans are used plus one modified reversal of the intermediate plan. Both "A" and "C" are rectangular.



TWO "B" plans produce a 86-foot long front court. Insertion of an "A" or "C" between basic "B"s enlarges the court by 61 feet.

ish. One typical plan calls for striated tongue and groove laid vertically to a level just over the first-floor windows, then cedar siding lapped, 8-inch exposure, up to the roof line. Composition roofing will be used.

Porches have brick piers, decorative grilles and wood trellises. Porch roofs are of cedar shingles or copper sheets. The public halls are specified for flooring with asphalt tile.

The interiors show a variety of combinations provided to link the Ingersoll utility unit kitchen with the dining area. One of the basic plans combines the dining area with the kitchen in a room which is more than 14 feet long.

Another basic plan makes the dinette space an L-shaped wing off the living room, providing a total outer wall length of 24 feet with large window areas. This living room extends back 17 feet 6 inches and the dinette 7 feet 7 inches.

Clothing and storage closets and cupboards are liberally provided. Bookshelves are included in some basic designs.

Interior finish will include plaster board for walls and ceilings and, in general, fir trim with incidental use of plywood. Floors will be hardwood or vertical grain fir. All rooms will be painted. Apartments will be separated by sound-deadening fire walls.

A large shopping center is being erected on the corner of the subdivision at Ambaum road and 136th St. S.W. Provision is made for 18 store spaces. This construction is financed separately from the apartment project and the center will be owned by Suburban Builders, an affiliate of Burien Heights, Inc., which owns the development.

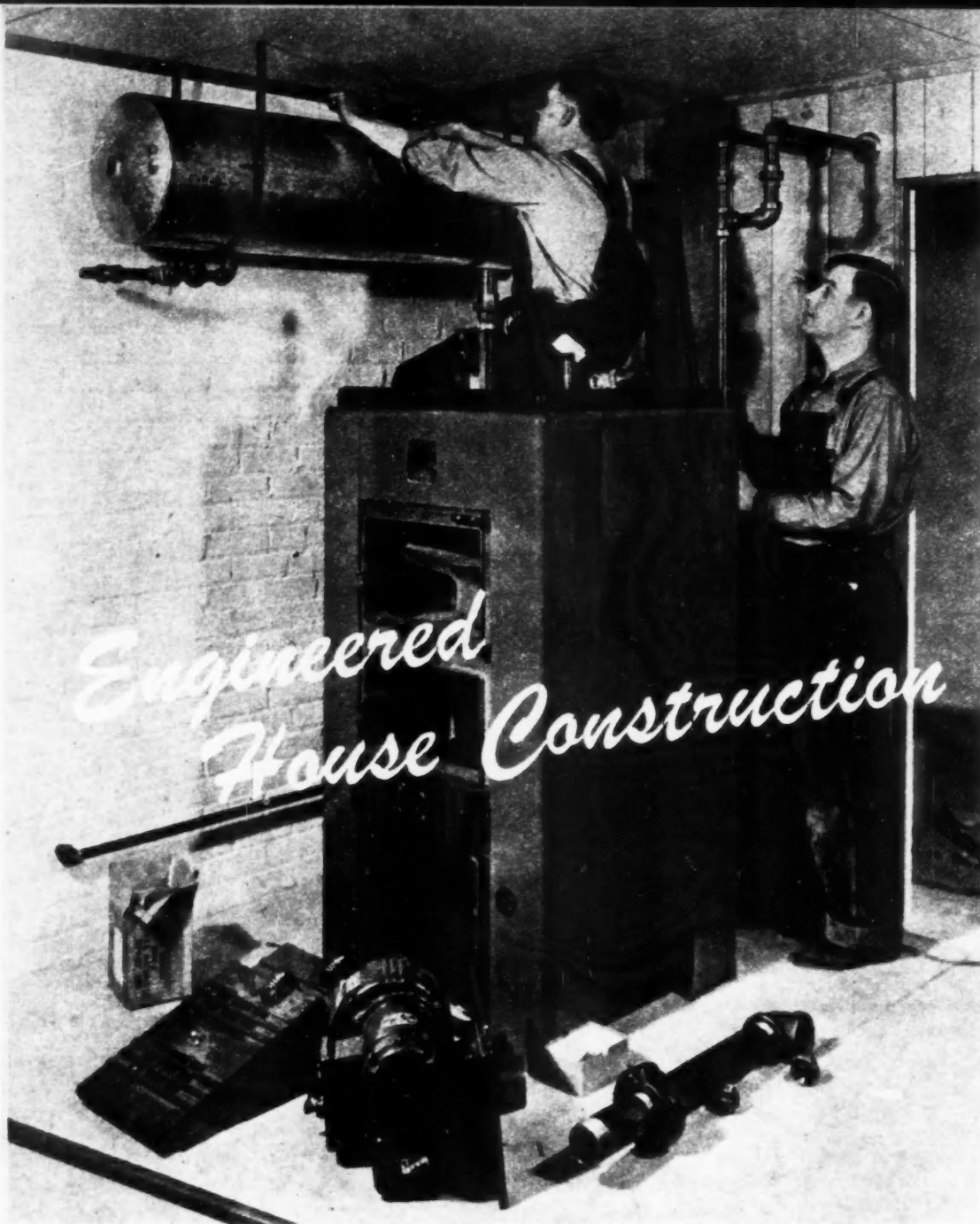
The primary financing for the development was handled by the Seattle mortgage banking and real estate firm, Carroll, Hillman & Hedlund, and a mortgage of \$4,143,600 was assumed by Sun Life Assurance Co. of Canada and guaranteed by FHA.

Nettleton & Baldwin, Inc., the developer and builder, is one of the most widely known firms on the West Coast.

Construction work is directed by Loren E. Baldwin, president, a man in his 40's who formerly owned the Northern Construction Company of Seattle.

### Other Rental Housing Projects Started

The rental project described on these pages is but one of several large multi-family housing developments now getting under way in various parts of the nation. Gross-Morton, of Long Island, has started a \$30,000,000 rental project to house 3,800 families, with rentals to start at \$66 per month. The American Community Builders, of Chicago, Phil Klutznick, president, have obtained an FHA commitment of \$27,500,000 for a project of 3,010 units with rentals to start at \$65 per month. Fred C. Trump of Brooklyn has announced plans to start \$9,000,000 rental development for 1,344 families averaging \$80 per month.



THE modern, compact boiler units available today can be easily set up with minimum labor in a short time in a basement or utility room.

## One Pipe Steam Heating

*By J. L. Shank*  
Consulting Engineer

**S**TEAM heating systems may be classified according to the pipe arrangement, the accessories used, the method of expelling air from the system, or the type of controls employed. This article, however, will be confined to the one pipe steam heating system, probably the steam heating system most extensively in use today.

Down through the years, at more or less regular intervals, the one pipe steam heating system has been considered obsolete. However, today many of these systems are being installed throughout the country. While this system does not have the sales appeal, and is one of the least talked about heating systems on the market, it still does a mighty good job of heating, and with control, will provide a suitable comfort condition.

Many people who are not familiar with heating think of a heating system as one having large, highly decorated cast iron radiators located in just the spots where tables or chairs should be placed. Others think of it as the system that uses cast iron monstrosities that are collectors of dust and dirt, which are impossible to clean, while still others think of this system as round chunks of cast iron stuck into a basement into which persons throw shovels of coal each time they want to get warm.

Perhaps it is well then to bring out the fact that many changes have taken place in the old fashioned one pipe steam heating system. It has been streamlined and coordinated into an attractive, efficient heating system that anyone should be proud to own. Into

**This is the third in a series designed to acquaint builders with the fundamentals of good home equipment selection and installation. The same Anicka-designed house used in previous articles has been engineered this month for one pipe steam heat**

it are incorporated boilers of modern design and finishes, radiators that are attractive and well proportioned, and accessories that make the system quiet and efficient.

The modern boiler is constructed of cast iron, steel or copper, is compact and finished with metal insulated jacket of attractive design. The modern boiler adds to, rather than detracts from, the appearance of the structure into which it is installed. It might also be said at this time that the modern boiler is designed for the type of fuel which is to be burned. The coal burning boiler is designed to burn coal, an oil burning boiler is designed to burn oil, and a gas fired boiler is designed to burn gas. A boiler fitted with a conversion burner is expensive to operate for it is not possible in a conversion installation to extract enough of the heat from the non-combustible gases before they are vented to the atmosphere, to realize good overall efficiency. Any boiler on the market today merits consideration. However, the reputation of the manufacturer is invaluable.

The modern radiator, like the modern boiler, is designed for space saving and modern living. It may be of the free standing type, semi-recessed type, or the type that is completely recessed. The type selected usually depends upon the cost, or how it will fit into the building construction.

The cast iron free standing radiator, as manufactured today, is of the thin tube design. In other words, it is small and compact, utilizing a minimum amount of floor space. This type of radiator is usually free standing located in the room directly under a window or windows, so as not to interfere with the placing of furniture. It may be fitted with a furniture steel enclosure, and be partially or fully recessed. This, of course, will increase the cost perhaps enough to warrant the use of another type of radiator, usually costing more money.

There is also the sun type cast iron radiator which is enclosed within itself, the castings being made so that when the radiator is assembled as a complete unit the tops of the sections, as well as the greater portion of the front of the sections, come in contact with one another, forming a solid mass, thereby creating the enclosure. This type of radiator, like the thin tube, may also be set free in the room, partially or completely recessed. However, no additional enclosure is required to semi-recess or completely recess the unit. A fair amount of radiant heat is affected by this type of radiator, the radiant rays being emitted from the solid face on the front and top of the radiator. This type of radiator then supplies some radiant heating as well as heat by convection.

The third type of radiator, the convector, is perhaps the most popular of all of the types of radiators on the market. It is constructed either of cast iron or a non-ferrous metal heating element enclosed in a furniture steel cabinet. It, too, may be free standing, semi-recessed or fully recessed. With this type of radiator, the cabinet may be fitted with a damper, so that the temperature may be varied in each room to suit the desire of the occupant. It might be said, at this time, that the only possible way to control the heat from an

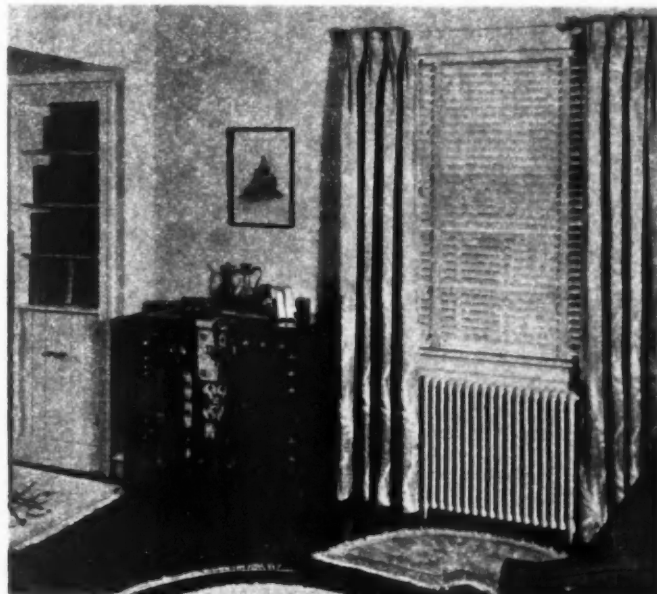
individual radiator on a one pipe steam system, other than to have it completely on or completely off, is to modulate the airflow through the unit by means of a damper in the enclosure. The radiator supply valve on the radiator on a one pipe steam heating system is either fully open or fully closed by necessity, to avoid pounding and filling up with water. This then would indicate a decided advantage in favor of a convector radiator, whose enclosure is fitted with a damper, when making a comparison with a radiator of the conventional type. On the other hand, there is very little radiant effect from a convector radiator, which to many engineers' way of thinking is desirable for comfort.

This leads to probably the most essential equipment used in a one pipe steam heating system, the automatic air valves and quick vents. It might be said they govern the fuel consumption. Good air valves and quick vents are a necessity for, without complete elimination of the air, a steam heating system will not heat properly or efficiently. A good automatic air valve is one fitted with an adjustable vent port. The size of the vent port opening governs the length of time required to eliminate the air from the radiator so that it will fill with steam and heat. By properly adjusting the vent port opening in the air valve on each radiator, it is possible to cause all of the radiators to heat uniformly. This is essential when an automatic firing device is used, controlled by a room thermostat.

A good quick vent is just as essential as a good radiator air valve, and should be installed on the end of each steam main. The quick vent should have a large vent port opening, so that the air will be eliminated from the main quickly, thereby letting the steam circulate freely throughout the entire system. A radiator air valve is not satisfactory for venting the end of a steam main, due to the small vent port opening.

Poor air elimination is costly, as the amount of energy utilized (fuel burned) for the air eliminating process is lost, and cannot possibly reflect into the comfort of the building. Therefore, let it be said again, good air valves and air vents are a "must" on a one pipe steam heating system.

Since the proper elimination of air from a steam heating system is essential, the return of air to the system should be prevented if possible. This fact brings up the subject of vacuum type radiator air valves and vacuum



**BULK** of modern radiators has been reduced about 40 percent, compared with their predecessors, without loss in efficiency.

quick vents. The vacuum type air valve and quick vent is fundamentally the same as the ordinary air valve and quick vent, with the added feature of a check valve usually located in the vent port opening. When the air valve or quick vent is eliminating the air from the system, the check valve opens, permitting the air in the system to be eliminated. However, as soon as the air is released, the check valve closes, thereby preventing the return of air into the system.

In preventing the return of air into the system, a means has been taken to keep the radiators warm longer, for the room air cannot enter them thereby causing them to cool. By the same token, since the air is being kept from entering the system, a vacuum will be created within the system as the steam condenses, thereby affording the probability that steam will be generated at less than 212 degrees Fahrenheit (the temperature at which water boils at sea level). It can, therefore, be said that as long as there is a slight vacuum maintained within the system there will be very little, if any, air to be eliminated from the system during the next heating up cycle. This will then directly affect the fuel consumption, as little or no energy will be used in the elimination of the air from the system.

It might be well, at this time, to dwell upon the conditioning of a steam heating system. Probably the first thing to consider in the conditioning is the preparation of the system for the generation of steam. The steam generation takes place in the boiler. It is, therefore, essential that all of the grease and foreign matter be completely eliminated from the boiler so that steam can be generated effectively. This can be done in a new system by using it for ten days to two weeks and, at the end of that time, skim the grease from the boiler and drain the sediment from

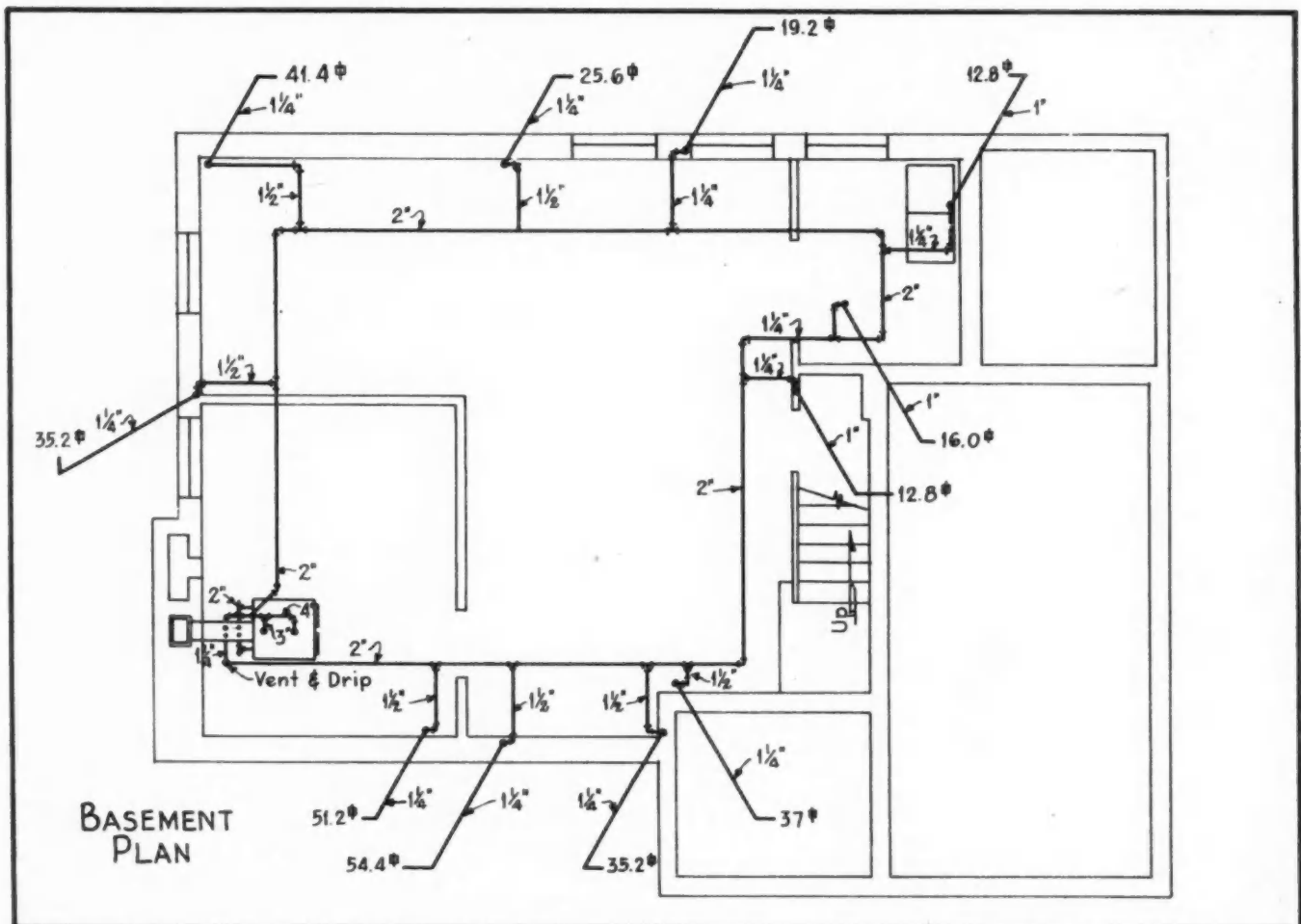
it through the drain valve. The time involved allows the steam to release the oil, compound and other foreign materials which got into the system at the time it was assembled to return to the boiler. After the boiler is skimmed and drained, it should be flushed and then filled to the proper level for operation.

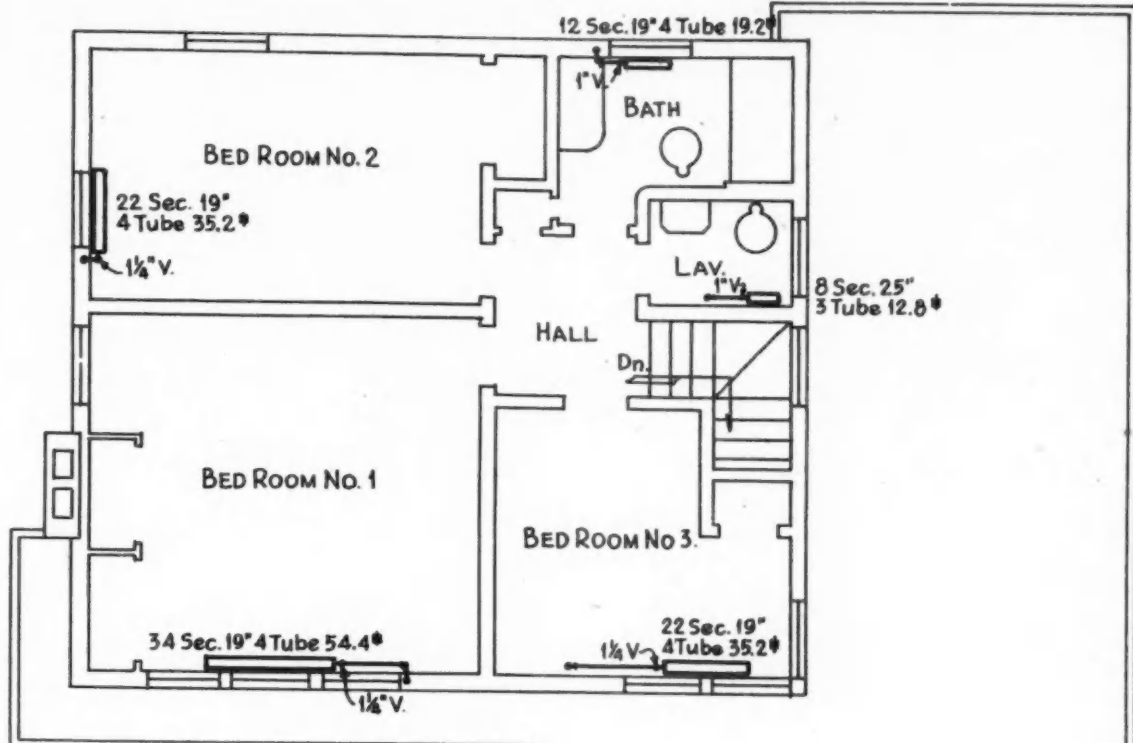
The automatic radiator air valves and automatic quick vents should not be installed on the system until all of the grease has been eliminated. This will then assure proper operation of the valves when they are installed, as they will not have become fouled by grease and oil. Thus they will operate at the efficiency for which they are designed.

By taking this precaution at the time the system is first started, many dollars will be saved, as it is not possible to generate steam effectively if there is a skim of oil or grease on the surface of the water. This statement can be very readily proven by placing two cooking utensils of a similar size on a stove, fill each with water and then add a little grease or butter to one of the vessels. Steam will be generated more rapidly and in a greater quantity in the vessel containing only the water.

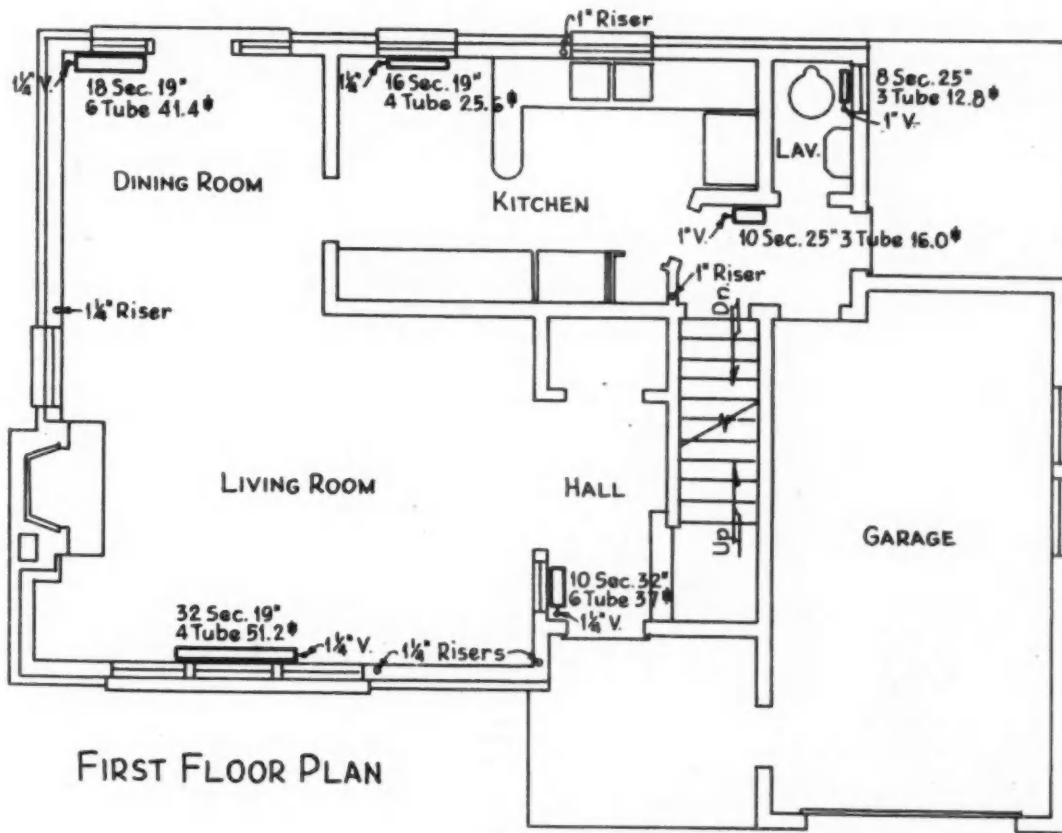
Before the start of each heating season, the water should be drained out of the boiler, the boiler cleaned, flushed, and filled with water to the proper level. This will assure good, efficient operation of the system throughout the heating season.

With a coal fired installation, whether it is hand fired or stoker fired, the boiler flues should be cleaned at regular intervals. In an oil fired boiler the flues should be cleaned every time the burner is serviced or each time an adjustment is made on the burner. The reason for this is that the products of combustion or carbon will deposit themselves in the flues, thereby becoming an insulation on the surface which prevents the heated gases





SECOND FLOOR PLAN



FIRST FLOOR PLAN

CALCULATION SHEET																									
ROOMS	Factors	FIRST FLOOR							SECOND FLOOR																
		Reception Hall		Living Room		Dining Room		Kitchen	Lavatory		Entry	Bed Room No. 1	Bed Room No. 2	Bed Room No. 3	Bath	Lavatory	Hall								
		Exposure	B.T.U.	Exposure	B.T.U.	Exposure	B.T.U.	Exposure	B.T.U.	Exposure	B.T.U.	Exposure	B.T.U.	Exposure	B.T.U.	Exposure	B.T.U.	Exposure	B.T.U.						
Infiltration	Windows .72 Doors 1.42	20	2270	48	2770	30	1730	34	1900	13	750	20	2270	60	3020	34	1900	51	2540	17	1100	17	900		
Total Exposed Wall		104		272		100		128		84		40		210		100		120		105		30		45	
Glass	1.10	30	3250	84	5790	30	3520	24	2160	7	1175	21	1900	40	4340	24	2100	30	3250	12	1220	12	1000	18	1625
Net Wall	.20	60	1085	208	3330	121	1886	104	1865	57	919	19	305	170	2720	104	2620	84	1340	83	1785	18	230	27	430
Floor	.10									15	45	12	30												
Ceiling	.10									15	120	12	30	210	1000	100	1200	100	600	45	400	24	195	60	400
Total B.T.U.		2535 6885		11090		9465		5785		3000		4885		12000		7940		8330		4400		2545		2535	
Sq. Ft. Radiation		30.0		49.5		39.5		24.0		12.5		15.0		53.0		33.0		35.0		19.0		16.5			
Valve Size		1 1/2"		1 1/2"		1 1/2"		1 1/2"		1"		1"		1 1/2"		1 1/2"		1 1/2"		1"		1"			
Riser Size		1 1/2"		1 1/2"		1 1/2"		1 1/2"		1"		1"		1 1/2"		1 1/2"		1 1/2"		1"		1"			
Branch Size		1 1/2"		1 1/2"		1 1/2"		1 1/2"		1 1/2"		1 1/2"		1 1/2"		1 1/2"		1 1/2"		1 1/2"		1 1/2"			

TABLE revealing how heat loss and B.T.U.'s were calculated for this heating installation.

from coming in direct contact with the heat absorbing surface. The greater the thickness of the deposit, the less the amount of heat which is generated will be extracted from the fuel burned, thus increasing the amount of fuel consumed.

The chimney is also an important item in building construction for, without a properly constructed chimney and one of the correct size, no heating system will operate efficiently. An improperly constructed or under sized chimney prevents the correct combustion of the fuel burned, as it will not carry away the noncombustible gases sufficiently fast, thereby causing the boiler to become sooted. The soot or carbon clinging to the heating surface prevents the boiler from absorbing the heat in the gases. Chimney should then be well constructed and sized in accordance with manufacturer's recommendation.

Good workmanship is just as essential in the installation of the heating system as are good materials. As stated in previous articles, the heating system is no better than the mechanics who install it. One might ask what constitutes good workmanship. First, the coordination of all trades into a working unit. Second, make the necessary preparations to install the heating system so that where cutting and notching is required, it will be done without weakening the structure. Third, where holes are cut in floors or walls, they should be cut so that they may be finished and not detract from the appearance of the build-



RECESSED convector radiation has been vastly improved in efficiency and appearance. The one shown is a typical installation.

ing. Fourth, all piping should be reamed, graded, and supported so that no pockets or traps will form, thereby assuring noiseless operation of the system.

In view of what has already been said, it might be well to proceed with some information about the one pipe steam heating system designed and illustrated in the accompanying plans. The building for which the system is designed is the same standard two-story Colonial house presented by Walter T. Anicka, architect, Ann Arbor, Michigan, into which gravity warm air and forced warm air heating systems were illustrated in previous issues of the *American Builder*. The one pipe steam system, like the other systems, is designed for an inside temperature of 70 degrees Fahrenheit with an outside temperature of 10 degrees Fahrenheit below zero, with the exception of the bath which is designed for 80 degrees Fahrenheit.

The heat loss calculations shown in the calculation sheet are based on first floor wall construction of brick veneer, 25/32 insulating board sheathing, studs and plaster on gypsum lath. The second floor wall construction of wood siding, 25/32 insulating board sheathing, studs and plaster on gypsum lath. Windows are figured as double hung wood sash without weatherstripping or storm sash, and based on between average and poorly fitted. The second floor ceiling was figured with plaster on gypsum lath and 2 1/2 inches of mineral wool between the joists.

After the heat loss in each room was calculated, the proposed locations of the radiators were determined. In the majority of instances, it was possible to locate the radiators beneath windows, thereby taking care of the infiltration and the place where the greatest heat loss occurs. Cast iron radiators were then chosen as the heating units. However, sun type radiators or convectors could be used quite readily. The radiators were selected so that top of the radiator would not project above the window sill, and of a length so that they would not project beyond the window frame. The size of the valve for each radiator was selected as was the riser connecting to the valve. The size of the branch connection from the main to the riser was made one pipe size larger than the riser, this being in accordance with the standards of good practice, and to assure noiseless circulation of the steam.

The kind of boiler (steel or cast iron) was determined after the type of fuel and the method of handling were decided. A cast iron sectional boiler was selected for this particular job. This was done so that it would be possible to bring out the proper piping connections to and from the boiler, a cast iron boiler being more critical to connect to than a steel boiler. The calculations were



made for determining the size of the boiler to handle the job as follows: By summing up the heat loss of each room it was possible to arrive at the total heat loss of the building. Then 25 per cent of the building heat loss was added for piping and pick-up, the new total representing the load for which the boiler was selected.

Referring to the boiler detail, it should be noted that each of the supply connections is carried full size through a swing connection into a common steam header, the size of the steam header being as large as the largest steam supply connection into it or as large as the steam main leading away from it. In this particular job the boiler supply tapping is larger than the steam main. Therefore the header is the same size as the largest steam supply tapping. It should also be noted that the steam header is carried full size below the water line of the boiler, and that the steam supply main is taken from between the last steam supply outlet and the drop. By taking the steam main from the header in this location, the circulation of dry steam throughout the system is assured, this being essential as the steam is the heating medium and not the water.

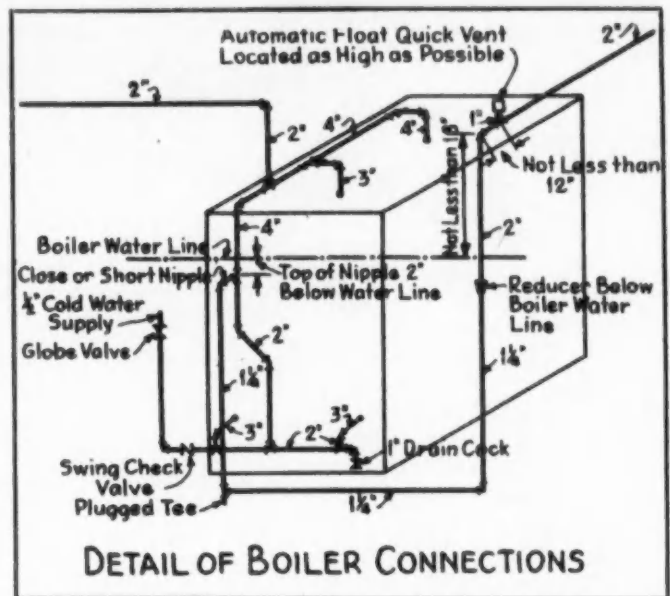
It might also be noted that the return openings are connected into a common header, coming out of the boiler full size of the boiler tappings and then dropping into the header. By handling the return in this manner, it is possible to drain the boiler completely, thereby assuring the removal of the accumulation of sludge which fills the water legs. The return header also assures the even return of the condensation into the boiler, affording free internal circulation, thereby preventing hot spots.

Now perhaps is the time to discuss the piping connection between the steam supply header and the return header. This connection is commonly known as a "Hartford Connection." By using this connection it is possible to eliminate a check valve in the return main connection to the boiler header, thereby overcoming the possibility of the check valve becoming fouled or stuck and not allowing the condensation to return to the boiler, causing it to break. It also acts as a pressure equalizer, as steam is being generated in the boiler and is flowing through the system.

There have been, and probably will continue to be, many boilers installed without steam supply headers, return headers and "Hartford Connections," and they will probably operate satisfactorily. Nevertheless, all steam boilers should be fitted with headers and a "Hartford Connection" so as to assure maximum boiler protection and dry steam transmission.



THERE is a trend toward the unit type of winter air conditioner. Air is drawn into the unit through the grille in the floor.



Covering is usually applied to all of the piping installed in a steam heating system so that the steam will travel to the radiators where it is used to its best advantage. By omitting covering from the piping, considerable heat is lost, and, in all probability, the portion of the building which requires very little heat will become overheated. The investment in pipe covering, like the cost for insulating the building structure, is money well spent.

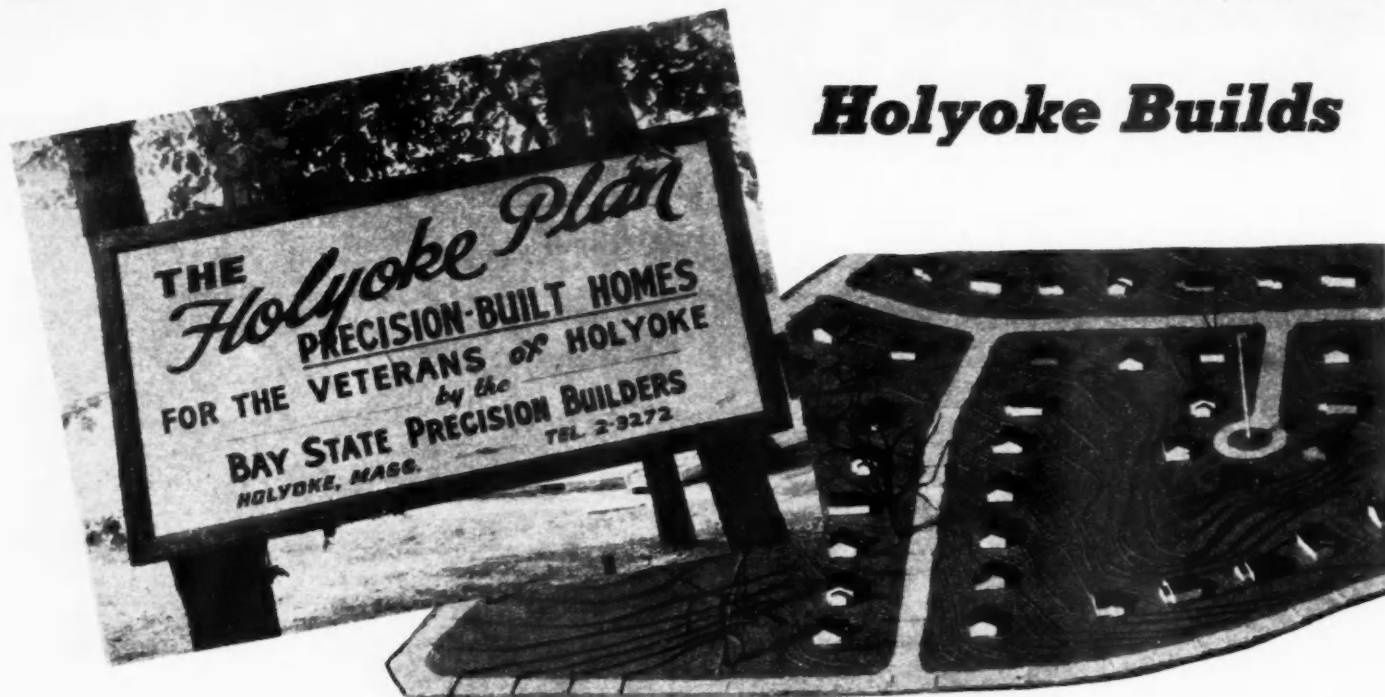
Many persons are not aware of the fact that it is possible to use a steam boiler the year round. In the winter time it is possible to heat both the structure and the domestic water. In the summer, it is possible to heat the domestic water and not heat the structure, the domestic water being heated by an indirect water heater, either of the built-in or the external type, installed below the boiler water line. In the summer, the boiler water line is maintained at a temperature below boiling so that steam will not be generated thereby causing the structure to heat. This is the most economical means of heating domestic water. During the summer months it may cost more than with a direct fired water heater. However, during the winter months, the cost is almost negligible as the water during this period is heated by what would normally be a standby loss. Since, in the majority of the localities in the United States, there are more months requiring heat in a building than there are when no heat is required, the yearly cost for heating the domestic water will be less than with a direct fired heater.

Another point in favor of utilizing the boiler the year round is that concerning deterioration. A boiler, like an automobile or any other piece of machinery, functions better and lasts longer when used daily than it does if it were used eight months out of the year and remained idle four months. When standing idle it is quite susceptible to rust and erosion which means deterioration and short life. The life of the boiler may therefore be increased many years by using it daily which will prevent erosion and rust formation.

The one pipe heating system, like all of the other heating systems available, when properly engineered and installed, will furnish an excellent comfort condition. It might, therefore, be well to consider a one pipe steam heating system when considering the purchase and installation of a heating system.

The data and information used in figuring and designing the one pipe steam heating system was obtained from tables and charts shown in the Guide, published by the American Society of Heating and Ventilating Engineers.

## Holyoke Builds



**I**N spite of a "catchy" name, the Holyoke Plan is not a new and miraculous scheme for quickly producing houses for veterans of World War II. Simply, it is a commendable and noteworthy teaming up of community resources—this made possible by state enabling legislation—and private building initiative, using a proven, engineered, mass-production method of construction. Hence the story of the Holyoke Plan is not particularly unique; rather a report on typical American ingenuity being used to do a job that needs doing.

Not unlike most of the towns and cities scattered across the land, early last year Holyoke, Massachusetts, became acutely aware of its veterans housing "problem," and its citizens—again not unlike the citizens of many towns and cities throughout the country—pondered a solution under the able leadership of five-term Mayor Henry J. Toepfert.

At about the same time the Massachusetts State legislature was considering a special emergency measure—now Chapter 372, Acts of 1946, Massachusetts Legislature entitled, "An Act to Provide Housing for Veterans of World War II"—under which towns and cities

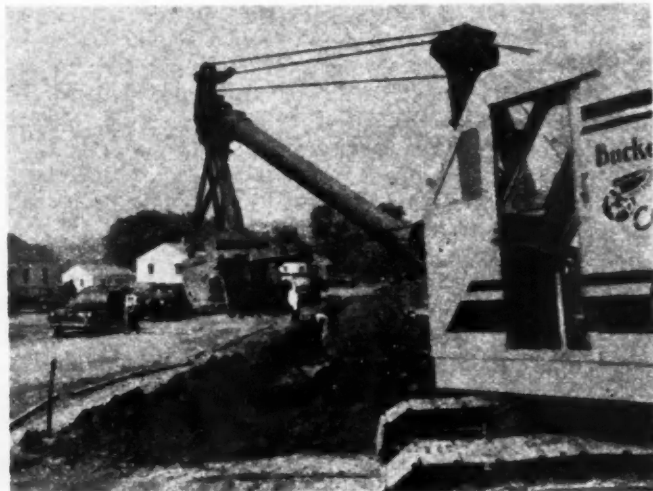
of the Commonwealth would be allowed to use their resources to construct homes for returning veterans and their families.

Following passage of the enabling legislation, Mayor Toepfert immediately moved to take advantage of the provisions of the law, thereby enabling Holyoke to be the first city in the Bay State to sponsor homes for its veterans—and achieve widespread publicity for The Holyoke Plan.

In the usual pattern, when community action is involved, meeting after meeting was held, and finally a program adopted. As the initial step toward fulfillment, the city acquired an unusually desirable 19-acre tract of rolling ground adjacent to a good residential section, and also contracted with the Holyoke Housing Authority to act as its agent in connection with the proposed building program. Architects Alderman and Alderman were called in for professional guidance on land planning, street layout and subdividing. Plans were also formulated for the city to install all utilities, streets, curbs and gutters, including underground electric and telephone services. Photograph at left shows installation of underground conduit.

Upon completion of the preliminary negotiations, the Bay State Precision Builders, Inc., took over and the actual building operation got under way. Today, 62 Holyoke veterans and their families have homes of their own in Memorial Village which they can rent for a period not exceeding five years, as stipulated in the law, and after which they must purchase the houses or vacate so the city can sell it on the open market. Rentals in the project range from \$40 to \$45 per month, exclusive of utilities.

In relating his company's part in The Holyoke Plan, Donald L. Walsh, president of Bay State Precision Builders, told *American Builder* why he and his partner, Frank K. Butler, secretary and treasurer of the firm, decided to confine their home building operations to Precision-Built construction. He said: "Homasote Precision-Built Construction was developed to take the haphazard, rule-of-thumb kind of thinking out of residential building and replace it with sound engineering principles and mass-production technique.



POWER equipment speeds up installation of utility equipment.

## "Precision-Built" Homes For Vets



LEFT and above: Project sign and scale model of Memorial Village built under The Holyoke Plan.

RIGHT: Donald L. Walsh, president of Bay State Precision Builders, Inc., (right) checks plans with Construction Superintendent William H. Ross.



**Massachusetts community sets example by being first in the state to team up with private building firm, employing engineered, mass-production methods, to produce attractive group of small homes for veterans**

"It was pioneered by Homasote Company twelve years ago—in 1935—after thorough research into all phases of construction. That research has never stopped. A permanent research group of housing engineers is constantly working on building problems at the company's headquarters in Trenton, N. J., and the money spent on these studies to date amount to several hundred thousands of dollars.

"Basically, the advantages of the Homasote system come from four elements of operation:

1. The use of large panels of insulating board  $3\frac{1}{2}$  times the size of ordinary boards. The superiority of dry wall construction over plaster for both speed and lack of cracking, has long been recognized. But Homasote Company was the first to recognize the advantages of large panels—not only in saving time, but in eliminating wall joints. Homasote board, the oldest and, in my opinion, strongest, building and insulating board on the market, is made in panels as large as 8' by 14'.
2. Prefabrication of foundations, walls, floors, ceilings, roofs, steps, hoods, stoops and millwork in a plant.
3. Location of the prefabricating plant near the building operation.
4. Assembling and finishing the house at the site.

"So that each part of the house will fit precisely into place without time-consuming, material-wasting handwork at the site—so that like parts can be interchangeable—so that the advantages of mass production can be gained for such elements of the house as floors, walls, ceilings and roofs—Homasote Precision-Built Construction is based on modular design. A module is a unit of measurement. Modular construction is one in

which all dimensions of the parts are multiples of the module chosen.

"In pioneering Precision-Built Construction back in 1935, Homasote Company adopted the Bemis 4" Module, because it was most frequently the lowest common denominator of the dimensions of the typical American frame house. Walls of this construction are built from 2" x 4" studs on 16" centers."

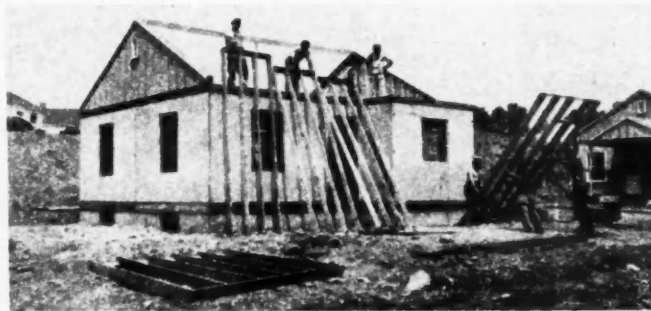
The Holyoke plant of the Bay State Precision Builders, located in an old factory building, consists of 17,000 square feet of floor space. In addition there is a large storage yard, and a private railroad siding. The plant is equipped with a series of "universal jigs." That is, a wall jig for making all the walls of a house, a ceiling jig for all the ceilings, etc. Other equipment consists of light power equipment, like variety and power hand saws. Overhead cranes are used to carry materials around the plant and for loading the trucks for delivery to the site.

At the plant, the various parts of the house are combined into a few major elements:

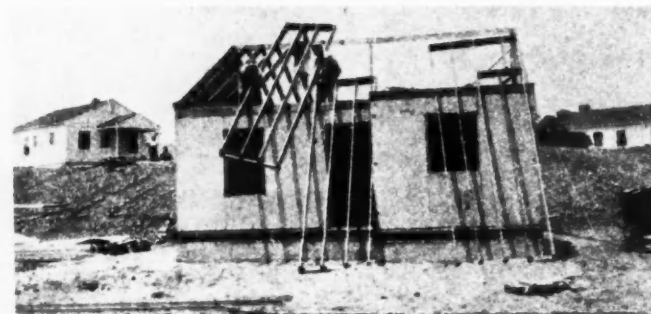
- (1) All framing lumber is pre-cut to proper lengths.
- (2) Floor sections are constructed on specially designed jigs, and the finishing floor is applied (when available. Ed.).
- (3) Walls and partitions are built in room-size sections with Homasote nailed and glued to both sides.
- (4) Ceiling and roof sections are built on jigs especially designed for that purpose.
- (5) Millwork is either pre-cut or assembled—and primed before going to the job. Windows are pre-fitted to their frames, doors are hung in the openings.



1:30 P.M.—Roof sections are being hoisted into place.



1:40 P.M.—Assembly crew prepares to assemble sections.



1:50 P.M.—Two sections in place; third being hoisted.



2:15 P.M.—Last section of roof framing is put in place.



2:25 P.M.—Sheathing already covers part of structure.



THE LARGEST house has three bedrooms, all having adequate storage space. One of the bedrooms can be dining room.

(6) Plumbing lines are pre-assembled into sections by the local plumber, so that they may be quickly installed in the house.

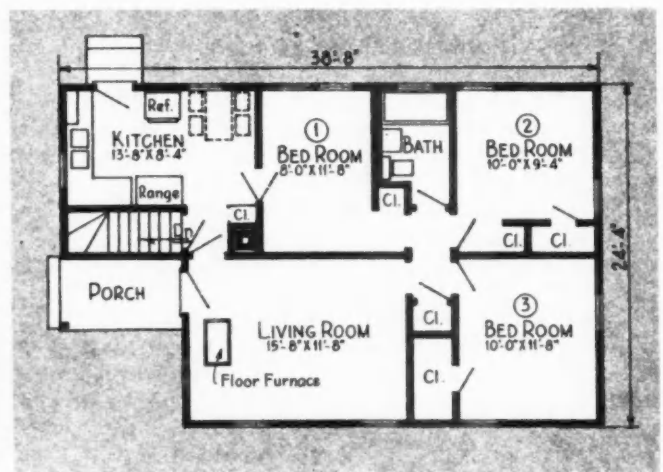
All the various elements of the house are trucked to the site. Carefully worked out loading schedules reduce trucking costs to a minimum.

Meanwhile trained crews at the site are installing the foundations ready for the floor sections. From there on, when the loaded trucks arrive, it is a matter of hours before the house takes shape.

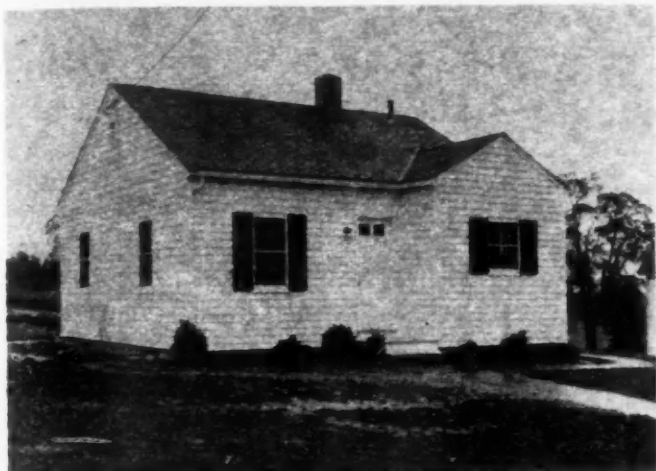
Three basic plans were selected for Memorial Village. One of the two-bedroom models is essentially a Cape Cod house, and is the smallest of the three plans. Measuring 24'4" x 28', it features a living room providing a maximum of usable wall space even with two windows. The bedrooms are at the rear of the house; the kitchen faces the street. A double sink, several feet of counter space, overhead and underneath cupboards, cross ventilation, space under the window for a breakfast table and space for the range and refrigerator, complete the kitchen details.

The bath is located well away from the living room; the fixtures back up against the basement stair wall. The bedrooms are soundproofed from each other by the bank of closets between them.

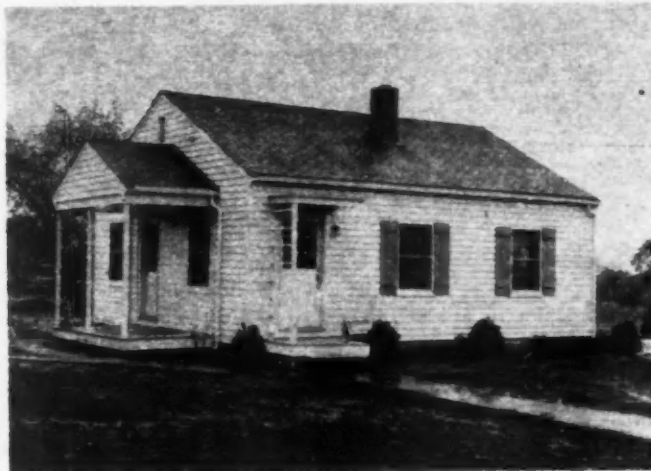
The other two-bedroom house, the plan of which is not shown on these pages, is slightly larger. It follows in general the character of the smallest house, but has



PLAN of largest house; bedroom No. 1 can be used as dining room.



**SMALLEST** of the houses has four rooms, including two bedrooms, and a living room providing maximum usable wall space.



**THE THIRD** house also has two bedrooms, as well as an entrance stoop, and a generous service porch off the kitchen.

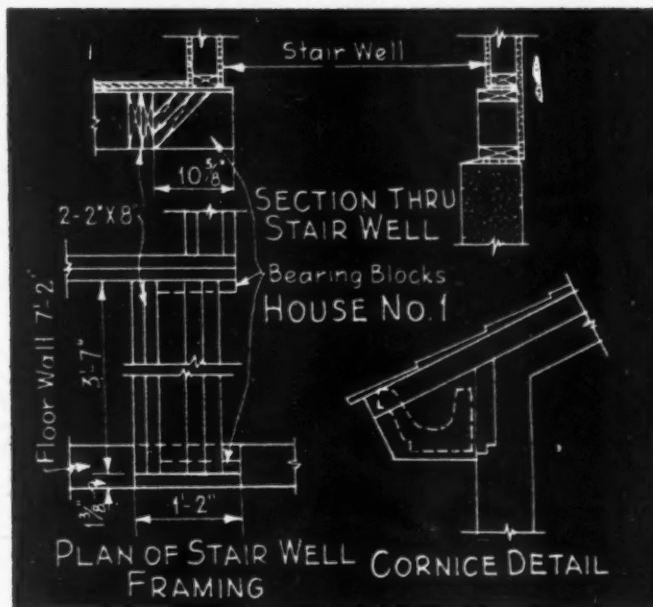
in addition to the entrance stoop a generous service porch at the kitchen end. The overall size is approximately the same. In the arrangement of the rooms and location of the doors and windows, consideration has been given to the placement of furniture. There is a total of six closets, thus supplying an unusual amount of storage space. The kitchen features a compact, convenient layout of appliances and also has adequate cupboard space.

Entrance to the three-bedroom house is directly into the living room from a sheltering porch. The bedrooms and the bath open off a passageway behind the living room, and each has two windows; one has a six-foot walk-in closet; one has two closets; one has a closet at the door to form a small entrance alcove, leaving the balance of the wall unbroken. While not large in size, these rooms are skillfully designed to serve more than one purpose. They can be combination sleeping-study or sleeping-play rooms, with good space for desks, toy chests, bookcases, work benches. Dining space is provided along the eight-foot wall in the kitchen.

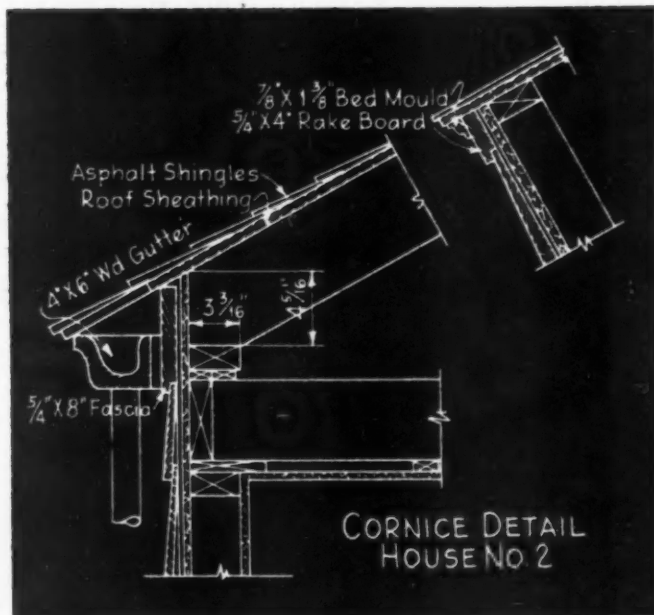
Regarding The Holyoke Plan, a prominent citizen was heard to comment: "In short, one would say that Mayor Toepfert and the rest of Holyoke that is responsible for Memorial Village got their money's worth, and beauty of location thrown in. There will be problems, of course—but all communities have their problems. People of goodwill can work them out."



**PLAN** of small house; judicious use of space provides two bedrooms.



**CONSTRUCTION** details applicable to all types of houses.



**PARTIAL** wall and roof section at eaves and rake of gable.



ONE of the story-and-a-half two-bedroom houses in J. C. Nichols Company Country Club District of Kansas City.

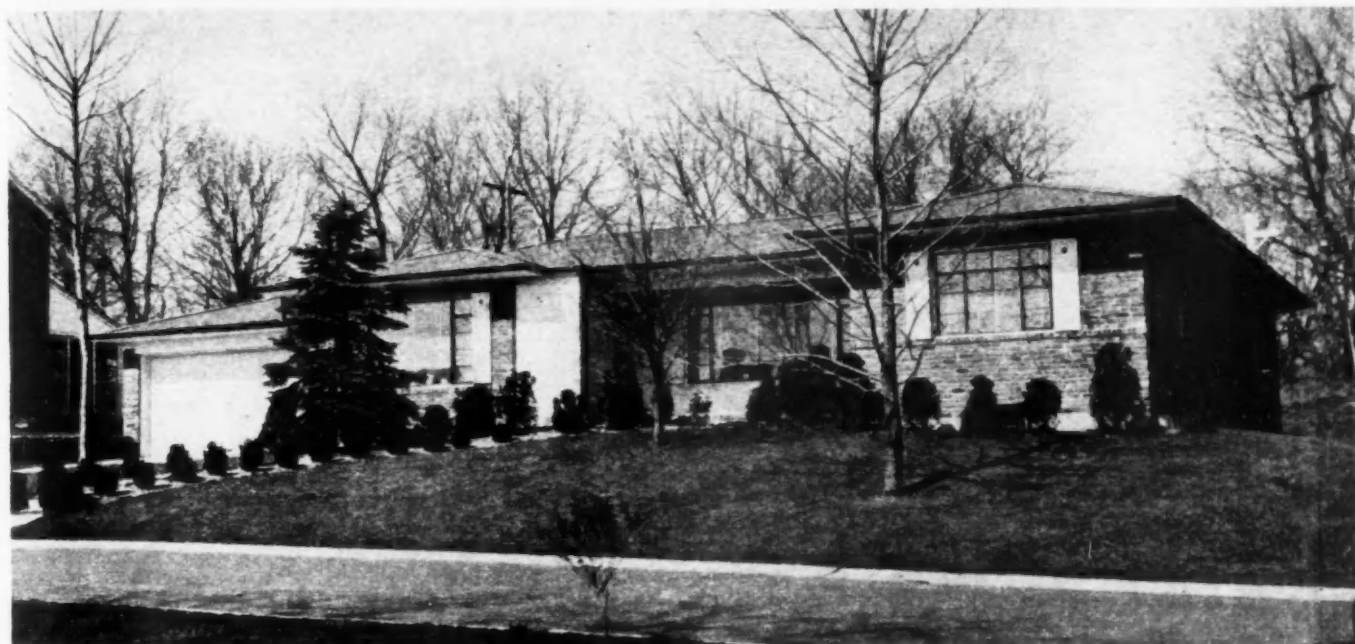
## Well Planned House for a City Lot



**T**HIS is the type of story-and-a-half house which has proved so popular in the famous J. C. Nichols Company Country Club District in Kansas City. Edward W. Tanner and his staff of architects in the firm's offices design most of the houses to fit the individual tastes and requirements of families who select the Country Club District as a residential location. The size of the house, its architectural style and exterior appointments, however, always blend well with surrounding houses and the terrain.

The judicious use of stone on this house, which sets on a lot considerably above street level, lends a note of distinctiveness which might not be achieved with the same treatment on different terrain. The house plan provides for privacy on the street side, but calls for large glass areas at the rear, leading to a porch which is screened, but could be completely glass enclosed. The large kitchen, with a comfortably-sized breakfast nook, is especially well laid out for efficiency and work economy. The large amount of closet area assures storage space on the main floor.

**DESIGN** of the interior, like the exterior, is practical and permanent in its appeal.



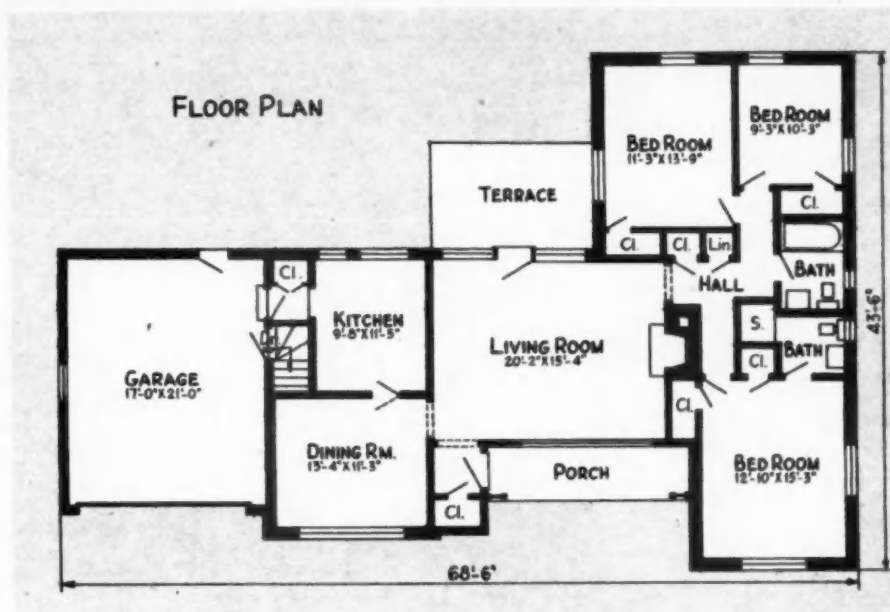
VIEW of street front of house. The sloping ground adds to the effectiveness of the horizontal lines of the facade.

## Western Style Invades the Eastern Area

**A** PATTERN of things to come. The rambling modern ranch house shown on this page, has recently been completely in Plandome, Long Island, and offered to the public by Callan Brothers, prominent builders in this area.

This type of house is a distinct departure from the traditional style consistently adhered to in the past by these builders. Since the public has responded so enthusiastically to this house and others of a similar nature, it has encouraged these brothers to embark on a new development consisting entirely of one story houses.

Designed by Henry W. Johanson, architect, Roslyn, Long Island, this house contains six large rooms, two baths, ample closet space and a two car garage. A large living terrace is provided at garden side of living room. Exterior walls are mainly of ten inch thick brick hollow wall construction. Wood framing and siding provided on one wall of living room. Entire roof covered with asphalt shingles; gutters and downspouts of copper; oak flooring throughout; linoleum in kitchen; tile floor and wainscot in bathrooms; steel sash in windows. Accessories include, venetian blinds; radio and clock combination; kitchen fan; accessory cabinets and screens.



IN the plan shown above all rooms radiate from the center core or living room.



DETAIL view of portion of street elevation. Frame vestibule extension adds interest.

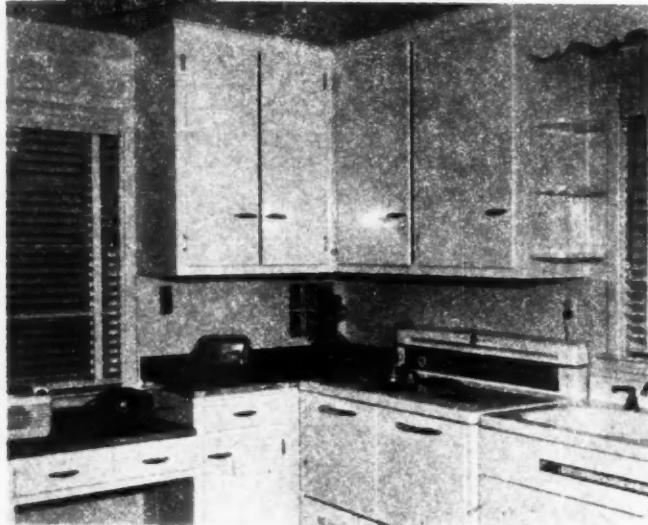
# Lumber



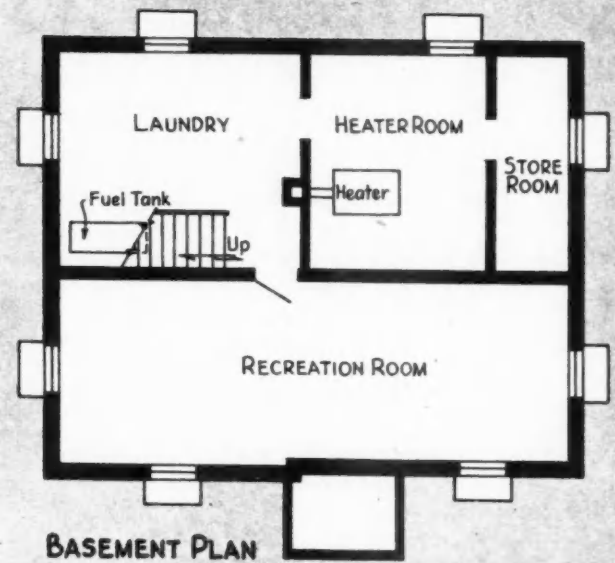
TEN thousand visitors crowd Ebenreiter demonstration home in response to newspaper advertising announcing two-day open house.



**Retail lumber and material dealer builds and promotes practical demonstration homes in Sheboygan, Wisconsin, to stimulate sales for contractor customers and show public today's home values and materials**



CORNER of electric kitchen featuring G.E. equipment and appliances.





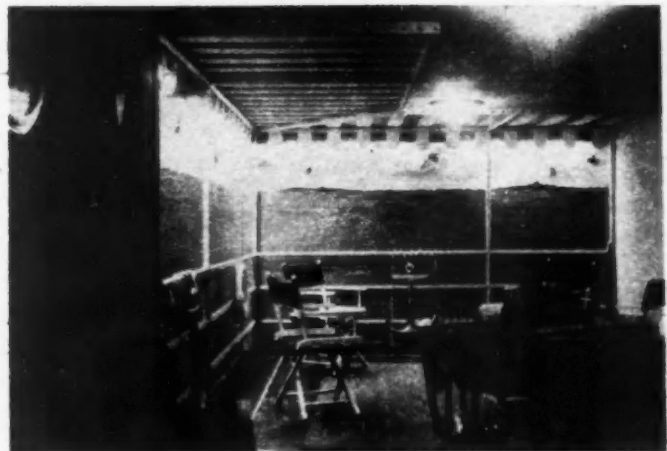
# Dealer Builds Demonstration Home

**T**HE demonstration home shown on these pages was built by the Ebenreiter Lumber Co., Sheboygan, Wis., to stimulate home building and modernization, and aid the company's home builder customers. More than 10,000 interested visitors inspected the house, and took away 50,000 pieces of literature describing modern building materials and equipment. With a public address system in use continuously, nine members of the lumber yard staff were on duty to guide the visitors.

Robert Ebenreiter, energetic head of the company, kept a microphone cradled at his ear through the entire two-day demonstration period, and repeated all questions asked, thus giving all visitors the benefit of answers to everything asked. Corners of the pastel painted and wallpaper walls were protected against hand marks and stains from outdoor clothing with cellophane, a precaution which proved valuable.

The house, designed by R. E. Miersch, company architect, features modern materials throughout. Features are Curtis mitre-tight oval casing, a mirror door for the guest closet, a door knocker with the owner's name engraved on it, specially designed window valences made in the Ebenreiter shop, moulding strips with electrical outlets every eight inches, a complete General Electric kitchen, linoleum on kitchen, bathroom and basement floors. Faries cabinets in the baths, Kohler plumbing fixtures, Marlite surrounding bath tubs, Paine flush floors throughout the interior, Dexter latches, General Electric washer in the basement, Century Zeph-oilator oil heater, and insulated roof.

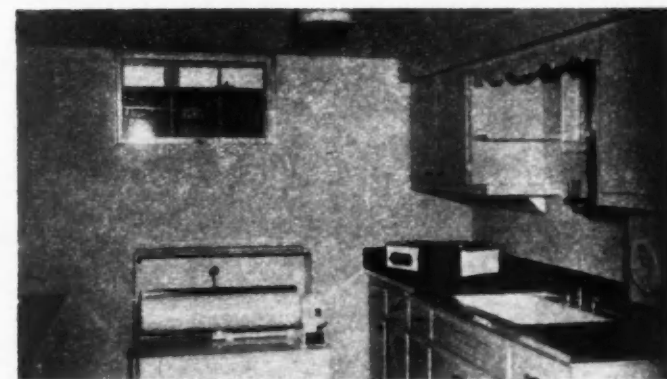
Ceilings are 7 feet 8 inches in the clear. Small furniture in the living room, judicious choice of color, and a large mirror on the wall opposite the front room picture window, give the room an appearance of much greater size than it actually has. Drapes hung at the sides of the windows increase the size of the windows and the amount of light that enters. All doors have three hinges. Basement windows are covered with panels decorated the same as the walls. These are removable. All electric and heat controls are placed in a cabinet above the basement sink.



NAUTICAL recreation room with sea scene painted on walls.



SMALL bar in recreation room opposite simulated covered deck.

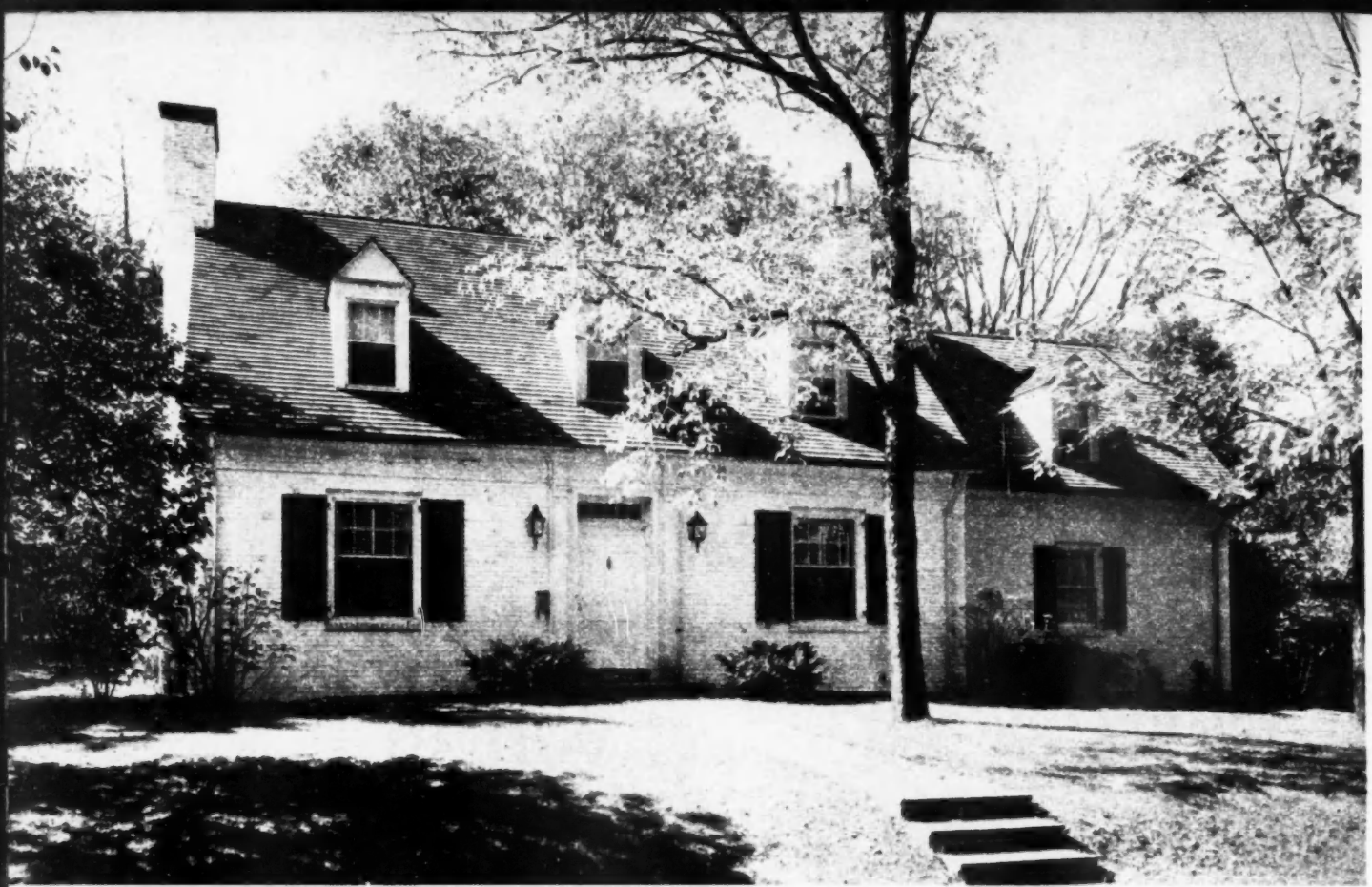


CORNER of utility kitchen in basement with G.E. washer center rear.



FRONT view of Ebenreiter demonstration home at time of open house.





THE RICHEY house embodies all the elements of good design.

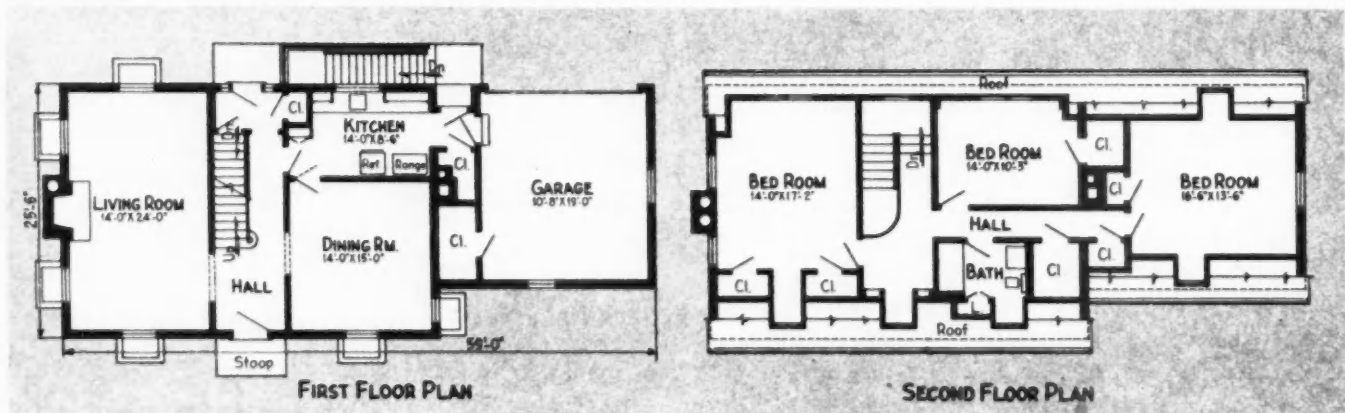
## Colonial Homes

### That Live Through the Ages

THE two Cape Cod Colonial houses shown on these pages were designed by Charles Frederick Cellarius, architect, F.A.I.A., Cincinnati, Ohio.

The house designed for Mr. and Mrs. Sheffield Richey of Oxford, Ohio, contains six rooms with attached garage. The construction outline is as follows: Concrete foundation, waterproofed; 8 inch brick walls, dampproofed; plaster directly on brick; wood shingle roof; rock wool insulation; oil fired hot air conditioning unit; hardwood floors; tile bath; asphalt tile in recreation room. Cubage, 33,500 cubic feet. Contractor, Joseph Wespiser Jr., Oxford, Ohio.

CORNER of bedroom with built-in bookcases both sides of windows. First and second floor plans of Richey house below.

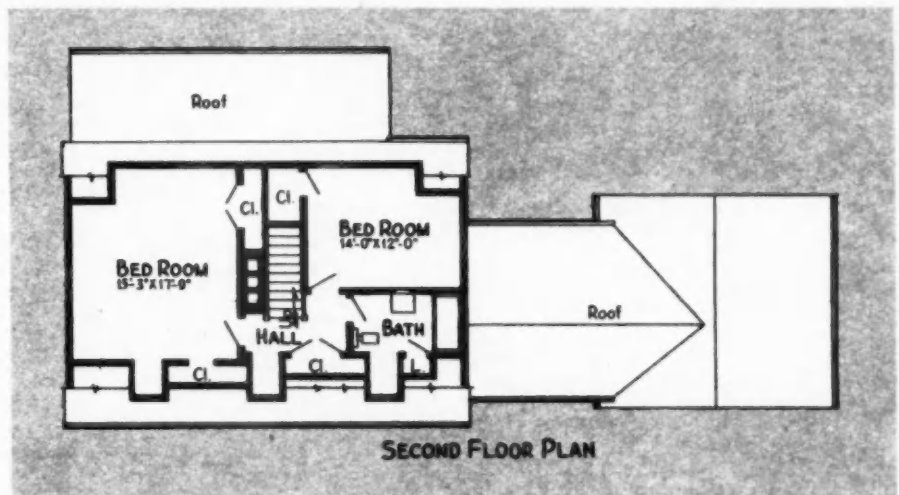




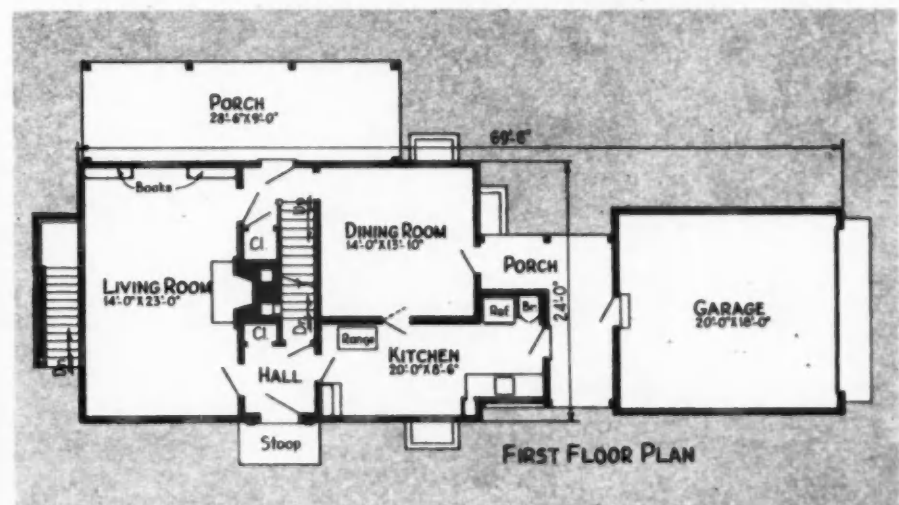
EXCELLENT proportions feature the above residence for Mr. and Mrs. Merle N. Riggs.

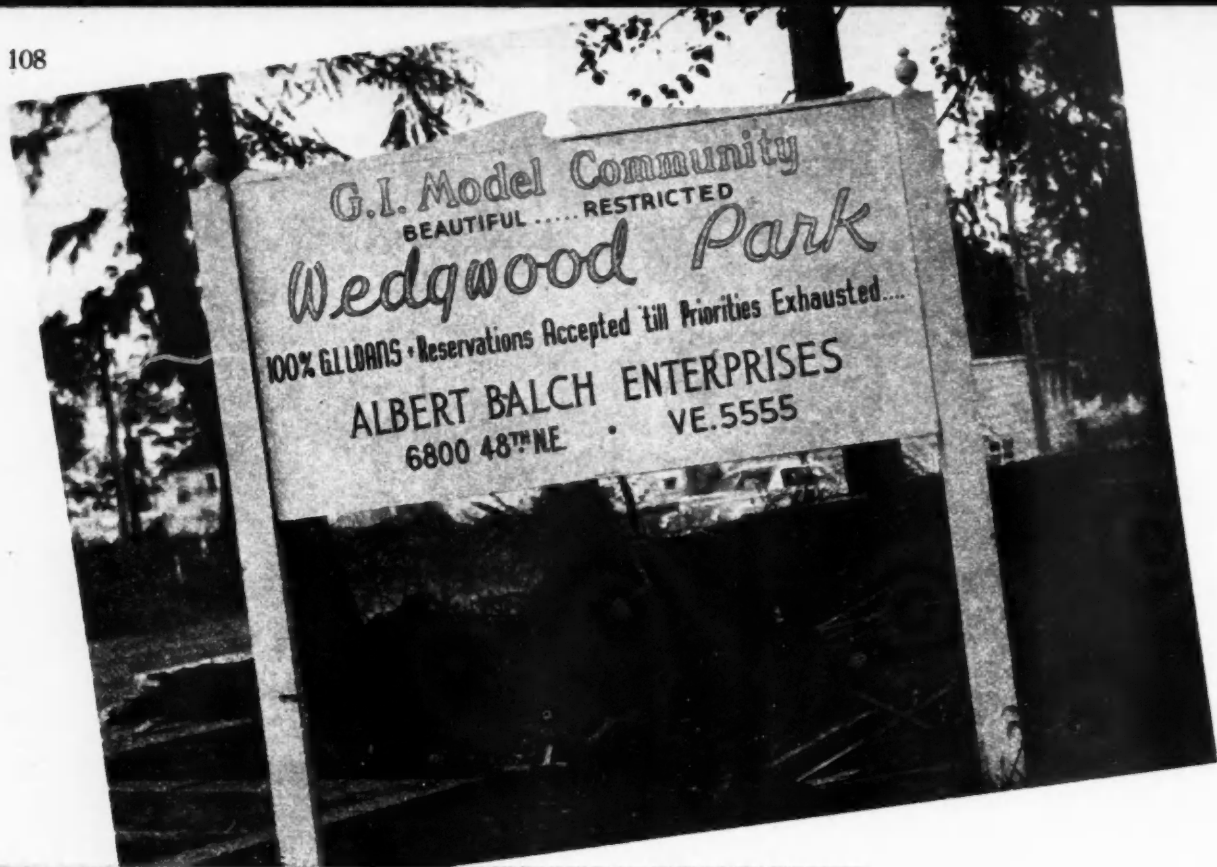
**Two homes designed by Charles F. Cellarius, architect, F.A.I.A., are complete in every detail and well built**

The house for Mr. and Mrs. Merle N. Riggs which is similar to the Richey house contains five rooms with breezeway and attached garage. The construction outline is as follows: Waterproofed concrete foundation; frame construction; wood shingle walls and roof; rock wool insulation; hot air conditioning unit; hardwood floors; tile bath; incinerator; electric heater. Cubage, 32,200 cu. ft. Contractor, R. B. Witte & Son, Cincinnati.



FLOOR plan of Riggs house. Knotty pine paneling and beams in living room.





## Home Builder's Own Power Equipment Does the Heavy Work

**T**YPICAL of many of the large-scale operative builders producing complete homes for sale, Albert Balch of Seattle, Wash., has to his credit a long-time, continuous record of subdividing, land developing and home building; and this record is not yet complete, since he is now going right ahead clearing and developing more land and building homes for the present market.

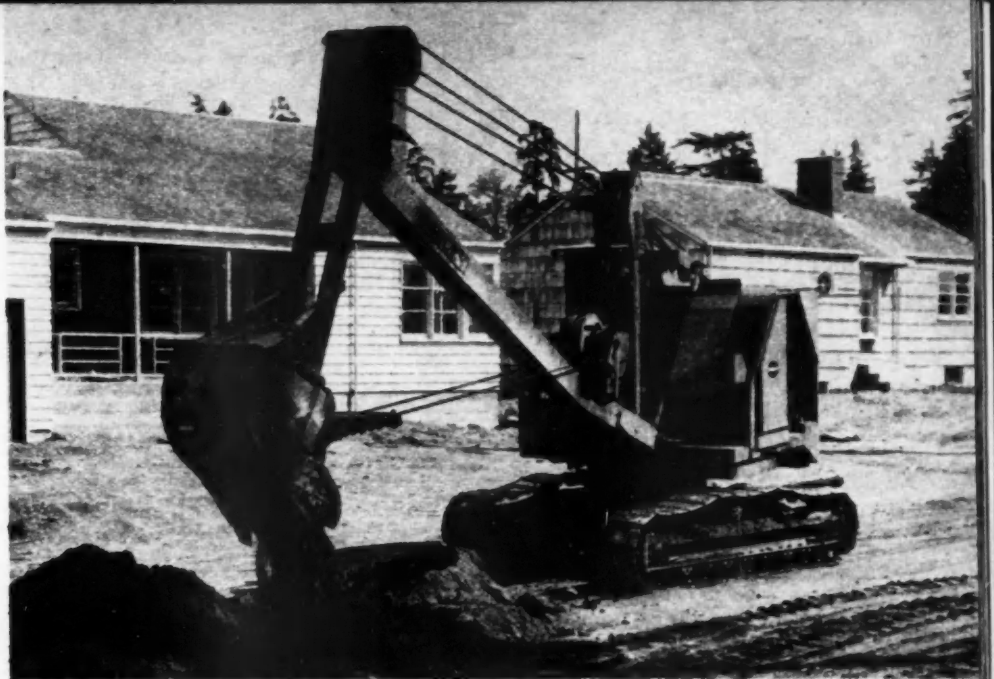
In the past 15 years Balch has built more than 1,500 homes. He now has 261 under construction and expects to start at least 300 more this year (1947). All this work has been in the Northeast section of Seattle in the View Ridge and Wedgwood area, an old cut-over forest region, very rugged in contour and filled with underbrush and second-growth among the old stumps, a situation presenting the land-clearing and grading problems typical of much Pacific Northwest "bulldozer land."

Clearing land for new streets and home building sites is a continuous

◀ **ALBERT BALCH**, Seattle builder, who has completed 1500 homes in past 15 years, does all his own land development work with earth-moving equipment which he owns.

**By owning his own land clearing and dirt-moving equipment, Al Balch can synchronize entire operations so that costly delays may be avoided**

**POWER** hoe digging street trench for 8-inch cast iron water main. With this machine four men lay 500 feet of pipe in eight hours, digging through sandy loam.



performance with the Balch organization. They are land clearing all the time. A small but steady force is kept employed right along in this department. Al Balch finds that to handle this work himself is much more satisfactory than to let it out to others by subcontract. The actual costs, he finds, are about the same no matter who does the work. However, by owning his own equipment and using his own men he is able to control the *timing* so as to conform to the overall program. Other parts of the job are not held up by delays in grading, pipe laying and street improvements.

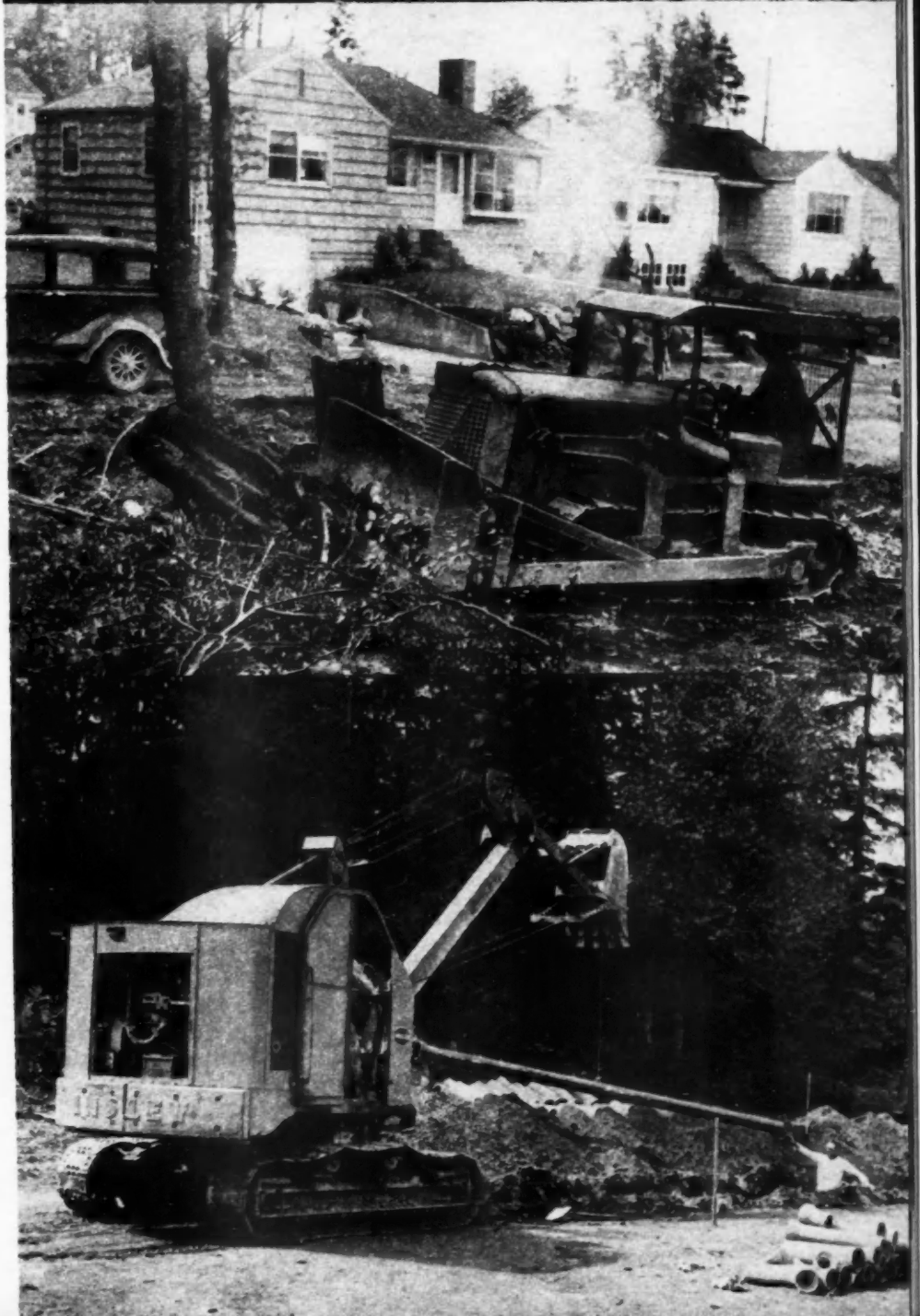
Raw land, fairly close-in, northeast of Seattle now costs around \$600 to \$800 per lot (60' x 100'). The development costs, including land-clearing and grading and streets with city

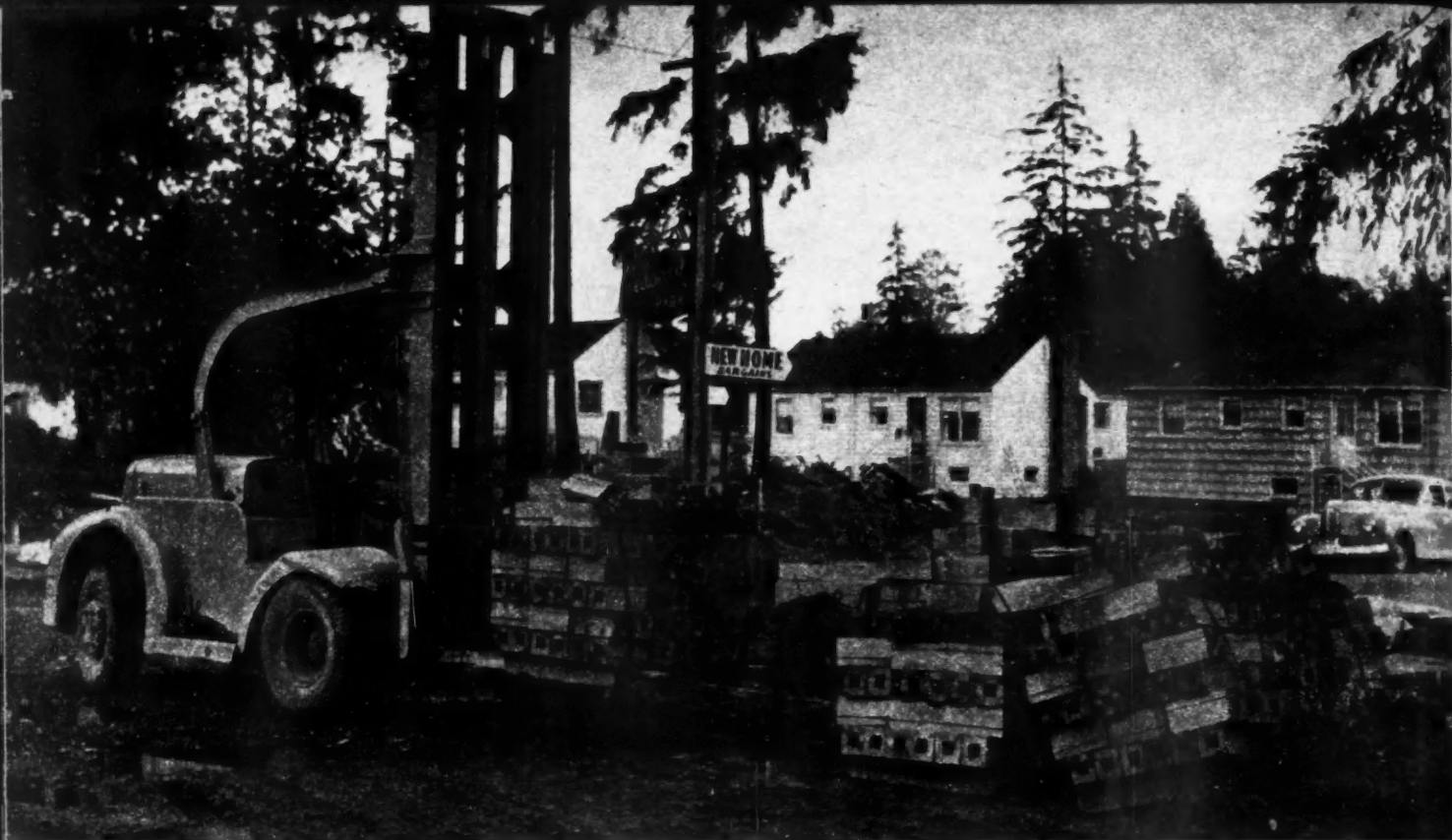
**BULLDOZER** at work clearing additional land in Balch's Wedgwood Park Addition. Small trees, underbrush, old stumps are easily cleaned out and the ground leveled.

sewer, 6" and 8" water mains with hydrants, concrete curb and gutter and macadam paving, amount to \$1000, so that each developed lot represents a cost of about \$1800.

To handle this development work with his own tools and men, Balch is operating two crawler-type tractor bulldozers, a power shovel and hoe for trench digging, a road grader and three dump-trucks of 5 cu. yd. capacity. He started buying such equipment back in 1937 and has been renewing and adding to his machine inventory ever since.

**SPEAKING** of this machine, Mr. Balch said: "We have had this outfit in continuous operation all this year—no delays waiting for street improvements."



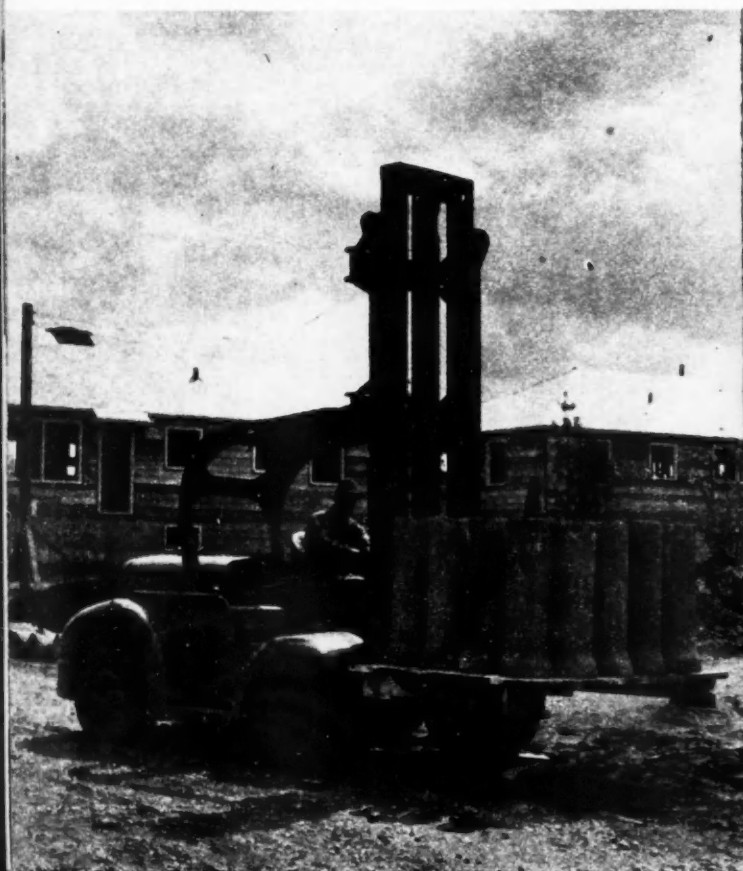


**Lift-truck proves to be a versatile piece of equipment on the home building job. New uses for this 7½-ton unit with 18-foot lift are being discovered daily**

ROMAN brick are delivered on pallets to central yard and then distributed by lift-truck to workmen on the job site as needed.

CONCRETE sewer pipe on lift-truck platform being delivered to job location where it will be set down where workmen need it.

THE lift-truck transfers a load of lumber from the central storage yard to the building site to be ready for use by carpenters.



"With all the present urgent drive to get home building costs down, we find that more labor-saving tools and power equipment at the building site are a big part of the answer." Thus, Albert Balch, well known operative home builder of Seattle, Wash., recently revealed to *American Builder* his key-thought for success in building today for the homeseeking market.

Inspecting his current operations at Wedgwood Park and other developments in Northeast Seattle, much evidence was found to show that Balch is, and has been, practicing this power method of building and has been able to reduce his costs substantially.

One piece of power equipment, recently acquired, which he reports is a big expediter and cost-saver, is a Hyster lift-truck of 7½ tons capacity and a lift of 18 feet. New and additional uses for this are being discovered almost every day, he says.

Loads of lumber, properly stacked for insertion of the lifting "fork," loads of brick on pallets, loads of sewer pipe on platform—these are quickly loaded at the central supply yard of the project and are trucked right up to the building where needed. The load can be elevated to clear any obstruction and finally set down exactly where needed.

Then, by setting the boom in place on the fork, additional feats of lifting big, awkward and heavy objects are made easy. For instance tool houses and work shanties are picked up and moved to new locations, heavy machine parts are handled, giant hoisting is done.

One of the ingenious uses Balch has found for this machine is as a movable platform hoist. With its effective working reach of 18 feet, it will put a workman and his materials right up to a second story coping or roof ridge, saving the expense of setting up a scaffold. Bath tubs or other heavy pieces of equipment are hoisted right up and put onto upper floors. Bundles of shingles strapped to pallets are put on the roof, all at one operation.

This rig saves a great deal of time, Balch says, in moving other tools and equipment from one part of the job or building to the next.

The "clean up" men put everything on platforms and this fork-truck picks it all up and takes it away in one load.

By using ingenuity and enterprise this type of equipment is kept in steady operation on the job so that idle time is not an appreciable cost factor. Its mobility and versatility make it especially valuable.

"It's a hell of a time saver," was Al's final summary of the situation after having had this outfit in use since last fall.



**BY SETTING** a boom in place on the fork, many feats of lifting big, awkward and heavy objects are made easy. Here the machine handles a "clearing plate" for a bulldozer.

**TOOL** houses and work shanties are moved to new locations. With its 18-foot effective lifting range, bathtubs or other heavy materials may be hoisted to second-floor levels.



## Electrical Radiant

**Ceiling panels contain a heating element of conductive rubber sandwiched between two thin layers of plastic**

**R**ADIANT HEAT provided by electrically heated ceilings has been operating successfully in an experimental house at Knoxville, Tenn. The electrified ceilings, developed by United States Rubber Company, contain a heating element of conductive rubber in panels sandwiched between two thin layers of plastic. The entire ceiling in each room becomes warm, producing enough heat to keep every nook and corner at a comfortable and uniform temperature.

The new heating system eliminates radiators, warm air registers, furnaces, flues, fuel tanks and coal bins. It is automatically controlled by a thermostat and requires no more attention than the snapping of a switch at the beginning and end of winter. The house has no drafts or "cold spots."

The heating panels are incorporated as a part of the ceiling structure, and cover approximately two-thirds of the ceiling area. The output of the panels is just under 20 watts per square foot, corresponding to an average output of 1.6 watts per cubic foot in the house. The total connected electrical load is 11.2 kilowatts operating on 220 volts.

Information on power consumption indicates that the house will consume 7,000 to 10,000 kilowatts per full heating season, or 0.3 to 0.4 kilowatt hours per thousand cubic feet per degree day. The panels are four feet square and bonded to an asbestos backing board for rigidity. Each panel has a narrow non-heating border to permit its being



**ELECTRIFIED** ceilings in this house in Knoxville, Tenn., make the rooms comfortable in winter regardless of outdoor temperatures.

**WORKMEN** (below) installing panels which may be painted, papered or plastered. Narrow, non-heating border is provided for nailing.





# Ceiling Heat

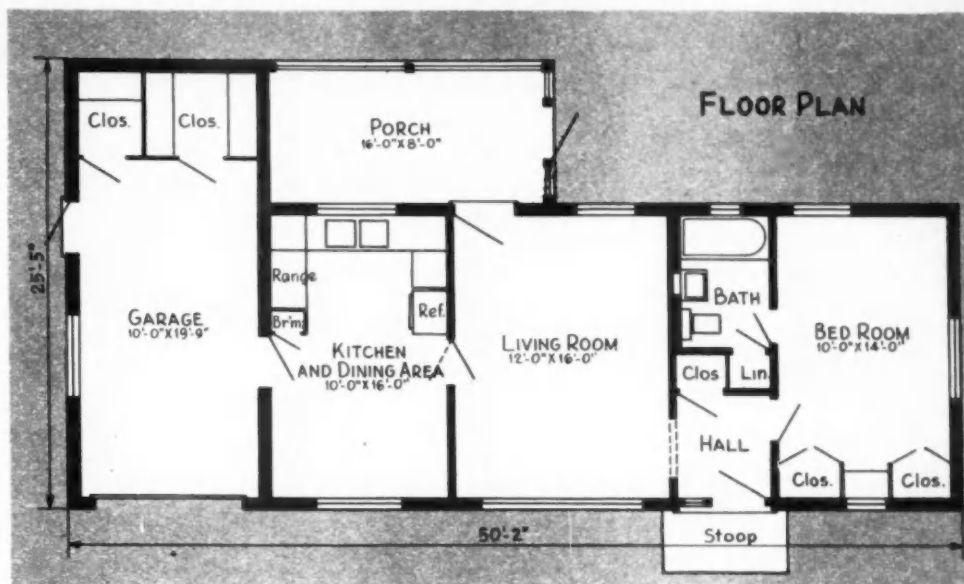
nailed to the ceiling joists. The ceiling in the Knoxville house was papered after the panels were installed but could have been painted or plastered.

The house selected for the test was designed and built by the Fonde Construction Company of Knoxville, headed by Stuart Fonde and M. L. Bartling, Jr., who have done considerable work in development of electrically heated homes. The one-story house consists of living room, bedroom, hall, combination dining room-kitchen, glass-enclosed porch and bath, all equipped with ceiling heat. The attached garage is not heated.

In designing the house, Mr. Fonde put special emphasis on insulation. Hollow cinder blocks filled with insulating material are used for the walls. Above the electrified ceilings are eight inches of mineral wool insulation. By utilizing the natural heat of the sun further economy in heat loss was achieved with large windows facing south-southeast, to permit the sun's rays to enter the house. The house has no basement and floors are of concrete with a special surface as smooth as hardwood. Heat from the ceiling keeps the floor 15 degrees warmer than floors of conventionally heated homes.

Ceiling heat operates on the same principle as the sun, according to R. D. Gartrell, development manager of U. S. Rubber Company's Passaic, N. J., plant under whose supervision the product was perfected. "The heat travels in waves that are absorbed by occupants of the house and by solid objects nearby, including furniture, floors and walls," Mr. Gartrell explains. "In a room heated by conventional means the human body loses heat by radiation to cold walls and other surrounding surfaces. With radiant heating this loss of body heat is greatly reduced or stopped completely, enabling the normal metabolism to generate enough heat for physical comfort."

Development of the electrified ceilings grew out of wartime research on conductive rubber in the laboratories of United States Rubber Company. Reversing nature, chemists transformed rubber from an insulator to an electrical conductor by adding high percentages of finely-ground carbon black, the material found in dry cell batteries. During the war conductive rubber was used in heating pads to keep ice off propeller blades and wing guns of airplanes. Electricity is conducted to the edges of the ceiling panels by copper wire, but there is no



THIS house can be heated for a full season on from 7,000 to 10,000 kilowatts.

electrical wiring in the heating areas.

In addition to ceiling panels, United States Rubber Company is developing portable conductive rubber heaters in the form of decorative screens to provide temporary heat in bathrooms, bedrooms and other parts of the house. The supply of these heaters and also the ceiling panels will be limited for several months owing to the current shortage of materials and production facilities, the firm announced.

The new type radiant heating system in the Knoxville house was first turned on in February of this year and has been in operation ever since. To test capacity of the heating system, engineers raised the temperature in the

house to 80 degrees one day when the mercury outdoors was five above zero.

Although power rates in the Knoxville area are lower than in most sections of the country, Mr. Fonde, the builder, believes that it is practical and economical to use electricity in any part of the United States provided the homes are properly designed and insulated to utilize this type of heat.

"It is true enough that the Tennessee Valley area provides the most favorable electric rates," he said, "but one should not look at the electric rates alone. It is the number of kilowatt hours required per season that counts. This makes electrical heat possible in many other areas."

THE tests of successful electrical radiant ceiling heat were conducted in this house.



## Los Angeles Builders



GROUP of writers and photographers who participated in tour. Below, seated, Los Angeles FHA Director John McGovern and NHA Regional Director Preston Wright; second from left, standing, is Mason Noice of Veterans Administration, with several builders.

**L**AURENCE B. GIBBS, president of the Home Builders Institute of Los Angeles, was disturbed by repeated newspaper reports to the effect that the building industry was failing to provide homes for veterans. He knew that the various government-sponsored programs for pulling houses out of the air had failed but that, on the other hand, the local builders were delivering houses by the thousands.

In order to prove the truth of the situation, Mr. Gibbs organized a two-day press tour to which he invited newspaper, radio and magazine writers. He rented a large bus equipped with a loud speaker, and he brought along as special guests to answer questions of the press, Preston Wright, regional OHE director, John McGovern, local head of FHA, and Mason Noice, home loan officer for Veterans Administration. These men provided much information to the press.

During the two-day tour which cov-



LAWRENCE B. GIBBS of Pasadena, president, Home Builders Institute, who headed tour.



NATE BERSHON, a builder whose plans for rental housing were outlined to guests.



SPIROS G. PONTY, building 306 units, locates his project on large map for guests on tour.

# SHOW the Truth to Local Press

**Two-day tour of major operations in area aimed to counteract unfair newspaper and magazine treatment of industry activities and prices**

cred about 250 miles the press visited practically all the important housing developments in the area and saw for themselves that approximately 40,000 living units were under construction. That ended the story that the local builders were not doing anything about the housing situation!

They found that an overwhelming percentage of all the homes were conventional in type and were being built by the same builders who had been erecting homes here for many years before the war. They found that they were not "dingbats" but were solid, substantial houses and were remarkable values considering the high costs of labor and materials. Some of the prefab outfits, who turned out shoddy houses a year or so ago, are finding the going tough now that the conventional builders are under way.

Taking all of the projects into consideration, the average house is about 1100 to 1200 square feet in area, contains three bedrooms, has a wood-shingled roof, hardwood floors, tile bath and sink and is of frame and stucco construction. It has a two car garage. There were some duplexes and some rental units but the bulk of the building in the Los Angeles area was in single family units.

The average price of the house just described is \$10,000, including the lot and in most cases, clothes lines, incinerators and some landscaping. Most of the houses are built under what Larry Gibbs calls the "California Plan," i. e., the builders purchase the raw acreage, subdivide and improve it, then build and sell their houses with their own personnel—all at one profit.

In some cases the builders are taking less profit on the completed houses than they could have made on lot sales had they sold the lots several months ago when there was a scramble.

Today, improvement costs on a level acre of land amount to \$3000 which, plus the cost of the land which runs from \$3000 to \$3500 per acre in close-in areas, makes the five lots derived from it run to about \$1300 each. Adding a normal mark-up, most of the lots were appraised for \$2000 or more.

Many of the builders visited had as many as 500 to 1000 houses under construction. Spiros G. Ponty who emigrated from Greece at the age of 16 has 934 houses under way. He recently purchased a shipload of lumber to keep going. He employs 1300 mechanics and is finishing 11 houses daily. Don Scott has just completed one of the largest rental projects in the country. He has 500 units which rent for \$45 to \$50 per month, furnished.

The builders were unanimous in declaring that shortages of labor and materials and inefficiency of labor contribute more to their high costs than high prices. They are hopeful of an improvement in the situation soon. However, one builder presented a tabulation of increases in costs which showed that as compared with 1942, the smallest increase was in finish lumber at 31 per cent and the largest was in sewer connections, 50 per cent. Stabilization of these costs is the number one problem of manufacturers, labor organizations and builders if residential construction is to continue at high levels.



AIR VIEW of Kenneth P. Schmidt's tract development, Rancho La Canada, in La Canada.



M. C. DAVENPORT, of L. S. Whaley Co., discusses job progress with workman at site.



A ROOF'S-EYE view of an L. S. Whaley Co. veterans home development observed on tour.



JOHN S. GRIFFITH, Long Beach home builder, describes his projects to the local press.



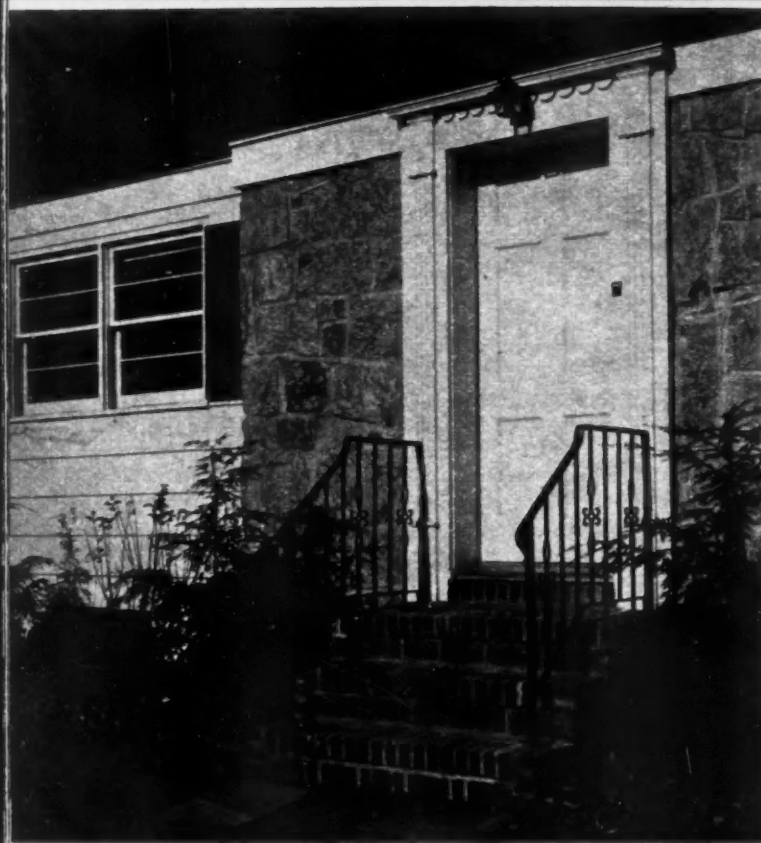
H. TRUMAN BROWNE rental project—another of the jobs visited in the 250-mile tour.



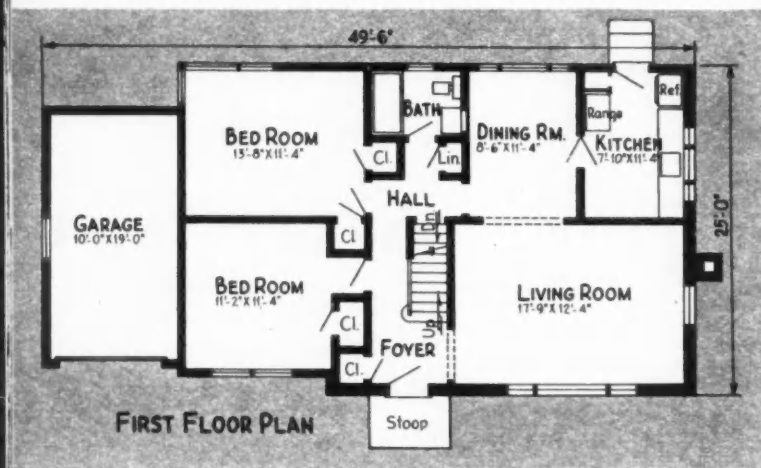
THIS tour of projects in Los Angeles area covered about 40,000 units now under way.

# MEETING The Market

**Having completed 19 of a projected development of 200 houses, this Long Island builder is meeting the demand for better housing in medium priced field**



STONE and wood have been successfully employed in this entrance.



PLAN of five room house with future expandable second floor.



**S**ITUATED in the midst of a large and deeply wooded area on the outskirts of Merrick, Long Island, is a development of fine homes that has recently been opened for inspection to the buying public by the Kellson Construction Corporation of that city.

The project, which is referred to by the builders as the "Merit Homes in Merrick-Wood," will eventually contain approximately 200 individual homes. At the time the *American Builder* visited the site 19 of the houses had been completed with foundations for many others already under way. Now that restrictions have been removed and with materials moving unhampered to the building site, it is assumed that intense activity, for early completion of the project, will be the order of the day.

Rudolph A. Matern, architect, Jamaica, L.I., a veteran in the designing and planning of homes in terms of experience, has produced a group of designs that are simple yet distinctive in character. All the houses revolve around three basic floor plans, two of which are shown here. Variations are provided by reversing the plan layout in some cases, and by changing entrance arrangement, position of garage unit and window fenestration in others.

No attempt has been made by the architect to peg the houses to any particular style or period. It is rather a combination of traditional elements and local materials assembled together in an attractive and pleasing manner, excellently proportioned. On these pages are shown three of the many variations in design that have been employed by the architect. All are different, yet each one has a definite affinity for the other.

The *American Builder* feels that this type of house is the answer to the buyer's manifest resistance to many of the new homes that are being offered. This attitude has been noticeable in recent months in some of the larger centers of population. Given rooms of reasonable size, materials that are sound and well constructed, together with good planning and design, it is then safe to assume that a prospective purchaser will buy the house in spite of the high prices that now prevail.

A background of more than 25 years of experience in the construction of apartment buildings and homes in Brooklyn and New England has conditioned Samuel J. Kellner, president of the Kellson Construction Corp. and his corps of assistants, to the building of the houses

**THE HOUSE at left with its large roof area and dormers provides space for additional bedrooms when expansion is required.**

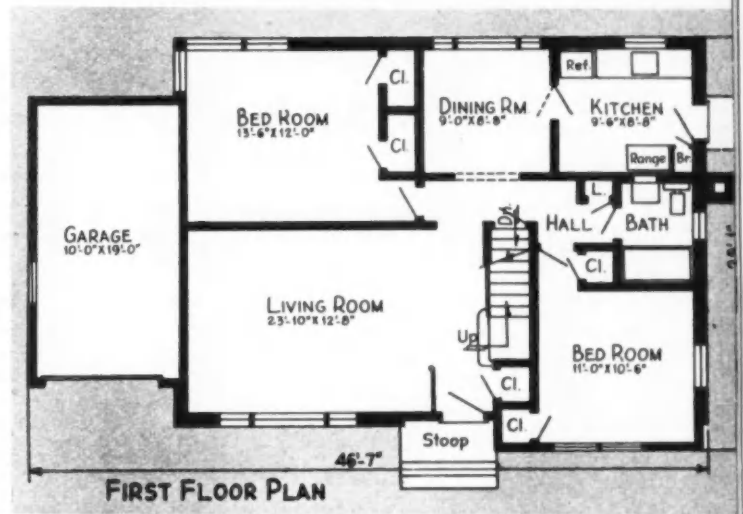


THE BASIC design in this development is shown above. The other houses in general follow the pattern established here.

that he is now erecting in Merrick-Wood, his first development on Long Island.

Due to the topography and the street layouts most of the lots are of irregular size. Houses are all five and six rooms with attached garage and expandable attics where additional bedrooms may be provided when needed. Foundations are of poured concrete, waterproofed; full basement over entire area; exterior walls are of frame construction with brick or stone veneer and wood siding. Roofs are covered with asphalt shingles; gutters and downspouts are of copper; walls and ceilings are plastered throughout. Hardwood floors are throughout except linoleum in kitchens and tile in bathrooms. Built-in cabinets are in the kitchens; and steam heat is used with A.B.C. oil burners.

Mr. Kellner has found that in his many years of operation that the best method known for reducing costs in any project is to do volume building. This can be accomplished through an efficient and workable organization thoroughly schooled in the use of power equipment that lightens labor and shortens construction time.



ALL rooms in the plan above radiate from a center hall, permitting ease of circulation to and from all areas.



BY reversing the plan and the use of the exterior materials with changes in the roof profiles, an entirely different type of design is produced as indicated in the house shown at the right.

# Tech Home— the Steel and Concrete House

**Recently developed method of shop-fabricating steel and gunited concrete wall sections proves practicable and has interesting implications**

**T**HE traditional conservatism of New England is reflected in its people—and in its fine old, well-kept homes. Substantial and attractive, these homes seem to tie the past with the present, and convey the feeling that they are as endless as time itself. It is understandable, therefore, that when a house—modern in design and constructed of steel and concrete, thus sharply breaking with tradition—suddenly springs up in the midst of a typical New England community it might well become the focal point of interest.

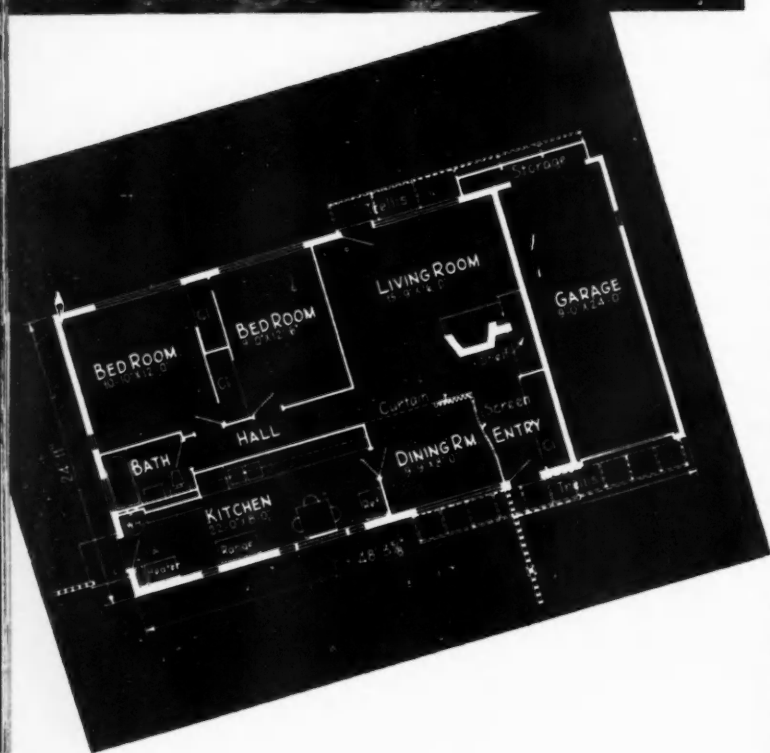
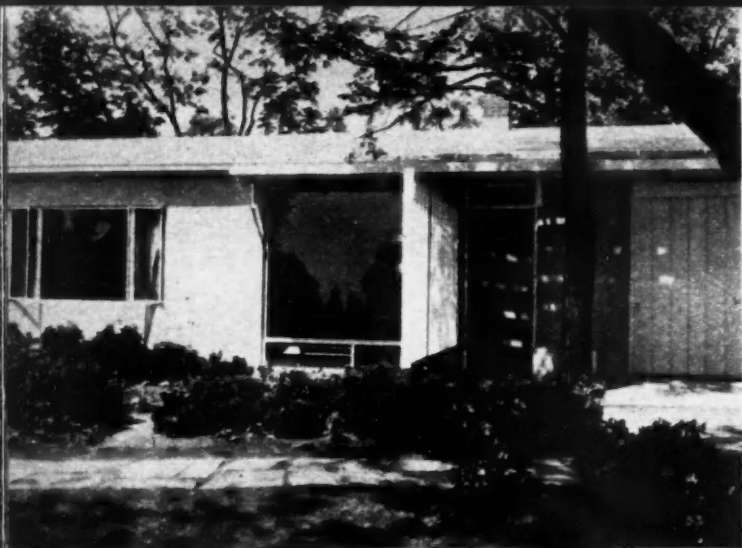
Early in June, when M. J. Rosenau, Jr., of Framingham Centre, Mass., completed the first full-sized model of the Tech Home—smartly located on the principal thoroughfare between suburban Framingham and nearby Boston—he expected that it would create a “mild stir.” He did not, however, anticipate the overwhelming acceptance of the shop-fabricated steel and concrete structure by prospective home owners. Nor did he anticipate the interest in the new construction by home builders from other cities, some as far as 250 miles distant.

Operating under an arrangement with Tech Process, Incorporated, Mr. Rosenau revealed that Tech Home is the result of prolonged research and experimentation by the firm's principals: Boston architect, George H. Stoner, president of Tech Process, Inc.; vice president, Frank Morgenroth, of Boston, a German refugee whose knowledge of steel and concrete construction is famed; and treasurer, Saul G. Chason, of Portland, Me.

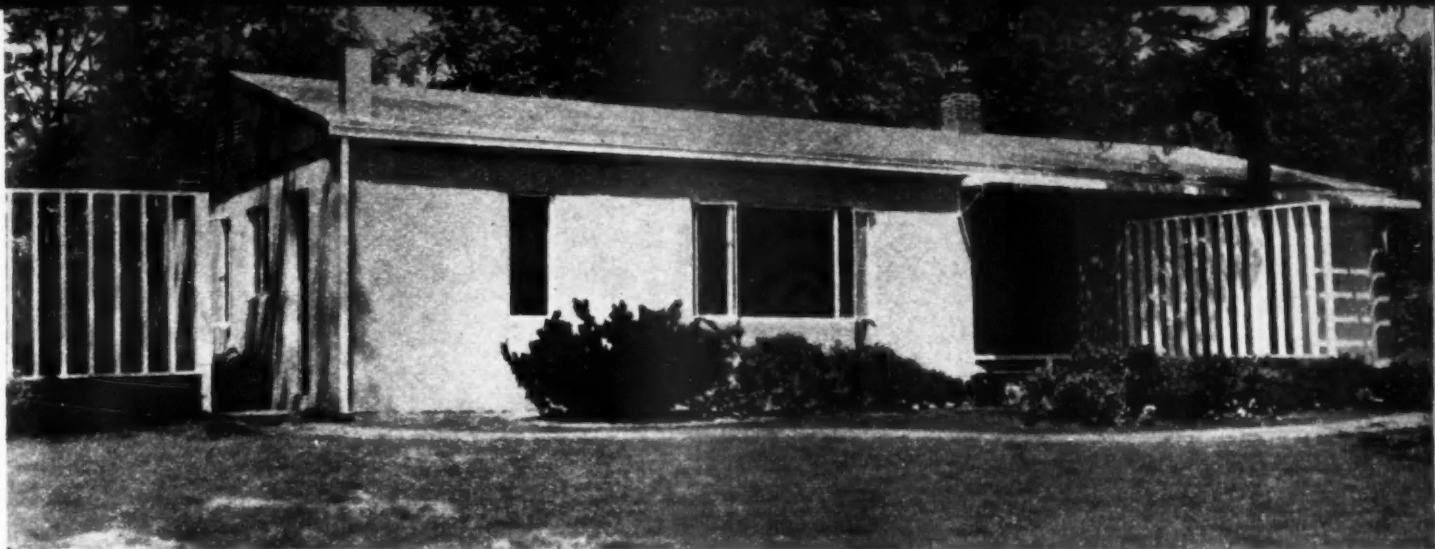
At first glance, and as can be seen in the accompanying photographs, the Tech Home appears completely conventional, except in design. Actually, over 90 per cent of the materials in the frame of the house are steel and concrete. Only the gable ends and the roof are of other materials. As though in explanation, Mr. Rosenau points out: “More than 10,000 Americans died needlessly in fires last year, and fire losses, still mounting, exceeded half a billion dollars.”

Foundations are of reinforced concrete. The outside surface of the shop-fabricated, fully insulated, six-inch wall panel is built of gunited concrete on a welded steel frame; the inside surface consists of three-quarter inch insulation board fastened through insulators to the concrete slab and structural steel ribs. Similarly the roof trusses and ceiling panels are of steel and insulation board. As they span wall-to-wall there are no bearing partitions. The built-up asphalt roof is applied over wood sheathing. Asphalt tile is laid over the concrete slab floor.

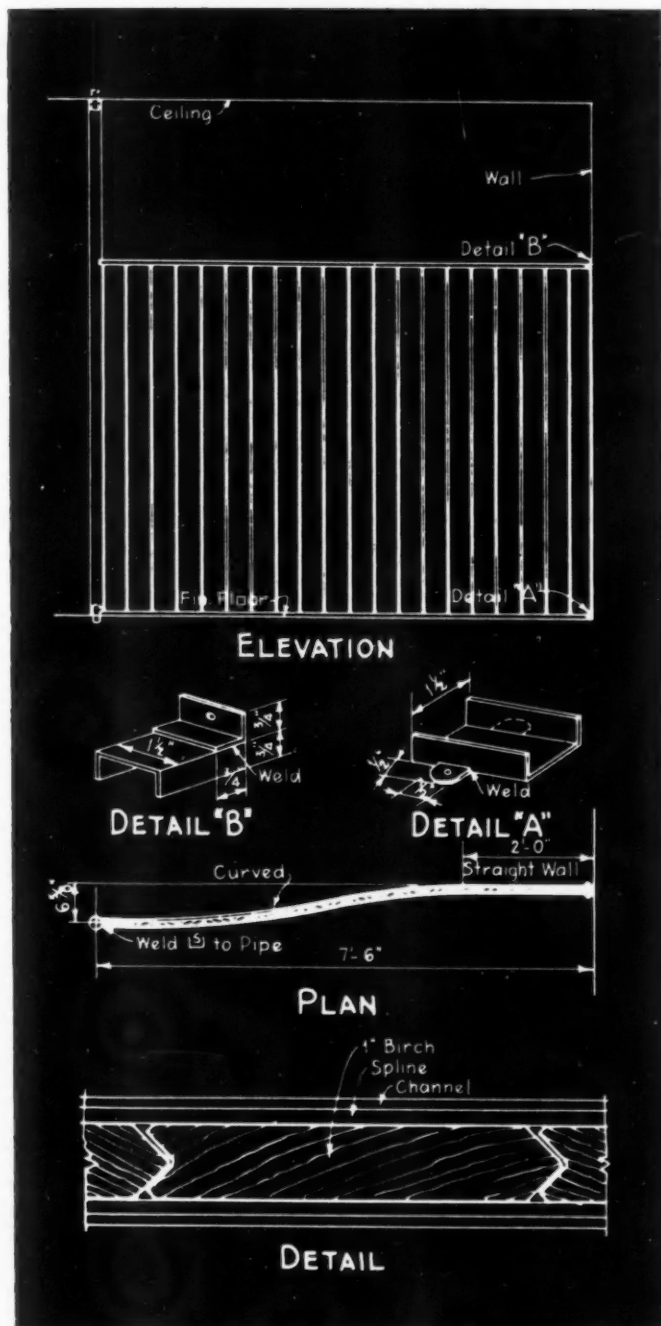
The model shown consists of five rooms and attached garage, measuring 24 x 48 feet. The open plan and large window areas fulfill the modern concept of living beyond four walls. Closets are unusually large, with sliding panel doors. The completely-equipped kitchen-laundry provides 15 feet of cabinet and cupboard space, and adequate space for light dining.



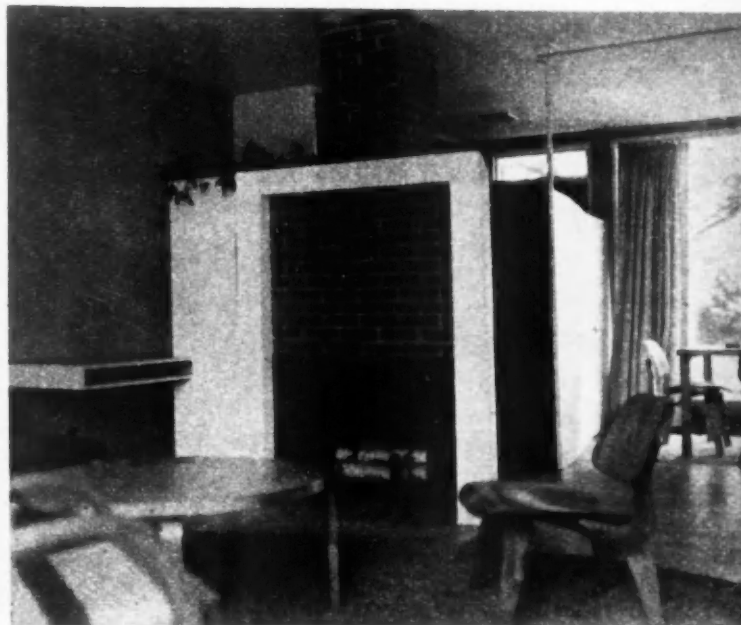
TOP: Tech Home entrance; center: plan and bottom: kitchen.



THE simple character of Tech Home's modern design, with its large glass areas and extensive use of concrete and steel for fire protection, makes it extremely adaptable to a variety of sites.



DINING area and entrance hall detail shown from living room.



THE above drawings show construction detail of the Tech process. VIEW from living room reveals openness of the Tech Home plan.



THE unusual portion of this house pictured above is the balcony containing the bedroom with the service portion placed below.

## SMALL . . . Yet Sufficient

*Photographs by Armstrong Cork Company.*



THE high ceiling with its exposed beams following the slope of the roof, and the large picture window with its egg crate design, tend to increase the spaciousness of the living room which is pictured at left.



**All the requirements of normal living and entertaining can be carried on in this dream house**

**M**UCH has been said about the average small house. A great deal of information has been printed and innumerable plans have been prepared showing economies that can be obtained by combining some of the basic elements of the house, or by eliminating others for the time being.

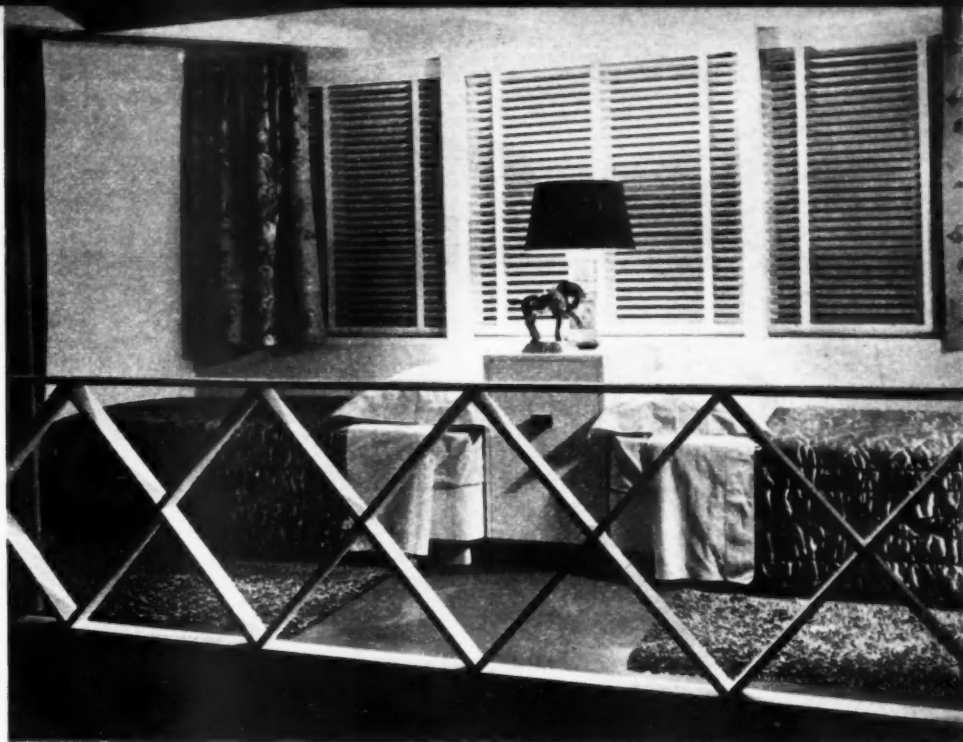
Seldom has it been our pleasure to show a house that meets all the requirements of present day living within a limit of 480 square feet without sacrifice of space, such as the Armstrong Dream House shown on these pages provides.

Designed by Hazel Dell Brown of the Armstrong Cork Company's Bureau of Interior Decoration, in collaboration with Burton Ashford Bugbee, A. I. A., it contains the equivalent of four rooms within a 20 foot by 25 foot dimensional limitation.

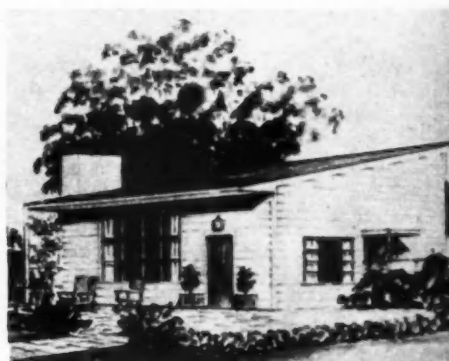
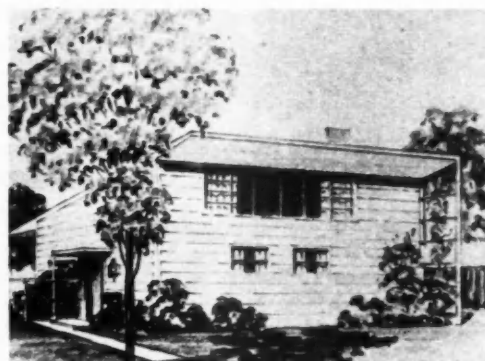
The feature of this low cost house is the manner in which the designers have utilized every available inch of space at their disposal. It contains many of the built-in items that are seen only in larger and more expensive homes, such as a fireplace with a woodbox adjoining that can be filled from the outside; bookcases flanking both sides of the large eight foot high window done in the new egg-crate design; china cabinet conveniently located adjacent to the table and chairs in dining portion of living room.

A complete kitchen with built-in cabinets and all the necessary equipment, together with a bathroom and utility room with an oil burner, is located under the balcony. The supporting beams which follow the slope of the roof are completely exposed. This permitted the designer to take advantage of the additional height on the street front, by reducing the ceiling height in the service rooms to a minimum and thus allowing for a balcony utilized as the bedroom. This has served two purposes, first by providing an unusual and distinctive bedroom area, and secondly by creating an architectural feature in the railing that adds character to the whole interior.

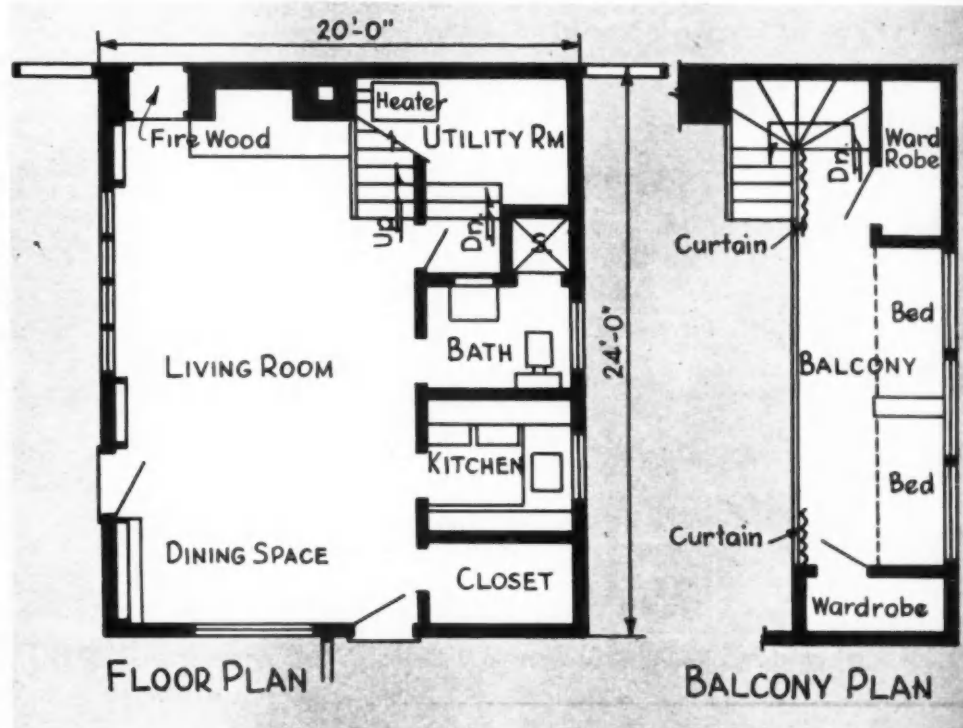
THE first and balcony floor plans shown at right, indicate clearly the compactness of the arrangement and the spaciousness that has been achieved by the unusual placement of some of the basic room requirements.



CURTAIN along rail can be drawn to separate balcony bedroom from balance of house.



ARCHITECT'S renderings showing the street and garden elevations.





DESIGN takes maximum advantage of location potentialities.

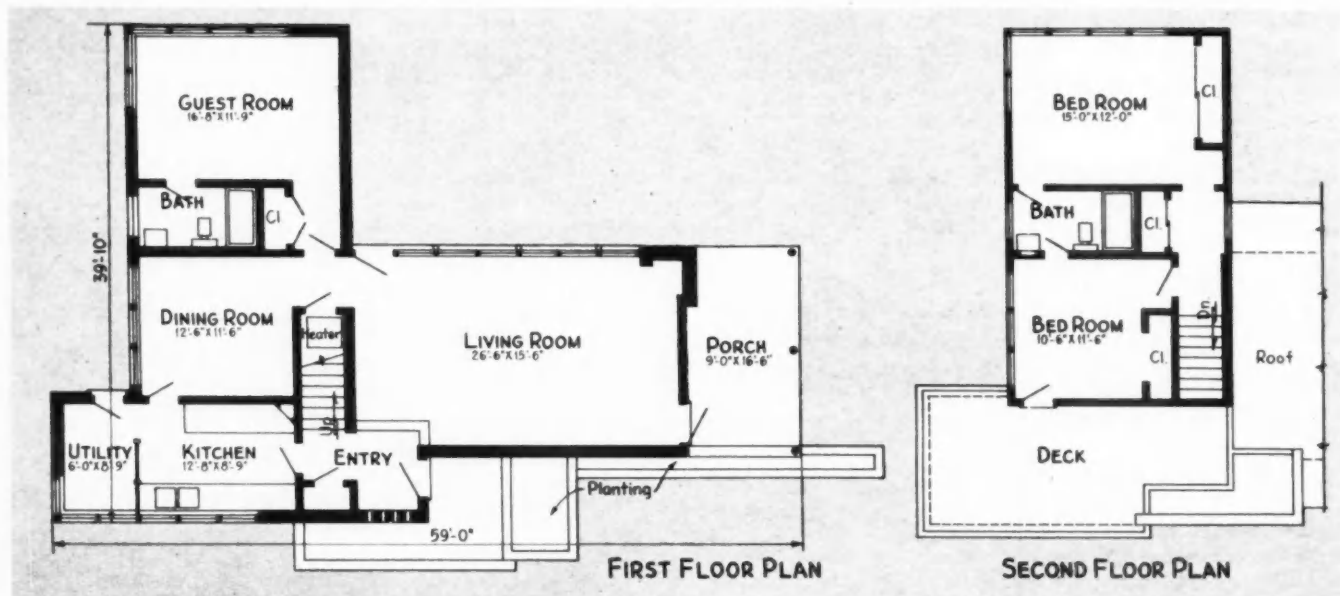
## Southern Hospitality With a Modern Motif

**D**ESIGNED to take full advantage of all favorable factors inherent in an attractive corner lot, this house in Atlanta, Ga., provides maximum privacy on the street sides but holds the desirable division between indoor and outdoor living to a minimum in the part of the house facing the rear lawn. The rear, or south side, overlooks a long but rather steep slope ending at a golf course.

The large living room windows are  $\frac{1}{4}$ -inch plate glass set in wood sash with louvers above to provide adequate ventilation. The overhang protects windows from sunlight in summer months. Exterior finishes include well blended combinations of crab orchard stone, brick, stucco and  $\frac{5}{8}$ -inch exterior-type plywood, painted. Flagstone laid over a four-inch concrete slab was used for the living room floor. Floors in other rooms are of conventional construction. The house was designed by John Cherry, architect, and built by B. A. Martin, home builder.



LIVING room overlooks large, low, open area used as golf course.



## Downtown Sample Sells Homes

15 orders booked in 30 days to "duplicate on your own lot." Numerous alternates offered



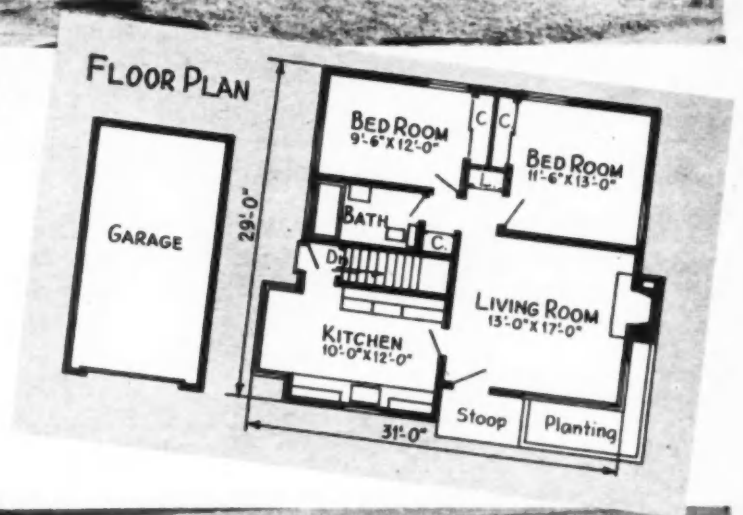
SAMPLE house, on a close-in Seattle, Wash., site, is inspected by many lot owners and prospective home builders every day.

**P**ROSPECTIVE home builders, who have their own building sites—and there are thousands of them—would like to see exactly what they are going to get, before they sign a firm contract to build. Don Kennedy, a Seattle real estate man, figured that in high-cost times, like the present, it would be particularly helpful to put up a sample house in a prominent downtown location and take orders to duplicate it anywhere in the city.

Working through the Western Development Co., he has created this winsome little five-room and garage home as typical of six new designs (choice of 36 floor plans) by Architect Carl U. Collins and Paul W. De Laney, Associate. These houses are being offered at from \$8,300 to \$11,000 complete but not including lot.

A staff of salesmen is kept at the house, and in the first month fifteen orders have been booked. Of these five are already under construction.

To give an extra popular appeal to this demonstration, the local post of Veterans of Foreign Wars has sponsored it. Members and friends have visited it in large numbers.



**WHO'S WHO** at Model House. (l. to r.) Walter Raybein, Eagelson Post V.F.W., Robert C. Klontz, Bruce Mead, Don Kennedy, Larry Mielke, Frances Ney, all of Western Development Co., and Carl U. Collins, architect.



NIGHT view of the completed store building. Detail view of first unit at right.



## Displays + Parking = Good Business

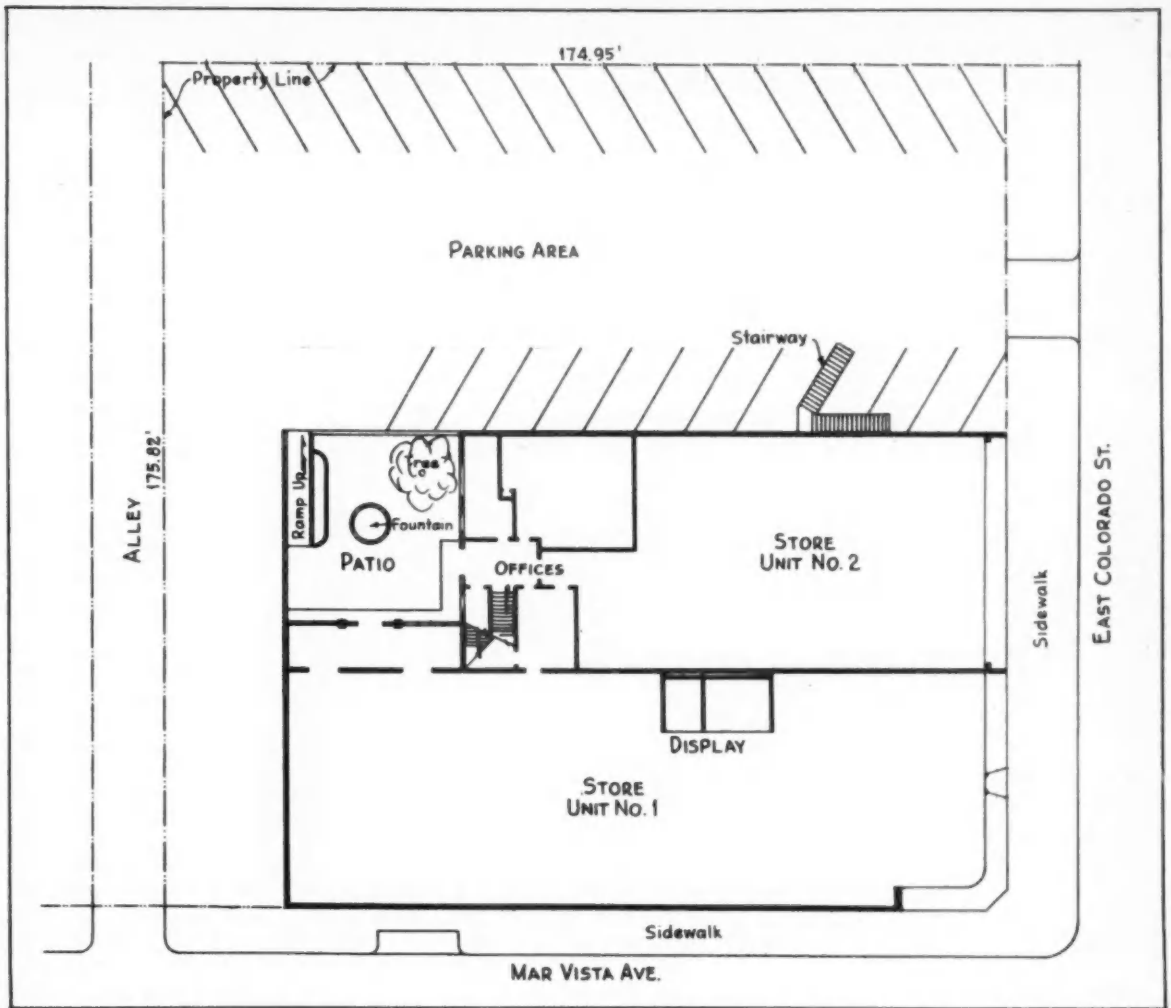


VIEW of display porch. The exposed roof timbers blend with display articles. Entry to store from parking area is through the porch.

THE expansion program recently completed for Conrad Troll in Pasadena, California, has been carried on under the supervision and plans of Cyril and Robert Bennett, architects of that city. This structure consists of unit one and two with a large parking area adjoining it to the east. Unit two was required after the business had expanded beyond the confines of the original building. The horizontal lines of the exterior and the show window cornice have been continued through and made an integral part of the design of the new two story building, so that the structure has the appearance of a unit.

Realizing the importance of the automobile in relation to successful merchandising, the owner has provided a large and completely equipped parking lot for the accommodation of customers adjacent to the new two story building. Entrance to the first and second floors is obtained from the parking lot. Entrance from the street is through the present doors of unit one.

An open patio which leads to a display porch is located at the rear. This provides a natural setting for the display of outdoor furniture. The entire first floor is devoted to sales except for several small offices in rear. Second floor is devoted to offices.



PLAN of first floor of both units and adjoining parking area.

**Ample and well lighted display windows together with adequate parking facilities contribute to successful expansion program**



**VIEW** in large sales area of unit number one. Clear unobstructed floor space is provided for the display of similar products.



**THE** generous display window in unit number two shown above is typical except that floor line of window is lowered.

# WHO Are the Postwar Builders?

**Ten per cent are veterans of World War II and 16 per cent are veterans of World War I; 67 per cent were engaged in war construction; 88 per cent live in single-family dwellings with a median value of \$12,222**

**A**PPROXIMATELY 75,000 builders of all classes are active currently in attempting to solve the most critical housing problem in the history of the United States. In an effort to obtain a closeup of the postwar home builder, *American Builder* has just completed a nation-wide survey to obtain information which would indicate the status of these builders in the communities in which they reside and do business.

The cross-section survey included builders of all classes of operation, from the largest metropolitan operators to the small town and rural builders. Proceeding with the understanding that there are widespread differences in the economic status and operation of home builders, the survey was designed to include all types. Some builders may construct only one house or a small commercial building in a given year. Others will build ten, twenty, thirty, or several hundred houses. Even the large builders, as well as small operators, may suspend building activities for a year or longer and then undertake operations again when they believe local conditions are appropriate.

The home builder who erects even a relatively small number of dwelling units or other structures performs all the functions and has all the problems of a large-sized corporation. With little in the way of special training or help he becomes a purchasing agent, a controller, a construction engineer, an economist, a personnel administrator, a salesman and a financier.

The field staff of *American Builder* has observed that builders generally identify themselves with the civic activities of their communities and are more often than not members of fraternal and civic organizations, with prominent roles as committee members and leaders. Legitimate home builders realize that before they can be successful in their business of constructing and selling good homes, the community itself must be a satisfactory economic and social unit which will encourage families to live there and invest in property.

## Home Occupancy of Home Builders

### Live In

Single-family house.....88%  
Apartment.....12%

### Own the Unit

Yes.....86%  
No.....14%

### Built It

Yes.....58%  
No.....42%

### Age of House—Years

0-5.....23%  
6-10.....19%  
11-20.....20%  
21-30.....18%  
31-40.....6%  
41-50.....4%  
Over 50.....5%  
No reply.....5%

### Valuation

Under \$5,000.....8%  
\$ 5,000 to \$10,000.....28%  
\$10,000 to \$15,000.....27%  
\$15,000 to \$20,000.....17%  
\$20,000 and more.....13%  
No reply.....7%

### Plan to Rebuild Own Home in Next 5 Years

Yes.....57%  
No.....40%  
Undecided.....3%

## Activities of Builders in World War II

In military service.....10%  
In war construction—

Housing.....24%  
Housing—Industrial.....11%  
Industrial.....20%  
Other war construction.....12%  
None.....5%  
No reply.....18%

Builders whose family members are presently engaged in construction.....47%

Percent with family members in construction who are associated with contractor-builder....64%  
Veterans of World War I..16%

Usually a man's status in his community can be gauged by the residential unit in which he lives. Accordingly data has been obtained which provides information as to the age and value of the residential units in which home builders reside. Replies to the questionnaire requesting this information were received from owners, officials and partners of construction firms, and contractors in all parts of the country. A tabulation of results shows home builders are among the more substantial individuals in their communities.

The great majority of home builders live in single detached houses. Only twelve per cent live in apartments. Thirteen per cent of the builders live in residences valued at \$20,000 or more, 86 per cent own the residential unit in which they live. This reveals a far higher percentage of home ownership than the average of 53 per cent for all families in the United States. The median value of their residences is \$12,222. This figure includes the homes of a large number of builders in small towns where a house valued at \$8,000 to \$10,000 is probably among the most expensive houses in the area.

As a whole, builders live in relatively new dwellings, the median age of which is 14 years. Fifty-eight per cent built the homes in which they live, the study reveals, and 57 per cent plan to build new homes for their use in the next five years.

One out of every four home builders is a war veteran. Sixteen per cent are veterans of World War I and ten per cent are veterans of World War II. The preponderance of World War I veterans suggests that home builders now active, specifically the owners, officials and partners of construction firms, are largely middle-aged and have a wealth of prewar experience on which to draw to tackle our postwar housing problems. Sixty-seven per cent of the builders were engaged in war construction, including 24 per cent in war housing and 11 per cent in both housing and industrial construction.



## Mansions or Cottages With Concrete Block

**Satisfactory house construction requires well-made units thoroughly waterproofed**



**THOROUGH** waterproofing at time of construction ten years ago eliminated moisture troubles in the large concrete block house above.

**PRECAST** concrete beams support concrete floors in this Atlanta, Ga., house. Curving concrete stairway leads to the second floor.

**P**ROGRESS and refinement in the manufacture of concrete block, along with development of better sealing and waterproofing materials are resulting in a much more extensive use of this material in house construction and in the erection of small commercial structures. Prior to World War II concrete block was considered primarily a material for commercial construction, although a few homes had been erected and proved satisfactory when the ingenuity of the builder combined with the advice of waterproofing compound manufacturers.

Today the popularity of concrete block as a material for house construction has received tremendous impetus. This is due to two principal factors—development of more efficient machinery for manufacture of the block, and vastly improved waterproofing and sealing compounds. Another recent development is the manufacture of coloring compounds which may be



THIS beautiful ranch-type concrete block house was built by Robert Rise, home builder in St. Petersburg, Florida.

successfully used to add new beauty to concrete block structures.

The fact that concrete block for many years has been considered as a material used only for low cost construction has contributed to carelessness in selection and handling in application. Concrete block is high in capillary attraction, and to make it absolutely water tight it must be treated both inside and out. It is possible to stop water at ground level by using waterproof mortar and filling the voids in the block with waterproofing compound for three or four courses. But the proven, most satisfactory

method is to waterproof both inside and out. If only the outside wall is waterproofed the tendency will be for the block to absorb moisture from the ground through the block itself and because it cannot get out, the only place for the moisture to go is on the inside wall.

There are several reputable manufacturers producing waterproofing compounds that have been proven in practice. Application techniques as well as composition of the material may vary, but all authorities agree the importance of thoroughly waterproofing concrete block structures, especial-

ly houses, is essential to satisfactory, long-term usage of the building.

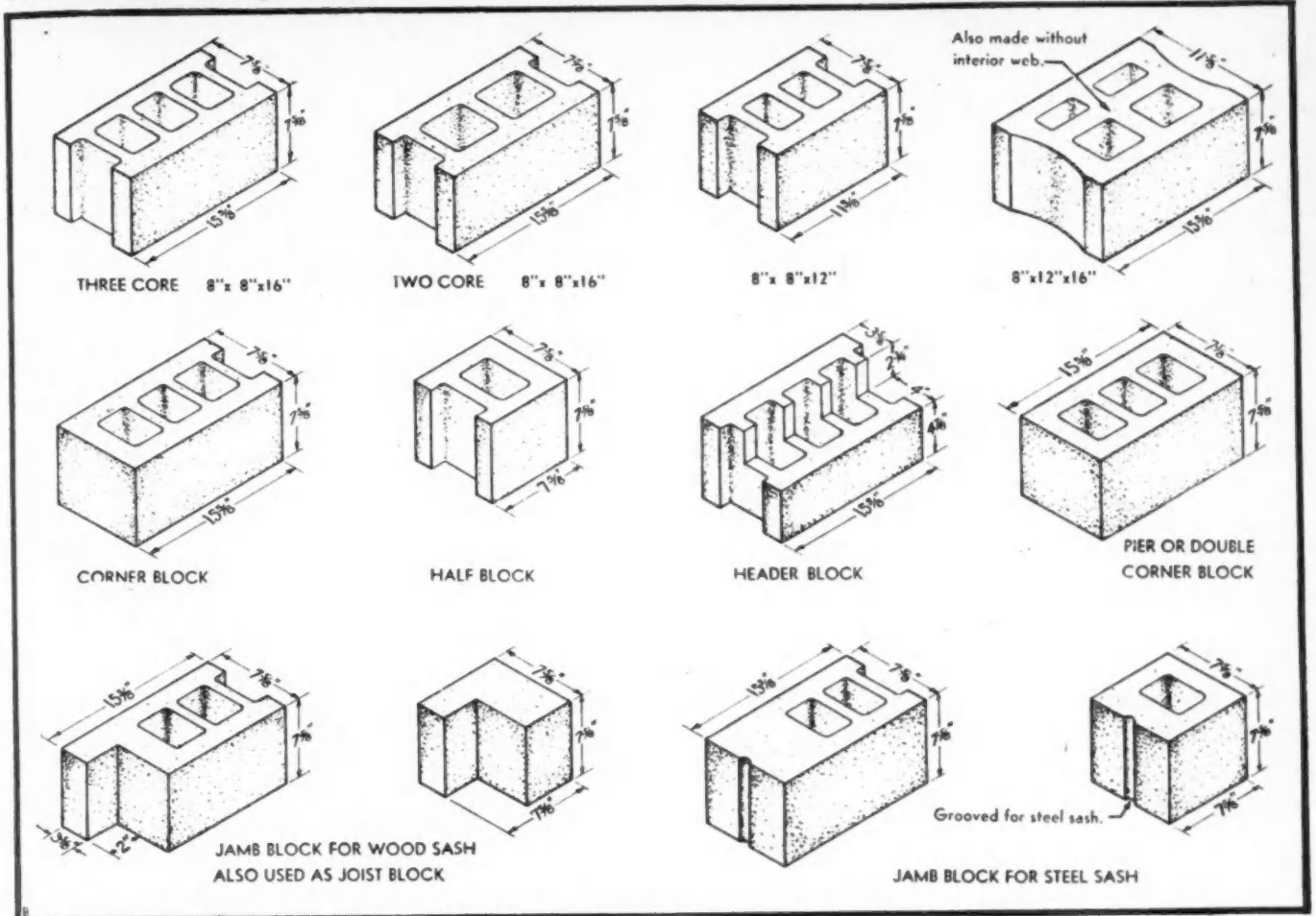
Builders who are successful in the use of concrete block are consistently cautious in accepting delivery of block for their jobs unless they are certain it is manufactured according to modern techniques and will meet A. S. T. M. specifications. The tremendous demand for concrete block since the war has inspired many individuals to set up manufacturing facilities without proper training or background in the importance of producing a good product, knowing full well that the builder and not the block manufacturer, in most cases, will be blamed for any failures that occur.

The photographs on these pages illustrate several types of houses that have been built satisfactorily of concrete block, properly waterproofed. A variety of textures is possible for exteriors by using the numerous sizes and various aggregates available in the concrete masonry units. Joints may be emphasized on the horizontal or vertical by raking one and troweling the other flush. Good authorities agree that walls of concrete masonry should have a mortar joint approximately three-eighths-inch thick. Thin mortar joints are best because it has been proven that such joints produce a stronger, more water-tight wall. Thick



RAKING of horizontal joints and troweling others flush gave this special effect.



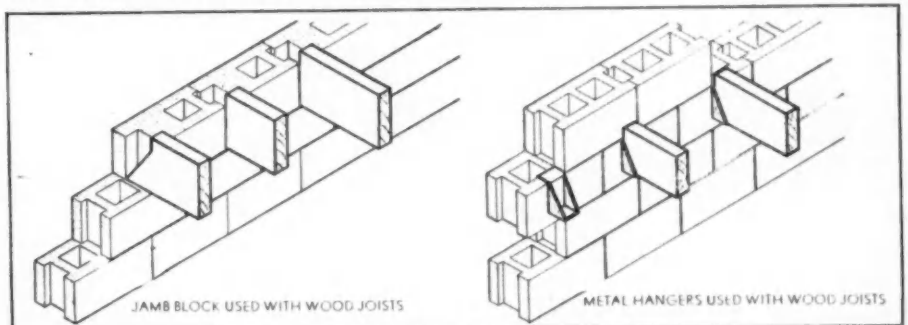


THE common types of concrete block building units now in use. Drawing courtesy Portland Cement Association.

... joints may be desirable for architectural effects, but unless precautions are taken to make the wall surface tight, watertightness may be sacrificed for appearance. Weathered, concave and V joints afford the best protection against leaks and are recommended in preference to other types. Vertical and horizontal joints should be struck off flush with the wall surface and then after partially set should be compressed and compacted with a rounded or V-shaped tool. In cases where a horizontal appearance is desired the vertical joints may be troweled flush and rubbed.

Door and window frames should be well bedded and jointed in mortar. Door and window jamb blocks may be obtained to fit plank, box and metal frames of all common designs. By using such jamb blocks it is possible to make absolutely tight connections around the frames.

The use of some waterproofing compounds on interior walls has made it impossible to plaster because all suction is stopped. Manufacturers of waterproofing materials have answered that challenge by developing interior finish material which will bend to the waterproofed wall and provide the same beauty and utility as plaster, in addition to being more economical to apply.



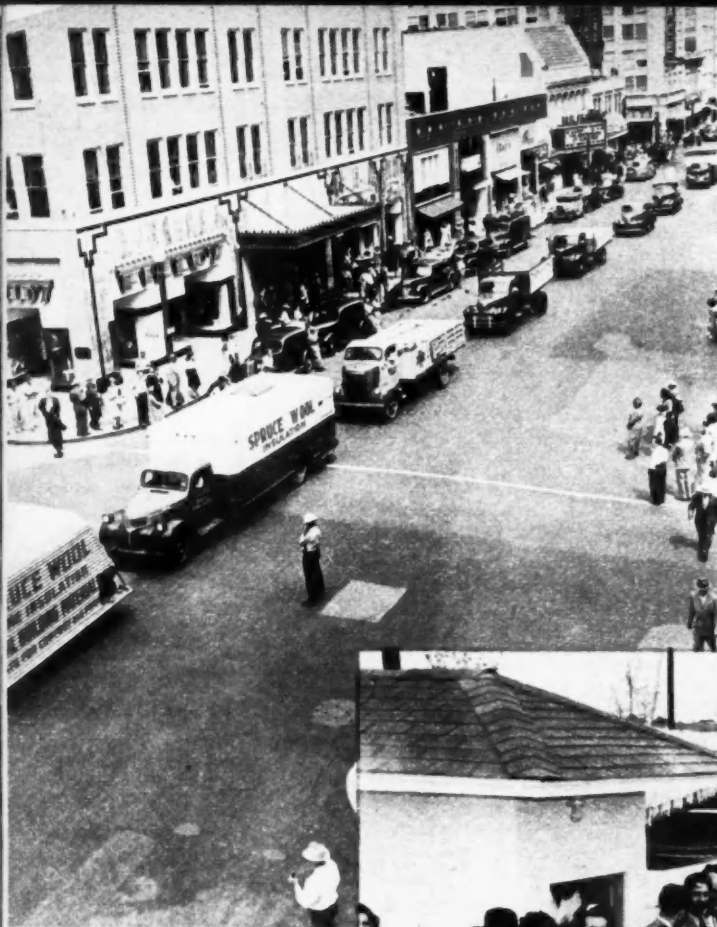
DRAWING above shows two methods of suspending wood joists in concrete block walls.



BOGGS & L'ENGLE, Atlanta, sell these two-bedroom concrete block houses for \$7,500.

# Seven Model Houses Show Today's Values

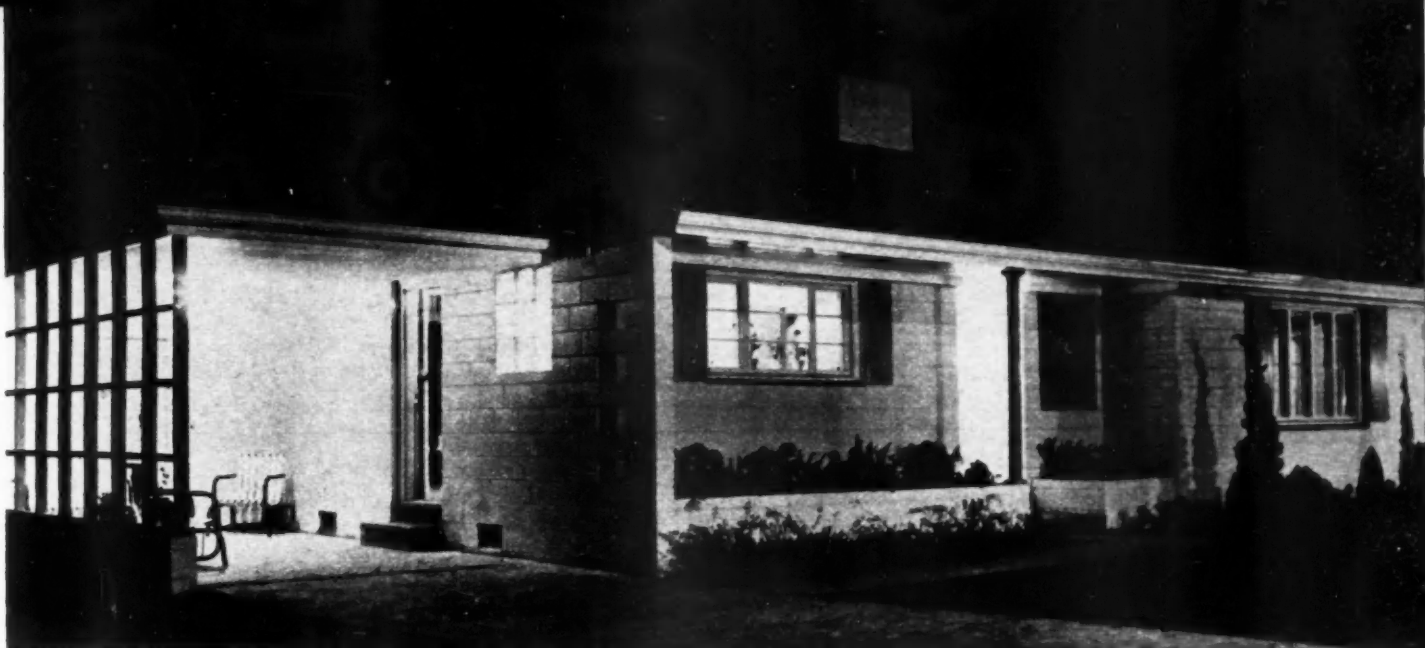
Exhibit staged by Tulsa Home Builders Association featured one block of homes completely furnished and equipped to show public materials, workmanship and conveniences embodied in the 1947 house



FLOATS were part of fanfare of Tulsa's "Better Homes Week." At right Mayor Price cuts ribbon opening exhibit to public.

THE seven homes shown were erected by seven members of the Tulsa Home Builders Assn., sponsors of the exhibit.





**ELABORATE** lighting arrangements for night exhibition of house interiors as well as exteriors was an important feature.

**T**HE true values in today's good housing were vividly demonstrated to the citizens of Tulsa, Okla., in an elaborate display of seven completely furnished and equipped model homes erected by seven association members and placed on display by the Tulsa Home Builders Association. The houses were all erected in the same block and placed on sale following close of the show.

When the idea of building a number of model homes for the show was conceived by the Home Builders Association, all members were offered the opportunity to erect houses and participate in the actual showing. Seven members volunteered to build what each considered his idea of a 1947 model home for prospective purchasers in that locality. Each builder prepared his own plans and the net result is a fine variety of well-designed modern homes, which stimulated a great amount of publicity and interest. The event not only demonstrated the ability of home builders to cooperate wholeheartedly in a civic undertaking, but served to focus attention on the home builders and their efforts to provide the maximum in good housing at today's market prices.

The seven builders who erected houses in the exhibit are: Roy L. Morgan, Morris W. Turner, Robert Adams, Larry Brooks, Vernon Mudd, Mrs. R. B. Butler and Son and Otis Nidiffer.

Some of the outstanding features of the Morgan house included a corner fireplace with two exposures, a roof window in the kitchen and two unusual porches. The Morgan house

was a New Orleans type. The Adams house featured a rear yard guest house. The unusually large wardrobe closets here created considerable interest. The outstanding appeal to housewives in the Brooks house is a plastic floor covering in the kitchen which will not stain or dent under the pressure of heavy kitchen equipment.

Vernon Mudd constructed a solar type house with large windows designed to utilize rays of the sun during winter months to partially heat the interior, in addition to providing more than average light.

The Turner house featured red tile window sills and a large patio in the rear. The dining room was omitted from this house and a car port rather than a garage was attached. Mrs. R. B. Butler and Son included a combination den and porch with a wood

burning fireplace. A barbecue pit on the outside utilizes the same chimney as the fireplace. Otis Nidiffer built a ranch type with cottonwood siding and incorporated a snack bar between the dining room and kitchen.

All of the houses of course included the newest in equipment such as refrigerators, ranges, heating equipment, attic fans and similar modern conveniences. The new trend toward dividing bathrooms into various compartments was featured in the exhibit.

In addition to the seven home builders who constructed the houses, more than 80 other firms participated in supplying furnishings, materials and equipment so that the entire field of house construction and furnishing was blanketed by the show. Keith Roberts, of Tulsa, directed the exhibit for the Tulsa Home Builders Association.

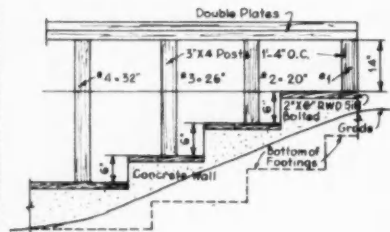


**FLOOR** plan of house pictured above shows three bedrooms, combination living-dining room, laundry and storage space.



# How-To-Do-It Pointers

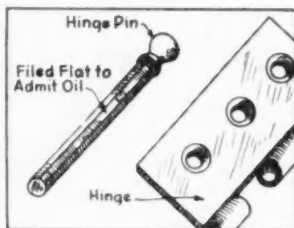
## How to Measure Underpinning



AN easy and direct method of measuring underpinning, which works well on a sloping lot, is shown here.

Set up level and have helper hold 1" x 1" rod on mudsill at position No. 1. First stud is measured and found to be 14" long. Now simply tack a 6 ft. rule to rod so that the 14" figure can be read through the level. Note the length and move rod to stud No. 2 which will be 20", move to No. 3 which will be 26", etc., for as many studs as may be required.—J. G. CALDWELL, San Mateo, Calif.

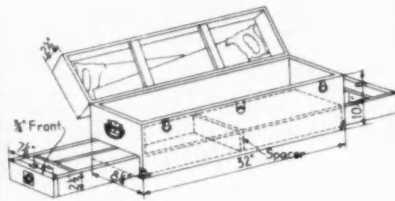
## How to Prevent Door Hinge from Squeaking



IF door hinge continues to squeak after heavy oiling, remove the pin from hinge and file it flat on one side for its entire length.

This slight alteration will admit the thin lubricant freely and squeaks will vanish like magic.—HERBERT E. FEY, New Braunfels, Texas.

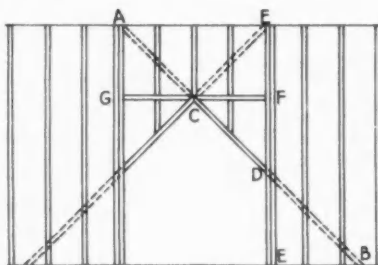
## How to Make a Tool Box With Two Full Drawers



JOHN J. STEC, Chicago, Ill., in presenting this idea for a tool box, says: "I am able to have my tools well separated as to their specific duties. The chisels are kept in one division of the drawer and the bits in another, etc.; in this manner they are permitted to lay parallel to each other with the cutting edge only touching the edge of the wooden drawer. The small sections in the ends of the drawers allow space for screws, etc. Through the use of drawers it is possible to carry more tools than in the narrow conventional tray of the average tool box.

Drawers are locked from the inside with surface bolts about 3" long with the strike on the drawer. The saws are carried in the lid held in place by two strips. This leaves the box space for the other tools. Box is made of 1/2" plywood and secured with 1 1/2" No. 8 flat head screws.

## How to Frame for Dormer Windows



ROBERT WISER, Neosha, Wis., outlines a simple and accurate method to follow in determining the proper way to frame a dormer window.

When the distance C to D as shown in the drawing above, is less than one-half the distance from A to B, then double the common rafters E to E; also use header from F to G and short valley rafters from C to D.

When distance C to D is over one-half the distance from A to B, then run continuous valley rafter from A to B and cut common rafters between.

The above rule meets with FHA inspection when proper size rafters are used.

## The Importance of Flashing in House Construction

By R. J. Alexander

FLASHING—a minor item when the total cost of a building is considered, but of major importance to the builder and owner when trouble-free construction methods are sought after. It is a subject that should be given careful consideration by the designer and extreme care in its installation by the builder.

Flashings are required wherever wood construction adjoins masonry, as in the case where the chimney cuts through or abuts the roof, or in similar situations. Flashings are also required where roof shingles join the sides of a dormer or other wall, or where flat decks join the sidewall. Each building project will have special flashing problems to deal with, in addition to the normal situations. Methods of flashing some of the more common points are suggested in the details opposite.

Painted tin and galvanized iron are the metals most commonly used. Copper will give many more years of service and thereby save the owner the expense of tearing into the construction to make the necessary repairs. Aluminum has recently become available for flashings.

It is important that flashings be installed at the proper time during the progress of the construction. Chimney flashing should be put in place as the masonry is being laid. It then can be securely bedded into the mortar joint. On remodeling work it will be necessary at times to flash into the existing brickwork. In this event the joint should be cleaned out to a depth of at least one inch, and the metal securely set in mastic or caulking compound.

Metal flashing shingles are usually used on the sides of chimneys and dormers so that they can be woven into the shingles, over the hidden portion and under the exposed part. The metal shingles should start at the bottom and overlap as shown on the chimney elevation.

A metal saddle behind the chimney is an important item. The metal of this saddle should run up under at least two courses of shingles. The flashing in front of the chimney should extend over the shingles at least three inches.

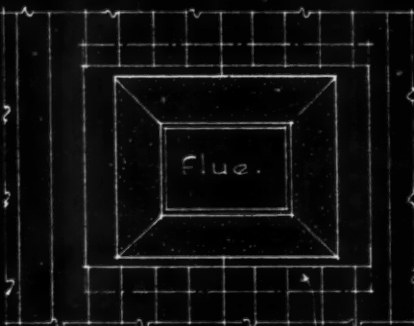
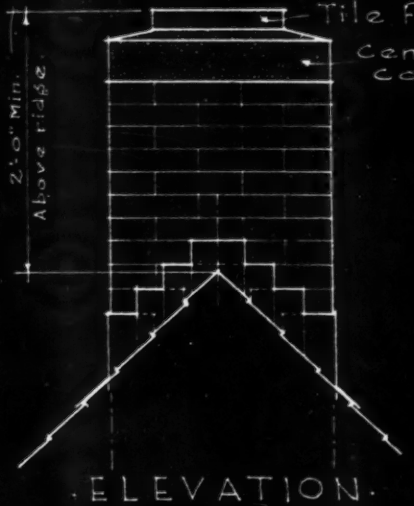
An important place for flashing to be used, and one that is often neglected, is the heads of door and window frames. A small item of flashing here will keep rain from driving in under the siding. Only by using adequate and properly placed flashing can leaks be avoided.

# BUILDER'S BETTER DETAIL PLATE

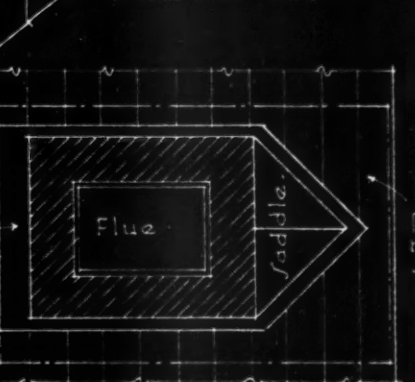
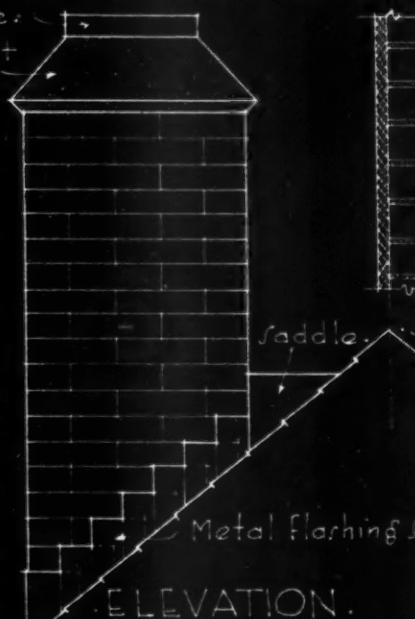
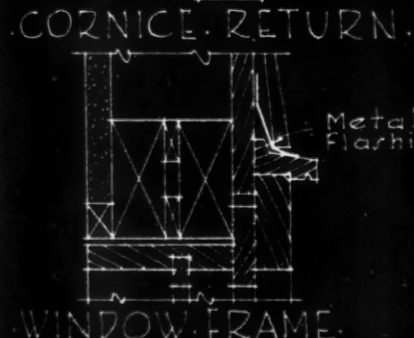
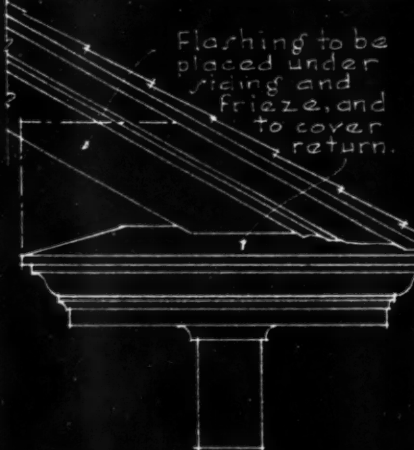
American Builder, August 1947.

133

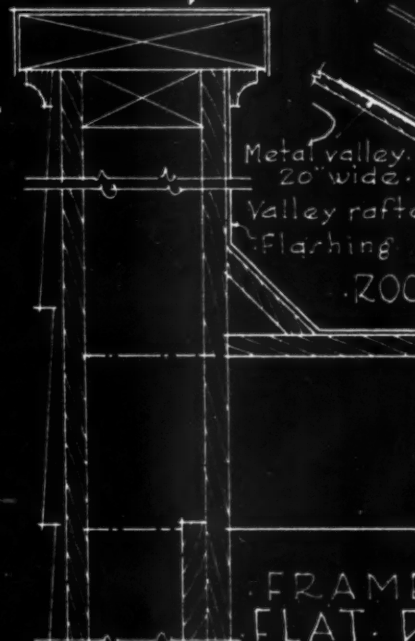
## NO. D. 34. DETAILS OF METAL FLASHINGS.



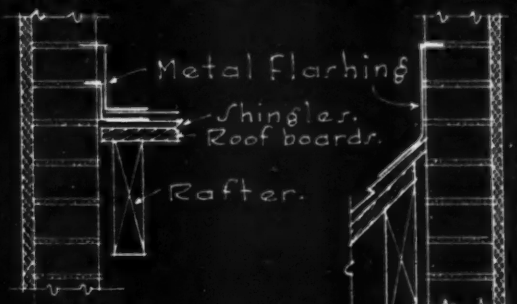
CHIMNEY FLASHING.



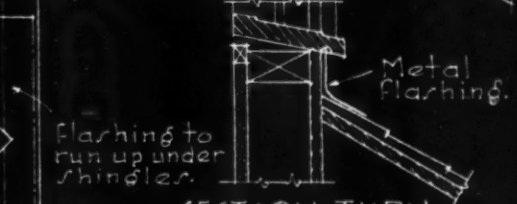
SECTIONAL PLAN OF CHIMNEY.



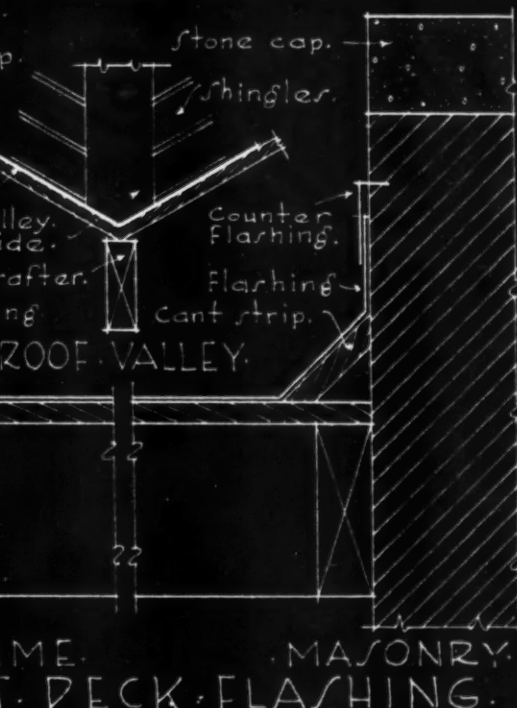
FRAME.



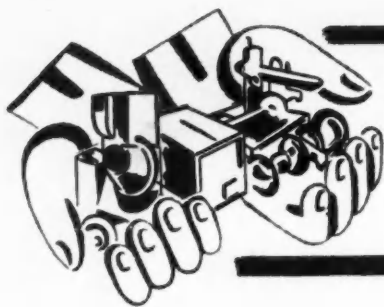
FRONT THRU CHIMNEY FLASHINGS.



DORMER FLASHING.



FRAME.



# NEW PRODUCTS

Offered by Manufacturers

**SAW TRACK**

**AB8705**

The new Stanley Saw Track is designed for use with Stanley Safety Saws for square, bevel or bevel mitre cuts. With this Saw Track, lumber can be cut to the exact size desired without laying out and marking each

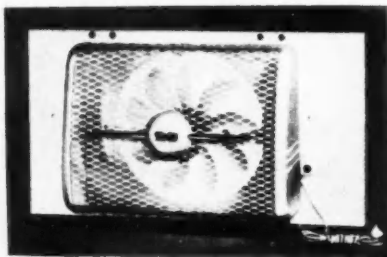


piece. Slate and marble can also be cut on the Saw Track when proper abrasive wheel is used. The overall length of the Saw Track is 37 inches and its overall width 7 3/4 inches. The maximum width of wood possible to cut is 17 1/2 inches. Product of Stanley Electric Tools, New Britain, Conn.

**PORTABLE WINDOW FAN**

**AB8701**

A portable window fan which can be converted into an exhaust fan by simply removing the grille and reversing the mechanism is being distributed by the National Appliance Co., 4814-18 W. Vernor Hwy., Detroit 9, Mich. The fan is 13 1/2 inches high and 6



inches deep and comes equipped with cord, switch, and plug. It is adjustable for windows 25 inches to 35 inches, and operates on A.C. current.

**CLAMPING TAB**

**AB8703**

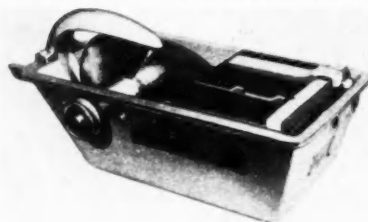
To hold insulation bat firmly to Stran-Steel frame, a Grip-Clip has been devised by the Blue Diamond Co., 2722 Logan St., Dallas, Texas. It is easy to use. Simply hold insulation

bat in position next to steel frame and then slip the Grip-Clip into place. It holds as securely as a clamp, yet is easily removed for alterations without damage to frame or insulation. Any force tending to displace clip or free tab increases the gripping power of the clip. The Grip-Clip is equally effective in ceiling and side walls.

**TILE CUTTING MACHINE**

**AB8706**

For on-the-job tile cutting the Hyatt Lapidary Equipment Co., East San Diego, Calif., have a new power driven diamond saw tile cutting machine. Portability, low power requirements, ease of operation and accuracy of cutting are its outstanding fea-



tures. The machine has rigid cast aluminum housing and light weight construction throughout. A saw guard keeps the saw and cutting contact amply supplied with water for maximum sawing speed and minimum wear on the saw. The machine is designed to cut the tile without wedging or dragging action on the tile. It operates with 1/5 h.p. motor and is equipped with 8-inch diamond saw, self-contained flushing system, calibrated guide bar, adjustable stop and universal motor bracket. This machine handles all standard sizes of tile.

**TILE FLOORING**

**AB8711**

The Wright Rubber Products Division of the Taylor Manufacturing Co., Milwaukee, Wis., have resumed the manufacture of Wrightex—a line of rubber tile that has been out of production since before the war. Wrightex is a softer surface type of flooring than the company's principal product, Wrightflor, a hard surface tile. Both products are being made in 1/8 inch and 3/16 inch thicknesses.

**LAUNDRY TUB**

**AB8707**

A single compartment laundry tub particularly adaptable to the home laundry using an automatic washing machine is the new product of Crane Co., 836 S. Michigan Ave., Chicago 5, Ill. Made of Duraclay, an easy-to-clean vitreous glazed earthenware, the



tub is resistant to household acids and iron or sulphur deposits in water. Its overall size is 22x25 inches with an inside depth of 12 inches. The tub is  
(Continued to page 136)

**CHECK NUMBERS AND MAIL COUPON FOR INFORMATION**

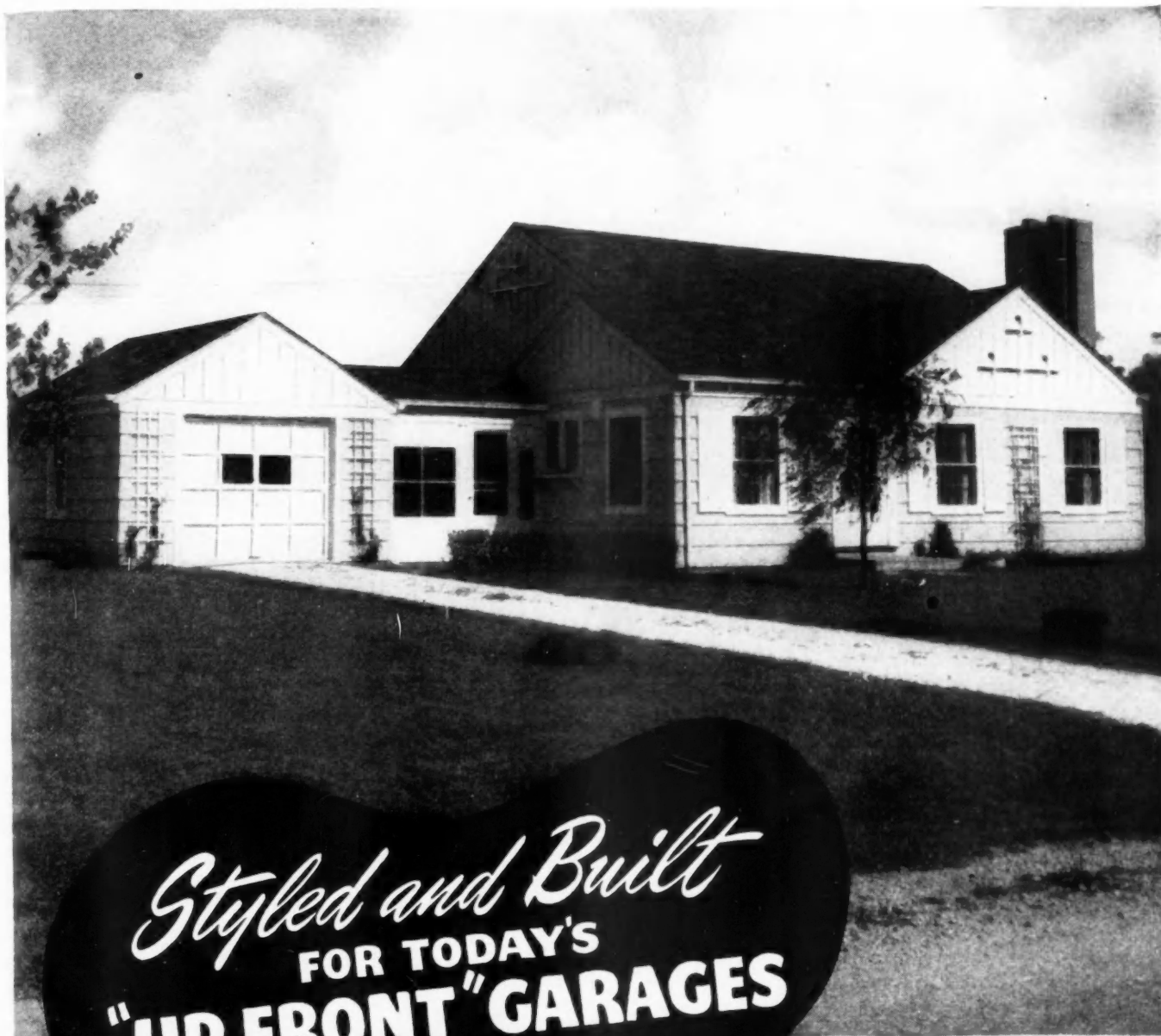
American Builder, 105 West Adams Street, Chicago 3, Illinois

NAME.....ADDRESS.....

CITY.....STATE.....

- |        |        |        |        |
|--------|--------|--------|--------|
| AB8701 | AB8706 | AB8711 | AB8716 |
| AB8702 | AB8707 | AB8712 | AB8717 |
| AB8703 | AB8708 | AB8713 | AB8718 |
| AB8704 | AB8709 | AB8714 | AB8719 |
| AB8705 | AB8710 | AB8715 |        |

When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder.



*Styled and Built*  
**FOR TODAY'S**  
**"UP FRONT" GARAGES**

Ro-Way Overhead Type Doors have lasting "good-looks." Each Door is a finished Ro-Way job. It is built entirely in the Ro-Way plant . . . right down to the last coil in its power-metered spring.

Inspect a Ro-Way Door closely. Notice the excellent millwork of the sections made from first class kiln-dried lumber. Note that all Ro-Way hardware is precision type hardware. See how the sections and hardware are combined to create a more smooth, easy operating overhead-type door. Do this and you will understand why Ro-Way has won the *front place* among the doors for today's

"up front" garages. Write for Free Catalog. See our Catalog in Sweet's.

**ROWE MANUFACTURING COMPANY**

725 Holton Street

Galesburg, Illinois, U.S.A.



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

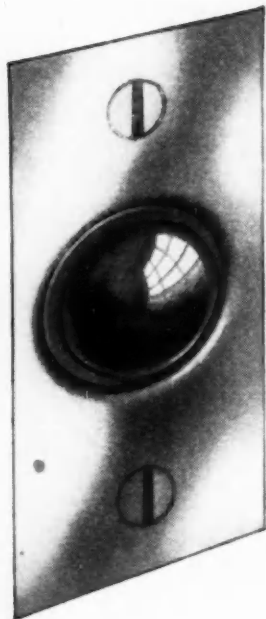
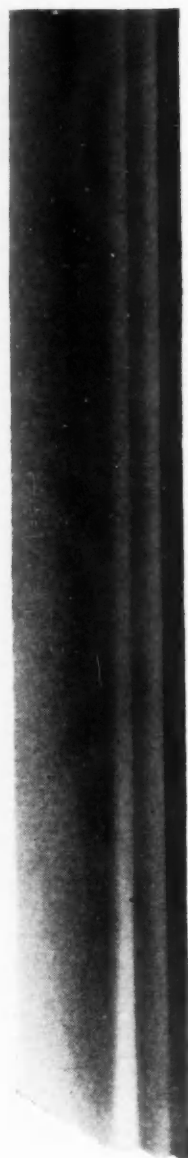
AB8711  
 s Divi-  
 g Co.,  
 ed the  
 ine of  
 out of  
 war.  
 ype of  
 nicipal  
 urface  
 made  
 nesses.

AB8707  
 ry tub  
 home  
 ashing  
 Crane  
 ago 5,  
 asy-to-  
 re, the

ds and  
 er. Its  
 th an  
 tub is

is

et  
 or.

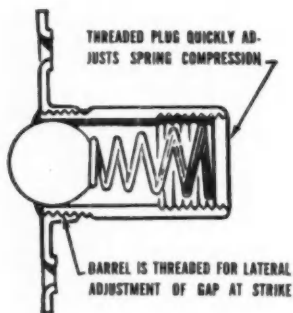


## This Rite Ball Latch Can't Jam!

A Steel ball makes this latch jam-proof and assists its door to always open or close in an easy, positive manner. A coil spring behind the ball constantly exerts pressure which may be changed to meet varying conditions through a clever feature illustrated in the half-section diagram below . . . adjustment of the strike-point of the ball is also possible. This latch is heavy enough for use on communicating, and service doors with dummy trim and on top of louvre doors . . . a smaller size is recommended for use on wardrobes and cabinets. Installation is simple and easy . . . correct distance between latch and strike is easily maintained . . . it's the most satisfactory latch we have seen. Choice of nine standard finishes is yours . . . delivery is immediate. Add Rite Ball Latches to your line today . . . send for Catalog Sheet No. 200.

**Patented Design** — Features illustrated reveal the success of the Rite Ball Latch. Note the ball-bearing action . . . two-point adjustment (spring compression of small No. 434 latch is not adjustable). Strike furnished serves as template for locating latch on jamb easily and quickly.

No. 234 . . . Face Measure  $2\frac{3}{8}'' \times 1''$   
No. 434 . . . Face Measure  $1\frac{1}{2}'' \times \frac{3}{4}''$



QUALITY HARDWARE FOR



NEARLY HALF A CENTURY

# ADAMS-RITE MANUFACTURING CO.

540 WEST CHEVY CHASE DRIVE, GLENDALE 4, CALIFORNIA, U. S. A.

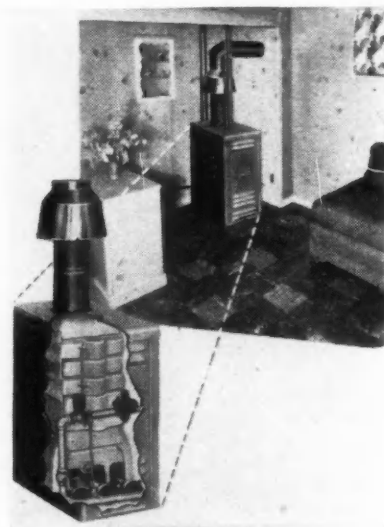
## NEW PRODUCTS

(Continued from page 134)

equipped with a molded-in washboard and a molded-in rear shelf for keeping soap within easy reach. It carries the trade name "Laundrette."

### GAS-FIRED HEATING PLANT AB9709

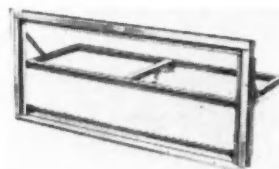
A small automatic gas-fired central heating plant for hot water heated homes with an unusually high BTU output is found in Hydrotherm, new product of Hook and Ackerman, Inc., 18 East 41st St., New York, N. Y. The compact absorption unit with its zig-zag flow of water through the horizontal sections prevents undesirable internal circulation



within the absorption unit. The water circuit generates a positive pressure which assures rapid and continuous circulation of hot water through the entire heating system. The heat transfer unit consists of deep ribbed, over-lapped and staggered horizontal sections which allow the heat transfer surface to be surrounded by the radiant flame. The unit is suitable for modern convector and panel heating systems in small homes, multiple family and apartment houses.

### STEEL BASEMENT WINDOW AB8714

The Kewanee Manufacturing Co., Kewanee, Ill., is marketing a steel basement window known as the Kewanee Master. Its outstanding feature is a friction supporting arm which allows the



window to be open anywhere from a tiny crack to 90 degrees without other support. This window is of tight-fitting construction with positive latch. Wide sills of one-piece specially formed steel provide drainage to the outside. Corners are welded to prevent leakage of rain.

(Continued to page 138)





## ARMSTRONG'S TEMSEAL SHEATHING SAVES TIME—CUTS WASTE

Here's a practical material that will speed construction—cut costs. Temseal Sheathing's convenient 2' x 8' size is just right for quick handling and easy installation. Its accurate dimensions assure a fast fit with minimum waste of material. Armstrong's Temseal is light in weight, yet so strong it adds strength to the building structure. And it does such a good job of insulating that it can often be used without any other insulating material.

Armstrong's Temseal Sheathing is a rigid, wood-fiber board, coated with asphalt and covered with heavy kraft paper. This paper blocks the passage of air and adds to the strength of the sheathing. The millions of tiny sealed air spaces in and be-

tween the fibers block the flow of heat and cold through the wall. The asphalt coating keeps out moisture and helps make Temseal highly resistant to dry rot, fungus, and vermin. Long edges are ship-lapped to assure a snug, secure fit.

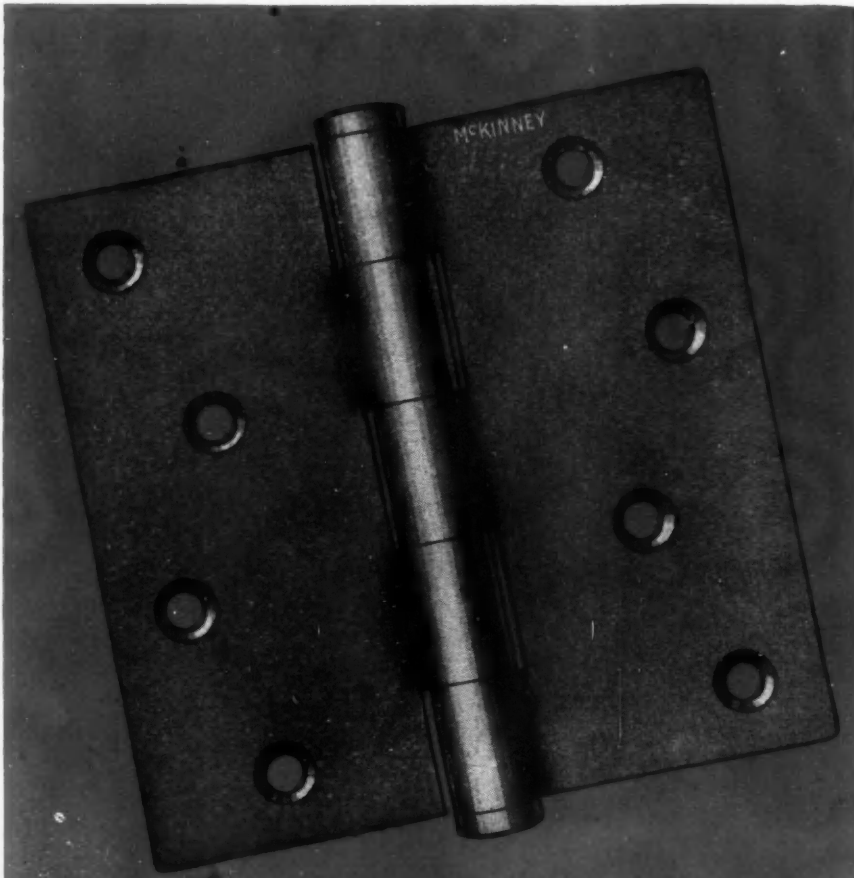
Temseal Sheathing is a member of the family of Armstrong's building materials. These include Temlok Insulating Panels and Planks, Temlok Insulation Board, Temlok Lath, Monowall, Insulating Wool, and Armstrong's Insulated Siding.

For complete details on all Armstrong building materials, ask your wholesaler, or write to Armstrong Cork Co., Building Materials Division, 1608 Ross Street, Lancaster, Pa.



TEMLOK, MONOWALL, AND TEMSEAL ARE REGISTERED TRADE-MARKS.

**ARMSTRONG'S BUILDING MATERIALS**  
 TEMLOK • INSULATING WOOL • MONOWALL • HARDBOARDS • INSULATED SIDING

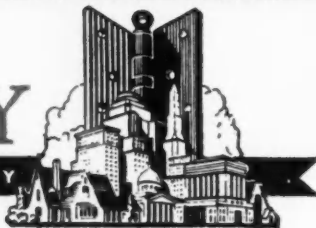


# BUTT HINGES

*Quality  
Hardware  
Since 1865*

**MCKINNEY**

MANUFACTURING COMPANY  
PITTSBURGH 12, PENNSYLVANIA

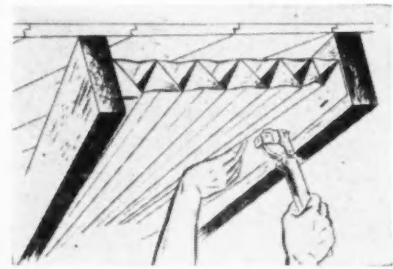


(Continued from page 136)

Fins on each side fit deeply into the masonry, making a complete weather-tight anchorage. The window cannot be opened from the outside. Screens and storm sash may be inserted or removed by means of spring plungers.

#### INFRA ACCORDION INSULATION AB8713

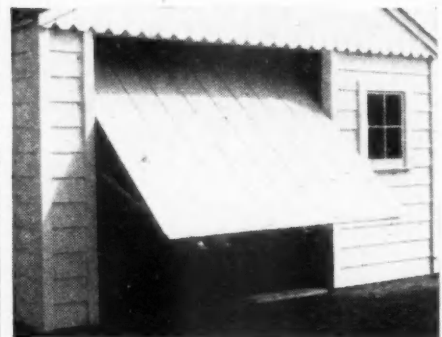
Following are some technical facts on Infra Accordion Insulation, new product of Infra Insulation Inc., 10 Murray St., New York, N. Y. Infra insulation is a reflective type consisting of triangular, reflective, non-conductive air cells enclosed in a double layer of thin aluminum foil. It has very little substance and this aids in lessening heat flow by conduction. Accordion type inner foundation and aluminum surfaces also block convection currents, and have



capacity to emit only 1/20th of heat rays. Due to the metallic surfaces, Infra Insulation creates a vapor barrier so effective that specifications state Infra to be impervious to water vapor. Its light weight of one ounce per square foot will not support sufficient exchange of heat to precipitate moisture, making condensation virtually impossible. Its light weight also eliminates the need for a supporting foundation. Infra Insulation is available in 16- and 24-inch widths.

#### ALL-STEEL GARAGE DOOR AB8716

An all steel receding-type garage door is being made by the Strand Building Products Co., 1818 Buhl Building, Detroit, 26, Mich. The door is built of galvanized zinc-coated rust-resisting steel electrically welded to a trussed steel frame. This sturdy frame prevents sagging or warping. Hard rubber



rollers on which the door moves result in silent operation. A turn of the handle and the door glides up and slides inside the garage. A slight pull on the release

(Continued to page 140)

# Get BETTER WORKMANSHIP with BRIXMENT!

No. 4 OF A SERIES—

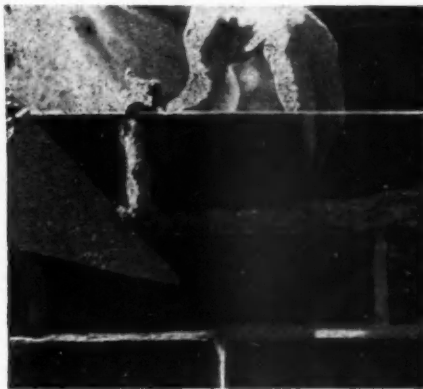
## THE RIGHT WAY AND THE WRONG WAY—IN HEADER COURSES



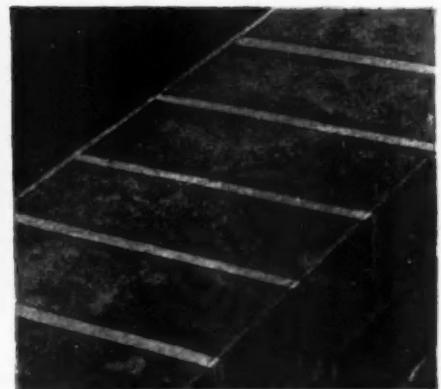
Mortar should be spread over the entire side of the header brick before it is placed on the wall.



To secure full header joints, mortar should be spread over the entire side of the header brick before it is placed in the wall.



The brick should be shoved into place so mortar oozes out at the top of the joint.



This completely fills the joint.

## BRIXMENT

is so workable, so plastic, that when the bricklayer pushes the brick into place, he does not have to *force* it home. The excess mortar "flows" readily into every part of the joint, thus providing good, full joints without requiring extra work or effort on the part of the bricklayer.

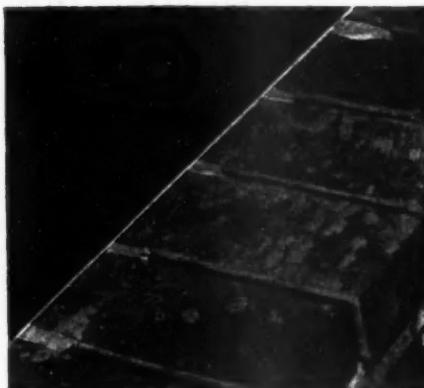
Aside from its greater plasticity, Brixment mortar has higher water-retaining capacity and bonding quality, greater resistance to freezing and thawing, and freedom from efflorescence. Because of this combination of advantages, Brixment is the leading masonry cement on the market.



When a dab of mortar is spotted on one corner of the brick,



A dab of mortar spotted on one corner (or both corners) of the brick cannot possibly fill the cross joint. Slushing will not fill the voids.



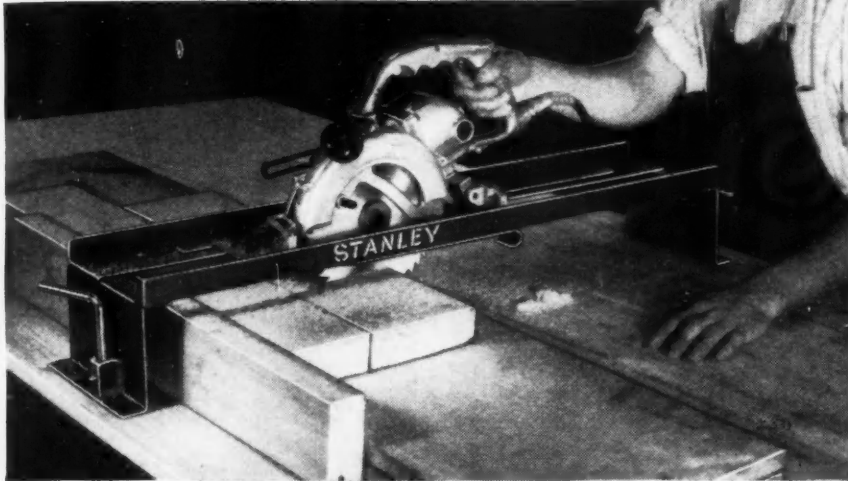
there is very little mortar in the cross joint.



Slushing will not fill the voids.

**LOUISVILLE CEMENT CO.**  
*Incorporated*  
**LOUISVILLE, KY.**

# New!



## HERE'S A REAL TIME-SAVER FOR YOUR STANLEY SAFETY SAW!

**Y**OUR PORTABLE SAW becomes a bench saw quickly and easily with this new Stanley No. 158 Saw Track. Made for use with the W7, W8 or W9 Stanley Safety Saw, the Stanley Saw Track is a real time-saver as a guide in making square, bevel and bevel mitre cuts, or cutting lumber to exact sizes. You no longer have to lay out and

mark each piece of lumber. Hours of lost time become real productive time. And when abrasive wheels are used, you can cut slate, marble and other hard materials. Get the full details on the labor-saving Stanley No. 158 Saw Track now. Ask your distributor, or write Stanley Electric Tools, 492 Myrtle Street, New Britain, Connecticut.

### How To Use The New Stanley Saw Frame

1. To set up Saw Frame, simply drill a  $\frac{3}{8}$ " hole in bench for locating pin. This is a pivot point, and with holes drilled for locating pin in opposite end of frame any desired angle can be laid out.
2. Block up board to be cut to desired height and install work stop.
3. Saw Guide is adjustable. Move in or out to suit width of the base of the saw.
4. Adjust guard trip plate to proper position.

# STANLEY

Trade Mark

HARDWARE · HAND TOOLS · ELECTRIC TOOLS

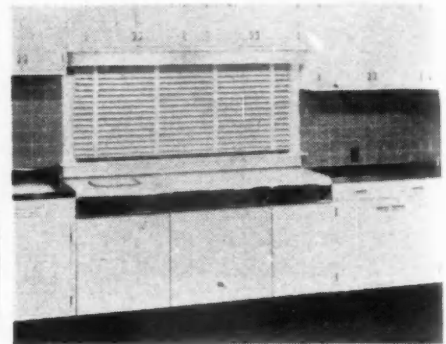
(Continued from page 138)

rope and the door closes. It is designed to fit a standard 8 x 7-foot garage opening and needs only  $1\frac{1}{2}$  inches of headroom. The heavy rust-resisting zinc-coating is an excellent priming coat for painting.

### PACKAGED LAUNDRY

AB8719

The first "packaged laundry" complete with electric washing machine, electric dryer, and electric ironer has been announced by the Blackstone Corp., Jamestown, N. Y. The units, which can be purchased separately, are of matching streamline design and can be installed side by side within a 72-inch space. Standard toe room is provided across



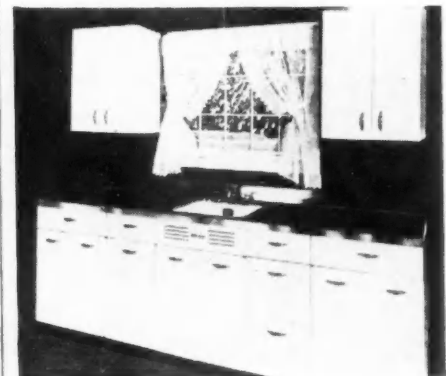
the entire front base of the unit. Built to the exact height and depth of standard kitchen cabinets, the appliances lend themselves to attractive utility room arrangements, using standard floor and wall cabinets. The model laundry shown is installed at the factory for the benefit of distributors and dealers.

### KITCHEN CABINETS

AB8710

In the steel kitchen cabinet field, the Midwest Mfg. Co., Galesburg, Ill., offers the Kitchen-Kraft Kitchens, a line of semi-custom and package kitchens, and the Blackhawk Cabinets, a line of portable steel kitchen cabinets.

The package kitchen cabinets are completely enclosed on back and sides and

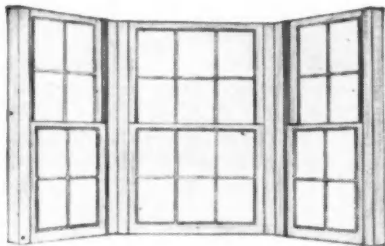


feature roller bearing drawers; adjustable shelves; recessed toe space on floor cabinets; stainless steel back-splashes and counter trims, and acid resistant sink bowls. Their finish is baked-enamel on bonderized steel. The line includes single and double bowl sinks of porcelain and stainless steel.

(Continued to page 142)



## No Need to Skimp on Sunshine!



Attractive bays need not be expensive when made of stock design Ponderosa Pine windows. In the bay shown above, three Ponderosa Pine double hung units were used to create an effect of lightness and grace. Note also the Ponderosa Pine French doors. Ponderosa Pine doors and windows are made in a wide variety of styles . . . and accurately made stock frames help assure proper installation.

Sunny interiors with plenty of windows are the dream of planner and owner alike. And no icy hand of budget limitations need shatter that dream if you choose stock-design Ponderosa Pine windows! Precision built, these windows embody high quality and low cost.

Ponderosa Pine, an ideal material for windows, is friendly to the owner's pocketbook. The grain of this wood is close, uniform and resists raising. Its surface is even textured, sands to a satin-smooth finish to take and hold paint, enamel, stains and varnish. Remember, too, that wood is a natural insulating material and does not readily transmit heat or cold.

Dozens of photographs showing uses of Ponderosa Pine windows and doors are contained in "Today's Idea House," 32-page booklet. You will want a copy for your file—just mail the coupon.

*For Friendly Living . . .*  
**Ponderosa Pine**  
**WOODWORK**



Ponderosa Pine Woodwork  
 Dept. PAB-8, 111 West Washington Street  
 Chicago 2, Illinois

Please send me a free copy of "Today's Idea House."

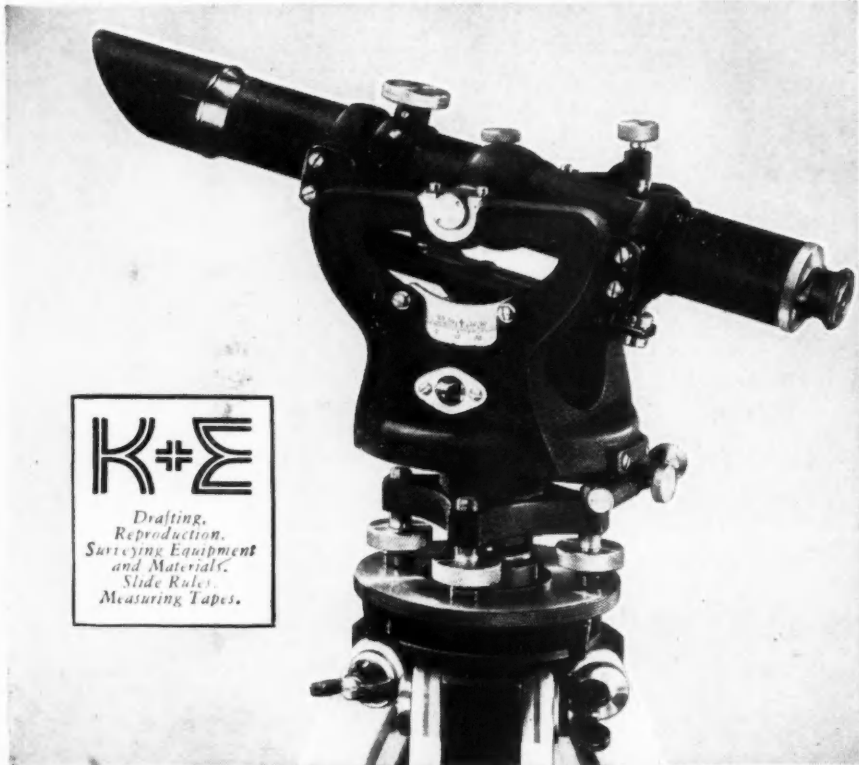
Name .....

(Please Print)

Address .....

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

**SAVES YOU TIME AND MONEY...**  
**SIMPLE TO USE...**  
**BUILT FOR YEARS OF RUGGED SERVICE...**



**A** K&E BUILDERS' TRANSIT-LEVEL cuts out old fashioned, time-taking methods and streamlines the work. For instance, chalk line, line level, plumb bob and tape—those old "trusties" have gone on and on since "the days when." But they mean that your building mechanics must be constantly stopping. Time is lost from laying bricks, setting steel, carpentering—the jobs your men are hired to do.

So simple that any intelligent man can use them, these instruments are built for years of rugged service, yet they retain their accuracy. Their quality is guaranteed by the K&E reputation and experience of 80 years of making equipment and materials for the engineers of America.

For details of the No. 5155 K&E BUILDERS' TRANSIT-LEVEL (a transit and a level in one instrument), the No. 5153 K&E BUILDERS' LEVEL, K&E Leveling Rods, WYTEFACE\* Steel Tapes, K&E Slide Rules or other K&E equipment of service to builders and contractors, write to your nearest K&E Distributor or to Keuffel & Esser Co., Hoboken, N. J.

\* Trademark

**K+E BUILDERS' TRANSIT LEVEL**

**KEUFFEL & ESSER CO.**

EST. 1867

NEW YORK • HOBOKEN, N. J.

CHICAGO • ST. LOUIS • DETROIT • SAN FRANCISCO

LOS ANGELES • MONTREAL

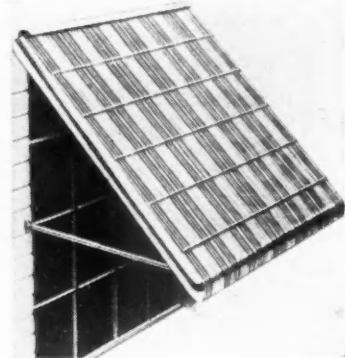
*American Builder, August 1947.*

(Continued from page 140)

The portable cabinets are of all steel construction except the counter-top sub-bases. They have sound insulated doors; acid resistant porcelain counter tops; friction slide drawers; plastic handles with chrome stripes; spring-type door catch and leaf-type hinges. They are bonderized with Dupont Dulux baked-on enamel finish. The tops of all cabinets are flush and the bottoms of wall cabinets are double and flush. The line includes 54 inch sink cabinets, 18 inch floor and wall cabinets, and 24 inch floor and wall cabinets.

**STAINLESS STEEL AWNINGS AB8718**

The Perma-Steel Corp., 2025 Fenkell Ave., Detroit, Mich., manufacture an awning completely fabricated of rustless, stainless steel, permanently spot welded and trimmed in a choice of ten colors. Construction is of tubular-strut type, as in aircraft design, allowing light weight and ample rigidity to withstand wind



drag or heavy loading of ice or snow. The awning cannot leak as each strut serves as a miniature rainspout and the hanger strip is permanently anchored and caulked to the building. Constructed to give plenty of ventilation, the awning does not trap static heat against the window, is fireproof, and requires little care.

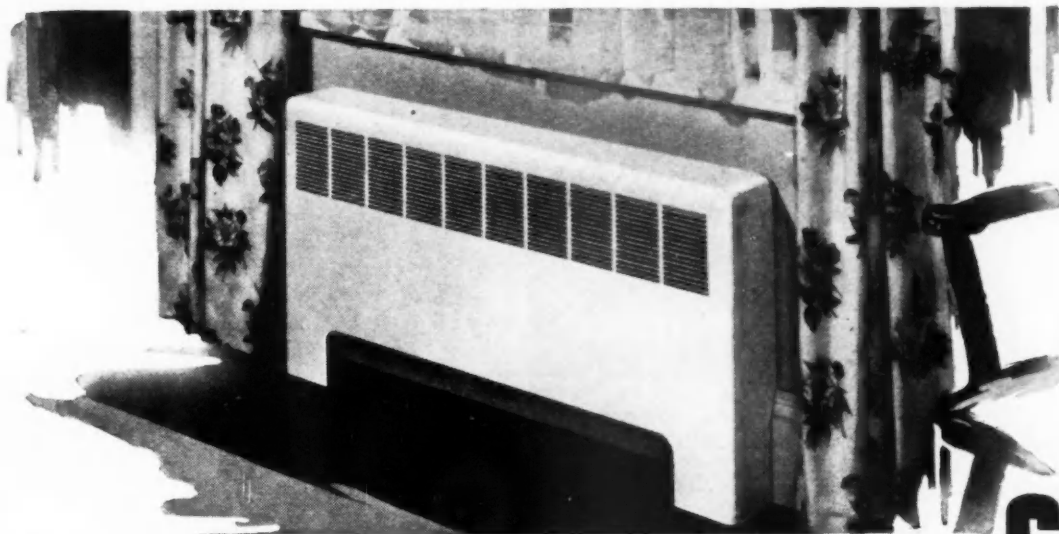
**PAINT VARNISH SOFTENER AB8702**

A solvent named Pa'So with over 100 uses is being marketed by the Charles Paint Research Co., Kansas City, Mo. Developed after many years of effort to accomplish certain definite results, Pa'So penetrates and softens a coating so it will sandpaper easily; removes wax glazes on plaster or furniture, paint from clothing and shoes, and decalcomania designs. It will also bleach spots on furniture, floors, and woodwork. This solvent is not messy and does not injure hands or lift old enamels. Another popular use is as a part thinner in under-coats and flat wall paints for better coverage and adhesion over hard, glossy or sticky coated surfaces.

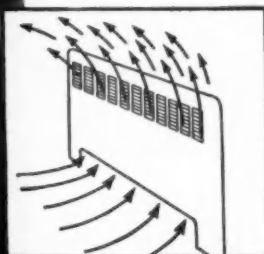
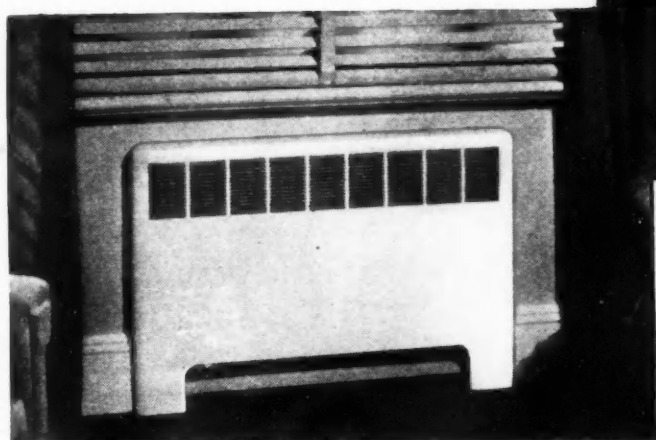
**GARAGE DOOR OPENER AB8704**

The latest automatic garage door opener operates on inaudible sound. It consists of a tiny whistle attached to the windshield wiper hose and operated by a button on the dash, a tiny microphone

(Continued to page 144)



THERE'S A REASON WHY HOME OWNERS APPROVE



Furnishings by Peck & Hills

T&B Convectors, designed for chimney-effect action, assure proper air circulation, more comfortable rooms. Cool air enters at base . . . passes through heating element . . . leaves by grille as heated air.

*\*We mean Convection Heating*

Performance . . . appearance! Two customer demands that determine satisfaction with heat distribution systems. And these are the factors that have "sold" more and more prospective home owners on heat by convection, Tuttle & Bailey Convectors. They have found by experience that—on both counts—T&B units will meet even their most exacting requirements, better.

Here are a few of the performance statistics that have impressed home-owners, that will interest prospects in the planning stage. Start with the principle of convection heating as provided by Tuttle & Bailey Convectors. It means transference

of heat by circulation . . . even, more comfortable room temperatures.

Tuttle & Bailey heating elements—constructed entirely of copper—mean faster response to thermostat control, quicker transmission of heat from fuel to rooms, fuel cost savings.

Appearance—the second important consideration in selecting heat distribution equipment—is another Tuttle & Bailey "first." Neat, trim units harmonize with the most modern home furnishings. Space-saving recessed type, *exclusively designed for recessed installation*, provides front panel plaster overlap feature.

These are important facts. It will pay you to keep them in mind when your customers ask advice.

TUTTLE & BAILEY



*Standardized* COPPER CONVECTORS

ASK YOUR JOBBER TODAY

For detailed facts that will aid specifying and installing Tuttle & Bailey Convectors, send for a copy of Catalog C6R. WRITE . . . Tuttle & Bailey, Inc., New Britain, Conn.

# Fyro-Place

THE *New AND Better* Circulating Fireplace Unit

*Developed out of 20 years experience*

For nearly 20 years our top officials, Price and Walters, have pioneered and improved fireplace units. Out of their experience has come Fyro-Place, the "last word" in a circulating fireplace unit.

### OUTSTANDING FYRO-PLACE IMPROVEMENTS

Fyro-Place multiplies the heating value of the fireplaces you build, provides faultless operation, without detracting from beauty and atmosphere. The home owner gets a more valuable and *liveable* home. You save time and money. Investigate the

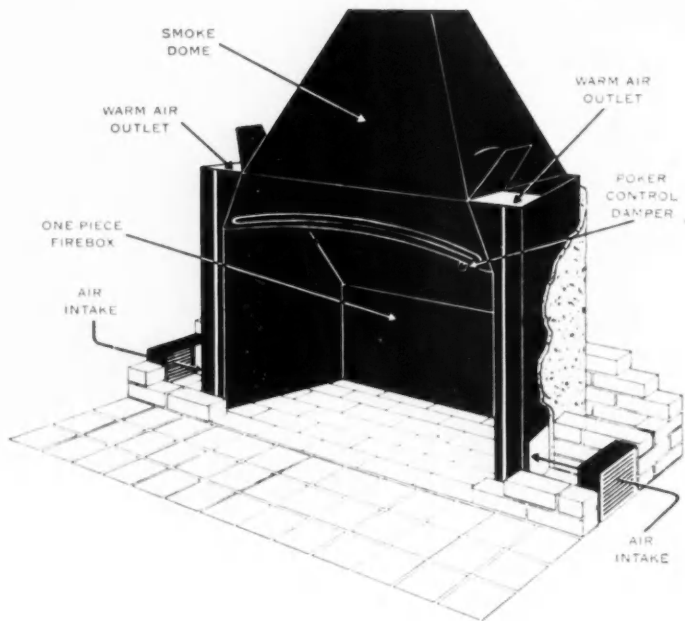
- Increased volume of warm air due to larger air outlets—no obstructions.
- Improved draft due to streamlined fire box and smoke dome.
- No obstructions in smoke dome means free passage of smoke—no eddies.
- No troubles with damper—simple open or shut, poker operated, construction.
- Insulating and expansion cushion provided by rock wool blanket supplied with each Fyro-Place.
- Tight-fitting damper—no warm air leakage when fireplace is not operating.



**F. E. PRICE**  
—former Treasurer and General Manager of Heatilator, Inc., now President, Price Fireplace Heater & Tank Corp.



**H. H. WALTERS**  
—former Chief Engineer Heatilator, Inc. Circulating fireplace inventor. Our Vice President.



**Sold through your building supply dealer  
WRITE US TODAY FOR FULL INFORMATION**

**PRICE FIREPLACE HEATER & TANK CORP.**  
2 Austin Street Buffalo 7, New York

(Continued from page 142)

protected from the elements by a specially constructed body and attached above the garage doors, and a wire run inside the garage to a control box mounted on a rafter. At the touch of the button a whistle pitched so high it cannot be detected by human ears is picked up by the microphone and relayed to the sound control box. There, a five tube amplifier adjusted to the particular Silent Whistle actuates the controls. A switch is automatically thrown that opens garage doors and will operate floodlights as well if installed. The manufacturer is the Vendo Company, 7400 E. 12th St., Kansas City 3, Mo.

### BRICK GENERATING MACHINE AB8717

Brickmaster, Inc., 115 Broadway New York, N. Y., has a brick generating machine which will produce up to 6,000 standard size building bricks per hour. The bricks are formed six at one time every 3½ seconds on a continuous conveyor in single, or multiple or plain slabs. Many inexpensive local materials



may be used in their manufacture such as slag from foundries, ore, sand, crushed stone, cinders, volcanic ash and other plentiful or waste materials. The Brickmaster is built of welded steel construction with special heavy duty bronze bearings. It can be installed in two hours, is readily moved about and is adapted to the production line of any concrete plant. Weight: 3,600 pounds.

### ALUMINUM NAILS AB8715

Aluminum nails and staples are now available from the Nichols Wire and Steel Co., Davenport, Ia. Developed after exhaustive field tests, the nails are found to have great holding power because in manufacture the nail surface is etched to remove all traces of grease and oil. They cannot rust or oxidize and have no protective coating that can be knocked off by hammer blows. This is also true of the aluminum staples.

These nails can be used in applying wood siding, asbestos shingles and siding, batten, plaster board, wood shingles, aluminum and asphalt roofing, or for any job in which steel nails and staples are used, and in the same types and sizes.

Common aluminum nails are available  
(Continued to page 146)





*Asbestos in Action*

**4 BIG advantages of**  
 **APAC**  
**ASBESTOS-CEMENT SHEETS**

Apac never needs protective painting, but the owner of this attractive service station painted it green and white with outstanding decorative results.

**1.** You'll find "Century" Apac sheathing is easy to use and apply. With Apac you save cutting time—just score it and snap off. You can lay up its 4' x 8' sheets 32 sq. ft. at a time, fasten them with nails or screws.

**2.** Being made of asbestos and Portland cement, Apac sheets are completely fire-proof, rot-proof, rust-proof, weather-proof. They grow tougher with age.

**3.** Because of Apac's smooth finish and pleasing light gray color, your finished job will be neat and attractive. And Apac never needs painting, though you *can* paint it when desirable for decorative reasons.

**4.** Best of all, you make a good profit on an Apac job... thanks to Apac's ready workability and surprisingly low cost.



Why not look further into the possibilities of this versatile asbestos-cement material? See your K&M dealer about Apac, or write direct to us.

Original manufacturers of asbestos-cement roofing shingles in this country.

**KEASBEY & MATTISON**  
**COMPANY • AMBLER • PENNSYLVANIA**

**Mr. Builder!**

of Today's Small Homes  
Use **ORNAMENTAL IRON**  
for **EXTRA VALUE**

INTRODUCING the new **PORCH POST**  
design series, No. 100.



Number 100 Wrought Iron PORCH POSTS are available in stock weights 70", 76" and 80". Low cost 3/4 sq. corner bars, hand forged graceful scroll work design, from 1/2 stock. Exclusive loose-foot anchor-plate design saves installation time and permits variation of Post height.

• Coffman wrought iron PORCH POSTS are low in cost. They add beauty to any small home—and extra dollars sales value. Use Coffman wrought iron PORCH POSTS for porches, under canopies, or along breezeways, wherever you need a post. They are designed for today's small homes and fast modern building methods.

• Whether you build in a small village or large city you can have Coffman ornamental iron easily, because it is sold by any lumber or building supply dealer.

• With the catalogue of stock sizes and designs you can plan in advance, know your costs and save time and money. Write for your copy.

The Builders Line Includes:

- CANOPY BRACKETS
- SCREEN DOOR GRILLES
- PORCH & BALCONY POSTS
- SILHOUETTE HOUSE NUMBERS
- RAILINGS—STOOP, PORCH & BALCONY
- FOUNDATION ACCESS DOOR

Manufactured by  
**The R. G. COFFMAN CO., INC.**  
Orlando, Florida since 1925

**SOLD by LUMBER and  
BUILDING SUPPLY DEALERS**

Write for catalogue of **DESIGNS, SIZES  
& PRICES TO:**

**WOODA B. ELLIOTT**  
Winter Park, Florida  
MANUFACTURERS' SELLING AGENT

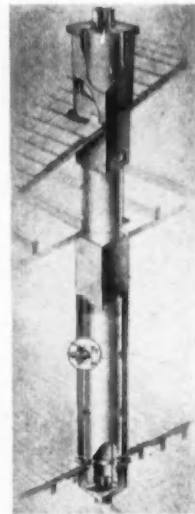
(Continued from page 144)

in sizes 3d to 40d. Aluminum staples are available in 9 ga., 1 inch and 1 1/4 inch sizes. Roofing nails come in sizes 1 inch to 2 1/2 inch with 7/16 inch head. There are also specific shingle nails, box nails, plaster board nails, asbestos shingle and siding nails. The Nichols Wire & Steel Co., Davenport, Ia., will send free samples upon request.

**READY-MADE FLUE**

AB8712

New adjunct to the line of prefabricated building products is a tile-lined masonry flue intended for use in dwellings employing coal, wood, oil, or gas as cooking and heating fuel. The flue comprises a chimney tile liner, surrounded by a 3-inch thick wall of masonry-type proprietary insulation, reinforced by an expanded metal external binder. It is made up in precast circular sections 2 feet or less in length. The sections are ground smooth and the joint between sections sealed with high-temperature chimney cement. Adjoining sections are clamped together with heavy brass clamps locked into steel reinforcing and drawn tight with bolts. The flue

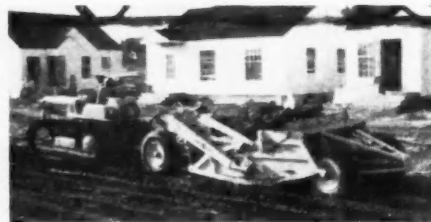


may be enclosed by a thick plasterboard having not less than 2 inch clearance from the flue. It is designed for use in one and two story houses and requires three to four man hours to install. The manufacturer is the Van-Packer Corp., 135 S. LaSalle St., Chicago 3, Ill.

**FOUR-YARD SCRAPER**

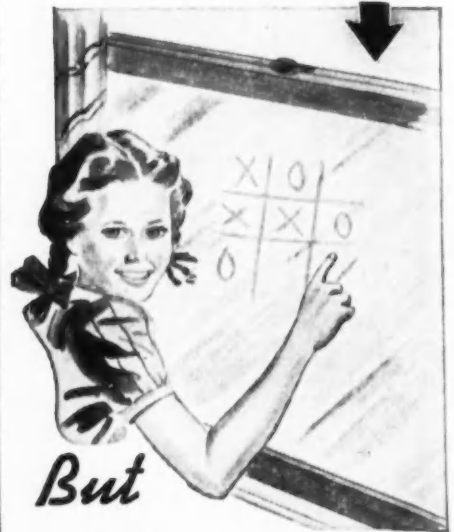
AB8708

Especially suited for digging basements, grading, light filling and building driveways is the four-cubic yard capacity scraper recently developed by the La-Plante Choate Manufacturing Company, Inc., Cedar Rapids, Iowa. Fitted for use with either crawler or high-speed



rubber tired tractors, this scraper features a new combination of hydraulic and cable operation. It is the forced ejection and front dump type, the rear gate moving forward and positively ejecting the entire load. Hydraulic operation enables a powerful down pressure to be exerted on the cutting edge, positive locking of the bowl in any position, and controlled spreading depth with proper lift and carry.

**VAPOR Condensation  
Child's Play Here**



*But*

**A 4-way Evil  
Within Walls**

Moisture condensation on windows may be "child's play," but it can cause these costly evils within walls:

1. Soggy, inefficient insulation
2. wall staining
3. paint peeling
4. structure rot

A sure way to lick this 4-way evil of "in-wall" condensation is with a separate vapor barrier. Standard with architects everywhere is Bird Neponset Black Vapor Barrier. Applied on the warm side of insulation, Bird Neponset Black Vapor Barrier, keeps insulation at peak efficiency, ends the other "in-wall" evils. Low cost—only about \$20 to protect a \$10,000 building. See Sweet's Architectural file, 9b-2. For sample, write Bird & Son, inc., 172 Wash. St., East Walpole, Mass.



Specifications: roll width: 36"; Sq. feet: 500; approximate wt.: 50 lbs. Asphalt Saturated. Coated both sides with glossy asphalt surface. Meets Federal Specifications UU-P-536 Grade B.

**BIRD NEPONSET BLACK  
VAPOR BARRIER**  
BIRD & SON inc., E. WALPOLE, MASS.  
CHICAGO NEW YORK SHREVEPORT

# Practical Builders

USE...  
THE NEW

## SAFWAY SINGLE-POLE all steel SCAFFOLDING



● Safway Single-Pole, All-Steel Scaffolding offers many advantages over conventional wooden types . . . it's lighter; will not crack, splinter or wear-out; is easier and faster to erect; pays for its low initial cost in no time. You will benefit by investigating Safway Single-Pole Scaffolding, at once.

Get All The Details FREE . . .

. . . by writing to Safway, Dept. AB8, today.



Distributors in Principal Cities



**SAFWAY STEEL PRODUCTS, INC.**  
MANUFACTURERS OF TUBULAR STEEL SCAFFOLDING AND EQUIPMENT

6218 WEST STATE STREET, MILWAUKEE 13, WISCONSIN

## Automatic CONTROLS...

# Buy the Package

**GENERAL CONTROLS** presents four of their convenient packaged sets for compact inventory and simple installation. Here are four of many precision built, field proved package sets most frequently desired by gas heating contractors and engineers. Buyers can select complete sets in compact cartons; each set includes essential units required. Get improved performance at lower costs through **ENGINEERED** adaptability.

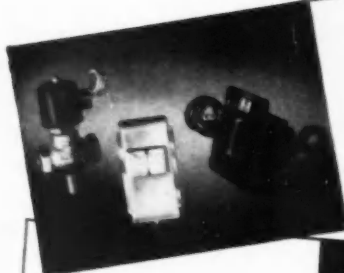
### T-90 STANDARD THERMOMETER SET

Set combines improved B-60 gas valve, flush mounting Thermometer Thermostat and Pilot Generator. Positive remote temperature control for gas-fired furnaces.



### T-30 GAS HEATING SET

This set includes silent K-38 two-wire gas valve, T-70 two-wire metrotherm, and 115-24 volt transformer. Ideally adaptable to gas-fired boilers, wall and floor furnaces, conversion burners and warm air furnaces.



### BX-230 STANDARD THERMOSTAT SET

BX-230 includes B-60-6B diaphragm gas valve, PG-6 Pilot Generator, and T-80-4 Thermometer type Thermostat with night cut-off. For wall and floor furnaces, circulators, etc.



### T-40 GAS HEATING SET

This set includes two stage Thermostat, dual solenoid valve and Transformer. Provides fully automatic, hi-low firing, maintaining ideal temperature control and lower fuel cost.



For complete specifications covering the **GENERAL CONTROLS** broad line of *Automatic Pressure, Temperature and Flow Controls* see the new 1946 Catalog 52C. For Gas Heating Controls, request Service and Instruction Manuals.

## GENERAL CONTROLS

507 ALLEN AVENUE, BLENDALE, FLA., U.S.A.

Manufacturers of Automatic, Pressure, Temperature & Flow Controls

FACTORY BRANCHES: PHILADELPHIA • ATLANTA • BOSTON • CHICAGO • DALLAS  
SAN ANTONIO • NEW YORK • DENVER • DETROIT • CLEVELAND • PITTSBURGH  
INDIANAPOLIS • SEATTLE • SAN FRANCISCO • DISTRIBUTORS IN PRINCIPAL CITIES



# Home Builders Prefer Certified\* INSL-COTTON Insulation and HERE'S WHY

**FLAME-PROOF AND FIRE-RETARDING**—You just can't ignite Insl-Cotton, even with a blow-torch at 1800°F!

**MOST EFFICIENT**—Government tests have shown that no other type insulation can match the 0.24 "K" value of Insl-Cotton!

**MOISTURE and VERMIN PROOF**—Impervious to moisture and non-absorbent, Insl-Cotton also is treated to make it insect and rodent repellent!

**CLEAN and SAFE TO HANDLE**—Perfectly clean and borated, Insl-Cotton carries no germs—and contains no shot, silica or other irritating matter!

**LIGHT and EASY TO INSTALL**—Weighing less than a pound per cubic foot, Insl-Cotton can be handled and installed by one man... without special tools!

**INSULATION VALUE OF VARIOUS INSULATIONS**

Type of Insulation—	Pounds per cu. ft.	"K" Factor
Cotton: Insulating Batt . . .	.875	0.242
Rock Wool: Fibrous material made from rock .	10.00	0.268
Glass Wool: Fibrous material made from glass slag . . . . .	1.50	0.270
Rigid Insulation made from sugar cane fibre . . . . .	13.50	0.330
Chemically treated wood fibre between layers of paper . . . . .	3.62	0.270
Eel grass between layers of paper . . . . .	3.40	0.250
Stitched and creped expanding fibrous blanket .	1.50	0.270
Shavings: Various from planer . . . . .	8.80	0.410
Corkboard: No binder added . . . . .	7.00	0.270
Rigid Insulation made from wood fibre . . . . .	15.90	0.330
Rigid Fibre Board made from shredded wood and cement . . . . .	24.20	0.460

**INSL-COTTON DIVISION**  
TAYLOR BEDDING MFG. CO.  
TAYLOR, TEXAS  
The Originators of Flame-Proof, Fire-Retarding Cotton Insulation

\* *Certified*—made under Government supervision, Insl-Cotton is inspected and certified flame-proof and fire-resistant. No other type of insulation can make this claim!

**TAYLOR MADE INSL-COTTON**

**MAIL THIS ORDER COUPON TODAY**

INSL-COTTON DIVISION  
Taylor Bedding Mfg. Co., Taylor, Texas

Gentlemen:  
Please send specifications and full information on INSL-COTTON.

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

Check Here:  Distributorship  Architect  Contractor

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

## Catalogs and HOW-TO-DO-IT INFORMATION

**341—HEAT YOUR HOME WITH YOUR FIREPLACE**—the title of a 12-page booklet, describes and illustrates how the Heart-Heat, a system of heat chambers which function as a small warm air furnace, is built around and behind a fireplace without altering its appearance. Copies are available from Carey Associated Industries, 818 E. Water St., Syracuse, N.Y.

**342—GENERAL PLUMBING CODE REQUIREMENTS**—is the topical title of a 16-page booklet prepared for dealers by Mullins Manufacturing Corp., Warren, Ohio. The importance of kitchen sink plumbing units, the reasons for plumbing codes, and plumbing terms a dealer should know are discussed, illustrated with sketches of Kitchenaiders showing plumbing connections.

**343—COPPER CONVECTORS**—by Tuttle & Bailey, Inc., New Britain, Conn., is the subject of their new catalog No. X C6R. The book tells the story of heat transference by convection; shows photos of installations, and gives mechanical details illustrated with line drawings of the type convectors available.

**344—FARM AID**—a new booklet released by The Barrett Division, Allied Chemical & Dye Corp., 40 Rector St., New York 6, N.Y., contains many helpful ideas and specific "how-to-do-it" tips on modern farm maintenance and improvement in 24 profusely illustrated pages.

**345—MARSH WALL 1947 CATALOG**—in 8 pages presents illustrations and information on the company's complete line of panelings, mouldings, and bathroom accessories. Installation instructions are illustrated by a series of sketches and brief descriptive copy. For copies write Marsh Wall Products, Inc., Dover, Ohio.

**346—WINTER AIR CONDITIONING**—in the small home through installation of an "Oil Economy" unit is the subject of a 4-page pamphlet prepared by International Heater Co., Utica, N.Y. Illustrations show the special working parts of the unit—a blower, top mounted motor and filters—in position. "Oil Economy" is available in two models.

**347—ELECTRIC WATER HEATERS**—round, square, or table-top are described and pictured in pamphlets available from M. M. Hedges Manufacturing Co., Chattanooga, Tenn. The size and capacities of the different styles together with installation instructions make up the balance of the folders.

**348—BUILDING SAVERS**—from floor treatments to roof coatings are covered in a 16-page catalog released by the Building Products Division of L. Sonneborn Sons, Inc., New York 16, N.Y. Designed to help maintenance engineers, contractors, and builders in product selection, the catalog gives coverage figures, packaging data and a few application suggestions.

**SERVICE COUPON—CLIP and MAIL to CHICAGO**

Readers Service Department (August 1947)  
American Builder,  
105 W. Adams St., Chicago 3, Ill.

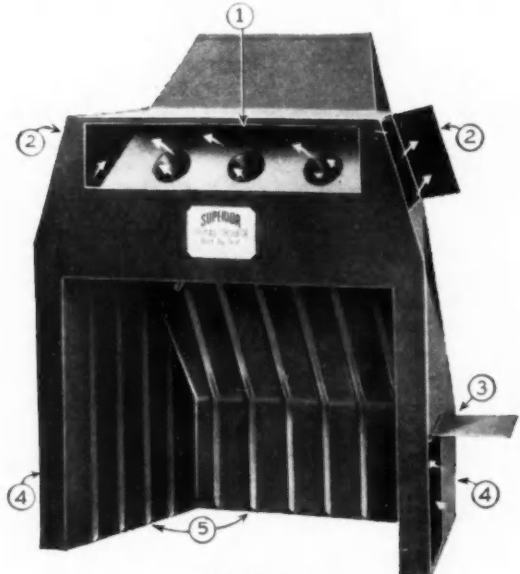
Please send me additional information on the following product items, or the catalogs, listed in this department:

Numbers \_\_\_\_\_  
Name \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

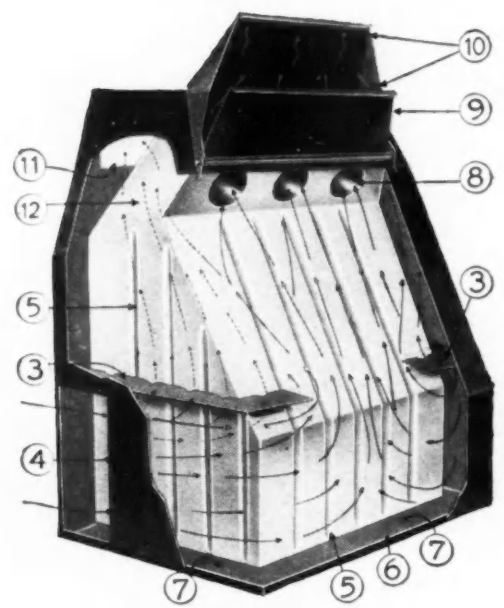
OCCUPATION\* \_\_\_\_\_  
\*Please note that occupation must be stated if full service is to be given.

# HEATFORM

*The Superior Heat*  
**Circulating Fireplace**  
—still selling at pre-war prices



FRONT VIEW



REAR AND SIDE VIEW

with outer wall removed. Arrows show contact of air to all heating surfaces.

## the HEATFORM

- delivers more heat and
- gives more years of service than any other fireplace.

### Why Do HEATFORMS Produce More Heat?

- The HEATFORM has more heating surface per size unit because the air contacts the hot metal of the firebox, upper front and side walls of the throat, and also the heating surface of the round air passages through the throat.
- The HEATFORM gives greater volume of warm air circulation because of larger heating chambers, larger air inlet and outlet capacity.
- The HEATFORM has no dead air pockets because the lower and upper heating chambers are connected at each end of and directly through the throat, which increases the volume and velocity of air circulation.
- The HEATFORM is so designed to force the larger volume of cool air intake over the hottest of the metal, which is the lower sloping back wall of the firebox, and the heating surface through and around the throat. This is where 90% of the heat is generated.

### Why Do HEATFORMS give more years of service?

- The ribbed construction of the firebox adds strength and controls warpage. The ribs do not stretch the boiler plate metal because they are individually die formed. The connecting round air passages add strength to the construction of the throat and prevent it from sagging and interfering with the operation of the damper.
- The HEATFORM is designed to prevent the metal from reaching deteriorating temperatures because the multiple air passages through and around the throat provide for a larger volume of air to pass over the hot metal thus removing the heat faster.
- There are no exposed metal parts beneath the chimney to rust out. The rear outside lining slopes forward and is covered with masonry, forming a downdraft or smoke shelf.
- Proved by 26 years of use in homes all over America.

### Key to Illustrations

1. Front warm air outlet, showing air flues and side air passages connecting lower and upper heating chambers.
2. Side warm air outlets.
3. Horizontal baffle plates which direct a large volume of air intake to the lower rear heating chamber and over the hottest of the metal.
4. Large air inlets at floor level.
5. Ribs individually die formed into the boiler plate metal.
6. Location of rear cool air inlet.
7. Bottom view of air heating chambers.
8. Superheating connecting round air passages through the throat.
9. Heat control damper, has underslung poker friction control to regulate draft.
10. Smoke dome.
11. Side air passages from lower to upper heating chamber.
12. Inner lining of the throat.

BUILDING MATERIAL DEALERS WRITE FOR COMPLETE INFORMATION AND NAME OF DISTRIBUTOR NEAREST YOU.

## SUPERIOR FIREPLACE COMPANY

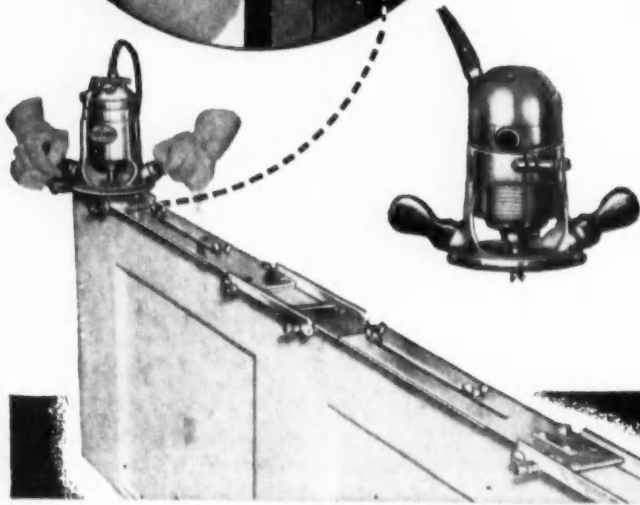
1708 East 15th Street

Los Angeles 21, Calif.

—also manufacturers of form and blade dampers, fuel grates, ash dumps, cleanout doors, and drape screens.

# CUT BUTT MORTISES

## 6 times faster... 100% accurate



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

Depth of cut adjusted by turning motor in base . . . one turn for  $\frac{1}{16}$ " , half turn for  $\frac{1}{32}$ " and quarter turn for  $\frac{1}{64}$ ". Templet fits any size door and reverses to fit jamb.

There's extra money for you in this Stanley-Carter Hinge Butt Equipment. Write today for complete information. Stanley Electric Tools, Stanley-Carter Sales Dept., 534 Myrtle Street, New Britain, Connecticut.

**CARTER STANLEY TOOLS**

"Beautiful!"

MEANS MORE SALES  
AND MORE PROFITS!!

Beauty, Permanence, Economy—all packed together to provide America's finest wall and ceiling coverings—that's Miracle Walls by TYLAC. Eighteen beautiful colors, four lovely patterns provide endless fascinating and delightful combinations. Resists household acids, fats, oils, fruit juices, alcohol or boiling water. Won't crack, craze or chip. Easy to clean—just use a damp cloth. Ideal for kitchen, bathroom, playroom, powder-room. There's a big sales field in stores, offices, night clubs, taverns, restaurants and hospitals.

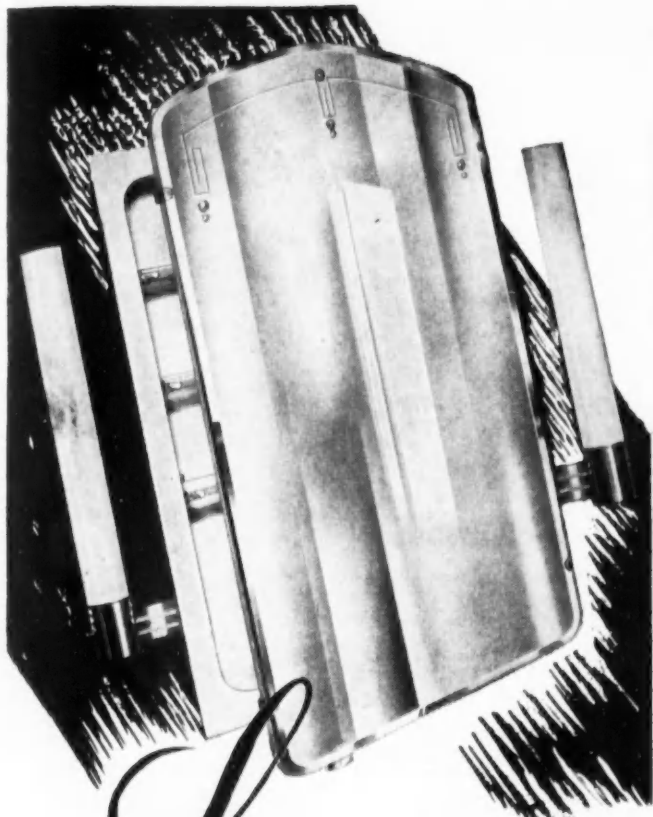
TYLAC quality and combination range build greater sales and profits for wholesaler and dealer alike. TYLAC is the line of least resistance.

We have for immediate shipment—TYLAC Metal Mouldings, TYLAC Adhesive Cement, TYLAC Wax Base Wall Polish and other accessories. Write today for price and discount sheet.



**TYLAC COMPANY**  
MONTICELLO, ILLINOIS

PIONEERS IN THE PREFABRICATED WALL PANEL INDUSTRY



*Lawson* **LEADS AGAIN!**

**I**N smart styling, distinctive beauty and top values, the No. 3000 line of Lawson Bathroom Cabinets is outstanding. Check the many important features.

- Seamless one-piece drawn steel body, rust-resistant—finished in High Lustre Baked Enamel.
- First-quality copper sealed plate glass mirror.
- Easy-to-clean, rounded inside corners.
- Square outside corners, with 7/8" return flange, make it easy to set cabinet in tile.
- Adjustable stainless steel shelf supports.
- Shock-absorbing bar-and-spring door stop.
- Removable stainless steel razor blade box.
- Full-length chromium-plated brass piano hinge.
- Bullet catch door.
- Patented "Jiffy" ratchet stainless steel mirror clips on models with frameless mirrors.

Write for Complete Catalog on  
Lawson Bathroom Cabinets and Accessories

**WORLD'S LARGEST  
BUILDERS OF  
BATHROOM CABINETS**  
THE F. H. LAWSON CO.  
801 EVANS ST.  
CINCINNATI 4, OHIO



## SAVE CUTTING DAYS 3 WAYS

Using **VERSATILE FRED W. WAPPAT**  
**ELECTRIC  
HAND SAWS**

**PRACTICAL DESIGN.** Fred W. Wappat saws are over-powered for fast cutting, yet give thorough operator protection. Their light weight, even balance permit fatigue-free one hand operation—more of the awkward cutting jobs are done quickly. Blower keeps cutting line always visible at the blade, sawdust being kept from operator's eyes by a guard—cuts can always be accurate to the layout and the job done right the first time. Both models feature the famous Fred W. Wappat telescoping blade guard.

**MANY USES ON THE JOB.** Fred W. Wappat saws operate perfectly in any position, save time by trimming wall or roof sheathing already in place. They can be hung upside down for ripping or, fitted with suitable blades, can cut light gauge metals, stone, brick, tile, cement block, etc.—no need to take the tough or unusual cutting jobs away from the scene of the work.

**DEPENDABLE—DAY IN, DAY OUT.** Off-the-work repair time and general maintenance is minimized. The special Fred W. Wappat-designed gears are produced under rigid standards. Permanently-lubricated motors are kept cool-running by turbine-driven air currents. All mechanical parts are easily accessible, are lubricated from a single point. Write today for free literature. And if you have a chance, talk to a user of Fred W. Wappat Electric Hand Saws.

High-Speed Portable Electric Tools • Radial Guides • Service and Parts for Wappat and Alfa Tools  
**FRED W. WAPPAT • 135 Valley St. • MAYVILLE, N.Y.**  
On Chautauqua Lake

# "Can I Afford Them\*?"



asks

**Mrs. D. MacDuncan**

who wants the best in window hardware . . . IF it fits her budget

**134,445,000 modern-minded people share her interest**

Grand Rapids Invisible Sash Balances are sold monthly to the readers of these magazines . . . the bulk of the home-building market.



**\* She is interested in**



## The practical SPIRAL sash balance

Of course she can afford them! They go in quick and easy . . . just three screws per balance . . . save hours of high-priced labor. Laboratory tests point to perfect lifetime performance . . . proved in thousands of homes. No tapes, no cables, no exposed tubes, no corrosion. The one practical installation for modern narrow trim. A few standard sizes fit 95% of all residential requirements . . . same size balance fits upper and lower sash.

### For complete specifications and instructions



Write today for fully illustrated specification and installation data. See how Grand Rapids Invisibles fit into your next set of plans!

## GRAND RAPIDS HARDWARE COMPANY

Grand Rapids, Michigan

Quality Leaders in Sash Hardware for 50 Years



### Grand Rapids Sash Pulleys

No. 103 face plate, cone bearing type and Nos. 175, 109, 110 sawtooth drive type sash pulleys cover 95% of all sash pulley requirements.



## Nichols Wire & Steel Co. Refuses To Accept Government Subsidy

**F**RANK R. NICHOLS, president of the Nichols Wire & Steel Co., Davenport, Iowa, has refused to accept government subsidy payments proffered his firm from nail production in excess of a quota established on average production figures. In commenting on his return of the money to the Reconstruction Finance Corporation, Mr. Nichols said in part: "We dislike the idea of having the government subsidize us out of the taxpayers' pocket, to cajole us into doing what it was proper for us to do." The total amount of money refused was \$8,020.



FRANK R. NICHOLS

Subsidy payments were established while Wilson Wyatt was National Housing Administrator as part of that agency's plan to stimulate production of critically short building materials as a means of accelerating the construction of homes for veterans.

After pointing out that "it was clearly our responsibility to make as many nails as possible," Mr. Nichols wrote: "Through many vicissitudes we have stood on our own feet without governmental financial assistance for forty-odd years, and we do not want, nor do we need to, lean on Uncle Sam."

In a letter to United States Senator George A. Wilson, who had the communication incorporated in the Congressional Record, Mr. Nichols stated: "The subsidy payments were made from October 1, 1946 to March 31, 1947, for nail production beyond a quota established on average production figures. They were paid to us and all other nail manufacturers to stimulate production in an effort to alleviate the nail shortage that bedeviled the housing program, and were ostensibly to cover overtime and added expense.

"An additional subsidy of \$7 a ton was paid to producers of wire rods when their rods were sold to be made into nails. The RFC has also paid subsidies on pig iron to be used for housing purposes. Hundreds of thousands of dollars have been paid out to the steel industry at a time when its profits were the highest in history. As far as I know, Inland Steel is the only company which has previously rejected a subsidy.

"The subsidy has not been paid for nail production since March 31, and I am informed that nail production has dropped. But the black market in steel nails still exists. A decline in production since subsidies stopped indicated to me a lack of responsibility on the part of the industry."

After pointing to extensive black market operations in baling wire for hay, which his firm is attempting to offset by production of aluminum baling wire, Mr. Nichols wrote: "The steel sheet situation is a well known public disgrace, and needs no further amplification. . . . My point is that if the steel industry doesn't police itself, the government inevitably will have to police it. Legitimate purchasers of steel in this country are not going to remain forever at the mercy of speculators, nor is the government going to continue to pay subsidies for production. To accept subsidies is simply to invite governmental control.

"Steel, which is reaching the black market, and the premium export market, if spread equitably among regular mill customers, would go a long way toward alleviating the shortages everyone faces. . . . There are pious declarations and deprecatory statements by the ream to the effect that not much steel is getting to the black market. I say there's a lot of it."

Estimates of the amount of steel reaching the black market have varied between five and fifteen per cent. Taking a conservative figure of only two and one-half per cent, Mr. Nichols points out that of the 91,000,000 tons produced, that would mean 2,275,000 tons or about \$341,250,000 worth, which is going through the black market. He concludes the letter by urging the nation's legitimate steel industry to do more self-policing and also to agree to refuse to accept premium prices for steel that is exported.





**and Garage Doors OPEN!**



**THE POSITIVE-ACTING GARAGE DOOR OPERATOR  
WITH A FOOLPROOF ELECTRONIC CONTROL**



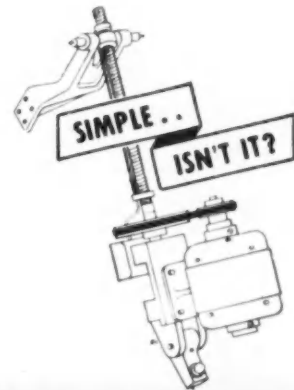
*Midget in Size*

*Giant in Performance*

Entirely new! It opens and closes garage doors with a basic, foolproof *electronic* principle that is built-in, safe, swift, silent! Installation is quick and easy, summer or winter. Just five screws secure the door-lift and motor unit (shown below) to the inside garage wall . . . out of the way, almost out of sight. It *can't* bind or jam, because it is *always* in perfect alignment. ★ ★ ★ ★ A compact electronic transmitter under the car hood . . . press a button on the dash . . . and garage door opens instantly. After car enters garage, close door by pressing dash button again . . . or have an auxiliary button on garage wall or inside house. ★ ★ ★ ★ Best of all, it's priced within easy reach of every home owner or home builder. Compare!

- **NO DIGGING!** . . . *minimizes tedious and costly installation. Easily installed, winter or summer.*
- **NO WIRES TO STRETCH!** . . . *house-to-garage connection utilizes same radio wave transmission as does auto-to-garage.*
- **NO HORN TO HONK!** . . . *no annoyance to family and neighbors.*
- **NO LIGHTS TO FLASH!** . . . *no one else has the "key" to your garage.*

**Now in  
Production  
on  
Overhead Type  
Unit**



**BUILDERS! DEALERS!** Sell and install The Electronic Serviceman in your community. Leading distributors coast to coast are lining up with this amazing operator as fast as production will permit. Get full details from your nearest distributor or write us direct.

**FEDERAL INDUSTRIES, Inc.**

MANUFACTURERS and NATIONAL DISTRIBUTORS  
19720 W. Eight Mile Road • Detroit 19, Michigan • REdford 8880

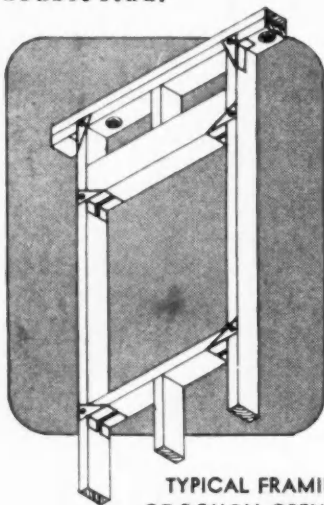
# Reduce Costly Plaster Cracks

## with Trip-L-Grip

### FRAMING ANCHORS

Builders everywhere are using this new timber connector to strengthen door and window openings — and reduce costly plaster cracking.

This new method saves labor and eliminates need for double stud.



TYPICAL FRAMING OF ROUGH OPENINGS

Write for FREE booklet

#### TIMBER ENGINEERING COMPANY

1319 18th STREET, N. W.  
WASHINGTON 6, D. C.

Please send FREE booklet "Reduce Costly Plaster Cracks with Trip-L-Grip" and quote prices.

Name .....

Company .....

City .....

State .....

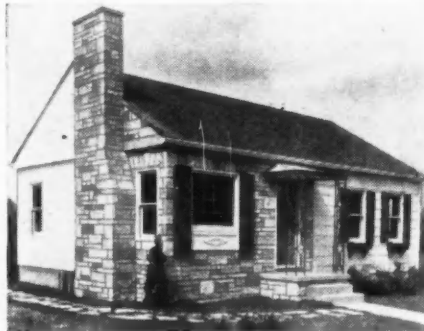
AB

## Packaged Buildings

Arlington Corp. announces plans for a complete line of preassembled buildings

FROM the production lines of the Arlington Manufacturing Corporation plant at Columbus, Ohio, a wide variety of preassembled buildings will soon appear on the market. These pre-assembled units will include homes, cottages, utility buildings and garages.

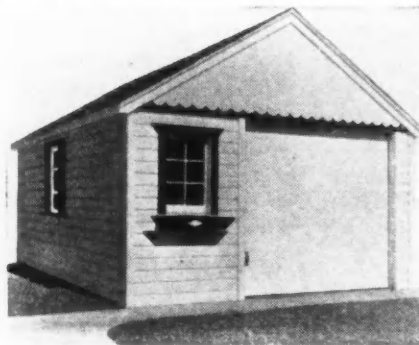
Because of the acute shortage of



MODEL No. 2001 house ready for occupancy.

houses, emphasis was placed on the preassembled home. This unit ranges in size from one story, one and one-half story and two story, planned for either two, three or four bedrooms. Two-family duplexes are already in production, and contemplated plans call for ultimate production of four-family duplexes with entrances front and back for each family.

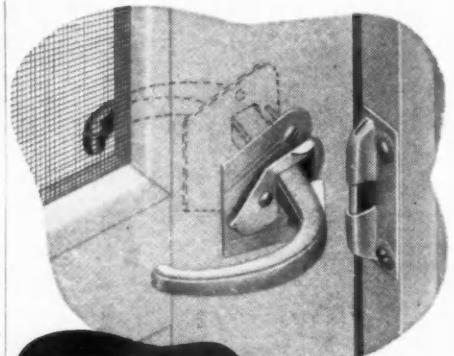
Each unit is preassembled with 2 x 8 floor joists, 2 x 6 rafters, 2 x 4 studing (all 16" on center), double constructed with wood sheathing and regular weatherboarding or cedar shingles. The manufacturer furnishes everything needed to complete the home, including inside trim, oak floor-



PREASSEMBLED garage with overhead door.

ing, inside doors, plumbing fixtures, heating units, soil pipe, kitchen cabinets and plaster goods.

Available in 30 different elevations, these homes can be erected, side by side, without the usual stereotyped sameness in appearance. They are designed to conform with the building codes of every city, county and state, and are eligible for FHA and GI financing.



### ONE-BORE LATCH

Automatic PUSH or PULL ACTION

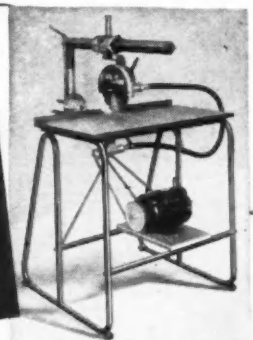
Push the handle if the door swings away from you; pull it if the door swings toward you. That's the simple principle of the Ideal Latch for screen and storm doors, as well as many other applications. New '48 model includes latching action in the strike . . . silent operating . . . easier latching . . . stronger handle. Trouble-free—absolutely guaranteed against breakage regardless of cause. Requires no mortising—just bore one hole and insert 6 screws. Available with or without locking lever. Handles furnished in cast, brass, bronze and aluminum. Latch with stamped steel manufactured as previously. Ask your jobber, or write for literature.



Display Models For Dealers

250 EAST FIFTH STREET  
ST. PAUL 1, MINNESOTA

DO ALL THESE JOBS AND MORE WITH



## FLEXSAW

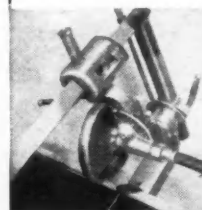
CROSS-CUT, RIP, MITER, BEVEL, DADO, PLANE, TONGUE & GROOVE, ROUT, GRIND, DRUM & DISC SAND

A rigid, rugged tool of extreme accuracy for both construction and cabinet work. Cuts material up to 15" wide, 3" thick, of any length.

### 6 EASY HAND ADJUSTMENTS

No wrenches — set it by hand for any cut.

DISTRIBUTORS WANTED



FLEXSAW CO.  
PORT AUSTIN, MICH.

WRITE FOR OUR CATALOG

# Leigh

## ORNAMENTAL SHUTTERS



*Louver Design*

Contractors and Builders -- your homes will have more "sales appeal" with these attractive shutters!

LEIGH all steel Ornamental Shutters add that finishing touch to homes. Builders everywhere are acclaiming these sensational metal shutters. Unlike wooden shutters — they will not warp or split. Built of heavy gauge steel with one piece construction — they have no individual louvers to come loose or rattle.

They will save you money too! Surprisingly low in cost — require no cutting or fitting — easily installed — finished in green baked enamel prime coat, requiring only a finished coat. Available in two attractive designs — louvered and panel — in a range of sizes for all standard windows.

Write today for complete information and the name of your nearest local distributor. Immediate delivery.

*Panel Design*

STANDARD SIZES

14" x 47½"	14" x 59½"	17" x 59½"	20" x 55½"
14" x 55½"	17" x 55½"	17" x 63½"	20" x 59½"

Other sizes also available

Other Leigh Building Products . . .

Dust Chutes • Clothes Chute Doors • Attic & Roof Ventilators • Milk and Package Receivers • Built-In Mail Boxes • Foundation & Brick Ventilators.

AIR CONTROL Registers and Grilles

Styled and Built by

**AIR CONTROL PRODUCTS, Inc.**

COOPERSVILLE • MICHIGAN





**REZ**  
 makes  
 fine wood finishing  
 easier ...  
 quicker ...  
 more economical

This ready-to-use amber-clear sealer and primer protects floors, doors, sash, millwork, and plywood. It is a synthetic resin, especially formulated to penetrate the wood fibers—leaves a tough resinous deposit, thereby minimizing moisture absorption, grain raise and decay. Also, it acts to assure dimensional stability.

Rez\* provides an ideal base for any type of finish—paint, stain, varnish.

**See Your Dealer or Jobber**

If Rez is new to you, or if you want current supply information on this easy-to-apply, quick-drying sealer and primer, see your dealer or jobber today. MONSANTO CHEMICAL COMPANY, Western Division, Seattle, Wash. . . . District Sales Offices: Los Angeles, San Francisco, Portsmouth, Va.

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



SERVING INDUSTRY . . . WHICH SERVES MANKIND

**L. C. Hart Promoted  
 By Johns-Manville**

L. C. HART has been appointed vice president for relationships by the board of directors of Johns-Manville Corporation, New York City, it is announced by R. W. Lea, president.

Mr. Hart, who has been general sales manager of the company's Building Products Division and vice president of Johns-Manville Sales Corporation, is well known in the building and construction industry from coast to coast. He is a director and former president of the Producers' Council,



L. C. HART

and a member of the construction industry committee of the National Association of Manufacturers. Recently, he completed an assignment on the construction and civic development committee of the United States Chamber of Commerce.

In appointing Mr. Hart, Mr. Lea said, "In this new position Mr. Hart will have the responsibility for assisting the president in carrying out the basic policies established by Lewis H. Brown, chairman of the board, to promote a sympathetic understanding between the company and its members."

\* \* \*

**Unions Pledge Cooperation  
 To Construction Industry**

A COMPREHENSIVE labor-management program to stimulate a high level of home building and commercial construction has been launched in Metropolitan New York as a means of forestalling any possible business recession. Sponsored by the New York Building Congress, in conjunction with the Building & Construction Trades Council, A.F.L., and the Building Trades Employers Association, the campaign is designed to stabilize building costs, increase labor productivity and efficiency and to dispel the "wait and see" attitude of investors who are holding off construction work in anticipation of lower prices.

In announcing the program, Max H. Foley, president of the Building Congress and chairman of the sponsoring committee, revealed that a new and unprecedented pledge of cooperation and higher productivity has

(Continued to page 158)



**Eliminate HANDSANDING!**

UP TO 75% SAVINGS in time finishing or refinishing cabinets, doors, wood trim, stair treads, etc. A rugged, fast finishing sander for CURVED or flat, WET or dry work. Strate-line, back and forth action cuts no swirls, laps, stutters or gouges.

Detroit Surfacing Machine Company  
 7458 W. Davison Detroit 4, Michigan

1000's ARE SAVING WITH IT  
 — Write for Facts! —  
 RECIPROCATING  
**ELECTRIC SANDER**  
**EASU**

**CAREFREE HOURS** at LAS VEGAS, NEVADA

Relax in desert sunshine... marvel at scenic wonders... then play in Gay Nineties Bar... 21 Club Casino. Dance to name bands in the Ramona Room. Come soon.

The Early West in Modern Splendor

**HOTEL LAST FRONTIER**  
 LAS VEGAS, NEVADA

# Universal LEVEL-TRANSIT



**MOST PRACTICAL  
ALL-AROUND BUILDER'S  
INSTRUMENT  
EVER DESIGNED!**



Highly accurate, amazingly rugged, the Universal Level-Transit does all survey and check-up operations in building and road construction!

Quickly convertible from level to transit, its novel type of design protects parts which were formerly exposed to damage and inaccuracies. Other features include: a patented ball-bearing race, lock and release lever system, and perfect alignment adjustments.

12" Telescope, 25 power, horizontal guarded circle, Verniers to 5 minutes, Vertical arc, 3".

Write today for full details and free booklet "How to lay out building lots."



MANUFACTURERS OF  
INSTRUMENTS FOR ENGINEERS,  
SURVEYORS AND BUILDERS.  
301 West Court St., Milwaukee 12, Wis.

for...

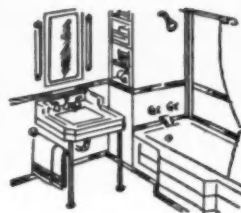
**CONTRACT  
INSTALLATIONS**

or...

**CONSUMER  
SALES**

the demand is for...

**CHROMTRIM  
METAL MOULDINGS**



**BUILDERS  
CONTRACTORS  
ARCHITECTS**

The regular Chromtrim line of 80 metal moulding profiles, all designed in related groups, adequately meets every private or commercial installation requirement.

## DEALERS

Sell the homemaker market. Chromtrim's "Trim-it-Yourself" merchandise and floor display, features 8 easy-to-install metal moulding shapes. Ready wrapped in 6' lengths, mass market priced for volume over the counter sales.



NATIONAL ADVERTISING  
makes

**CHROMTRIM**  
*America's Preferred*  
**METAL MOULDING**

Sold only through a nation-wide distributor organization

**R. D. WERNER CO., INC.**

295 FIFTH AVENUE

NEW YORK 16, N. Y.

----- For Further Information . . . Mail today -----  
R. D. Werner, Inc., 295 Fifth Avenue, New York 16, N. Y.  
Dept. AB-8. Please send me literature on your CHROMTRIM line  
Company Name \_\_\_\_\_  
Buyer's Name \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_  
Your Distributor's Name \_\_\_\_\_  
His Address \_\_\_\_\_  
Check Nature of your Business  
Distributor \_\_\_\_\_ Dealer \_\_\_\_\_ Contractor \_\_\_\_\_ Mechanic \_\_\_\_\_ Architect \_\_\_\_\_



with **SPEEDY, LOW-COST REED EQUIPMENT**

Every day finds more and more builders switching to concrete brick—a proven way to lower costs while maintaining structural strength and permanence. Reed equipment puts you into this profitable business with a minimum investment. With one VI-BRIK-CRETE and three men you can easily produce over 8,000 brick a day—selling at \$30.00 to \$35.00 per thousand for plain brick; up to \$10.00 more for colored.

**VI-BRIK-CRETE**  
28 PER MINUTE!

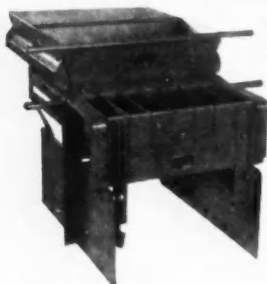


Makes brick 7 on edge at 28 per min. - 3600 vibrations produce solid, sharp-cornered super-standard brick. Sturdy construction. Thoroughly proved. Send for literature showing various size brick, specifications, production line set-up for lower costs.



**\$875**  
FOR MACHINE  
**\$734.50**  
FOR PALLETS  
**8,000**  
DAILY  
PRODUCTION

**TEST YOUR MARKET at LOW COST with MODEL 401**



**MAKES 3,500 BRICK A DAY**—yet costs only \$237.50 (or \$500 complete with pallets). **LIBERAL CONVERSION ON VI-BRIK-CRETE** when desired. Write for full facts.

**MIXERS, CONVEYORS, HOPPERS** also available—priced low and built for top results.

All prices F.O.B. Three Rivers. All orders delivered promptly. Send for detailed literature on items that interest you today.

**R. S. Reed Corporation**

810 E. HOFFMAN ST., THREE RIVERS, MICH.

(Continued from page 156) been given management by leaders of the building trades unions. Howard McSpedon, president of the Building & Construction Trades Council, A. F. of L., said the pledge of cooperation will be effective for all types of building: homes, commercial structures and institutional buildings.

Through the joint efforts of the



From left to right: Howard McSpedon, Max H. Foley and Carl Brandt, president of the Building Trades Employers Association.

three groups, representing every phase of the building industry, it is hoped to demonstrate in New York what may be successfully accomplished in other cities, thereby setting a pattern for strengthening the national economy.

\* \* \*

**McEwen Ransom of E. L. Bruce Dies**

**McEWEN (CUE) RANSOM**, vice president and member of the board of directors of E. L. Bruce Co., died at his home in Memphis, Tenn., on June 28. His death resulted from a cerebral hemorrhage following several months of illness. Mr. Ransom was 69.

A leader in the development of the hardwood flooring industry in the South, Mr. Ransom was born in Murfreesboro, Tenn., in 1878. As a young



**McEWEN RANSOM**

man he went to Nashville, Tenn., and entered the lumber business with his brother, the late John B. Ransom. When E. L. Bruce Co. purchased control of this operation in 1924, Mr. Ransom was retained as president and elected a director of E. L. Bruce Co. In 1926 he was elected vice president of E. L. Bruce, at which time he moved his home to Memphis.



**Stainless Steel Sinkbowls**

Legion sinkbowls are seamless drawn from one piece of solid or single clad stainless steel...No welds, rough edges, ridges or grooves to cause leaks, corrosion or cracks where dirt may lodge...Light in weight, yet rigid and long-wearing... Oblong, square, round or oval shapes.

Write for catalog sheet.



**LEGION**

**STAINLESS SINK CORP.**

21-13 40th Avenue, Long Island City 1, N. Y.



**DUO-FAST GUN TACKER**  
Model CT 850

**FOR APPLYING INSULATION**

Fast, accurate, efficient. Easy to operate in awkward positions. Ideal for applying insulation, tacking building paper and felt, and for making screens. One hand always free to hold material. Loads 84 DUO-FAST Staples. Automatic hammer tackers also available.

**FASTENER CORPORATION**

888 Fletcher St.

Chicago 14, Ill.

FOR LOW INSTALLATION COSTS  
FOR *Modern Kitchens*



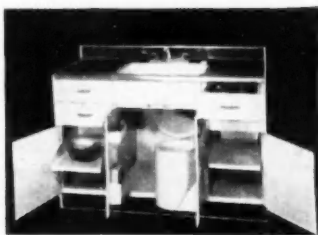
INSTALL *Guiberson*  
STEEL CABINETS  
*with lifetime Formica tops*

Smart, modern kitchens are finished quickly with Guiberson Steel Cabinets. Built in standard sizes, Guiberson Cabinets fit any kitchen plan. They will work around doors and windows and conform to almost any room size or shape. Beautifully finished in white baked-on enamel, Guiberson Cabinets have lifetime Formica tops—a strong sales appeal to the homemaker. They will match any color scheme . . . blend in with all appliances. For low installation costs . . . for cabinets built to last for years, specify Guiberson Steel Kitchen Cabinets.

**MATCHED UNITS FOR MANY COMBINATIONS**

Guiberson's 5 Basic Cabinet units are adaptable to almost any installation.

The Guiberson Sink Cabinet, made of extra heavy sheet steel, has lifetime Formica top. Sink is acid-resisting heavy porcelain on steel. New ledge-type faucet is a product of General Tire and Rubber Company.



See the nearest Guiberson distributor or write to

THE *Guiberson* CORPORATION

P. O. Box 1106

Dallas, Texas

## IT'S IN THE WOOD



Soft texture, even, straight grain, all round workability, these qualities of the Western Pines are "in the wood." The carpenter likes the Western Pines. They handle easily. He can do a better job more quickly.

These woods also have the reputation of being carefully manufactured and graded—thoroughly seasoned. Such characteristics make the Western Pines a good buy—more economical in the long run. Small wonder then that architects specify and so many builders prefer the Western Pines.

### INSPIRATIONS FOR HOME-BUILDERS

Here is literature you will find most helpful whether you are building one or a hundred homes.

**"Western Pine Camera Views"**

**"We're going to build our new home of WOOD"**

These two booklets will be sent you free—just send a postcard.

Address Western Pine Association, Dept. 8T,  
Yeon Building, Portland 4, Oregon.

\* Idaho White Pine

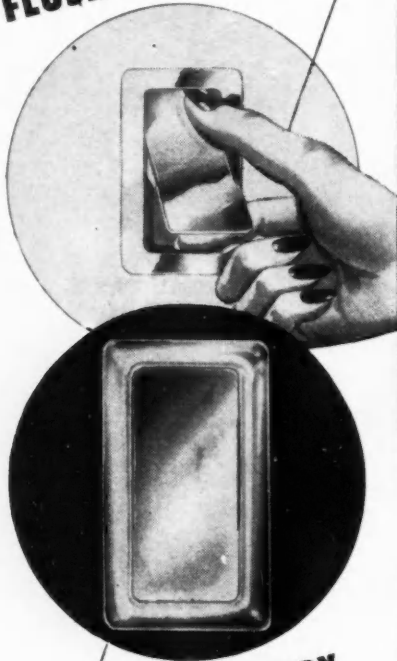
\* Ponderosa Pine

\* Sugar Pine

## THESE ARE THE WESTERN PINES

*Well-manufactured — thoroughly seasoned — rigidly graded — by all Association mills*

**Dedoes  
FLUSH HARDWARE**

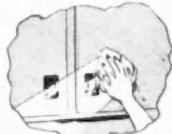


**The REVOLUTIONARY  
NEW DOOR LATCH and  
MATCHING DRAWER PULL  
FOR INTERIOR CABINET  
DOORS and DRAWERS!**

Completely modernizes and beautifies cabinet doors and drawers. Revolutionary in hardware design, easy to install and use. Adds that extra touch of bright, modern, harmony in new home designing . . . makes re-styling and replacement easy, simple, inexpensive. Choice of lustrous polished chrome, satin finish stainless steel and natural brass. Write for literature and catalogue sheet.



**EASY TO INSTALL!**  
Merely drill two 1-7/16" holes and fasten front piece to back plate with two screws. Simple! Fast!



**EASY TO CLEAN!**  
A smooth, casual swipe of the cloth while cleaning and original luster is restored as if by magic.

**DISTRIBUTOR franchises now being granted.**  
Choice territories open. Complete information will promptly follow your inquiry.

**Dedoes  
BERKLEY, MICHIGAN**

**Arnold Koutonen Elected President of Douglas Fir Plywood Association**

**P**ROBLEMS incident to maintenance of maximum production as well as continuing research to further develop the industry occupied the attention of more than 150 leaders of the Douglas Fir Plywood Association at their recent annual meeting in Tacoma, Wash.

It was disclosed at the session that production of fir plywood for the first half of 1947 was at the rate of nearly



Arnold Koutonen, left, new president of the Douglas Fir Plywood Assn. Charles E. Devlin, right, is managing director.

1,600,000,000 square feet a year. Thus, current output is ahead of prewar years, considerably greater than a year ago and only slightly under the record 1.8 billion square feet reached in 1942 under the impetus of the war. Today, a third of the total is of the all-purpose exterior type panels bonded with waterproof adhesives, or six times more than was produced in 1941.

Manufacturers were quick to explain, however, that although recent production gains are encouraging percentage-wise, demand still outruns supply. Further increases, if any, are dependent directly upon available supplies of raw materials.

Charles E. Devlin, in outlining the continuing development program for the industry, emphasized the importance attached by plywood makers to performance of their product to sustain consumer confidence. "I just want to say that plywood quality is not good enough if it can be made better. The industry is dedicated to that principle," was his pronouncement.

Arnold Koutonen, of Olympia, Wash., general manager of the Plywood Division of the St. Paul and Tacoma Lumber Co., was elected president to succeed Thomas B. Malarkey, Portland, Ore., vice president of the M & M Wood Working Co. J. W. Forrester, general manager of the Coos Bay, Ore., Lumber Co., is the new vice president of the Plywood Association. Secretary of the organization is Leonard Nystrom of Eugene, president of Associated Plywood Mills, Inc. The new treasurer is Joe H. Smith of Tacoma, general manager of Puget Sound Plywood, Inc.

All 33 Douglas fir plywood factories in western Oregon and Washington now participate in the industry's trade promotion program. Yearly output of the fir plywood industry is valued in excess of \$100,000,000 at the factory.

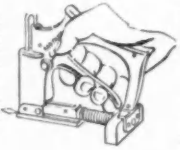


**Red Devil  
DIAMOND POINTS**

Here's a big repeat item of top quality

Diamond Points are packed in a new package which prevents breaking of "sticks." They are made by an exclusive Red Devil process from especially hard metal, treated against corrosion. Come stacked in strong sticks of 100 points each to fit driver.

**Two SIZES**  
No. 1 Diamond Points  
3/8" long for No. 1 Red Devil Diamond Point Driver. 5,000 points (50 sticks) to a package.  
No. 2 Diamond Points  
1/2" long for No. 2 Driver. 4,000 points (40 sticks) to a package.



**RED DEVIL TOOLS.**  
Irvington 11, N. J., U. S. A.

*There Are Tremendous  
Merchandising Possibilities*

*In a*

**HOME SHOW**

**For Manufacturers, Distributors  
and Retail Dealers**

**AN EXPOSITION WILL FOCUS ATTENTION  
ON THE LOCAL HOME BUILDING INDUSTRY**

Our organization produces Home Shows exclusively through Home Builder Association and Real Estate Boards, in co-operation with daily newspapers. We furnish modern booth equipment—complete stage properties and spectacular set-pieces, including attractive industry dioramas; handle all details—advertising, selling, public relations, and financing.

**A trained organization of experts and specialists in showmanship**

**NATIONAL  
HOME SHOWS, INC.**

GROVER A. GODFREY, President  
JOS. P. TUFTS, Vice Pres. and Gen. Mgr.  
JOHN DALY, Director of Sales  
Horace Black, Exposition Director  
Home Offices—Dallas, Texas

Chamber of Commerce Building Telephone  
Riverside 6163

Next Home Show:

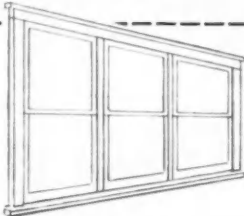
**DENVER AUDITORIUM—October 17th-25th**



# DUPLEX SASH BALANCES Help Sell Houses

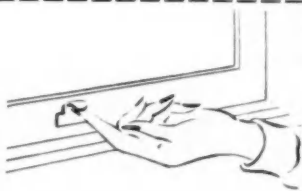
Duplex sash balances not only cost less than old fashioned cords, weights and pulleys—and are easier to install—but in addition they have sales appeal... because they make a home a more attractive and convenient place in which to live.

**Duplex Sash Balances help sell houses because:**



**DUPLEX SASH BALANCES ALLOW ATTRACTIVE, MODERN STYLING**

... with narrow mullions (from 2" to 3 3/4") and narrow interior and exterior trim, creating added sales appeal at an actual saving in cost.



**DUPLEX SASH BALANCES PROVIDE FINGER-TIP SASH CONTROL**

Sash hung with Duplex balances do not bind or lock. They glide effortlessly up and down without friction or chatter. Sensitive to the lightest touch, Duplex equipped sash are a convenience which instantly appeals to women.



**DUPLEX ADJUSTABLE FLAT SASH BALANCE**

Easily adjusted for exactly the right tension with a screw driver at time of installation.

**DUPLEX PRE-SET FLAT SASH BALANCE**

Completely adjusted at the factory for various weights of sash.



Sold only through jobbers, dealers, sash and door mfrs.



DUPLEX, INC., 628 No. La Peer Dr. Los Angeles 46, Calif.

Please send information on Duplex Flat Sash Balances.

- Adjustable
- Pre-Set

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

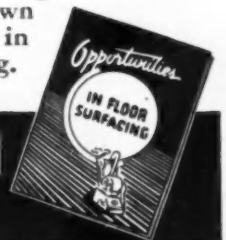


● "Yes, my American floor sander has been a steady money-maker. Both new and old floors have kept me busy with good-paying work, month after month. And there are plenty of jobs ahead all the time! Yes, I'm busy."

This is typical of the experience of enthusiastic American owners everywhere!

Throughout America, thousands find that American floor sanding machines make profits for them that consistently exceed their original expectations.

There's REAL MONEY for you in floor surfacing! Send today for "tell-all" booklet entitled "Opportunities in Floor Surfacing". Not a catalog—it's a general introduction to getting into something for yourself... being your own boss. Use coupon and enclose 25c in coin or stamps to cover handling.



## AMERICAN Floor Sanders

The American Floor Surfacing Machine Co.  
511 So. St. Clair St., Toledo 5, Ohio  
Enclosed find 25c in stamps or coin for booklet "Opportunities in Floor Surfacing", telling me how I can be my own boss.

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

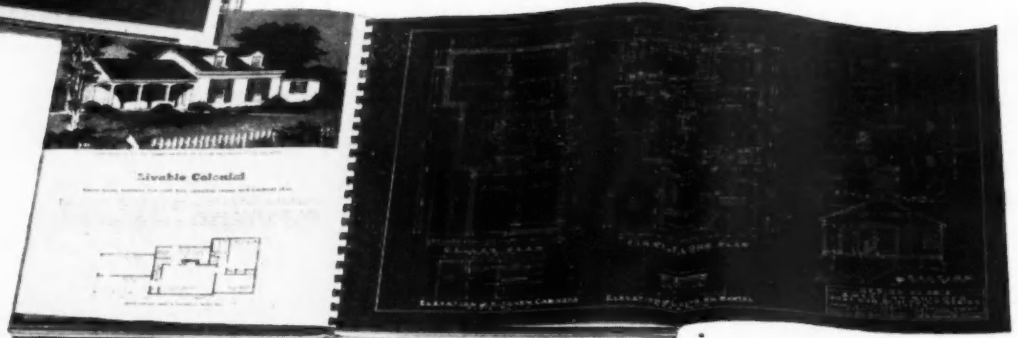
# Get This Blueprint Plan Book NOW!



Use this new Blueprint Plan Book as a sales tool. Use it to accurately estimate building costs. Use it for ideas on Built-Ins and ideas on garage styles that will harmonize with the exterior design treatment of the house.

12 COMPLETE BLUEPRINTS  
21 HOUSE DESIGNS  
GARAGES — BUILT-INS

\$2.50



## Order TODAY

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

Gentlemen:

Enclosed is a check or money order for \$2.50 for which please send a copy of your Blueprint Plan Book to:

Name .....

Street .....

City .....

State .....

B-47

**A**MERICAN BUILDER'S New Blueprint Plan Book will be a valuable sales aid to you. The blueprints open up to 16½ inches by 11½ inches, suitable for accurately estimating construction costs of these attractive homes and garages. Colorful plastic binding permits it to open and stay flat while in use. You can help you customers visualize the house from all sides, as *all four elevations are shown*. Furthermore, the large size plans assist your customers to obtain a better idea of the relative sizes of rooms than is possible with ordinary "plan books." In addition, important details are shown and each plan is illustrated with a large, clear photograph of the house. In fact, no customer can fail to be impressed with the splendid material in this book. All homes in this book have been designed by nationally famous architects.

# INSTALLATION TIME REDUCED 50% to 80%

With Douglas Fir

## PRE-FIT

## Stock Doors

Save Time—Save Labor—and  
Get a Better Job . . . with  
These Improved Fir Doors!

**O**NE BUILDER reports as many as seven installations in the time previously required for a single door! Savings of from 50% to 80% are common.

That's because Douglas fir stock doors are *pre-fit* to exact size at the factory. They reach the job trimmed and squared, ready to hang. No sawing or planing is required. Precious time is saved—and there's far less danger of on-the-job marring, "butchering" and poor alignment due to unskilled help or improper tools. Corners are clean, trim, true—scuff-stripped for protection. The result: a better, as well as a faster, job!

and **PRE-SEALED, too,**  
for Protection and Better Finish

Douglas fir stock doors—featured in definite, plainly marked grades and a wide range of designs, including modern 3-panel layouts adaptable to all types of building—are also *pre-sealed* at the factory. They reach the job fully prepared for a better finish. They're protected against moisture and checking, with resulting improvement in dimensional stability.

**MORE FIR DOORS SOON!**

It is a fact that Douglas fir doors may continue in short supply for a number of months. Two factors make this true: the present overwhelming demand—and the shortage of essential raw materials. But production IS stepping up. Warehouse and dealer stock should soon reflect this increased production. We suggest that you keep in touch with your regular source of supply.



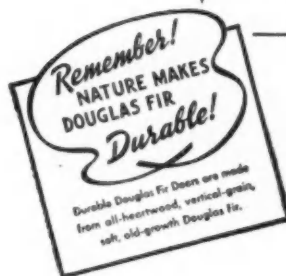
For Even Greater On-the-Job  
Economies, Specify Fir Doors

### "FACTRI-FIT"

Durable, attractive Douglas fir doors may also be ordered completely precision-machined—not only pre-fit and pre-sealed, but gained for hinges and mortised or bored for locks as well. Here again, cleaner, trimmer jobs are assured, because all work is done at the factory by high-speed precision tools. Time savings more than offset the slight additional cost.



No on-the-job  
mortising or boring  
required!



For Better, Faster Installations, Specify:

# Douglas Fir DOORS

FIR DOOR INSTITUTE

Tacoma 2, Washington

The National  
Association  
of Fir Door  
Manufacturers

# HOW BUILDERS Profit BY INSTALLING *H.C. Little* OIL FLOOR FURNACES

With Exclusive Electric Ignition  
and Automatic Operation

You profit three ways when you install H. C. Little automatic, oil-burning floor furnaces—the ideal unit for modern small homes without basements:

### 1. LOW FIRST COST—

Much lower than the conventional warm air furnace using pipes.

### 2. LOW INSTALLATION COST—

No warm air pipes, no sheet metal work, no basement to dig. Complete installation takes only a few hours.

← Easy installation right in the floor.

### 3. EXCLUSIVE SELLING FEATURE—

With H. C. Little—and only with H. C. Little—do you get an oil burning floor furnace with **ELECTRIC IGNITION**, which gives true and complete automatic operation. The furnace either operates at peak efficiency or is shut down entirely. There is no pilot light to waste fuel, cause soot or smoke, or fail entirely.

### TO FAMILIES INTERESTED IN BUYING A NEW SMALL HOME,

the advantage of fully automatic, thermostatically controlled oil heat as offered by H. C. Little can be the deciding factor in the final selection. May we send YOU full information?

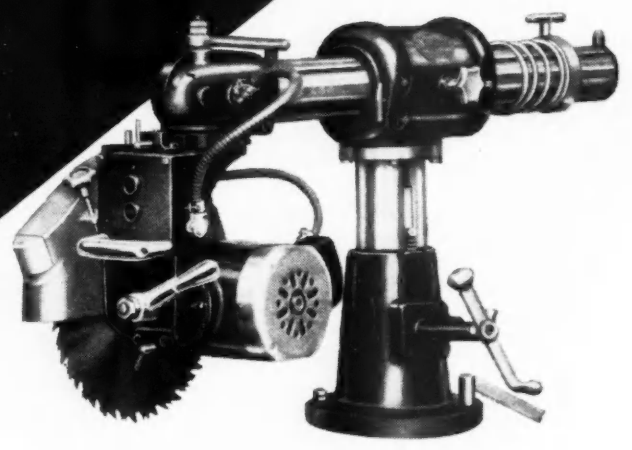
Many exclusive features—chief of which is automatic **ELECTRIC IGNITION**



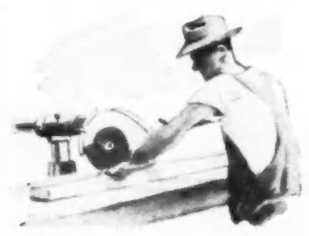
San Rafael California

H. C. Little Burner Co.,  
AB 8, San Rafael, Calif.  
As Builders, we are interested in your Oil Burning Floor Furnace.

# COMETS *give you the EDGE*



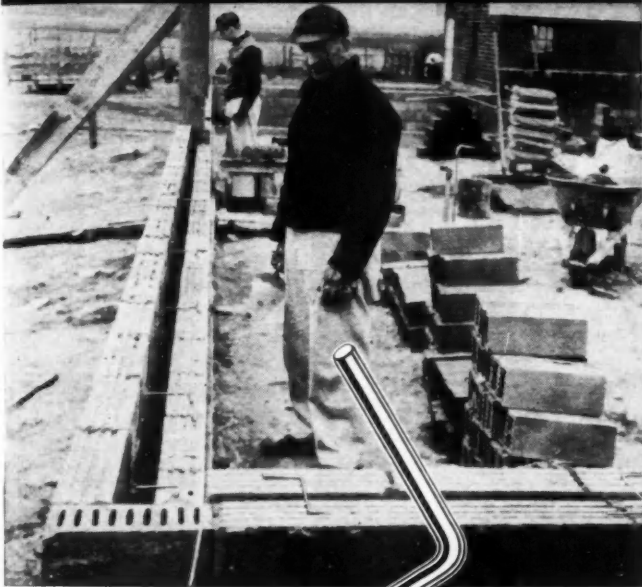
Look at it this way. If you have Comets with which to work you have the edge—in many ways. Comets give owners concrete advantages. They are so powerful, so sturdy. They cut with tremendous speed and sustained accuracy. They are so easily maneuvered and economical in operation. And Comets, relatively speaking, are well-nigh indestructible. See your Comet dealer about the saws that give "more cuts per dollar" or write direct.



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

**COMETS** cut quicker

**FOR STRONGER CAVITY WALLS**



**...ALWAYS USE**  
**NON-RUSTING**  
*Copperweld*  
**WALL TIES**



● You can be sure of permanent strength and safety in cavity wall construction when you use Copperweld Wall Ties to bond the walls together.

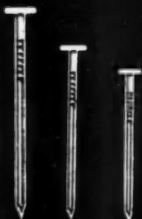
Copperweld Wall Ties give you the high strength of alloy steel—made permanent by a heavy protective covering of non-rusting copper. The two metals, inseparably united by our exclusive Molten-Welding Process, provide a breaking strength of about 2 tons—a breaking strength that remains constant since these ties cannot rust and will not deteriorate in the wall.

These cavity wall ties are available for immediate shipment. They are made in two sizes—6" and 8"—and are packed 500 of one size to a box.

*Specification Bulletin mailed on request.*

**COPPERWELD STEEL COMPANY**  
**GLASSPORT, PA.**

SALES OFFICES IN PRINCIPAL CITIES



**Time-Tested**  
**Copperweld Nails**  
**will help you do**  
**a better job!**

**A Name To Paste**  
**In Your Hat**



**CELLULITE** flameproof cotton **INSULATION**



There are bales of statistics available on insulation. Figures compiled by the U. S. Bureau of Standards, the Army and Navy, Engineering Association tests, University Research. Anybody who can read can be an expert.

But wherever you look, and whatever you decide is important in insulation, you'll quickly discover that Cellulite\* is right up at the top of the heap. For instance, it is made from flame-proof cotton, the most efficient barrier to the

passage of heat and cold available commercially, the lightest weight. It can't burn, doesn't prick your fingers, won't pack down, doesn't deteriorate. Its resistance to moisture is terrific. It's the easiest and the fastest insulation to install—a pair of scissors and a tack hammer are all the tools you need.

Want the proof—simple, direct, unmistakable? Return the coupon, we'll do the rest. The Gilman Brothers Company, Gilman, Connecticut.



- K-factor 0.24
- Weight 0.875 lb. per cubic foot
- Exceeds FHA, FPHA, and HH-I-528 Specifications
- Flame-proof—resists 1800° blow torch temperature
- Manufactured under U. S. Government supervision

THE GILMAN BROTHERS COMPANY  
 52 Lawrence Street, Gilman, Connecticut  
 Send full information on Cellulite\* Insulation to

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_  
 Builder     Dealer     Architect

\*Trade mark registered

# The Floor of Today



## ...AND TOMORROW



A good definition of a *quality* floor is this . . . one that will stay new looking throughout the years it takes a child to grow up and graduate from college. A shorter definition is . . . *Wright Rubber Tile*. When installations still look like new after 20 years of rugged service, only *the* quality floor could do it! Records of hundreds of dealers prove that *Wright Rubber Tile* has no flooring equal. Colors are clearer, the mottling is more beautiful and its long life cannot be matched by any other flooring.

Where a hard surface tile is needed to withstand heavy abuse with a minimum of care, specify *Wrightflor*. Where a softer surface, more resilient tile is desired, recommend *Wrightex*. Both come in 1/8" and 3/16" thicknesses. For complete information and color charts of *Wrightex* and *Wrightflor* write us today.



**TAYLOR MANUFACTURING COMPANY**

Wright Rubber Products Division

3050 W. Meinecke Ave.

Milwaukee 10, Wis.

**WRIGHT RUBBER TILE**

*Flooring of Distinction*

# It's **ECONOMY** Plus **QUICK HEAT** With a **KOVEN** **WATERFILM** **BOILER**



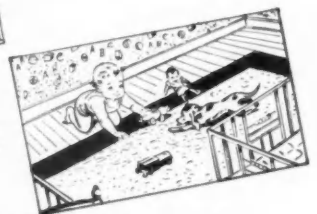
It's comfort that makes a house a home. That's the reason practical, budget-wise home owners depend on **KOVEN WATERFILM BOILERS** whose scientifically developed, patented construction insures even room temperatures and an ample domestic hot water supply at all times. Add considerable fuel savings, the height of heating effectiveness and good looks and you have the outstanding features of this modern, fast-steaming boiler.

Handsomely jacketed, **KOVEN WATERFILM BOILERS** are made for automatic firing with oil, stoker or gas and are available in a variety of models adaptable to small home, apartment house or industrial plant use. Write for detailed information.



**THROUGHOUT THE HOUSE!**

**EVEN ROOM TEMPERATURE**



**WATERFILM BOILERS, Inc.**

**154 Ogden Avenue, Jersey City 7, N. J.**

Plants: Jersey City, N. J.

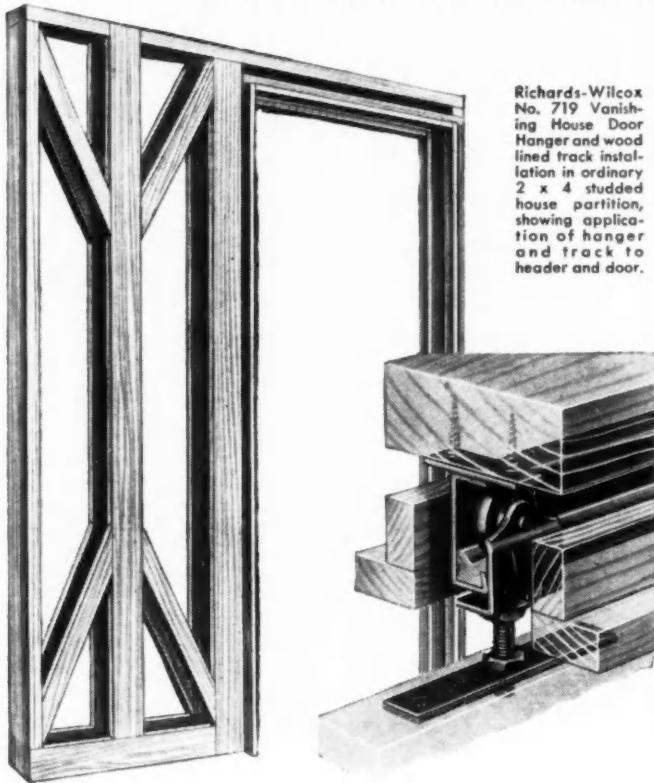
• Dover, N. J.

Listen to the **WATERFILM** Broadcast "Vaudeville Isn't Dead" Mon., Wed., Fri. at 7:45 P.M. and Sun. at 12:15 P.M. Station WNEW

**More USABLE floor space  
at LESS COST!**

**with R-W Residential Vanishing Door Hangers**

*Designed for use in 2" x 4" Studded Walls!*



Richards-Wilcox No. 719 Vanishing House Door Hanger and wood lined track installation in ordinary 2 x 4 studded house partition, showing application of hanger and track to header and door.

Mill construction of R-W designed "Ordinary Wall" pocket for installing vanishing house doors operating on R-W No. 719 house door hangers in ordinary 2 x 4 studded partition. This construction, developed by Richards-Wilcox engineering department, solves the problem of builders and architects who desire to get the advantages of "Richards-Wilcox" Vanishing House Doors without increasing the width of the ordinary 2 x 4 studded partitions.

**P**resent-day home building costs require maximum use of *all* available floor space. That is why Richards-Wilcox Vanishing (sliding) House Doors are now more popular than ever. Floor space "wasted" due to the swinging arc of hinged doors can be fully utilized with vanishing doors . . . furniture, pictures, lighting fixtures can be located conveniently and correctly.

And with R-W Vanishing House Doors there is no extra construction cost! The R-W "Ordinary Wall" pocket permits installation of vanishing doors in standard 2" x 4" studded partitions. Get complete details from your nearest Richards-Wilcox office—free consultation available without obligation.



1880 • 1947  
OVER  
67 YEARS

**Richards-Wilcox Mfg. Co.**

A HANGER FOR ANY DOOR THAT SLIDES!  
AURORA, ILLINOIS, U.S.A.

Branches: New York Chicago Boston Philadelphia Cleveland Cincinnati Washington, D. C.  
Indianapolis St. Louis New Orleans San Francisco Dallas Memphis Kansas City  
Los Angeles San Francisco Omaha Seattle Detroit Atlanta Pittsburgh



Upstairs . .  
downstairs . .  
.. all around  
the house . .

**PYROFAX GAS DOES THE WORK!**



**H**OUSES beyond the gas mains can be as modern as 1947. Give your clients the best—specify "Pyrofax" gas service. With this superior bottled gas service, a home can be equipped with the famous Magic Chef range—a silent Servel refrigerator—and an automatic water heater.

"Pyrofax" gas service is economical—completely automatic—and the above-ground system provides uninterrupted service. For complete details see our catalog in Sweet's or write to "Pyrofax" Gas Division, Dept. B-2, Carbide and Carbon Chemicals Corporation, 30 East 42nd Street, New York 17, N. Y.



**Pyrofax**

SUPERIOR BOTTLED GAS SERVICE

Product of a Unit of Union Carbide and Carbon Corporation

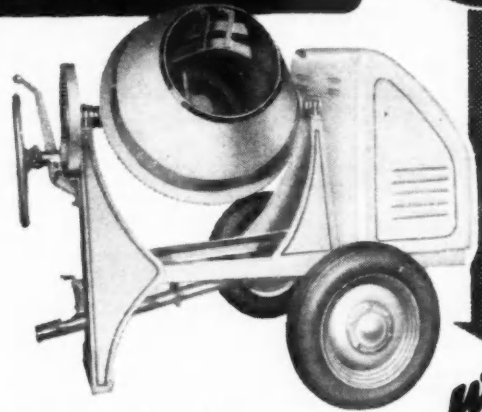
**Structural.  
Reinforcing or  
other Blding Steel  
Shipped from Stock**

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

Joseph T. Ryerson & Son, Inc., Plants at: New York, Boston, Philadelphia,  
Detroit, Cincinnati, Cleveland, Pittsburgh, Buffalo, Chicago, Milwaukee,  
St. Louis, Los Angeles.

**RYERSON**

**GET RIGHT UP TO  
THE MINUTE!**



*with*

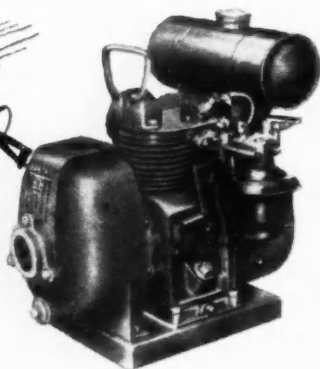
Here's the original single-opening  
tilter, with famous "Figure  
8" mixing action and other  
time tested features. Stream-  
lined for surprising daily out-  
put and low yardage costs.  
Furnished side or end dis-  
charge on skids, steel wheels,  
or pneumatics.

**WONDER  
TILTERS  
MIX FASTER  
TRAIL FASTER  
LAST LONGER**

*write for Bulletin SJ 147.*

**CONSTRUCTION MACHINERY CO.  
WATERLOO • IOWA**

**A PERFECT BILL OF HEALTH  
for EVERY BARNES PUMP**



**E**ACH Barnes Stream-  
luxe Automatic Centrifugal  
Pump, from the largest to  
the smallest, is factory tested by actual operation as it  
comes from the assembly line and before it is shipped  
to you. Each pump is rigidly tested for capacities at  
various heads and for perfection of engine performance.  
All in all, 42 different inspections at various stages of  
manufacture, guard the quality of Barnes Pumps. This  
Quality-Control at Barnes assures you of a perfect pump  
and perfect pumping performance. Buy the Best—  
Buy Barnes!



For sale by leading distributors  
in all principal cities. If there is  
no distributor near you, write,  
phone or wire.

**BARNES MANUFACTURING CO. Mansfield, Ohio**  
PRECISION WATER CONTROL PRODUCTS FOR OVER FIFTY YEARS



# Quality

... "The very soul of a product which, aside from its beauty, is the measure of its usefulness and length of life."

## In Metals, in Craftsmanship, in Performance, in Permanence

Barrows provides more than quality of appearance in hardware for every type of architectural design. Actually, only as it is selected, installed, and then "lived with" can the quality of BARROWS be fully appreciated—its ease of installation, its smooth operation, its durable construction. The test of time is the test that tells—in both beauty and long life. And for over fifty years BARROWS BUILDERS HARDWARE has helped bring more ease in home building and greater enjoyment to every-day living. That's why those who know . . .



# Bank on

# BARROWS

NORTH CHICAGO

ILLINOIS

## The Saw with the Rotating Table



The Nordberg-Buday is the only rotating table saw. Only in this saw is the table, arbor and power drive combined in a single rotating unit. All cuts are made with the lumber remaining lengthwise on the extension work tables. Write for Bulletin 132 or better still, see the saw on demonstration.

### ● PORTABILITY

Light but rigid construction — weighs only 340 lbs. with gasoline engine drive can be used anywhere (Electric motor available).

### ● ECONOMY

Elimination of unnecessary lumber handling means greater output, lower costs and higher profit — the saw will pay for itself in a short time.

### ● CAPACITY

With 12 inch blade can rip 4" deep and 40" wide, or cross-cut a 3" x 12" or 4" x 4".

### ● VERSATILITY

Easily used for cross-cutting, ripping, mitering, tenoning, bevel ripping and compound mitering.

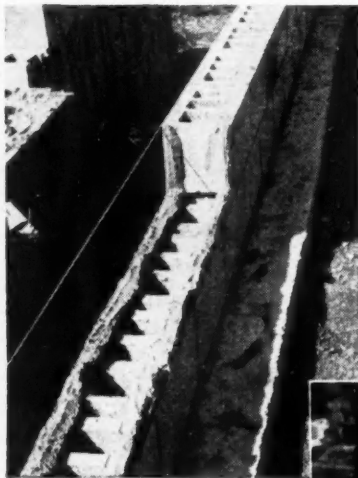
# NORDBERG-BUDAY PORTABLE POWER SAW

NORDBERG MFG. CO., MILWAUKEE 7, WIS.

# How to Build Weathertight CONCRETE MASONRY WALLS

**I**N the scramble to cut housing costs there is widespread disregard for good workmanship. High quality concrete masonry units are being badly used in nearly every community. This will inevitably lead to buildings with cracked, leaky and unattractive walls. No matter how good the block may be, if they are not properly laid, owners will be dissatisfied with their structures.

To protect the future of the concrete masonry industry it is necessary to help owners get satisfactory concrete masonry buildings.



To build weathertight walls, place mortar on outer and inner face shells of units and "butter" the head joints of the last unit laid as shown in illustration at left.



"Butter" the head joints of next unit to be laid. Then shove it firmly against last block. Enough mortar should be used to cause a small amount to ooze out of both head and bed joints on both sides. Head and bed joints should be struck off with trowel. When mortar is partially set it should be compressed and compacted into the exterior joints.

Concrete products manufacturers can help guard against the misuse of their material by making frequent inspections of housing projects and other jobs where their block are being used, to help architects, builders, and masons get good quality concrete masonry construction.

## PORTLAND CEMENT ASSOCIATION

Dept. A8-3, 33 W. Grand Ave., Chicago 10, Illinois

A national organization to improve and extend the uses of concrete . . . through scientific research and engineering field work

# NEW HEATING IDEAS...



## COME OUT OF the WEST

Of signal interest to you who design and build: Pacific has developed—(1) really new performance standards in warm air, automatic gas heat; and (2) distinctive functional styling.

Throughout the nation, our own industry acknowledges the spectacular success of such 1947 Pacific innovations as Duo-Stage Modulation\* and Thermo-flo Heating Element . . . such distinctly original engineering as appears in the new Suspended Unit, the Duct Furnace, the Winter Air Conditioner.

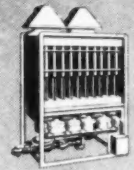
New, yes . . . yet fully proven by many months of rigid testing in the Naco Engineering Laboratories. Today, as for a third of a century, the entire lineup of Pacific Gas Heating Equipment bears the mark of superior engineering.

Learn about really new gas heating! Send for a file of catalog and specification data. Throughout the nation, our dealers are at your service.

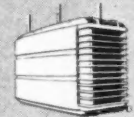
"Be Specific . . . Demand Pacific"



\*Patent applied for.



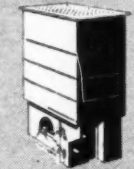
DUCT FURNACE



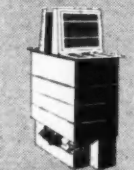
SUSPENDED UNIT



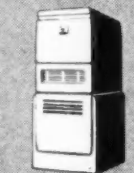
GRAVITY FURNACE



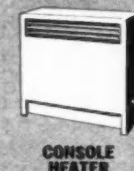
FLOOR FURNACE



DUAL WALL FURNACE



FORCED AIR FURNACE



CONSOLE HEATER

PACIFIC HEATER DIVISION

## NACO MANUFACTURING CO.

P. O. Box 310, Huntington Park, California

# HYDROTHERM

**AUTOMATIC GAS FIRED  
CENTRAL HEATING PLANT**

*for* **HOT WATER HEATED HOMES**



**SMALL  
in size . . . .**

**MIGHTY  
in performance!**

- LONG-LIFE CAST IRON CONSTRUCTION
- LIGHTWEIGHT, EASY INSTALLATION
- HIGHLY EFFICIENT PATENTED DESIGN
- IDEAL FOR PANEL AND RADIANT HEATING
- APPROVED BY AMERICAN GAS ASSOCIATION
- SPACE-SAVER IN BASEMENT, PLAYROOM

WRITE FOR NEW DESCRIPTIVE BOOKLET AB-8



**HOOK & ACKERMAN, Inc.**  
18 EAST 41st STREET, NEW YORK, N. Y.

**You SAVE 85% ON YOUR DOOR  
INSTALLATION COSTS...**

*When you use*

ADJUSTABLE

*Tru-sized*

**DOOR JAMBS**



**NO NAILING  
NO SAWING  
NO PLANING  
only 3  
precision milled  
pieces to install**

**TIME SAVED IS MONEY SAVED** when you're building . . . and adjustable Tru-sized Door Jambs cut average installation time from 1½ hours to approximately 10 minutes each!

The door jamb can be quickly adjusted to the exact clearance desired with just a few turns of a screwdriver. Permanent accuracy of fit is assured by the "shock-absorber" leaf springs.

Wheeler-Osgood Tru-sized Jambs and Tru-sized Doors make the perfect combination. Find out about their many advantages today. Write to Dept. 5AB for FREE Literature.

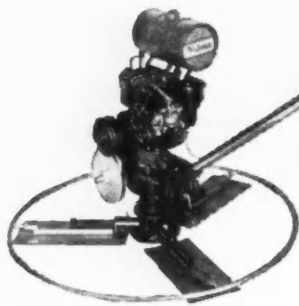
\*PATENT APPLIED FOR

## THE WHEELER, OSGOOD COMPANY

*Plants and General Office: Tacoma 1, Washington*

NEW YORK OFFICE ..... 1326 Empire State Bldg., New York 1, N. Y. .... Penn. 6-2954  
 CHICAGO OFFICE ..... 134 So. LaSalle Street, Chicago 3, Illinois ..... State 5335-6-7  
 SAN FRANCISCO OFFICE 3045 19th Street, San Francisco, California ..... Valencia 2241  
 LOS ANGELES OFFICE ..... P.O. Box 7685 Del Valle Sta., L. A. 15, Calif. .... Vandike 6326  
 TACOMA OFFICE ..... 1216 St. Paul Avenue, Tacoma 1, Washington ..... Main 8101

**MACHINE ECONOMY AND PERFECTION  
for SMALL CONCRETE JOBS**



MODEL  
"J"

**The perfect  
Mechanical Trowel ...  
LIGHTWEIGHT  
FLOATING-FINISHING  
MACHINE**

Eliminates back-breaking handwork . . . produces a dense, wear-resistance slab, free from ripples and depressions. May be adjusted by control handle to any pitch, while in operation. Produces either traction surfaces for walks or vehicular driveways . . . or perfectly smooth floors, suitable for dancing. 35" diameter goes through 36" doorways. Weight 105 lbs. with gas engine or electric motors.

Also in Model "B" with 46" diameter.

Write for details of these and other Whiteman products and name of nearest distributor.



**Whiteman MANUFACTURING COMPANY**

3249 Casitas Avenue Los Angeles 26, California

**Hopes for More Bathtubs,  
Sinks and Fittings in 1947**

**L**AATEST production figures prepared by the U.S. Department of Commerce throw light on the controversial topic, "What's happening to sinks, bathtubs, pipes and fittings being produced in the factories of America?"

This agency's figures show that the plumbing industry is manufacturing most items today at an unprecedented rate. Production figures for such items as soil pipe, bathtubs, sinks, lavatories and water closets had reached all-time highs for December, 1946. But, cautions this agency, the shortages that still exist are real and undeniable. The entire problem hinges on the supply catching up with the demand.

The soil pipe situation is an illustration of this condition. In January, 1946, soil pipe manufacturers had on hand orders for 272,473 tons of soil pipe and fittings. This backlog kept getting higher until it reached a peak of 356,636 tons in October. Since then manufacturers have been steadily chopping away at these orders, so that by February, 1947, they had reduced the unfilled order totals by 17,000. Present production figures reveal that some time in 1949 the soil pipe shortage may come to an end—unless other conditions prevail.

This same condition applies to the production of bathtubs, sinks, lavatories and water closets, despite the fact that figures show an all-time high in production of these items. The production index figures for February, 1947, reveal: bathtubs, 158.1; sinks, 221.1; lavatories, 172.3; water closets, 137.1, as compared with the base index of 100 in 1939.

**Demand versus Supply**

Production of lavatories and sinks is slowly catching up with demand. Estimates are that the U.S. will require 2,031,000 lavatories in 1947. Production of this item at year end will total over 2,600,000. More than 2,101,000 sinks will be needed to meet estimated requirements. The industry has already produced 913,000 in the first quarter, with a

(Continued to page 174)

It's a BREEZE to install



- This extra feature will sell your homes.
- Easily installed in any standard wall from 4 3/4" to 30 1/4" thick.
- Can change the air in the average kitchen every two minutes.
- Now in production.
- Contact your local Westinghouse supplier today.

**Westinghouse Long-Life FANS**

WESTINGHOUSE ELECTRIC CORPORATION  
ELECTRIC APPLIANCE DIVISION • SPRINGFIELD 2, MASS.

**Majestic**

No. 550\*

**ALL-PURPOSE  
SERVICE DOOR**



**NOW Available for Homes and Buildings**

... better  
handling of  
**FUEL**



**LUMBER**



**TOOLS**

**SUPPLIES**



Priced in the low-cost bracket for the mass market, yet built for lifetime service in any class of structure, the Majestic No. 550 Door is a necessity in all homes and buildings. It simplifies basement deliveries; protects siding and masonry. The heavy-gauge, die-formed steel door acts freely on heavy-duty hinges permanently welded to the one-piece steel frame. Angle-reinforced body anchors solidly in the wall. Rust-resisting asphaltum finish. Automatic burglar-proof lock. Full range of sizes. Write for details.

**\*Rugged FORMED STEEL**

Extra strength and durability of formed steel construction are featured in many Majestic items.

Nationally Known and Advertised for 40 Years

**THE Majestic CO.**  
834 ERIE STREET  
HUNTINGTON, INDIANA



**T&S**  
TORRINGTON

# Hidalift

## 100% CONCEALED SASH BALANCE

The trim architectural lines made possible by the elimination of bulky old-style sash-weight boxes appeal to home designers and builders . . . are positive selling points to the prospective home owner. Other important features are:

**SELF-CENTERING** An exclusive feature of HIDALIFT Sash Balance is the self-centering guide bushing which maintains perfect balance . . . prevents jamming . . . eliminates templates in installation.

**EASY TO INSTALL** After a sash has been ploughed, HIDALIFT is attached quickly and easily with only two screws.

**LIFETIME SERVICE** HIDALIFT is sturdily made and all parts are permanently rust proofed. The tension spring is sealed within the tubing to prevent wear caused by dust.

*WRITE for completely descriptive literature including installation details and listing sizes and specifications for all standard sash sizes.*

**TURNER & SEYMOUR MFG. CO.**  
TORRINGTON, CONN.



**SAVE 11 COSTLY STEPS PER WALL**

with  
**SYMONS SYSTEM WALLFORMS**

*count your savings in Time, Labor, Materials*

When you use the Symons System you eliminate **eleven** costly steps that now are slowing down and pricing up your wall form construction. Count these facts:

- 1—No hammering or removing of nails to hold adjacent forms together.
- 2—No drilling for ties.
- 3—No plugging up of old tie holes.
- 4—No making, placing or removing of spreaders.
- 5—No fishing for ties through the forms.
- 6—No placing of more than one waler per wall.
- 7—No measuring, cutting, nailing of band iron; no adjusting of washer ties.
- 8—No complicated breaking off of ties.
- 9—No measuring nor squaring of corners.
- 10—No forcing-out of forms when stripping against resistance of band iron or washer ties.
- 11—No covering of marks made in concrete by ties.

These are your eleven time and labor savings. Plus these materials saved: spreaders; nails; all waling lumber beyond one; almost all bracing lumber; all lumber split by nails.

Send now for big FREE illustrated book. Gives details on Symons System eleven profit-building savings.

**SYMONS CLAMP & MANUFACTURING CO.**  
4249 Diversey Avenue, Chicago 39, Illinois



## Complete Sander Kit

*Everything You Need on the Job!*



**Safe Storage—Saves Time**

All steel case contains Sterling Portable Electric Sander (for fast, economical finishing), extra sanding pads, oil, grease, filter—plus the new slide rule abrasive selector. Write for descriptive folder that gives all details on Sander operation and kit.

**STERLING TOOL PRODUCTS CO.,**  
370-K East Ohio St., Chicago 11, Ill.


**INCLUDED IN KIT**



Slide rule abrasive selector quickly answers hundreds of finishing problems.

**STERLING** PORTABLE ELECTRIC SANDERS

# STATE DISTRIBUTORS WANTED TO SELL



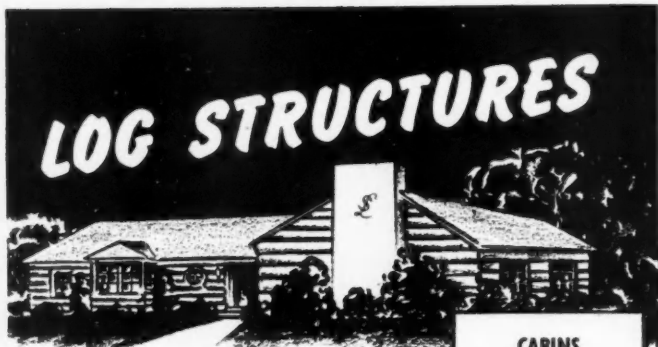
THE RANCHER BY STRATHMOOR

## STRATHMOOR Factory-Bilt HOMES . . .

Must be capable of erecting and maintaining five retail display locations as well as organizing the necessary sales force. Must appoint one retail dealer to each fifty thousand population. Homes competitively priced.

Write, phone or wire for appointment.

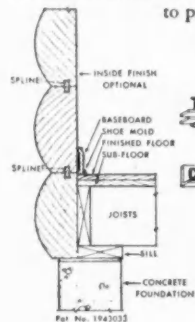
**THE STRATHMOOR COMPANY**  
14000 Grand River Ave. VERMONT 7-3300  
DETROIT 27, MICHIGAN



For unusual homes of character and distinction... for typical western homes of rustic beauty. Materials available NOW... not 30 days... not next week... but TODAY!

Effects substantial savings in construction costs. No studding required. Approved financing.

Conventional or rustic interior finish and modern arrangements... adaptable to any floor plan. Solid wood walls provide best insulation against heat and cold. Average home can be completed in 30 days ready to move in! Bark removed and log chemically treated to prevent discoloration and deterioration.



**THE Lowe CO.**  
ENGINEERS  
CONSULTANTS  
**CIVIL MECHANICAL ELECTRICAL**

EXCLUSIVE NATIONAL and  
INTERNATIONAL DISTRIBUTORS  
Dept. AB-8, 344 W. Colorado  
Glendale 4, California

- CABINS
- COTTAGES
- RUSTIC HOMES
- RANCH HOMES
- RESORT BUILDINGS
- MOTELS
- RESTAURANTS



Planning  
Consultation  
Available

Some Choice  
Exclusive  
Dealer  
Territories  
Still Available

(Continued from page 172)

potential of 3,752,000 sinks for this year. This should ease the situation on sinks somewhat. The industry will need 2,343,500 closet combinations in 1947. First quarter production of 594,000 shows that manufacturers are producing slightly over the requirement.

Certain types of bathtubs are still hard to get. Total requirements for U.S. are estimated at 1,261,500. First quarter production came to 418,000, an indication that before the year's end the bathtub situation should not be critical. Still to remain on the shortage list are radiation, cast-iron or convection and plumbing pipe and fittings. This includes also various types of piping. American Iron and Steel Institute records show that every major manufacturer of pipe has his order books full all the way to 1950.

Despite some unhealthy conditions that exist, the present outlook is good. Order backlogs are being whittled down a little more each month. It is hoped that by the end of 1947 most items will be in full supply.

\* \* \*

**Refrigeration and Air Conditioning  
Exposition to be in Cleveland**

"THE biggest date in '48," original slogan for the entire Fifth All-Industry Refrigeration and Air Conditioning Exposition in Cleveland next January, already has narrowed down to the single day of January 27, 1948, for the nation's refrigeration contractors and service engineers.

On that date, the show will open exclusively to these two groups in the refrigeration industry, and plans already are under way by the National Association of Refrigeration Contractors and the Refrigeration Service Engineers Society to take full advantage of the opportunity thus provided to view the industry's new products in special displays provided by the manufacturers.

Word received at headquarters of the Refrigeration Equipment Manufacturers Association, sole sponsors of the 1948

(Continued to page 176)

Automatic

**OIL HEAT**

*at its best!*



FOR A HOME... OR FOR A  
SKYSCRAPER



Johnson Oil Burners will give you the most dependable heat you can buy! It doesn't matter whether you are heating a private home or a 1000-room hotel, that statement still stands, for there's a Johnson Burner for every heating job.

They are engineered to give you more heat per fuel-oil dollar for more years than any other heating equipment available.

If you want true economy and enduring efficiency, specify "Johnson Burners"... one of the great names in the oil burner industry. There's a Johnson dealer near you.

...**Johnson Oil Burners**...

S. T. JOHNSON CO.  
940 Arlington Ave., Oakland 8, Calif.  
401 No. Broad St., Philadelphia 8, Pa.



Touch of Magic

**SELLS KITCHENS  
SELLS HOMES**

Builders say an easy, low-cost installation of a modern Vent-A-Hood Kitchen Ventilator works magic in selling kitchens to women—and SELLS HOMES FASTER.

Designed for beauty with glistening white baked enamel finish, all chrome trim, splash panel to protect walls and utility light. Engineered for efficiency with patented centrifugal exhaust unit and grease-trap to remove food odors and greasy vapors. Venting is direct to flue or through simple metal ducts.

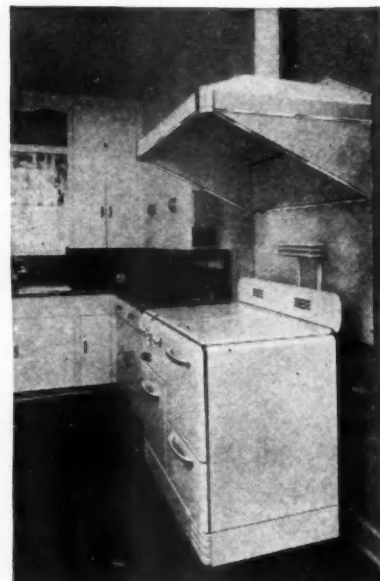
Investigate Vent-A-Hood for homes you're building or planning.

Write for descriptive literature, quotations.

**VENT-A-HOOD**

THE MODERN KITCHEN VENTILATOR

The Vent-A-Hood Co., Plantation Drive-Hines Boulevard, Dallas, Texas



# Lemco SOLID STEEL CASEMENTS

*America's Oldest Casement Windows*



Lemco's thirty years of quality workmanship with over one million casements satisfactorily installed is your guarantee of a perfect job.

**Immediate shipments from our large warehouse stock.**

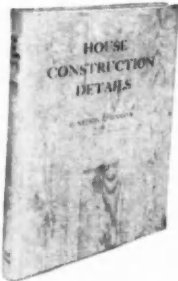
See our catalog in Sweet's or write today for your copy.

## CROFT STEEL PRODUCTS, Inc.

JAMESTOWN, N. Y.

N. Y. C. SALES OFFICE — 370 LEXINGTON AVENUE, NEW YORK 17, N. Y.

## An invaluable book



314 p.  
1,500 illus.  
index, 8½x11  
cloth, \$4.00

for builders or others making alterations in a set of stock plans and when drawing up a complete set of plans. All aspects of house construction are clearly explained from the excavation of the foundation to the finished house with the aid of scale drawings and photographs carefully chosen to make each detail easily understood and arranged in logical construction sequence. Ready reference is aided by thorough system of indexing.

Many new building materials are shown and the various systems of pre-fabrication are presented as well as standard methods of carpentry work. The broad usefulness of the book is demonstrated by its wide acceptance by builders, instructors in vocational high schools, working carpenters and contractors.

### CONTENTS

Floor Plans; Sets of House Plans—Excavations; Foundation Forms; Foundations—Sills; Girders; Joists; Sub-flooring—Outside Walls—Inside Walls; Wall Sheathing; Ceiling Joists—Roof Construction; Bay Construction; Roofing—Cornices and Porches—Exterior Wall Construction—Interior Wall Coverings; Interior Trim—Stair Construction—Windows—Doors—Hardware—Closets; Shelves; Built-in Equipment—Finished Flooring—Chimneys and Fireplaces—Scaffolds—Garages—Wiring for Modern Homes—Insulation; Sound Proofing—Gates; Garden Furniture—Camps; Cabins; Cottages—Farm Buildings—Painting and Finishing—Modern Homes—Modern Building Materials—Heating; Air Conditioning—Pre-fabrication. Index.

314 p., 1,500 illus., index, 8½ x 11, cloth, \$4.00

Book Service Department

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

## ECLIPSE TILTING DRUM CONCRETE MIXER



*A Full Half Bagger*

### AN Improved LOW-PRICED MIXER

A handy, profitable 3½ cu. ft. machine that will handle all classes of work done by the average contractor. The Improved Eclipse 3½ Mixer embodies all the latest refinements in design and is guaranteed as to materials and workmanship. Engine runs in oil and is controlled by throttling governor to insure constant speed and steady power. The engine is completely enclosed in a steel housing. Main bearings are bronze, readily accessible. Sturdily built and easy to move.

Quick uniform mixing — easy to load — visible mixing action — handles coarse or fine aggregate — moves anywhere.

WRITE OR WIRE FOR DETAILS

MANUFACTURED BY

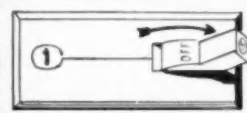
**GEO. C. CHRISTOPHER & SON IRON WORKS**

FOR FORTY YEARS THE WORLD'S BEST IN CONCRETE MACHINES  
P. O. BOX 610 WICHITA, KANSAS

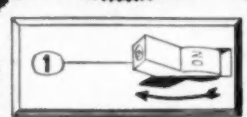
## Ⓜ TYPE AC CIRCUIT BREAKER LOAD CENTERS



*Automatically  
TRIPS "OFF"*



*Then, after removing  
cause of trouble, simply  
FLIP BACK to "ON"  
position.*



## Eliminate the HAZARDS and INCONVENIENCES of SHORT CIRCUITS

Short circuits are extremely costly, not only in inconveniences they cause, but in the irreparable harm they can do to the household electrical wiring system.

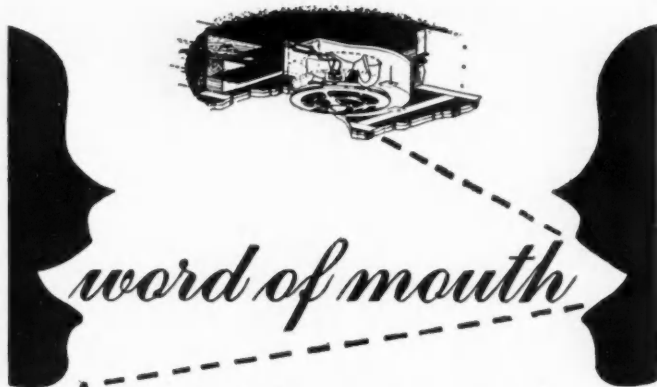
The Ⓜ Type AC Circuit Breaker Load Center protects home wiring and appliances by automatically turning off the current whenever short circuits or sustained overloads occur.

After the cause of the trouble has been removed, a simple flip of the Ⓜ Circuit Breaker handle to the "on" position restores full electrical service.

Ⓜ Type AC Circuit Breaker Load Centers are safe and simple to operate — nothing to replace.

For further information write for Bulletin No. 75

**Frank Adam**  
ELECTRIC COMPANY  
ST. LOUIS, MO.



An enthusiastic home owner is your best salesman. To help create enthusiasm, include Blo-Fan electric ceiling ventilators; in the kitchen ceiling (where a fan belongs); in the bathroom; in the den and laundry. With Blo-Fan on the job, the house stays fresh and clean. Then you'll have enthusiastic salesmen for your future homes. Write for the name of your nearby Blo-Fan distributor.

**Blo-Fan**

- combination fan and blower
- more than a fan
- more than a blower

PRYNE & COMPANY, INC • LOS ANGELES 54, CALIFORNIA • \* \* \* NEW YORK • CHICAGO



*Fall* IS THE IDEAL TIME TO START NEW LAWNS

**Scotts SEED and TURF BUILDER Is Your Best Bet For Outstanding Results**

As a builder or contractor, you are aware of the extra appearance and value a beautiful lawn adds to new homes, community developments, and industrial buildings. For making good lawns with a minimum of expense and effort, send today for this FREE volume of lawn building "know how." Don't delay, for fall is the best time to start new lawns. Also tell us about your seeding requirements, and we will include estimates. Use Scotts lawn products this fall and start lawns that will be a boon to your reputation as a contractor. For beautiful lawns, always specify Scotts.

**O. M. Scott & SONS COMPANY**  
21 Fourth St., Marysville, Ohio



Send For This **FREE** Volume Of Lawn Care Bulletins . . . They Tell How To Make Better Lawns

(Continued from page 174)

show, indicates that both NARC and RSES will have special events in connection with the exposition.

The exposition will be staged in the Cleveland Auditorium from January 26 to 29. With the exception of Tuesday, January 27, the show will be open to the entire industry and trade. A mounting list of exhibitors and announcements of activities of various trade groups give evidence that the exposition will be a success from the standpoint of size, number of displays, and attendance record.

\* \* \*

**Clay Pipe Manufacturers Hold Meeting in Akron**

**M**ORE than 100 members of the National Clay Pipe Manufacturers, Inc., an association of 44 of the nation's leading clay pipe companies, met on June 11, 12 and 13 in Akron, Ohio, to discuss the business outlook for that industry for 1948.

G. Lawrence Avery, head of the Lehigh Sewer Pipe and Tile Co., of Fort Dodge, Iowa, and new president of NCPMI, opened the three-day meeting. Among other items discussed was an analysis of construction costs as reported by the U. S. Bureau of Labor Statistics. Its indexes show current costs of clay pipe less than 10 per cent higher than in 1926. Present index of this material is only 109 as compared with the normal 100 based on 1926 costs. The average index for all building materials is 178, indicating a jump of 78 per cent over the 1926 level. No increase in costs of clay pipes was contemplated, unless rising labor costs forced manufacturers' prices to rise.

J. P. Seiberling, president of the Seiberling Rubber Co., delivered the main address at the banquet. Mr. Seiberling warned manufacturers to be on their toes, ready for anything. He cited the trends of labor and government and said that there is no way of predicting what will happen.

Other speakers included: W. E. Robinson, president of The Robinson Clay Products Co., and A. T. Knowles, general manager of Goodyear Aircraft.

**ENTRANCE RAILS FROM STOCK SAVE MONEY—TIME**

FIVE SIZES SHOWN AT LEFT

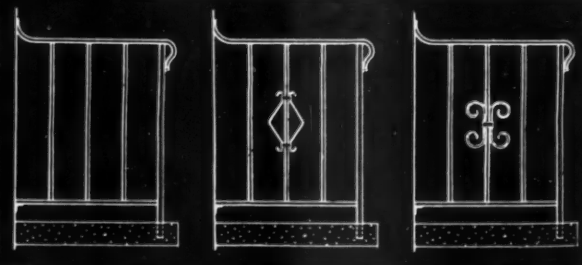


A size for every home—a design for every taste! That's what you get in STOK-RAILS (stock size entrance rails) . . . and at a saving of nearly 50% compared to made-to-measure rails. STOK-RAILS are standard construction: 2' 8" high, 1" sq. posts, 1/2" square upright bars, 1 1/2" channel top with lamb's tongue finish. Painted black. Available in 3 designs shown below. Order from your dealer or write.



LOGAN CO., INC., 410 BUCHANAN ST., LOUISVILLE 6, KY.

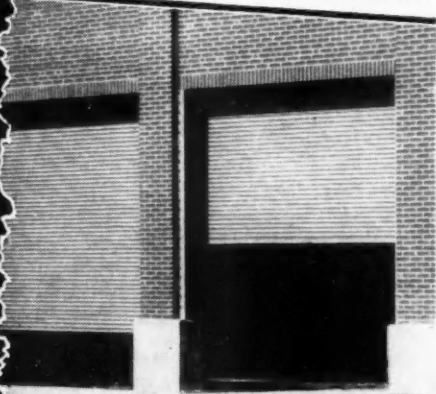
**Logan STOK-RAILS**





The easy coiling upward action of KINNEAR ROLLING DOORS clears the entire opening quickly saving floor and wall space. When open, the doors remain out of the way, safe from damage by wind or vehicle! Kinnear's famous interlocking steel-slat curtain assures extra all-around protection. Write today.

## CLEAR the WAY! with KINNEAR ROLLING DOORS



The KINNEAR Manufacturing Co.  
Factories: 1560-80 Fields Ave.,  
Cols. 16, Ohio, 1742 Yosemite  
Ave., San Francisco 24, Calif.

Saving Ways in Doorways  
**KINNEAR**  
ROLLING DOORS

Thanks JOBBERS AND DEALERS

... for the swell job you are doing

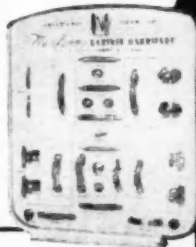
Yes, you have done a fine job. Thousands of dealers everywhere have been very patient waiting for delivery of this profitable Cabinet Hardware line, and found their waiting was worth it!

The National Lock Company line is backed by an extensive promotion campaign to help you sell this profit-packed hardware. Write us today — take advantage of this booming sales opportunity.

Our handsome counter display boards help keep selling costs down for dealers from coast-to-coast. Better get yours now!

THE DE LUXE LINE

No. 140  
Display Board



**NATIONAL LOCK COMPANY**  
Cabinet Hardware Division  
ROCKFORD ILLINOIS

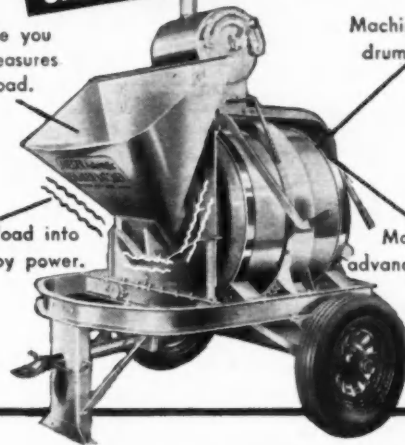
## HERE'S YOUR NEXT MIXER JAEGER 3 1/2 S "AUTO-LOADER"

Loads while you mix and measures as you load.

Machined steel drum tracks.

SHAKES load into the drum by power.

Many other advanced features.



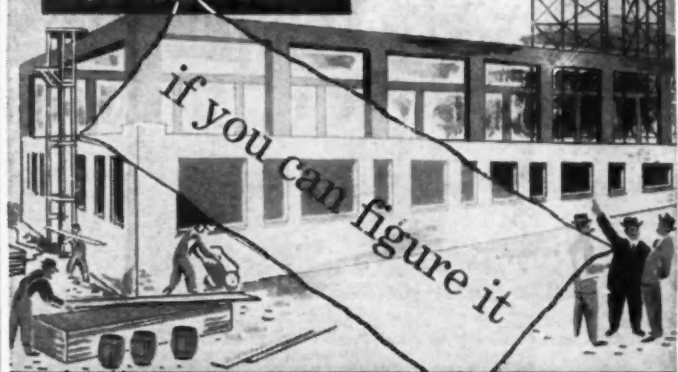
with AUTOMATIC SHAKER BATCHER  
GOOD FOR UP TO 50 CU. YDS. A DAY

Loads and measures while you mix, then shakes waiting batch into drum QUICK-AS-A-FLASH. Fastest, huskiest half-bagger built. Send for catalog showing latest type 3 1/2 S, 6S, 11S, 16S Trailers and Plaster-Mortar Mixers.

THE JAEGER MACHINE CO. Main Office, Factory  
Columbus, Ohio  
REGIONAL 8 E. 48th St. 226 N. LaSalle St. 235-38 Martin Bldg.  
OFFICES: NEW YORK 17, N. Y. CHICAGO 1, ILL. BIRMINGHAM 1, ALA.

PUMPS • COMPRESSORS • HOISTS • LOADERS • PAVING EQPT.

You can build it



LEARN ESTIMATING IN SPARE TIME

Figure big or little jobs quickly and accurately the Tamblin way for DEPENDABLE profits! Analyze current building costs. Learn the simple, easy Tamblin System of Estimating — in your SPARE TIME! Used by successful contractors for more than 20 years. Try it for 10 days at our expense!

*The Tamblin System*

MAIL NOW

Tamblin System, Johnson Bldg., 488, Denver 2, Colo.

Send me Tamblin System on 10 day trial. I will pay \$5 per month until \$30 is paid if I keep it. If not, I will return it.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_

SEND NO MONEY! TRY IT BEFORE YOU BUY!



Contractors get a foundation a day with this new construction technique

## HOUSE FOUNDATIONS TWICE AS FAST HALF THE COST

With Atlas SPEED Forms\*

THE Modern Process of concrete construction used by builders everywhere to beat today's high labor costs.

Steel Forms cut labor costs 1/3 to 1/2 lower than wood, for they go up in half the time. Easy to strip and move. Light weight, anyone can handle them.

Material costs are lower than wood, too—steel forms—good for re-use indefinitely without repair. No joists needed on slabs—No studs on walls.

SPEED Forms plus the experience of specialists in form work of all types, plus trained field supervisors to start your men off on the job, give you better concrete construction at a new low cost. Call on us for layouts, comparative figures, recommendations and Atlas SPEED Forms.

Available Now For Rent Or Sale  
Write for Folder and Prices

### Irvington Form & Tank Corp.

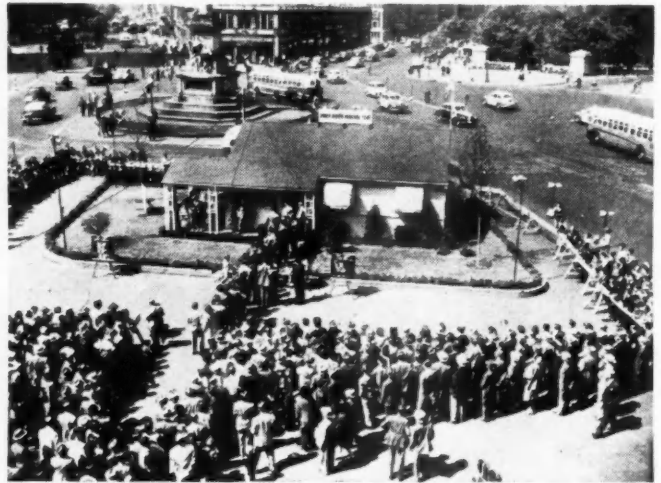
IRVINGTON 1, N.Y.

New York City Sales Office—43 Cedar St. Telephone—BOWling Green 9-4030  
\*Patents Pending

### Celotex Pre-Engineered House Aids in Cancer Drive

TO aid the Fund Drive of the Damon Runyon Foundation for Cancer Research, the Celotex Corporation has erected, furnished and donated to the foundation a five-room Cemento Pre-Engineered House. Located at Columbus Circle in the heart of New York City, the house served as headquarters of the drive until its termination on June 30.

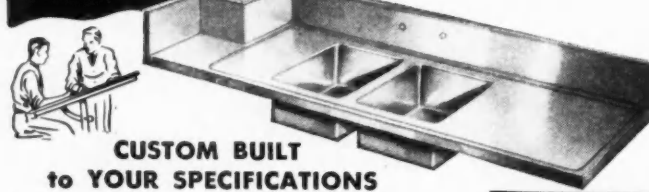
Completely erected in nine days, the house was officially opened on Sunday, May 10. Walter Winchell, chairman of



New Yorkers watch Cancer Drive Show.

the drive, city officials and other guests of local and national prominence were present at the ceremony at which Brod Dahlberg, Celotex president, turned over the keys to the Runyon Foundation.

## Stainless Steel SINKS AND CABINET TOPS



CUSTOM BUILT TO YOUR SPECIFICATIONS

Custom fabrication is an original policy of Just Manufacturing Company and we have maintained that policy throughout the years. The needs of our custom-built trade have always had preference and always will. You design the cabinets... we build the sinks and cabinet tops to fit your design... any size... any shape, and they will always have that incomparable...

### Radiluxe QUALITY

which gives you two important exclusive features:

**IN-BUILT ANTI-SPLASH RIM ON BOWLS, DOUBLE-PITCH DRAIN-BOARDS** with no channels to clean, no grooves to endanger fine glassware.

ALL WELDED, seamless construction polished to a beautiful satin finish... radius corners in bowls, vertically and horizontally... fully sound deadened and many other quality features.

Other JUST LINE products are Cabineteer "Package Unit" Stainless Steel Sinks, Stainless Steel Scullery Sinks, and Galvanized Scullery Sinks that are hot-dip galvanized after fabrication.

Write today for bulletins and details.

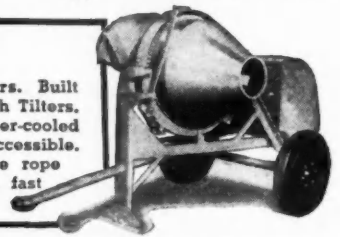
# JUST Manufacturing Co.

4610-20 W. 21st Street, Chicago 50, Illinois

## \$SAVE WITH \$SMITH

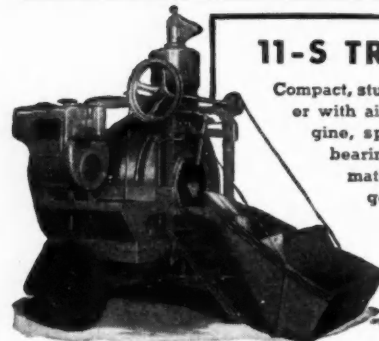
### 3 1/2-S TILTER

The champion of small mixers. Built like the world-famous Big Smith Tilters. Equipped with air-cooled or water-cooled engine, fully enclosed, easily accessible. Other features include: simple rope starter, big wide feed chute, fast "tilt and pour" discharge.



### 11-S TRAIL-SMITH

Compact, sturdy, trailer-type non-tilt mixer with air-cooled or water-cooled engine, spring-mounted axle, roller bearing automobile wheels, automatic skip vibrator and enclosed gear reduction. Tows behind truck at fast speed. Also available in 11-S, 4 wheel, and 6-S, 2 wheel, end discharge models.



SPECIFY SMITH MIXERS for that next concrete job and save money. All Smiths are backed by 47 years mixer building experience. They last longer... cost less to operate.

Write for literature.

THE T. L. SMITH COMPANY  
2849 N. 32nd Street • Milwaukee 10, Wisconsin



## MIXERS

Famous for Performance on the World's Greatest Projects

## IMMEDIATE DELIVERY



**AMERICAN BOWSTRING WOOD TRUSSES**  
for Warehouses • Stores • Factories • Garages

FREE—SEND FOR NEW CATALOG TODAY!

25th Anniversary



1922-1947

## AMERICAN ROOF TRUSS CO.

Phone PLaza 1772  
6852 STONY ISLAND AVE.  
CHICAGO, 49

Phone ADams 1-4379  
232 W. SANTA BARBARA AVE.  
LOS ANGELES, 37

ALL-ALUMINUM

### "LEWSHIELD"

- WINDOW & DOOR CAPS
- DOOR DRIP CAPS

In sizes up to 21 ft.

"LEWSHIELD" caps are easily and quickly installed on new or existing buildings of all types . . . add a distinctive touch that means greater customer satisfaction. Weatherproof, fireproof, rustproof—they form a permanent seal against water leakage into buildings; keep out dust and dirt; prevent weather expansion of windows and doors. Economical in cost. Immediate delivery. See your building supply or lumber dealer today; or write for complete details.

### "LEWSHIELD"

Aluminum Building Products Co.

FIFTH AVENUE  
EAST MCKEESPORT, PA.

## Beaver Caulking Guns

Immediate Delivery



### For Cartridge or Bulk Compound

Precision made for longer life and better results. • All working parts accurately machined.

- Extra heavy gauge barrels. • Uses all caulking materials—handles light oils. • Positive ratchet drive. • Threaded nozzles—no bayonet joints to come loose. • Three popular sizes—6½", 10" and 15". List prices—\$6.50, \$7.50, \$8.50. Write for discounts.

WESTERN RESERVE MFG. CO.

3708 E. 93rd St. Cleveland 5, Ohio

## WANTED

### — Manufacturers Agents —

An old established nationally known line of "Built-in" home ventilators and portable panel window fans is available to well established top flight manufacturers agents. This is an outstanding line, competitively priced and established throughout the U. S. and Canada. Will consider only recognized firms, traveling several men and contacting hardware, electrical and builder's supply houses. Sectional territories open from coast to coast to qualified sales organizations.

Box 847

AMERICAN BUILDER

105 W. Adams St.,

Chicago 3, Ill.

## MANUFACTURING OPPORTUNITIES

The great building industry is your profitable market for these masonry products. Low investment . . . high returns.

The biggest building years in the nation's history are just beginning. New construction, involving billions of dollars, means huge demands for block, brick, roof tile and drain tile. Today is the opportune time to get into the local manufacture of these products.

Use our modern, low-cost machinery to insure finest quality products at lowest manufacturing costs. Sold direct from factory to user. . . . backed by 40 years of doing business with men like you.

Write for new catalog. Describes complete line of equipment with prices plainly given. Early delivery.

Concrete Equipment Company  
514 OTTAWA AVE. HOLLAND, MICH.

More Power

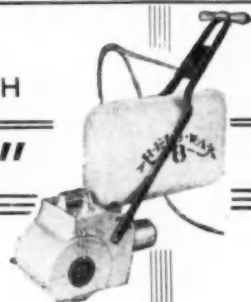
WITH

## REID-WAY "8"

FLOOR SANDER

REID-WAY BUILT  
MOTOR DEVELOPS  
2 H.P.!

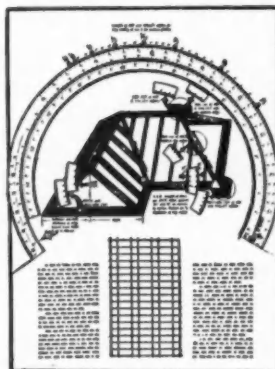
WRITE DEPT. AB FOR FULL DETAILS



## REID-WAY, INC.

2917 First Ave. S.E.  
Cedar Rapids, Iowa

## SOLVE ROOF PROBLEMS INSTANTLY—SAVE MATERIALS



IN 10 SECONDS!! All 11 lengths and cuts for any size and shape of simple or hip roof. Just set dial to "pitch" and "run," and the figures appear in windows at proper places on diagram of roof. Unlike the usual rafter tables, this instrument enables you to set "run" directly in feet and inches—not just in even feet. Takes thickness of ridge board into account from the start and avoids troublesome adjustments later. Angles are given both in degrees and square readings. Eight standard pitches and all other pitches in degrees from 10° to 57°. Perfect also for estimating lumber needs. Indispensable to the carpenter, builder, architect, draftsman, contractor, and lumberman. Worth many times cost.

RAFTER DIAL  
\$1.95

Order from: E. Weyer, Dept. F, P.O. Box 153,  
Planetarium Station, New York 24, N. Y.

## This LUMBER HANDBOOK

BRINGS YOU ALL THE ANSWERS

48 PAGES packed full of information to help you save time and money every working day. Send the coupon today for your FREE COPY.



TEAR OFF AND MAIL  
ARKANSAS SOFT PINE BUREAU  
524 Bovie Bldg., Little Rock, Ark.

Without obligation please send me your Builders' Handbook, postpaid.

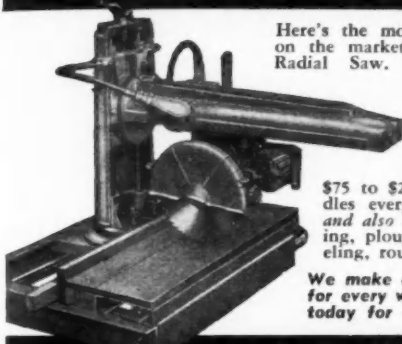
Name \_\_\_\_\_

Address \_\_\_\_\_

STRESS TABLES, HOW TO FRAME, BEST SHEATHING TO USE, GRADES ILLUSTRATED, GRADES TO SPECIFY, TRIM PATTERNS, WALL PANEL DESIGNS, PAINTING AND FINISHING, ARKANSAS SOFT PINE, WHY AND HOW TO USE IT.



## SAWS RAFTERS WITHOUT MARKING!



Here's the most practical contractor's saw on the market today—the Wallace No. 1 Radial Saw. With the exclusive Wallace Angulator, it cuts rafters complete with only ONE handling and without marking.

It's a real money-maker on framing work, saving \$75 to \$200 on average homes. Handles every kind of sawing operation, and also does first-class shaping, dading, ploughing, grooving, fluting, bevelling, routing, etc.

We make a complete line of machines for every woodworking operation. Write today for full information.

**J. D. WALLACE & CO.**  
136 So. California Ave., Chicago, Ill.

## KILN DRIED HARDWOOD FLOORING

Birch • Beech • Maple • Oak

CAR LOTS ONLY

Each board grade stamped  
Few territories still open for representation by salesmen and dealers

**DAILEY FLOORING CORP.**

Dailey, West Va. 33 West 42 St., N.Y.

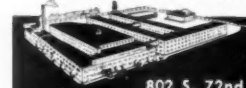


**CONCEALED!  
NO MORTISING!  
NO ADJUSTING!  
IMPROVED!**

**ACCURATE FACTORY PRE-TENSIONING  
ELIMINATES HUMAN ELEMENT OF ERROR!**

An exclusive feature of the Rochester Balance is that there is no sliding or adjustment of spring tension by the installing carpenter. For different glass heights, all balances are accurately factory-adjusted and tested to exactly the same balancing strength compensating for variation in spring characteristics. The required spring tension is securely locked at the factory and is automatically released only when the sash is operated for the first time after installation is completed. This results in an equal tension in both balances—obviously necessary for smooth, effortless operation.

See your jobber today . . . or write direct for complete details.



**MILWAUKEE  
STAMPING CO.**  
802 S. 72nd STREET, MILWAUKEE 14, WIS.



## CARPENTRY and JOINERY WORK

By NELSON L. BURBANK

Formerly Instructor, Building Vocational High School  
Cincinnati, Ohio

The manuscript was carefully checked by a former contractor and editor so that this book combines the practical outlook with the author's trade teaching experience. The cardinal principles of modern residential construction are set forth simply and logically with the aid of many photographs and line drawings. The Fourth Edition contains six new chapters.

The program of study as presented in this latest textbook for students of carpentry work involves class discussion, practical job work and related studies. These include Architectural Drawing, Plan Reading, Carpentry Mathematics, Business English, Applied Science, Codes and First Aid.

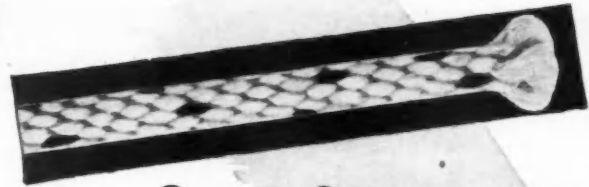
248 pages, 600 illus., 8½x11 inches. Cloth, \$4.00

BOOK DEPARTMENT

**AMERICAN BUILDER AND BUILDING AGE**

30 Church Street

New York, N.Y.



## SPOT SASH CORD

WITH WEIGHTS AND PULLEYS

— the one method of hanging windows that has been proved by generations of actual use to provide perfect and permanent balance.

The Colored Spots are our Trade Mark, Reg. U.S. Pat. Off.

**SAMSON CORDAGE WORKS, BOSTON 10, MASS.**



## LESLIE LOUVERS

**"SR" Series for SLANT ROOFS  
EXCLUSIVE features include:**

- Improved baffle angle permits condensation to drain off.
- Deeper baffle creates air pocket and separates driven rain from air stream.
- Drip cap prevents water from running under the shingles.

One type fits every roof.

**AVAILABLE NOW! "VB" Series  
for NEW Construction**

- Improved design prevents dirt accumulation and wall discoloration—ends capillary action of water behind the siding.
- Requires no wall framing for installation.
- Integral center flange provides sealing and attaching surface to sheathing under the siding.

"VB" Box Frame Type and "VF" Flush Flange Type Vertical Louvers are available in 8" x 8", 12" x 12", 8" x 16" and 12" x 16" sizes.

Immediate Delivery. **NEW LOW PRICES!**  
**LESLIE WELDING CO.**

2937 W. Carroll Ave. Chicago, Ill.

**END DUST and WEEDS with**

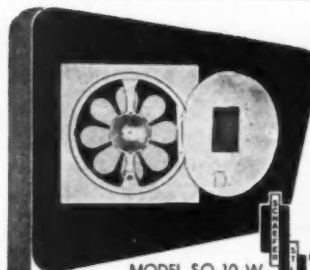
## SOLVAY CALCIUM CHLORIDE

With a simple application of Solvay Calcium Chloride, you can eliminate both. Solvay Calcium Chloride is odorless, colorless, inexpensive . . . requires no special equipment, no training to use.

**SOLVAY SALES CORPORATION**

40 Rector Street

New York 6, N. Y.



## SCHAEFER

*Built-in*  
**VENTILATORS**

FEATURING

- SMART MODERN DESIGN
- BAKED ENAMEL FINISH
- CONCEALED WIRING
- FAN EASILY REMOVED
- ONE YEAR GUARANTEE

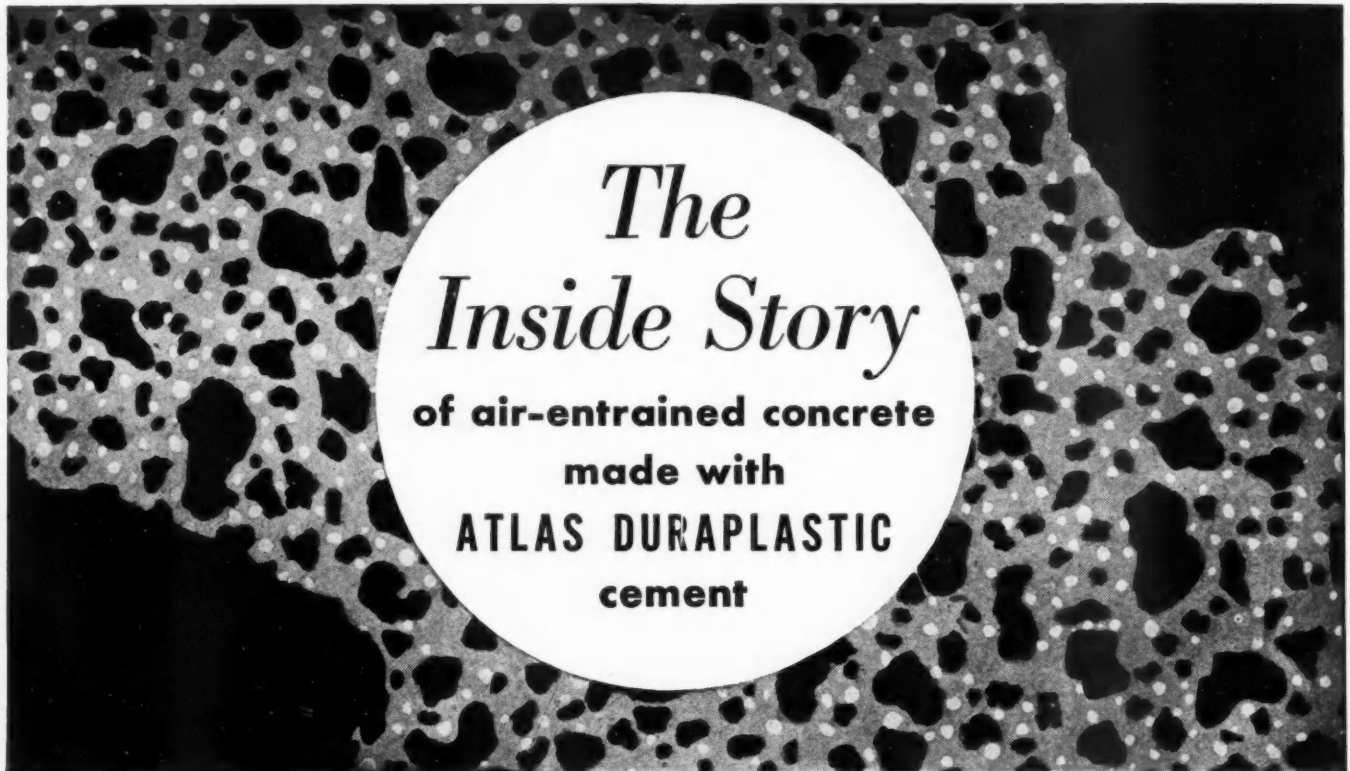
Manufacturers of  
THE MOST COMPLETE  
LINE OF VENTILATORS

DEALERS—WRITE FOR FULL DETAILS OF OUR LINE!

**MANUFACTURERS PRODUCTS CO.**

7530 LINDBERGH DRIVE

ST. LOUIS 17, MISSOURI



*The  
Inside Story*  
of air-entrained concrete  
made with  
**ATLAS DURAPLASTIC  
cement**

A highly magnified section of Duraplastic concrete would look something like this. The two large black areas represent small portions of coarse aggregate; small black spots represent sand; gray area represents cement paste; white dots represent entrained air bubbles.

**Duraplastic cement** provides the proper amount of entrained air by intergrinding with the cement the precise amount of air-entraining material needed for satisfactory field performance.

It requires less mixing water and reduces segregation and bleeding.

It makes the concrete more workable, more plastic, more cohesive, more uniform and more durable.

For almost any type of concrete work, Duraplastic cement makes better concrete at no extra cost. It complies with ASTM and Federal specifications, and sells at the same price as regular cement.

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

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

AB D-52

**ATLAS DURAPLASTIC**  
AIR-ENTRAINING PORTLAND CEMENT

**MAKES BETTER CONCRETE AT NO EXTRA COST**

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



# *Selected* for **APPEARANCE** and **SERVICE**

● The adaptability of The "OVERHEAD DOOR" to any style of architecture and any size opening has aided in making it the predominant choice among architects, builders and owners. Its ease of operation and instant, constantly dependable service are responsible for its continued selection. This quality door is expertly engineered from highest grade materials. It is weathertight and tamper-proof. Specify The "OVERHEAD DOOR" with the Miracle Wedge for commercial, industrial and residential use.

TRACKS AND HARDWARE OF SALT SPRAY STEEL

● Any "OVERHEAD DOOR" may be manually or electrically operated. Sold and installed by Nation-Wide Sales — Installation — Service.



*the* **"OVERHEAD DOOR"**  
TRADE MARK  
WITH THE  
**MIRACLE WEDGE**

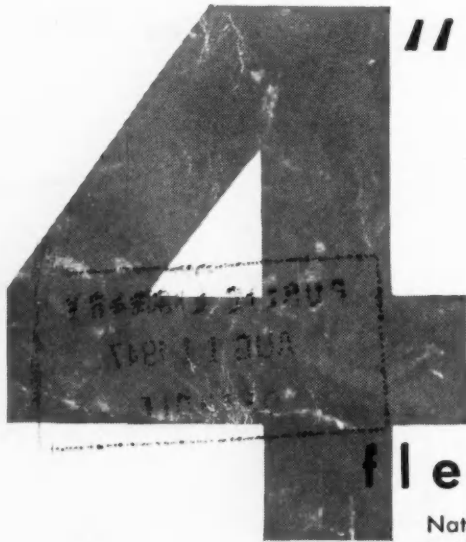
COPYRIGHT, 1947, OVERHEAD DOOR CORPORATION

OVERHEAD DOOR CORPORATION • Hartford City, Indiana, U. S. A.

# NATIONAL MANUFACTURING CO.

S T E R L I N G, I L L I N O I S

"big



## flexible door hanger

National "Braced" Rail is  $1\frac{1}{4}$  x  $\frac{3}{16}$  inches. Made in 4-, 6-, 8-, 10- and 12-foot lengths. This Rail is used with the "Big 4" and National Hangers. In fact, any flat-rail barn door hanger will run on it. Brackets are spaced 12 inches apart and double riveted, giving the rail great strength and rigidity.

SEE YOUR NATIONAL  
DEALER FOR  
QUANTITIES AVAILABLE

Thousands of "Big 4" Hangers are giving satisfactory service in all sections of the United States and Canada under every imaginable condition. There are none better.

Equipped with anti-friction steel roller bearings, the "Big 4" Hanger is made entirely of steel on extremely heavy lines. It is of simple construction with no complicated parts to get out of order. Two studs, together with the hook turned under the rail absolutely prevent hanger from jumping the track. Axles and rivets are cadmium plated to prevent rust.

Easily attached to door with three bolts. Studs rest on top of door which automatically lines up hangers and brings door close to the "Braced" Rail. Flexible feature permits door to swing out and rise higher than with any other flexible hanger.

