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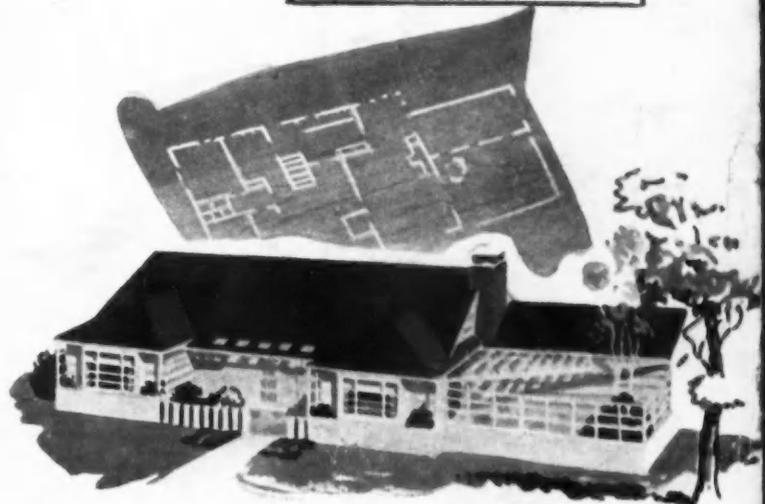
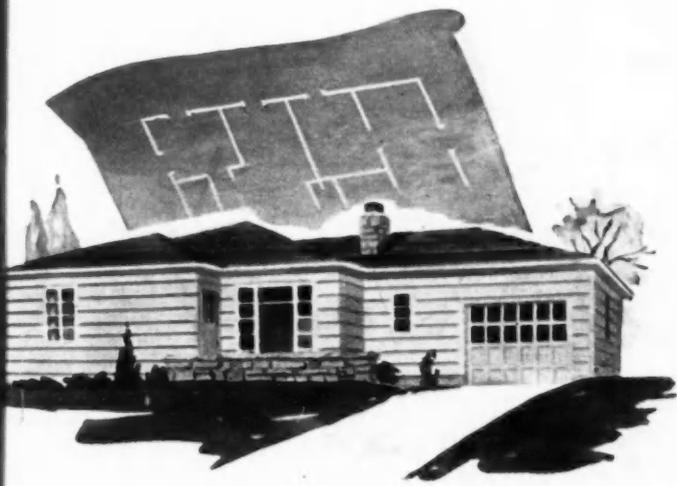
TECHNOLOGY DEPARTMENT

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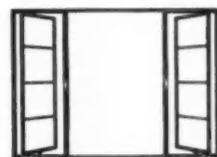
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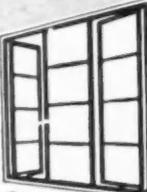
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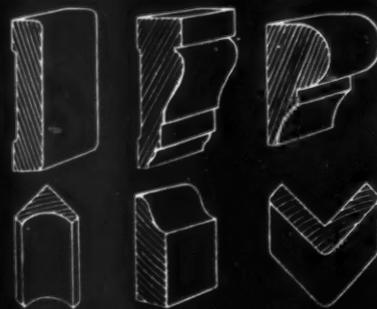
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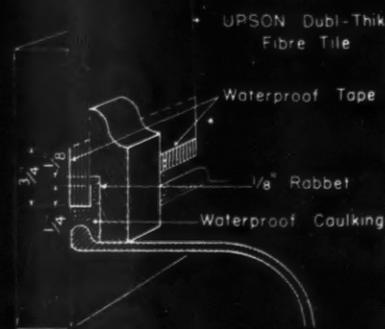
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# AMERICAN BUILDER

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## PUBLISHER'S PAGE

### **Legalizing Confiscation of Property**

**H**OW largely American citizens are being, and may continue being, deprived of what until within recent years were held to be their constitutional rights is indicated by the recent decision of the U.S. Supreme Court sustaining postwar control of housing rentals. The court held that it is a proper exercise of the government's war power for it to continue such control *as long as the effects of war continue*.

War has many effects. What effects did the court mean? And to *what degree* must these effects continue in order to justify continuance of rental and other controls? The court did not say.

Generations are sure to pass before some important effects of the last war—such, especially, as the huge increase in the national debt—will cease to be felt. Hence, a literal interpretation of the court's decision apparently would be that control of rentals may constitutionally be made permanent or virtually so.

It seems most improbable that the court ever would have rendered any such decision before it was filled with New Dealers. Privately-owned housing, whether occupied by the owner or rented, is private property in the strictest sense. It always heretofore has been held in this country that unless privately-owned property is used in rendering a "public service"—as in the case of property of railroads and public utilities—its owner has a right in time of peace to charge for its use whatever he can get anybody to pay. What he can get for its use determines its value, and for him to be required to rent it for less than he could get in a free market is to deprive him of part of its value.

Rentals have declined when the supply of housing has exceeded the demand for it, to the advantage of tenants and often causing losses to the owners. If government prevents rentals from being increased proportionately when the demand

for housing exceeds the supply, tenants will be subsidized both by the losses property-owners incur in periods of housing surpluses and by government control of rentals in periods of housing shortages. Under previous decisions of the Supreme Court since the foundation of the government, such requirement that citizens owning property shall let others use it for less than the owners could get in a free market has been held to be unconstitutional taking of private property.

The present housing shortage has been created principally by government control of rentals, because it has (1) encouraged increase in the average amount of housing space occupied per person and (2) discouraged ownership and building of housing for rent. The only remedy for the shortage is a large increase in housing built and owned for rent. The Supreme Court's decision that the government has power to fix rentals for an indefinite period does not in the least alter the fact that the amount of rental housing provided will be determined by whether those who must be depended on to provide it can get rentals *satisfactory to them*. The New Deal Supreme Court, by its decision in this case, apparently has repealed the constitution to an extent that puts the rights of owners of most kinds of property in jeopardy. But even the Supreme Court cannot repeal human nature and the law of supply and demand which inexorably decree that the income that can be derived from any kind of private property will determine how much of it will be created. The surest way to keep people from being able to rent housing will be to keep rentals lower than those able and disposed to build housing are willing to accept.

*Samuel O. Drumm,*

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No. 2 OF A SERIES—

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When absorbent brick are used, especially in hot weather, mortar should be spread out over only a few brick at a time. The brick should be placed on this mortar immediately, before it can stiffen.



The mortar should be spread over a few brick only.



So the mortar will still be soft and plastic when the brick are bedded.



Thus the mortar will stick to the brick on top of it as well as to the brick below it.

**BRIXMENT** makes good workmanship *easier* because it holds its moisture longer than ordinary mortars, when spread out on the wall. This enables the bricklayer to properly bed the brick before the mortar has stiffened too much.

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If the mortar is spread out too far, or if any delay occurs between spreading the mortar and placing the brick, the mortar will be sucked dry and will not stick to the brick placed on top of it.



Mortar for this bed joint was spread out on the wall too far.



So the mortar dried out too much before the next course of brick was placed on top of it.



Therefore the mortar did not stick to the top brick. A good bond was not secured.

## Progress Report

**H**ERE'S where production of Armstrong's new Temlok stands today.

The new plant in Macon, Georgia, is now running. It is producing both Temlok<sup>®</sup> Insulation Board and Temlok Sheathing. But like all big straight-line production setups, the machinery requires careful adjustment before it can open up to capacity. Quality comes first—volume, later. The new Temlok appears to have all the quality we planned for, and more.



Saw into Temlok Sheathing anywhere; you'll find the same brown color. That's asphalt. It waterproofs every fiber, yet doesn't gum the saw.

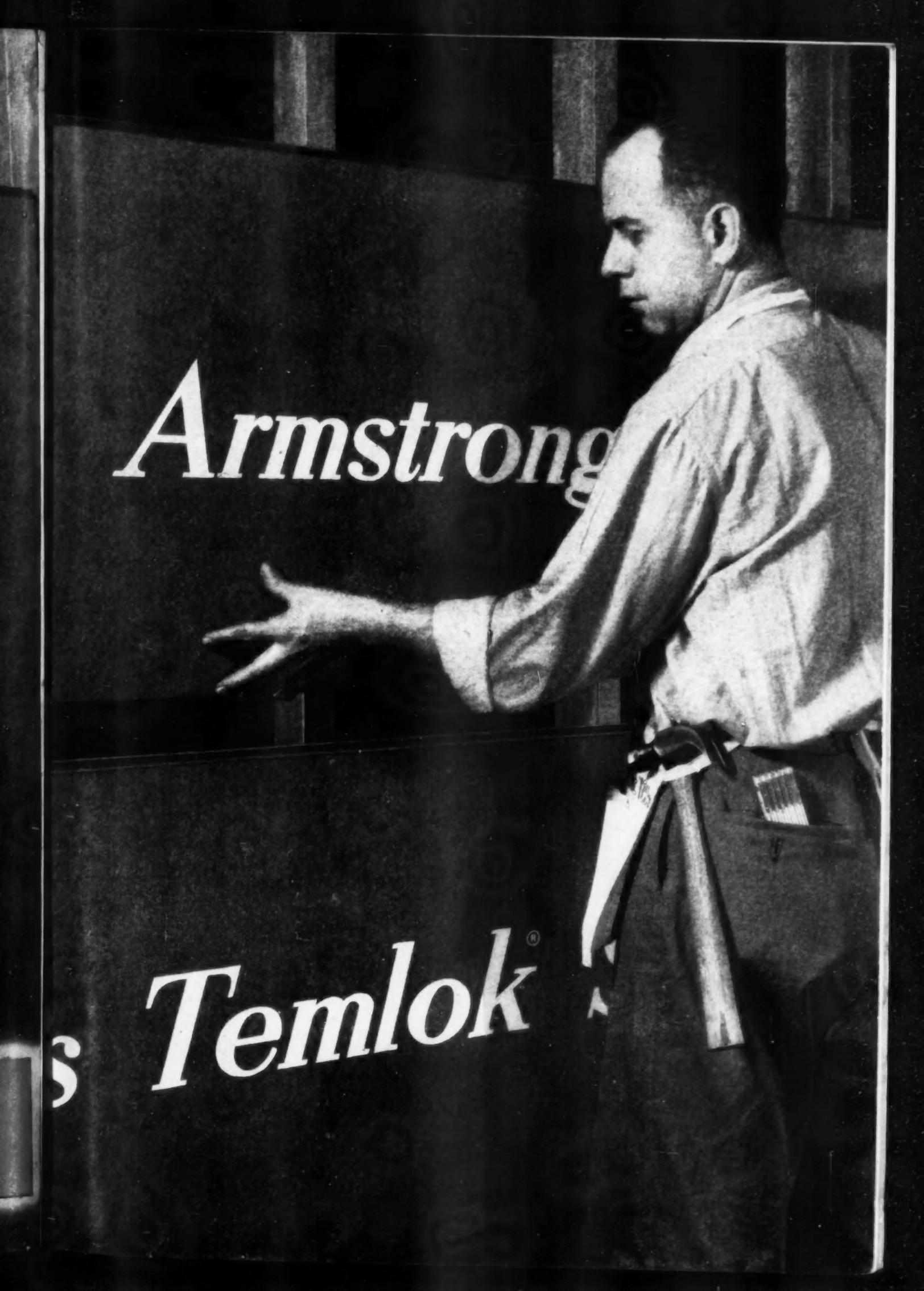
The picture at right shows some of the first pieces of Armstrong's new Temlok Sheathing being erected in a test panel. First tests show Temlok has a high margin of extra strength and ability to take rough handling.

You can see here the shiplapped long edges of Temlok Sheathing which make a solid, weathertight joint. And every fiber is weatherproofed by asphalt that impregnates Temlok Sheathing.

Temlok Sheathing is made in both the 4' x 8' and the 2' x 8' sizes. Ask your Armstrong wholesaler for samples and full details. Armstrong Cork Company, Lumber Dealer Products Department, 1604 Ross Street, Lancaster, Pa.



# Armstrong's Temlok

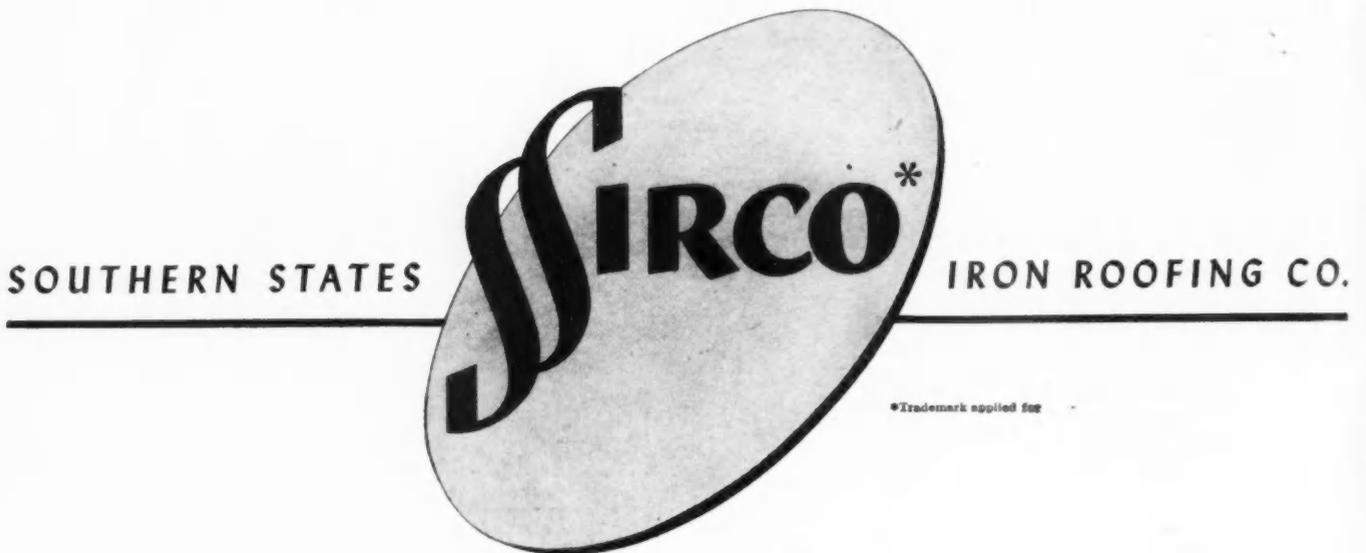


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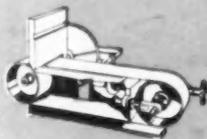
At all times, cutting tool or blade meets the workpiece in full view of operator's eye — within convenient reach. He knows he's cutting *what* he wants, *where* he wants.

On eight ball-bearings, acting over length of ram, the universal head of the Radial Saw glides 21½" . . . or stops, and locks in any position for accuracy.

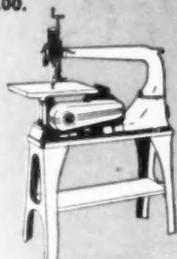
*Three more reasons why it pays to choose the Walker-Turner Radial Saw:*

- Geared motor drive has newest type smooth-running, precision-mated gears. This exclusive feature, with constant speed motor, gives finer, cleaner cuts . . . delivers 5 H.P. blade performance with 3 H.P. motor.
- Universal head swings, tilts, locks . . . in any position for all woodworking operations possible with a rotating cutting tool — cross cuts, compound miters, rips, dados, routs, shapes, tenons, etc.
- Two positive anti-kick-backs hold the work on both sides of the cutting tool . . . for double safety in every operation.

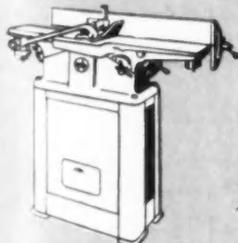
**ECONOMY, DEPENDABILITY WITH THESE, TOO.** With the Walker-Turner Jointer, Jig Saw, and Belt and Disc Surfacers — as with all Walker-Turner Machine Tools—savings soon shift initial cost from red column to black. Then, it's clear profit for years of dependable service. *For complete catalog write to Walker-Turner Co., Inc., Plainfield, New Jersey.*



Belt and Disc Surfacers, SM-700. Table tilt from 90°-45°. Sanding disc 10" diameter. Length 29". Price: less motor, \$63.00.



24" 4-Speed Jig Saw, J-915. Throat capacity 24", table tilts to 45°, quadrant indicator. Price: Including motor pulley, 32" belt, 7 assorted blades — less motor, belt guard, bench, lamp, switch, cord, \$59.50.



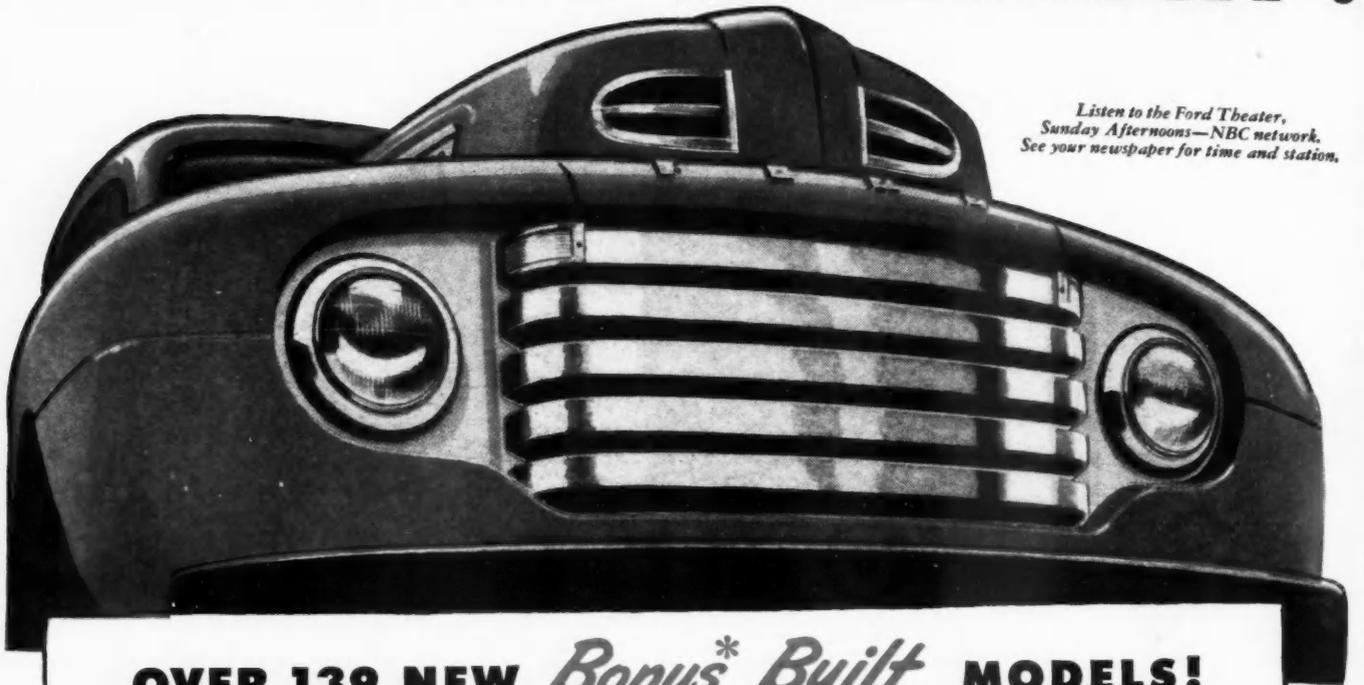
6" Jointer, P-910. Rabbeting capacity up to ½ inch. Price less motor, switch and machine base, \$102.00.



RADIAL SAWS • BAND SAWS  
DRILL PRESSES • TILTING ARBOR SAWS  
JIG SAWS • TABLE SAWS  
JOINTERS • LATHES  
BELT & DISC SURFACERS

SOLD ONLY BY AUTHORIZED INDUSTRIAL MACHINERY DISTRIBUTORS

# NOW! THE BIGGEST FORD TRUCK LINE IN HISTORY!

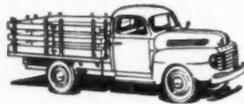


Listen to the Ford Theater,  
Sunday Afternoons—NBC network.  
See your newspaper for time and station.

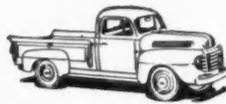
## OVER 139 NEW *Bonus\* Built* MODELS!



**F-1**—4,700 lbs. GVW. 8' Panel, 6½' Pickup, 6½' Platform or Stake. 114" w.b. V-8 or Six.



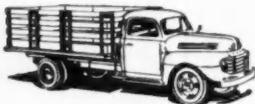
**F-2**—5,700 lbs. GVW. 7½' Platform or Stake, 8' Express. 122" w.b. V-8 or Six engine.



**F-3**—6,800 lbs. GVW. 7½' Platform or Stake, 8' Express. 122" w.b. V-8 or Six engine.



**F-4**—7,500 lbs. GVW. (singles), 10,000 lbs. (duals). 9' Platform or Stake. 134" w.b. V-8 or 6.



**F-5**—14,000 lbs. GVW. 9' & 12' Platforms or Stakes. 134" w.b. & 158" w.b. V-8 or Six engine.



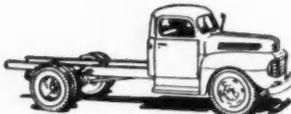
**F-5 C.O.E.**—14,000 lbs. GVW. 9' & 12' Platforms or Stakes. 110"-134"-158" w.b. V-8 or Six.



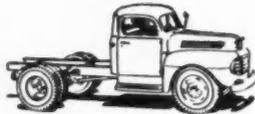
**F-6**—15,500 lbs. GVW. 9' & 12' Platforms or Stakes. 134" w.b. & 158" w.b. V-8 or Six engine.



**F-6 C.O.E.**—16,000 lbs. GVW. 9' & 12' Platforms or Stakes. 110"-134"-158" w.b. V-8 or Six.



**F-7**—19,000 lbs. GVW. 135"-159"-195" w.b. 9.00-20 maximum tires. 145 h.p. V-8 engine.



**F-8**—21,500 lbs. GVW. 135"-159"-195" w.b. 10.00-20 tires. 2-speed axle. 145 h.p. engine.

**NEW!** Three new truck engines . . . a new Six and two new V-8's developing up to 145 horsepower!

**NEW!** Living room comfort in the new Ford Million Dollar truck cab! New seats. New 3-way air control.

**NEW!** Two new BIG JOBS rated to carry gross vehicle weights up to 21,500 lbs.!

**SEE YOUR FRIENDLY FORD DEALER TODAY!**



**BUILT STRONGER TO LAST LONGER**

LIFE INSURANCE EXPERTS PROVE AND CERTIFY . . . FORD TRUCKS LAST UP TO 19.6% LONGER!

\*BONUS: "Something given in addition to what is usual or strictly due."—Webster

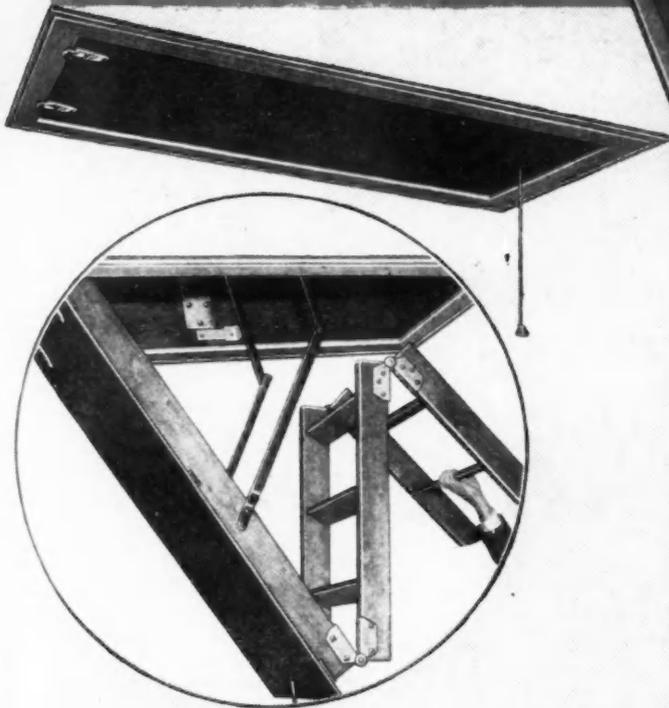
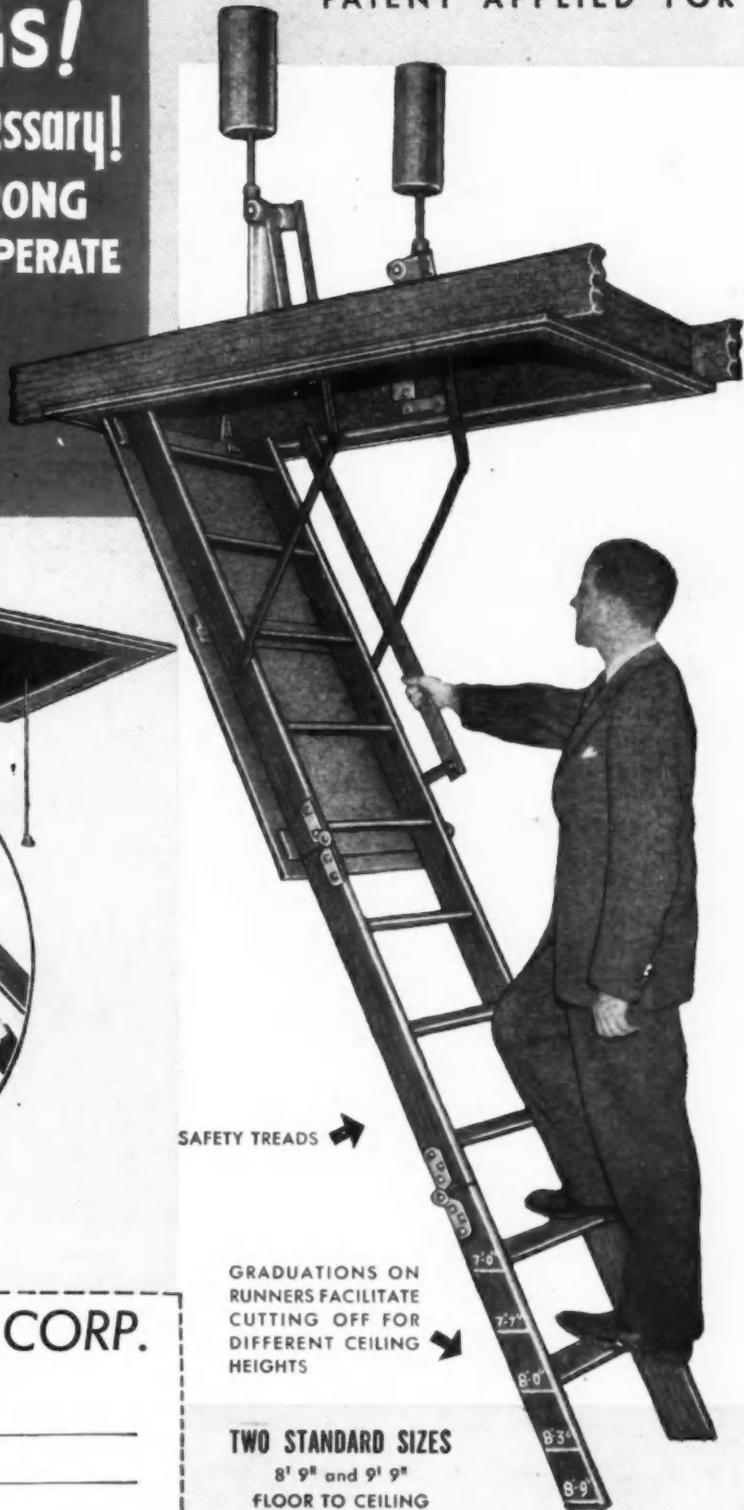
# Precision

# FOLDING STAIRWAY

ACCEPTED BY FHA EVERYWHERE  
PATENT APPLIED FOR

**NO SPRINGS!**  
**No Adjustments Necessary!**  
**RUGGED AND STRONG**  
**SIMPLE AND EASY TO OPERATE**

MADE OF HIGHEST QUALITY MATERIALS  
SHIPPED IN ONE PACKAGE  
REQUIRES VERY LITTLE  
INSTALLATION EXPENSE



**PRECISION PARTS CORP.**

NASHVILLE 7, TENN.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

**TWO STANDARD SIZES**

8' 9" and 9' 9"  
FLOOR TO CEILING



Architect: Victor Hornbein,  
Denver. Photographer:  
Andreas Feininger, New York.



## Cheerful little "Eyeful" ... to give sales a lift

You know from experience how well-planned features capture every prospective home buyer's fancy. That's why it's so important to include plenty of window space to put zest in your houses.

Modern buyers have a right to expect all the sunshine and clear, colorful views which glass provides for the up-to-date residence. Glass costs so little . . . and adds so much.

When the glass you use bears the L·O·F label, you establish yourself with prospects as one who knows and uses quality materials. Libbey-Owens-Ford Glass Company, 6148 Nicholas Building, Toledo 3, Ohio.

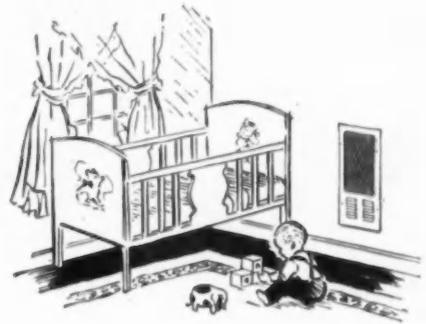
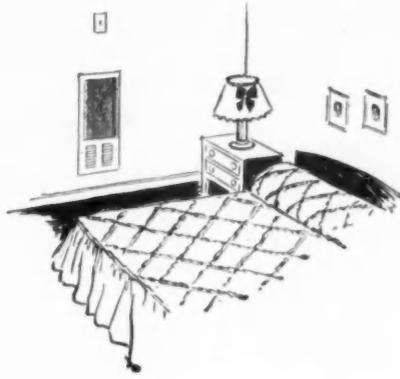
● L·O·F also makes polished plate glass, safety glass, colorful Vitrolite\* glass facing, Tufflex\* tempered plate glass and other flat glasses. Only Libbey-Owens-Ford makes Thermo-pane\*—the first mass-produced insulating windowpane.

\*®



**LIBBEY·OWENS·FORD**

*a Great Name in* **GLASS**



the **ELECTRIC**  
**FA QUIKHETER**  
 adds to the comfort, convenience and value of the home



Some days only auxiliary heat is needed . . . some days only regular heat . . . but efficiently designed heating plans now call for both.

The FA Quikheter blends perfectly into a situation such as this. It provides instant, early morning heat and comfort to normally chilly bathrooms, bedrooms, nurseries . . . or wherever and whenever extra heat is needed . . . at a cost of only a few cents per hour of continuous operation.

Quick-acting, requiring only the flip of a conveniently located switch, these noiseless, long-lasting units are specifically designed to meet the need for variable heating requirements in the home.

Attractive in appearance, low in cost and easy to install in new or old homes, the economy-famous Quikheter is complementary to any room . . . and adds substantially to the overall comfort, convenience and value of the home.

Available in single units of 1000 and 1500 watts and twin units of 2000 and 3000 watts. Separate control switch can be placed anywhere for your convenience . . . with thermostatic control also available, if desired.

See your electrical contractor for details or write for Bulletin No. 77.



**Frank Adam Electric Co.**

ST. LOUIS 13, MISSOURI

Makers of BUSDUCT • PANELBOARDS • SWITCHBOARDS • SERVICE EQUIPMENT • SAFETY SWITCHES • LOAD CENTERS • QUIKHETER

Remember  
These? →



# Here

# it

## THE NEW RHEEM PROMOTION PLAN for Small-Home Builders!

**N**ot long ago we visited some model homes. We talked to people inspecting them. *We found out what prospective home buyers want to know.*

They want to know a lot . . . much more than any busy builder has time to tell them personally.

What kind of pipes? What type of insulation? What kind of cooking range? What make of furnace? What brand of water heater?

You put into the houses you build, the best materials, the best brands of appliances you can find. How can you tell each prospect what your house offers?

We have a way.

We have constructed a large, beautiful portfolio in full color, called the "Home Buyer's Guide." It is dignified, impressive, wholly in keeping with the importance of the subject.

The inside pages of this handsome piece are divided into pockets into which we will insert attractive literature which describes in detail the Rheem equipment installed in your houses. From your other suppliers you can obtain and insert literature on building material, in-

sulation, paint, plumbing fixtures and kitchen appliances.

You can include financing plans—your own, the local bank terms or F.H.A. plan. You can include *all* the facts about your new homes!

No Rheem advertising appears on this portfolio. But *your name and address* will be handsomely imprinted (at *no cost* if you are a Rheem customer). The portfolios are shipped to you in the quantity you need. You simply insert the literature, put a supply of the "Home Buyer's Guide" on display in each of your model homes and sales offices and invite every prospect to take one free.

Thus, the whole story of your new homes is presented in a single package—a striking portfolio that your prospect takes along with him. It's a new way to merchandise your new homes. It's an entirely new kind of service to builders from Rheem, world's largest maker of water heaters and one of the foremost manufacturers of Home Comfort Appliances.

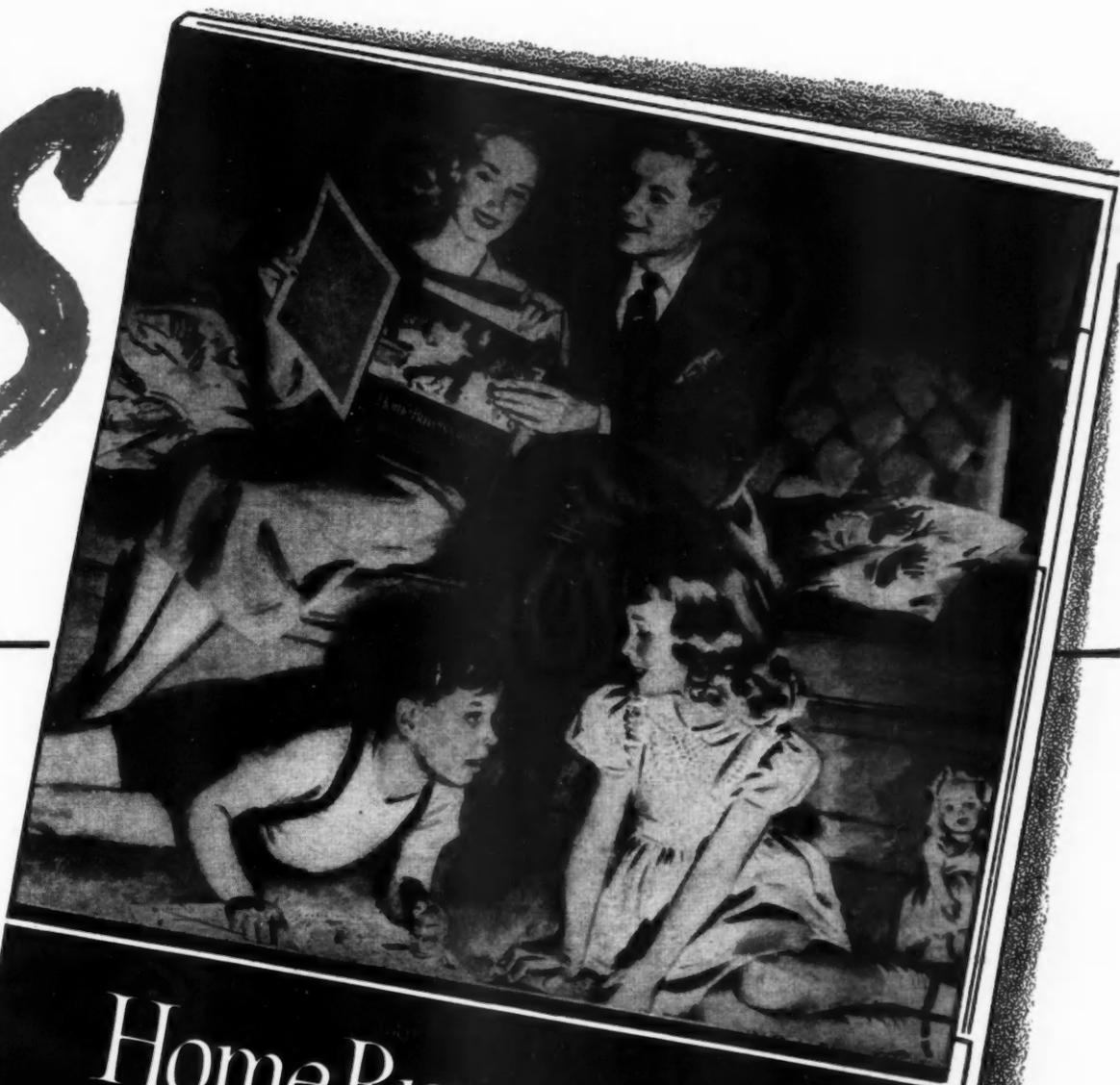
Fill in your name and address on the coupon below and mail it today. Our representative will call to show you a sample of the "Home Buyer's Guide" and take your order. NO obligation, of course. Do it now.

# Rheem Manufacturing

HOME COMFORT APPLIANCES

Automatic Water Heaters • Central and Space Heating Equipment • Soft Water Appliances • Boiler and Tank Units

is



# Home Buyer's Guide

## The Home Buyer's Guide

*A guide to  
materials, appliances, and equipment  
called in this House*

ACTUAL  
SIZE  
9 1/4" x 13 1/2"

1. A beautifully illustrated portfolio with your name imprinted.
2. All facts about your new homes in a single package.
3. Stays with your prospect while he's making the decision.

**Rheem Manufacturing Company**  
Dept. AB-4  
570 Lexington Ave., New York 22, N. Y.

*Please have your representative call to show me a sample of the Home Buyer's Guide. I understand there is no obligation.*

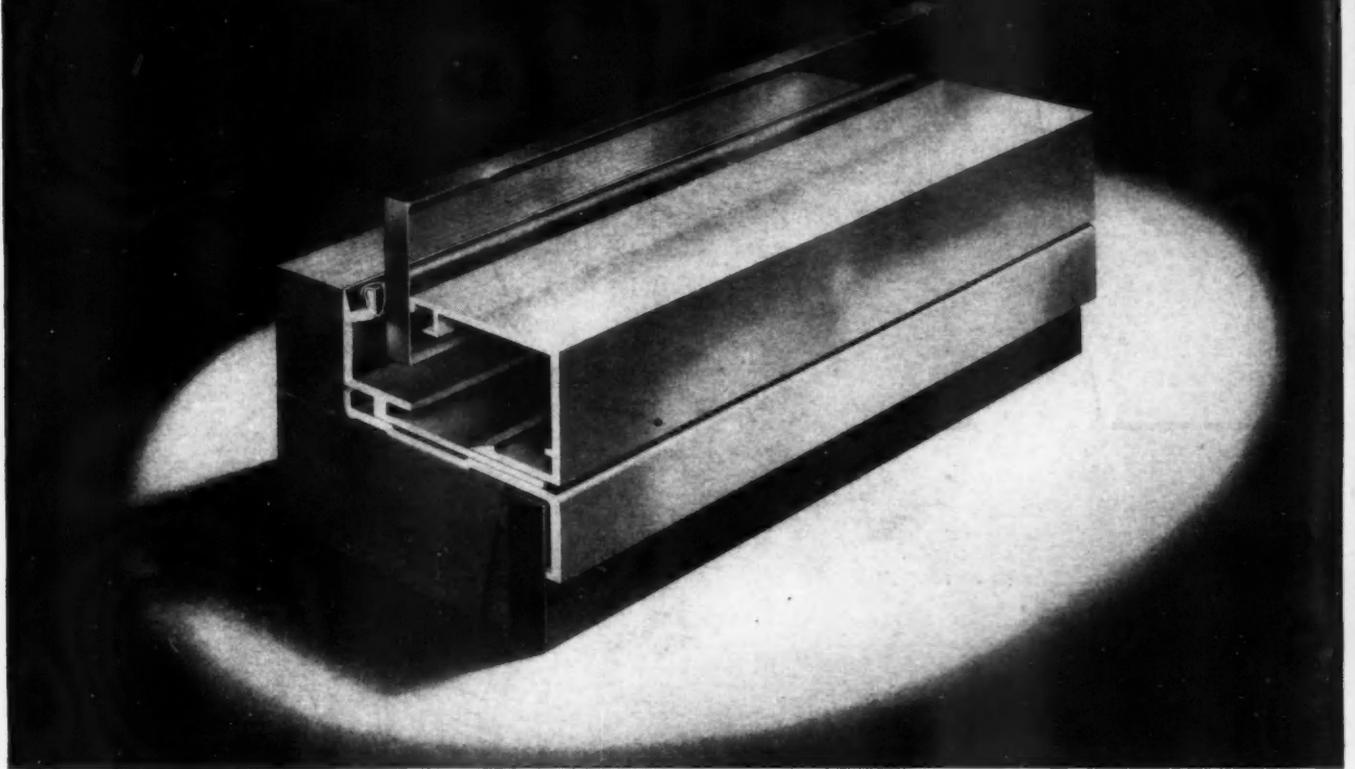
NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_

# Company

9 plants in U.S.A.—also Brisbane, Melbourne, Sydney, Rio de Janeiro, Singapore, and Hamilton, Canada.



*Designed by Request*



## **a NEW SASH in Pittco De Luxe Store Front Metal**

This new sash (Pittco De Luxe 12C), designed to harmonize with certain modern store front designs, is now available to contractors all over the country. Contact the nearest "Pittsburgh" warehouse for further information about this and other members of the Pittco Store Front Metal line.

"Pittsburgh" can help you complete your store front jobs quickly and efficiently. Our warehouse personnel is qualified to cooperate with contractors to see that rough work is erected properly to receive our finished products. And experienced crews of "Pittsburgh" workmen set metal and glass with speed and skill.

Two Pittco lines of Store Front Metal offer the contractor a wide variety. Pittco De Luxe is ideal for top quality installations . . . it's extruded for rugged strength, clear sharp profiles, and a rich, smooth finish. Pittco Premier is lighter in weight than its companion line, but can be set more quickly and easily than any other metal construction.

## **PITTCO STORE FRONT METAL**



**PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS**

**PITTSBURGH PLATE GLASS COMPANY**



# VISION

## will see both a job and a future!

Every business should have somebody in charge of looking ahead. And in most businesses, including the construction business, that man's time would be well spent if he did no more than see that today's job was well done.

Actually, right now is an excellent time to build a reserve of good will. If competition gets a little lax about its easy-to-get jobs, that's your cue to set higher standards for careful application, painstaking attention to detail, considerate care of property.

Make no mistake! Good workmanship pays . . . in saving you trouble and comebacks on the job you've finished . . . in the extra jobs a good job promotes!

*Roof with*  
 ✓ COLORFUL  
 ✓ SERVICEABLE  
 ✓ FIRE RESISTANT

# ASPHALT SHINGLES

ASPHALT ROOFING INDUSTRY BUREAU • ROOM 1703 • 2 W. 45TH ST. • NEW YORK 19, N. Y.

SPONSORED BY 28 LEADING MANUFACTURERS OF ASPHALT SHINGLES • ROLL ROOFINGS • SIDINGS • AND BUILT-UP ROOFINGS

It's good business  
to do it **BETTER**

**DO** In new construction, prepare a sound, tight roof deck, with sheathing not over a 6" width . . . laid without open cracks. In reroofing, nail old shingles flat . . . give yourself smoothest possible surface.

**DO** Take special pains in preparing valleys. Follow manufacturer's recommendations closely as to widths of material and methods. Leave no point of weakness.

**DO** Watch construction and installation of flashings. Seal all flashings tightly.

**DON'T** Don't spare the nails. Where directions recommend 6 nails . . . use 6. Using a few extra nails is a cheap way to insure a good sound, wind-resistant roof.



## How to clinch a closing on a scaffold

Yes, we mean it. What goes on up on your painters' scaffold can help clinch many a contract closing—if what goes on is Devoe 2-Coat House Paint. And you'll get a better profit margin in the bargain!

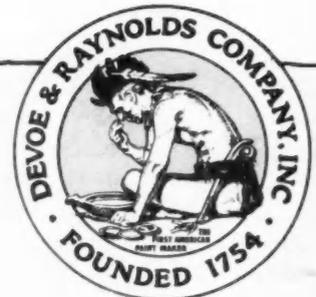
## Prospects Know DEVOE Means Quality House Paint

First of all, Devoe 2-Coat House Paint is the original of the 2-Coat systems—and one of the most widely publicized and best known. Prospects know you're talking a quality job when you feature it in your selling routine.

As for overhead—doing anything only twice just naturally costs less than doing it three times. And this is just as important. Both elements of the Devoe 2-coat system are designed for teamwork.

The undercoat seals any kind of wood completely and evenly— withstands more moisture content in wood than ordinary paints.

Your nearest Devoe Agent can talk facts and figures—give you some mighty convincing arithmetic to prove the advantage of the Devoe 2-Coat System. Get in touch with him or write us direct on your letterhead today.



### HOW DEVOE PAINT HELPS WITH CLOSINGS

When it comes to closing contracts, there's real magic in materials bearing known brands these days. Devoe is one of the oldest, most trusted names in the Paint Industry. It pays to use Devoe products—and make sure your prospects know it.

**DEVOE & RAYNOLDS COMPANY, INC.**

787 First Avenue, New York 17, N. Y.

Important!

March 1, 1948

Scarcity of building material makes it imperative that all dealers, contractors and builders notice the attached information about the Certigrade #2 shingle. This utility shingle is available in quantity at reasonable price — and returns good mark up.

Certigrade number two's are all clear for the first twelve inches and more than 85% are clear from butt to tip. — Recommend the number two shingle for its proper uses and reserve your number one Certigrades for double-coursed sidewalls and "in the city" roofs

Be sure to  
Read this

**PROPER USES FOR " 2 CERTIGRADE SHINGLES**

The Certigrade No. 2 cedar shingle is especially designed to provide a utility grade for good roofs on secondary buildings, for over-roofing and for excellent sidewalls.  
Made of world-famous western red cedar, the 16" and 18" No. 2 Certigrade shingles are clear of all defects 12 inches from the butt. When laid on roofs at recommended exposures, two complete layers of clear shingles are provided at every point.



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

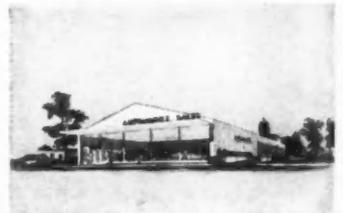
# LURIA INDUSTRIAL BUILDINGS

## NOW IN PRODUCTION

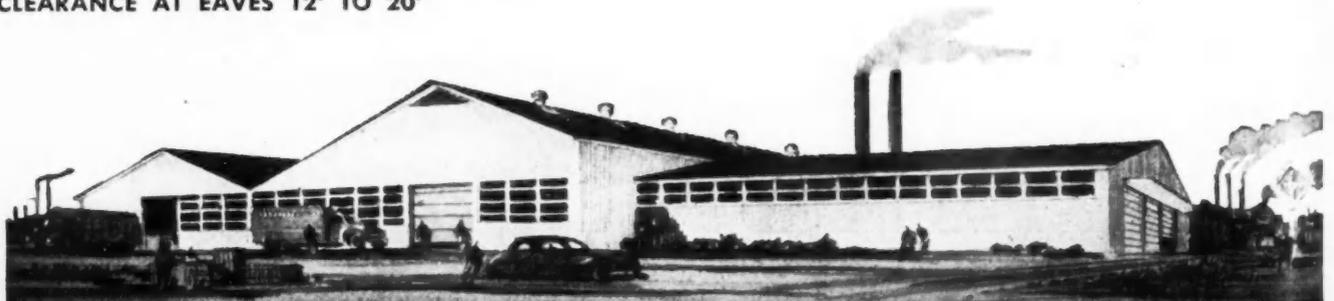
LURIA STANDARD BUILDINGS are permanent structures designed for maximum utility and flexibility. Large door openings, ample eave height and unobstructed clearance to the rafters make these buildings adaptable for innumerable uses. The unit system of expansion both in width and length combined with a choice in location of doors and sash provide unlimited variation in size and arrangement. These features allow a selection of combinations that are calculated to meet most individual requirements, thereby eliminating the expense of special engineering and gaining the benefit of production line economy. Simplicity of design featuring prefabricated frames of structural steel, insures easy handling and economical erection.

Corrugated steel sheets provide the most economical covering and are widely used with structural frame buildings. An additional feature of the Luria Structures is that they are designed to accommodate various types of collateral materials. This is important where requirements dictate the use of particular materials and also gives the advantage of greater freedom in architectural treatment.

**BASIC UNIT WIDTHS 40' TO 100' CLEAR SPAN  
LENGTH ADJUSTABLE IN INCREMENTS OF 20'  
CLEARANCE AT EAVES 12' TO 20'**



**ADAPTATIONS OF  
STANDARD UNITS**



## LURIA ENGINEERING CORPORATION

500 Fifth Avenue,  
New York 18, N. Y.

1734 Candler Bldg.,  
Atlanta 3, Georgia

First National Bank Bldg.,  
Chicago 3, Illinois

1873

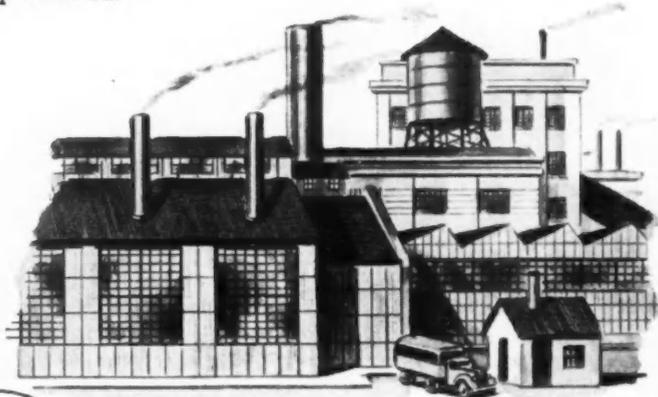
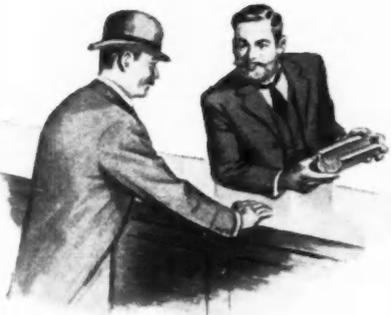
- Henry G. Keasbey and Richard V. Mattison open a modest drug manufacturing business in Philadelphia. Basic ingredient: Magnesium Carbonate.



In his spare time, Dr. Mattison experiments with a fire-defying fibre called *Asbestos*... seeking ways to use it for the benefit of humanity.



1886-reward! By blending *Asbestos* fibres with basic Magnesium Carbonate, he develops 85% Magnesia Pipe Insulation which today saves Industry millions of dollars annually in fuel.



Further K&M research soon yields America's first *Asbestos* textiles in commercial quantities, America's first *Asbestos-cement* roofing shingles, and the first *Asbestos Corrugated Sheets*.

1948

- what started as a small drug business is today a leading factor in America's giant and strategic *Asbestos* Industry!

This year marks the 75th anniversary of the founding of Keasbey & Mattison Company—the pharmaceutical firm that branched out into one of America's primary producers of *Asbestos* and Magnesia products. Today, K&M "Featherweight" 85% Magnesia insulation is still one of the Company's basic products. But in addition, K&M also makes a complete line of asbestos-

cement materials including shingles, pipe for water mains, corrugated and flat lumber, sheet packings, paper and millboard, textiles.

In celebration of the anniversary, K&M has prepared a brief, interesting history of the Company. We will be glad to send you a copy with our compliments.

*Nature made Asbestos...*

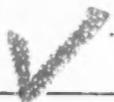
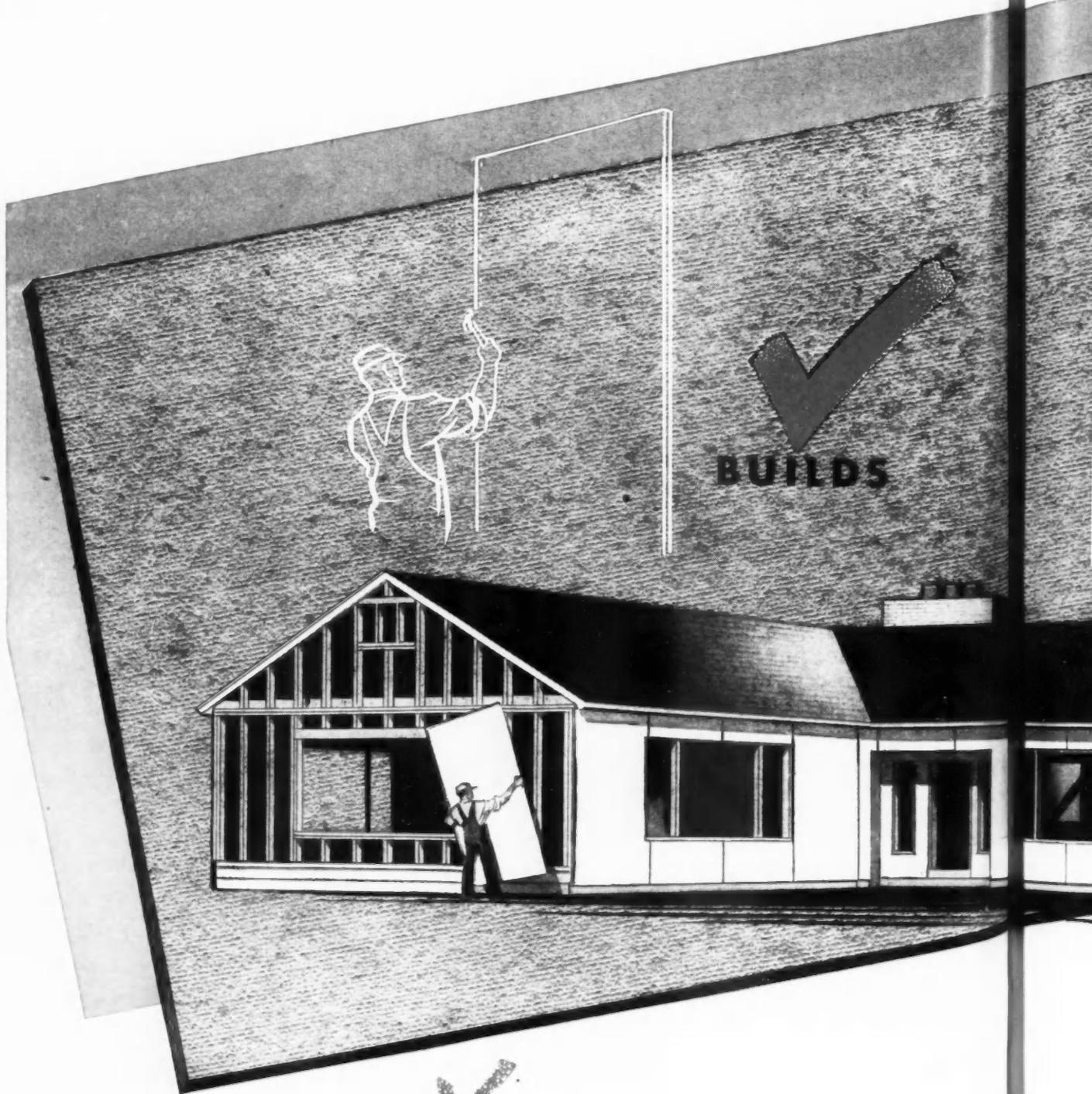
*Keasbey & Mattison has made it serve mankind since 1873*



**KEASBEY & MATTISON**  
**COMPANY • AMBLER • PENNSYLVANIA**

# DOUBLE DUTY

# INS



INSULATES AS IT BUILDS.....

B

# INSULITE



**QUESTION:** How strong is Double-duty INSULITE?

**ANSWER:** Insulite (Bildrite) Sheathing provides more than *twice* the bracing strength of wood sheathing horizontally applied. Quick and easy to put on. Jobs go up fast. All this *plus* insulation to make a tighter, warmer wall. That means you can cut costs, build better competitive houses, sell them faster—profit better.



**BUILDS AS IT**



**INSULATES**

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

INSULITE DIVISION  
PAPER



MINNESOTA & ONTARIO  
COMPANY  
MINNEAPOLIS 2, MINNESOTA

# 6 common conditions where **\*WOLMANIZED** PRESSURE TREATED **LUMBER** protects against **DECAY** and **TERMITES**



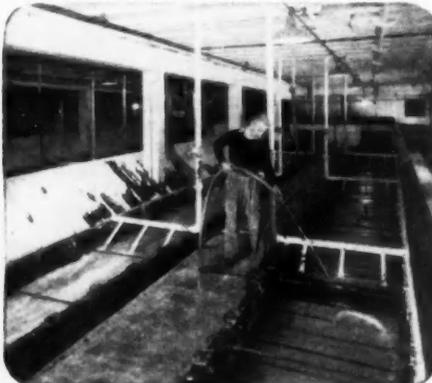
1. Wherever moisture is condensed because of concrete or masonry.



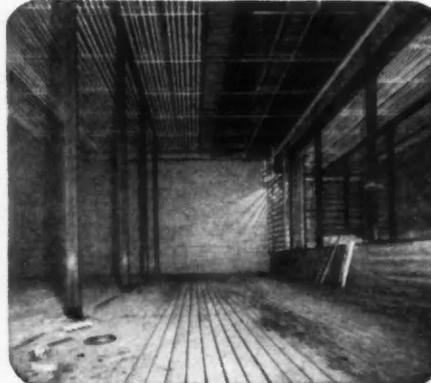
2. Ground moisture and rain held in joints, etc., of outdoor structures.



3. Wood used in or near the ground open to attack by termites.



4. Where steam and vapor from industrial processes are prevalent.



5. Walls, floors, ceilings subject to condensation from refrigeration.



6. Stock barns, silos and other farm structures subject to high humidity.

## ITS LONG LIFE MAKES LASTING CUSTOMERS

Industrial work is steady and profitable. It is even more so when you are able to deliver a value in lumber, such as resistance to wood-decay and termites.

When you recommend "Wolmanized" pressure-treated lumber, you can point out that the extra cost of this lumber is less than the cost of replacement labor alone. And you can also point out—with actual service records—to back you up—that Wolman-

ized lumber lasts 3 to 5 times as long as ordinary wood.

Customers are quick to see the advantage of economy like this.

The long life of the Wolmanized lumber you put into a job will make lasting friends.

For full information and service records on Wolmanized pressure-treated lumber, see your local dealers or write to American Lumber & Treating Company.

**The latest information on WOLMANIZED Pressure-Treated Lumber**

A new booklet which tells the complete story of Wolmanized Lumber is yours for the asking—write for your copy today.





Boston 9  
141 Milk Street

New York 17  
420 Lexington Ave.

Washington 5  
831 Southern Bldg.

Jacksonville 2, Fla.  
719 Graham Bldg.

Los Angeles 15  
112 West 9th St.

San Francisco 5  
604 Mission Street

### AMERICAN LUMBER & TREATING COMPANY

General Offices: 332 South Michigan Ave., Chicago 4, Illinois

\*Registered Trade Mark



**YOUR  
INSTALLATION MAN  
WILL TELL YOU!**

THE *Inside* STORY OF **Cotton Insulation**

**TURN PROSPECTS  
INTO STRONG  
BOOSTER CUSTOMERS**

Sell more insulation jobs at more profit per job—sell rings around competition—learn "The *INSIDE* Story of Cotton Insulation." Pass it on to employees—use it for increasing your insulation sales and profits.

WRITE for  
your copy now—  
**IT'S FREE!**



Ask the man on the job! He will tell you how much easier and quicker featherweight, flameproof Cotton Insulation can be installed. No short lengths—comes in one long blanket that unrolls like a rug. Sized to fit and lie flat in spaces between rafters and studdings—leaves no gaps.

Non-irritating to handle—nothing to sting or prick the skin—no shedding or sifting over the house to annoy customers. Ask your installation man, or better still, go out on the job with him and learn first hand why your workmen, if given a choice, will take the Cotton Insulation job every time.

Get the complete story of the many more *INSIDE* advantages Cotton Insulation offers you and your customers. Send now for your free copy of "The *INSIDE* Story of Cotton Insulation."

**NATIONAL COTTON COUNCIL OF AMERICA  
COTTON INSULATION ASSOCIATION**



National Cotton Council, Dept. B  
Box 18, Memphis 1, Tennessee

Please send "The *INSIDE* Story of Cotton Insulation."

Name .....

Address .....

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

# GOOD LOOKS PLUS...



more years of roof protection for your dollar

• Only Ruberoid Dubl-Coverage Tite-On shingles give you the combination of windproof performance, complete double coverage and outstanding beauty.

That combination gives you extra years of protection, freedom from troublesome roof worries. A Tite-On roof is safe from driving snow, rain and ice. It gets admiration, doesn't need attention!

These rugged, heavier weight shingles *interweave* to make two complete layers over the entire roof. That's like getting two roofs for the price of one.

They *interlock* to make a roof that's virtually "one-piece." Tite-On Shingles can't curl up or blow loose.

Dubl-Coverage Tite-Ons have a reasonable initial cost. They're fast, keeping application costs down. They save you expensive maintenance. For new roofs or re-roofing, they'll give you more roof



**Distinctive appearance**

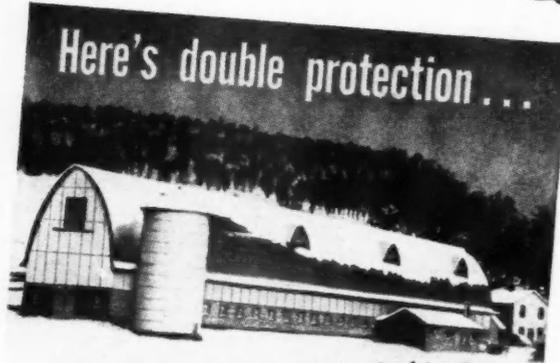
The smart basket weave pattern, clean cut "American" type shingles and rich colors make Tite-On roof completely different and satisfying.

**A "one-piece" roof**

This view of the underside shows how the locking and interweaving holds these designed shingles firmly together. In addition, when applied, concealed at four points anchors each shingle so that even hurricanes have failed to tear



**RUBEROID**



Here's double protection...

## AGAINST BOTH WIND AND WEATHER

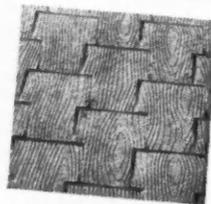
• Winter or summer, Ruberoid Dubl-Coverage Tite-Ons give your house or barn *two-way protection* against every storm hazard.

1. They are completely windproof... will even withstand winds of hurricane force without blowing up or tearing loose.
2. They give extra protection against driving rain, sleet or snow because there are two thicknesses over the entire roof area.

Give your farm buildings and their contents this double protection by using Ruberoid Dubl-Coverage Tite-On Shingles. You will be surprised at their economical cost. They lay up fast, too, keep application costs down.

Use Ruberoid Dubl-Coverage Tite-Ons for new roofs and re-roofing. For re-roofing over old shingles, where double coverage isn't so essential, Standard Tite-Ons are available.

A Ruberoid Tite-On Shingle roof means real freedom from roof worries and expensive maintenance costs!



**THE SECRET IS IN THE DESIGN**

Concealed interlocking firmly links the shingles into a "one-piece" roof having two thicknesses throughout. In addition, hidden nails securely hold each shingle. There are no metal strips, holding gadgets or exposed nails to rust away.

**RUBEROID**  
**DUBL-COVERAGE**  
**TITE-ON SHINGLES**

MAIL THIS COUPON TODAY FOR FULL INFORMATION

# TOWN OR COUNTRY

Ruberoid advertising reaches your best prospects!

Ruberoid national advertising covers both the farm and residential markets—a carefully selected audience of 14,000,000 families. Home owners, prospective home owners, farmers—all people with the need *and the means to buy* building materials!

What does this mean to your business? Just this. Month after month, 6 out of 10 of the best building prospects in your community read the story of *exclusive feature* Ruberoid products like the Dubl-Coverage Tite-Ons in the advertisements above.

This is advertising that pre-sells your prospects—helps you turn them into customers easier and faster!

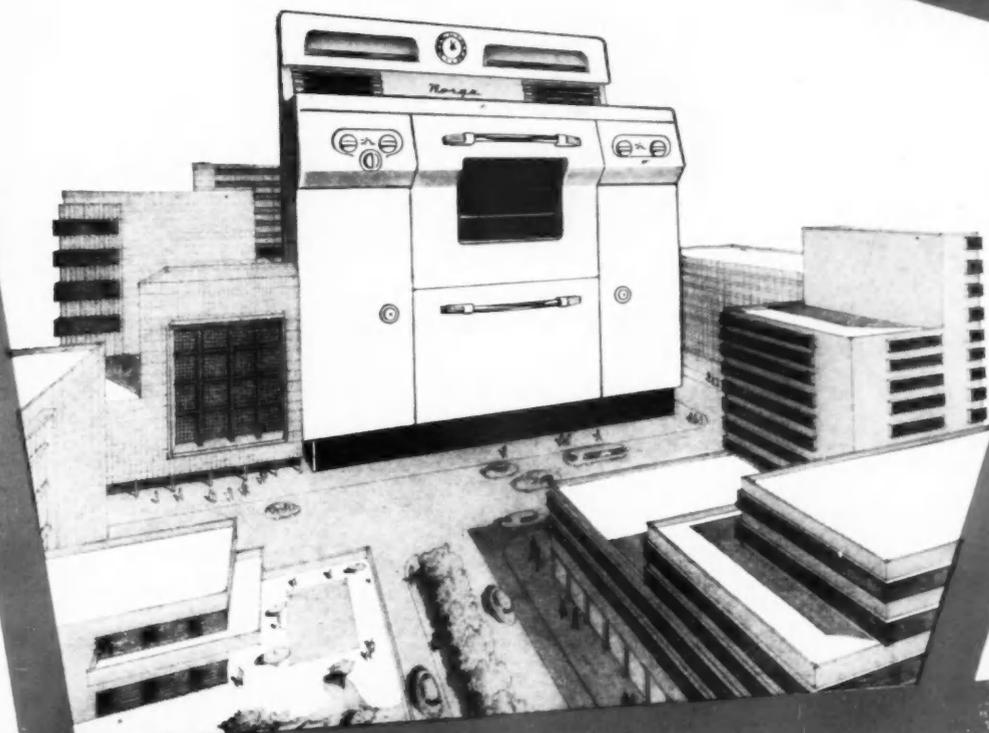
The **RUBEROID** Co.

manufacturers of

**BUILDING MATERIALS**

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

There's a place for NORGE  
in your picture!



Good design—whether for a modern apartment building or a NORGE appliance—has these attributes in common. The unit must utilize all available space efficiently. It must have all the beauty that symmetry

permits. It must have all functional parts arranged for greatest convenience. That's modern architecture . . . and that's NORGE. Norge Division, Borg-Warner Corporation, Detroit 26, Michigan.

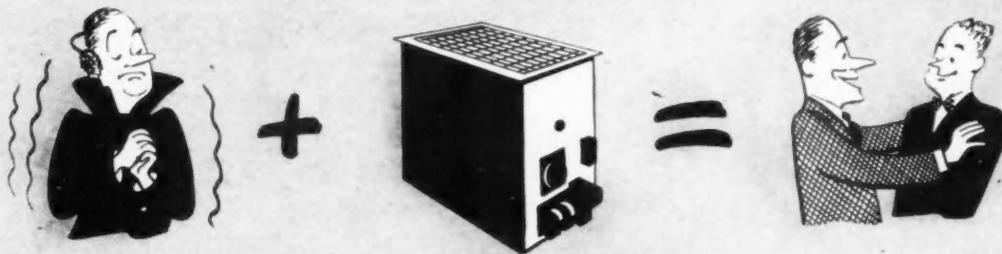
**A BORG-WARNER INDUSTRY**

- Refrigerators • Electric Ranges • Water Coolers
- Washers • Electric Water Heaters • Home Heaters
- Gas Ranges • Home Freezers

**SEE  
NORGE  
BEFORE YOU BUY**

Co.

ALS  
18, N.Y.



## Cold customer + Kresky Furnace = Warm friend ...and a nice profit for you

Install the KRESKY *Evenheat* Oil Floor Furnace in the new or remodeled homes of your customers and they're sure to tell others that you certainly "did right by them." And that sort of thing snow-balls, you know. The Kresky *Evenheat* is one of the most popular oil furnaces on the market today, and here are a few reasons why:

### Low initial and operating cost

The famous patented Kresky burner, basic unit of *Evenheat*, is simplicity itself, allowing us to effect many savings in manufacturing costs—savings we pass on to you. Immediate heat from a fire that is *always* clean—soot free—and hot, assures warmth when you want it—and less oil consumption.

### Very easily installed

A Kresky *Evenheat* floor furnace is almost a plug-in unit, it's that easy to install. Requires only three feet of clearance under the floor—less than any other comparable heater.

### Always clean instant heat

Air is mixed with the gases from the oil in the burner in just-right amounts by an electrically operated blower to give instantaneous clean heat, which is then forced through the home by a circulating fan.

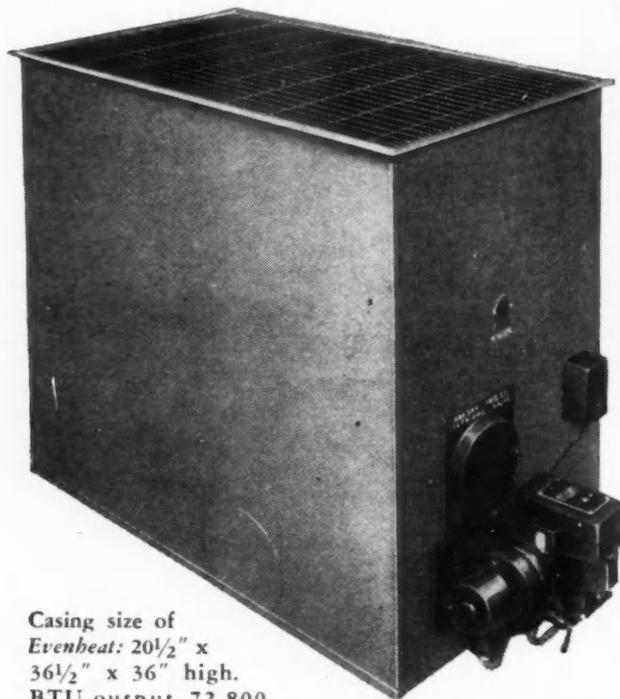
### Safe as safe can be

The Kresky *Evenheat* is completely enclosed in a double casing separated by adequate air space. This insulates the furnace, keeping the outside casing cool—an important safety feature.

### Automatic and really rugged

Intake of oil and air induction are so synchronized that you get clean healthful heat in amounts you want when

you want it without the slightest bother. The best of heavy gauge steel and the finest of materials, plus the famous Kresky workmanship is your guarantee of long life and complete customer satisfaction.



Casing size of  
*Evenheat*: 20½" x  
36½" x 36" high.  
BTU output, 72,800.

Shipping weight, 237 lbs. Also comes in dual register and super models. Write for our 1948 catalogue for information about our full line of commercial and domestic ranges and furnaces. Increased plant facilities allow us to make faster deliveries on all models.

#### NOTE TO DEALERS

If you are interested in a dealership, please let us know. There may be an opening in your locality.



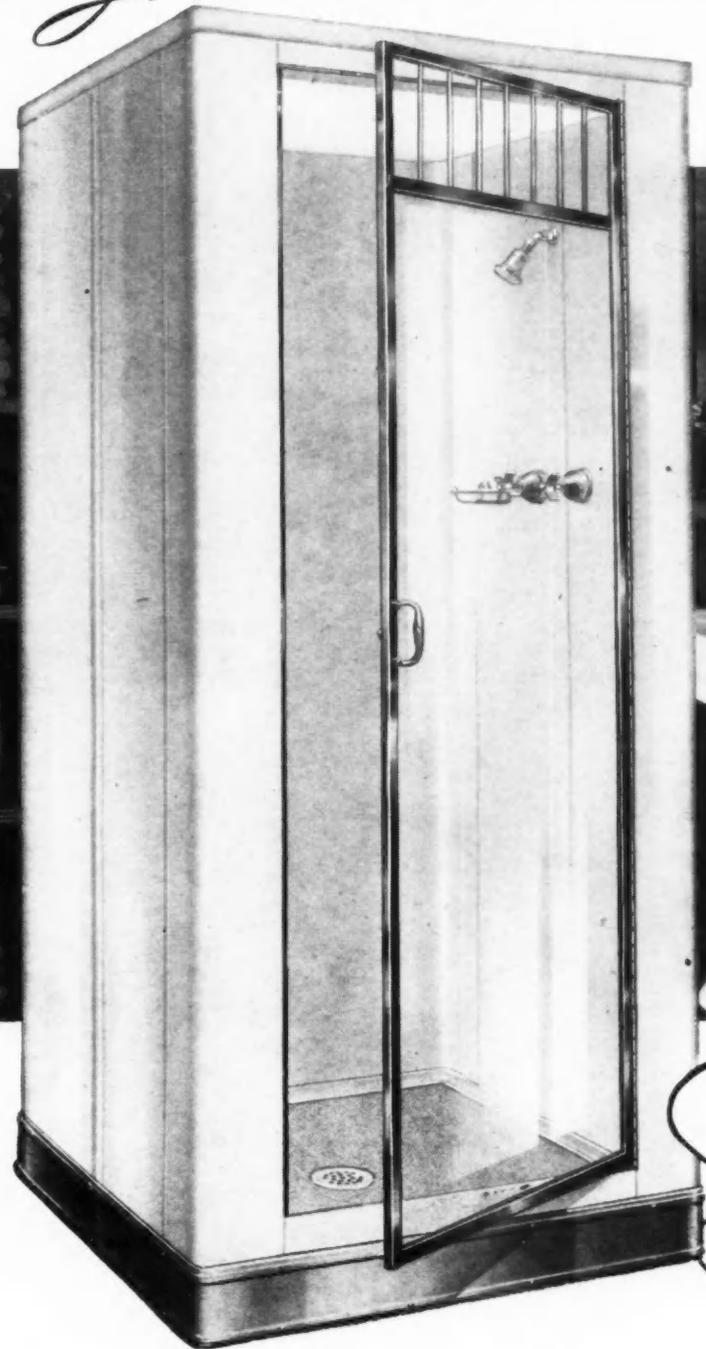
Listed by Underwriters' Laboratories, Inc.

**KRESKY MFG. CO., INC.**  
Petaluma, California

TODAY  
want the  
combine  
tone, and  
really gra  
It is Mod

TILE

# Beauty IN THE BATHROOM THAT Endures



Sizes: 36" x 36" x 80".  
 40" x 40" x 80".  
 Corner cabinet.  
 Terrazzo receptor. White Bonderized enameled aluminum alloy cabinet. Underwriters approved lights. Chromium plated brass door. Non-clogging shower head. 6" center valves. Soap dish.

TODAY, in their bathrooms, new home owners want the luxury of modern design in shower cabinets combined with utility and real durability. Now Tile-tone, and only Tile-tone, offers a shower cabinet that really graces any bathroom no matter how luxurious. It is Model 75. Here is a shower cabinet that is con-

structed to hold up better—is durable. Made of aluminum alloy, it is non-rusting and is protected by a Bonderized baked enamel finish. Model 75 has a new improved terrazzo receptor—shoulder height shower head, is lighter, yet rigid . . . solid! So it's easier to handle, easier to install.

MODEL **75** **TILETONE**  
*Shower Cabinet*

TILETONE COMPANY • 2323 WAYNE AVENUE • CHICAGO 14, ILLINOIS

# Daylighting on a large scale . . . or small?



**1. A bright spot** in Los Angeles is the new Broadway-Crenshaw department store. Extensive use of Insulux Glass Block adds daylight and distinction to this building. But Insulux pays big dividends in smaller installations, too.



**2. In this large** department store, Insulux Glass Block panels bring natural daylight deep indoors to highlight displays. But Insulux isn't only for big buildings. Do you see an idea here for some smaller shop you may be planning?



**3. Merchandise** looks better under natural daylight. Here in Broadway-Crenshaw's yard-goods section, Insulux Glass Block does its part. But, remember, soft lighting like this helps sell things in neighborhood stores, as well. Have any ideas?

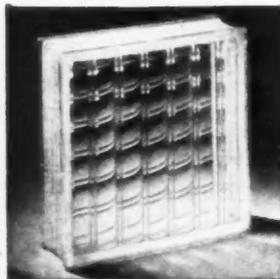


**4. Even the** employees in this big store get a break with Insulux. On this rooftop sun deck, an Insulux Glass Block windscreen separates luncheon and recreation areas. Such screens and partitions are popular for home use, too.

**5. Whether** your line as a builder is commercial or residential construction, you will find it profitable to recommend Insulux. This remarkable building material has many functional and decorative uses which make it adaptable to both. Investigate!

Write today for complete information on the many interesting commercial uses for Insulux Glass Block. Clip the coupon and mail.

**Send for free booklet**



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

American Structural Products Company is a wholly owned subsidiary of the Owens-Illinois Glass Company. It has taken over the manufacture and sale of Insulux Glass Block and other Owens-Illinois structural products.

**AMERICAN STRUCTURAL PRODUCTS COMPANY**

P.O. Box 1035, Dept. E-52

Toledo 1, Ohio

Gentlemen:

Please send me your free booklet on Insulux Glass Block, "Ideas for Commercial Application."

Name \_\_\_\_\_ Address \_\_\_\_\_

Firm \_\_\_\_\_

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

# THE MODERN STYLE IS

GENUINE CLAY  
*tile*



*Boston's Bonwit Teller has*

a distinctive decor pleasing to the most fastidious customer . . . smart merchants everywhere know

the importance of clean, attractive powder

rooms and gentlemen's lounges. Here at Bonwit's,

the ladies' lounge is done in a modern color combination

of grey and Kelly green. The grey motif established in the walls and

carpets of the powder lounge is carried through in

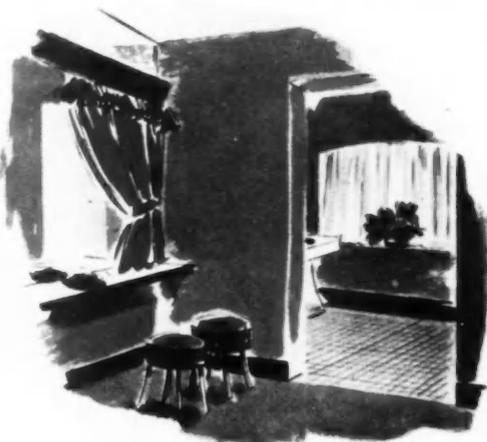
the washroom with French grey genuine clay wall tile and

wainscotting. Used with pink fixtures, this real tile

background is both pleasing and distinctive. Sanitary

cleanliness is assured. The effect is one of beauty, smartness,

and color that will last year after year.



## to defeat demon doodlers

in school corridors, gyms, and wherever else eager hands can reach, choose a permanent, mar-proof surface like genuine clay tile. Public officials appreciate it when real clay tile is specified because tile makes tax dollars go further. Cleaning and maintenance work is easier and less costly. Clay tile is washable and therefore doesn't require waxing, varnishing, or painting to keep it always looking bright and doodle-free.



## THE MODERN STYLE IS GENUINE CLAY IN THE BEAUTIFUL BILTMORE

tile



Even when you enter this world-famous

New York hotel it is hard to realize it was built 34 years ago. Recently, an extensive

modernization program was undertaken to further enhance its distinctive charm. Original Georgian furnishings are being replaced with "modern Georgian."

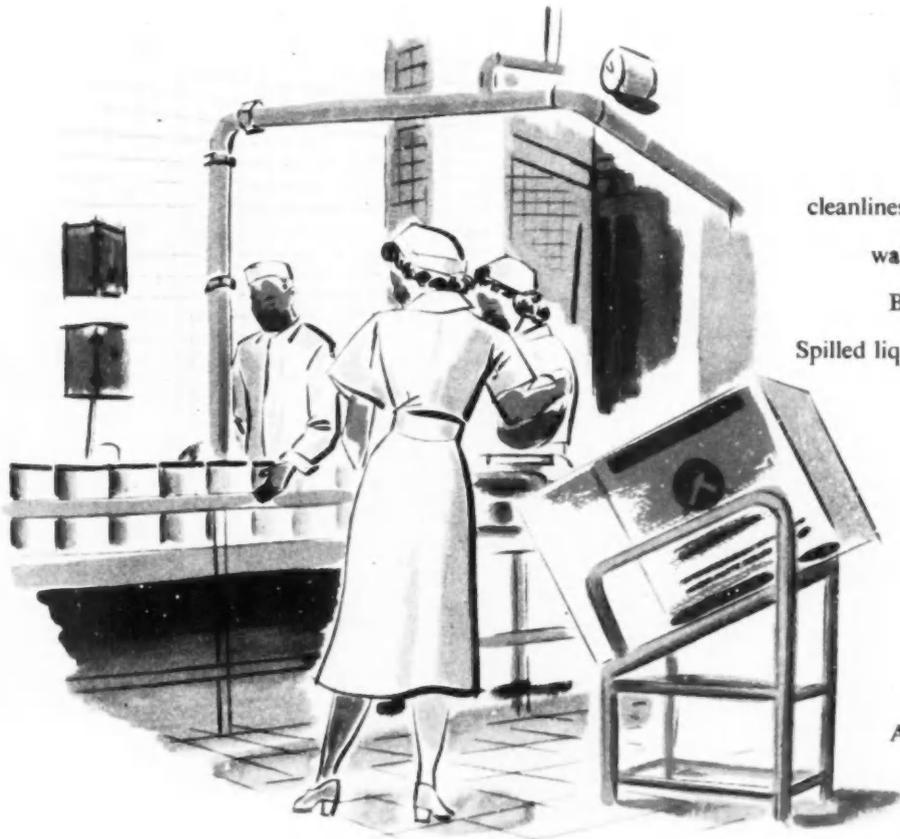
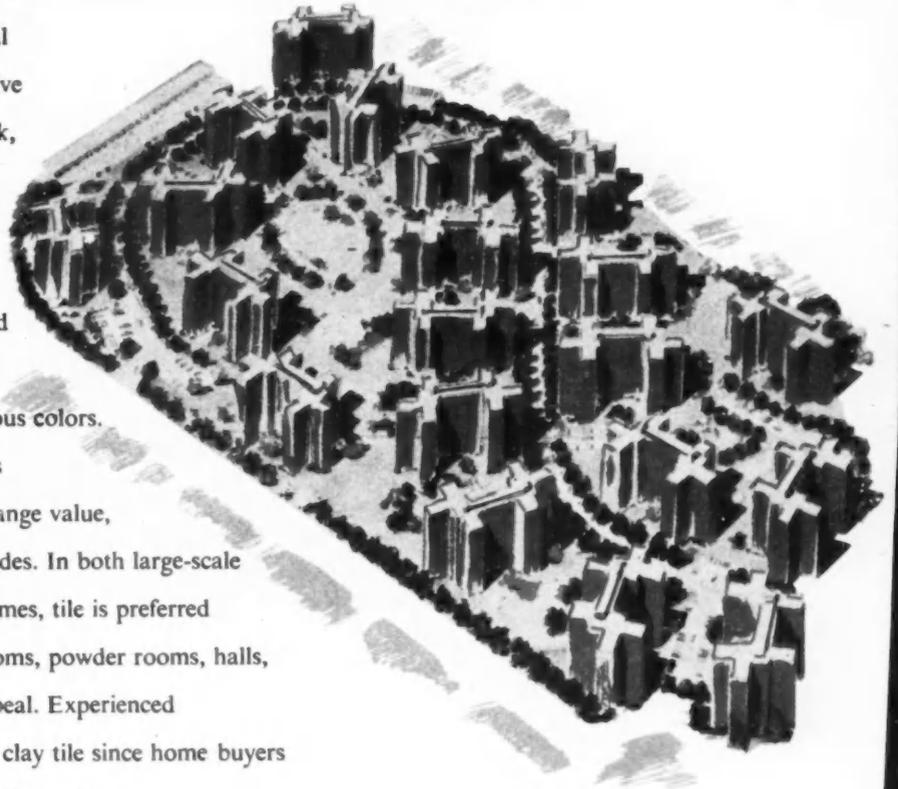
Besides keeping beautiful, *all* hotels must also keep maintenance costs low. A guest in the Biltmore who steps into any one of the 550 modernized bathrooms appreciates the smart looking beauty and cleanliness of the walls which have 6' of newly added genuine clay tile. And behind scenes are the easily cleaned, sanitary, tile floors now installed in the 18th floor kitchen and Bowman Room pantry. Equally important to the Biltmore management is the money which will be saved over the coming years by the maintenance economies real tile assures. Keeping beauty bright, and maintenance costs low, in this case go hand in hand.



## "FORESTGATE" IS BECOMING FAMOUS

as an outstanding example of how private capital and management are providing a truly cooperative residential community at Forest Hills, New York, for World War II Veterans. When fully developed, 5,669 apartments of 3½ to 5½ rooms will cover a 55-acre tract in this New York City suburban development. Featured in these well-planned apartments are bathroom walls and floors of genuine clay tile in harmonious colors.

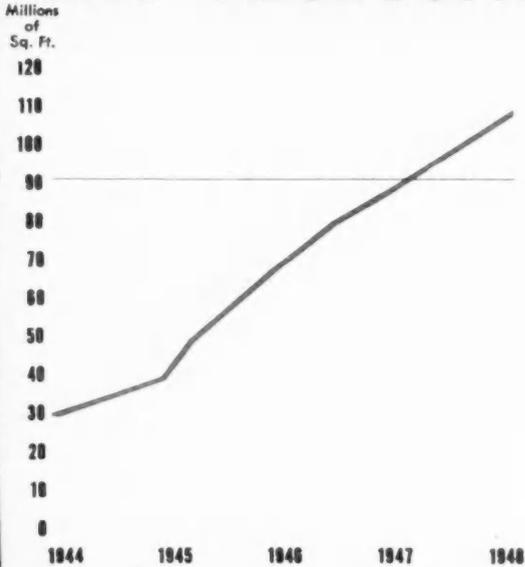
The Veteran's Administration, in appraising this and other housing projects, looks for the long-range value, economy, and durability that real clay tile provides. In both large-scale housing projects and individual custom-built homes, tile is preferred for bathroom walls and floors, kitchens, sun rooms, powder rooms, halls, stairs, and porches because it increases sales appeal. Experienced real estate people stress the presence of genuine clay tile since home buyers and renters recognize tile as the hallmark of quality and are willing to pay for its advantages.



### *when candy is cookin'*

cleanliness counts. Naturally, candy and food factories need walls and floors that are easy to clean and keep clean. But, ease of cleaning is just one of the requirements. Spilled liquids can penetrate open floor joints and deteriorate rapidly, causing unsanitary conditions. So, dairies, bakeries, restaurant kitchens, and other places where surfaces might be attacked by food acids or alkaline cleaning agents, rely on real clay tile floors and facings. Acid and stainproof, clay tile is hard and resistant to warping, chipping, and cracking. All these advantages help assure sanitary conditions.

# TILE PRODUCTION SETS ALL TIME RECORD



Reflecting the increased use of genuine clay tile for all types of contemporary and traditional designs, the industry is today producing more and better tile than ever before in history.

To insure the continued increase of both quality and quantity, tile manufacturers have invested over 10 per cent of their gross sales income since the end of the war in new plants, equipment, and product research and development.

As a result, genuine clay tile can be specified for familiar—as well as for new and exciting—installations, with full confidence that every demand will be satisfied.

## Skilled Contractors and Tilesetters Available

Throughout America, thousands of tilesetters bring to the installation job the advantage of years of training and experience in an exacting craft. Today, additional thousands of young men are learning the trade. Together, these trained craftsmen offer the know-how so essential to outstanding installations. Your nearby tile contractor and dealer offers an extensive background of using real clay tile. He is vitally interested in providing specifiers and buyers of clay tile with economical and attractive installations.

## How to get more information about tile

**Tile Council of America**  
 10 East 40th Street  
 New York 16, New York

I would like to receive information about genuine clay tile for walls and floors as checked below. Unless requested, no one will solicit us.

Data Sheet on Tile. 4 pages. Describes the types, sizes, shapes, and colors of clay floor and wall tile manufactured by the tile industry.

Basic Course in Tile Setting . . . Introductory textbook for apprentices. Available free to apprentices and to dealers employing apprentices. Others may obtain this textbook for \$2.75.

We are considering the possibility of using tile and would like to receive specific information regarding available types, sizes, and colors. Please send me a list of local contractors and dealers.

NAME \_\_\_\_\_  
 COMPANY \_\_\_\_\_  
 STREET \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_  
 CITY \_\_\_\_\_

## TILE COUNCIL OF AMERICA

10 EAST 40th STREET  
 NEW YORK 16, NEW YORK

American-Franklin-Olean Tile Co.

Architectural Tiling Co., Inc.

Atlantic Tile Manufacturing Co.

B. Mifflin Hood Co.

California Art Tile Corp.

Cambridge Tile Mfg. Co.

Carlyle Tile Company

General Tile Corp.

Gladding, McBean & Co.

Mosaic Tile Co.

Murray Tile Co., Inc.

National Tile & Mfg. Co.

Olean Tile Co.

Pacific Clay Products

Pacific Tile & Porcelain Co.

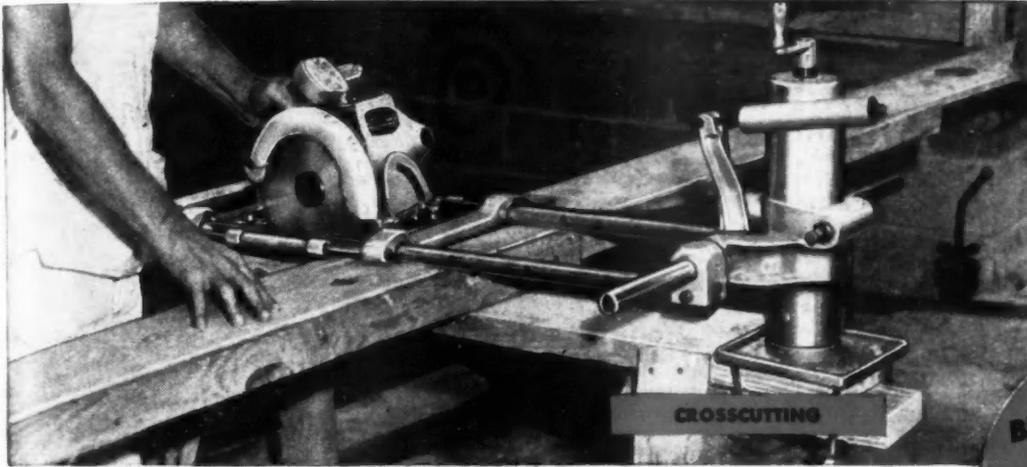
Pomona Tile Mfg. Co.

Robertson Mfg. Co.

Sparta Ceramic Co.

Summitville Face Brick Co.

United States Quarry Tile Co.



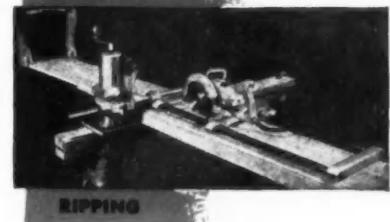
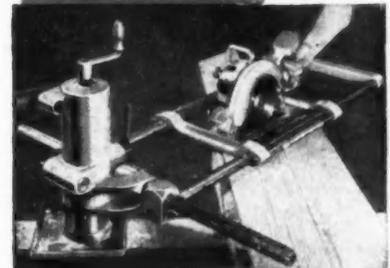
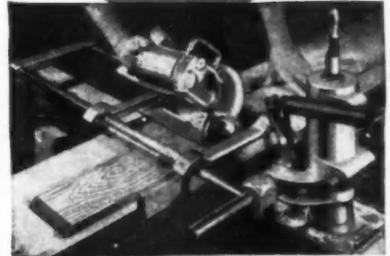
**BLACK & DECKER**  
**"Quick-Saw"™**  
**ARM \$148.00**  
(NOT INCLUDING SAW)

# NEW "Quick-Saw"™ ARM

**Multiplies the Usefulness of  
 Powerful, Versatile Electric Saws!**

Now—add Radial Saw features to your Portable Electric Saws—with a Black & Decker Quick-Saw Arm! The new Quick-Saw Arm gives you *dual* versatility: (1) A *positive* set-up for "pre-fab" cutting; (2) *Flexibility* of adjustment to make many kinds of cuts . . . in "on the job" sawing or production shop use. It helps you make more accurate cuts, increase speed, reduce fatigue. It does fast plunge cutting on moulding, fence pickets, etc.

All three Black & Decker Electric Quick-Saws (and most other portable electric saws) fit into the adjustable carriage of the Quick-Saw Arm in a jiffy. Entire unit clamps to saw horse or mounts on table. All adjustments quickly regulated on the column. And, however you use them, Black & Decker Quick-Saws beat hand sawing 10 to 1—in wood, metal, stone or composition sawing—with maximum safety. Ask your nearby Black & Decker Distributor for complete details. Write today for free catalog to: The Black & Decker Mfg. Co., 666 Pennsylvania Ave., Towson 4, Maryland.



LEADING DISTRIBUTORS  EVERYWHERE SELL

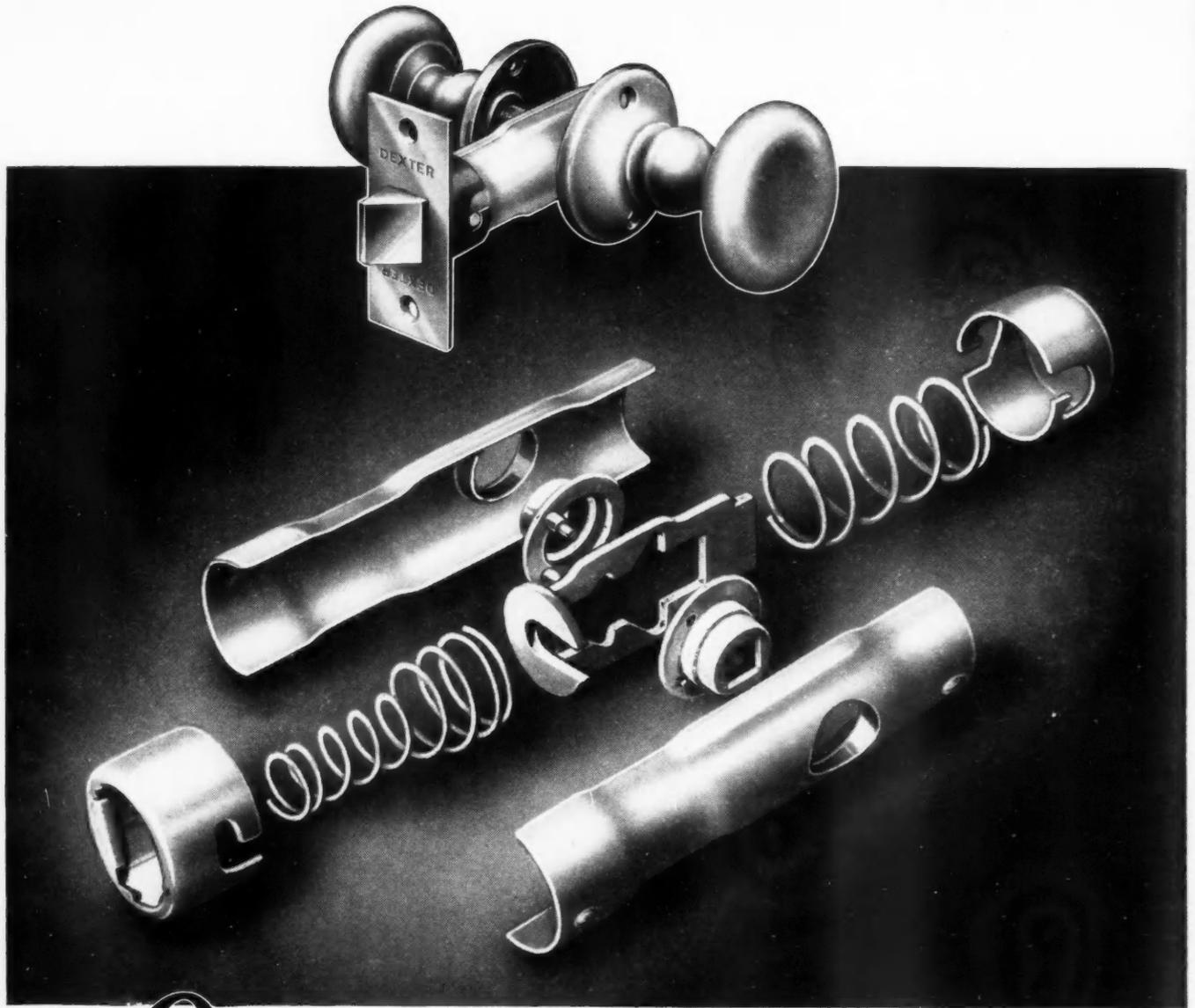
**Black & Decker**  
 PORTABLE ELECTRIC TOOLS

8" QUICK-SAW  
 Cuts up to 2-5/8" depth  
**\$135.00**

7" QUICK-SAW  
 Cuts up to 2-3/8" depth  
**\$115.00**

9" QUICK-SAW  
 Cuts up to 2-1/8" depth  
**\$150.00**

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



## Only DEXTER TUBULARS have all these 9 features of superiority

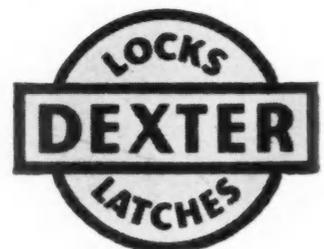
COLD rolled steel can't be beat for working parts that have to stand up and take it. That's why every single interior part in a Dexter is made of steel (plated for rust protection). This is only one of the nine features which assures you of the very best when you use *Dexter Tubulars*.

- 1 Stay-tite Set Screw
- 2 Two Big Coil Springs
- ③ All Steel Interior
- 4 Solid Brass Trim
- 5 Uniform Boring for Locks and Latches
- 6 Self-Adjusting Alignment
- 7 25 Years Specialized Experience
- 8 Shallow Face Plate Mortise
- 9 Lifetime Guarantee

**NATIONAL BRASS COMPANY**

Grand Rapids, Michigan

MAKERS OF BUILDERS, CABINET, SCREEN DOOR  
AND SHELF HARDWARE



# Weather- Wrecker

**NOW...double thick**

## Carey

### SUPER STRIP SHINGLES



Here it is... a top-quality, pre-tested CAREY product—the CAREY extra heavy Super Strip Shingle! Just check its outstanding features, listed below, and you'll see how you can do a better roofing job, obtain more satisfied customers and increase your sales... with this quality shingle that defies the weather!

## more sales - more profits

**HEAVIER WEIGHT**—250 lbs. per square... 40 lbs. more per square than most other shingles. No wonder they give extra years of weather protection!

**SUPER STRIP IS DOUBLE THICK** — Double coating of asphalt and mineral granules over the entire surface of the shingle serves as a protective blanket to add years of efficient roof covering.

**HIGH WIND RESISTANCE**—Because of extra weight, thickness and rigidity, Super Strip

Shingles offer greatest resistance to wind. They're held securely with six nails. (In extreme high wind areas, cementing down the tabs is recommended.)

**EXTRA BEAUTY AND COLOR HARMONY** — Super Strip's extra thickness provides heavy shadow lines! And Super Strip comes in 10 shades to match any exterior color scheme of the home—Dixie Green, Harvest Blend, Blue-Black, Tile Red, Slate Blend, Slate Green, Green Blend, Azure Blend, Red Blend, Brown Blend.

**call YOUR PROGRESSIVE  
CAREY DEALER TODAY**

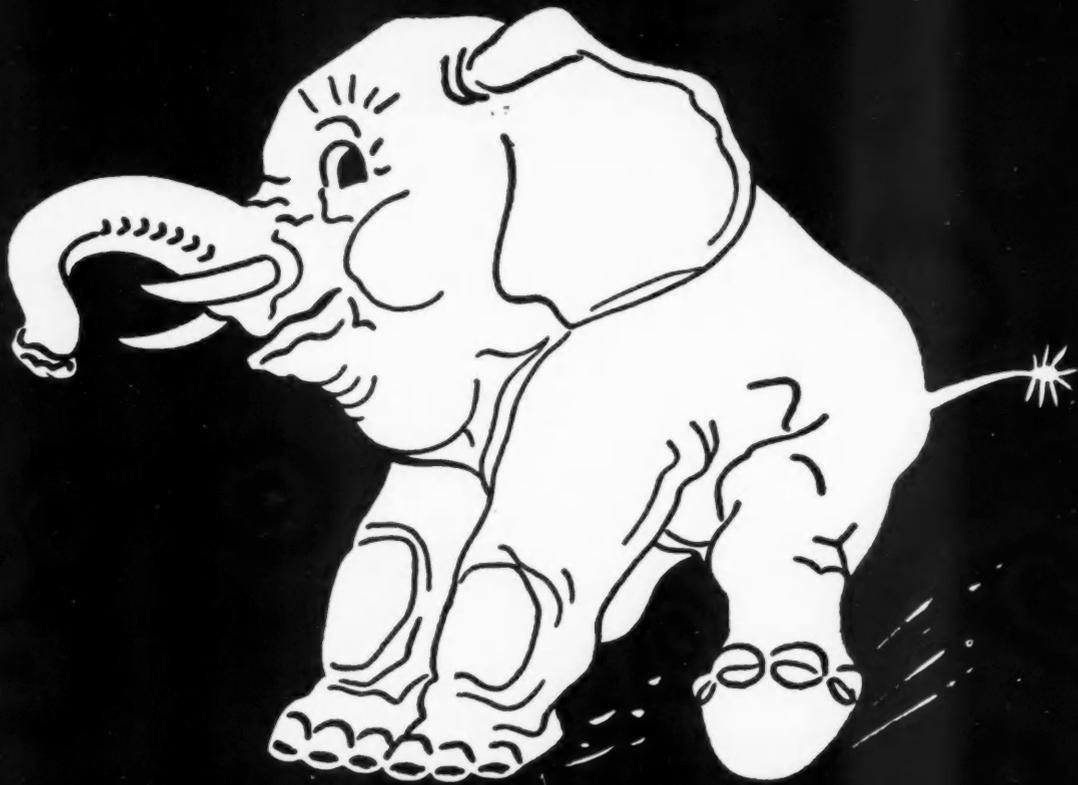
Ask him for complete details about easy-to-install and easy-to-sell Super Strip Shingles—the beautiful, fire-resistant, long-life shingles that sell. Or write Dept. AB-4.

Asbestos Shingles and Siding  
Asphalt Shingles and Roofings  
Roof Coatings and Cements  
Rock Wool Insulation  
Asbestos Wallboard  
Miami-Carey Bathroom Cabinets and Accessories

**Carey** 75 years serving home and industry

**THE PHILIP CAREY MANUFACTURING CO., CINCINNATI 15, OHIO**

In Canada: The Philip Carey Company, Ltd., 1557 MacKay Street, Montreal 25, P. Q.



# “Beware” OF WHITE ELEPHANTS!!

Sooner or later, "white elephants" crop up in every business. Big expensive jobs no one can afford to buy. Or—material purchased in time of shortages and high prices, which may require a severe price cut (and a severe financial beating) to sell.

To avoid many white elephants, make it easy for your customers to buy. Make a fast turnover possible. Make it possible to sell a

big job, small job or anything you handle for nothing down and a small monthly payment. How? By using the nationwide instalment note services of Allied Building Credits, Inc., "exclusively for the building industry."

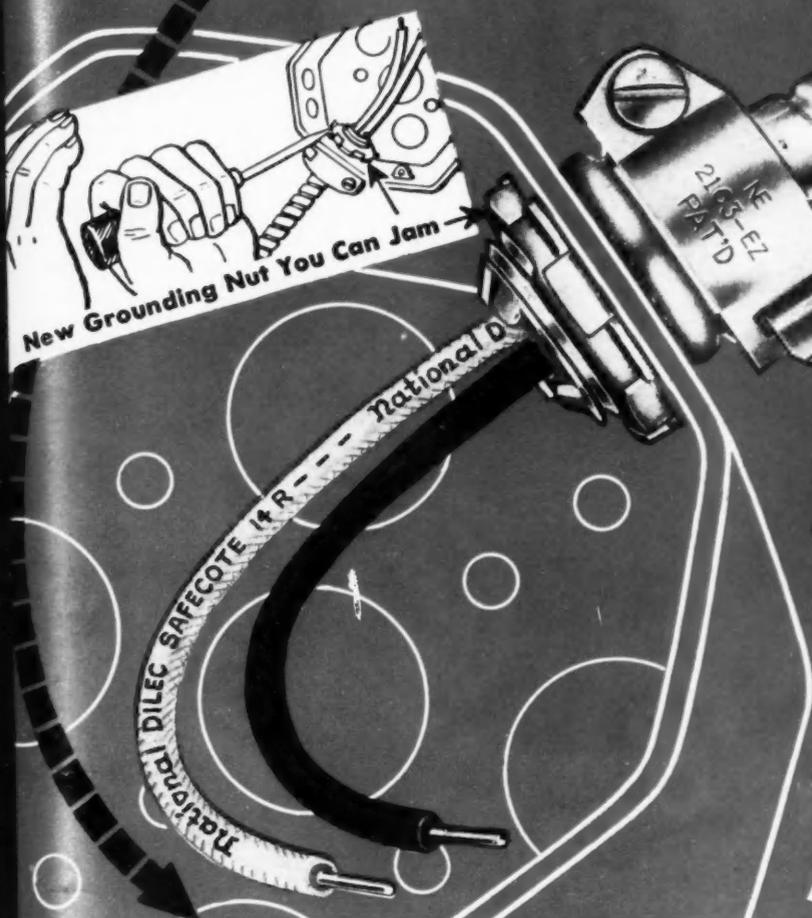
You get paid in cash and you tie up no money in accounts receivable. No collection worries, no overhead expense on credit facilities. Sell with ABC and avoid a lot of "white elephants."



**ALLIED BUILDING CREDITS, INC.**  
DEPT. B, 3109 WILSHIRE BLVD. LOS ANGELES 5, CALIF.  
*Complete Instalment Selling Services for the Building Industry.*  
**NATIONWIDE SERVICES; OFFICES IN PRINCIPAL CITIES.**

# NATIONAL ELECTRIC

**EZ**  
Numbers  
to Remember



## **EZ** HINGED STRAP CONNECTORS FOR ARMORED CABLE

Wide, Flat Cable Stops  
Easily Inspected Anti-Short  
One-Piece Stamped Steel Body  
Sure-Grip Bond  
Electro-galvanized

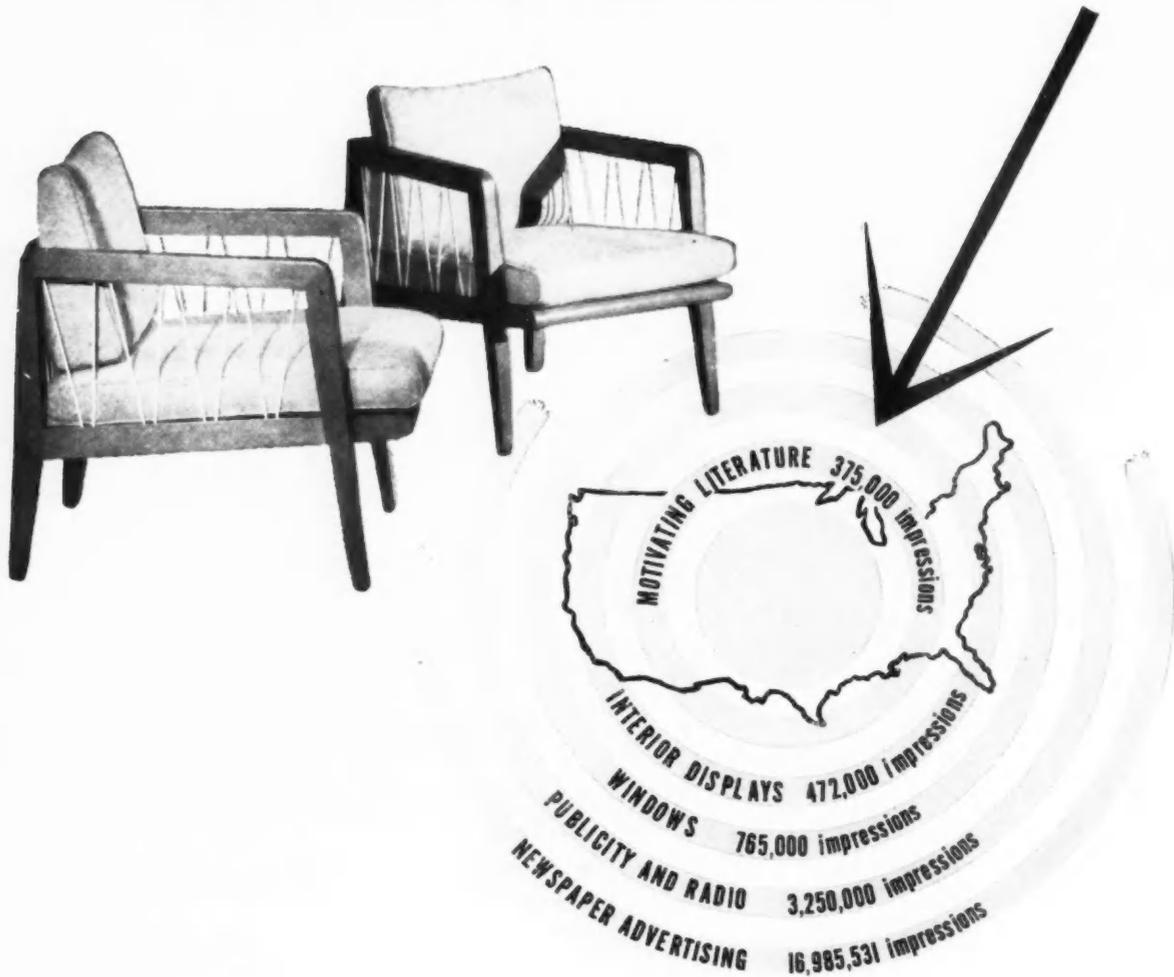
Cat. No.	FITS SIZES SHOWN					
	Armored Cable	Armored Lead Cable	Lamp Cord Plain	Flexible Conduit	Ovalflex	Bare Armored Ground Wire
2222 EZ	14-1 12-1 10-1 8-1	14-1 12-1 10-1	18-2 16-2 14-2	5/16" 3/8"	14-2 12-2	8-1 6-1 4-1
2163 EZ	14-2 14-3 14-4 12-2 12-3	12-4 10-2 8-1 6-1 4-1 2-1		5/16" 3/8"		
2165 EZ	10-2 10-3 10-4 8-2 2-1	14-4 12-2 12-3 12-4 10-2 10-3				
2166 EZ	10-4 8-2 8-3 8-4 6-2	10-2 10-3 10-4 8-2 8-3		1/2"		

AVAILABLE NOW  
THROUGH LEADING  
ELECTRICAL WHOLESALERS!  
ECONOMICALLY PRICED!  
COMPLETELY APPROVED!  
MADE TO THE WIREMAN'S  
SPECIFICATIONS!

**National Electric Products Corporation**  
Pittsburgh 30, Pa.



## House & Garden—trend setter



House & Garden sets trends by reaching people who materially influence the buying of others. This power of multiplying influence in *ever widening circles* is the golden touch of House & Garden. The Drexel Furniture Company promotion in House & Garden clearly demonstrated the effectiveness of the golden touch in action. The House & Garden advertisements touched off a series of store promotions across the country that told Precedent's story to 22 million people.\*

\* These results at the lowest initial cost in the home service field.

# House & Garden

© 1948, THE CONE & BELL PUBLICATIONS, INC.

House & Garden's golden touch gets action at the point of sale.

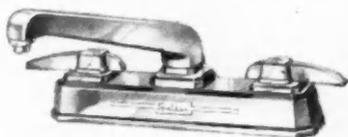


**THIS CATALOG  
DESCRIBING IN DETAIL  
THE Salter  
Feather-Touch LINE  
IS YOURS FOR  
THE ASKING**

So that you may know all the features of this revolutionary Prestige Feather-Touch Line and the variety of available patterns, send for this catalog today or ask for a copy at your plumbing wholesaler.



**571**—Feather-Touch center set lavatory fixture on 4" centers complete with Salter snap-lock pop-up waste.



**601**—Feather-Touch sink fixture for installation on metal or wood ledge sinks with 6" center openings. Complete with Salter flow control unit.



**306**—Feather-Touch combination swing spout sink fixture on 8" centers with patented Hydro-Lock spout—its guaranteed for 5 years.

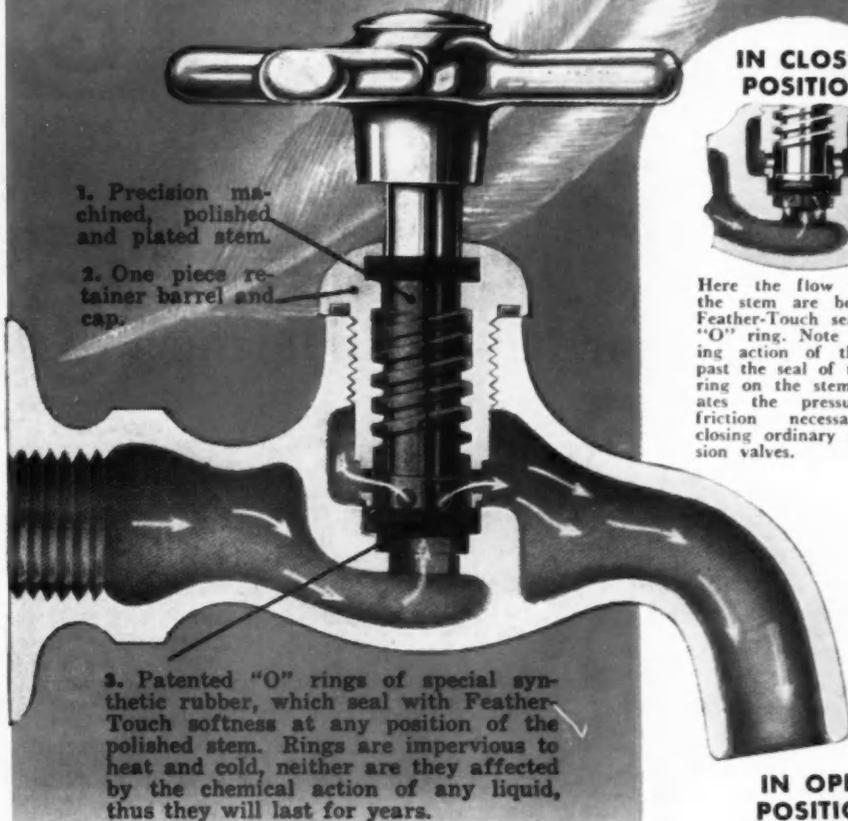


**260**—Feather-Touch Lavatory sink faucet with new finger-tip circular handle.

**138D**—Feather-Touch adjustable flange bibb with four arm metal handle.



## LOOK INSIDE And SEE HOW Salter Feather-Touch VALVE CONSTRUCTION ACHIEVES FEATHER SOFT CLOSING

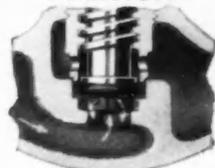


1. Precision machined, polished and plated stem.

2. One piece retainer barrel and cap.

3. Patented "O" rings of special synthetic rubber, which seal with Feather-Touch softness at any position of the polished stem. Rings are impervious to heat and cold, neither are they affected by the chemical action of any liquid, thus they will last for years.

**IN CLOSED POSITION**



Here the flow ports in the stem are below the Feather-Touch seal of the "O" ring. Note the sliding action of the ports past the seal of the "O" ring on the stem eliminates the pressure and friction necessary for closing ordinary compression valves.

**IN OPEN POSITION**



Flow ports have now moved above the "O" ring to permit a full flow of water thru the valve. Regulating the volume of water flow requires only slight turning of the handle.

In this new Feather-Touch valve, Salter engineers have perfected an amazingly simple valve. It's a removable barrel type with no complicated working parts... just a stem and outer barrel or bushing which also serves as the cap. Conventional metal valve seats and washers have been entirely eliminated. Its finger tip Feather-Touch opening and closing action is achieved by the hydraulic piston action of the stem sliding through two precision "O" rings. Working surfaces of these parts are precision finished to 3 thousandths of an inch tolerance and the stem is polished and plated to achieve the ultimate in smoothness. The above features make a valve which has operated on laboratory tests equal to over twenty years of drip proof service. See this new Feather-Touch line of fixtures at your plumbing wholesaler without further delay.



# H.B. Salter MFG. CO.

**PRESTIGE Feather-Touch FIXTURES**

20 Ninth Street, Marysville, Ohio

and division THE GLAUBER BRASS MFG. CO., Kinsman, Ohio

**"I use  
Supertreated Pol-mer-ik**

**because nothing can  
replace this  
100% PURE LINSEED OIL  
for top-notch painting!"**



● That's what VERNE WALLIN, master painter, says as he welcomes back Supertreated Pol-mer-ik. Wallin remembers Pol-mer-ik's superior qualities . . . the faster covering, better glossing, finer leveling that saves him painting time and gives an all-round more satisfactory paint job.

So, use Pol-mer-ik and you can rest assured you are using the finest 100% pure linseed oil science has produced. *It's Supertreated*—given a special processing and blending that strengthens its molecular structure . . . speeds up painting . . . provides a tougher, more durable, better-looking paint film.

Your dealer has Supertreated Pol-mer-ik . . . ask for it!

# Pol-mer-ik *Supertreated*

5-gallon,  
1-gallon



quarts,  
pints

**100% PURE LINSEED OIL**

Raw and Boiled Available in Factory-sealed Cans

**EXTRA VALUE AT NO EXTRA COST**

Product of **ARCHER-DANIELS-MIDLAND CO.**

680 Roanoke Building, Minneapolis, Minnesota

Please send additional data on Supertreated Pol-mer-ik Linseed Oil.

Name

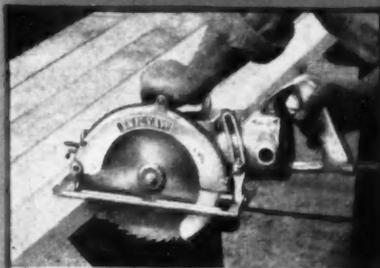
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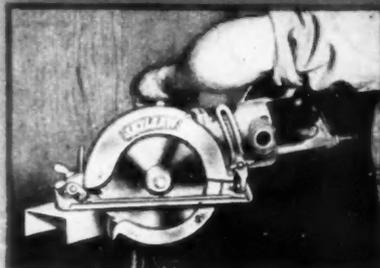
City  Zone  State

Production  
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and Canada

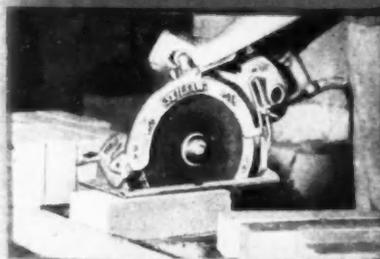
# EVERY CUT in home building GOES FASTER with a SKIL Saw



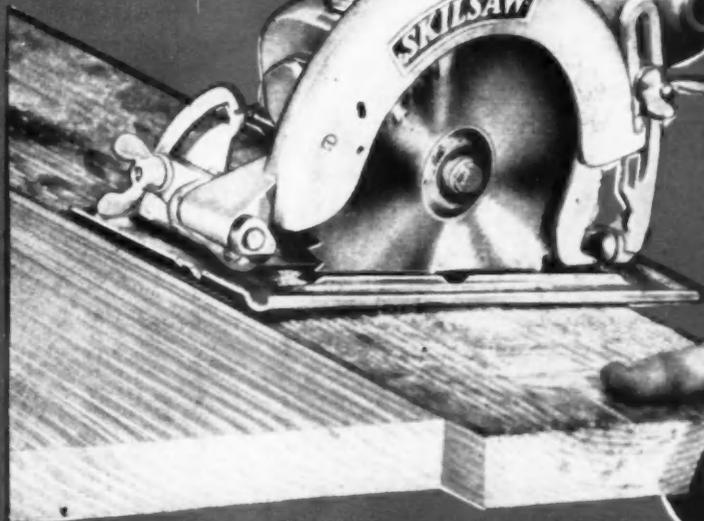
• SKIL Saw gang-cuts rafters, studs, flooring . . . is quickly adjustable to every bevel cut up to 45°.



• SKIL Saw cuts sheet metal for spouts, gutters, moldings - saves time, money and manpower on every cut.



• SKIL Saw cuts brick, tile, stone and compositions . . . reduces costs on home and commercial building.



You can't afford to saw by hand when you're competing with today's higher construction costs. You can afford an electric SKIL Saw . . . it's a money-maker . . . it's 10 times faster than a hand saw . . . saves time and money on every cut from foundation forms to roofs. You have a choice of 9 compact lightweight, heavy-duty models that cut as deep as 4 3/8 inches in wood, score concrete, cut metal . . . do more jobs than you ever thought a portable electric saw could do. See your SKIL Tool Distributor. He will show you why you need a SKIL Saw.

**SKIL** ELECTRIC  
**Tools**  
PNEUMATIC

TRADE-MARK

SKILSAW, INC., 5033 Elston Ave., Chicago 30, Ill.  
Factory Branches in Principal Cities  
In Canada: SKILTOOLS, LTD., 66 Portland St., Toronto, Ont.



  
**Not EVERY Key  
fits the front door**

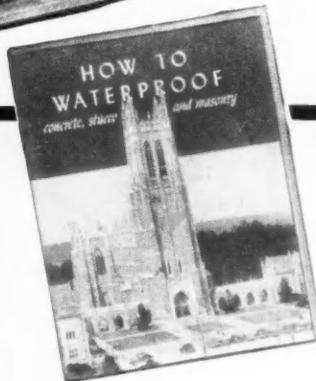
**and not just any cement fits every job**

Certain keys are made for certain locks and you're not going to open that front door with just any key. The same thing applies to cements—there is a certain type of cement that just fits a certain job and not just any cement gives a good construction. Today, smart contractors look over the five Medusa Special Cements and select the one that will give them the best job. They know that ordinary gray cement has its place but so do the other Medusa Special Cements.

Suppose you are building a home and you want a basement that is going to be dry for years to come. Don't choose just any mortar nor any cement—instead, use Medusa Waterproofed Gray Portland Cement\* for laying up the units for monolithic concrete and for the basement floor. This cement has a waterproofing material ground in at the mill. It is thoroughly distributed throughout the cement; hence, throughout the concrete. This waterproofing material is locked in the concrete or mortar. It repels all water at the surface, guarding against moisture penetration. The further addition of a Medusa Waterproofed Gray Portland Cement as a plaster coat inside and out on the basement walls is an added promise of complete protection. For further information on Medusa Waterproofed Gray Portland Cement, send the coupon below for the booklet, "How to Waterproof Concrete, Stucco and Masonry."

\*If not available, use Medusa Waterproofed Paste or Powder.

**FIFTY-SIX YEARS OF CONCRETE PROGRESS**



**Mail this  
Coupon  
NOW!**

**MEDUSA PORTLAND CEMENT COMPANY**

1002-2 Midland Building Cleveland 15, Ohio

Gentlemen: Please send me a copy of the free booklet, "How to Waterproof Concrete, Stucco and Masonry."

Name .....

Please Print

Address .....

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

Also made by Medusa Products Company of Canada, Ltd., Paris, Ont.

SHOW

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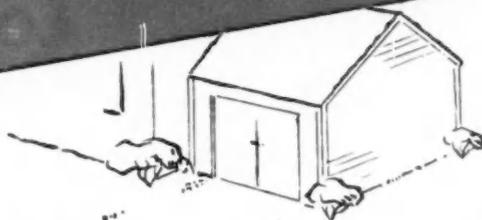
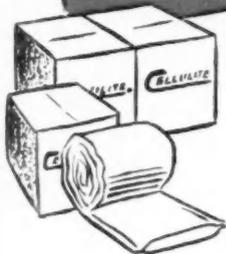
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**SHOUT** from the housetops about this . . .

# NEW DOUBLE ACTION INSULATION . .



**H**omeowners get double action from new, patented Cellulite-Silvercote—Reflective Cellulite. Up to 70 per cent greater efficiency than other types of insulations . . . far better fuel savings, much more summer comfort.

You, whether builder, dealer or both, get triple action: a sale that's a cinch to make, a sale that earns you the lasting good will of your customers . . . and a good, sound profit.

Cellulite-Silvercote combines a blanket up to 36 per cent more efficient in preventing heat transfer by conduction and convection PLUS two reflective membranes to block radiation of heat. Total—up to 70 per cent greater efficiency.

**THE GILMAN BROTHERS COMPANY**  
Established 1897

**GILMAN, CONNECTICUT**

Sales Offices — New York, Chicago, Tacoma, Los Angeles, San Francisco

Here's something to shout about — *the most efficient building insulation known to science!* Permanent, non-settling, flameproof. Gilmanweld nailing flanges make it simple as all get-out to install. Rugged vapor barrier provides MODERN MOISTURE PROTECTION. Send us the coupon today for complete information about Cellulite-Silvercote.

**WHOLESALEERS - A few choice territories now available.**

THE GILMAN BROTHERS COMPANY  
52 Richard Street, Gilman, Connecticut

Please send me full information about new, double action Cellulite-Silvercote.

Name \_\_\_\_\_

Firm \_\_\_\_\_

Street \_\_\_\_\_

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

Check one:  Builder  Wholesaler  Dealer (Retail)  Architect

\*T.M. "Cellulite" Reg. U. S. Pat. Off. by The Gilman Brothers Company.  
\*\*T.M. "Silvercote" Reg. U. S. Pat. Off. by Silvercote Products, Inc.



1

**HERE'S RADIANT HEATING**

See those arrows coming from the Modine Convector Panel below the window? That's *radiant heating* — mild radiant heat in just enough quantity to offset heat loss from window area.



2

**HERE'S CONVECTION HEATING**

These arrows illustrate *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 passes out through grille.

**Modine Convector Radiation blends both for the greatest forward step in modern heating science**

MODERN heating at its best — that's what engineers and architects are calling Modine Convector Radiation. This blended combination of radiant heating and convection heating is the dependable new hot water and steam heating system for moderate cost homes and apartments . . . as well as commercial and institutional buildings.

Right now Modine Convector Radiation costs less than any other form of radiation. Compare these outstanding features which it gives you: 1) individual room control. 2) instant response to automatic controls. 3) gentle air circu-

lation without the use of moving parts that wear out. 4) distinctive room charm and cleanliness without unsightly radiators.

If you're planning to build or modernize, specify Modine Convector Radiation. Call Modine's Representative listed in the "Where-to-Buy-it" section of your phone book. Or send for new, free Convector Booklet! MODINE MFG. CO., 1501 Dekoven Ave., Racine, Wis.

**Modine**  
**CONVECTOR RADIATION**  
*The modern "proved by use" heating method.*

**Check these key Modine features!**



Close Temperature Control



Adds to Living Space



Modern Beauty



Priced for Today's Homes and Apartments



Easy to Install



Easy to Clean

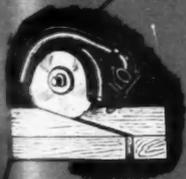
Take this low-cost

# Portable Saw-Shop

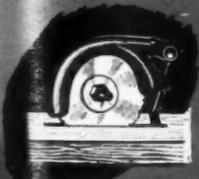
to your job!



It's a CUT-OFF saw!



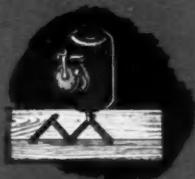
It's a MITER saw!



It's a RIP saw!



It's a DADO machine!



It's a ROUTER!



It's a VARIETY saw!



It's a SHAPER!

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

To build more and better houses faster—builders use this portable, low-cost DeWalt. Because most of its working parts are now of light-weight, heat-treated aluminum, operators find it easier to handle—safer than ever before—and it does the fast, accurate work they want. It's a machine you can get quickly. Write for catalog. DeWalt, Inc., 14 Fountain Avenue, Lancaster, Penna.

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

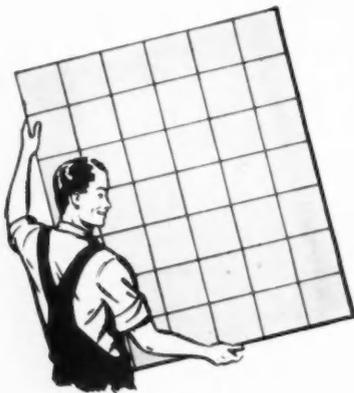
# DeWalt

THE SAW THAT'S FIRST WITH BUILDERS

# PRESTILE

*"Its Plastic Beauty is Baked In"*

**THE EASY-TO-SELL,  
QUALITY  
TILEBOARD**



**Quickly Installed Over  
New and Old Walls**

**Prestile is the Known Brand of National Prestige!**

Nationally Advertised in Better Homes & Gardens, American Home, House & Garden, Small Homes Guide, Architectural Forum, American Builder, Progressive Architecture, Practical Builder, American Lumberman and other leading magazines.

Inexpensive! Beautiful! Enduring! Here's reason why Prestile is the popular tileboard for remodeling or new construction. It's *panel-size*—easy to install—easy to clean. Wide range of glistening pastel colors are *baked-in* by a special process for permanency—offers customers unlimited decorating effects! Write today for details and prices.

### 9 Color Combinations

- WHITE with black or red score lines
- PEACH with white score lines
- BLUE with white score lines
- GREEN with white score lines
- IVORY with white or black score lines
- YELLOW with white or black score lines
- ORCHID with white score lines
- RED with white score lines
- BLACK with red score lines
- PLAIN—unscored in all colors.

### 5 Popular Patterns

- 4-inch square—Regular tileboard.
- 8-inch square—Large tileboard
- 4-inch Streamline—parallel lines
- 8-inch Streamline—parallel lines
- Plain—unscored colored panels

*Prestile line also includes: Black Cap and Base Mouldings, Stainless Metal Mouldings, Prestile Waterproof Cement.*

**PRESTILE**  
MANUFACTURING COMPANY

2860 LINCOLN AVE., CHICAGO 13, ILL.

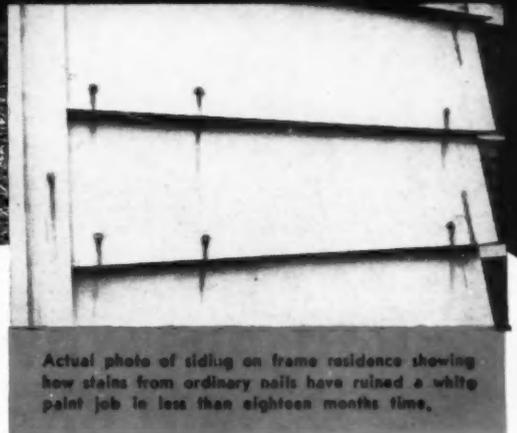
# A \$10 added investment in NICHOLS "neverstain" ALUMINUM WOOD SIDING NAILS

on this 5-room house would have saved a \$200 repaint job

No more rust streaks to ruin a nice paint job when you use Nichols "Neverstain" Aluminum Wood Siding Nails. They are the greatest improvement in nails since the wooden peg. Siding installed with NICHOLS "Neverstain" ALUMINUM NAILS can never become rust streaked or discolored as in the case of the steel-nailed siding shown in the photo below. Hammer blows on the heads of galvanized nails may chip off the zinc, exposing steel to rust. Copper nails may give off a dark hued oxidation.



ALUMINUM IS NOT A SUBSTITUTE!



Actual photo of siding on frame residence showing how stains from ordinary nails have ruined a white paint job in less than eighteen months time.

## RUST PROOF • EASY TO DRIVE • ETCHED TO HOLD

### More Nails per Pound

Made of a special alloy, these aluminum nails are rust proof *all the way through*, as aluminum cannot rust. They are etched for added gripping power and drive easily and straight. You get about three times more aluminum nails per pound than steel nails of the same size.

(Available in 50 lb. kegs in sizes 6d (2" long, 12 Ga., 17/64" head), 7d (2 1/4" long, 12 Ga., 17/64" head) and 8d (2 1/2" long, 11 Ga., 19/64" head).)

### OTHER TYPES OF NICHOLS "neverstain" ALUMINUM NAILS

- COMMON — Sizes 4d to 20d.
- SHINGLE — (Standard) — Length 7/8" and 1 1/4", Ga. 12 1/2, head 9/32".
- ROOFING — Length 7/8" to 2 1/2", Ga. 10, head 7/16".
- PLASTER BOARD — Length 1 1/4", Ga. 12 1/2, head 5/16".
- ASBESTOS SHINGLE — Length 1 1/4" and 1 3/4", Ga. 11 1/2, head 10/32".
- CEDAR SHAKE — Length 1 1/4" and 1 3/4", Ga. 14, head 5/32".

SPECIFY NICHOLS "neverstain" ALUMINUM NAILS ON YOUR BUILDINGS

## Other Famous NICHOLS "neverstain" Products

Will not rust or stain buildings



**ROLL VALLEY**  
14", 20" and 28" widths.  
One continuous coil of 50 ft. per carton.



**FLASHING SHINGLES**  
Available in 5" x 8" and 8" x 10" sizes. 5" x 8" packed 500 pcs. per bundle. 8" x 10" size packed 250 pcs. per bundle.



**EAVES TROUGH**  
5" half round, 10 ft. lengths, .027" thickness (23 U.S. Std. Ga.).



**CONDUCTOR PIPE**  
3" Plain and Corrugated Round, 10 ft. lengths. .020" thickness (26 U.S. Std. Ga.).

All necessary fixtures for gutters and down spouts are also available.

Write today for circulars illustrating, describing and pricing Nichols products.

# NICHOLS WIRE & ALUMINUM CO.

Main Office: Davenport, Iowa  
Warehouses: Mason City, Iowa and Battle Creek, Mich.

**They're  
FIREPROOF**



**They're  
FULL-THICK**



**2 Reasons why you should recommend  
Gold Bond Rock Wool Batts**

**YOU** and your customers *both* profit when you recommend Gold Bond Rock Wool Batts!

**YOU PROFIT** two ways. First, you'll be fulfilling your obligation to your customer by giving him the good, sound advice he expects from you. There's no finer home insulation than Gold Bond Rock Wool, made by National Gypsum Company. Second, you'll make as much or more actual profit than you would on inferior insulation.

**YOUR CUSTOMERS PROFIT** by having the finest home insulation in the world—at *no extra cost!* First, Gold Bond

Rock Wool can't burn. It's as fireproof as the rock from which it's made. Second, only "Full Thick" insulation, which completely fills the wall, provides an effective fire stop, and top efficiency heat insulation, too!

The map below shows the six Gold Bond Rock Wool plants from coast-to-coast, ready to make fast shipments. Play it safe! Always give your customers the best!

**NATIONAL GYPSUM COMPANY  
BUFFALO 2, N. Y.**

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



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

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# TRENDS

BUILDING MATERIAL - EQUIPMENT - APPLIANCES

## Program for Ten Million New Homes

CONSTRUCTION was begun on 50,000 new permanent non-farm dwelling units in January according to preliminary estimates of the Bureau of Labor Statistics. This was 12,000 under the estimate for December, but exceeded the number of dwelling units started in January 1947 by almost 10,000 (25 per cent). Severe winter weather seriously affected starts in northern areas. Marked decreases were noted in Oakland, Calif., Chicago, Ill., Evansville and Fort Wayne, Ind., Minneapolis, Minn., Elizabeth, N. J., Columbus, Ohio, Philadelphia, Pa., and Richmond, Va. Substantial increases were reported for Phoenix, Ariz., Washington, D.C., Miami, Fla., Indianapolis, Ind., Baltimore, Md., and Austin, El Paso, Houston and San Antonio, Texas.

### Financing Ten Million New Homes

Relatively high prices for new homes have proved no obstacle to prospective buyers as long as easy credit terms were available, but builders are now confronted with prospective buyers who have not more than \$100 to \$500 for a down payment whereas \$2,500 is needed. It was inevitable that this problem would arise.

The Mortgage Clinic of the Mortgage Bankers Association meeting at the Drake in Chicago, was urged by one of its members "to stay in the game and make every effort to finance the man who wants to buy a home. If we do not finance them somebody else will and that somebody else may not be private enterprise. Let us encourage home ownership. Keep our homes salable but select risks wisely."

Problems that confront the mortgage banker in a desire for stability in their investments include local booms and industrial relocations, and the changing character of neighborhoods, all creating instability of value. Another factor is the significant role that divorce and break-up of families play in the mortgage banking field. A former commissioner of the Federal Housing Administration states that marital difficulties represent the actual principal reason for FHA foreclosures nationally. They are the chief reasons for mortgage delinquencies and the most difficult to handle.

Confronted with such practical

difficulties, it is no wonder that bankers look with a jaundiced eye on mortgage loans when commercial and government loans are much easier to handle.

Typical of plans being advanced for a bigger supply of credit is the "Dallas Plan" which argues that the true cost of housing to the consumer is not the sales price of such housing, but rather the total monthly payment necessary to authorize the mortgage. The plan would give FHA insured mortgages the security of a government bond, and make it the investment equivalent of a government bond at a 3½ per cent interest rate. The sponsors believe that the plan will lower costs and increase production by permitting builders to achieve the economies of mass production and uninterrupted construction of long range building operations—two, three, five year projects.

### Congress Urged to Formulate Ten-Year Plan of Building

Perhaps the President's special message to Congress on February 23, urging a long range program to produce one to one and a half million homes for the next ten years was timed to coincide with the opening of the NAHB Convention.

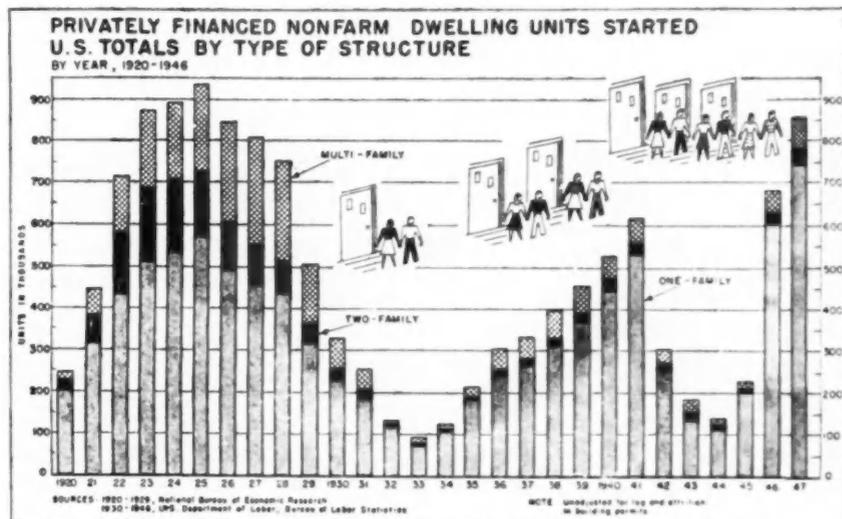
Although this long range program would certainly be desirable, so far as builders are concerned, its implications have not been fully emphasized.

Such a program will not only house

the anticipated increase in families as estimated by the Bureau of Census for the next ten to fifteen years, but will also provide for the replacement of one out of four existing dwellings. This would remove all slums and blighted areas and sub-standard dwellings in cities and towns as well as others which are still serviceable. After the present housing shortage has been eliminated, the problem of designating certain dwellings for destruction and replacement would arise. Many of these so called sub-standard dwellings are owner-occupied. Many owners would protest any compulsion to destroy their present dwellings and to replace them with new ones.

The President, in his address to Congress, called attention to the fact that less than 15 per cent of the 854,600 new homes built in 1947 were rental units. The chart shows how the present building boom differs from the twenties when two-family and multi-family units, the usual type of rental units, formed a substantial portion of total residential building.

In spite of higher prices, certain lines of retail trade are registering decreases in dollar sales volume as compared with last year, notably: Confectionery stores, bakeries, eating and drinking places, women's accessory stores, custom tailors, jewelry and book stores. In contrast, lumber and building material dealers, according to Department of Commerce data, registered an increase of 22 per cent in retail dollar volume in January.





\***TO THE LAST MAN** they voice their approval of the Sargent Quality House Unit Package. Less handling time, lower inventories, greater ease of identification — those are the advantages. Here, right at your finger tips in one handy package, are all the lock and latch sets required for two average small homes, with front and rear doors keyed alike. Packed as complete house units, each individual lock or latch set is packed in a separate box, the carton being suitably labeled for the openings for which they are intended. If additional items are required they are immediately available from your jobber's open stock. Is it any wonder that everybody enthuses over the

## QUALITY HOUSE UNIT PACKAGE



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



News, Views  
and Comments

## On and Off the Record

**NEGATIVE JUDGMENT**—David S. Miller, president of the Producers' Council, recently scored a bull's-eye against negative judgment of the performance of the building industry when he said, "There has been a tendency to judge the building industry by what it has not been able to accomplish, rather than by the outstanding record it has made in the face of unprecedented handicaps."

**MILLER SCORES AGAIN**—The astute PC president, calling attention to the tremendous acceleration of building volume in the 30 months following the close of the war, added that "The amount of new construction would have been greater had it not been for the vast quantities of materials utilized to repair and improve existing housing and other buildings."

**CIIC**—It means Construction Industry Information Committee. It is at work documenting evidence that all branches of the building industry have been working in the public interest.

**PUBLIC RELATIONS**—The documented evidence should be a genuine contribution to industry public relations. It is expected to show shortened building time, increased labor production, improved materials production, and to outline numerous programs designed to reduce building costs.

**MUTUAL HOUSING**—First veterans' mutual housing project under New York's limited dividend housing law has been announced. Will be in Queen, New York City, and include 800 apartments. Each unit, 4½ rooms for expected sale price of \$9,200, down payment of \$450, monthly charges about \$70 to \$75.

**HOUSING IN BRITAIN**—Between the beginning of Britain's re-building drive in 1945, and August, 1947, there were 124,013 permanent houses completed. On August 1, there were 248,914 permanent houses under construction.

**MARTIN V. COFFEY**—"You and I earn a living for ourselves and our families because of the dreams

of great Americans . . . hence, we, as their successors, have an obligation . . . to see to it that their dream of a happy, prosperous America does not turn into a nightmare."

**G. A. AMES**—"I do not think we need to worry too much about initiative or ambition or vision. These are inherent in the individual spirit of the people of this country. We need only to remove the obstacles and artificial barriers. Let's stop taxing progress."

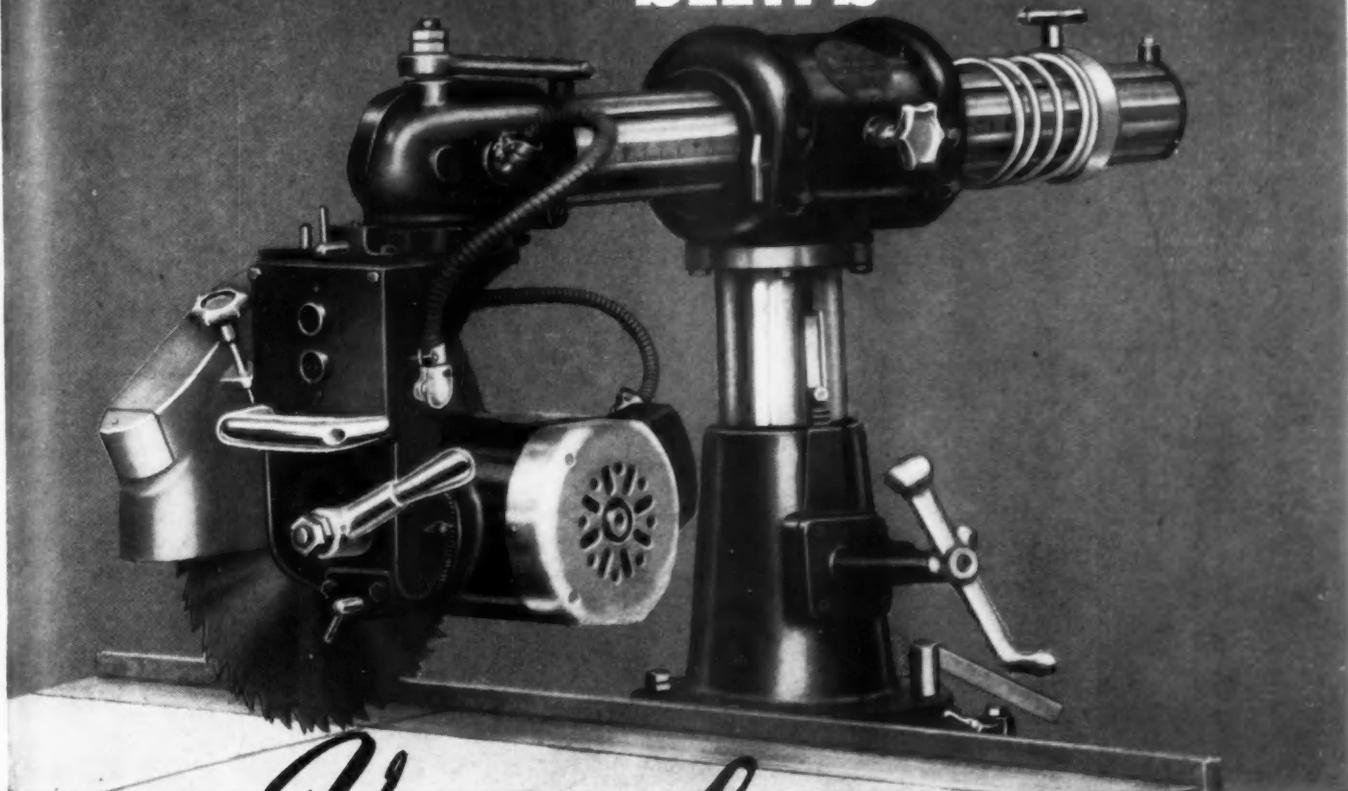
**LOW-COST HOMES**—What probably was intended to be just one of a number of interesting panel discussions at the recent NAHB convention, turned out to be almost the theme of the entire convention. It was the low-cost home panel under Nick Molnar. With all due appreciation of the excellent work of other panels and speakers, it can be said that the results of the low-cost home panel alone justified holding the convention.

**BUILD UP**—It was agreed by the panel that the fundamental of low-cost home building is to build up to a standard and not down to a price. That means more efficient, compact design, room for expansion, and high quality for long life.

**COOPERATION**—One of the best examples of real cooperation and coordination of the elements that make up the home building industry was afforded at the convention of the Western Retail Lumbermen's Association in Spokane. Manufacturers and wholesalers exhibited their products. The local builders' chapter had a booth, and members attended all business sessions of the retailers. Labor's representatives were present and vocal. All went away with a better understanding of the other fellow's problems.

**SPOKANE**—A coordinated building industry is a reality in this city. Regular meetings of builders, retailers, wholesalers and representatives of labor are held to step up building volume and reduce building costs. Result, an end to name calling, and a beginning of real progress.

# PEER of ALL RADIAL POWER SAWS



## THE *Versatile* COMET

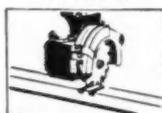
Because of their several outstanding features, their inherently fine qualities, their absolutely superior performance for owners everywhere, versatile Comets have soared to the top among radial power saws. New owners often say their first experience with Comets is one of extra satisfaction. They

know they are buying the best but are more than agreeably surprised to discover how good the best can be. The position Comets hold today is due to the constantly increasing preference for the kind of service they give . . . service that saves—and makes money. See your Comet dealer or write direct.

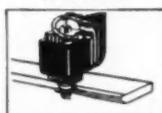
BEVEL CROSS CUTTING



DADOING



SHAPING



BEVEL RIPPING



RIPPING



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# COMETS *cut quicker*



## How to make Home-buyers **Jump** with joy!



People are really pleased when you give them what they want. In homes, the trend today is to Electric Ranges. Another million American families switched to Electric Cooking last year. Conservative estimates indicate that this year at least a million more Electric Ranges will be installed.

This is a definite trend that cannot be ignored. Progressive builders recognize this trend. Electricity is a "must" in any house, and it's simple and economical to include wiring for an Electric Range leading to a range outlet in the kitchen at the time of construction. This is assurance that the houses you build are not only modern today, but will *stay* modern for years to come!

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

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GIBSON • HOTPOINT • KELVINATOR • LEDO • MONARCH • NORGE  
QUALITY • UNIVERSAL • WESTINGHOUSE

*Follow  
the trend...*

**wire** YOUR HOUSES  
FOR ELECTRIC RANGES

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

SYMBOL OF ADEQUATE WIRING



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# LETTERS

## Advice to the Ignorant

To the Editor: In order to be well informed on reasons and cause effect on the very rotten conditions affecting the home construction industry, I happened a few days ago to read your periodical, in which I found a gem at the end of the article entitled, "Housing Facts Without Distortion."

In reference to Mr. Nathan Straus, an authority on housing whom I trust and respect more than all your writers and builders, the article concluded as follows:—"he should learn something about his subject, and then stick to the facts." In my estimation only a big-business lout and ignoramus could make such a statement. I am indeed of the strong belief that it is you who should learn about your subject before writing and making stupid and derogatory statements about a distinguished research worker and author, which Mr. Nathan Straus is, and which you are not. It is you, my darling good fellows, who have much to learn in order to advocate for better conditions in the home construction industry, which I consider the most backward and most rotten affecting our American economy.—BENJAMIN NAUBERT, Chicago, Ill.

## Endorses Reply to Straus

To the Editor: I want to tell you what a fine article you have beginning on page 100 of your February issue, in which you reply to Nathan Straus. Would you grant us permission to use it as an advertisement, or as a news item if we give credit to the American Builder? It deserves the same public readership received by the original article by Straus.—ARTHUR CLIFFORD, The A. W. Burritt Co., Bridgeport, Conn.

## Another Endorsement

To the Editor: I have read with much interest the article, "Housing Facts Without Distortion—A Reply to Nathan Straus" in the February issue of American Builder. If reprints are not available, may we have permission to reproduce this article so that we can place it in the hands of our salesmen? —RALSTON D. SCOTT, Council of Insured Savings Associations of New York State, New York, N.Y.

## Not in Central New York

To the Editor: In your February issue you gave a comparison between amount of work done and wages paid in 1940 and 1947. You did not state in what part of the United States these figures applied.

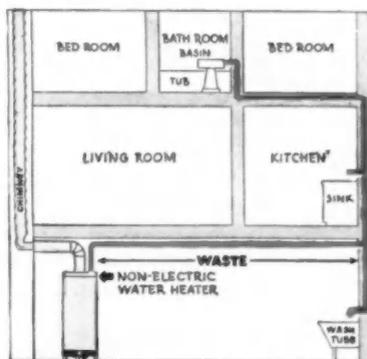
I have been in the building trades  
(Continued to page 60)

It's  
in the  
bag!



Your sales are made and your houses stay sold when they have the features customers want. The trend of home-buyers' preference today is for automatic Electric Water Heaters.

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



NON-ELECTRIC INSTALLATION

Construction costs can be reduced with Electric Water Heaters because there's no flue or vent, so installation can be made anywhere—in a closet, in the kitchen, in the bathroom, in the utility room. Hot water lines can be short, cutting piping cost. Customers like Electric Water Heaters



ELECTRIC INSTALLATION

because they are: (1) AUTOMATIC (continuous hot water, no attention); (2) CLEAN (smokeless, sootless); (3) DEPENDABLE AND TROUBLE-FREE (as electric light); (4) ECONOMICAL (fully insulated storage, short hot water lines); (5) SAFE (all-electric, dependable temperature control); (6) FLEXIBLE (can be installed anywhere, even in living quarters; no flue or vent).

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

- B & F • BRYANT • CLARK • FOWLER • FRIGIDAIRE • GENERAL ELECTRIC • HOTPOINT •
- HOTSTREAM • JUD WHITEHEAD • KELVINATOR • MERTLAND • MONARCH • NORGE •
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IT'S EASY TO  
INSTALL an

electric WATER HEATER!

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

## WARM FLOORS for BASEMENTLESS HOMES

with the **NEW INTERNATIONAL**

*Warm Air*

# OIL FURNACE

**Compact...Easily installed in  
a niche, closet or utility room  
PROVIDES WARMTH AT THE FLOOR  
—WHERE IT'S NEEDED MOST...**



**Especially designed for wood floors, cement slab or terrazzo floor basementless homes. Warm air is conducted underneath the floors and delivered at the base of walls to eliminate cold air washing down walls and windows. No condensation.**

Maintain uniform temperatures from floor to ceilings... all the advantages of radiant heating without the lag. Complete quietness of operation with International's exclusive patented "floating blower"—entirely cradled in resilient springs. Fully automatic.

SEND FOR BULLETIN and SPECIFICATIONS.

**INTERNATIONAL OIL BURNER CO., ST. LOUIS, MO.**

## LETTERS

(Continued from page 59)

for a quarter of a century in central eastern New York State, and can truthfully state that never have I known or heard of a bricklayer laying an average of 125 bricks per hour on an 8-inch wall (standard in this area for a story and a half house) including plumbing, at least two door openings, and from 7 to 14 windows, not to mention setting sills and possibly lintels in these openings.

Personally, I think you would do more to benefit the building industry by exposing to the public the various devices whereby materials necessary for construction have continued to soar higher and higher.

Why not publish the profit of manufacturers per unit in 1940 and 1947, also increased earnings of those same companies, including their excess profits? Carpenters' wages in this area increased in these years approximately 31 per cent (\$1.37½ in 1940 to \$1.80 in 1947), other trades in proportion.—S. A. HURLEY, Carpenter Builder, Troy, N.Y.

### Monolithic Concrete Houses

*To the Editor:* I have patented a system for mass producing houses by which the skeleton of the house is a monolithic, self-contained whole, though it is constructed from single elements, which are pre-cast in prestressed concrete. The skeleton also forms a thermal body which can either heat or cool all the rooms of the building. I am looking for contacts with big building firms in the United States. I need working arrangements with such builders, or opportunity to form a new company in the United States.—JOSEF ŠEDLAK, Revoluční 13, Praha I, Czechoslovakia.

### Problem in Denmark

*To the Editor:* We want to contact American firms manufacturing building materials. Our firm for many years has been working with artificial building materials, such as Dansk Eternit, which is made from cement and asbestos. We are very much interested in everything new in this line of business.—E. LISSAU, Aktieselskabet Martinit, Gasvaerksvej, 10, Copenhagen, Denmark.

### Reply from Britain

*To the Editor:* I feel I must reply to your criticism of our housing policy, regarding private enterprise. It was based on the fact that of the members of the forces who wanted houses, only one in four wanted or was able to buy, and it appears to

(Continued to page 62)



**ALL THAT YOUR CUSTOMERS  
WANT IN HEATING**

**FORCED CIRCULATING  
THRU FLOW CONTROL  
SUMMER — WINTER  
HOT WATER HEAT!**

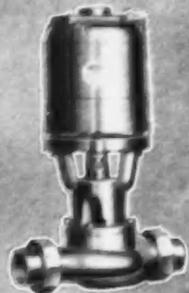
# THRUSH System has

*everything*

**EQUIP** the hot water heating plants of your customers with the finest modern automatic controls for greater efficiency, lower fuel consumption and increased heating satisfaction. This means Thrush System, with forced circulation and a plentiful, automatic supply of hot water for kitchen, laundry, and bath from the same boiler, winter or summer. Get acquainted with Thrush Equipment now if you want to build a good reputation and increase your sales. See our catalog in Sweet's or address Dept. G-4.



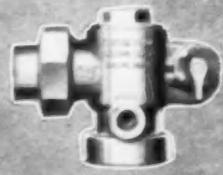
Thrush Water Heater



Thrush Water Circulator



Airtight Pressure Tank

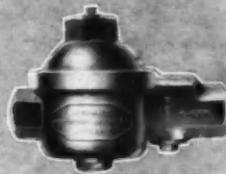


Thrush Flow Control Valve

No. 4 Water Pressure Relief Valve

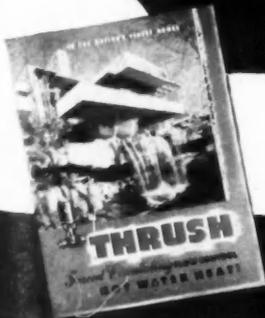


No. 200 No. 201 Radiant Heat Control



No. 12 Automatic Filling Valve

**WRITE FOR THIS  
*New* HOT WATER  
HEATING BOOKLET**



*A new sales aid that will help you sell more Thrush Systems.*

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

DO THESE

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JOBS AT LOWER  
COST... WITH AK $\neq$  $\Sigma$  BUILDERS' TRANSIT-LEVEL

1. Measure from property lines
2. Stake out buildings
3. Lay out angles
4. Plumb vertical lines
5. Level up excavations for foundations
6. Set grades for thresholds, sills, lintels, etc.
7. Set slopes for drainage or sewage
8. Set stakes for grading
9. Determine amounts of cut and fill
10. Set concrete forms to line and grade



**Y**OU can do all of these jobs faster, more accurately and at lower cost with a K&E BUILDERS' TRANSIT-LEVEL. This easy-to-use instrument cuts out old fashioned, time-taking methods and streamlines the work. For instance, chalk line, line level, plumb bob and tape 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 by following the instruction booklet, 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 or K&E Leveling Rods, write to your nearest K&E Distributor or to Keuffel & Esser Co., Hoboken, N. J.

*Easy-to-follow instructions with each instrument.*



**KEUFFEL & ESSER CO.**

EST. 1867

NEW YORK • HOBOKEN, N. J.

CHICAGO • ST. LOUIS • DETROIT • SAN FRANCISCO  
LOS ANGELES • MONTREAL

## LETTERS

(Continued from page 60)

me that only the government was interested in building for rent. All the rest were keen to get into a position where they could make money quick.

All we could get after the first war were hovels, houses with no back way out, one tap for about eight houses, and the usual offices at the end of a terrace. They were still occupied by some people when this war started. I say that two-thirds of the housing demolished in Hull during the last war was slum clearance. The houses never should have been built, and except for the deaths caused, the bombings removed something very bad.—FLORENCE K. CARTLIDGE, 1 South Cliff Rd., Withensea, East Yorks, England.

### Building in Canada

*To the Editor:* Your January edition is at hand, and I want to heartily commend you on your wonderful publication. We in Canada are very much behind the times, and I am sorry to say that in general the Canadian public is slow to accept new standards or methods. Our building costs are very high chiefly on account of low labor productivity, and the high waste in materials, largely lumber. You have to take what you can get at the mills, or else. It is very interesting to see that builders, architects and engineers realize that large savings of time and money can be had through the use of prefabricated floor, wall and roof panels, together with factory-built units such as cabinets, plumbing units, heating and electrical devices. This seems to me to have produced reductions in building costs of at least 25 per cent, and in places, 30 per cent.

We are fast approaching the time when the builder will be able to drive his truck, lorry or float up to the factory, pick up his bath and kitchen units, plus the number of suitable prefabricated panels for his house, and then have the house complete within a week or ten days, depending on the size of his staff.—E. W. BARNES, 191 Wolseley, Montreal West, Canada.

### School to Office

*To the Editor:* I started taking the *American Builder* while in school, and it sure helped me in my studies. I am now in business as a small home designer and draftsman, and your magazine is invaluable to me in my work. I'll never regret the day I subscribed, and I recommend it to anyone in the building business.—M. R. WALLACE, 3898 Jackson St., Denver 5, Colorado.

# CHRYSLER AIRTEMP

## AUTOMATIC HEATING

### HELPS GET BUYERS ON THE DOTTED LINE!

**—say leading builders like Delaire Corporation  
(WILMINGTON, DEL.)**

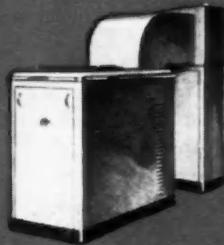


"We have constructed over 45 homes in which we have installed many Chrysler Airtemp units," writes Mr. Philip E. Kare, president of Delaire Corporation. "We have found that home buyers look into the type of heating just as carefully as they check woodwork, wallpaper, utilities, and appliances. They know and trust the name Chrysler Airtemp—and that helps sell houses!" To thousands of persons in your community, Chrysler Airtemp means the finest in automatic home heating. It helps get buyers on the dotted line! And Chrysler Airtemp dependability through the years enhances your reputation and holds buyer good will. Design this "plus" factor into your houses—specify Chrysler Airtemp on all your jobs.

#### MORE COMFORT FROM ANY TYPE OF FUEL... AUTOMATICALLY!



Winter Air Conditioner.  
Gas or Oil.



Year-Around Air Conditioner.  
Heats and Cools.



Boilers for Steam  
and Hot Water.



Automatic Oil  
Water Heaters.



Winter Air Conditioner for  
small homes. Gas or oil.

*Nation-Wide  
Dealer  
Organization*

There is a Chrysler Airtemp dealer nearby to serve you. Depend on him for prompt delivery, expert installation... and for the speedy, efficient maintenance service that holds buyers' good will.

**AIRTEMP DIVISION OF CHRYSLER CORPORATION**

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In Canada: Therm-O-Rite Products, Ltd., Toronto



# The ELJER Crystal Fountain



THE CRYSTAL  
FOUNTAIN  
B-4595  
Width—11"  
Projection from Wall—1 1/2"

Chrome-Plated Fittings  
with Non-Squirting  
Bubbler

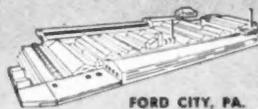
- Vitreous China
- Easy to Clean
- Easy to Keep Clean
- Automatic Stream Regulator
- Sanitary Bubbler
- Chrome-Plated Fittings
- Trouble-Free Strainer
- Moderate Price

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

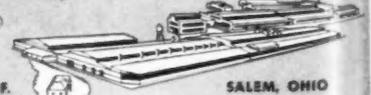
PLUMBING FIXTURES ARE OUR EXCLUSIVE BUSINESS—17 ACRES OF IT!



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# MONTHLY REVIEW

NEWS OF THE NATIONAL ASSOCIATION OF HOME BUILDERS AND AFFILIATED ASSOCIATIONS

## Seattle's First Home Show in Seven Years Is Sold Out Two Months Ahead



SERVING on the Home Show Committee for the Seattle Master Builders Association are, left to right: V. O. Stringfellow, new president; Verne Brice, representing mortgage bankers, standing. Seated are Harold J. Raber, builder; Sam Hale, representing building material firms; and E. J. Groseclose, builder

The first home show to be held in Seattle in seven years opened March 27 to run through April 4 to an expected 100,000 visitors from all parts of the Northwest. Sponsored jointly by the Seattle Master Builders Association and the Post-Intelligencer newspaper, the show sold out its exhibit space two months in advance.

Exhibits are a cross-section of everything in the modern home field—building, remodeling, decorating, furnishing and landscaping, with the latest developments in appliances, equipment and push-button living.

It is estimated that 12,000 dwelling units will have to be constructed in Seattle in the next three years to meet the existing demand for homes in that city. A study by the mayor's committee of Seattle revealed this, and also showed the need for more homes in the medium and lower price brackets.

V. O. Stringfellow, new president of the Seattle association, states that members will try to develop an economical house this year through the use of new designs, materials and labor techniques.

Working along this line, the Seattle Master Builders, in conjunction with the Small Home Plans Bureau, is sponsoring a contest with prizes totaling

\$1,000 to be awarded at the home show for the best plans for a small house.

Serving on the home show committee, in addition to President Stringfellow, were Ed Groseclose and Harold Raber, builders; Harry Gerster, electrical suppliers; Verne Brice, mortgage bankers, and Sam Hale, building material firms. The show is under the direction of McDonald Brothers.

## Hartford Builders Association Has New Executive Officers

Carl B. Liljedahl was named executive vice president of the Home Builders Association of Hartford County at Hartford, Conn., on February 19. He succeeds Shipley D. Burton.

Mr. Liljedahl comes from a family of builders. His father is a builder in West Hartford, and he is associated with his brother in another West Hartford building firm of Cliff & Bert Liljedahl. Before coming with the association, he was a sales representative for the Doall Co. and also had been employed in the mortgage department of a Hartford bank for a short period.

At present, the association is striving to increase its membership in Hartford

County, and later will attempt to take in the rest of Connecticut. New members have been coming in rapidly, Mr. Liljedahl reports, with 19 admitted at the February meeting. Total membership of the chapter is now 68.

In cooperation with the Hartford Times, the association is staging a home show which opens April 3 at the West Hartford Armory. Exhibition space is virtually all sold out. Central feature of the association activity for the show is a six-room house which is being built in the armory and which will be furnished by a Hartford department store, G. Fox Co.

The show committee includes Joseph Howard, Ivar Liljedahl, Don Shively and Carl Liljedahl.



CARL B. LILJEDAHL.

Hartford County Home Builders Association

## Mid-South Home Show Turns Down Exhibitors

The Memphis and Mid-South Home Show, which will be held from April 11 to 18, was completely sold out in January so that additional requests for exhibit space had to be declined. The show is sponsored by the Home Builders Association of Memphis.

The entire exhibition has a central and uniform theme of lighting, design and color which is expected to make it outstanding among shows of this kind. A special exhibit of "on-site" tools and machinery for builders will be held in a separate section adjacent to the main exhibit.

## Dallas Home Show Scheduled For May 8 to 16

Exhibit space for the Dallas National Home Show to be staged for nine days starting May 8 is being rapidly sold out. The show will be held in the General Exhibits Building at State Fair Park in Dallas.

## Portland President Started with \$5 Bill

Carlos Huntington, executive secretary of the Portland Home Builders Association, always gets the personal touch in items in his association publication, the "Portland Homebuilder". His biographies of the new 1948 officers in a recent issue are interesting and help make the individuals real persons to those in the industry who do not know them.

The biography of Herman S. Schmitt, new president, states, matter-of-factly:

"Herman, being an ambitious lad, struck out on his own at the age of 17 with a suitcase, bicycle and a five dollar bill. He worked in a flour mill, harvest fields, and eventually saved sufficient money for a four-year course in a business college in Spokane. After a



**HERMAN S. SCHMITT**  
President,  
Portland Home Builders Association

period of office work with the N.P. Railroad in Spokane, he came to Oregon, and at Pendleton bought some lumber, traded part for carpenter labor and started a duplex. He finished one unit, went to the harvest fields, saved some money and finished the second unit.

"The president of the First National Bank in Pendleton, noting his industry, offered a loan of \$500 and told Herman

to take a vacation, go to California and rest after his strenuous labors. He even offered to collect the rents, take care of the mortgage payments and look after things generally for him. When a banker does a thing like that, it shows that Herman truly was a hard-working ambitious and deserving individual.

"In Los Angeles, he couldn't stand loafing, built three houses, and headed back to Oregon. This was 22 years ago . . ."

Huntington reports that Mr. Schmitt was one of the first 10 members of the association.

Incidentally, the association's new secretary-treasurer, Palmer Biggess, did a little missionary work for NAHB when on his vacation in Arizona and Mexico. He had a session with several contractors in Arizona and sold them the idea of a builder's organization. Perhaps his efforts may lead to a new chapter in Arizona in the future.

## Home Builders Conference Held in San Francisco

The first Home Builders Conference sponsored by the Home Builders Council of California was held at the Palace Hotel in San Francisco, March 30. The event is expected to be staged annually.

The day was given over to panel discussions on FHA financing, labor practices, new building techniques and home design.

## Rochester Unit Receives NAHB Convention Events

The entire monthly meeting in March of the Rochester, N.Y., Home Builders Association was given over to a review of the NAHB Convention in Chicago. Officers and members who attended the Chicago meetings reported on the various panels and gave particular attention to minimum cost housing, mortgage financing, the market outlook, land planning and radiant heating, and to discussing of conclusions reached by the panel.

## NAHB Leaders Assemble in Committee Meeting



WHEN good builders get together, you can get a picture like this which was snapped at a directors' meeting in February. Left to right are George Goudreau, Cleveland; William Carruth, Dallas; Luther Boggs, Atlanta; Arthur Fossier, Chicago; Alfred Gross, Long Island; Rodney Lockwood, Detroit; Milton Brock, Los Angeles, new NAHB president; Joe Meyerhoff, Baltimore; Paul Burkhart, Los Angeles; Eddie Carr, Washington, retiring NAHB president; F. R. McAbee, Seattle; W. Hamilton Crawford, Baton Rouge; Nathan Manilow and Joe Merrion, Chicago

## Ohio State Association Names New Executive

A new, full time executive vice president, Ivor R. Jones, has been appointed by the Ohio Home Builders Association—the first full time executive the organization has had. Mr. Jones has had wide experience in sales promotion and industrial relations work.

One of the first projects the association will take under his direction is to



**IVOR R. JONES**  
Executive Vice President,  
Ohio Home Builders Association

supply advisory groups to veterans who may be planning cooperative building projects.

"We feel it is important," he states, "for veterans who may be planning such projects to have the benefit of advice from experienced builders so that they can avoid costly mistakes."

## Portland Group Hears Talk By Expert on Heating

The Portland Association of Home Builders had as the featured speaker at one of their recent regular meetings Thomas E. Taylor, of the American Society of Heating and Ventilating Engineers, who talked on "Trends in Heating."

## Ohioan Tucson

Earl I. Home I. went we Tucson.



## President

Bailey Charles formerly associati 1946.

## Earl S. Of Cal

Earl home bu ident of of Calif the Home H. Burling. One c has been of the h rows' re derscore Commer program the org took tim fore 2 tell the fornia. problem thereaft his sta with th On th represen groups ems. away r save th product Burro mitted markets join v The Pertin way is servin ng of

## Ohioan Meets Ohioan In Tucson, Goes Western

Earl Bailey, president of the Ohio Home Builders Association, promptly went western during his recent visit to Tucson, Arizona, where he and Mrs.



**EARL BAILEY**

President, Ohio Home Builders Association

Bailey were guests of Mr. and Mrs. Charles Malowney. Mr. Malowney formerly was prominent in the Ohio association until he moved to Tucson in 1946.

## Earl Smith New Head Of California Council

Earl Smith, outstanding East Bay home builder in San Francisco and president of the Associated Home Builders of California, is the new chairman of the Home Builders Council of California. He succeeds Frank Burrows of Burlingame.

One of the prime aims of the council has been to improve the public relations of the building industry, and Mr. Burrows' report on the progress in 1947 underscores achievements in that respect. Commenting on the council's legislative program, he pointed out that members of the organization's legislative committee took time from their work to appear before Senate and Assembly committees to tell the real story of housing in California. In two special meetings, the problem was discussed directly. Shortly thereafter, the governor and members of his staff held a five-hour conference with the Council committee.

On three occasions, the Council sent representatives to confer with veterans' groups to study California housing problems. These meetings helped to clear away many misunderstandings and to pave the way for real progress in the production of veterans' homes.

Burrows said the press and radio were enlisted in a concerted drive on gray markets in building materials—a campaign which still continues.

The council's public relations and advertising program which is now under way is expected to bring increased recognition of the true picture in the building field this year.

## Cortright's Column

By Frank W. Cortright

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



**Home builders** are going all out for construction of hundreds of thousands of "economy homes" throughout the United States this year. This was clearly demonstrated at the recent Chicago Convention of the National Association of Home Builders, where builders jammed round table discussion sessions on the subject. That interest is at a high pitch is proved by the volume of inquiries received daily at National Headquarters. Local associations are receiving demands for information on expensible, lower cost, minimum, economy housing.

**Starting now**, the nation will see increasing amounts of true economy housing. Production will be limited only by codes, financing construction requirements, building material and labor costs and public acceptance. Designs and sales prices of homes produced from these designs will vary with geographical and climatic conditions, but there is assurance that they will all be sound, decent, moderate priced homes ranging in sales price from \$4,500 to \$8,000.

Home builders are determined to provide shelter which will be durable, livable, sturdy, healthful and safe at a price the average man can afford. Such housing will embody complete living units. Builders agree that the economy house will not be a stripped down shell. However, many fancy "gadgets" and "luxury items" not essential to good living will be sacrificed in favor of economy and low monthly cost.

**The economy house is a new concept** in providing respectable, honest shelter for the prospective home owner who finds his ambitions to have a place of his own blocked by the housing shortage and the present high costs of material and labor. Into its construction will go all new methods and tested materials. On-site fabrication of many components will reduce costs and speed construction. The economy house will be so planned that additional rooms may be added or finished as needs of the owner increase.

One very vital consideration should not be overlooked. The economy house is a direct answer to the planned campaign of public housing advocates who think only in terms of large scale projects to soak up the taxpayers' dollars and subsidize the tenant. It is the very realistic, earnest answer of home builders to the immense and pressing problem of housing a youthful, vigorous, growing America!

**To coordinate the job**, the National Association of Home Builders has appointed a national committee on economy housing under the chairmanship of Nicholas F. Molnar, prominent Cleveland builder and member of the NAHB Executive Committee. This committee will consist of men in every city who are intensely interested in economy housing, and who are building, or planning to build this type of construction. Each of the committee members will select local committees and vigorously direct their activities.

**NAHB is convinced** that widespread construction of economy housing will not only block public housing, but will constitute an immense new field of profitable activity for the home building industry.

As an integral part of the campaign, NAHB is inviting architects and builders throughout the nation to submit plans and specifications for the economy house. As the best of these are selected, they will be reproduced and offered to members at cost.

**Much progress has already been made** in construction of this type. Pioneers include builders in Cleveland, who have produced a one-bedroom house, with space for two more bedrooms to be finished, at a sales price of \$6,700 plus cost of land; those in Akron, who have produced a two-bedroom house for \$6,550 and builders in Atlanta, who have built two bedroom homes for \$4,500. Two-bedroom homes are also being produced in Indianapolis at \$6,250; San Antonio, single bedroom with plans for extra bedroom at \$5,250; Rochester, \$6,400 and Los Angeles, \$6,500.

## Washington Chapter Plans Experiment In Low Cost Housing for Capitol

Losing no time in implementing the NAHB national convention resolution that builders must provide lower cost homes in 1948, the Home Builders Association of Metropolitan Washington has tentatively wrapped up a housing package which it hopes to sell the veterans, civic and federal officials in the national capital. Clarence Gosnell, who took over



**CLARENCE W. GOSNELL**  
President, Washington Chapter

his duties as new president of the chapter in January, announced to the press last month that the association would erect a three-room expandable house which it is expected can sell for \$6,000. More rooms could be added later.

James W. Pearson, who was newly appointed executive director of the association, is seeking a site for the



**JAMES W. PEARSON**  
Washington Executive Director

guinea-pig house which probably will be built in nearby Maryland or Virginia.

The test house was designed by Clarke Daniel, Washington architect-builder. Cost of construction will be borne by the association members if the plan is looked on with favor by government officials and veterans.

The floor plan measures 32 feet, 9 inches by 15 feet, 5 inches overall. It would have a combined living room and dining area, one bedroom, kitchen and bath. The buyer would pay monthly installments of \$45 to \$50, including interest, taxes, insurance and amortization. The association predicts the house

will meet accepted standards of safety, sanitation and comfort.

The chapter also is considering a stripped-down minimum house. This would be a two-bedroom frame unit, minus many standard items such as closet doors, gutters and downspouts. Everything possible would be omitted to get the cost down, and the buyer could add these items later as he was able.

## Chicago Secretary To Head Secretaries' Council in 1948

Martin C. Huggett, executive vice president of the Chicago Metropolitan Home Builders Association, who was elected chairman of the Secretaries' Council for 1948 at the recent NAHB convention and exposition in Chicago. The Chicago chapter was host to more



**MARTIN C. HUGGETT**  
Chairman, Secretaries Council

than 70 secretaries of chapters from all parts of the United States at a luncheon during the National convention. The luncheon was held at the new Chicagoland Home Building Center.

## Bi-Weekly Forum Meetings Are New Feature in Chicago

First in the series of bi-weekly forums on home building problems was conducted at the new Chicagoland Home Building Center by the Chicago Metropolitan Home Builders Association Wednesday noon, March 10.

James C. Downs, president of the Real Estate Research Corporation, Chicago, addressed the 50-odd members in attendance on the outlook for home finance money in the immediate future. After reviewing economic cycles for the last 25 years and giving reasons for changes in the cycle, Mr. Downs predicted a continued, lengthy period of prosperity for the home building industry. He explained that the present tendency to raise interest rates and tighten mortgage terms is due to the affinity of bankers and individuals to hold money with the hope that it will become more valuable. This type of thinking has been inspired by recent downward swings in the commodity and stock markets—a development which Mr. Downs does not feel carries any vital portent as to sizable changes in dollar value and in the current monetary situation.

Mr. Downs is of the firm opinion that present price levels will not drop appreciably, and may go slightly higher. He does not expect interest rates to go very high, primarily because of the huge government debt and the tremendous cost of maintaining that debt, even at today's interest levels.

The forum was presided over by Ed Gavin, editor of the *American Builder*, who is chairman of the Chicago Metropolitan Home Builders Association Forum committee. Because all reservations for this luncheon meeting were sold out several days before the meeting, future forums will be conducted in larger quarters so that a larger audience may be accommodated. The meeting was formally opened by Nathan Manilow, president of the association.

## Dallas Home Builders Have Special Train



THE NAHB National Convention may be over, but there still are repercussions. Publicity-minded Dallas home builders insist on preparing visual evidence that ninety of them journeyed on their own special train to Chicago. Where's Dallas? When you say that, podner—smile! This Texas association now boasts 424 members

# Now Available!

## STAINLESS STEEL

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DOWNSPOUT

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**Architects** prefer stainless steel because it is a proven functional material in the modern style. Stainless steel is beautiful . . . everlasting . . . and available right now.

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For Larger Kitchens...:

**5 KELVINATOR REFRIGERATORS  
ALL ONE WIDTH—31¼ INCHES!**

**4 KELVINATOR RANGES  
ALL ONE WIDTH—39 INCHES!**

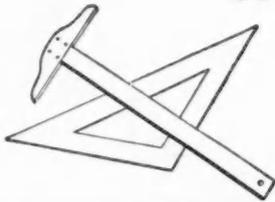
Just pick your model by budget . . . Kelvinator Refrigerators and Ranges are built to a standard size!

For big kitchens, it's Kelvinator's *new* kind of refrigerator. *Top-to-Bottom* refrigeration for the first time ever. Inside, 8½ cu. ft. within the shelf area, *plus* approximately 2 cu. ft. used by the new *refrigerated* Fruit Freshener . . . but with no increase in floor space. A fitting companion is Kelvinator's "Automatic Cook" electric range, now with all controls on the new back panel . . . easy to see and to reach. "Up-Down" unit converts from deep well cooker to 4th surface unit . . . giant double unit oven . . . new electric-fast surface units . . . pressure cooker available for deep well!



KELVINATOR  
DELUXE MODELS

... when kitchen plans call for the "New Look"



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"SPACE-SAVER" MODELS

For Smaller Kitchens...:

## "SPACE-SAVER" PACKAGE

**Big Kitchen Advantages For Small Kitchens!** "Space-Saver" refrigerator, 24" wide, is full 6 cu. ft.—holds 50% more food than the pre-war model of identical outside dimensions. Companion range is only 21" wide—new design permits installation flush against wall. Stars a full-size oven . . . three surface cookers—one 8", two 6". Kelvinator quality through and through!

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# AMERICAN BUILDER

## L D I T O R I A L

### **Public Relations**

**E**ACH new home added to the inventory of dwelling units in any community has an effect on public attitude toward the local building industry. Thus, each new home stands as undeniable evidence of what private enterprise building can do and is doing, and thus becomes a public relations job. The sum and quality of all new homes being built in a community, together with the reasons for both, should constitute all of the factors that determine public attitude toward home builders. Unfortunately, that is not the case. If it were, the performance of the home building industry in the past several years would be a matter of public pride, rather than a matter of public doubt, if not public suspicion.

That these are not all of the factors, and in many cases, are only minor influences in determining public attitude, is the fault of the home building industry itself, and not the fault of the public. The reason is that most home builders, and the home building industry as an entity, have failed to recognize the power they have for influencing public opinion through full demonstration and intelligent merchandising of their homes.

It is true that a scattered few hundred demonstration homes are held open for public inspection by individual builders each year, and it cannot be denied that several dozen home shows have an influence on public thinking. But, the biggest influence on public attitude toward private building comes from organized minorities who use every means of publicity they can find to convince home buyers that new homes are overpriced, shoddily built, unimaginatively designed, and deficient in volume due to alleged horse-and-buggy production methods. They use a rifle, while the industry uses a shotgun.

Thus, although the opponents of private home building deal entirely in theory, and sometimes in deliberate misrepresentation of facts and statistics, they are alert, aggressive and organized, and they keep alive a clamor for public housing and government control of private building. On the other hand, the home building industry, presently delivering more and better homes than ever before, and at prices below the general commodity price index, fails to use its facts concertedly, and fails to use effectively the physical evidences of its achievements for a dramatic and convincing refutation of the charges leveled against it.

The critical year is 1948. It is the year that should ease the housing shortages that still exist. It is the year that should call for heightened competitive selling of new homes. It is the year in which the exponents of public housing are marshaling every resource for an all-out attack of private building in 1949. It is the year in which a united home building industry, with all of its elements, including labor, must build a counter-offensive for the attack that surely will come in 1949. It is the year that demands a dramatic, compelling program of public education in the facts of private home building.

# APRIL AMERICAN BUILDER

## 5 Star Issue

### ★HOW TO PLAN BUILD and SELL

- ★Individual Houses
- ★Housing Developments
- ★Garden Apartments
- ★Home Communities
- ★Commercial Building

**T**HE average successful home builder has a working knowledge of land planning, home financing, home design, labor relations, building materials, home equipment, correct application and installation of materials and equipment, selling techniques, local and national economies.

In the following pages the editors present a series of actual operations in the field as illustrations and examples of how many of the factors mentioned above are coordinated by builders to achieve success in the light construction industry. Five phases of home building operation are discussed including planning, building and selling individual houses, housing developments, garden-type apartments, home communities and light commercial construction.

Material in the following pages highlights the fact that today's home builder is no longer a mechanic. He is a man of many talents and, even if he is successful in surrounding himself with associates who have expert knowledge of the various phases of home building operation, he still must know the basic principles of all factors involved.

This issue is designed to not only give builders an insight into all the basic knowledge and experience they must use daily, but also to supply new ideas and suggestions on successful operation. In addition to the editorial material, many supplemental ideas on materials, equipment and construction will be found in the advertising pages of this and all issues.

## A House

THE traditionally modern house shown below, embodies many of the latest innovations in home comfort and design. While all elements required for good living are contained in first floor and basement, second floor area is made available for expansion when the need arises. The small picture shows the private garden, enclosed by low wall and rail adjoining living room. This insures privacy for the occupants





# e Well Planned is Half Sold

**The criteria by which builders and architects are guided in their planning of future developments is public acceptance of the product offered**

**P**UBLIC acceptance determines the course to be followed by architects and builders in designing, constructing and selling houses.

Bearing in mind the fact that the architect's client is the builder, (this applies to the operative builder) then it is assumed that the builder's client is the salesman, and the salesman's client is the purchaser. When these three groups work together with a common objective in mind, which is to produce a good, sound, well-planned, and economical house, the ultimate sale is greatly simplified.

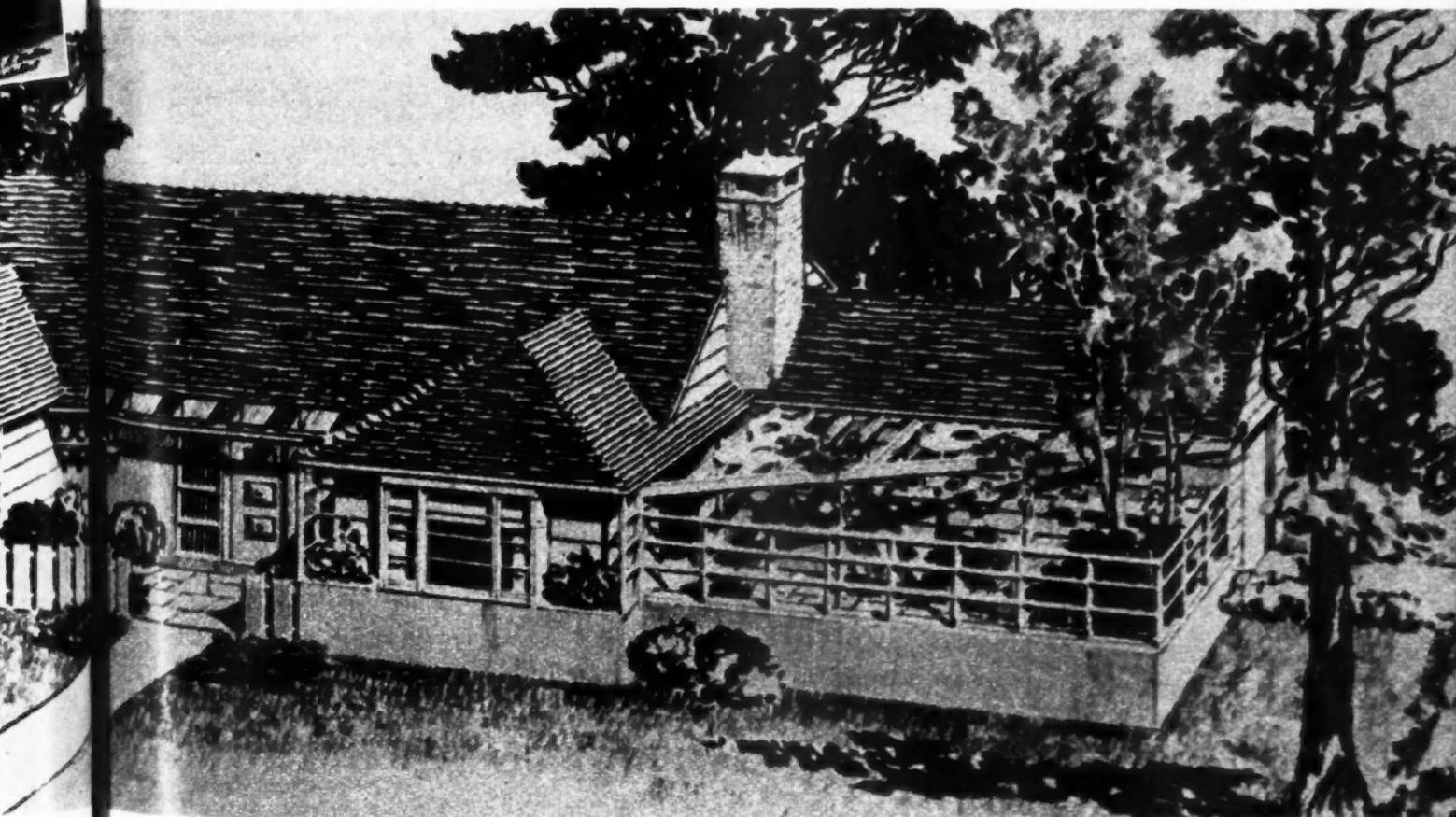
The architect needs to understand the builder's and salesman's problem. When a large number of new ideas and innovations are incorporated in a house, as a rule, it will require additional effort on the part of the builder or salesman to put across the sale. The buying public has a tendency to shy away from the unusual. They are guided to a great extent by the results their friends have had in buying a home. Builders know that the first house that a home seeker purchases is usually the biggest investment that he

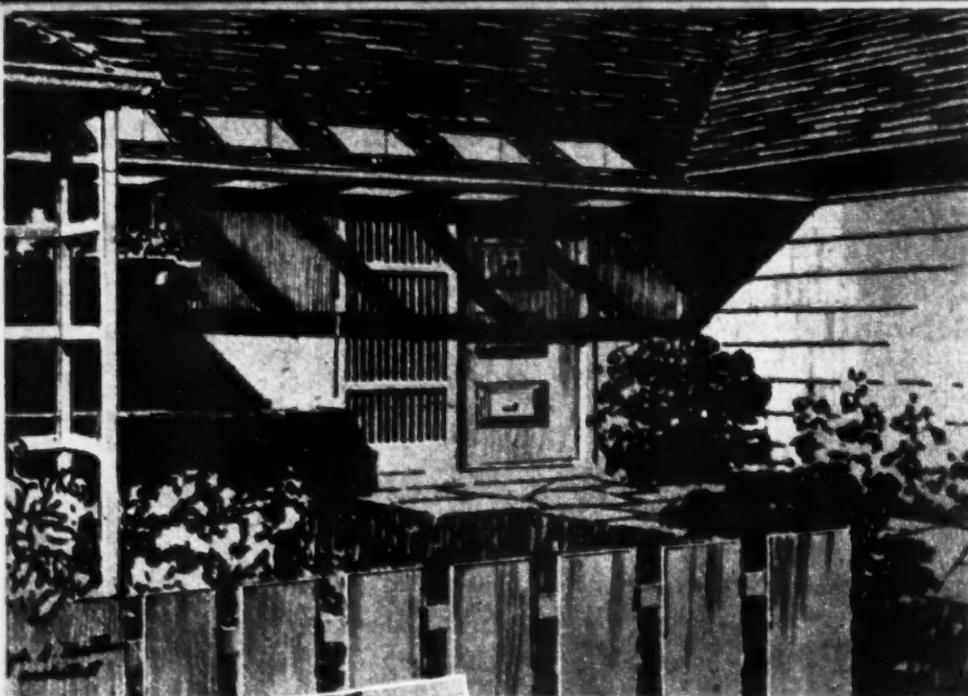
will ever make and consequently he is averse to pioneer a trend away from the accustomed procedure.

Rudolph A. Matern, architect, and his associate Herman H. York, of Jamaica, L. I., New York, have designed the houses on these and the following four pages. Mr. Matern has carried on an active practice in architecture for many years, specializing in homes, both for individual clients and operative builders in the Long Island area. Mr. Matern is well qualified to understand and interpret the builder's problems. He is a firm believer in the adage, that "a house well planned is half sold."

The house shown here, follows a pattern of design that has been successfully employed by these two architects. It contains 1,160 square feet, exclusive of garage and enclosed garden. The large attic space can be converted into two large bedrooms and bath, as indicated on the plan, when the need for expansion arises.

Following along traditional lines, yet modern in its concept, this house embodies many of the latest innovations





THE GROUP of rendered details, at left, apply in general to house on preceding page. The time-honored British custom of each home, large or small, boasting an entrance yard for planting and a featured entrance, has been faithfully reproduced

AN UNUSUAL treatment of the roof area is afforded in the rendering of the breakfast porch. The designer recognized here the function of the rafters and bluntly exposed them beyond the line of the gable end

THE PRIVATE garden is incorporated as an integral part of the house. The pattern of the railing above the wall adds to the effectiveness of the overall design

A CLEAR, unobstructed view is obtained through the large windows over the working area at the kitchen sink and counter



in home comfort and design. These would tend to appeal to the discriminating buyer who is seeking the unusual in a home, yet he is reluctant to go overboard on the flat roof type of house that has the so-called "new look."

The National Home Show, to be held at the Grand Central Palace, New York City, April 17 to 24, has selected this design to be built and furnished as a model home dedicated to good living. The Home Builders

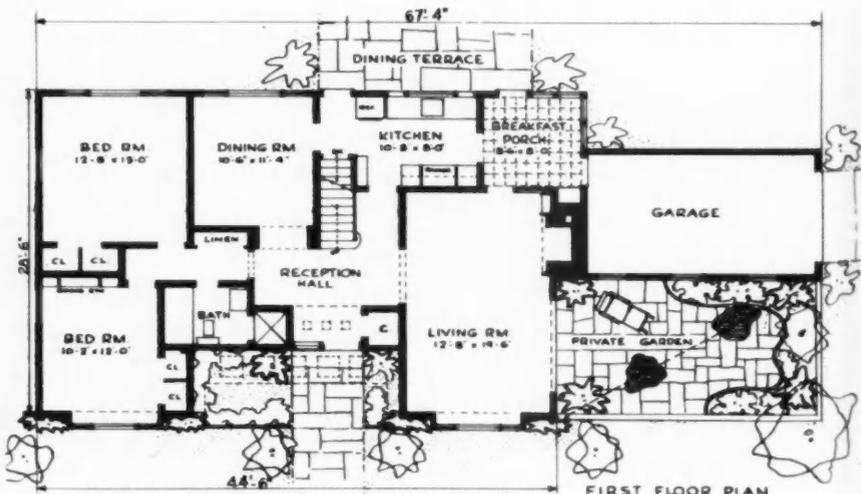
Council of New York, New Jersey and Connecticut, is sponsoring the show.

Mr. Matern, who is architectural advisor for the council, estimates that this house could be built in the New York area for \$12,000 to \$14,000, exclusive of land. The building conditions prevailing in each respective area where the house could be built would have a bearing on the final cost.

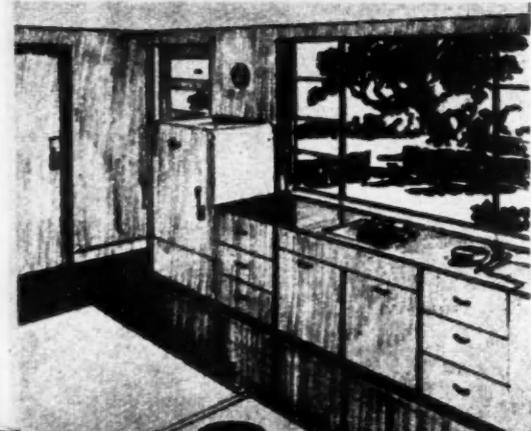
The architects have produced on this page a house that follows in gen-



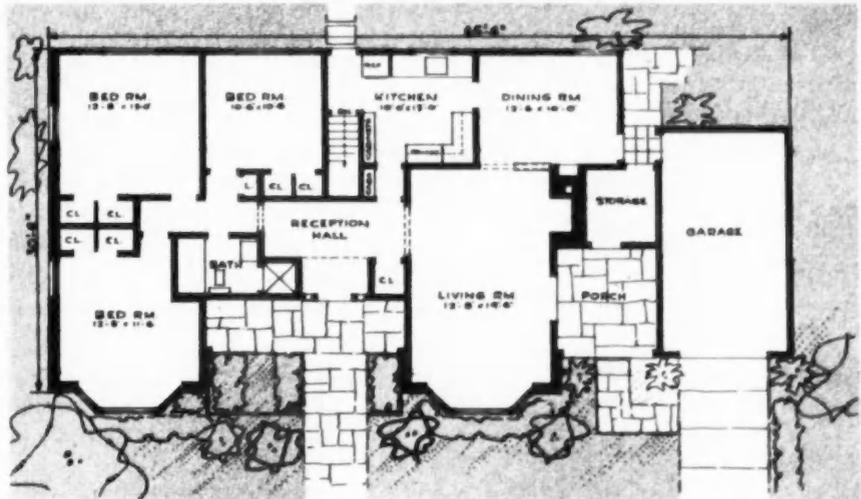
FUTURE SECOND FLOOR



FIRST FLOOR PLAN



**This house is a counterpart of the one shown on the preceding page—yet it differs in total square foot area, room arrangement and exterior treatment**



**THE HOUSE** shown on this page is patterned along the lines of the traditional Cape Cod style. The excellent room arrangement, with its ease of circulation to and from the respective zones, reflect the simplicity and charm of the exterior

eral the type and arrangement of the one shown on the preceding page.

The basic change is in the simplification of both the plan and the exterior treatment. The first house has been designed to appeal to a limited group of potential buyers, who would be seeking the ultimate in conveniences. The house on this page is designed to appeal to a larger market where economy is stressed without sacrifice of design or planning.

This house contains 1,275 square feet exclusive of porch and garage. The plan is arranged for six rooms, including two large bedrooms and a smaller one. A convenient storage room adjoining the garage can be used for garden tools or other equipment. This room is accessible to both

the front and rear yards. The entranceway garden is a feature of Mr. Matern's houses and is provided whenever the space is available. Ample closet space is assured, two being provided in each bedroom.

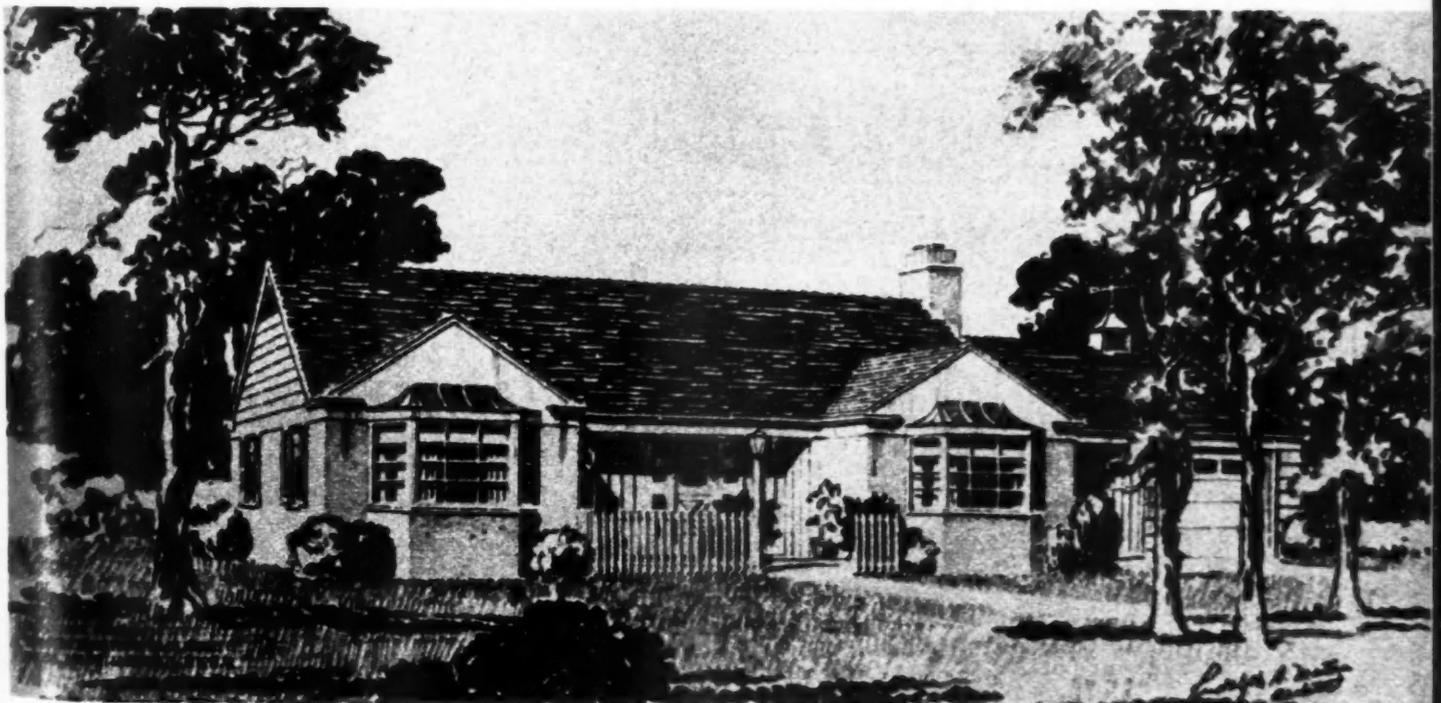
Exterior walls are a combination of brick veneer and frame, covered with vertical boards and battens, and wide siding on side walls and plywood in front gable ends. Copper decks cover the bays with wood shingles for the main roof. The simplicity of the Cape Cod cottage is manifested throughout.

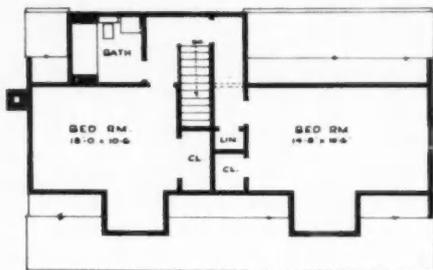
In this house as well as in others, the architect has divided the glass surfaces of windows with wood muntins. He has observed in his many building operations that where large

plate glass picture windows have been installed, that the salesman encounter a great deal of sales resistance. This is due to the fact that the potential purchasers do not like, what they call, "store windows."

Mr. Matern has also discovered that a house with the first floor placed close to the ground will not sell nearly as quickly as the house where the floor is raised. The purchaser thinks he is getting more for his money because of the appearance of additional bulk in the house. The architect finds that concession to art sometimes needs to be made for the sake of sales.

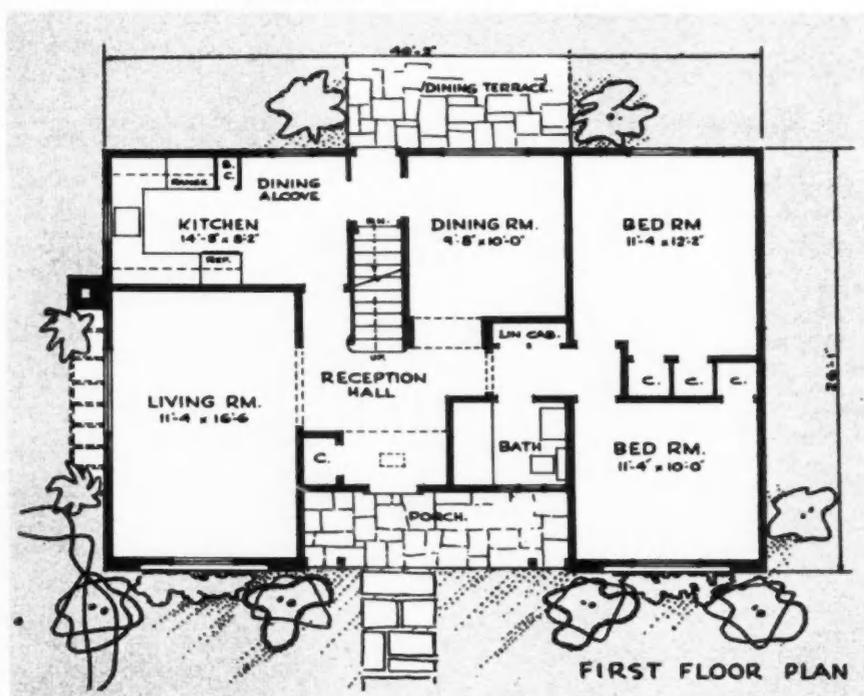
The two extremes of this group of houses designed by these two New York architects are shown on these pages.





FUTURE SECOND FLOOR

Two houses that follow the same basic plan arrangement are styled to meet divergent groups. Center entrance remains a fixed feature

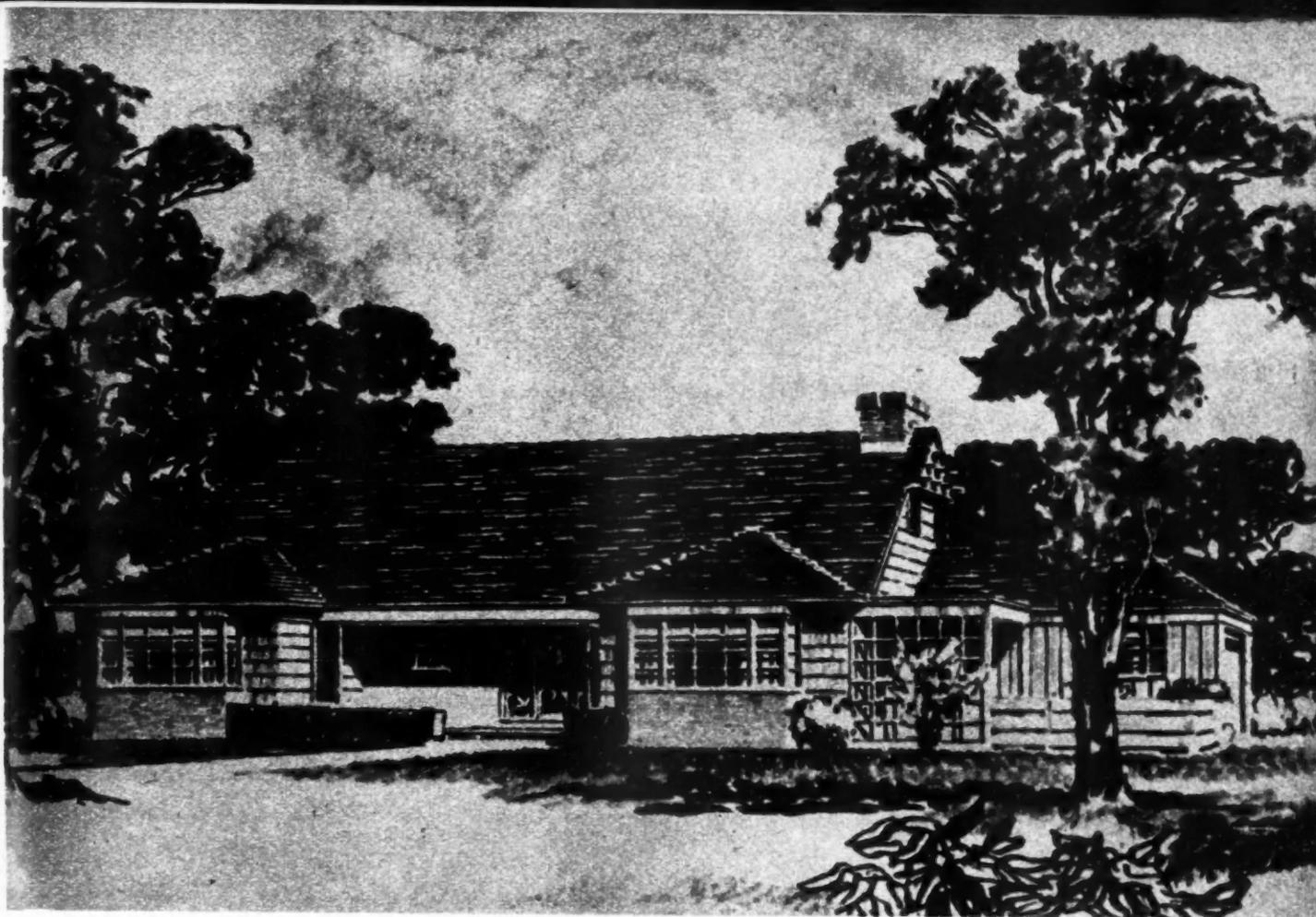


FIRST FLOOR PLAN

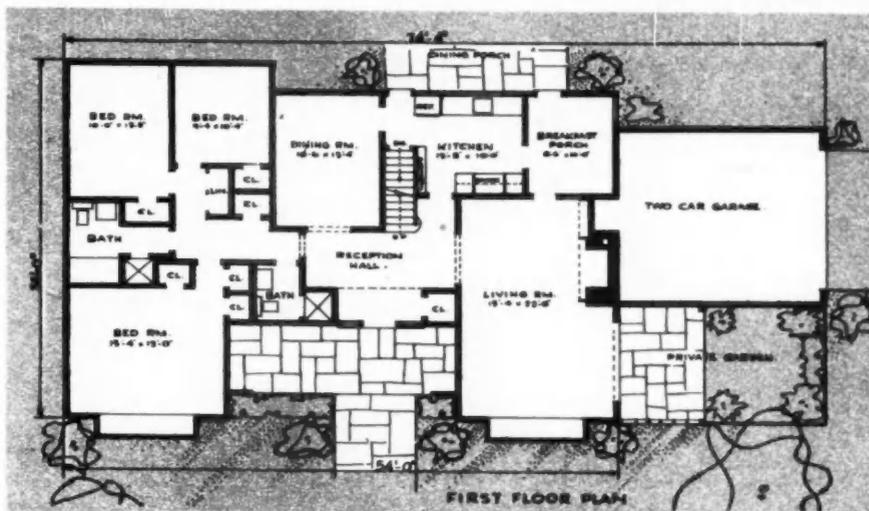
The smaller house contains a total of 950 square feet, exclusive of the porch, while the larger one has 1,500 square feet exclusive of garage and porches. In spite of the difference in size, both of these houses as well as the others, revolve around a center entrance and reception hall. In the case of the smaller house, the living room and kitchen have been reversed. Garage has been omitted.

The roof pitch on both houses has been increased, permitting expansion of additional rooms and bath in the future. A combination of field stone, brick and wood shakes on side walls and wood shingles on the roof are employed on both. A modern concept of the larger house is shown below.

ON this page is shown the smallest of this group of houses. The porch feature has been retained, with the roof extending over it in an unbroken line. Dormers are cut into front and rear roof surfaces to provide for future second floor expansion



THE largest of this group of houses is shown on this page. Three complete bedrooms with two baths, breakfast porch, and two-car garage, in addition to the other rooms comprise the layout. A portion of the private garden is roofed. An alternate sketch of the exterior is shown below. A modern touch is added in the unusual window, roof and wall treatment



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THIS \$40,000 home is conservative, fits its exclusive suburb. Designed by Ian M. Horne, New Jersey architect

## Special Techniques Required for Upper

**Exclusive suburban residences in the \$40,000 to \$60,000 price range are more carefully scrutinized by prospective buyers—a factor important to builders appealing to this particular market**



FLOOR plan for Horne design. Note number of baths

**W**HEN a builder puts up houses to sell between \$40,000 and \$60,000 on speculation, even during a period of high demand, he usually includes a number of added features to attract the discriminating purchaser. Springbrook, a subdivision in Short Hills, N.J., exclusive community for New York executives, is the type of project that caters to this class of prospective buyers. The development and building firm of Bremer & Kemp has worked out some novel ideas to make their high-priced homes more saleable.

Lloyd P. Bremer handles the construction for the firm and John A. Kemp, the real estate end of the business. Springbrook is a 45-acre tract of rugged terrain, subdivided into 78 lots of 1/3 acre minimum. Zoning laws require this much land. The builders install street improvements, sewers and utilities which require a considerable investment.

To insure individuality of homes, the firm works with designs from several New Jersey architects and employs its own interior decorator to work out the basic schemes for interiors. The house on this page, a traditional colonial priced at \$40,000 was designed by Ian M. Horne, East Orange, N.J., architect. The large home on the opposite page, which sold at \$60,000, is a design by Architect Emil Schmidlin, also of East Orange.

Bremer completely landscapes his homesites. Lawns

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THIS elaborate home brought the builders a price of \$60,000. Designed as a luxury home by Emil Schmidlin, architect

## Bracket Building

**Basic interior decoration, painted walls, colored kitchens are among practices used by builders to broaden appeal. High cost finish materials also attract buyers**

are seeded, plantings put in, permanent driveways laid. Special attention is paid to the interiors. In both the houses shown, painted walls for some rooms are designed and executed by Joan Rivers of the decorating firm of Rivers & Dexter, East Orange. Special uses of wall paper are found in bedrooms and baths. Light sliding doors separate dressing nooks and baths from bedrooms, making the room area more flexible.

No Bremer house has a white kitchen. Each is designed in soft colors. Counters are topped with formica. One kitchen, with the sink on an inside wall, uses a panel of glass blocks above it which permits light to enter from the garage and eliminates the blank-wall effect usually found in kitchens.

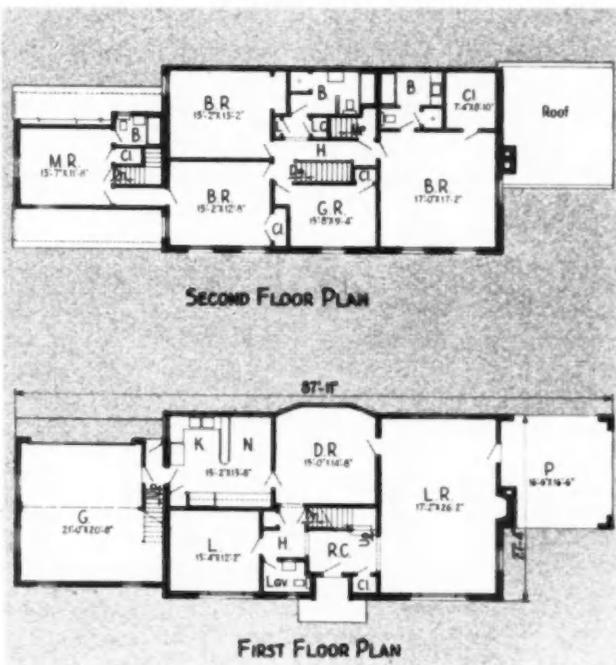
Glass, chrome and tile are used lavishly in baths and showers. Each such unit has its individual color scheme and design.

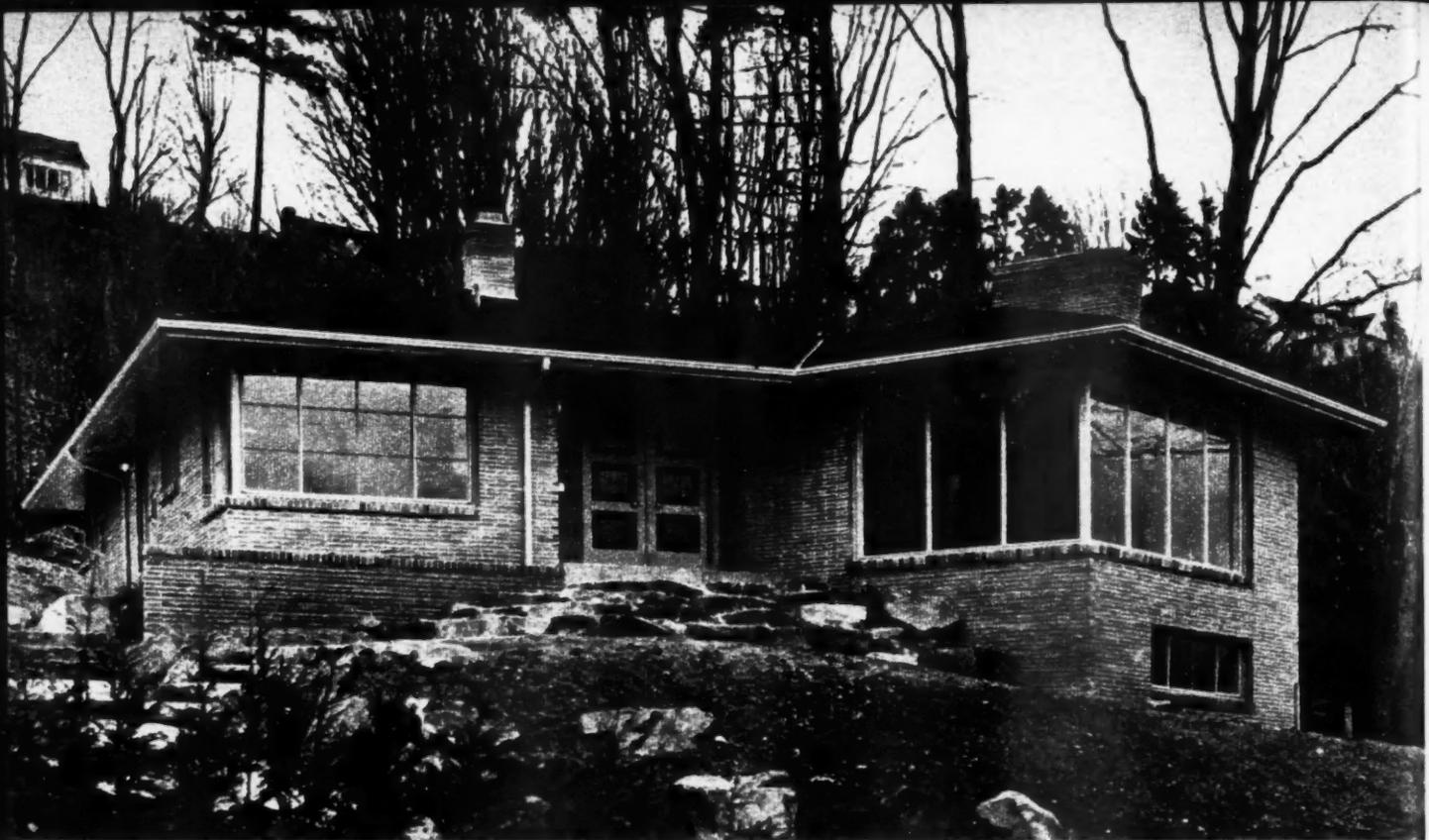
Large ventilating fans are installed in the attics to draw out hot air in summer. To avoid unsightly ceiling ventilators in the upper halls, Bremer installs a louvred door in the attic access which can be battened in winter and opened in summer. The fan draws the air through this door more effectively than it would through ceiling openings.

The home on this page has a library paneled in walnut veneer, painted living room walls and painted bathroom walls; 1 3/4-inch flush gum interior doors; cove lighting in the dining room, Thermopane windows in the rear openings.

Springbrook homes are heated with forced warm air by gas-fired furnaces. Four inches of mineral wool insulation is used in sidewalls and roofs. Kitchen floors are covered with linoleum, and all cabinets are custom made. Laundries are located on the ground floor. Telephone conduit is installed throughout the houses. These extra touches are factors that appeal to this class of buyers and help hold sales and advertising costs down.

SCHMIDLIN-designed floor plan shows thought in providing circulation and accessibility to various parts of home





THE LOCATION and slope of the lot on which this house is built called for special planning to take advantage of view afforded

## Oriented for a View

**F.** H. HILLIKER & SON, Seattle builders, and their architects, Lawrence and Hazen, also of Seattle, have produced a house of unusual design and layout to take the fullest possible advantage of a view afforded from a hillside lot overlooking Lake Washington and the Olympic mountain range in the distance.

The house is located about 25 feet above the street, which is an artificial ledge on the slope down to the lake shore. Perched high on the lot, at about the level of the roof tops below, the house affords a relatively unobstructed view of the lake.

Built for sale, the price of the house is \$31,500. The Hillikers build eight to ten houses a year, most of them priced from \$18,000 to \$20,000, with one sold recently for \$39,500. The builders handle their own advertising and selling.

A winding cement walk to reduce the grade leads from the street to a point in front of and at the side of the house. The remainder of the way to the covered front porch is a series of quarried rock steps and landings. The final steps are part of a rock terrace.

The exterior of the house is Roman brick, and the double front door, in Chinese modern, is painted green with maroon trimming. All of the

paint used on this and other jobs built by this father and son team is mixed by Bud, the younger Hilliker. The roof overhang extends 28 inches from the walls, and the soffits are painted dark green. The roof pitch is 1-3, and the roof is covered with 18-inch shingles, laid 4 inches to the weather.

The entry way, just inside the front door is unique. At the left is a spacious guest closet equipped with a Modernfold door in a coral tone. The entry way itself is formed with a counter and a glass panel. The counter is 32 inches high, 5 feet wide and 2 feet deep. The front and end of the counter are upholstered with the same material used in the Modernfold door. The dining room side of the counter is equipped with drawers and cabinets for the storage of silver and linen. The silver drawer is lined with felt. From the top of the counter to the ceiling, and extending almost the entire length of the counter top, is a panel of translucent, corrugated glass.

The floor of the entry way and living room is oak parquet, face-nailed, with the nails counter-sunk, and the holes plugged. The base shoe is oak. Ceiling height is 7 feet, 8 inches. Three round fixtures set in the ceiling supply the light in the entry way. There are six fixtures in the living

room, and one in the dining room section. Each group is operated with its own switch.

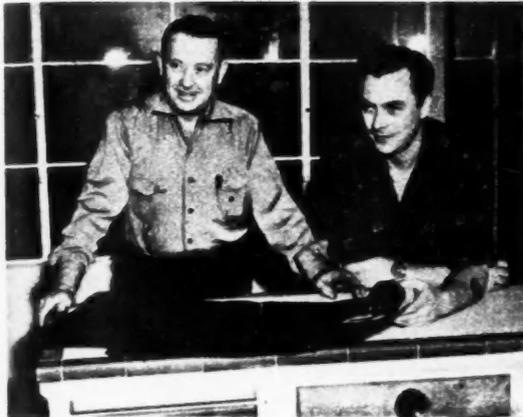
Large plate glass windows, extending almost from floor to ceiling, are fixed. Ventilation is supplied by casement sash at the side. Between the studs adjacent to the sides of every window, is a 2x10 strip, furnishing a firm nailing base for drape fixtures.

The fireplace is built of sandstone, the hearth is slate flagstone, and the mantel is Chinese modern. Wherever possible, the corners were rounded for effect and to eliminate the use of wood trim, still a scarce item. Plaster reveals are used throughout for the same reason. The hall, near the center of the house, provides entrance to two bedrooms, the bath and the basement, and contains drawers and shelves for storage.

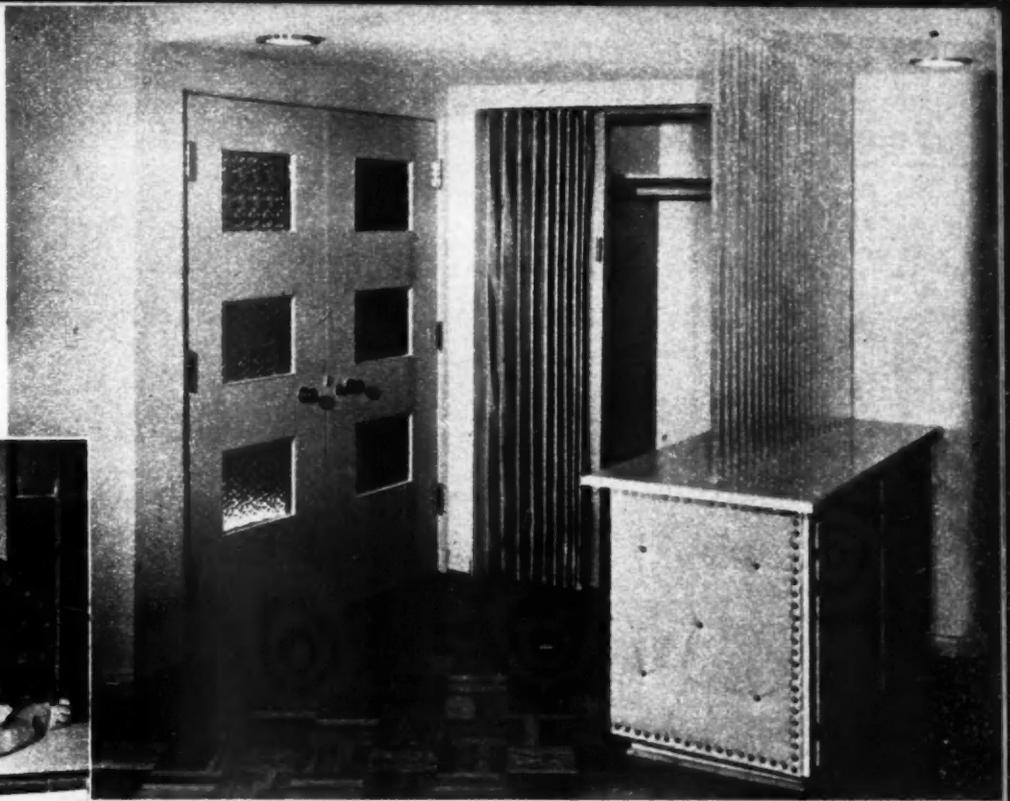
In both bedrooms, the windows are 4 feet above the floor to permit any desired arrangement of beds and furniture. Electrical outlets are provided on all bedroom walls, windows are arranged for cross-ventilation, and the master bedroom closet has a Modernfold door.

The bath tub recess is lined with baked enamel metal tile, and the shower rod is inside and above the soffit of the recess, so that the shower curtain hooks are not visible. The window is extra wide, and without

**BUILDING** quality houses to sell makes work a pleasure for veteran Seattle builder and son who works with him as full-time partner



THE HILLIKERS, Lester, senior, at left; Bud at right



INTERIOR of front entrance. Note lighting fixtures recessed in ceiling. Modernfold door to guest closet, corrugated glass partition, and convenient, attractive hall storage closet

trim. Artificial light is from a recessed ceiling fixture, and brackets on the medicine cabinet. The bathroom also contains a large storage cabinet for towels, soap and cleaners. Plumbing fixtures are the latest word in modern design.

Hardware throughout the house is of modern design, and especially dressy. Chromium door knobs, two inches in diameter, are particularly noticeable.

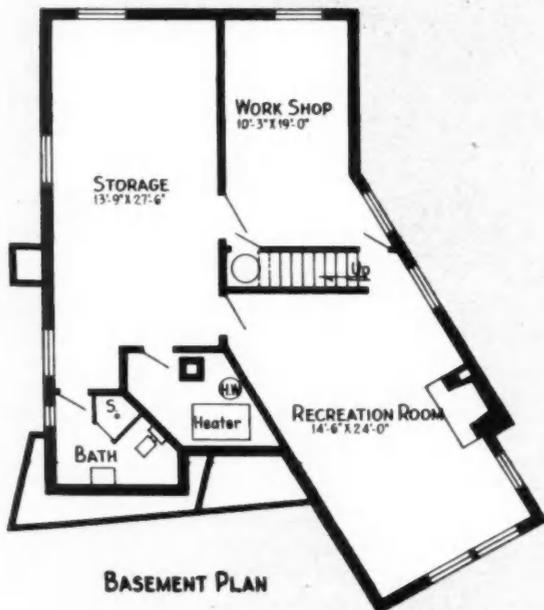
The kitchen is exceptionally well laid out and engineered. Counters

divide it into a breakfast nook, a cooking area, and a laundry. Here, again, recessed ceiling fixtures are used for lighting, with two in the breakfast nook, one over the sink, two for the cooking area, and one in the laundry. The floor is inlaid linoleum.

The partition separating the cooking area from the laundry is 4 feet high, and sides, top and edges are faced with ceramic tile. The tile is carried around the range, which fits against the partition. A Westing-

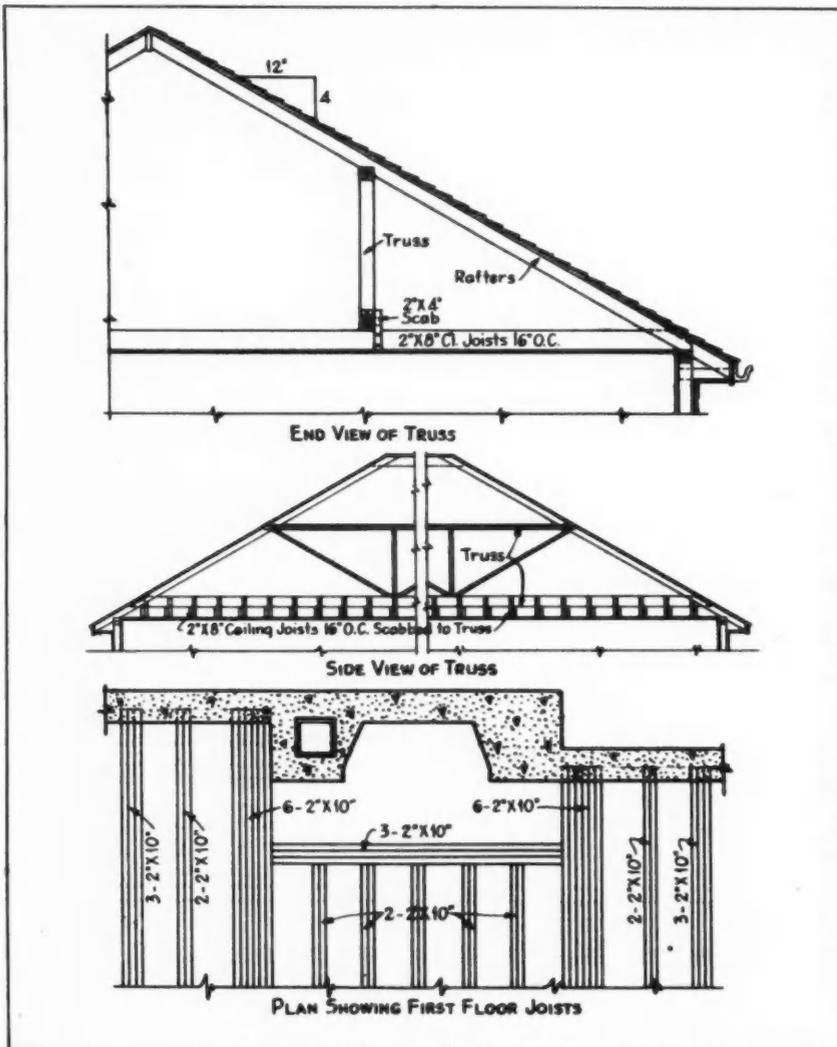
house Laundromat is flanked by two wood cabinets built in the same shape as the Laundromat. The doors of these cabinets, as well as those on the wall above, are birch. The floor cabinets are for soiled clothes, soaps, and other laundry and cleaning accessories.

The cooking area is separated from the breakfast nook by another counter, 36 inches high, 24 inches wide, and extending about 5 feet from the wall. The top is ceramic tile in ivory, trimmed in brown. Doors of the





VIEW from living room is over trees and neighboring roof tops to Lake Washington and the distant Olympic mountain range



DRAWINGS above show roof framing and floor joist details. Note double and triple joists for carrying heavy dead loads, and added roof bracing to guard against sagging and plaster cracks in ceiling. Both are typical of Hilliker quality building

wall cabinets are birch veneer, darkened to a gold-brown cast. Natural beauty of the wood is preserved by eliminating joints through the use of a single panel for each door. Knobs are chromium.

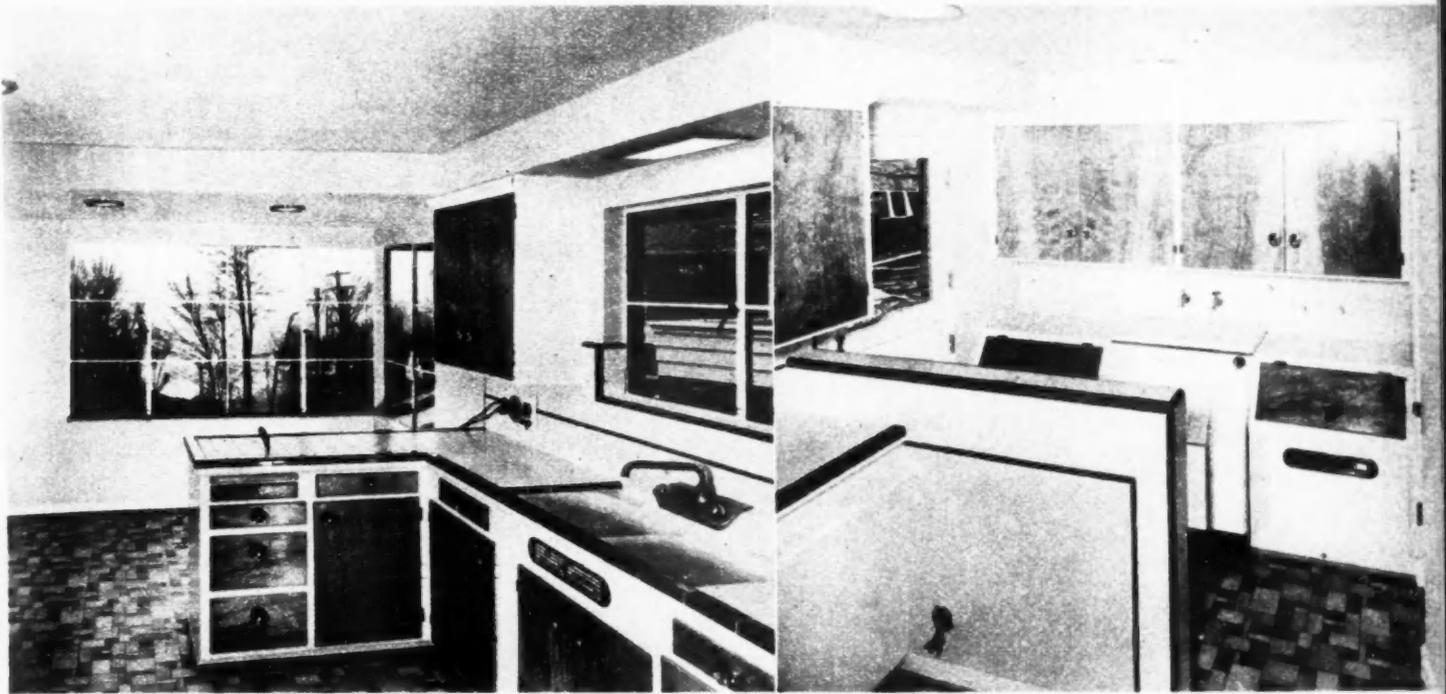
Cabinets under the sink are set back a few inches to provide knee space, and bases are further recessed for toe space. The arrangement of the refrigerator, sink and range reduces walking to a minimum. There is a built-in radio at the left of the sink. At the right an exhaust fan turns on by opening the metal door.

The breakfast nook, on the front of the house, overlooking Lake Washington, is 6x10. The ceiling over the breakfast nook is furred down 10 inches below the ceiling over the cooking area. One wall is fitted with an oddly-shaped knick-knack shelf. Color scheme for the breakfast-cooking-laundry unit is peach walls and raspberry ceilings.

The basement, extending under the entire house, is divided into three fully plastered rooms with Kentile floors. The recreation room has steel casement windows across one entire side, and a fireplace of Roman brick extends to the ceiling. The raised hearth is slate flagstone, and light bowls are trimmed with miniature airplanes.

The maid's room is extra large, about 15x20. There is a large closet, and a private bath with a shower stall.

The elder Hilliker has been building houses in Seattle for 40 years. He was joined by his son a few years

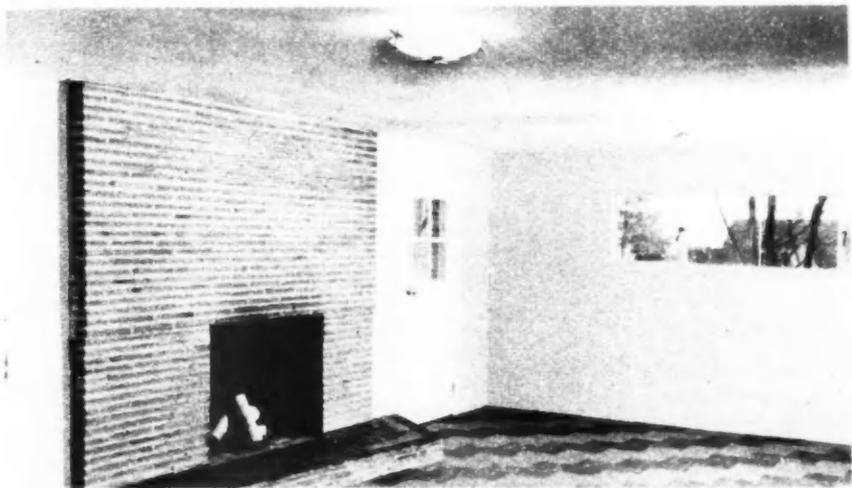


LEFT: View of lake from kitchen and breakfast nook. Right: Laundromat and flanking cabinets beyond tile-covered partition

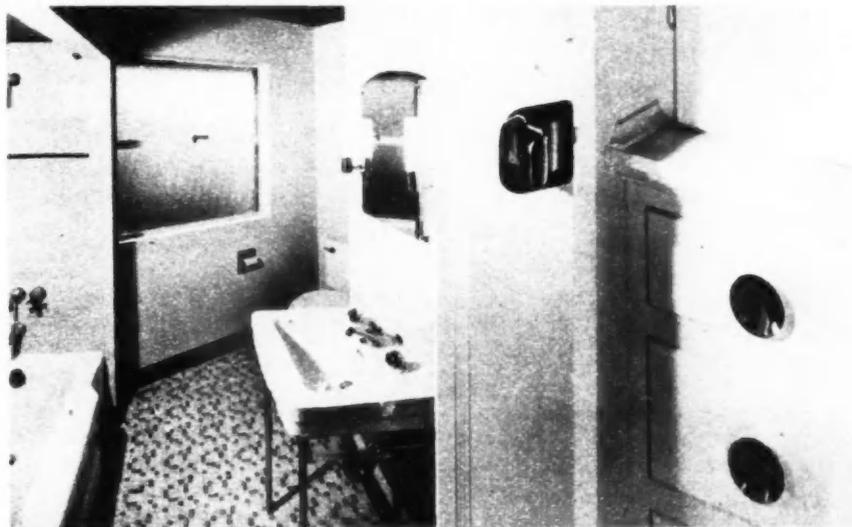
ago. Both are exponents of quality building, and the incorporation of advanced ideas in design and construction. The detail drawings on the preceding page illustrate typical examples of quality construction methods. One of these shows the bracing above the living room ceiling, designed to eliminate all possibility of sagging and consequent plaster cracking.

Another drawing shows floor joist details. It will be noted that every second joist is either double or triple. On each side of the fireplace, six joists are nailed together to carry the added load. These are precautions against sagging and squeaking floors. Floor construction consists of laying shiplap over the joists, then heavy paper, then 5/8 T&G fir, with oak parquet in 8-inch squares on top.

The Hillikers usually have two houses under construction at all times. In that way there are certain economies to be gained, and at the same time, there is not so much work that either or both members of the team cannot personally supervise all work. The Hillikers do all of their own carpentry work, and make all of their own cabinets, but sub-let all other trades. Present plans call for the construction of two or three more expensive houses, and then the Hillikers will enter the low-cost housing field for a while. They intend to build houses to sell for about \$5,000. The concentration by the Hillikers on low-cost houses is not being made at the sacrifice of activity in the production of higher cost homes.



RECREATION room has steel casement windows, wall-length Roman brick fireplace

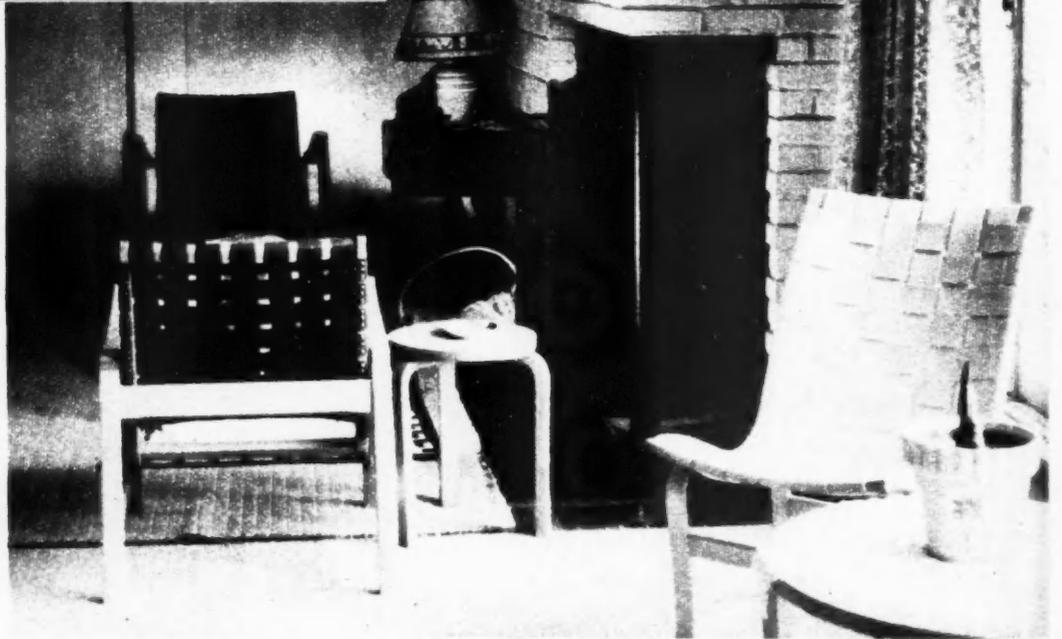


LEFT: Bath room with extra wide window and modern streamline plumbing fixtures. Note concealed shower rod. Right: Corner and cabinet details. Note chromium knobs

# PLANNING FOR A SITE



ABOVE and right are two views of the living room. Large window on opposite wall to fireplace produces an interesting pattern with its deep, sturdy muntins. These are used effectively for display purposes. Fireplace is of painted common brick. Entire end wall of living room is faced with plywood. Balance plaster



**W**HEN an architect builds for himself, almost always he selects a rugged and unusual site on which to build his house, that is, if such a site is possible to find.

Ray Corwin, architect of St. Paul, Minn., was no exception. He found a well-wooded, sloping site in the lake area around Mahtomedi, a suburb of St. Paul. This site contained 11 acres, with the high point of the property about 30 feet above the lake level.

Corwin was prompted to place the house on the highest knoll on the property, yet not too far away from the main road, in order to

capture the splendid view across the lake. In orienting the house to the site, he emphasized the view.

A private road leads directly up to the approach side of the house, which is about ten feet lower than the terrace or lake side. Consequently, this normal one-story house, presents a full two-story effect from the entrance side.

The difference in site levels permitted the architect unusual opportunities in planning the house. The natural contours dictated the location of the main entrance, which was placed at the approach side. A flight of easy stairs lead

directly up to the large living room.

The extra large living room acts as a focal point for circulation with the service unit on one end and the sleeping quarters on the opposite side. With the fireplace placed at one end of the room, the large battery of windows that occupy the balance of wall space, have complete control of the view.

Added space is obtained in the dining room through the novel table construction of special design. The two vertical legs of the table are bolted to the floor slab. Thus, chairs can be closely arranged.

Built-in units prevail in almost

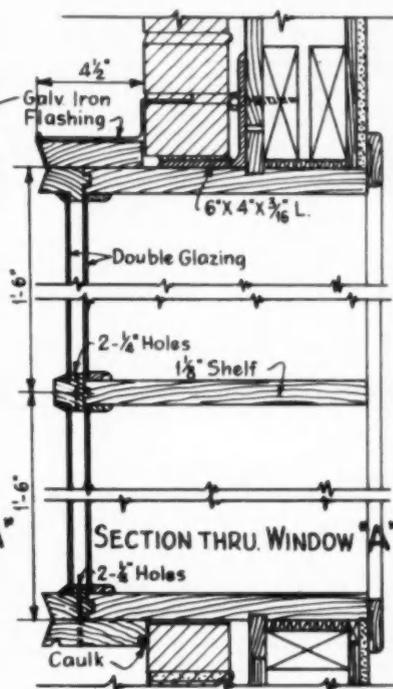
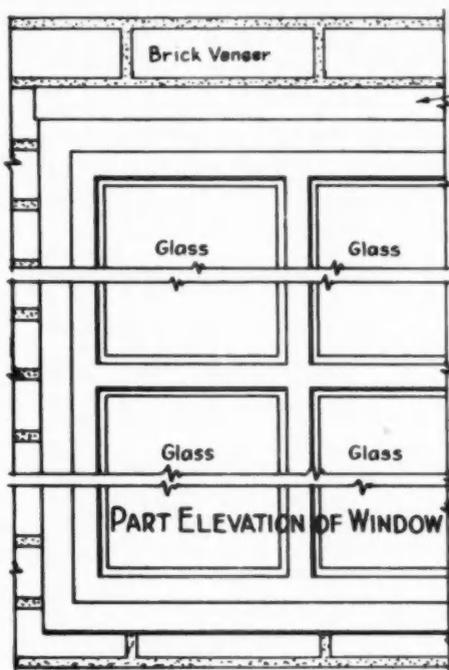
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**Placed on ridge overlooking small lake, this house has been oriented to the approach, taking complete advantage of respective levels in its planning**

every room. Particularly interesting is the bookcase placed up high on the bed wall of the master bedroom. Wardrobe closets are provided in each bedroom. The low rail adjoining the stairs in the living room has been increased in depth to allow for storage and display areas.

This house was designed by the owner and completed late in 1940 by F. L. Hahn, St. Paul builder, for \$11,000, exclusive of land. It represents an advance in design beyond the thinking of its day. Fear of going contrariwise to the general trend of home design at that time prevented Mr. Corwin from giving concrete expression to many other ideas that he would have liked to employ.



**DETAILS** of display window shown on opposite page. Below: View of house from the approach side. This is about ten feet below level of knoll or first floor, permitting an unusual plan arrangement. Main entrance to house is at lower level

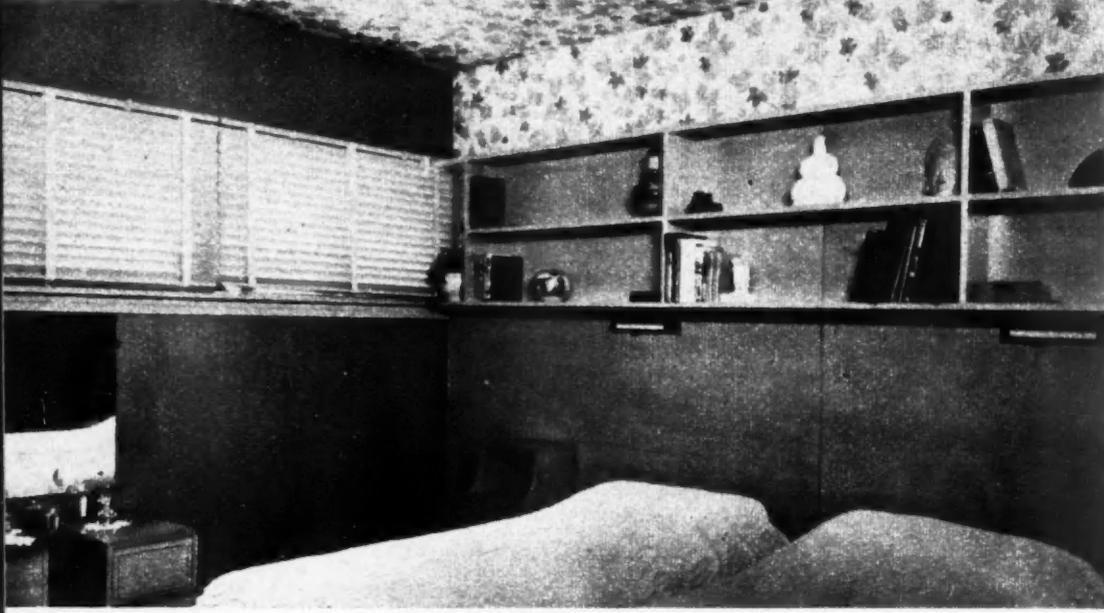


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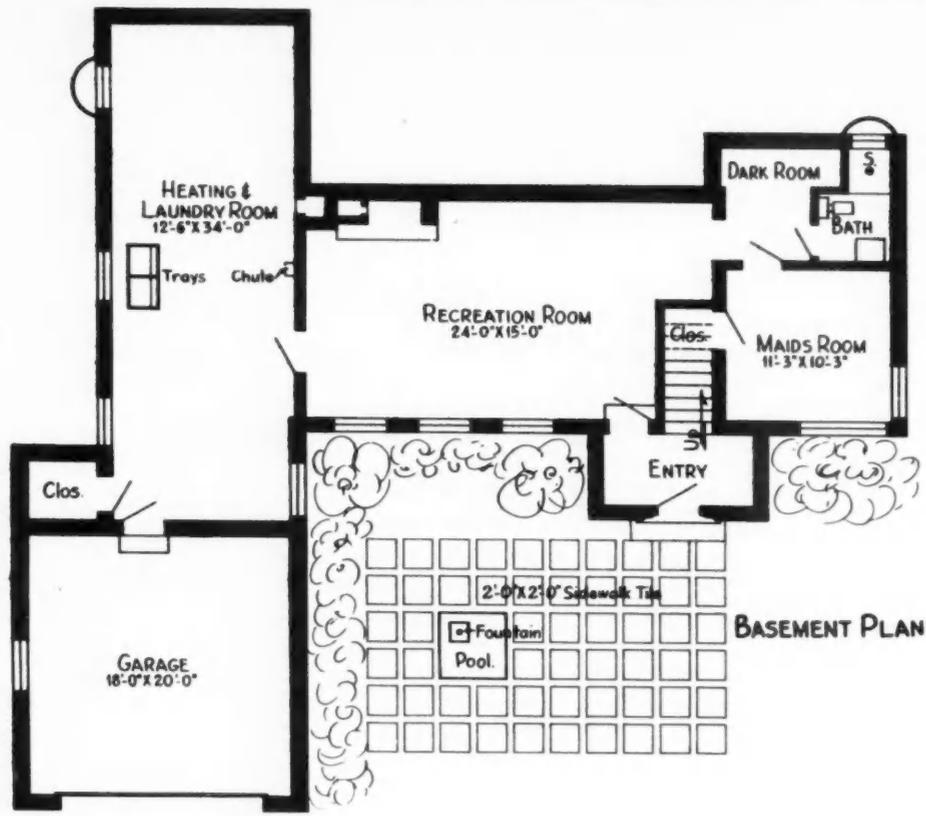
LEFT: View of house at upper level of knoll. Door adjoining battery of windows in center of facade leads directly into living room. Vertical cedar siding and face brick provide pleasing variation to exterior walls



LEFT below: Master bedroom with long horizontal windows placed high in north and south walls. Built-in bookcase on bed wall follows window. Wall below bookcases faced with plywood

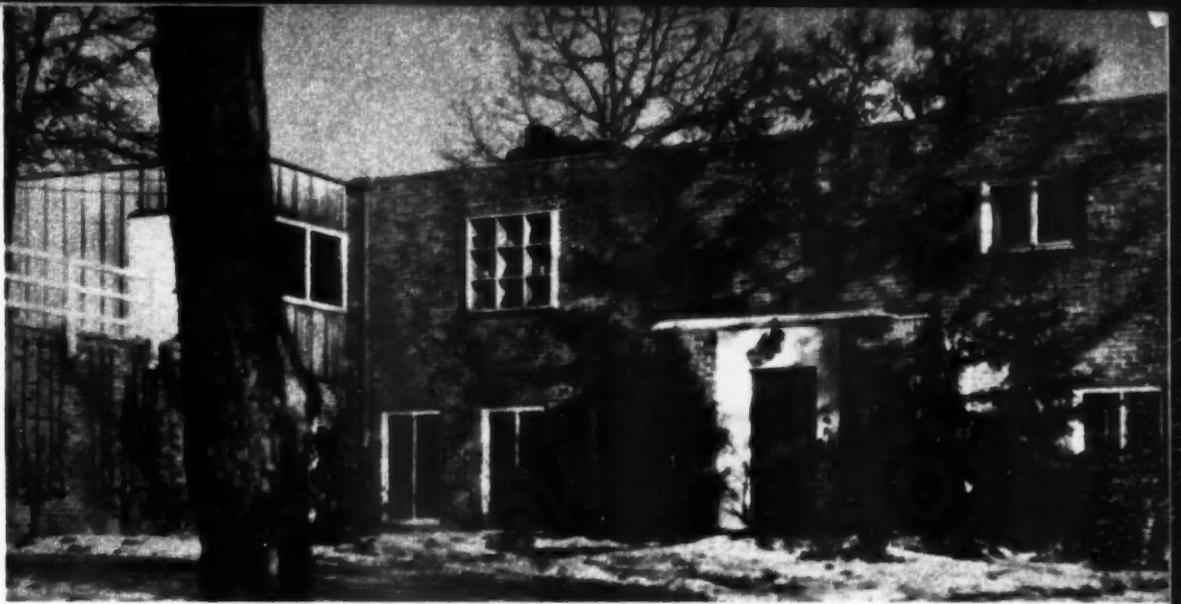
ROOMS in first floor, plan shown below and right, are arranged to meet a special site requirement. Rooms are grouped on both sides of living room. Entrance is by stair from lower level.

BASEMENT plan below. The walls are completely exposed on the approach side, providing for the entrance, service and recreation needs



RIGHT: Detail view of approach side of house. Severe lines of brick wall are pierced with an interesting group of windows each sized according to its relation to the room rather than the exterior appearance

RIGHT below: Small dining room table has two legs bolted to floor



**CONSTRUCTION NOTES**

- Basement walls—Pattsco block, parged on outside
- Basement floor—colored cement "Master Builders"
- First floor construction—precast concrete joists and 2 1/2-inch slab
- First floor—Tiletex asphalt tile
- Insulation—4-inch rock wool bats
- Exterior walls—brick veneer, vertical cedar siding, rock lath and plaster
- Fireplace—painted brick
- Roof—pitch and gravel
- Windows—Anderson horizontal gliding
- Heating—Superfex warm air
- Plumbing—Standard Sanitary fixtures
- Interior walls—rock lath and plaster with oak plywood



UPPER TERRACE



FIRST FLOOR PLAN

# LUXURY HOME MARKET



## *Requires Special Planning,*

**T**HE successful development of a large subdivision of homes costing as much as \$40,000 requires planning, building and selling techniques of a high character. Each house is usually designed individually, and in many instances the future owner is on hand to work with the architect and builder in arranging plans and details to suit individual desires. Because of the deviance from routine, labor employed in finishing such jobs must be more highly trained and conscientious about fine workmanship if the ultimate buyer is to be satisfied with the house and with the price paid.

The Adams & Leonard organization, realtors, of Tulsa, Okla., is completing a subdivision of high quality homes priced up to \$40,000. The development, known as Adams Estates, will consist of 129 houses, the majority of them one story ranch type with typical Southwestern lines, located on lots averaging 90 to 100 feet in width. In addition to the building crews employed by Adams & Leonard, the firm is working with six other builders, who are financed by the developers. More information on this phase of the operation and on other houses in the subdivision will be discussed in a future issue of *American Builder*.

The house illustrated and discussed on these pages is typical of the more expensive houses being built in Adams Estates. Now the home of Mr. and Mrs. A. L. Grubbs, it was designed by the Adams & Leonard organization and was constructed by the firm's own crews, under the direction of Oliver S. Black, who is in charge of construction and property management. Mr. Black is also the current president of the Tulsa Home Builders Association.

The house is located on a lot with 125-foot frontage on a curved street, with a cross street coming in at right angle to the house. It not only sets at the head of the cross street, but is at the apex of the convex street curve. This location permits an unobstructed view in three directions—to the front and both sides.

Although the house sets a few feet above street level, the long, low sweeping lines keep it close to the

**Individuality in design, quality materials and fine workmanship are essentials to success in development of subdivisions of high-priced houses. This home, designed and built by Adams & Leonard, Tulsa, is in the Adams Estates project**

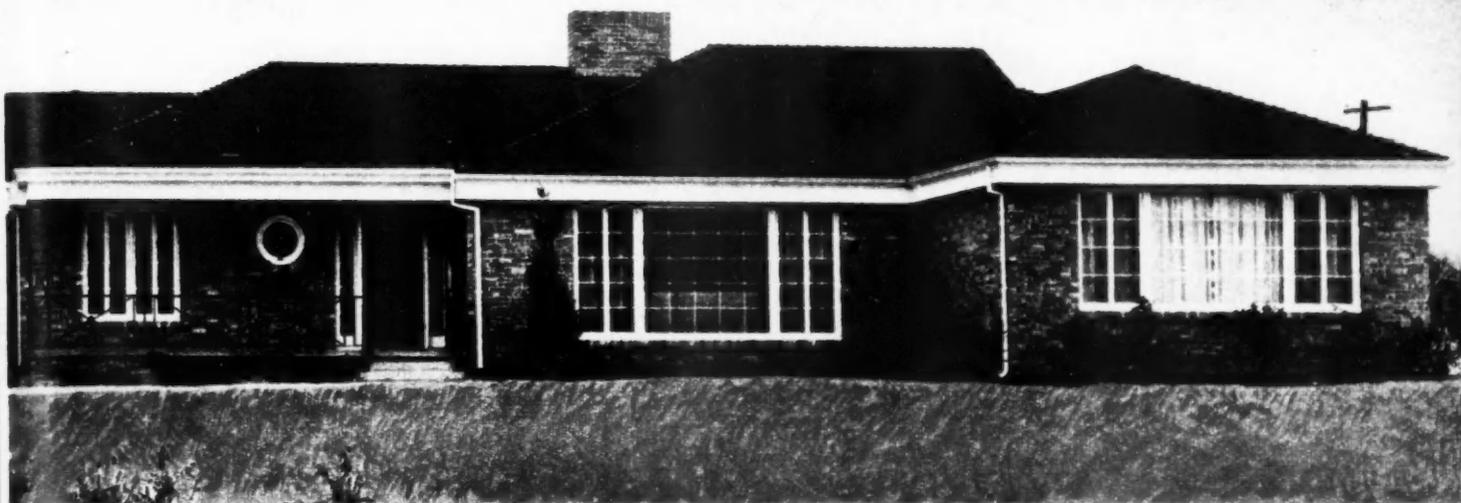
ground. Well balanced, effective breaks in the roof lines emphasize the styling and overall effectiveness of the attractive front elevation. The long, deep windows in the living room and master bedroom further emphasize the horizontal lines. Vertical lines, however, dominate the area around the front entrance.

The small porch above the front entrance not only protects that portion of the house from direct rays of the sun, but also adds a decorative note. The ornamental iron work on the porch was produced by the Weiman company. Copper gutters and downspouts, as well as other trim, are painted white. The garage is equipped with two upward-acting doors in a design which matches the overall appearance of the house.

Conventional wood joists are set on a reinforced poured concrete foundation. The exterior wall covering is red face brick over wood sheathing and studs. Cedar shingles cover the roof.

The floor plan provides for three large bedrooms and two and one-half baths, with a maid's living room, bath and closet storage space adjacent to the double garage.

Rooms in the house are floored with oak, covered with carpeting in the living room, dining room and master bedroom. Dry wall construction was used throughout with gypsum board on walls and ceilings. The front wall of the living room and the front wall of the master bedroom are largely glass. These and other windows in the house were supplied by Curtis. The living room wall opposite the large windows is



## ***Building and Selling Methods***

highlighted by a large fireplace and a set of built-in bookshelves. This wall is covered with varied width wood boards applied vertically and painted to match the color of the rug and other walls in the room. A pair of louvered doors separates the dining room from the living room.

The small den opposite the entrance vestibule is paneled with lacquered Philippine mahogany and the floor is covered with asphalt tile. The powder room is opposite the vestibule clothes closet, near both the living room and the den.

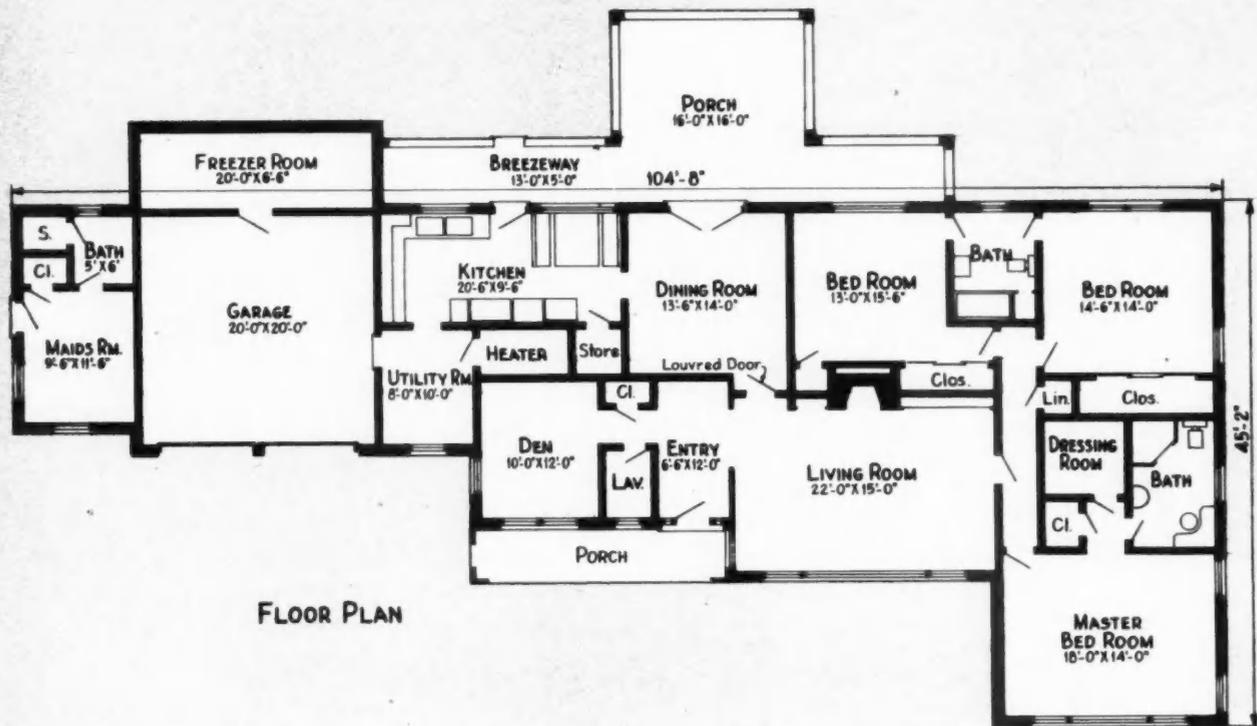
Much of the large window area in the spacious

master bedroom may be opened to bring a maximum amount of cool outdoor air inside during warm weather, which is prevalent in that area a large portion of the year. Adjoining the master bedroom, the master bathroom is equipped with oversize plumbing, a complete built-in shower stall and a vanity. The floor and walls are tiled. A large dressing room and clothes closet complete the master bedroom layout.

The second full bath also equipped with oversize plumbing is situated between the other two bedrooms, serving both of them and keeping hallway traffic at a minimum. The second corner bedroom has large



**VIEW** of living room from entrance vestibule. Large windows facing the street reach almost to the floor level, making that wall essentially one large glass area. Drapes may be drawn completely across windows when privacy is desired. The door at far end enters the hallway to the three large bedrooms



FLOOR PLAN

FLOOR plan reveals good separation of the service, living and sleeping quarters. Rear view of the house is below

glass areas and the walls are finished in bleached Philippine mahogany. This room is arranged as a child's bedroom and the floor is covered with linoleum. Closets in this bedroom and in the third bedroom are equipped with sliding doors.

Large glass doors open directly from the dining room to the large 16x16-foot screened rear porch. All screens here and on the other openings are copper. Finish hardware was supplied by the Schlage Co.

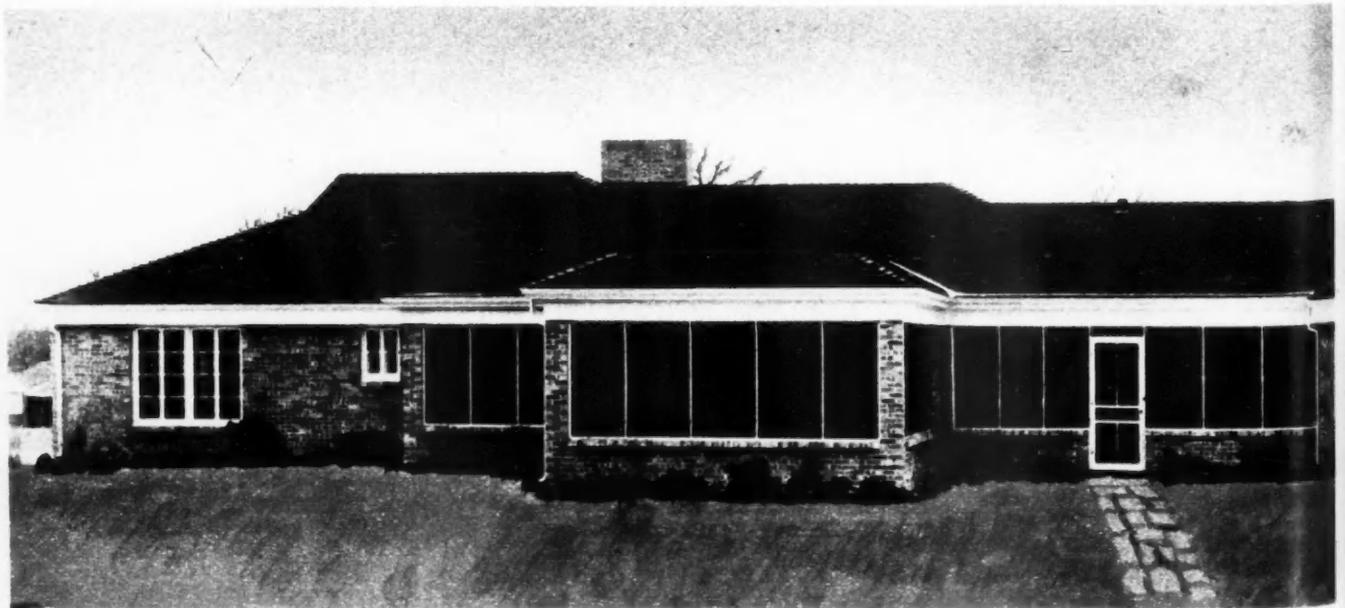
The large kitchen is equipped with an ample supply of high quality wood cabinets and built-in shelves. The floor and work counter are covered with linoleum. A ventilating fan is located in the ceiling above the range.

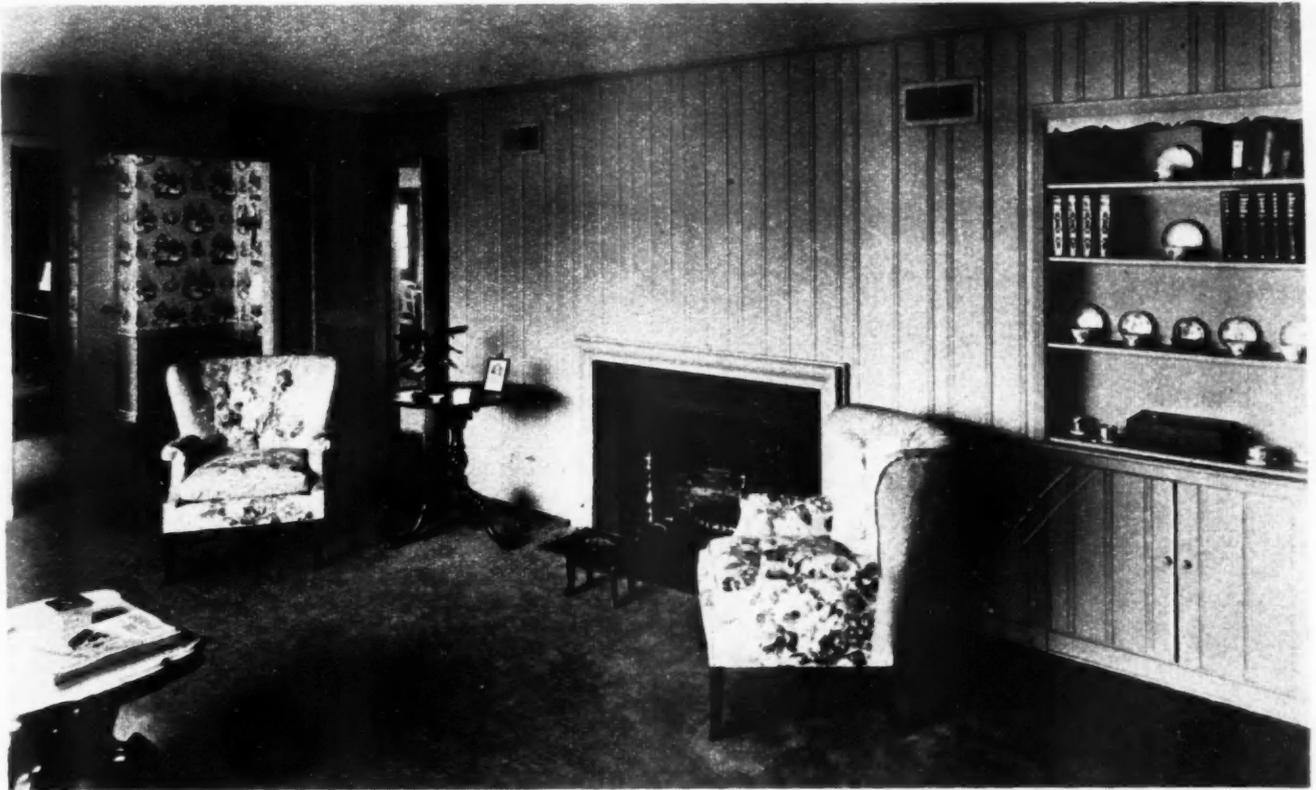
All rooms in the house are wired for an inter-com-

munication system and for radio speakers. Light switches are the silent mercury type, and all light fixtures were specially designed and manufactured by the Smiley company.

Heat is supplied by a gas-fired forced warm air Security furnace located in a separate enclosed compartment just off the utility room. Heat from this plant is supplemented by electric heaters in each of the bathrooms. For protection against summer heat and to minimize heating costs in winter, ceilings are all insulated with mineral wool. Two large attic fans circulate air through the house during extremely warm weather.

At the rear of the large double garage, a special room was constructed to house a large home freezing





LIVING room looking toward vestibule and guest clothes closet. Louvered doors are between living and dining rooms

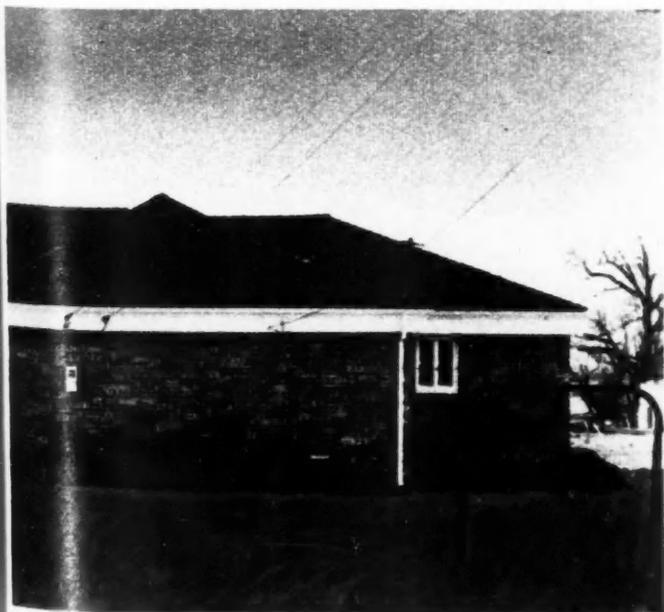
unit and also to serve as additional storage space. The attic above the garage is also used as storage space and is reached by means of a Curtis disappearing stairway. There is no direct access from the maid's quarters to the main portion of the house. The quarters consist of a large combination living and bedroom, a full bath, clothes closet and storage area.

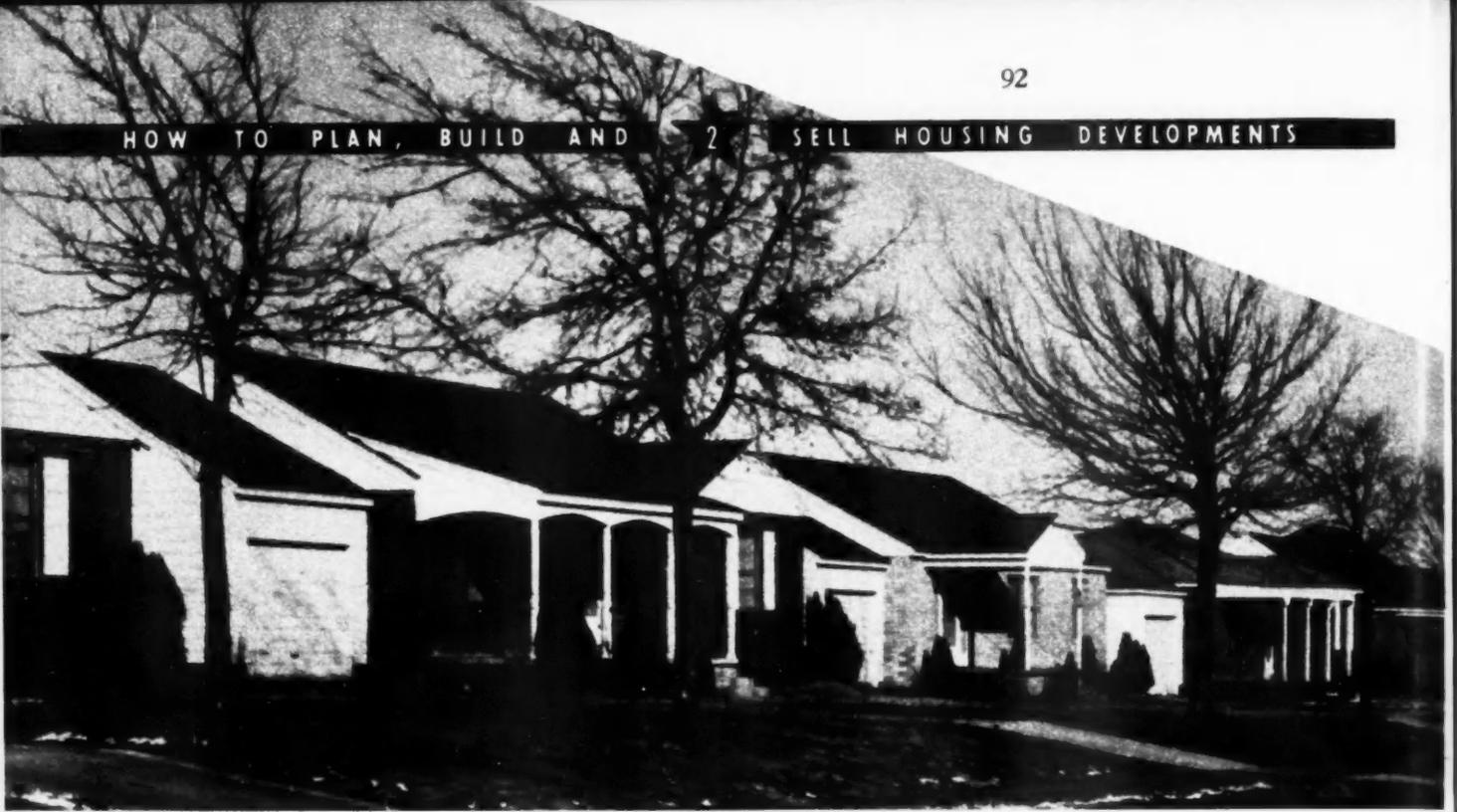
This house, although it is one of the finest in the Adams Estates subdivision, is typical, in design and quality, of other houses being built there by Adams & Leonard and other builders associated with them.

The wide curvilinear streets, good stand of timber and high quality of the homes being built will make this another fine addition to the excellent residential neighborhoods of Tulsa.



THE large kitchen, above, is well equipped with cabinets and work area. A ventilating fan is installed above the range. Note large window areas in master bedroom shown in lower photo





## Tomorrow's Homes Today

**T**HE production of good houses in the \$10,000 price range in today's market is a definite challenge to the home builder. It not only calls for the exercise of special ingenuity in design and technique, but requires full use of mass production practices.

The floor plans of such houses must embody the basic principles of efficient layout including maximum livability and economy in a limited area. In conformity with efforts to achieve good exterior appearance of the houses as well as the entire development, elevations must be varied sufficiently to eliminate monotony. Land on which houses in the \$10,000 price range are usually constructed cannot be extremely high-priced. Therefore, builders must exercise care in procurement of the land as well as in planning the subdivision. Since most individuals purchase a single-family dwelling to remove themselves from crowded conditions of apartment and other multi-family housing facilities, lots must be sufficiently large to offer a good degree of land area for appearance as well as living purposes.

Various mass production techniques have been tried by home builders catering to the low-price market. All of them involve the production

line principle, whether it is in a work shop on or off the site, or arrangement of work so that the homesites themselves constitute the production line. Full use of preassembled house parts in varying degrees, is always a major factor in achieving low production costs. It is a foregone conclusion that the home builder catering to the low-price market must construct a large number of houses to reach maximum production efficiency and low costs.

The efficient builder of small houses must not only police every operation and the installation of every piece of equipment to hold lost motion and delay at a minimum, but must be especially adept at procuring materials at the best possible prices for delivery at the time they are needed. If the builder of quality small homes for sale to individuals with limited incomes is to deliver those houses at the lowest possible cost, he must also have the ability to acquire and properly organize his crews so that labor costs will not be out of balance in relation to other costs on the jobs. All of these responsibilities fall under the heading of good management—a prime requisite for success in the low-price mass home building market.

In addition to incorporating all the livability and quality possible in small houses, the successful mass builder usually includes a few "plus" features which appeal to the average small home buying prospect, especially to the housewife. The use of sensible salesmanship plus the special features are usually sufficient to assure satisfactory sale of the houses to the best of the clientele for which they were designed, thus holding defaults on mortgages to a minimum. These factors not only assure financial success for home builders catering to this market, but establish reputations which assure for them a maximum portion of whatever demand their particular home building markets develop.

Howard Grubb, working with the Daniel Addition Co., of Tulsa, Okla., is completing a project of 132 brick veneer two and three-bedroom houses designed to give that much desired "plus" value in the \$10,000 price range. The land acquired for this project had laid idle for years while the residential area of Tulsa developed around it. By persistence and resourcefulness the plot was acquired but because all streets and improvements were in, it was impossible to

HOUSES in the \$10,000 price range in the Daniel Addition Company's project built by Howard Grubb in Tulsa, Okla. As indicated by sign at right, two of the many "plus" features in these houses include attic fans, automatic dishwashers



**Successful builder in low-price range not only offers good design, quality materials and fine workmanship but provides "plus" features that add value and livability**

do any land planning outside of dividing it into lots of 60 to 68 feet in width and 140 to 168 feet in depth.

After all legal and financial details were disposed of satisfactorily, Mr. Grubb's next efforts were concentrated on assembling sufficient materials to assure uninterrupted operation of crews on the job. Wherever

possible, materials and equipment were purchased in carload lots.

Six basic floor plans are used for the two-bedroom houses and three basic plans are used for three-bedrooms. Exterior elevations are so varied that most persons visiting the project are of the belief that every house is of an individual design. The

houses set on concrete foundations without basements.

Exterior wall covering is brick veneer in various shades and finishes over insulating board sheathing nailed to conventional studs. Wood siding in gable ends and on garages is used in combination with the brick to add variety. All roofs are covered with



TYPICAL example of good variety in elevations achieved in these low-cost houses by Architect W. H. Wolaver



EFFICIENT mass building operation permitted the sale of these three-bedroom brick veneer houses for \$10,400 to \$10,800

edge-grained cedar shingles. A concrete garage driveway and basic shrubbery are included in the sale price.

Floors are of conventional construction with wood joists covered with subflooring and hardwood except in the bathrooms and kitchens, where linoleum is used. Interior walls and ceilings are covered with gypsum board and each bathroom is tiled around the tub. Double-hung aluminum window sash and aluminum screens are standard equipment on

the 132-house project. Interior trim is eliminated around windows by plastering around the frames and up to the inside window stops. Wood stools are used for all windows.

Metal door jambs are installed for all interior doors and trim for the outside doors is run to a pattern to match that on the metal interior jambs so after decoration is completed there is no difference in appearance. All outside doors are completely weather stripped. One floor furnace and a wall bathroom heater,

gas-fired, provide heat. All attics are insulated with mineral wool.

In addition to a 20-gallon automatic hot water heater, "plus" features in these houses include a 36-inch attic fan, a Kaiser dishwasher and a small fireplace in each living room equipped with a gas log. These "plus" features were added as standard equipment in each house to not only give greater value in conformity with Mr. Grubb's past policies and reputation as a home builder, but to hold sales costs to a minimum.



THIS is typical of the three basic three-bedroom floor plans



FIRST FLOOR PLAN

ALTHOUGH this two-bedroom plan is square, rooms are large and the compact service areas are concentrated at the rear

This project is set up with each home building site as part of the mass production line. Crews assigned to the various jobs move along the blocks in sequence, with all building processes carried out in the conventional manner. Power tools are utilized in every manner possible in the hands of men trained to do certain special tasks such as cutting joists, studs, and rafters, or doing cabinet work. All kitchen cabinets in this project are built on the site with portable power tools being moved from job to job in orderly sequence. Two or three men are assigned to this job alone.

Mr. Grubb advertises this project as featuring "Tomorrow's Home Today" by the Howard Grubb Development Co. The two-bedroom houses range in price from \$9,650 to \$10,200 and the three-bedroom houses from \$10,400 to \$10,600. The homes are all approved for loans by the Veterans Administration and the Federal Housing Administration. W. H. Wolaver, of Tulsa, is the architect.

Mr. Grubb is not building low cost houses that will "just get by" in his market. He stresses quality design, materials and workmanship throughout the entire operation. He is confident that home building is a good business and that by giving "plus" value in his houses, regardless of what market they are built to sell in, he is developing a following that will assure him a permanent and prosperous place in that industry as long as he wishes to remain active. His selling costs are at a minimum on this project because of the reputation for quality and fairness which has been established as work progresses and more and more people buy homes there and occupy them.



IN ADDITION to 36-inch attic fans and automatic dishwashers, standard equipment in these houses includes aluminum double-hung windows and screens, metal interior door jambs and a fireplace equipped with a gas log in each of the living rooms



FIRST FLOOR PLAN

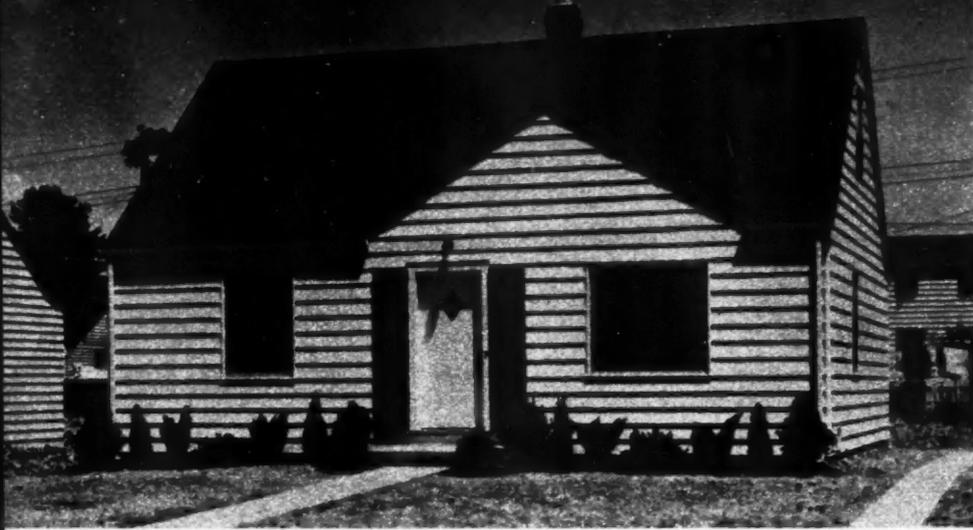
LARGE closet areas and ample storage space are features of these efficient small house plans. Here the living-dining area forms one large room across the street side of the house. The large window at the rear of the living room overlooking the back lawn is another desirable feature in this house



THIS is a third variation of the six basic two-bedroom floor layouts used by Howard Grubb in this 132-house development

# FIRST 609

**New Title VI plan permits prefabricated house manufacturers to finance operations from time raw materials enter plant until finished house parts leave. First loan under new setup went to Cleveland builder**



THIS is the type of two-bedroom house to be financed under first 609 loan

**M**ANUFACTURERS of prefabricated housing may now obtain insured loans to finance the factory production of such housing under emergency provisions of Section 609, Title VI, of the National Housing Act. The new type of credit insurance is designed specifically to meet needs of the prefabricated housing industry.

The loans are to provide working capital with which manufacturers may pay for material, labor and other manufacturing costs of houses produced by industrialized processes. Loans may be for as much as 90 per cent of the FHA Commissioner's estimate of the necessary current manufacturing cost of those parts of the house prefabricated in the plant, exclusive of the manufacturer's profit. Loans do not include cost of site, nor the cost of completing those parts of the house not prefabricated in the plant, nor the cost of erection on the site.

Maximum maturity is one year, but the loans may be refinanced and extended for an additional term of a year. The FHA makes an insurance

charge of one per cent of the original loan amount. The maximum interest rate on outstanding principal is four per cent.

The first insured loan under this plan was made to The Housemart, Inc., Cleveland, Ohio, of which Benton Lefton, well-known home builder, is president. The loan was made by the Trust Company of New Jersey, Jersey City, and is to finance the manufacture in the Housemart's Cleveland plant of the fabricated portions of 194 houses. Mr. Lefton plans to use the \$423,000 loan as a revolving fund which will enable his firm to fabricate at least 1,000 houses this year.

The panelized houses to be produced in The Housemart plant are story and one-half frame construction containing two bedrooms, living room, kitchen and dining area, bathroom and utility room. When the houses are set on basements the utility room is eliminated and the extra space is added to the living room and kitchen.

A built-in stairway to the second floor permits easy access to the un-

finished second floor which may be finished to include a half bath and two bedrooms if desired. These houses differ somewhat from ordinary factory prefabricated homes because the panels are unfinished. Plasterers, electricians, plumbers, bricklayers, and other craftsmen do their work on the site, rather than in the factory. With 20 men working in the present establishment, three houses a day can be pre-cut and assembled into panels. Six men on the job site can erect the panels, joists, rafters and get houses under roof including shingles at the rate of two houses a day.

These houses are being completed in the Cleveland area for from \$8,000 to \$9,000, not including the price of the lot. Mr. Lefton has announced his intention to ship these panelized houses to areas outside of Cleveland for erection by builders. Prices however, will vary with distance they are shipped, and with variations in design and equipment supplied. In the Cleveland area, the house packages include kitchen, heating and laundry equipment.

In executing this \$423,000 loan un-

SIX men can assemble panels, joists and rafters for these houses and get them under roof at the rate of two each day







## SETTING THE PACE For Development of Less Desirable Urban Areas

THIS house represents a mid-western version of the popular ranch type. While retaining cardinal features, it makes allowances for extremes in weather conditions with use of smaller glass areas

**The locating of a group of rambling one story quality houses has changed the direction of good home site projects in this community**

**T**HE TREND of new home building in Des Moines, Iowa, was in the past always pointed toward the west end of the city. This fact was due in part to the excellent home sites available.

Because of his close association with the east end of the city, Mr.

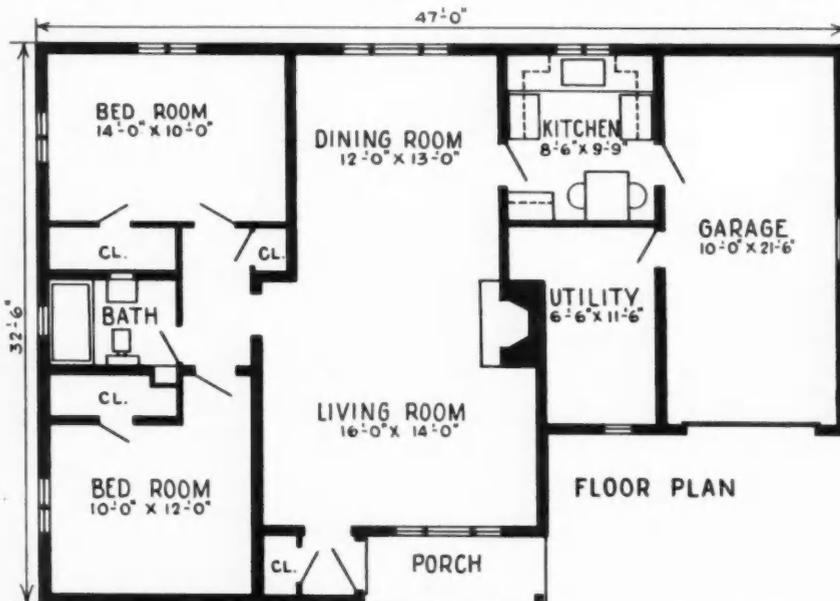
Wiltzie, who has been prominent in the home building field for the past twenty years, saw the advantages of this untouched area a number of years ago, and proceeded to develop it with a group of high quality homes.

His latest project of twenty-eight houses has been centered on and ad-

joining the 2800 block on Wisconsin Street. This is a high, rolling area on the east side of Des Moines that has a sweeping view of the downtown portion of the city.

Having observed, through personal contact, the trend in home building in the far west, Mr. Wiltzie decided to produce a group of houses that would resemble the general appearance of the ranch type house, yet would be adaptable to the rigorous climate of Iowa. He saw in this site the possibility of designing houses with large glass areas, not just for the purpose of following the modern mode, but in order to capture the view that seemed made to order for houses of this type.

The building lots vary from 60 to 120 feet in width and to 150 feet in depth, giving ample opportunity for outdoor living. Having started this project early in 1946, Mr. Wiltzie was compelled by restrictions to limit the houses to a definite cost figure. This accounts for the 60 foot lot



**THE plan at left of the basementless house shown above, contains all the elements of good living. Utility room is conveniently located to service the entire house**

widths that were in use at that time.

Most of the houses on the project contain two bedrooms, with a few having three bedrooms in addition to the other rooms. Mr. Wiltsie has not attempted to follow any standard pattern as far as room arrangement or construction is concerned. His organization is geared so that it can adapt itself to any change from the ordinary routine that may be decided.

Houses with and without basements are provided. Those with basements are generally framed with wood joists above. Precast concrete joists are provided in a number of cases as well as concrete slabs. Warm air installations and radiant heat panels are used in the basementless houses, with a hot water system employed in the others.

All materials are assembled and cut on the job. The wide use of all types of power tools has been featured by this builder ever since the tools came into general use. This has been one of the means of reducing costs. Exterior frame walls are completely laid out on the rough floor and then raised to position. This method is not new, as it has been employed for the past twenty years by Mr. Wiltsie's men.

The houses all represent a variation of the popular ranch type. The "H" type plan, typical of the ranch type, was used most successfully by Mr. Wiltsie. Most of the houses have large paved terraces to make the most of outdoor living.

The houses shown on these pages vary in costs from \$11,500 to \$17,500. The best materials obtainable have been used in their construction. This can be checked by scanning the list of materials and equipment used.

**MATERIALS AND EQUIPMENT USED**

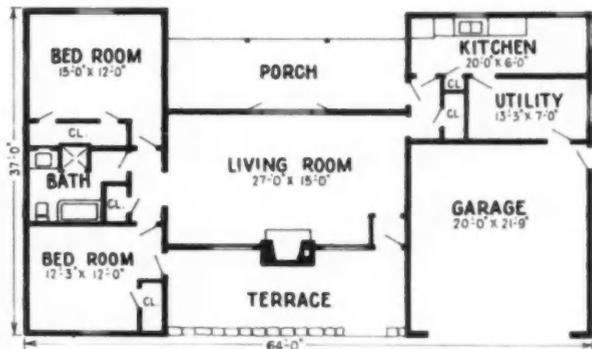
- Concrete block foundations
- Wood and precast concrete joists
- Steel beams and columns
- Brick veneer and frame walls
- U. S. Gypsum wall sheathing
- Metal lath and three coat plaster on walls
- Two and four-inch thick Rockwool insulation on walls and ceiling
- Exterior facing of cedar shingles and 10-inch bevelled siding
- Flintcote asphalt 210; roof shingles
- Anderson Co. sliding casement windows
- Curtis Co. D. H. windows, slab doors and millwork
- Kitchen cabinets—job built
- Floors—Kentile, asphalt tile, Armstrong linoleum and oak
- Yale hardware
- Sherwin-Williams paint
- Overhead garage doors
- Aluminum, Duratile and ceramic tile
- Crane Co. plumbing fixtures
- Heating-Trane Co. gas-fired hot water boiler; Colonial warm air furnace
- General Electric and Westinghouse dish washers, disposal and electric range
- Bendix and Laundrette washers
- Chamberlain interlocking weatherstrips and door seals



BY TAKING advantage of the site, a large terrace is made available over garage, which is at basement level. Simple lines of the house are enriched through use of stone on center front motif. The large living room is dominant feature of plan below



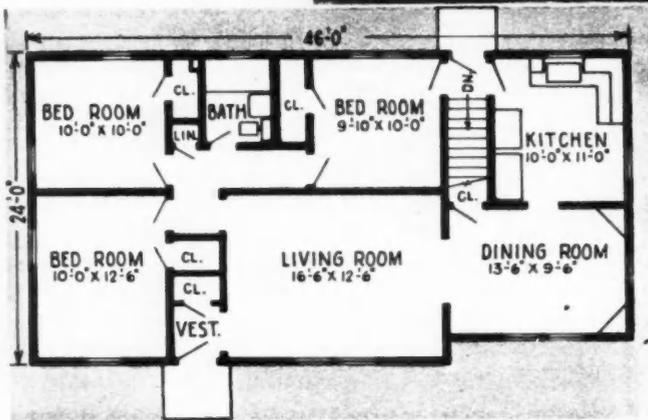
DOUBLE-COURSED shingles have been used with good effect on exterior walls of house at right. The "H" type plan, typical of ranch house design, was used successfully in this house. The front and rear terraces allow outdoor living



# Profitable Two Street



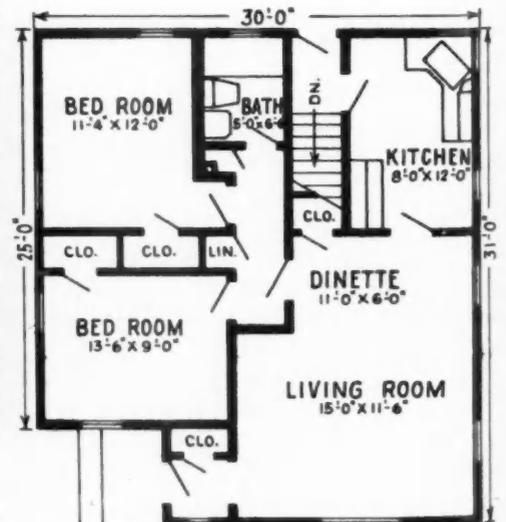
**ROBERT UETZ** and his superintendent of construction. Typical of the houses built on this street is the one shown at right. Simple in its contour and fenestration, this house has an appeal to the practical-minded individual. Plan of house is shown below



**Builder installs all public utilities and paving through private contract, thereby avoiding delays and waste. A generous saving in costs is reflected to purchaser**



**NO** attempt has been made by the builder, in the house above, other than to provide a simple solution to a pressing need. Plan contains two bedrooms, kitchen and combination dinette and living room. Large basement contains all utilities



# Development Within City Limits

**T**HE West Ridge subdivision located within the city limits of Des Moines, Iowa, was planned and built by the Robert P. Uetz Co., Inc. of that city.

This project contains 33 houses ranging in price from \$9,000 to \$14,000 each. The entire group of houses are placed on both sides of two dead-end streets with a landscaped turn-around at the extreme end.

The sanitary sewer, gas and water service and all pavement, curbs and sidewalks were contracted and installed by Mr. Uetz. This was done primarily for the purpose of expediting the work, rather than to wait until the city got around with their own crews. In this manner the builder was able to eliminate a ten per cent charge for supervision and overhead, and another ten per cent for default and deficiency assessment. All of the work was done according to city specifications. The amount thus saved was passed on to the eventual purchasers of the houses.

The houses are developed around variations of three basic floor plans, two of which are shown on these pages. They consist of one-story houses of two and three bedrooms and a one-and-one-half-story house of three bedrooms. By reversing the position of garage and other elements, a variety of exteriors was provided.

When Mr. Uetz turns a house over to a new purchaser, everything is provided except the furniture. Garage driveway, walks, complete grading, sodding and shrubs are all included in the original purchase price. Trees on the boulevard are planted by the builder.

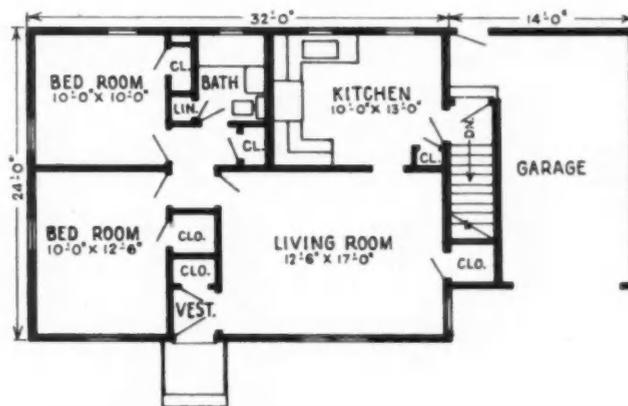
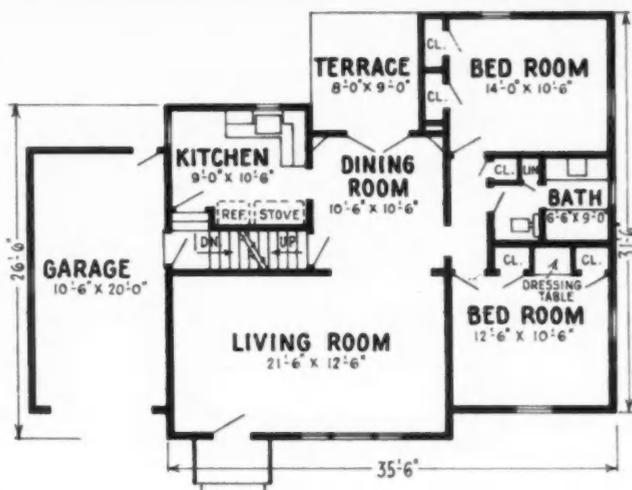
A feature of this project is the wide variety of colors that have been employed on the exterior walls of the houses. Bold colors have been used freely, especially to offer contrast where the same design has been repeated. Two tone arrangements have been introduced on wall surfaces with marked success, throwing into bold relief certain walls where emphasis was desired.

### MATERIALS AND EQUIPMENT USED

- Foundation:** Concrete blocks
- Walls:** Brick veneer, wood studs, double cased shingles, bevelled siding, Rocklath and plaster
- Sheathing:** Insulite
- Insulation:** 1-inch Balsam wool on walls, 4-inch batts on ceilings
- Roof:** Mulehide and Certainteed 210 lb. asphalt shingles
- Windows:** Cupples aluminum and wood windows
- Paint:** Sherwin Williams products
- Garage Doors:** Raynor Manufacturing Co. sectional doors
- Plumbing:** Elger fixtures, copper pipes
- Heating:** Lennox and Van Dyck gas-fired warm air furnaces
- Heater:** Rheem automatic gas hot water heater
- Hardware:** Sargents hardware
- Floors:** Bruce prefinished oak floors, Armstrong linoleum
- Wainscot:** 4-foot aluminum tile in bathroom
- Cabinet:** Miami-Carey steel medicine cabinet

**TOP RIGHT:** This house follows in its general contour the one shown at the top of opposite page. Plan provides for two bedrooms and attached garage in addition to the usual arrangement

**RIGHT:** Although reduced in size, this house has all the proportional qualities of the larger one. The plan is reversed with the rooms reduced in size and the dining room omitted entirely





SIMPLE straightforward lines, together with the use of standard materials, characterize this house

## Conservative Modern Colonial With Expandable Second Floor

**BLUEPRINT HOUSE  
NUMBER 15**

*Rudolph A. Matern*  
**Architect**

**T**HE HOME seeker is constantly on the lookout for the type of house where he can receive the greatest value for the money that he has to expend.

The house designed by Rudolph A. Matern, architect, and his associate, Herman H. York of Jamaica, L. I., New York, shown on this page, meets this requirement.

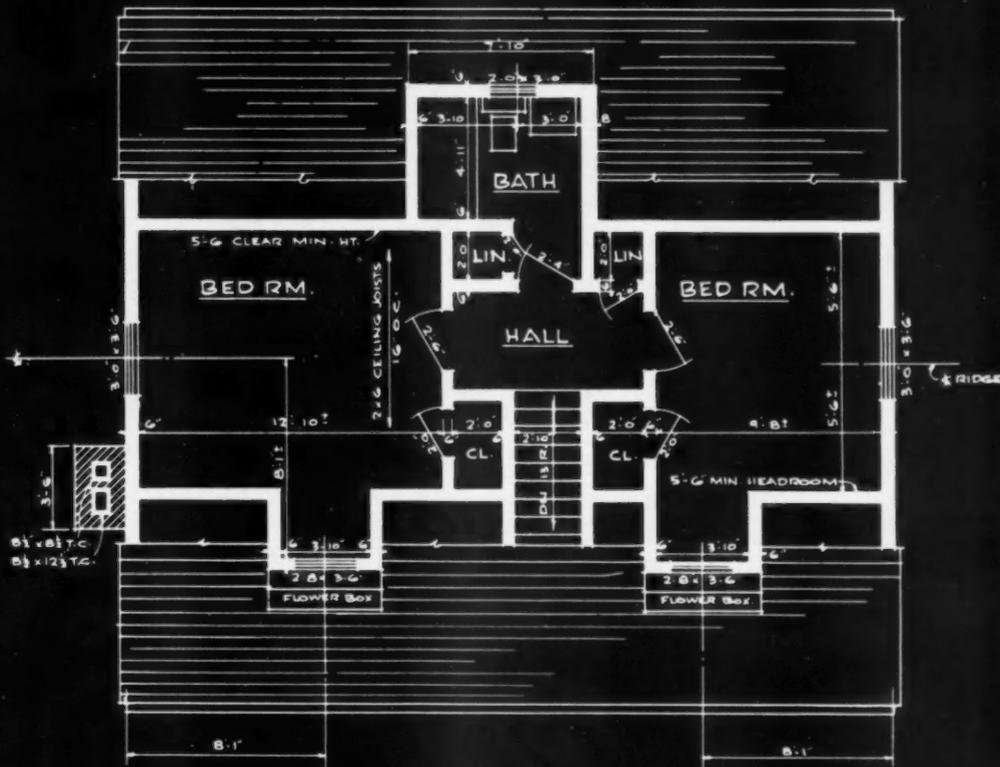
As indicated, it is a rectangular planned house, with a simple gable roof. It has a sufficiently high pitch to enable the owner to provide additional rooms on the upper floor in case of future expansion.

The rooms are arranged on both sides of a center entrance, with a stair leading to second floor directly in front of the door. Dining room and kitchen are to the right of the stairs, within easy range of the front door. Rear hall provides excellent circulation to all rooms and the basement. A

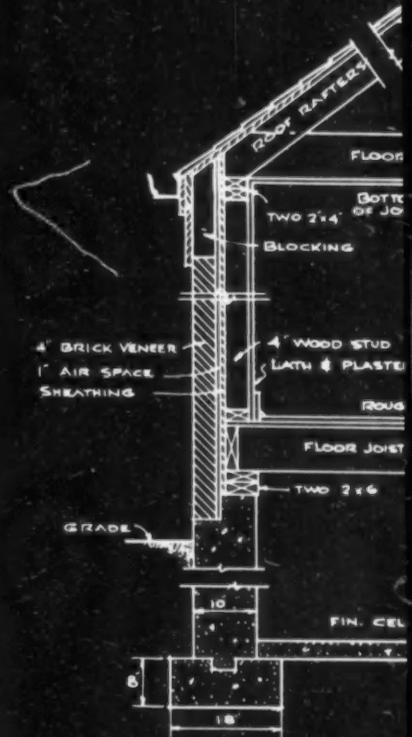
total of five rooms, bath and ample closet space are contained within a 924 square foot area.

The exterior walls are frame covered with brick veneer for the first floor, with either wood shingles or wide siding for the second floor gable. The large bay window and fireplace add a note of interest to the exterior treatment and the living room. A touch of brilliant color can be introduced through choice of flowers in the boxes.

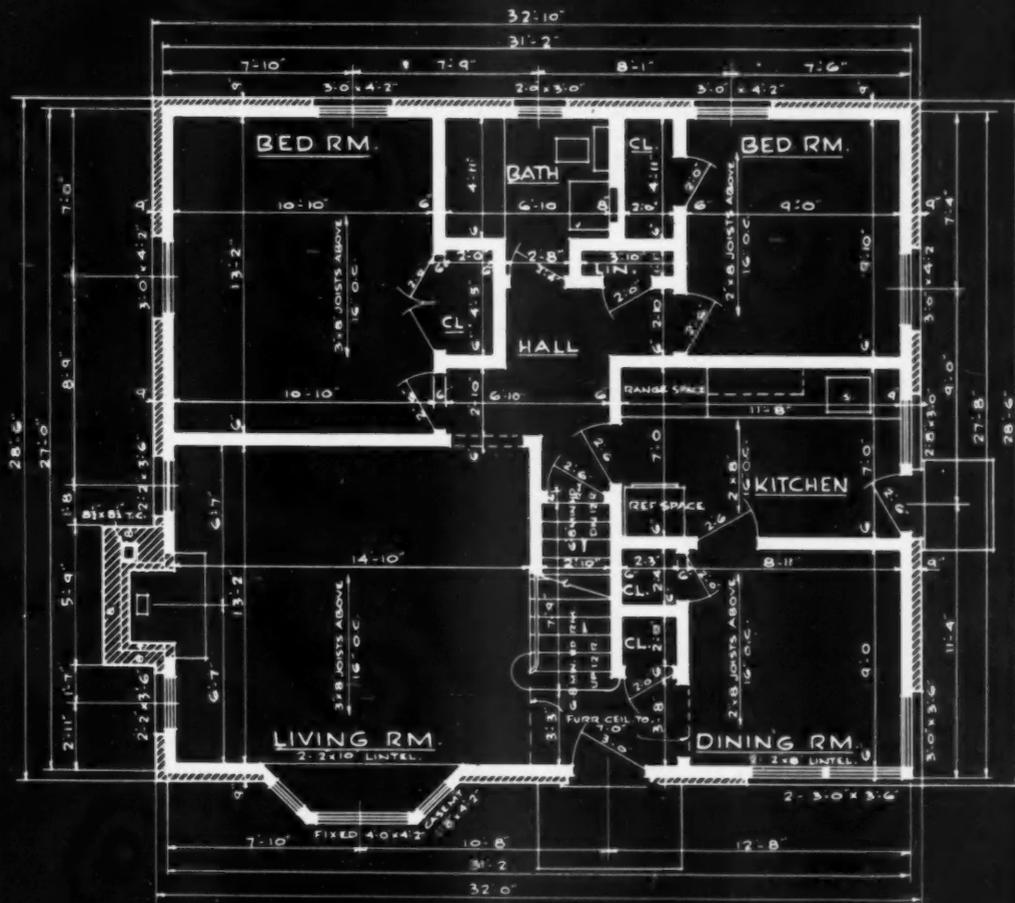
This house can be nicely adapted to the requirements of the operative builder. Minor changes can be made in the roof line, dormers or the fenestration of openings on the exterior, as well as changes in the interior, to allow sufficient variations in design, and to make the house suitable to the mass market. Material changes, such as field stone, brick or stained shingles will also alter the appearance.



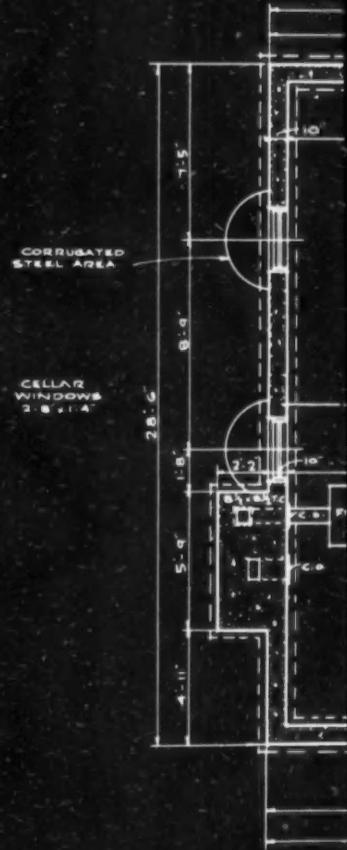
FUTURE SECOND FLOOR.



TYPICAL WALL



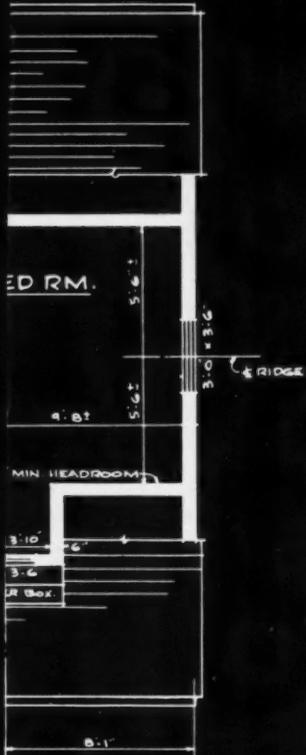
FIRST FLOOR PLAN



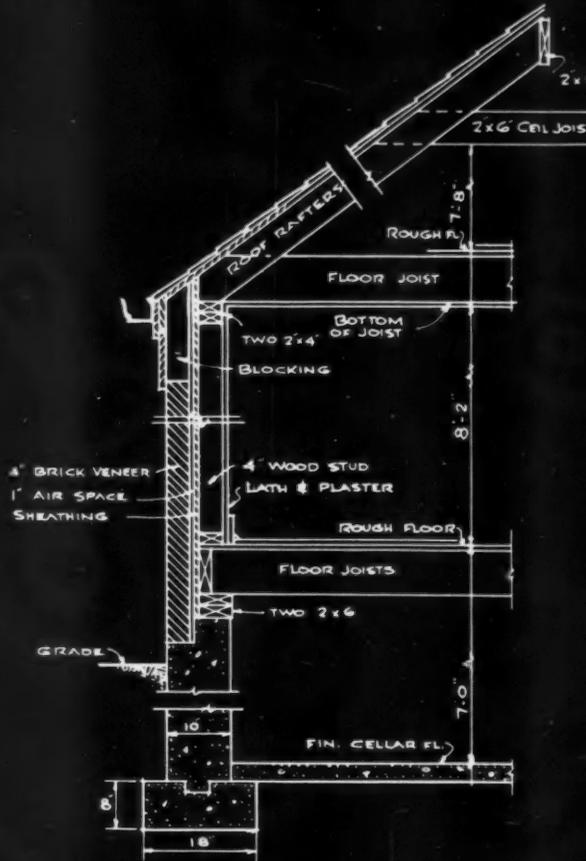
SCALE 1/4" = 1'-0"

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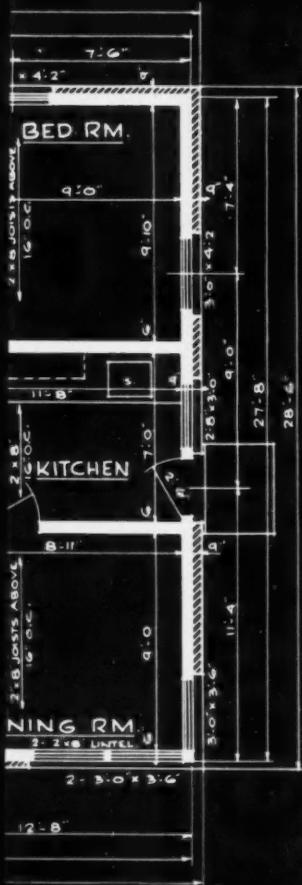




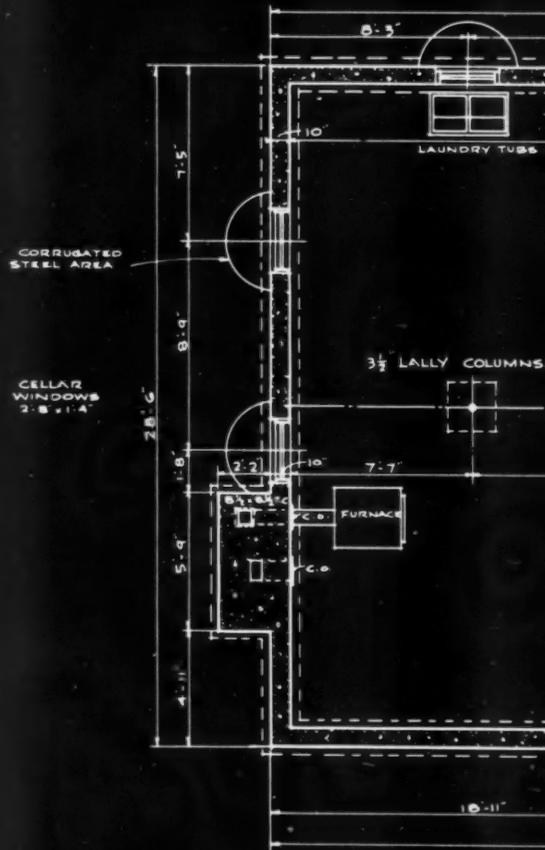
FLOOR.



TYPICAL WALL SECTION.



N



CELLAR PLAN

SCALE  $\frac{1}{8}'' = 1'-0''$

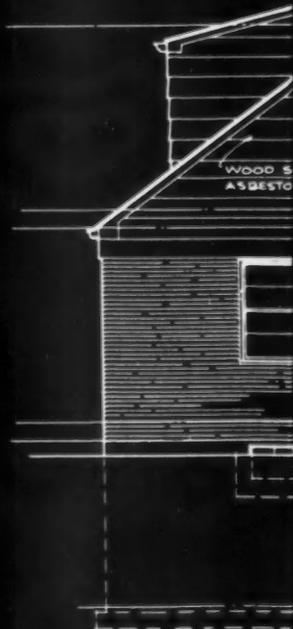
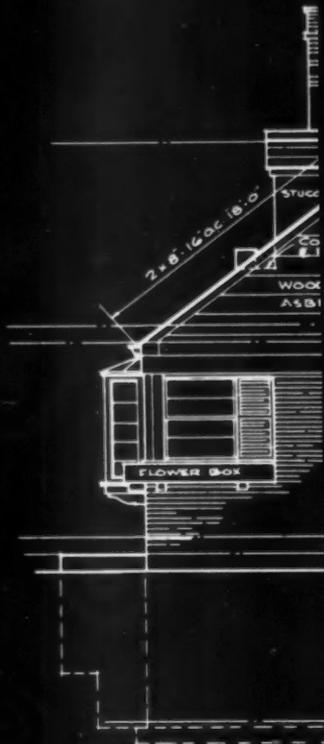
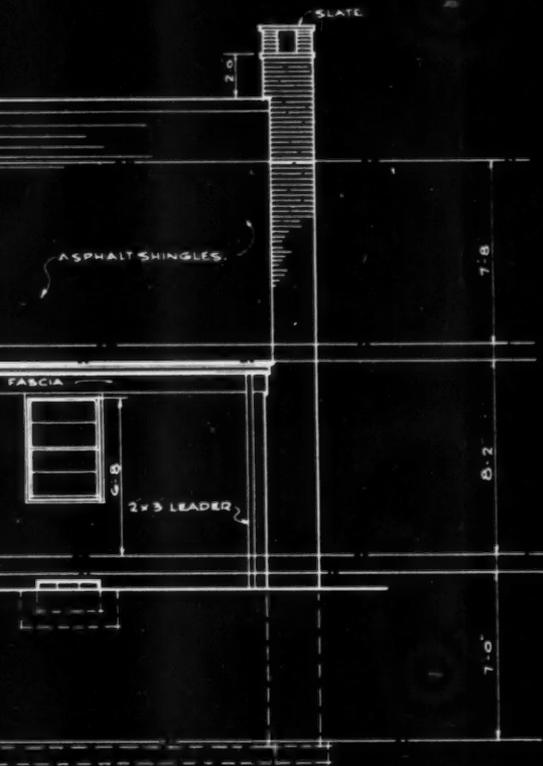




REAR.

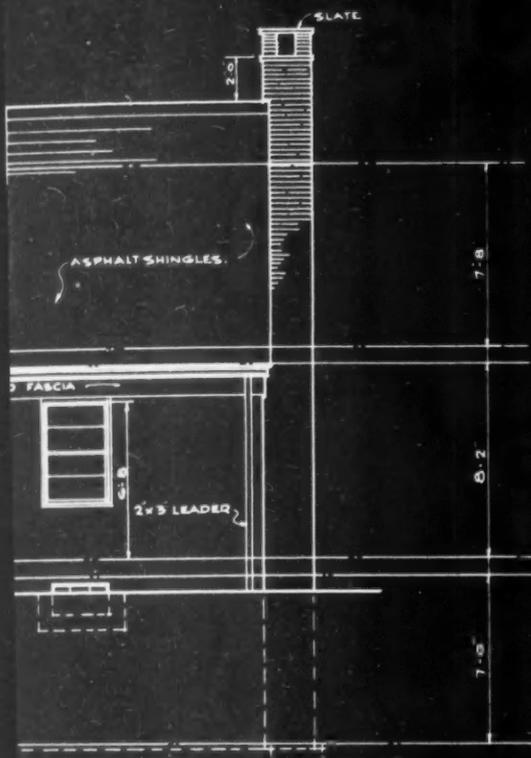


FRONT.

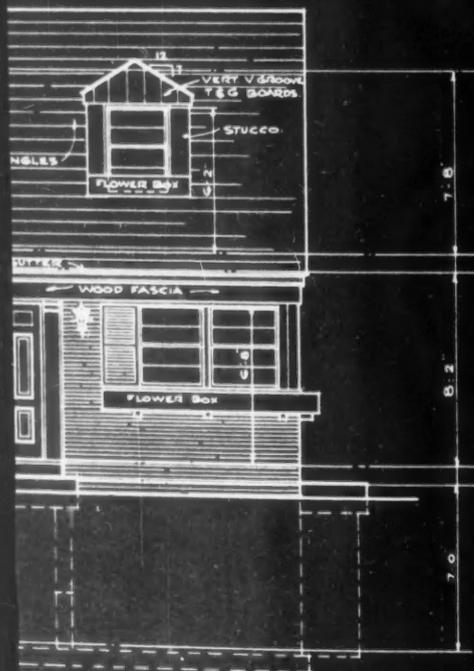


ELEVATIONS

SCALE 1/8" = 1'-0"



RIGHT SIDE



LEFT SIDE

ELEVATIONS  
SCALE 1/8" = 1'-0"



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## PRIVATE BUILDER MEETS CHALLENGE of Housing Shortage



AIR VIEW of Glen Oaks Village shows modern grouping of two-story apartment buildings on tract



LEFT to right: Alfred Gross, Laurence Morton and George M. Gross. George Gross is president of Gross-Morton

**Glen Oaks Village, begun last May, already shelters nearly 300 families; when complete will provide new, up-to-date apartments for 3,800 families in single self-contained community**

**S**IGNIFICANT among the private building industry's response to the challenge to produce more rental housing is the Gross-Morton garden apartment project, Glen Oaks Village. Located on a 175 acre tract in New York's Borough of Queens, it will house 3,800 families when complete.

The \$30,000,000 construction undertaking deserves the designation "garden apartments." Gross-Morton did some extensive land planning before ground ever was broken, with the result that four-fifths of the area has been allotted to garden and park areas, pleasantly winding streets and walks and outdoor recreation spaces. Landscaping alone will cost a half million dollars.

Fitting into this land plan is a

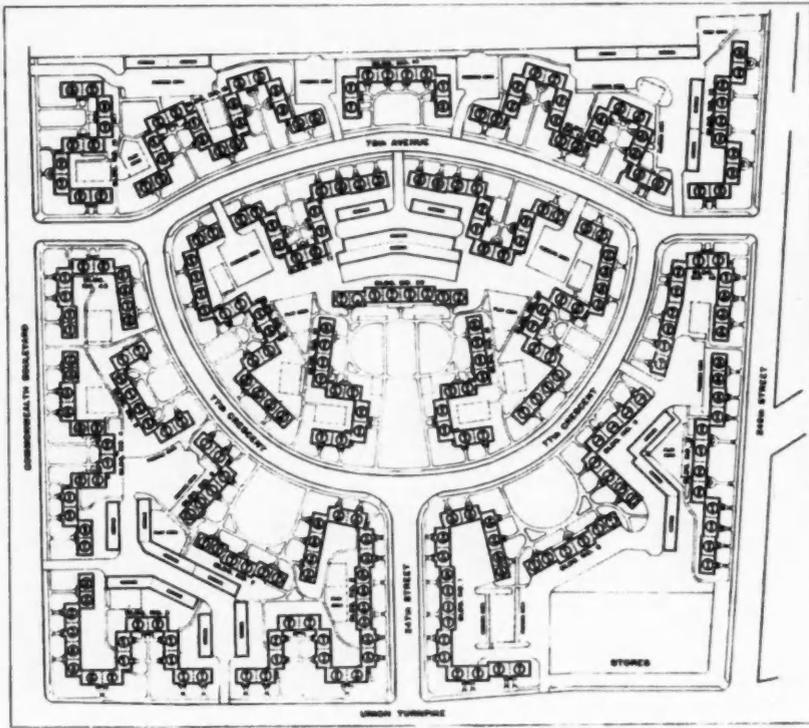
complete, self-contained community. It will have its own 15-acre shopping arcade with stores, restaurants, a theater and ample parking space. While the tract is roughly rectangular in shape, the interior is elliptical to permit grouping of the apartment structures so that there will be no appearance of "row housing." How effectively this has been done can be seen in the air view at the top of the page. This is the first section of 376 apartments, over half of which already are occupied.

The building firm of Gross-Morton is well known in the New York City area. George M. Gross is president, and Alfred Gross and Laurence Morton are the other members of the firm. They retained Benjamin Braun-

stein, architect at Jamaica, L.I., to design the structures at Glen Oaks Village. William F. Hueg is general construction superintendent for the project.

All the buildings in Glen Oaks will be two stories high and will reflect early American architectural tradition in the use of red brick and white trim. Buildings are grouped around the main driveway which forms a large circle. The apartments will vary in the number of family units each will contain.

Apartments will consist of 3, 3½, 4½ and 5½ rooms each and will rent for from \$76 to \$108 monthly. Each apartment will have complete modern kitchen equipment with cabinets, electric refrigerator, gas range and



PLAT plan at left shows first section of village, now nearing completion. This is one-seventh of entire project. Families move into apartments as soon as possible

counter-top sink. Laundry facilities, with electric washers and gas driers will be provided in the basement of each structure. Those who desire individual garages can have them at moderate rental, and supplemental free parking areas are provided.

Of particular interest to builders is the heating system designed for Glen Oaks. There will be 40 boiler rooms to provide forced hot water to the complete project. Each boiler room will have two boilers and will heat from a minimum of 32 apartments to a maximum of 76.

The heating system was engineered

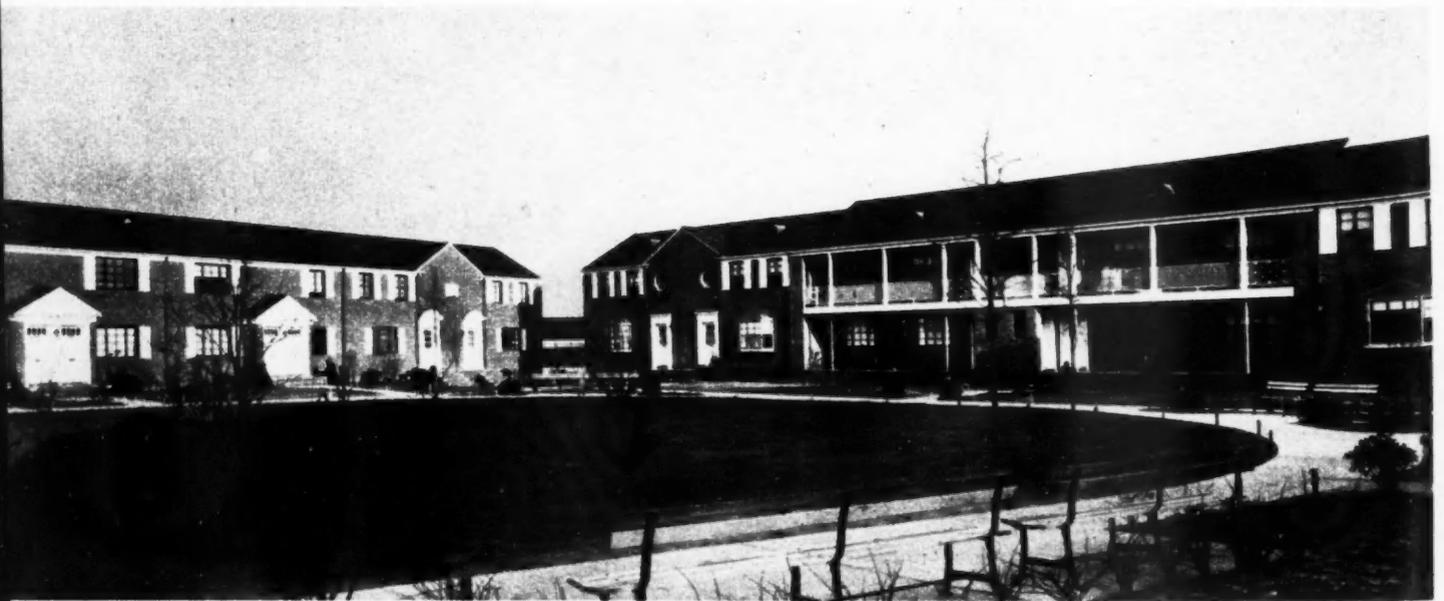
by William H. Dusenbury of New York City. Hot water was chosen as the heating medium.

The system is a one-pipe design, and the forced circulation feature permits pipe of small diameter to be used. A 1 1/4 inch pipe feeds each building, and 1/2 inch to 3/4 inch pipes serve individual apartments. Narrow, thin-tube radiators, placed beneath windows, cut radiator space requirements to a minimum. The heating system is designed to carry water at 200 degrees F. when the outside temperature is zero. Average water temperature in the system will be 160

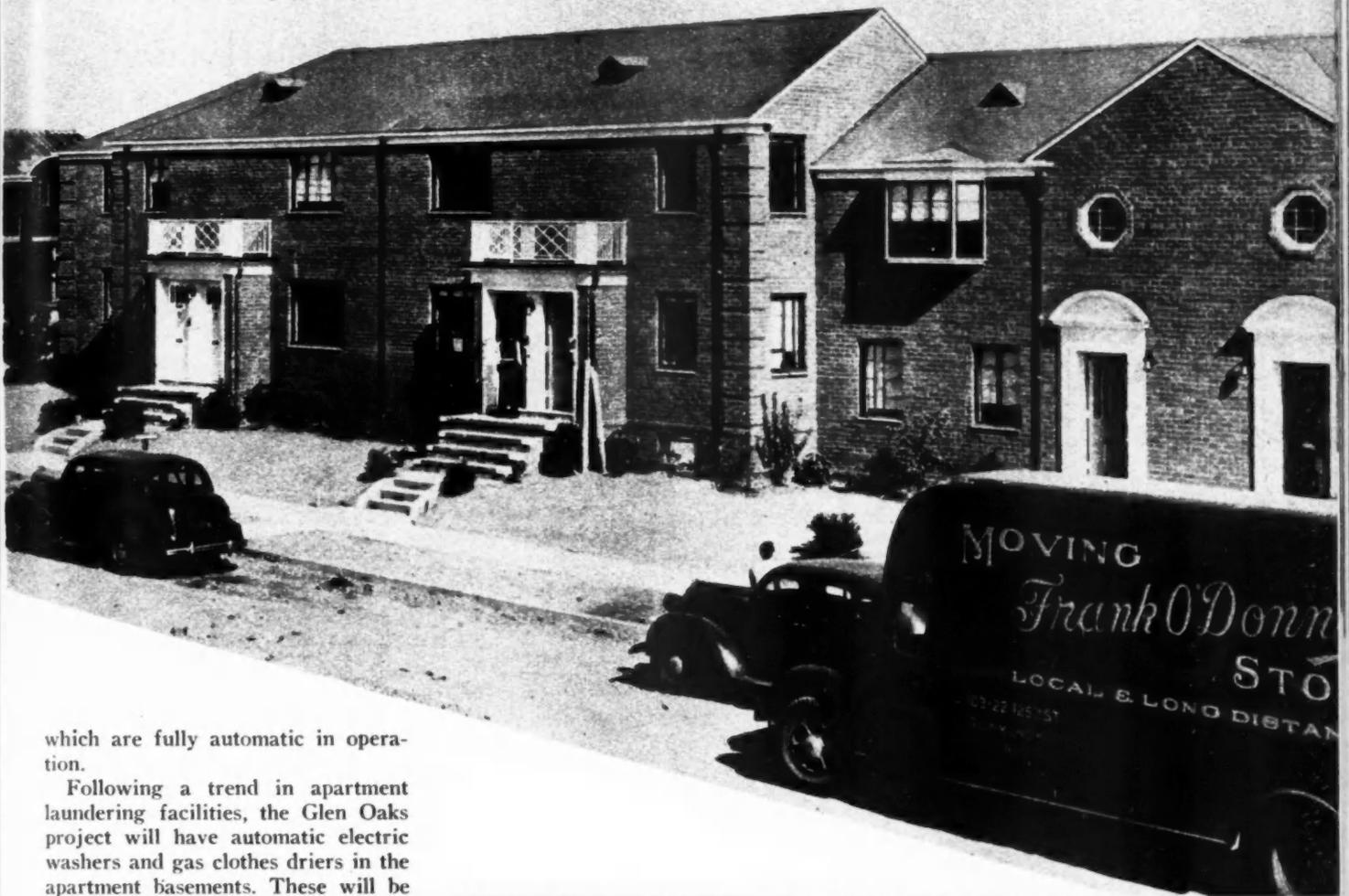
degrees. Circulation and heating is controlled by an outside weather thermostat.

An aquastat controls and operates a three-way motorized valve at the boiler. This makes it possible to bypass the boiler with the water in the system, or to pass it through the boiler.

Hot water heating circuits have been kept down to a maximum run of 500 feet from the circulating pump to the end of the circuit. Submerged hot water heaters furnish the hot water supply for apartments and laundries. The boilers are heated by oil burners



THIS completed section shows the colonial traditional design which harmonizes with the spacious lawn and planted areas



which are fully automatic in operation.

Following a trend in apartment laundering facilities, the Glen Oaks project will have automatic electric washers and gas clothes driers in the apartment basements. These will be provided by concessionaires, and tenants will pay a fee for their use. Basement storage space and baby carriage rooms are provided for use of tenants, the latter being made accessible by convenient ramps.

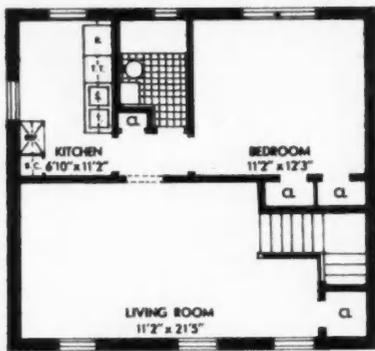
Both indoor and outdoor recreational facilities will be provided. Dozens of playgrounds will be placed in strategic areas throughout the village, equipped with swings, slides and sand boxes. It is estimated that there will be 25 square feet of playground area for each small child in the development.

Indoor recreation facilities will include branch libraries, workshop benches and photographic dark-rooms for hobbyists, and recreation rooms, with complete kitchen facilities, will be at the disposal of tenants who wish to entertain. The village is not far from Long Island ocean beaches and there are nearby golf clubs and public recreation areas to supplement the play opportunities provided in the village itself. Since it is bordered by four arterial highways, Glen Oaks residents can easily reach these other areas.

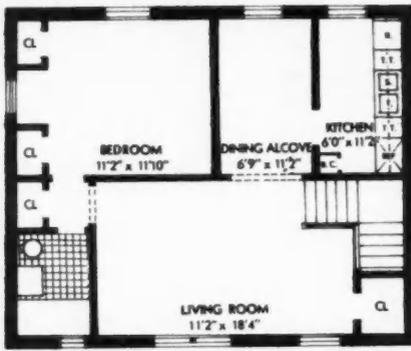
In addition to the main 15-acre shopping center an additional block of 14 stores for the convenience of the tenants in the apartment section is



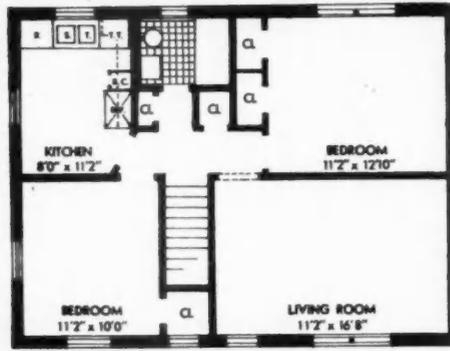
APARTMENTS can be seen in all stages of construction as first section progresses



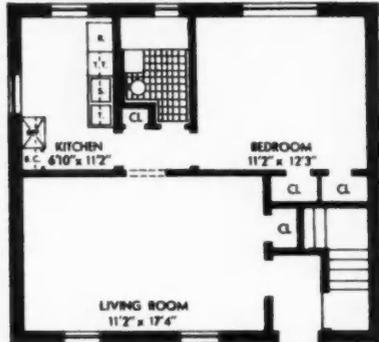
SECOND FLOOR PLAN  
3 ROOM APT.  
UNIT A



SECOND FLOOR PLAN  
3 1/2 ROOM APT.  
UNIT B



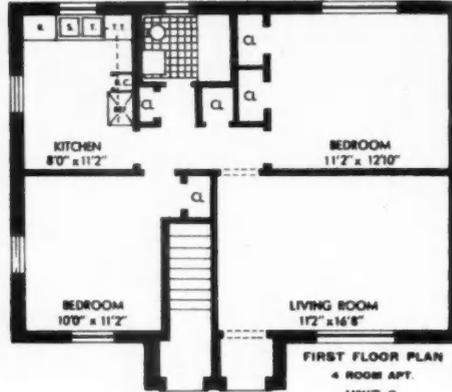
SECOND FLOOR PLAN  
4 ROOM APT.  
UNIT C



FIRST FLOOR PLAN  
3 ROOM APT.  
UNIT A



FIRST FLOOR PLAN  
3 1/2 ROOM APT.  
UNIT B



FIRST FLOOR PLAN  
4 ROOM APT.  
UNIT C

TYPICAL floor plans above show room arrangements of some of the various size apartments in the Gross-Morton Glen Oaks project in New York City. Large living rooms predominate even in the three-room apartments. In the four-room apartment, one room may be used as either a bedroom or dining room, according to need. Ample closet space is provided in all apartments

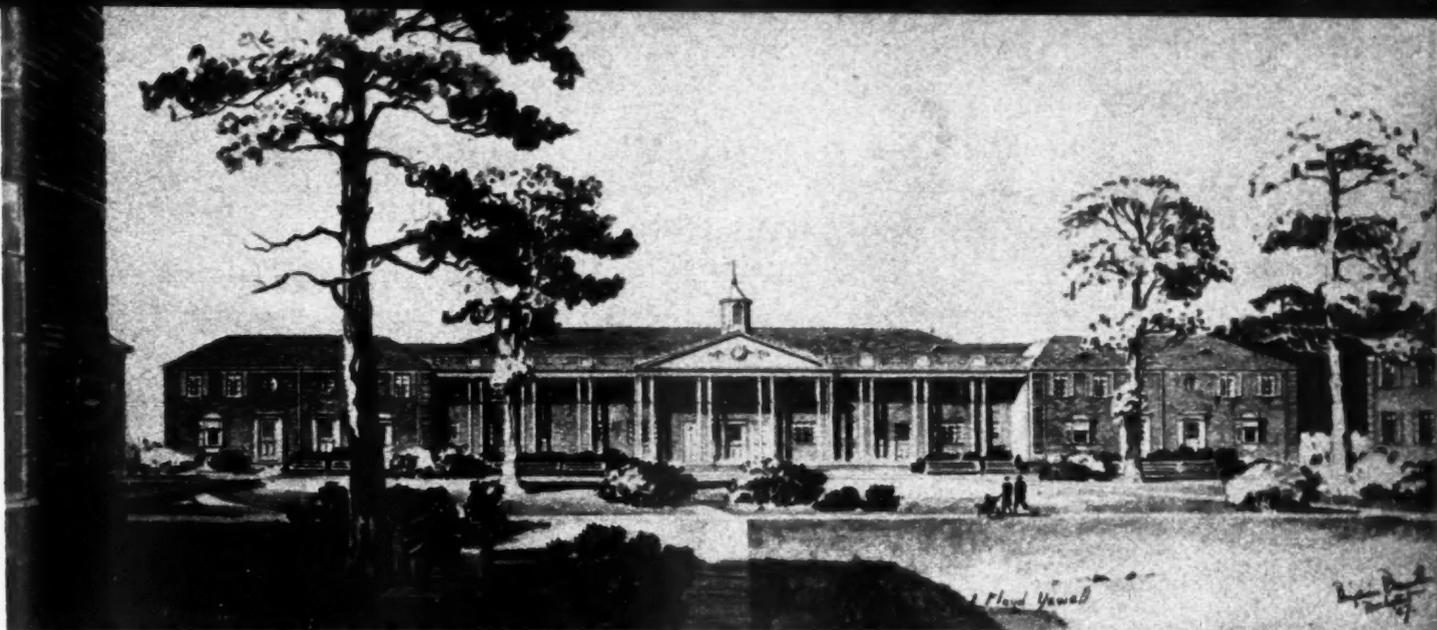
already underway on the Union Turnpike blockfront between 248th and 249th Streets. In this block, the Great Atlantic & Pacific Tea Co. has leased space for one of its super-markets on a long term, taking space equivalent to three stores. Floor area for the market will measure 60x115 feet.

Leases also have been issued to a pharmacy, a gift shop, grill, dry cleaner, an independent meat market, a bakery and a retailer of women's and children's wearing apparel.

The landscaping program for Glen Oaks is a big project in itself, one of the most elaborate ever applied to apartment house construction.

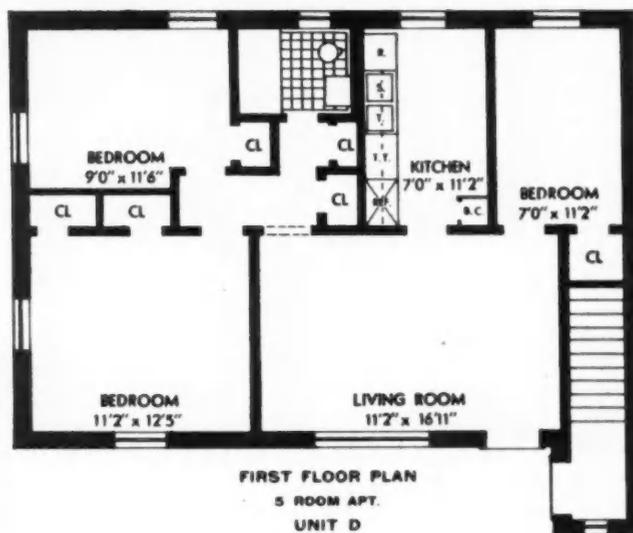


PLEASANTLY curving streets permit grouping of building to avoid any appearance of row housing. Plantings will soften view



FEATURE structure at end of the entrance mall. This building is completed, except for the front columns which were delayed

**This garden apartment community will have its own fifteen-acre shopping arcade with stores, restaurants, a theater and ample parking space. All buildings will be two stories high**



AT RIGHT is the first floor plan for the largest apartment, a 3-bedroom unit with total of 5 rooms. In two of the bedrooms, twin beds can be accommodated; note closets

**MATERIALS AND EQUIPMENT USED AT GLEN OAKS .**

- National Gypsum Gold Bond Lath
- National Gypsum plaster
- Flintkote exterior sheathing
- Taylor cotton insulation
- J. S. Thorn steel sash
- Aetna Steel Co. door bucks
- Pacific Steel boilers
- Capitol Thin-tube radiators (U. S. Radiator Co.)
- J. P. Ward Foundry Co. malleable and steel pipe fittings
- Phelps Dodge Co. brass pipe
- Mercer Tube Co. steel pipe
- Central Foundry Co. cast iron pipe
- Morse-Boulger garbage incinerators
- Lightolier lighting fixtures
- Kohler & Kohler plumbing fixtures
- U. S. Quarry Tile Co. bathroom tile
- Sparta Ceramic floor tile
- Willett bathroom accessories
- Lockwood hardware
- Armstrong linoleum
- Welbilt gas ranges
- GE electric refrigerators
- Westinghouse Laundromats (on concession)
- Hamilton clothes driers (on concession)
- Minneapolis-Honeywell Outside Weathermat
- Bell & Gossett circulating pumps
- Bell & Gossett submerged water heaters
- Berry garage doors



EXTERIORS are varied through different doorway and window treatment. Note bays

# 608's

**Builders and FHA officials work together to inaugurate construction of 1,003 garden-type 608 apartment units in Tulsa, Okla. Cost of this construction in city of 213,000 population is estimated at \$8,775,000**



**T**O SATISFY a large wartime growth in population which left the city sorely in need of all types of housing, garden-type apartment construction has hit a fast pace in Tulsa, Okla., as part of the answer to satisfying the needs of new residents. Home builders and FHA officials there realized soon after the war that the population growth was permanent and, consequently, they developed plans for constructing garden-type apartment accommodations to house those of the city's newcomers who desired such housing.

Home builders worked with Julian Rothbaum, Tulsa District FHA director and C. Ellis Hunt, assigned to process 608 applications, in procuring desirable sites, plans and financing. As a result of their efforts in the city of Tulsa, 1,003 garden-type apartment units in 31 separate projects are under way or planned, at a total cost of \$8,775,000. Rentals will run from \$55 up to \$80. More than 300 units are now completed and occupied. Tulsa has an estimated population of 213,000 exclusive of armed forces stationed there.

Because the city of Tulsa is comparatively new and has had the benefit of twentieth century city planning and land use practices in connection with its growth, there are no sections of the city which could be correctly classed as slum or blighted areas.

**PHOTO** at top left shows work under way on several buildings in Tulsa's big Osage Hills garden-type apartment project. Center photo is of Leemon Nix's Hillcrest apartments. Bottom photo is Edwin M. Kelly's 28-unit Kelly Apartments project



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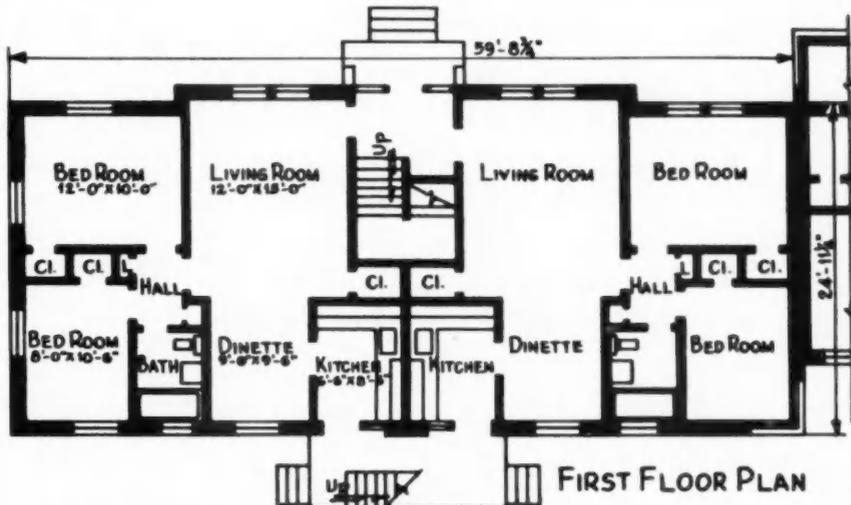
# Take the Spotlight



Therefore, reasonable land could be obtained adjacent to transportation, shopping, school and service facilities, in locations suitable for apartment dwelling, in a good variety of strategic city sections. Good land use, good planning, quality materials and high grade construction practices are resulting in the development of a fine group of garden-type apartments which rent at a moderate figure.

Home Builder Edwin M. Kelly is practically finished with his Kelly Apartments project of 28 units in a good location to rent for \$75 per month. These structures are of frame construction covered with brick veneer. The two-bedroom apartments, planned by W. H. Calderwood, AIA, have hardwood floors, tiled bathroom walls and floors and compact, efficient kitchens. Heat for the first floor units is provided by floor furnaces and heat for second floor apartments is obtained with wall heaters. Laundry and storage facilities are being provided in a separate building. Garages to accommodate 12 automobiles are being constructed and on-site parking is provided for other automobiles. Large window areas, spacious hallways and plenty of ground area around the buildings are desirable features of this 608 job.

Leemon Nix is completing 24 units in his Hillcrest Apartments, also designed by W. H. Calderwood. These buildings are concrete block with brick trim over frame construction. All the units in these two-story buildings have two bedrooms, good-sized living room, dining area and efficient kitchen. Floor furnaces provide heat for the first floor units and wall panel



PICTURE at top shows Kelly Apartments under construction, with each apartment conforming to the basic plan above. These units rent for \$75 per month



TYPICAL entrance to Kelly Apartment buildings. Note effective use of glass block



heaters are used on the second floor. Laundry room and storage facilities are provided in the basement. All floors are hardwood except the kitchen and bathroom. Bathroom floors are covered with asphalt tile, and linoleum is used in the kitchens. All cars owned by residents will be parked on the site. These units are renting for \$75 per month.

The largest single garden-type apartment development in Tulsa, however, is the Osage Hills project, which is being handled by a group of seven builders. The land for these 530 units was made available for de-

velopment only recently. For years it had been tied up in an estate. The site is ideally located for apartment dwelling because of rapid transportation to the downtown area, good schools and good neighborhood. It is directly opposite a country club and golf course so that the entire project will face a wide expanse of open, wooded area. It is also on high ground, an important factor in that climate during warm summer months.

Robert W. Adams, of Adams and Leonard, Tulsa, has the largest single group of units under way in the Osage Hills development. He has two

separate groups of 52 units each and another building of 26 units, a total of 130 apartments. W. H. Calderwood is the architect for Mr. Adams, and also for the following builders in Osage Hills: Dale Carter, two projects of 52 units each; K. M. Vaughn, two projects of 26 units each; Everett Johnson and Clyde Sears, two projects of 26 units each; Don Nix, one project of 32 units.

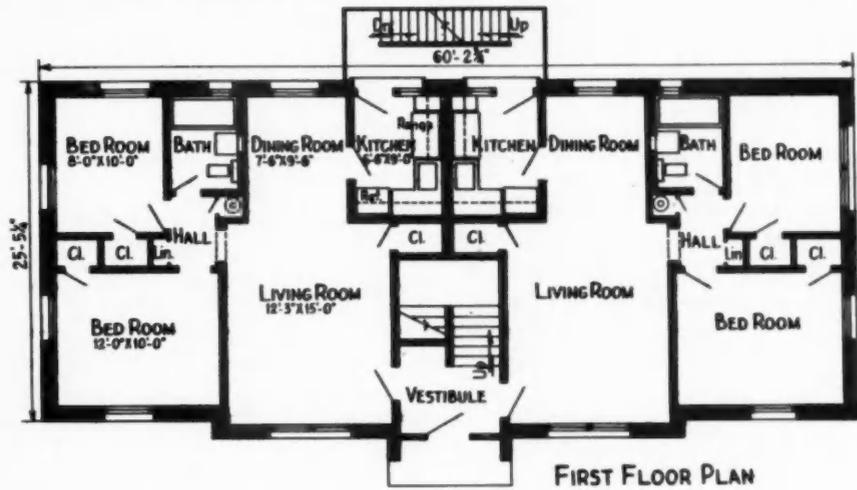
All of these buildings designed by Mr. Calderwood will have the living room, dining alcove and kitchen on the first floor and two bedrooms and bath on the second floor. Basements will provide laundry and storage facilities. Heat will be provided by Royal Jet Flow circulating air wall heaters, gas-fired. The majority of these apartment units will have ventilating fans, garbage disposal units and clothes dryers. Automatic washers will also be supplied in most of them.

Buildings will be of frame construction with brick veneer exterior. The buildings will cover only 18.6 per cent of the land area with 19.6 families per net acre. This is true of the entire Osage Hills project. All automobile parking will be on site.

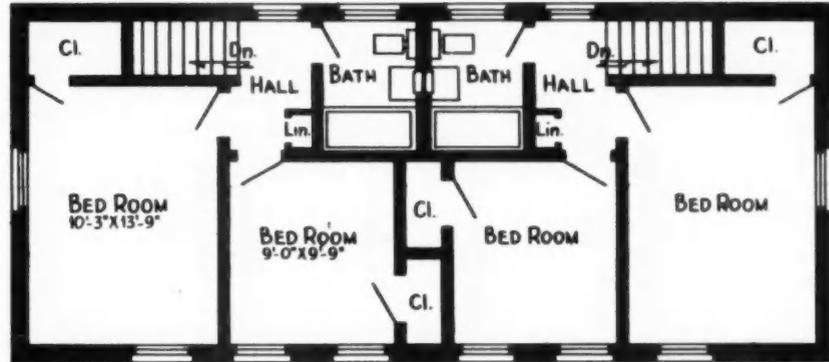
Frederick V. Kershner, AIA, designed the garden-type apartment units which Leemon Nix, Max Campbell and King Dickason are building in Osage Hills. Mr. Nix is building a 24-unit job, Mr. Campbell, 24 units and Mr. Dickason, 100 units. All of these buildings will be of frame construction with brick veneer, with large window areas and efficient apartment layouts. A separate building is being designed by Mr. Kershner on each project to house laundry



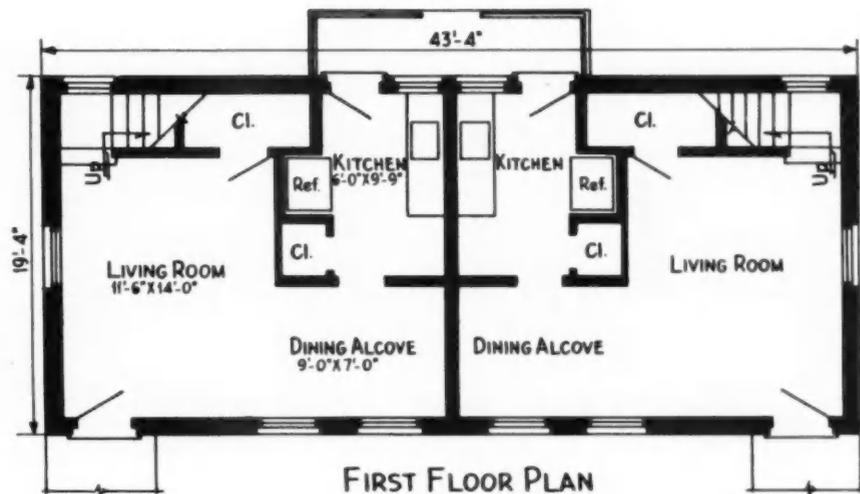
**VIEW in Osage Hills, the largest 608 project in Tulsa. When completed there will be a total of 530 apartments constructed by seven Tulsa home builders**



**HILLCREST** Apartments nearing completion in Tulsa will rent for \$75 per month. Buildings are frame with concrete block exteriors. All automobile parking will be on the site. Floor plan for the 24 units is above



**SECOND FLOOR PLAN**



**FIRST FLOOR PLAN**

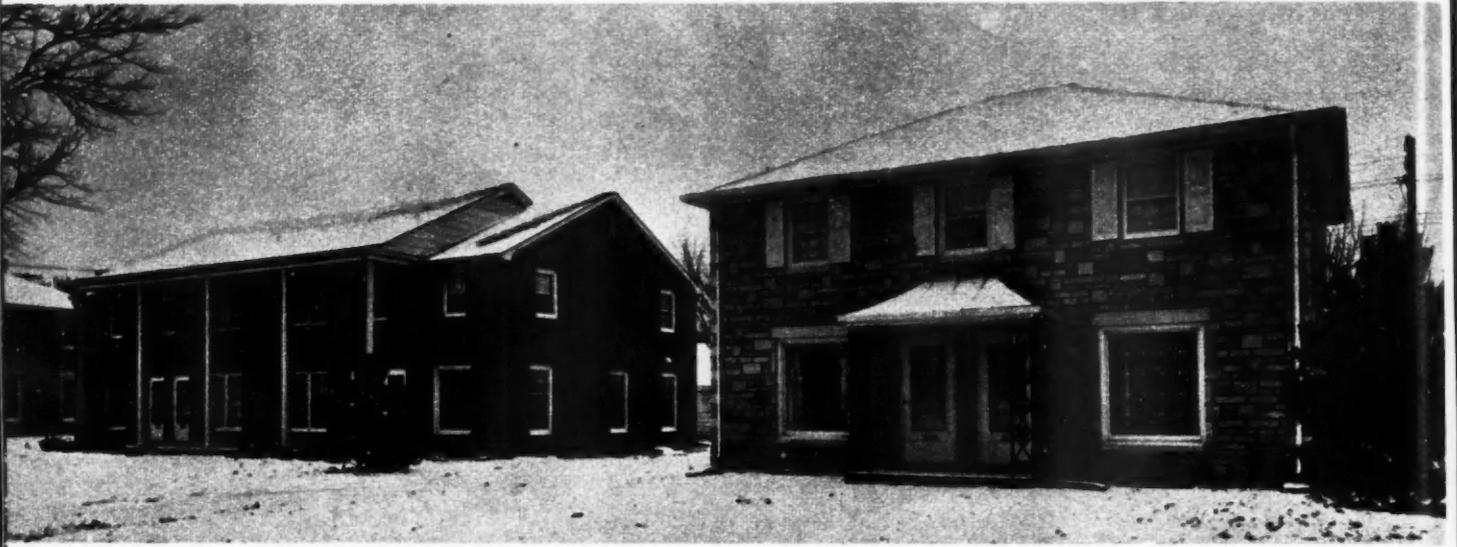
facilities, janitor quarters and storage accommodations. Heat in these units will be provided by Royal Jet Flow gas-fired circulating air wall heaters.

Another of the large 608 projects getting well under way in Tulsa is the Harvard Apartments project which will contain 172 five-room apartments in two-story frame and brick veneer buildings. This job is being constructed by Crane & Dohe, contractors, with Joe Frates and G. A. Chandler, the 608 sponsors. The buildings will be grouped around curvilinear streets with large play and recreational areas planned. Undercover parking will be provided for 172 automobiles and a small shopping center will be constructed.

One of the outstanding features of the Harvard Apartments project is the fact that each apartment unit will be heated by an individually controlled, General Electric, gas-fired, forced circulation, warm air furnace.

Much of the success of 608 development in Tulsa is due to the splendid teamwork between home builders there and the FHA office. Mr. Rothbaum, the local FHA District director and Mr. Hunt, FHA man in charge of 608 processing, have spent much time helping builders and architects plan quality jobs for permanent value high-quality residential apartments. The average processing time for all applications in the Tulsa FHA office from July 1, 1947 to Dec. 31, 1947, was 5.15 days.

**RENDERING** above and floor plans at right illustrate type of apartments designed by W. H. Calderwood for Osage Hills. F. V. Kershner also designed a number of buildings for this project



**BUILDINGS** are entirely insulated, storm windows and screens provided

## **One Housing Unit Every Six Days Completed in 608 Project**

**N**EBRASKA'S first Title 608 rental housing project, nearing completion in Lincoln by the Sweeney-Solheim Co., was started in May, 1947. These units are a part of almost 300 homes this company has completed. Since the fall of 1943, when Sweeney-Solheim began construction of similar houses, the concern has produced approximately one housing unit every six days.

When Nebraska's FHA office approved the Sweeney-Solheim Company's commitment application for the Lincoln project, work was immediately started on it plus two other 608 projects and several Title 603 rental housing units in other sections of the city.

The Title 608 rental housing units in Lincoln are 4½ and 5 rooms, designed for two and three bedrooms. Intended for two and four family buildings, they were constructed in

a natural apartment rental area near the state agricultural college.

To eliminate monotony of one design, plans of the buildings were varied. In accordance with FHA's plans for more attractive housing frontages, the buildings were arranged in staggered set-back positions from the street.

New streets were constructed in the area, as well as driveways and parking areas. Ornamental lighting will be installed along both sides of the street. The units are designed so that each tenant may have his own facilities for heating and lighting. Yard maintenance and water are to be furnished by the owner, and new General Electric stoves and refrigerators are provided for a charge.

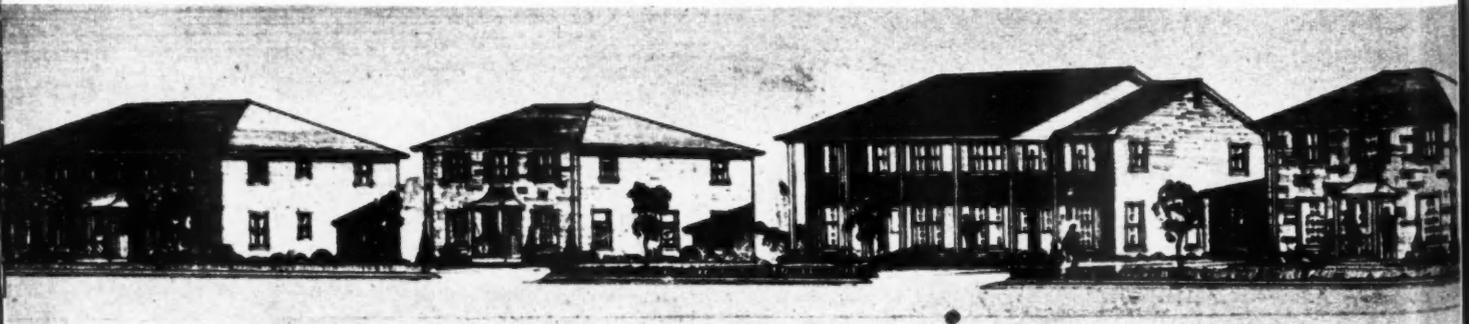
Foundation walls are of concrete block; exterior wall construction above grade is either limestone or face brick. Interior walls are plas-

tered; oak floors are used throughout except in kitchens and baths, which have linoleum.

Vertical partitions between apartments in the Nebraska Title 608 project are constructed with 2x4 studs, staggered, and a blanket type insulation used between them. Deadening felt is used between all sub-floors and finished floors.

All apartments in the project have two compartment sinks, and laundry facilities are provided in the basements for each tenant. Garages are equipped with sectional overhead door hardware.

Sweeney-Solheim Co. expects to complete three of their 608 projects in April of this year—to have a total of 74 rental units completed and occupied. Efficiency in planning building operations; efficiency in procurement of materials, have enabled them to establish this record.

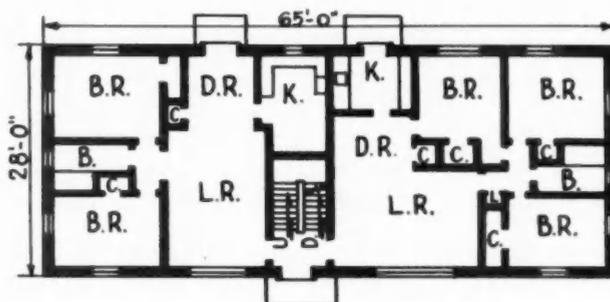
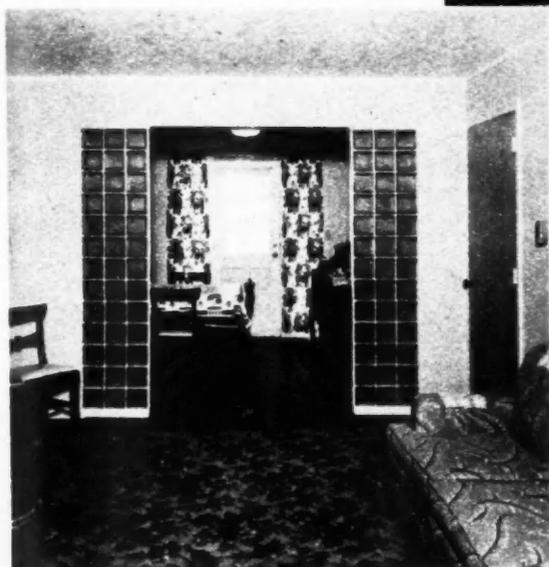


**VARYING** designs in styles avoid stereotyping, are approved by FHA

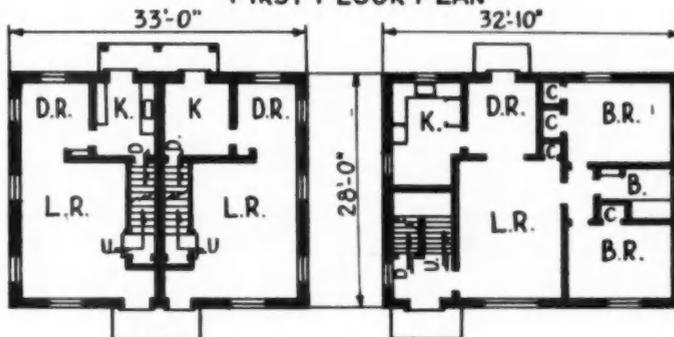
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New garden type units near completion by Sweeney-Solheim and Co. in Lincoln, Nebraska. Varied design eliminates monotony and makes attractive street



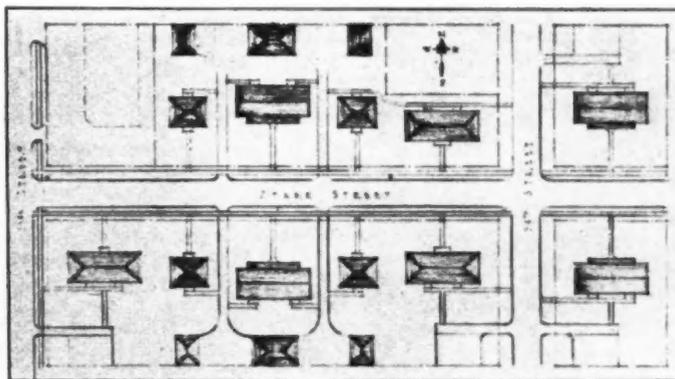
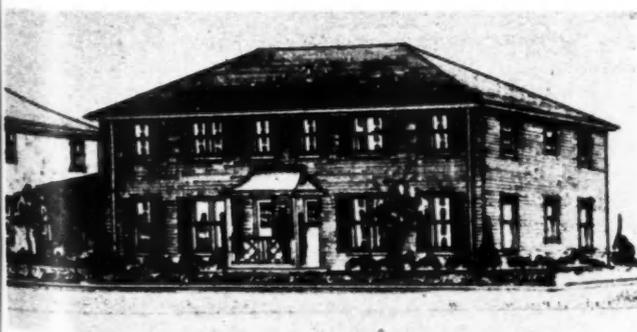
FIRST FLOOR PLAN



FIRST FLOOR PLAN

FIRST FLOOR PLAN

TOP RIGHT shows interior of one house in Lincoln project. Wood used in interior construction is pine, either enameled or blond finish. Notice glass panel in partitions (above); oak floor in dining room. At right is shown variation of designs used throughout the constructions. Houses are designed for two- and four-family units



PLOT plan shows staggered set-back arrangement for attractive frontage



COMMUNITY Builders Council in action at the recent convention of the National Association of Home Builders in Chicago

## LAND—A VALUABLE ASSET—Must Be

**Imagination plus energy on the part of builders have produced a host of planned communities. Thus, from the idea to plans and now in reality, progress in land use is sweeping across the nation**

**U**NDER the impetus given to land planning principles, through the Country Club project of J. C. Nichols, in Kansas City, community development in all phases, has gone ahead with great strides.

That this type of planning is in a constant state of flux is due in great measure to the leaders in this field. Never satisfied with the results that have been obtained, they are always seeking to interpret the habits and requirements of the public, as they relate to housing, shopping, entertainment and education. Their desire to produce a better place in which people may live, spurs them to action.

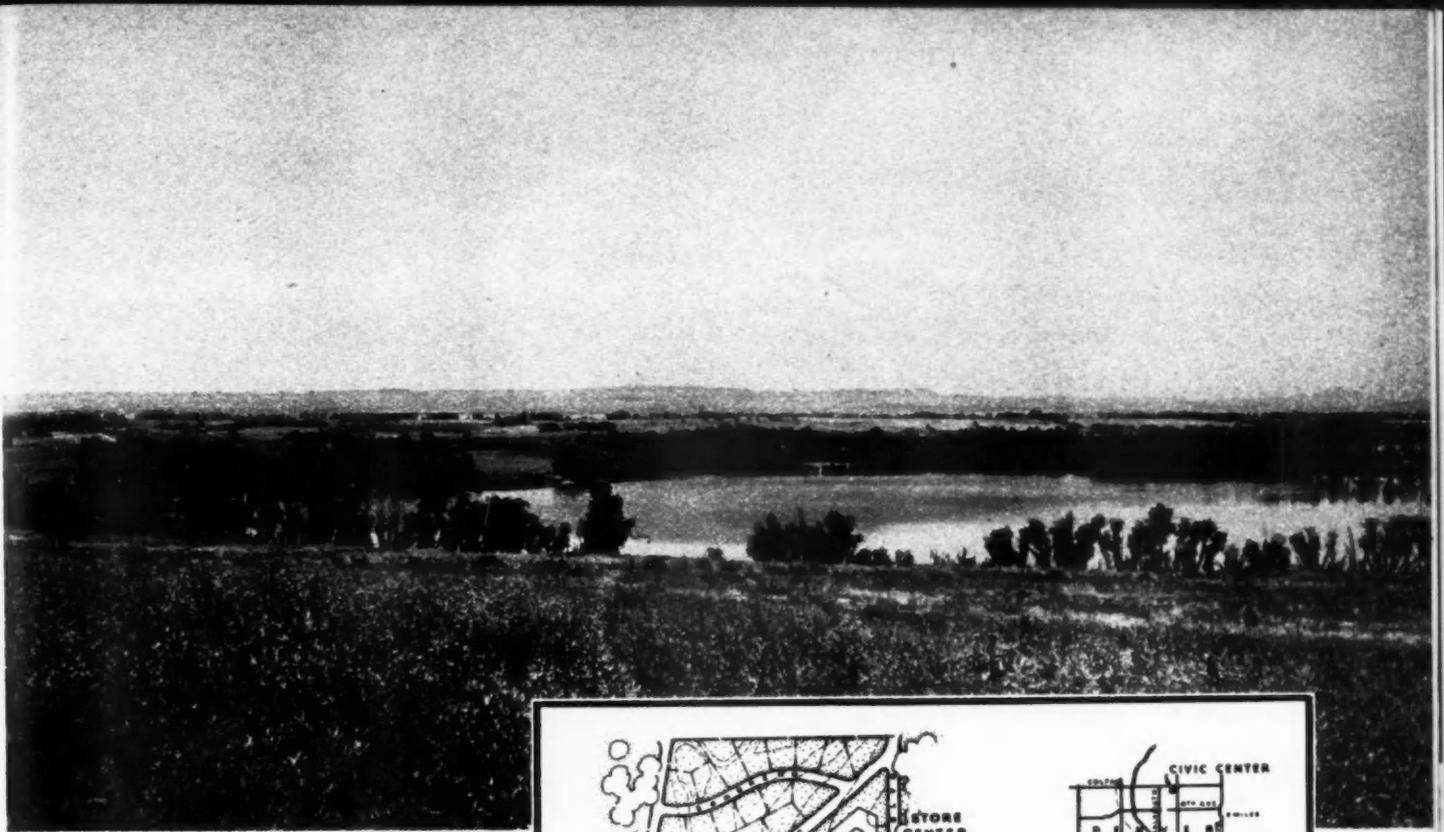
An example of this, was the Community Builders Council panel at the recent convention of the National Association of Home Builders, in Chicago. Leaders in the land planning field, spearheaded by J. C. Nichols and Seward Mott, analyzed and discussed projects that were submitted to them by the association members, in an all day session. The Association men were anxious that their project come under the scrutiny of this panel, in order that their particular community might benefit thereby.

Playgrounds, parks, shopping centers and their relation to the community have always been given major consideration in land planning. With changes taking place in the public's mode of living, it becomes mandatory for land planners to be mindful of the trend, and to seek to improve their layouts.

A definite movement toward an increase in the areas allotted to parks and playgrounds has been noted. A combination of these two units, placed into one large area

**J. C. NICHOLS, developer of the Country Club District in Kansas City, Mo., receiving from W. P. Atkinson, Oklahoma City, an engraved plaque, naming him as one of the outstanding developers in the country, presented during the NAHB convention**





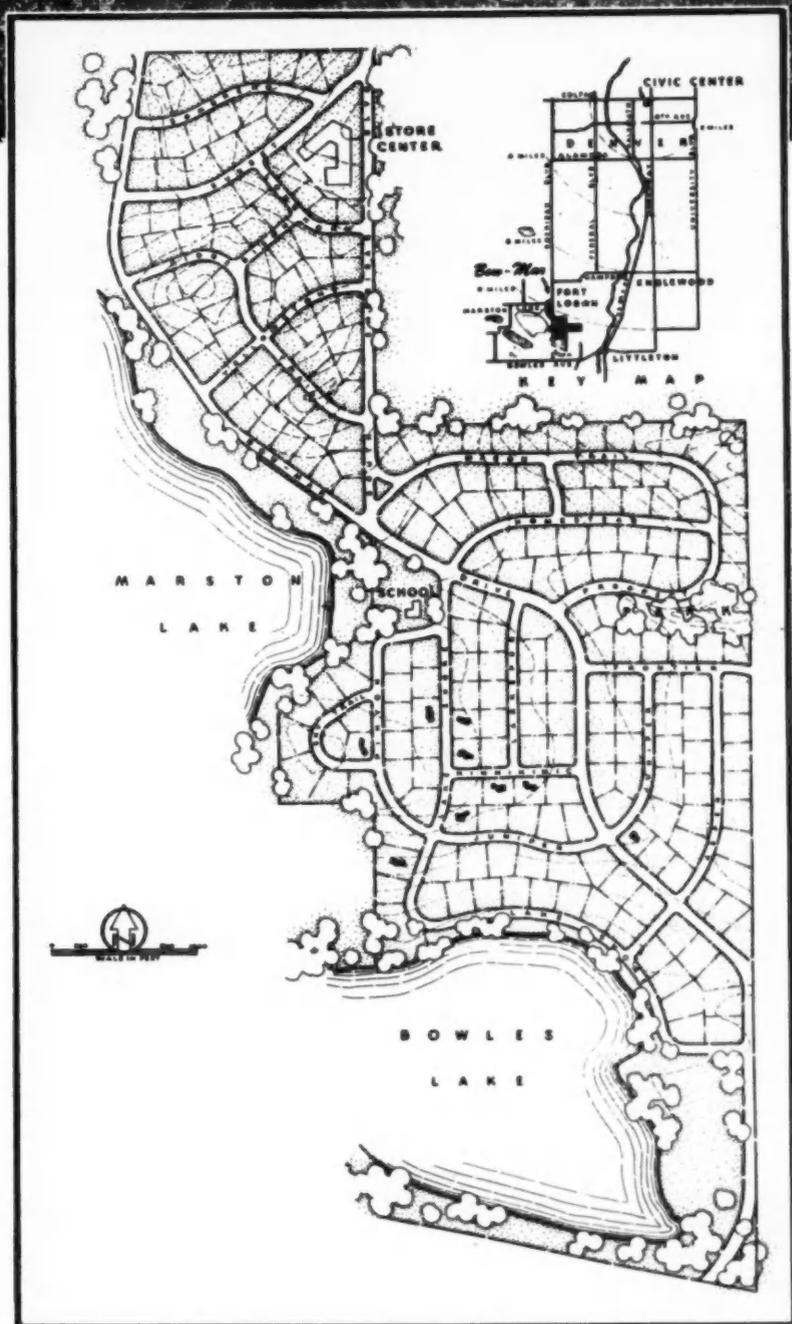
## Planned for Use

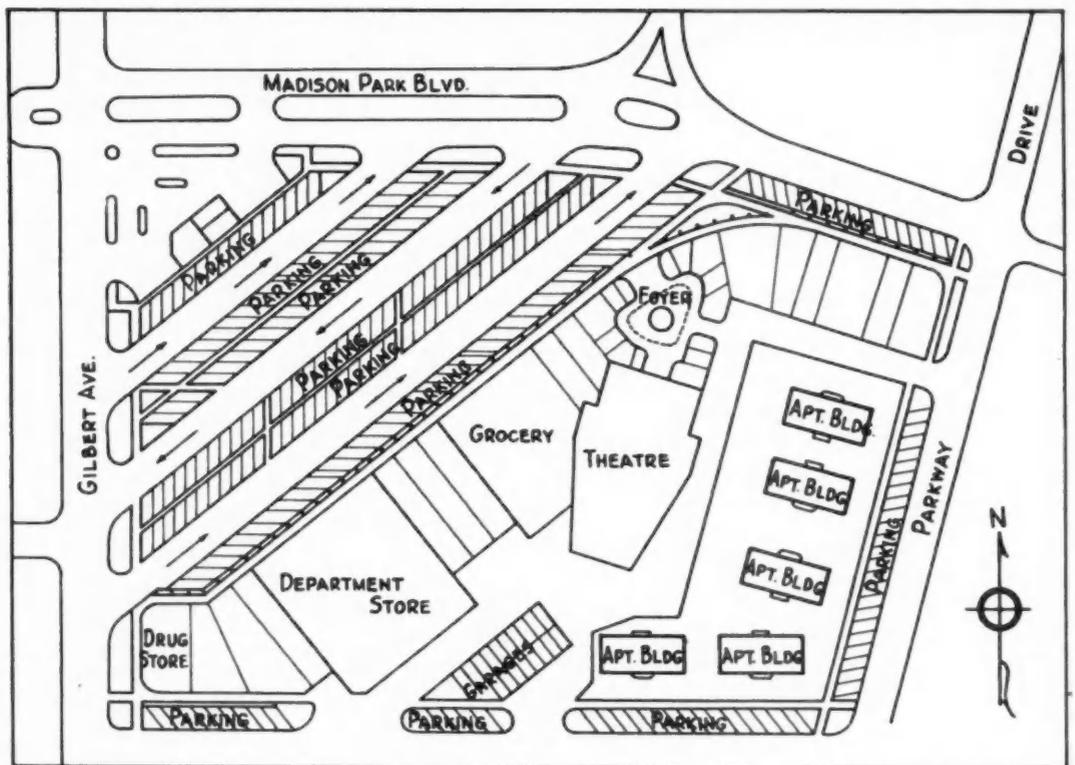
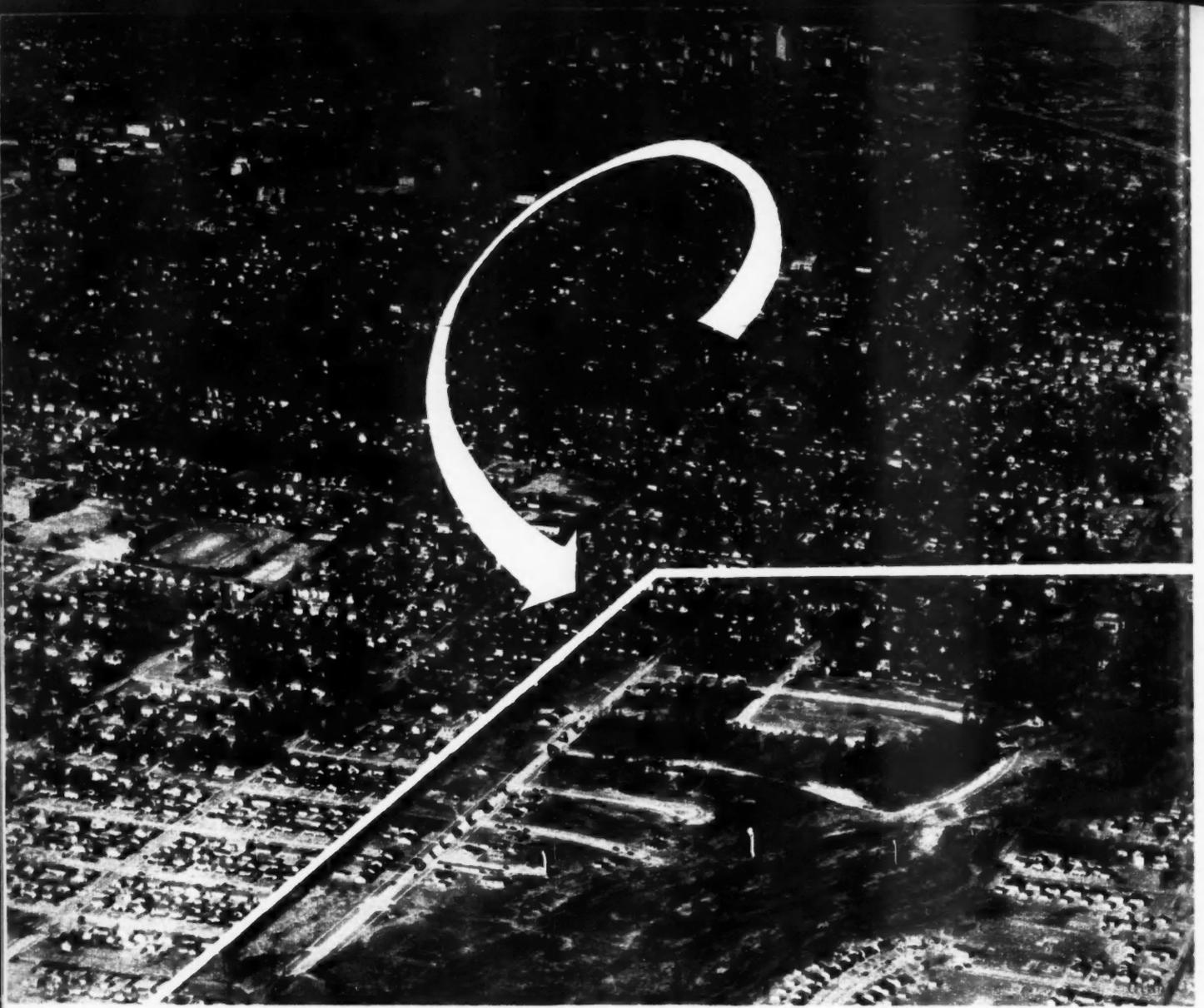
and centered around the school building, has been used with increasing favor. Six to twelve acres are generally allowed for this purpose, depending upon the size of the project.

Dead-end streets and cul-de-sacs are becoming increasingly popular, primarily, because this type of construction costs less than through streets. Buyers prefer rights on cul-de-sacs since they provide a measure of protection for children. Objections to this type of road planning have often been raised by city authorities, because of inadequate turn-arounds, and difficulties in servicing fires.

Blocks of 1,800 to 2,000 feet in length permit savings up to 20 per cent. Excessive number of corners and side street maintenance are eliminated. The trend now is to move setback lines for house location closer to the street. This was caused by the idea of orienting the house to garden areas in the rear. The popularity of the one-story house has caused an increase in lot widths. A minimum of 60 to 65 feet is usually established.

**AT RIGHT:** Plot plan of Bow-Mar, a community of suburban estates, laid out along shore of two lakes, located six miles from Denver. Above: View across Bowles Lake before construction





ABOVE: Air view showing Madison Park development outlined in the foreground with the commercial area of Shreveport, La., clearly indicated at top of picture. Detailed plan of the shopping area of the development shown at left

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**Complete facilities for a self-contained housing and shopping area are provided in the Madison Park project located in Shreveport, La.**

The cost of street improvements and utilities have had a tendency to prevent a wide-spread acceptance of this idea.

The use of an additional parallel service road has been successfully employed by developers where the project faces a through highway. An alternate arrangement of providing exceptionally deep lots with extensive landscaping, where the lots adjoin the highway has had a definite appeal, due to the economy involved.

The relation of the shopping center to the development is all important. The distance separating these elements depends on the arrangement and the size of the project. A large developer in Oklahoma City, in a recent project, kept the center of the shopping area about 3/4 mile from the choice residential section with apartments in between, acting as a buffer. The grade school is one mile from the shopping area, and the high school is two miles. Churches are placed on

the fringe of the project and provided with off-street parking. Ample parking facilities are an essential factor to the shopping section. It is the life line of the merchant and cannot be neglected. In determining the space to be allotted for this service, the builder needs to anticipate the future growth of the development.

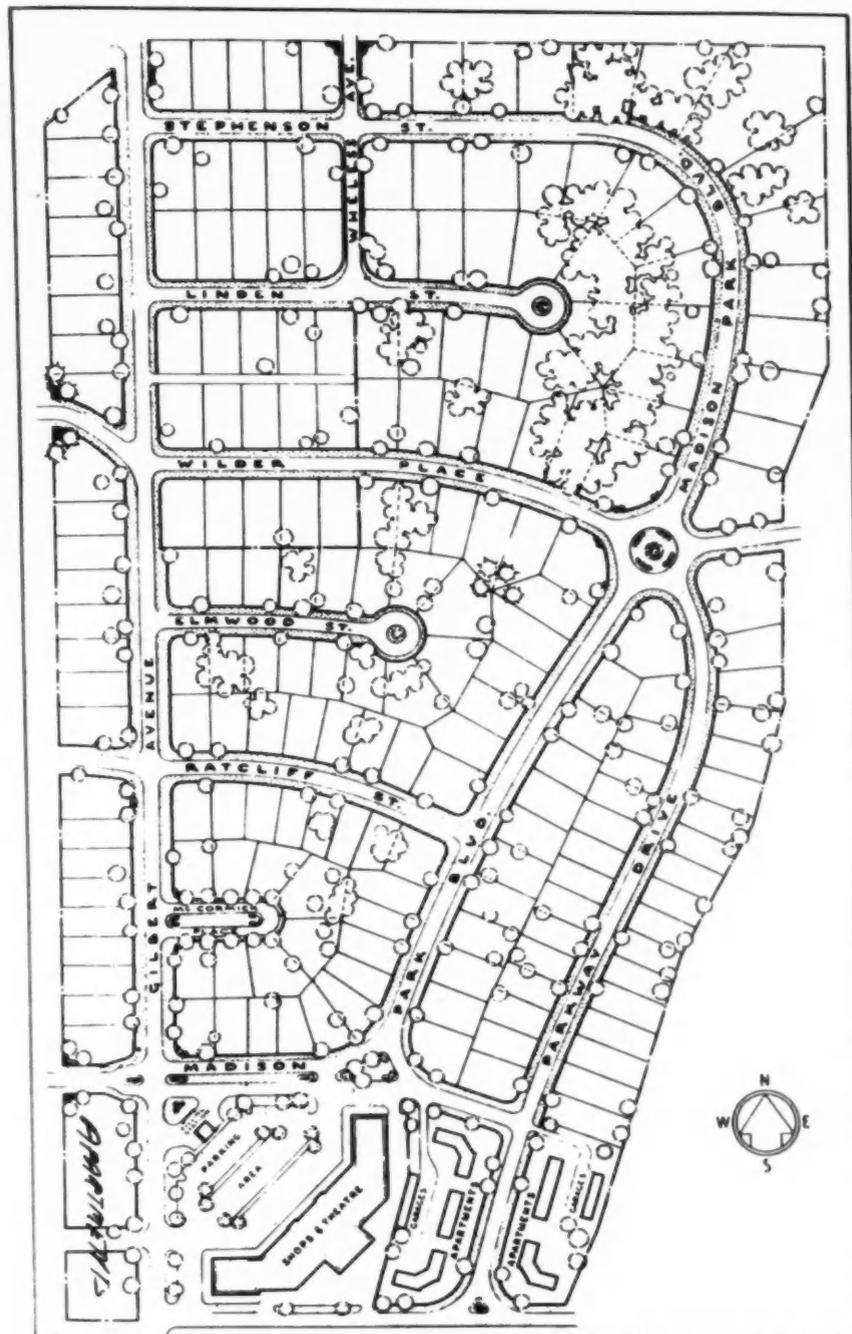
Primary considerations should not be overlooked. This applies to a knowledge of the land on which building is contemplated. The drainage condition and the length and size of utilities should be thoroughly studied before any commitment is made. In addition, the topography of the land should be analyzed to anticipate the kind of layout that would best suit the site. Accessibility to main roads leading to an urban center is necessary.

The two developments shown on these pages are entirely different in character.

The Bow-Mar subdivision is a tract of land overlooking Marston and Bowles Lakes, near Denver, Colo. One parcel of land was acquired by Lloyd J. King in 1942, on which he then erected a home. The unusual site attracted so much attention from motorists, that Mr. King acquired four additional parcels that now make up the 250 plot subdivision containing 677 acres. Bowles Lake which lies directly in the shadow of Mt. Evans beautifies the south 100 acres of the site for the enjoyment of Bow-Mar residents.

Bow-Mar is to be developed into an ideal suburban community with an association having full control over design and construction of all homes to be built. Lots are not being offered to all comers, but are being handled on a personal basis, friend bringing friend.

Madison Park the other project shown, is located on the outskirts of Shreveport, La. This subdivision is being developed by the Frank J. Zuzak & Co., with construction already underway. The shopping, theatre and apartment house sections are still in the planning stage. The detailed layout of this portion of the project, as shown on the preceding page, was planned after Mr. Zuzak visited many of the large shopping centers throughout the country. The pattern used, follows in general the arrangement that has been successfully employed by Joseph Meyerhoff, in the layout of Edmondson Village, Baltimore, Md.



**LEFT: Plot plan of Madison Park. This is the first large land planning project to be worked out in accordance with the new planning and commercial development principles enacted in Shreveport, La.**



## RUGGED HILLSIDE ENGINEERED FOR BUILDING SITES

ABOVE is typical of rough terrain encountered in this attractive subdivision with curved streets, rocky soil and tall trees

**P**RACTICALLY every type of soil and terrain presents special problems to be overcome by land developers before home building can be started with certainty that foundations will hold up and surface water will drain off. The problems confronting builders who operate in and near Seattle are among the most difficult to be found in any inhabited community. The reason is that the terrain is largely steep, rugged hills, studded with rocks and boulders, and covered with immense stumps, growing trees, and tangled underbrush.

Since some or all of these conditions are present in many other parts of the country, in some degree, the methods employed by Seattle builders and engineers to clear and develop land have wide interest.

Among the few builders in the Seattle area who deliberately look for rugged land to develop is Albert Balch. Seattle is growing rapidly, has been growing since the beginning of the war. Land values are high; and Balch, seeking to deliver houses at the lowest possible cost, reasoned that if he developed a technique for handling wild sites,

**Builder specializes in development of rugged hillside tracts in northwest, clears land of stumps, trees and rocks, makes use of natural contours, and achieves outstanding effects**

he might be able to purchase the land at some advantage, and produce building lots below the cost of less favorable tracts.

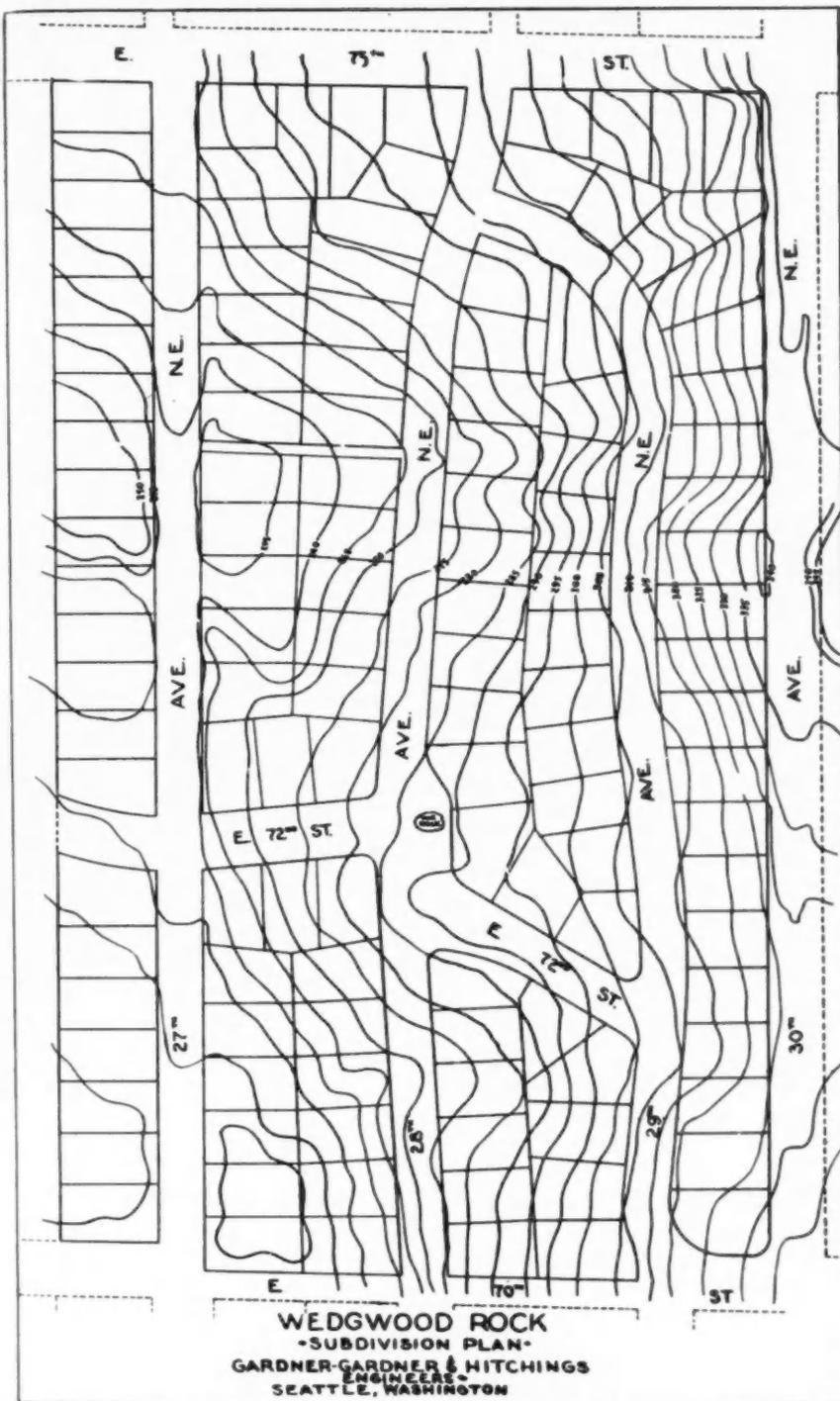
Indispensable to Balch is an assembly of heavy equipment including two crawler-type tractor bulldozers, a power shovel and hoe for digging trenches, a road grader, and three five-yard dump trucks.

Once interested in a plot of hillside terrain, Balch usually defers any action until he has had a chance to cruise the land in several rainfalls. This he does to determine the flow of rain water from the ground, and to locate pockets that will have to be filled. These cruises also serve to establish in his mind a general pattern for a future subdivision. The pattern resolves around the location of trees, and the possibility of saving as many as desirable; the location and size

of the large boulders; and the rough determination of street and sewer lines. If he finds conditions to be such that careful grading, good engineering and the use of equipment indicate that lots can be laid out economically, he proceeds to acquire the site, and call on his engineers, Gardner, Gardner & Hutchings, Inc., of Seattle.

One of the current Balch subdivisions in which building is under way is Wedgwood Rock, a ten-acre tract north of Seattle. The tract has a general slope of 10 to 20 per cent toward the west. The elevation at the east end is 345 feet. The fall is exactly 100 feet to the west line about 720 feet distant. Thus, the average slope is 14 per cent.

A large 20-foot boulder lies embedded in the middle of the tract. Rather than consider this particular rock a serious handicap, it was de-



THIS contour map of Wedgwood Rock subdivision shows drop of 100 feet from east line to west line 720 feet away. Irregular grade averages 14 per cent, poses real problems



EVEN the flat spaces are studded with old stumps, small trees, rocks and boulders

cided to utilize it as a landmark surrounded by an appropriate park.

Many practical considerations had to be utilized in Wedgwood Rock. The street grades were limited to 14 per cent, and provisions were made for routing through traffic around the project. No depressions were permitted in the middle of the blocks. Graceful curvatures in the street alignments were introduced to conform to the natural contours.

Good designing required that as many building sites should be above the adjoining street as possible. While Balch never places the foundations of a house in fill on a slope, he does use pay-dirt to grade up the remainders of lots on the low sides of streets.

Thus, on the hilly terrain of Wedgwood Rock, several of the building lots on the lower sides of streets were built up with excavated material from the basements of buildings on the high sides of the streets. Also, top soil from the entire area was stock-piled before street grading and basement excavations were begun, and the top soil was used later in the yards.

The natural features were preserved to a high degree in Wedgwood Rock. The desirable trees and shrubs were preserved where they could be used to harmonize with the individual building plots.

Practically all of Wedgwood Rock was a forest of trees and huge stumps, some of the latter running 10 to 12 feet in diameter. To remove the stumps, dirt was piled around the bases, and they were





**STUMP** at left with man's hat hung on it affords an idea of the average size of numerous stumps that have to be removed



**LICENSED** blasters placing charge of dynamite at base of stump preparatory to blasting it loose, as one of first steps in removing it from Wedgwood Rock tract

then dynamited by licensed powder men. The smaller trees which have to be removed are pushed over with a bulldozer when possible, otherwise cut down. On one operation, Balch sawed some of the logs into dimension lumber and shingles, and sold the balance to a mill.

After stumps are cleared away, and streets laid out, Balch often leaves whole clumps of trees to lend the appearance of a park. In Wedgwood Rock and in other Balch subdivisions, sewers frequently lie 20 to 30 feet below grade. Balch does all of his own sewer work, and lays his own water lines. While the heavy equipment for this work is on the job, he grades roads behind and between the houses to permit pouring concrete directly from trucks, and to permit the unloading of material as near as possible to the foundations.

Soil in the Wedgwood Rock site is of such a character that it absorbs about 75 per cent of the water that falls on it. That condition eliminates the need of drains to carry the water from the streets. Also, by grading the lots up in the back, in some cases, the high absorption factor of the soil eliminates the need of any retaining walls.

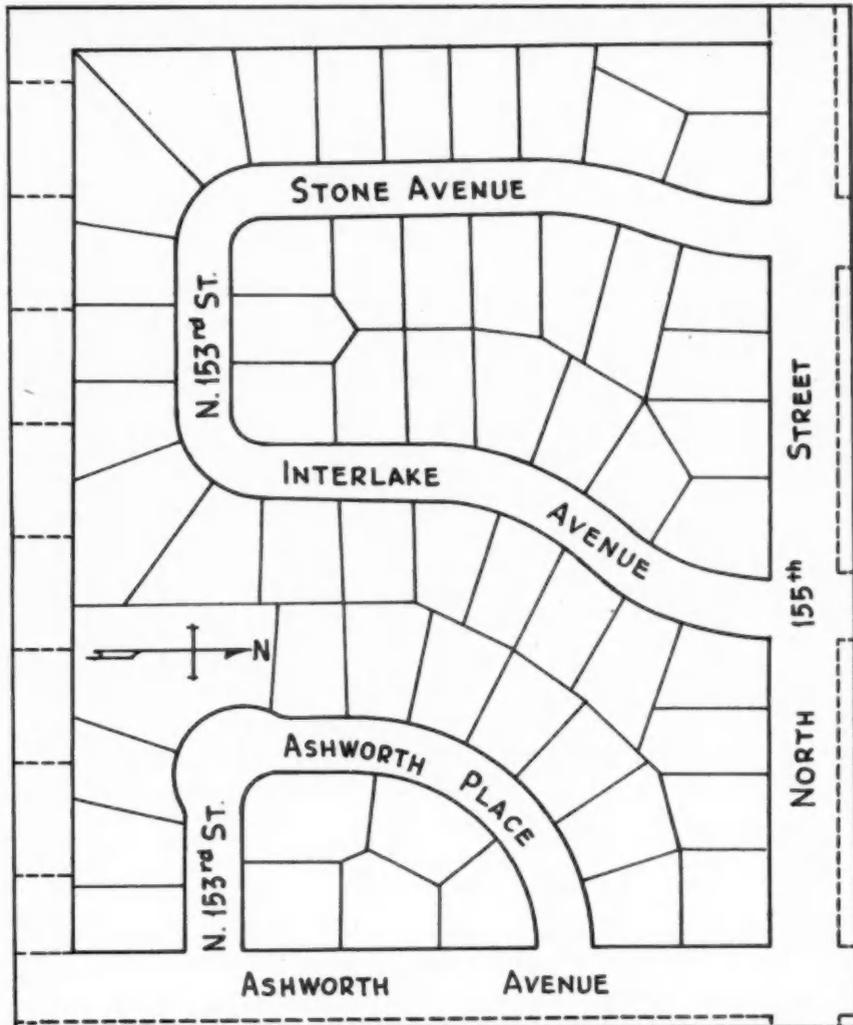
In Parkwood, Balch's latest subdivision, he has achieved what is reputed to be the latest word in subdivision planning in that area. Many native pine and fir trees border the streets, which are broad and curving. Streets, curbs, and driveways from the streets are concrete. All utility poles are in the rear of the lots. Corner lots invariably are larger than those inside the block, because it is Balch's practice to build larger and more expensive houses on the corners in order to improve the approaches to the tracts. There are no through streets, and therefore, no fast traffic. The streets are thus made safer for small children.

Balch has developed 30 subdivisions, and makes a practice of buying land sufficiently ahead so that a developed tract is always ready to build on as soon as one project is completed. That enables him to keep his carpenters and other mechanics busy practically all of the time, and also makes maximum use of his heavy equipment and the crews which operate it. The Wedgwood Rock tract was turned down by many builders, because they could not see how it could be improved economically.

Undeveloped land conveniently located to employment and shopping centers in the Seattle area ranges from \$600 to \$800 a lot. The cost of complete improvements is about \$1,000, making a total lot value of about \$1,800. Without experience in laying out and developing raw land, and the equipment and crews with which to do the work, the cost likely would be prohibitive.

Houses on these hilly subdivisions are seldom placed square with the street. Each house is located on its lot with the idea of making the best use of the contour and the view. Lot shapes are determined with the same ideas in mind. Thus, the shape and size of each lot, and the kind of house, and its location, become an individual study. The color scheme is also an important part of the study. The result is a harmonious blending of colors and shapes, with no suggestion of monotony, in either the houses or the streets.

The choicest houses, of course, are built on the lots affording the most desirable views. Not infrequently, after a house has been designed for a given lot, the architects, Thomas, Grainger & Thomas, of Seattle, have better ideas than the builder, and it is not unusual to have a house completely re-



PLOT plan of Parkwood. Note manner in which street lines follow natural contours

designed in order to save a good tree, or to take better advantage of an outstanding view.

Because of the rough terrain, and the great variation in lot shapes, lot lines are marked at all corners with sections of pipe buried securely in the ground. By staking all of the lot corners, whether there be four or more, and staking the house corners, the risk of having workmen make a mistake is minimized.

A distinguishing feature of the houses is that they are not built from one or a few standard plans, with variations in appearance achieved by reversing them, or changing color schemes. Dozens of different plans are used in every subdivision, and many are never used twice, because they were drawn for a particular site that has no duplicate.

Balch's subdivision expert is Louis Coglas, who for 20 years built right-of-way for the Northern Pacific Railroad. That experience now stands Coglas in good stead.

There is nothing standard about

the siding materials used. Most of the houses are sided with wood, but Parkwood features eight-inch masonry walls of Insulston, with hand-split roof shakes. Exteriors of other houses are wood siding, shingle and brick. Radiant warm water heat with pipes built into the concrete floors has been adopted recently for some of the houses, and the results are considered to be entirely satisfactory by both the builder and the owners.

One of the remarkable things about the Balch subdivisions is that they appear to be located remotely from the city, whereas, all of them are within a few minutes drive or bus ride from the heart of downtown Seattle. The reason is that artistic use of the hillsides provides views that are either actually spacious, or give the illusion of great distances.

Currently, Balch is offering the buyers of his houses the opportunity to purchase cooking ranges, refrigerators and Bendix washers on a monthly payment plan included in the mortgage on the house.



CLEVER treatment of a structural column in a drug store provides space-saving soda booths and display racks and shelves

## COMMERCIAL INTERIORS

### *Profitable For This Dealer-Builder*

**F**ROM piloting bombers in the Army Air Corps during the war to piloting the operations of the Ebenreiter Lumber Co., Sheboygan, Wis., was the step taken by young Bob Ebenreiter in 1945. During the war, Bob's father died, leaving grandfather Ebenreiter, now 87 years old, to run the company.

When Bob returned from service, he immediately took over, and put into practice many of the ideas he had evolved before and during the war. In addition to being one of Wisconsin's largest retail yards, the company also operates a cus-

tom millwork plant. Both the mill, operated by grandfather, and the yard, are dedicated to serving home buyers and owners, local stores and factories, the counter trade, and at least of equal importance with these, the home builders and carpenter-contractors who do business with the company.

Service to builders and carpenter-contractors takes many forms. Principally, it is in the form of selling store remodeling, using the design and production facilities of the millwork plant, and selling prospects for new homes, using the company's architectural depart-

ment and display of modern materials.

The staff of the millwork plant includes skilled engineers, designers and detail men, as well as craftsmen. Not infrequently when the capacity of the plant has been reached, the company, instead of allowing orders to pile up too far in advance, encourages its carpenter-contractors to install the products of another mill.

Accompanying photographs show custom-built, commercial installations of millwork, some manufactured by Ebenreiter, and some produced elsewhere, and installed by

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**LEFT:** Island type display counters in remodelled drug store. Mounted on short round legs, they are easy to move

**BELOW:** Stationary combination counter and display rack and bin makes use of paneled column in same drug store



**Custom millwork plant is spearhead of retail lumberman's fully rounded program of merchandising aids to his carpenter-contractor and builder customers**

Ebenreiter contractors and builders.

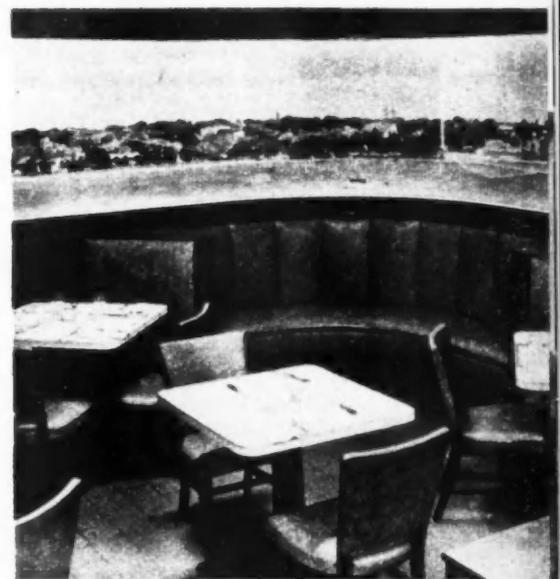
Of particular note, as examples of the type of work turned out in the Ebenreiter mill, are the restaurant in the H. C. Prange Co. department store, the counters and office partitions in the Bank of Sheboygan, and the bar in the local Elks Club.

The department store restaurant is distinguished by rectangular and curved booths, and by a long, curved frame for a mural of the Sheboygan shore line. Panels for the walls and structural columns were built by Ebenreiter to harmonize with the furnishings. The precision with which all of the millwork fits is the result of exact measurement of the premises, equally exact working drawings, and skill in craftsmanship. The same is true of the counter and partition work in the Bank of Sheboygan. Corner seats for customers

in the bank are easily recognizable as products of the Ebenreiter mill.

Aside from the same precision in workmanship, the distinguishing feature of the Elks Club bar is its unusual contour. Another and larger bar in Sheboygan's Grand Hotel is a closed rectangle with rounded corners. Some of the booths, similar to those in the department store, are three-quarter circles.

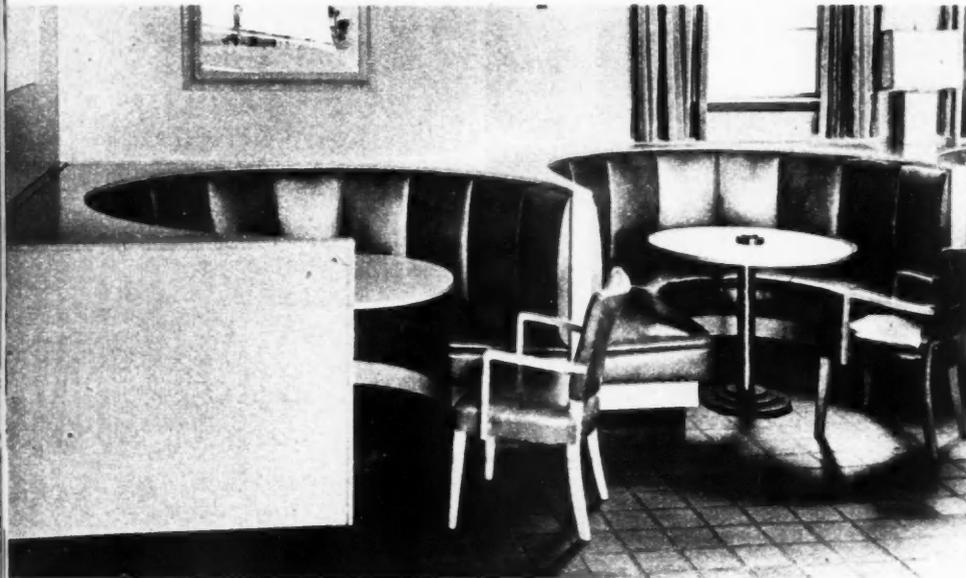
In addition to managing the overall operation, Bob Ebenreiter does most of the direct, outside sales work. Prior to the war, under Bob's direction, the company obtained a building site for a score or more of houses, north of the city, designed all the houses, had them built by builder and carpenter customers, held a successful home demonstration week, and sold all of the houses. Since his return, Bob has turned out one house,



**CORNER** booth and rounded frame for mural in H. C. Prange Co. department store



**VIEW from kitchen to restaurant in H. C. Prange Co. department store. Note paneling, angle and rounded booths, frame for mural**



**HALF-ROUND and three-quarter round booths in recently remodelled hotel tap room**

which was held open for demonstration purposes, and expects soon to begin building more.

Builders are expected to make the design department and material display their headquarters and sales offices. In addition to many kinds of material, dozens of house plans are on display in book form, and framed on the walls. Accommodations for the customers and prospects of both the company and the builders are well appointed and comfortable. Facilities for handling all of the details of home building from design through financing and building are available. The design and display department are open evenings for the convenience of both builders and their customers.

Service, however, does not stop with sales aids. Annually, the com-



**NOTE clothes rack at left and paneling on walls and column in this view of department store restaurant**



"ON THE JOB AGAIN" in red letters on a white disc was the symbol used by Bob Ebenreiter to advertise his discharge from the Army Air Corps and return to the lumber business. It is known everywhere in Sheboygan



BAR of unusual shape made by Ebenreiter for tap room of Sheboygan Elks Club

pany holds a mid-summer picnic for builders and contractors. This year, Bob conceived the idea of holding a first annual Winter Picnic. The purpose was to have a mid-winter get-together, and to get his suppliers acquainted with his customers. The result was one of the most unusual evenings the building industry has seen.

In the hall chosen for the picnic, more than 20 manufacturers and wholesale distributors of building materials erected elementary, but adequate exhibits in booths provided for them. The booths were opened at 5 p.m. By seven o'clock nearly 300 builders, carpenter-contractors, local store owners and manufacturing plant executives had arrived. Interest in the displays was lively from the start, and con-

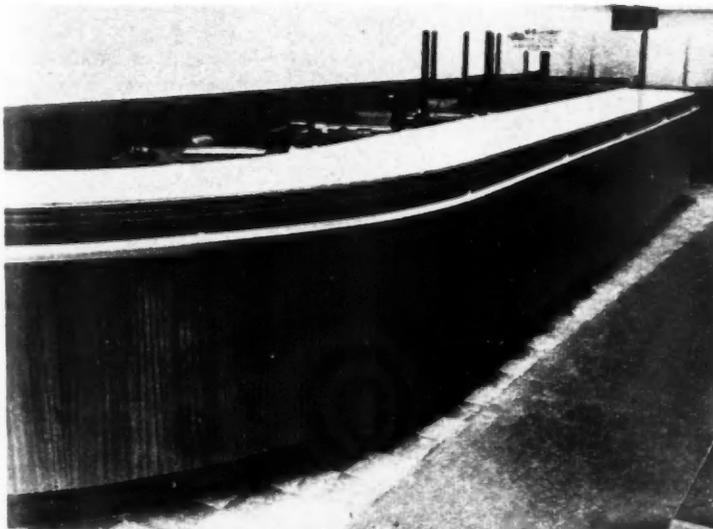
tinued that way until 9 p.m., when a one-hour program was begun. At 20-minute intervals, Bob, who acted as master of ceremonies, interrupted the conversations at the booths to point out items of special interest at certain booths, making it a point to feature each booth before the program began.

The program consisted of a number of short addresses by invited guests, including the oldest living contractor in the Sheboygan area, grandfather Ebenreiter, and officials of the Wisconsin Retail Lumbermen's Association. At the conclusion of the program, all were invited to visit the refreshment counter in an adjacent room, where hot sandwiches, coffee and beer were served. During and after the serving of refreshments, visiting the

booths was a constant feature.

Exhibitors were unanimous in expressing their appreciation of the opportunity to talk to their ultimate customers, the builders who do business with Ebenreiter. Builders and contractors demonstrated great interest in what they were being told and shown.

The concensus was that the meeting had done more to effect a united home building industry than anything that had ever taken place in Sheboygan. One manufacturer's representative stated that through the meeting he was sure that all the manufacturers and distributors, and the builders had learned more about each other's problems, aims and functions than would have been possible in any other way.



VIEWS of custom-built counters and corner seat made and installed by Ebenreiter in Bank of Sheboygan. Note recessed bases

# Good Looks Attract

The increasing popularity of the drive-in restaurant is due to the convenience afforded the busy traveler, and the unusual design employed in the buildings



LONG horizontal lines delineate this drive-in restaurant. A line of separation from restaurant and car service is provided by the vertical pylon with display signs

LEFT: View of the restaurant inside the parking area devoted to car service. Extensive planting in boxes, built-in as a part of the structure, embellishes adjoining wall surfaces. Wide curving canopy extending around two walls, protects the girls serving this area, from the elements

# Good Trade



**T**HE DRIVE-IN restaurant of today meets the needs of people living in a busy modern age. Here an individual may obtain a hasty snack or a complete dinner with minimum time expended.

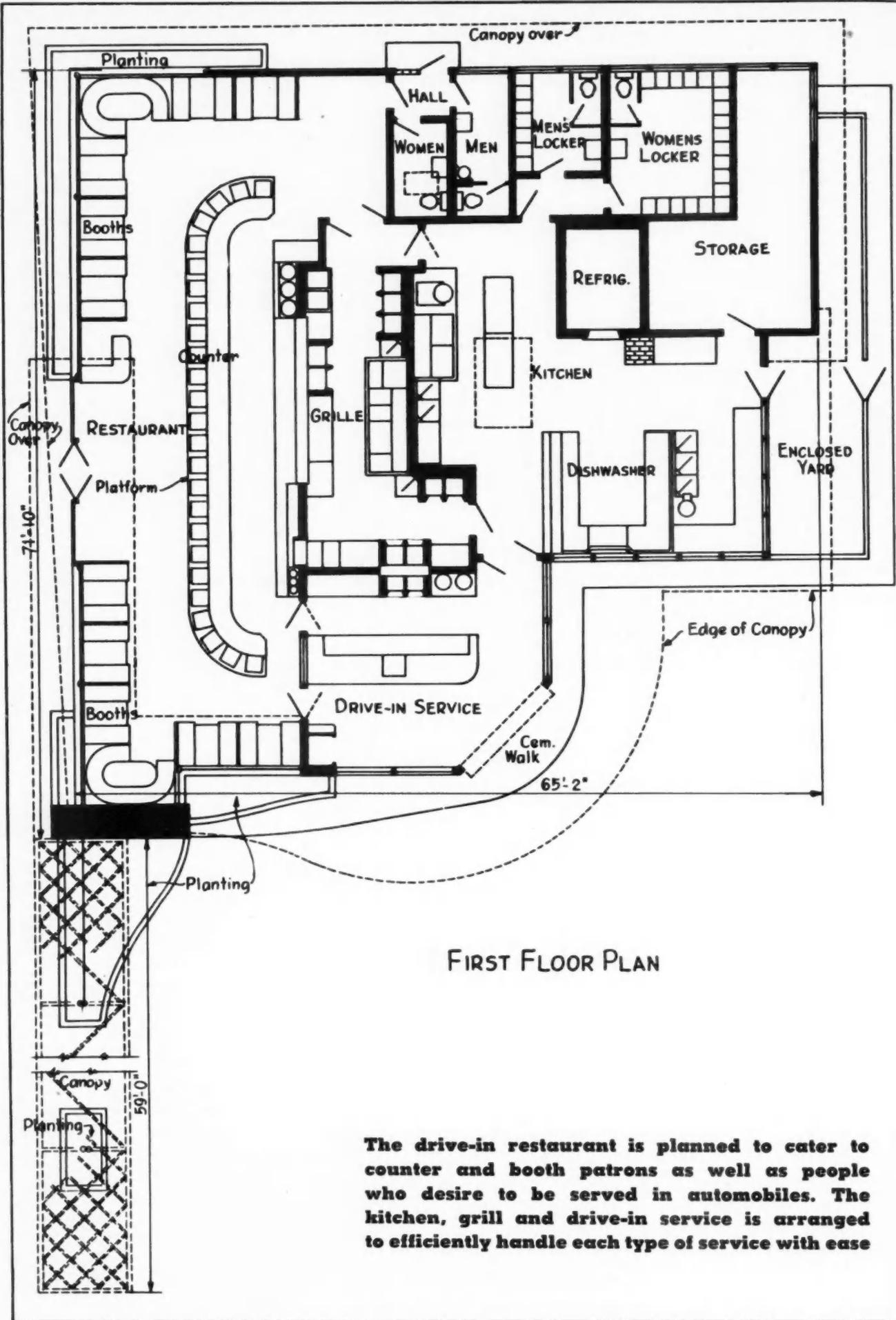
Out of a vast experience in the restaurant business, Floyd O. Gwinn, owner of the building, shown on these pages, came to the conclusion that "the building you build, asks in the people you want". Therefore, realizing that design would play a major roll in the development of this project, he enlisted the services of Harold J. Bissner, A.I.A. architect, and Harold B. Zook, A.I.A. associate. These two men, schooled along modern lines of design, have produced a building that meets every requirement of the owner. The interpretation of the plans have been ably carried out by W. H. McCune, builder.

The accompanying photographs tell the complete story of this unusual restaurant built on the fringe of the business area of Pasadena, Calif. The structure is designed to cater to two groups of people—one group prefers to park their cars and enter the restaurant to be served at the counter and booths, and the other drives into the paved court to be served in their automobiles.

The building is planned around the kitchen. This is divided into three sections—the kitchen proper, the grill and the drive-in service. In this manner each group of diners are efficiently handled. The grill area, where short



**RIGHT:** Copper canopy above, and stainless steel panels on each side of the pass window leading to grill area, provides an effective background for the counter arrangement. A feature of the interior is the egg crate design canopy that diffuses the fluorescent lighting from the ceiling



FIRST FLOOR PLAN

**The drive-in restaurant is planned to cater to counter and booth patrons as well as people who desire to be served in automobiles. The kitchen, grill and drive-in service is arranged to efficiently handle each type of service with ease**

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DETAILED view of front. Pylon separates car service from restaurant. Horizontal emphasis continued through extended canopy

orders are prepared, is provided with a large pass window to the drive-in and counter service.

Except for short orders, the drive-in service is independent. This area has separate coffee and fountain features, so that service to the automobile trade is uninterrupted. This unit is, however, closely related to the kitchen and restaurant, so that additional service may be obtained if needed. Ample storage and refrigerator space is provided adjoining the kitchen. Men and women's locker rooms are conveniently located.

An unusual feature of the restaurant interior, is the canopy that extends over the entrance and a portion of the booths. This is a continuation of the canopy used on the exterior. Designed in an egg crate pattern, it helps to diffuse light from the fluorescent tubes in the ceiling.

The long horizontal lines of the canopies dominate the exterior design. A contrasting pattern is maintained in the flush vertical joints of the brick surfaces. The over-sized pylon that provides a distinct medium of separation in the two featured services emphasizes the vertical aspect of the design.

Built-in brick flower boxes are in abundance around the building. Colorful planting of flowers are maintained in season. The arresting appearance created by the strong colors in the building, in addition to the planting, is a distinct asset to this type of busi-

ness. The warm red of the Roman brick is topped by the large glass expanse. This is capped by the brilliant white canopies that extend over the windows. Above the canopies is a stucco parapet painted a dark green which extends around the entire building.

An elongation of the building is established by a canopy over the driveway, leading to the car service area. This canopy is formed by a diamond-pattern egg crate design built-up of 1x6-inch members interlocked together. The overhang is supported by cast iron posts placed in a V pattern in the base of the flower box. A large curved canopy extends from pylon over to kitchen wall on the drive-in court extension. This serves to break the severe lines of the front. The soffit contains a number of lines of fluorescent tubes

that follow the contour of the canopy. This arrangement provides an abundance of light at night for car service.

A six-foot high Redwood fence, left in its natural finish, encloses the entire rear of the building. Refuse cans and other objectionable items are thus placed out of sight. The vertical boards of the fence are placed diagonally to each other, permitting air to circulate freely as well as providing a deep shadow accent.

The ceiling of the restaurant is covered with acoustical plaster; lights are set flush with the ceiling; the floor is covered with asphalt tile. The platform on which the counter chairs are placed is covered with linoleum; the counter is highly-polished walnut. A copper canopy extends across the pass window and side walls are of bright metal. The floor of the kitchen is concrete.

**RIGHT:** View in portion of kitchen devoted to food preparation. Cleanliness is recognized as an essential attribute, thus all equipment is kept spotless. Six-inch high concrete base around walls and equipment permit the floor to be thoroughly hosed each night





THE discomforts of poorly regulated heating can be overcome by proper installation of good electrical controls. Comfort unlimited is guaranteed in the rooms pictured above since automatic electrical controls govern the heating plant

## Engineered House Construction

# Heating System Controls

By J. L. Shank  
Consulting Engineer

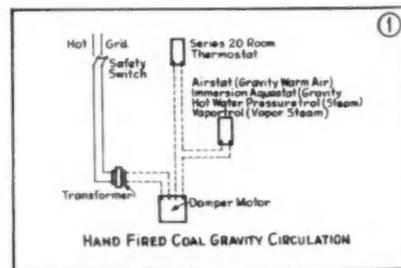
ONE of the essential factors that provides charm and livability in a home or other structure is a good heating system, accurately controlled. No heating system operates any better than its controls and to achieve efficient operation there are certain minimum controls required for each of the various types of heating systems.

The correct procedure to follow in obtaining comfort and livability, is to select a good heating contractor who has the reputation of doing good work and is dependable. The next step is to select a heating system according to the advice of the heating contractor. As stated in other articles, it is well to order heating equipment manufactured

by reliable and well established manufacturers. After the selection of the heating system, a considerable amount of thought should be given the control problem of the system. It is as important to have a dependable control system as it is to have a good heating system. Without correct control, the heating system will not function at maximum efficiency.

**The first type of control setup** to be discussed here is for a heating system hand-fired with coal, and in which the circulation is by gravity. The heating controls for the hand-fired heating system are designed for the automatic operation of the draft and check doors on the furnace or boiler. This is

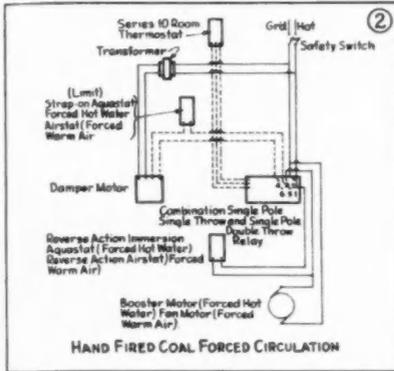
done with a damper motor connected to both the draft and check doors by a chain arrangement. The room thermostat governs operation



of the damper motor. Both of these units are low voltage devices and are furnished with power from a line voltage circuit through a transformer. There is a limit con-

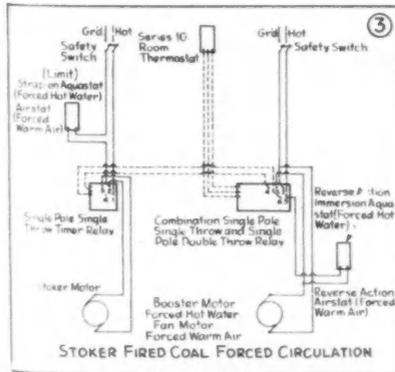
trol in the thermostat circuit which will cause the draft door to close and the check to open, even though the room thermostat is not satisfied, in the event that the heating unit becomes unduly warm.

**Second on the list of control systems**—hand-fired coal with forced circulation. Like the hand-fired coal system for gravity circulation, the room thermostat, damper motor, transformer, and limit



control are again used. In addition to this, there is a relay used to make and break the line voltage power circuit which supplies a booster motor for forced hot water, or a fan motor for forced warm air. The relay is controlled by the low voltage circuit which operates the damper motor. In addition to this, there is a reverse acting control in the line voltage power circuit for starting the booster or fan motor in case the room thermostat is not calling for heat. The reason for this control is to take care of any override in temperature within the heating unit itself, so that no injury will result from overheating.

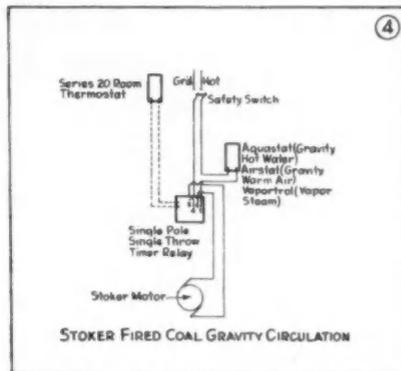
**The third control system**—stoker-fired coal with gravity circulation. The controls used with this system are almost identical to the controls used for hand-fired coal gravity circulation. The dif-



ference, however, is in the use of a timer relay rather than a damper motor and transformer. The operation of the timer relay provides for a regular minimum feed of coal to maintain the fire in the heating

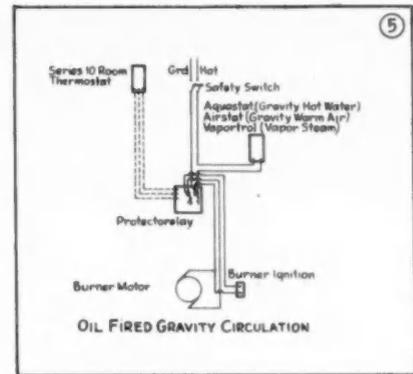
unit during the long intervals when the room thermostat does not call for heat.

**Fourth in the method of controlling heating systems**—stoker fired coal with forced circulation. The control for this system is identical to hand-fired coal forced circulation with the exception that a timer relay is used in place of the damper motor and transformer. In some instances, instead of using a timer relay for the hold fire, a stack control is used for maintaining the fire. This control operates from the temperature of the flue gases. The results received through the use of this control are excellent as long as the control is in good operating condition. However, since this control has the thermal element inserted in the heating unit where it comes in contact with the hot gases, it has a tendency to corrode and deteriorate. After a few heating seasons, it will fail to function correctly, if at all. While the



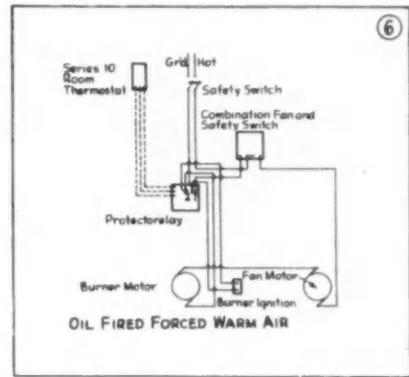
timer relay is not 100 per cent correct in its operation, it is a more substantial control than a stack control, and will accomplish the desired result.

**Fifth**—control system for oil-fired gravity circulation. The controls for this system are identical to those used for hand-fired and stoker-fired coal, with the exception that the protecto-relay replaces the timer relay or the damper motor and transformer. The protecto-relay indicated is for intermittent burner ignition, which in reality means that after the oil has been ignited, and the fire is burning, the ignition will cut off. It might be well at this point to advise that this control is perhaps the most essential control used in any oil-fired heating installation. The operation of the control, when in good working condition, is such that it will stop the burner if there is a temporary stoppage in the flow of oil to the burner. It is also designed to stop the burner motor if proper ignition does not occur.



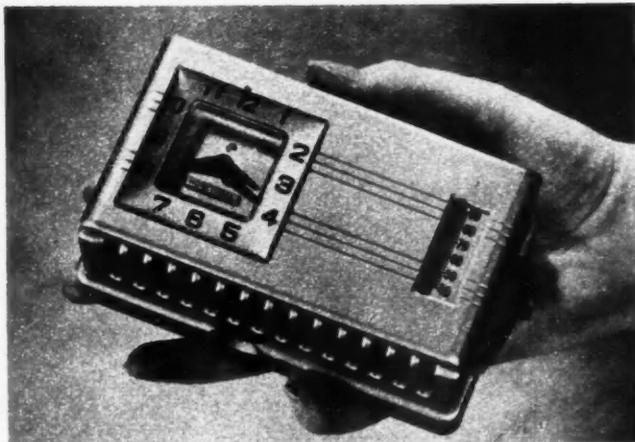
In many instances, the protecto-relay is wired for constant ignition.

**Sixth**—control for oil-fired forced warm air. This control system is similar to the control system used for oil-fired gravity circulation,



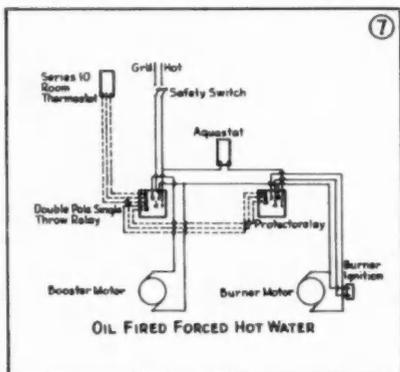
with the exception of the limit control. In lieu of the limit control, a combination fan and safety switch is installed. The operation of the fan and safety switch is such that the fan motor will start when sufficient heat is in the bonnet of the furnace. It will also stop the oil burner in case the furnace bonnet temperature gets beyond the safety point. By using the fan and safety switch to start the fan motor, a sufficient amount of heat will be built up in the furnace bonnet so that a flow of warm air will be supplied to the rooms. This will result in the rooms being heated rather than being cooled, which would happen in a case where the burner and fan started at the same time.

**Seventh**—control of an oil-fired forced hot water heating system. The operation of this system is such that when the room thermostat calls for heat, the relay closes the line voltage power circuit which starts the booster motor. The closing of the relay also energizes the protecto-relay which starts the oil burner. As long as the thermostat calls for heat, and providing the water temperature in the heating unit does not become too high, both the oil burner and booster



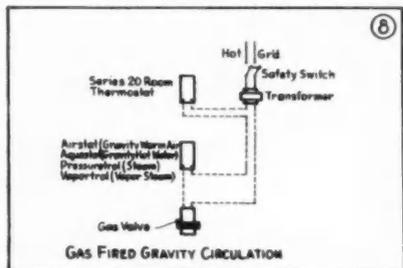
**NEW Chronotherm** by Minneapolis-Honeywell offers something new in thermostatic heat control. Fully automatic for night and day temperature regulation

pump operate simultaneously. In the event the thermostat does not become satisfied, and the water temperature in the heating unit



becomes extremely high, the aquastat will stop the oil burner. However, the booster pump will continue to run until the room thermostat is satisfied.

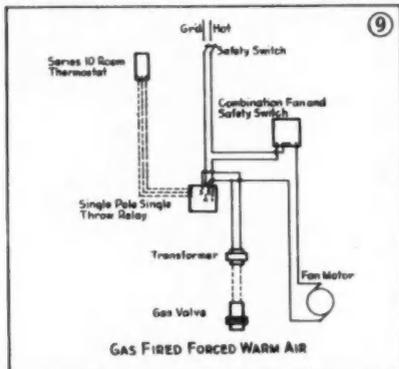
**Eighth**—control of a gas-fired heating system with gravity circulation. The operation of this system is such that the line voltage power circuit is reduced in voltage for the operation of a solenoid gas valve installed in the gas supply pipe to the heating unit. The operation of the solenoid gas valve is



from a low voltage room thermostat through the limit control. The operation of the limit control being such that it will open the circuit to the gas valve. The gas valve will then close and prevent the overheating of the heating unit.

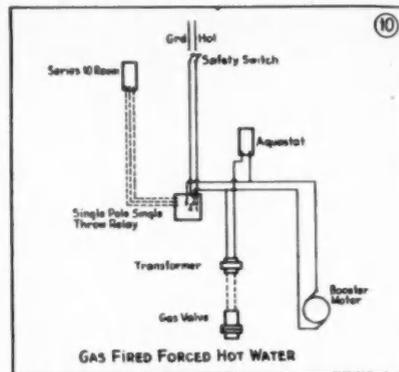
**Ninth**—control of a gas-fired forced warm air heating system. The operation of this system is

identical to that for the oil-fired forced warm air heating system, with the exception that a single pole, single throw relay is used instead of the protecto-relay. The operation of the system is such that when the room thermostat calls for heat, the relay will close, energizing the transformer and causing the gas supply valve to open. Then when the bonnet temperature becomes sufficiently warm, the combination fan and safety switch will start the fan motor. In event the bonnet temperature becomes excessive, the fan and safety switch will open the power circuit to the transformer. This will prevent



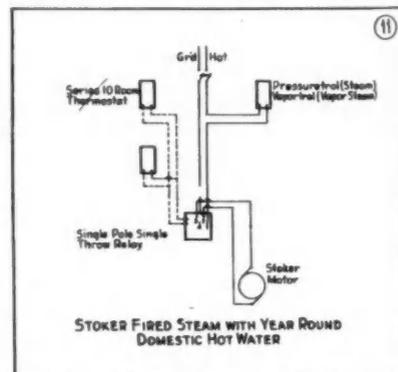
overheating of the heating unit. The fan will, however, continue to run as long as the bonnet temperature is sufficiently high to keep the fan switch closed.

**Tenth**—control of a gas-fired forced hot water heating system. The operation of this system is similar to that of a gas-fired forced warm air system. An aquastat is used, however, in place of the combination fan and safety switch. The booster pump operates directly from the room thermostat, and will run as long as the thermostat is calling for heat. The aquastat is used strictly as a limit control. In the event temperature of the heating unit becomes excessive, the aquastat will cause the gas valve to close, preventing any damage.



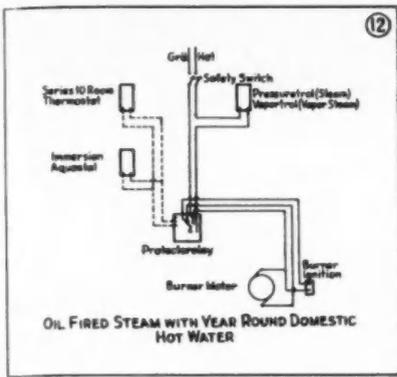
**Control system number eleven**

—a stoker-fired steam heating system with year-round domestic hot water. The controls used for this system are almost identical to the controls used for a stoker-fired steam heating system with gravity circulation. The exception is that a single pole, single throw relay is used in place of a timer relay. Also, there is an immersion aquastat connected in parallel with the room thermostat. The operation of the system is such that either the room thermostat or the aquastat will cause the stoker to operate. The room thermostat will cause the stoker to run long enough so the heating unit will generate steam and heat the structure. The aquastat will cause the stoker to run long enough to maintain a temperature within the heating unit. The temperature maintained by the aquastat will, however, be below the boiling point of water. By maintaining a sufficient temperature within the heating unit, it will be possible to heat domestic water. The heating of domestic water is by means of a heater immersed in the boiler water or through the use of a heater connected externally to the boiler. The aquastat used in



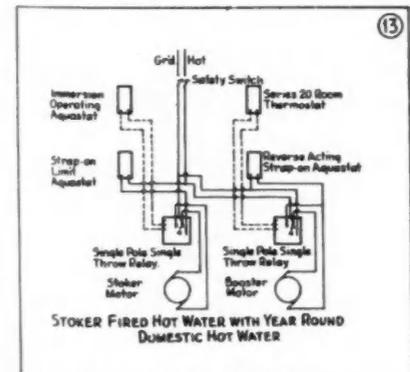
this manner also acts as a hold fire control, thus eliminating the timer relay.

**Twelfth**—oil-fired steam heating system with year-round domestic hot water hook-up. The operation of this control system is identical to that for stoker-fired steam with



year-round domestic hot water, with the exception that a protecto-relay is used in place of the single pole, single throw relay. The operation of this system is such that the immersion aquastat will cause the oil burner to operate and maintain a temperature within the heating unit. By maintaining a temperature within the boiler, the domestic water may be heated indirectly. In addition to maintaining temperature within the heating unit when the building requires heat, the room thermostat will cause the oil burner to operate until the required room temperature is obtained. However, in the event the boiler pressure becomes excessive, and even though the room thermostat is not satisfied, the limit control will stop the oil burner, thereby preventing serious damage to the heating unit.

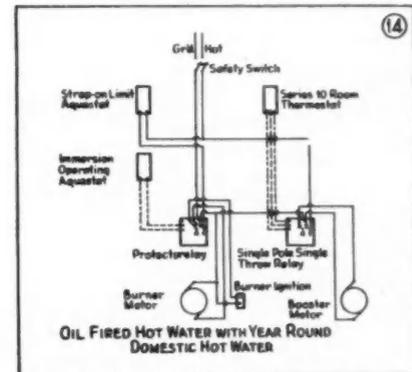
**Thirteenth**—control system for stoker-fired hot water with year-round domestic hot water. The operation of this system is such that the immersion operating aquastat causes the stoker to operate and maintain a temperature within the boiler at all times. In addition to the immersion operating aquastat, a strap-on limit aquastat



should be installed to prevent undue injury to the heating unit providing the operating aquastat should fail in a closed position. These controls will then maintain the temperature of the water within the boiler so that the domestic hot water can be heated indirectly

all year. For the building heating cycle of this control system, a room thermostat operates a relay which makes and breaks the line voltage power circuit to the booster pump. When the circuit is made, the heated water in the heating unit flows to the various rooms. When the circuit is broken, the booster will stop and the heat will cease to flow. In addition, there is a reverse acting strap-on aquastat which will start the booster pump. This is to take care of an over-ride in the water temperature in the heating unit, should this occur. This reverse action aquastat is an additional, essential precautionary safety device.

**Fourteenth**—control for an oil-fired hot water heating system with year-round domestic hot water. The operation of this system is the same as the operation of the stoker-fired hot water system with year-round domestic hot water, with the exception that a protecto-relay is used in place of the single pole, single throw relay, and the reverse action aquastat has been eliminated. The reverse action aquastat is not necessary with an oil-fired installation, because when the controls stop the oil burner, no additional heat is generated to cause

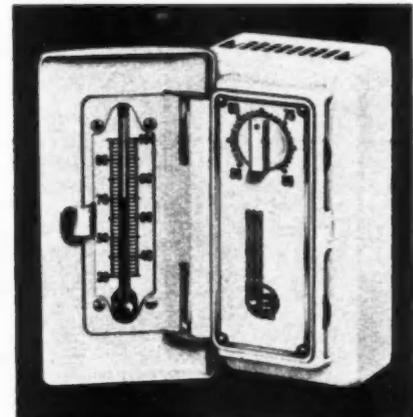


an over-ride in boiler water temperature. The booster pump operates directly from the room thermostat.

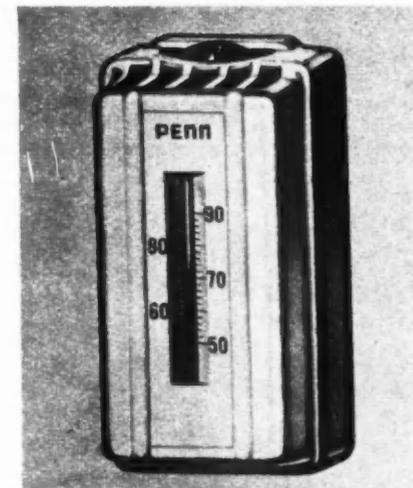
It will be noted that all of the operating controls, such as the room thermostats, are of the low voltage type. These may be either series 10 three-wire controls or series 20 two-wire controls. Low voltage is used so that a more accurate temperature can be maintained with less wear and tear on the controls. The control systems outlined are considered good minimum controls for residential or small commercial buildings.

Nothing so far has been mentioned here about indoor-outdoor temperature control. The operation of the indoor-outdoor bulb control system is usually such that

there is a continuous circulation of the heating medium throughout the entire heating system. The temperature of the heating medium flowing through the system is controlled by a temperature bulb located outside the building together with a temperature bulb located in the stream of the heating medium. Both of these bulbs are connected to a temperature controller by means of capillary tubes. This temperature controller is usually connected electrically to the burner itself, to a three-way mixing valve, or to a two-way valve with a bypass arrangement. When the outside temperature drops, the temperature controller permits the heating medium to become warmer. The increase in temperature compensates for the greater transfer of heat through the building. Vice-



WHITE-ROGERS bi-metallic room thermostat keeps room temperatures even



STURDY construction with finger-tip temperature selection are features of Penn Electric Company's room thermostat

versa, if the outdoor temperature moderates, the temperature controller keeps the temperature of the heating medium low, thus preventing over-heating of the structure. In some instances, a room thermostat is used in conjunction

with the temperature controller to assist in compensating the room temperature.

In addition to what has already been said about temperature control, it is well to remember that in many instances zone control is desirable. Zone control involves the addition of controls to take care of small intermediate areas where positive temperatures are desired.

**FIVE MANUFACTURERS WHO SUPPLY:**

Room Thermostats  
Fan and Limit Controls  
Immersion Aquastats  
Surface Aquastats  
Pressuretrols  
Damper Motors  
Relays

are:

Minneapolis-Honeywell Regulator Co.  
White Rogers Electric Co.  
Penn Electric Switch Co.  
Frank Adam Electric Co.  
General Controls

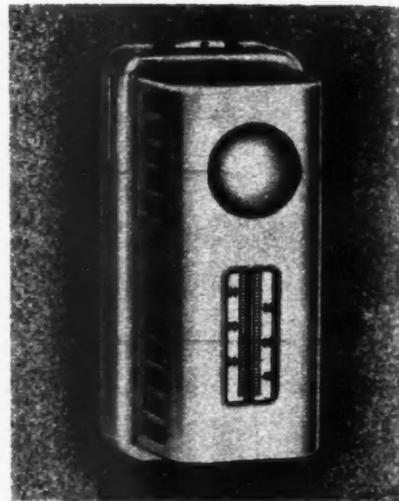
(Minneapolis-Honeywell and White-Rogers also make Indoor-Outdoor Controls)

**Starting in the May issue, American Builder will continue the series on Engineered House Construction with the first of several presentations on sound principles and practices of installing home electrical systems. The articles will be by nationally-recognized home wiring and lighting engineers**

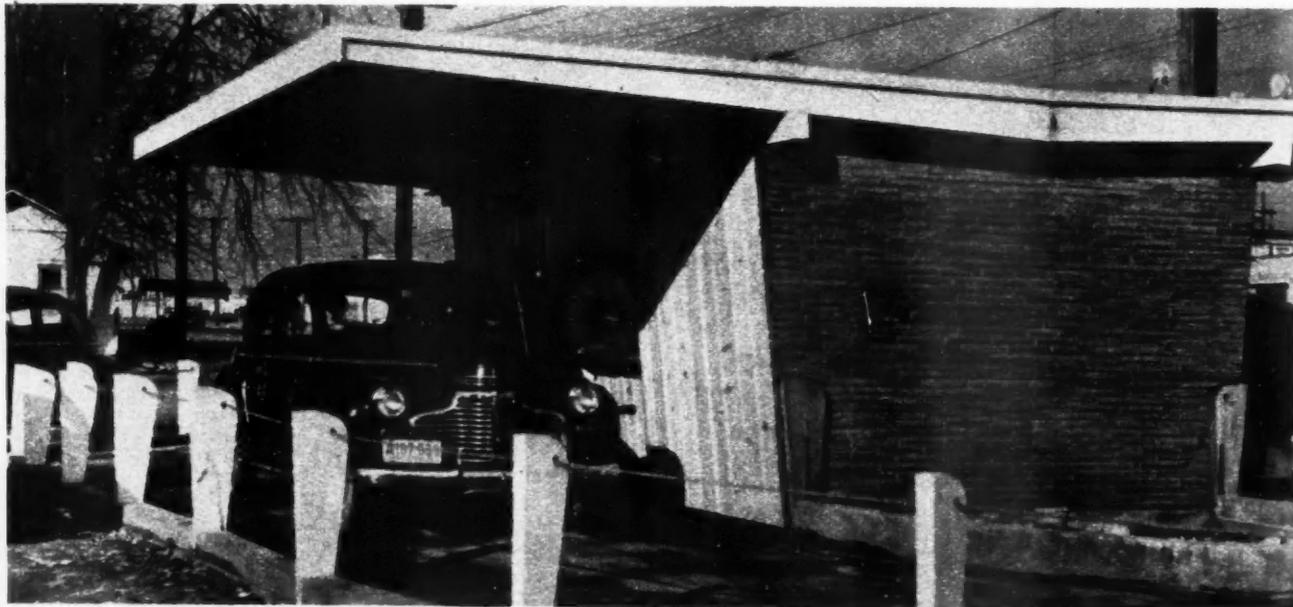
Zone control is usually an addition to the basic controls which have been presented in this article.

In order to have a comfortable living condition in any structure, it is necessary to have a good heating system properly controlled. Many good heating systems have not come up to expectations due to lack of temperature control or through the use of improper controls. Thus, when considering a building, first consider the building itself, second, consider the heating plant with which to heat it, and third, make sure that the heating system is amply controlled.

If these considerations are carefully adhered to, satisfaction for the home owner and the building contractor—without complaints—will be the result.



ATTRACTIVE in appearance, engineered for efficient performance, the Frank Adam room thermostat is easy to install



## Hamburger and Chicken Served in a New Way

**W**ILSON'S, on the outskirts of Seattle, Wash., represents a brand new type of drive-in restaurant, if it can be called a restaurant. You drive up to the counter in the front or the counter on the rear side, and your sandwich or bowl of chicken is handed to you by the attendant while you are in your car—then you drive away and eat it.

Mr. Wilson says he conceived the idea himself and, as far as he knows, it is original with him. He designed the stand shown in the photograph and built it with the help of his son. He says that he has been asked for plans but that he used no plans.

The front of the building and the back are 12 inch knotty pine T&G boards; the sides are Roman brick.

The overhang in the front and the back is 8 feet. There are three lights on the underside of the overhang. Planting spaces are provided at the ends of the building.

Northbound cars use the front counter; southbound cars are directed to the rear by the word "Entrance" in neon over the rear approach. The driveway is paved with concrete.

## New Fireproof Door

### Passes Rigid Test

Product developed by U. S. Plywood Corp. and American Structural Products Co. has core of new Kaylo insulation



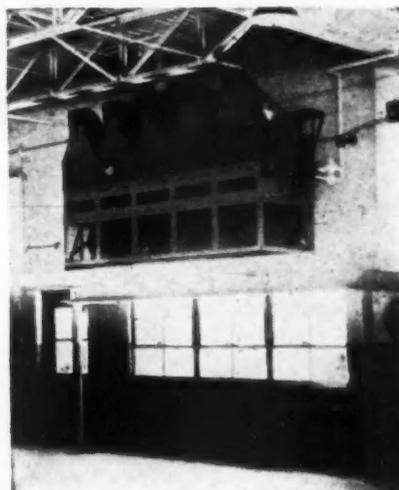
THE new door can be fitted and installed with ordinary carpenter tools. Photo at right shows fire demonstration of the door 14 minutes after the fire was started. Conventional panel door is at the left



DEVELOPMENT of a new fireproof door has been announced jointly by the American Structural Products Co. and the United States Plywood Corp. The door, composed of a core of Kaylo insulation faced with hardwood veneer bonded to it with waterproof glue, was shown in a spectacular fire demonstration at the new plant which will produce Kaylo insulation at South River, N.J. To attain the one-hour fire rating which has been granted by the Underwriters' Laboratories, the door withstood a free-burning fire for 60 minutes and then withstood the impact of a hose stream of 30-pound pressure for 60 seconds applied 20 feet from the fire.

The new "Weldwood" fireproof door was developed by U. S. Ply-

wood, which will fabricate it at Algoma, Wis. Kaylo insulation, developed before the war and made in limited quantities for war industries, will be produced in the new plant of American Structural Products Co., a subsidiary of Owens-Illinois Glass Co., at South River, N.J. The new door is lighter in weight than a conventional flush panel built-up lumber core door.



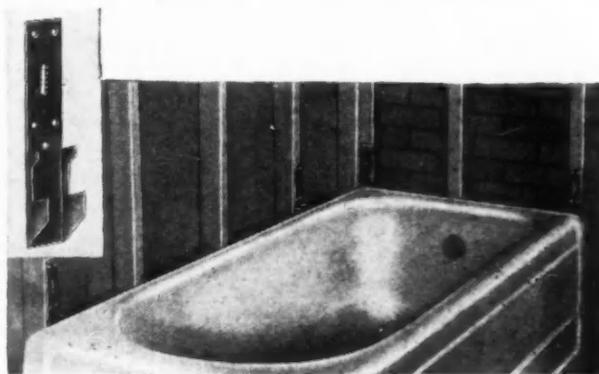
ONE bank of the multiple unit heaters

## Heavy Duty Heaters For Commercial Use

A SIMPLE yet adequate means of heating large unbroken floor areas is well demonstrated by the installation of Surface Combustion Janitrol multiple-section, gas-fired, heavy duty unit heaters in the new garage of the Ohio Fuel Gas Co., Toledo. Ten sections arranged in two groups of five, one group at each end of the main garage constitute the complete heating source for the major 130x260-foot floor area. Each section is, in itself, an individual unit, but operates in conjunction with the others in the group. Total heated area is 539,600 cubic feet. Each bank of five unit heaters is mounted approximately nine feet above the floor.

## Bath Tub Hanger Anchors Tub to Wall

INSET shows detail of the new bath tub hanger. The upper notch is used to hang tubs when walls are to be plastered and the lower notch when walls are to be tiled

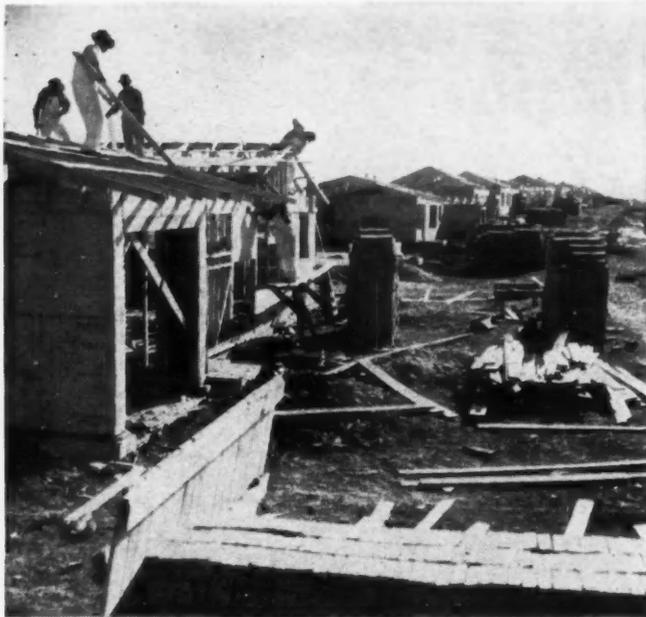


THE Titewall Hanger Co., Chicago, has developed and is producing a new type metal bath tub hanger which anchors the tub securely to the wall. The units, easily installed by workmen before walls are plastered or finished in any manner, has a special spacer for tile walls or for plastered walls, all combined in the same unit. Another special feature is the center

slot which permits the workman to place the hanger in the approximate position desired, move it up or down to make an absolute level and tight fit before nailing securely through the other five holes. The hangers may be used on studding, furring strips or flat walls. The units come packed four in a box, the usual number required for hanging conventional tubs.



SITUATION one minute and 11 seconds after the test fire was ignited



PRIVATE builders construct whole communities with on-site methods

A FEW DAYS ago we came across the statement of a high government official who said in effect that "the way to solve the housing problem is to solve it." It's just that simple! All you need do is solve it. What's so hard about that?

Whether the government official who made the statement was entirely serious or was merely talking for effect is more or less unimportant. However, the eleven words started us to thinking . . . especially when we came across an account in the same paper of one of the things the government had done in an effort to bring about a solution to the problem.

The article on another page in the same publication pertained to the prefabrication splurge which a certain suave politician (who had been selected to "expedite" the building of houses) assumed might be one of the answers to more and better housing.

At this point we must pause long enough to explain that we are not one of those individuals who believes that the prefabrication of houses has been weighed in the balance and found completely wanting. On the other hand, we maintain stoutly that substantial progress is taking place in this direction and that evolutionary improvements are being made constantly by well-established companies who are financially able to take the beating which accompanies any activity as involved as a change in the traditional method of building a home. The trouble with the whole subject of prefabricated houses has been that

far too many inexperienced, under-financed companies promised first and hoped to be able to deliver afterward. However well meaning these super-enthusiasts might have been, the fact remains that many of them had never built a house or operated a factory.

Our only point in discussing the subject at all is not to trade down on prefabricated houses but merely to show that it is seldom possible to "solve a problem simply by solving it," as stated by the government official who bemoaned the fact that the several million homes which are supposed to be needed to make up the housing shortage had not already been built. In the meantime other government officials were raising particular Ned because building prices were too high.

Admittedly the price of most building materials, including labor, has been high but the reason exists solely because demand has been so much greater than supply. One wonders what would have hap-

pened to prices if it had been possible to build the several million residential units, all at approximately the same time, which to our way of thinking is the only method by which the problem could actually have been solved.

To get back to the prefab aspect of our story, it is necessary to recall the "expediter's" enthusiasm for this new method of constructing a home and also to remember that Congress passed legislation in 1946 which authorized the RFC to guarantee markets for 200,000 prefabricated homes. It was the claim of the expediter that this guaranteed market would result in the construction of this many homes in 1947. Said year having come and gone, we may now look at the record and size up the results.

According to a recent news item in the *Chicago Tribune*, Richard Alger, director of the administration's prefab program, said that it had cost the government \$3,250,000 up to that time and that future

## The First Million Homes Are The Hardest

**Despite shortages of materials and manpower, private industry was able to complete approximately 850,000 residential units in 1947. You can't build houses at that rate very long without catching up with demand**

*By R. E. Saberson*



ON-SITE construction moves men from house to house. Materials are ready for their use

settlements would boost the loss to \$3,600,000.

In only one case did the government actually take over any houses. \$1,250,000 was paid for 299 flat-topped plywood houses stored in seven warehouses in Arkansas. The company had been able to sell only seven or eight and had turned the remainder over to RFC at something like \$4,100 each. Another builder was paid \$300,000 to stop building houses.

Three other firms were paid more than \$2,000,000 to cancel similar contracts. The amounts involved ran from \$300,000 to \$1,000,000, and the net result in housing was so unsatisfactory that the entire program was discontinued.

In the meantime the building industry, freed of rules, regulations and costly restrictions, had proceeded in 1947 to roll up one of the most impressive records in its history with 850,000 completed residential units to its credit, despite the fact that it was harassed constantly with shortages of materials and manpower.

Back in the twenties, it had established a somewhat higher total of completions at a time when there was plenty of everything and the building of a home was a much simpler proposition than it is today.

Under such circumstances it can be assumed that if the demand for housing continues and building money remains plentiful, homes will be built in sufficient quantities by those who have supplied them in the past to meet the national needs and, furthermore, that supply may even catch up with demand sooner than expected.

It is entirely possible that government estimates may prove to be as inaccurate in connection with housing as has been the case in other postwar activities and that if the proposed "relief" measures are passed, they will be put in operation at about the time the housing emergency is over. The more or less common prediction, by jittery politicians, that we need a million houses per year for ten years would probably ruin the price of existing homes to the point where it would amount to a major catastrophe, if ten million homes were actually constructed. Certainly the many families who built homes at peak prices, or even considerably less, would find need for another HOLC or something even more potent to bail them out.

We cite the loss involved in the government's prefabricated home program merely to show how im-



**PREFABRICATION** moves materials from man to man. Manufacturing costs are important

possible it is to expect the housing problem to be solved by bureaucratic agencies, manned by officials totally inexperienced in building—office holders who are here today and gone tomorrow. Things simply are not done that way, even though they may believe sincerely that "the way to solve a problem is to solve it."

Constructing 850,000 residential units in 1947 is no mean achievement, yet it is regarded as complete failure by many politicians who cling to the idea that private industry is unequal to the job. What government housing project can be pointed to as evidence that Uncle Sam can do it better?

What can lumber dealers do to hasten a solution of the housing problem?

The question is already being answered by lumber dealers and cooperating contractors who have joined up to speed construction and effect savings wherever possible. It is not enough for lumber dealers to leave the job to someone else. The mere fact that they sell such a large percentage of the materials required to build a home imposes a responsibility which extends to their eventual use. Not to accept this responsibility is to invite the competition of the many well-financed, well-managed prefabricating companies now making serious inroads in the home market, practically none of whom regard builders or lumber dealers as satisfactory outlets for their products.

That is why there is an element of danger in referring to the failure of the government's prefabricated house program. It is apt to create the wrong impression among those

who still do not regard prefabrication as a threat to their home market. That it should not be discounted too greatly is shown by the following figures which indicate that it is now far more than a budding industry and that it may be expected to continue to grow in importance . . . especially since it now includes several of the nation's largest companies. Here are the interesting statistics: \$60,000,000 invested capital; 10,000 employees; \$1,800,000, monthly payroll; 4,000, monthly production; 1,800, sales agencies; 37,000, houses produced in 1947; 100,000, estimated production for 1948.

All of which should be of major interest to home builders and lumber dealers . . . as well as government officials. Regardless of what happened when the government attempted to engineer a prefabricated house program, the fact remains those who are most able to carry on are doing so on their own power.

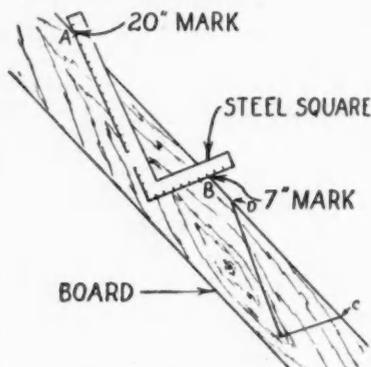
Naturally this is the only manner in which any producing agency will achieve permanently satisfactory results. If prefabricated housing requires government subsidies in order to survive, it is doomed to failure. Nothing is more debilitating than a subsidy. That is why we make the unqualified statement that Mr. and Mrs. Home Prospect will get a far better house through free competitive enterprise than in any other way.

As the matter now stands, a new industry is growing up to compete with conventional home building. As is always the case, the fittest will survive.



## How-To-Do-It Pointers

### How to Find The Length and Bevels of Rafters



HERBERT E. FEY of New Braunfels, Texas, submits this how-to-do-it suggestion.

To find the length and bevels of rafters in a building 40 feet long, for example, place a steel square on a board 20 inches from one corner, and 7 inches from the other. Mark the board as shown in the illustration.

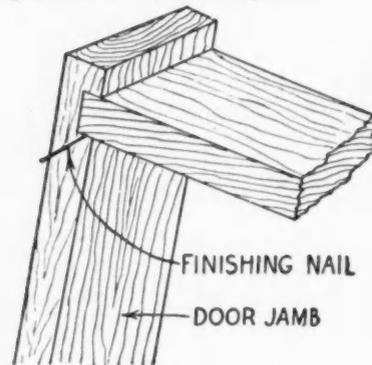
The angle at (c) will be the bevel of the upper end of the rafter, and the angle at (d) will be the bevel at the lower end. The length will be the distance from (a) to (b) on the outer edge of the board.

With 1 inch equal to 1 foot, the 20 inches on the scale are equivalent to 20 feet, or one half the width of the building. The 7 inches on the scale are, therefore, equivalent to a 7 foot rise. Thus, the distance from (a) to (b), on the edge of the board, is 21 inches, two-twelfths and one one-quarter of a twelfth. Therefore, the rafters in the 40 foot building will be 21 feet,  $2\frac{1}{4}$  inches long.

Mr. Fey suggests, as a help in this operation, that a square with inches on one side divided into twelfths always be used by the builder or mechanic.

This is a simple method of finding the length and bevels of rafters. It has been used consistently over a period of many years by Mr. Fey.

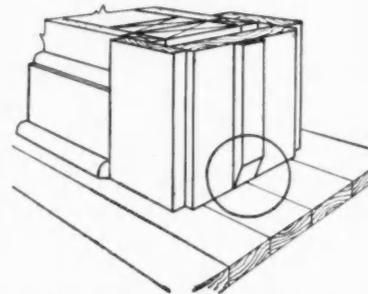
### How to Interlock Joints of Door Jamb



THIS TRICK used to interlock the joints when assembling door jambs was passed along by HERBERT E. FEY of New Braunfels, Texas.

After nailing the joints together in the usual way, drive a six or eight penny finishing nail in from the edge, letting it straddle the joint so that it partly embeds in the header and in the jamb.

### How to Cut Miter At Door Stop



TO HELP eliminate the housewife's job of sweeping around corners, this idea was suggested by ALLAN GREASBY, 2650 Montevallo Rd., Birmingham, Ala.

Simply make a miter cut, as shown encircled in the above illustration.

### How-To-Do-It Pointers (Continued to page 170)

#### \$5 for an Idea

HAVE you a job pointer, a short cut or a method of solving some building problem? We are sure you have some time-and-labor saving kink you would like to pass along to the fellow members of your craft. Send us a rough draft of your idea. For any idea submitted which is found suitable for publication, *American Builder* will pay \$5. Address material to Architectural Editor, *American Builder*, 105 W. Adams St., Chicago 3, Ill.

# AMERICAN BU

## The Entrance, A Focal Point Of Emphasis

Design, as it applies to houses, is in a constant state of flux. Architects and builders are continually seeking to apply the principles of good design, whether traditional or modern, to the type house they are building, regardless of size.

In recent years, because building costs have increased, the design emphasis has been centered on the front entrance. This situation is more common in the traditional type of house than in any other. The emphasis can be applied in a number of ways. One method is by projecting the doorway and its immediate surroundings. Another way is shown in the detail plate on the opposite page.

In this case, the roof line extends down directly over the door and is capped by a simple cornice consisting of a moulded gutter and a plain frieze board. A cut-out member arranged in an attractive pattern is applied to the frieze board. The stoop, fence, door and roof projection all comprise the entrance ensemble. This type of unit placed in proper relationship to window fenestration and wall surface often provides the necessary design emphasis.

In this manner, a house, that would ordinarily be quite plain and simple, may be given an added measure of attractiveness at little expense. The type of entrance illustrated has a tendency to give a feeling of hospitality to the house. The stoop, steps and side-walks may be built of either brick or flagstone. The picket fence, enclosing a portion of the front or side yard, ought to be painted a color harmonizing with the body of the house. A fence of the type suggested, with possibly a light pole at the extreme end, adds a great deal to the general effect.

The entrance detail shown on the opposite page has a distinct colonial flavor. It can be adapted for use on either a one-and-one-half or two-story house. The plan indicates that the vestibule is a part of a room extension, yet it is treated externally as a separate though co-ordinated unit.

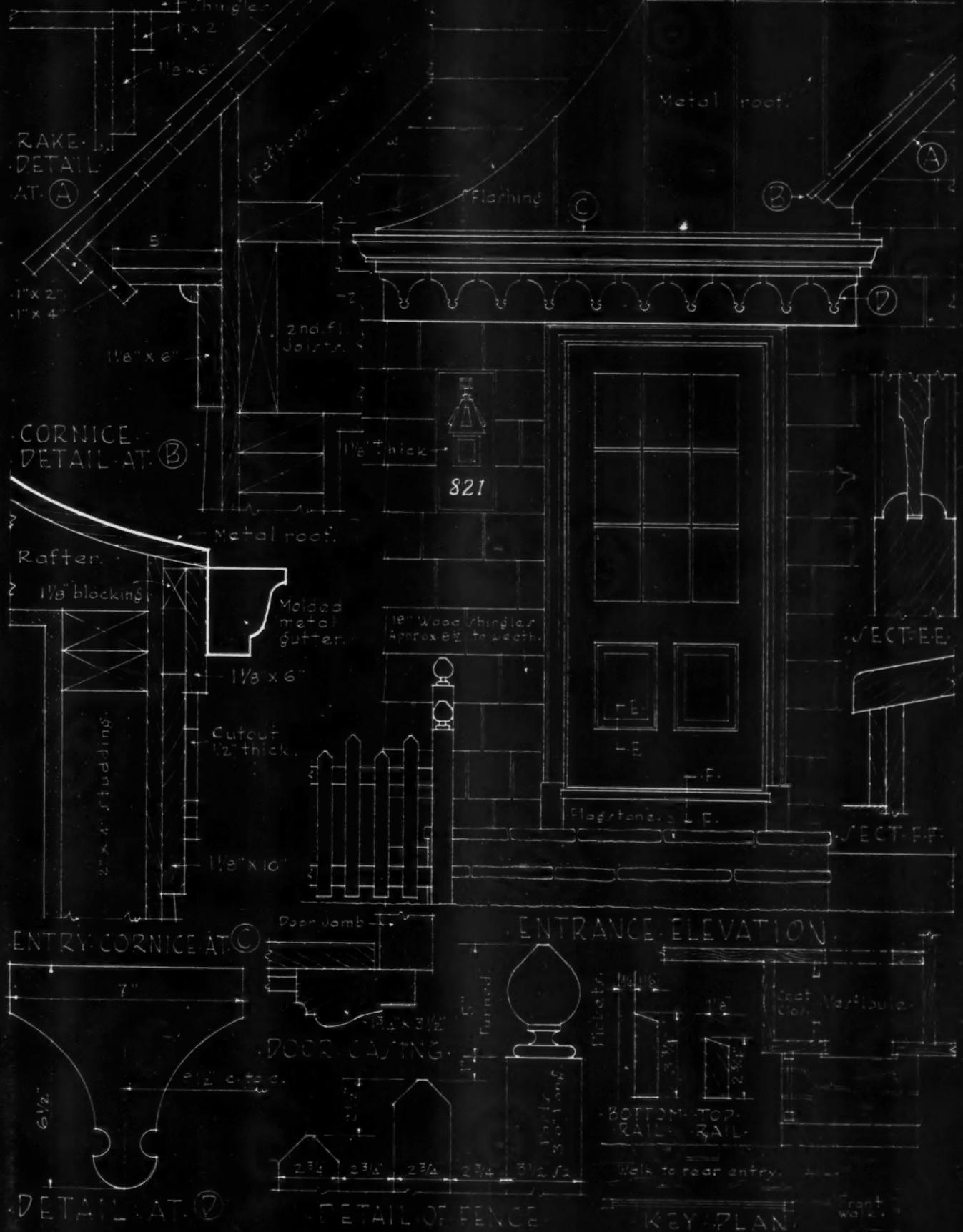
The use of standard, commonplace materials are indicated in the construction work. With the wide selection of new materials available, a number of different variations may be made. This may be done while keeping within the scope of the original pattern.

# BUILDER'S BETTER DETAIL PLATE

American Builder, April 1948.

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## NO. D-42. ENTRANCE DETAIL. SUBURBAN TYPE HOUSE.



uses, flux, con- prin- ther type gard- build- e de- ered situa- radi- any e ap- One door- und- n in osite e ex- door rnice utter cut- n at- o the fence, com- This er re- ration ovides is. that plain added little rance o give o the l side- brick fence, front ainted h the nce of ossibly e end, general own on distinct dapted d-one- ne plan le is a yet it eparate mmon- ated in ith the aterials different This y within pattern.



# NEW PRODUCTS

## Offered by Manufacturers

**COUNTER TOP AB4809**

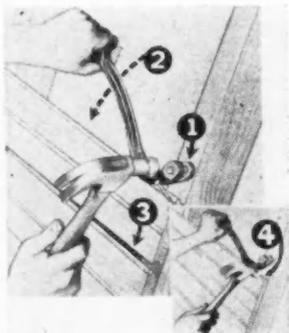
A counter top streamlined for functional use as well as beauty is the new feature of Kitchen-Kraft steel sink and floor cabinets. All sharp edges and corners have been eliminated. The back splash is concave, similar to the roller edge fit of well laid linoleum, doing away with crumb-catching



corners where back splash meets the flat top. The floor cabinets are bolted together and the tops joined with a watertight seal, giving a one-piece custom-built effect. This method of fitting tops makes the joints waterproof, greaseproof and dirtproof. Developed by the Midwest Manufacturing Co., Galesburg, Ill., this top is identified as their Kustomized Top.

**BOARD BENDER AB4808**

Both carpenters and builders will find this Board Bender a useful addition to their tool kits. Sturdily made of aluminum, it adds little weight to the kit yet saves valuable time and mate-

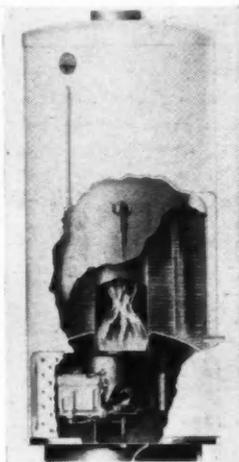


rial. Devised by the C. B. Tool Co., Lancaster, Pa., for use on rough, warped, or twisted lumber, it requires only four simple manipulations to operate: (1) Start nail in board as usu-

al; (2) With stroke of hammer set anchor pin; (3) Draw handle down until groove is closed, and (4) Hold, drive your nail.

**WATER HEATER AB4805**

A streamlined, automatic oil-burning water heater with controls completely enclosed within the casing is announced by the J. L. Gillen Co., Dowagiac, Mich. This feature prevents children tampering with the controls as well as eliminates the possibility of damage by accidental bumping with broom, mop or other moving objects. Another advantage is that it permits placing the water



heater in a smaller space. A magnesium alloy anode with special current-limiting resistor is another feature of this model. This device prevents electrolytic action, rust and corrosion, and prolongs tank life. A low draft burner, located at the base of the flue casing, rests on a screw-jack support that is easily lowered for servicing. The heater is available in 30 and 45 gallon sizes, both finished in baked white enamel trimmed with stainless steel.

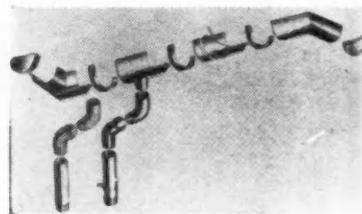
**CONCRETE FLOOR ENAMEL AB4802**

A rubber base enamel for concrete floors that reduces skidding accidents because it has the same grip a rubber sole would have was recently put on the market. This fast-drying enamel (requires only an hour) is available in eight colors and has a semi-gloss finish. It is

equally resistant to chemicals and oils, and unaffected by moisture and water. Long life is another of its outstanding qualities. The manufacturer is The Wilbur & Williams Paint Corp., 43 Leon St., Boston 15, Mass.

**ALUMINUM EAVES AB4807**

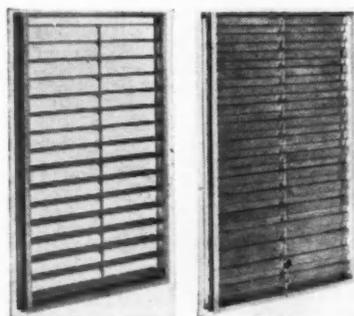
Aluminum rain-carrying equipment is now produced by the Reynolds Metals Co., Louisville, Ky. The line includes eaves trough, conductor pipe, and fittings of standard design. The



eaves trough is available in two styles: round and square. The conductor pipe comes in three forms: round, corrugated and square. The equipment is installed by the slip joint method. Customary rules apply and soldering is unnecessary. All the qualities that are inherent in aluminum—its light weight, permanence, resistance to rust, rot, stain and vermin—combine to make these products popular with home owners.

**ALUMINUM JALOUSIES AB4810**

Aluminum jalousies are available from the J. S. Thorn Co., Allegheny Ave. and 20th St., Philadelphia, Pa.

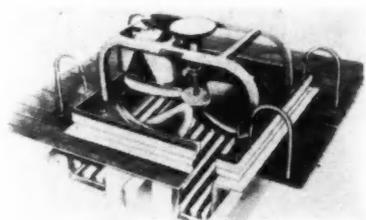


Developed primarily for torrid zones, they admit air and light yet exclude sun and rain. Made of non-ferrous materials, they are vermin, termite and rotproof, do not warp or swell, need no painting and are highly resistant to corrosion. The frames have

integral reinforcing ribs and water baffles designed to conduct water to the outside. To provide protection against housebreaking, the top and bottom reinforcing ribs interlock when slats are closed. These jalousies, named Tropic-al, are made to fit standard size openings and are delivered to the site assembled, ready for installation.

**PACKAGED ATTIC FAN AB4818**

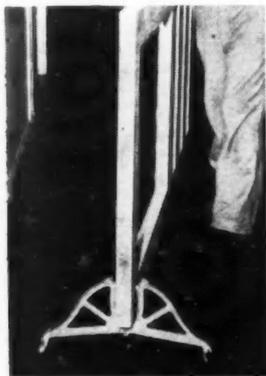
An attic fan packaged, ready for installation, is an innovation of the Chelsea Fan & Blower Co. Inc., 1206 Grove St., Irvington 11, N.J. The unit consists of vertical discharge fan and motor, automatic ceiling shutter,



floor mounting brackets and springs, canvas boot for seal between fan and attic floor, and pull chain switch. Designed for attics or other locations of low head-room and where extreme quiet is desired, this fan is suitable for home or commercial installation.

**PLANING TOOL AB4815**

Simple changes in design have increased the usefulness of Stow Metal "Dor-V-isE". Pointed set-screws, two on either end, have been added to the feet. These screws will hold on any surface. When not needed they may be backed off. To prevent marring finished floors, the feet are rubber padded. To increase the ease



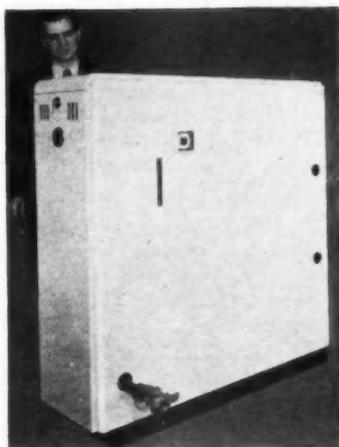
of handling, a tongue has been added to each foot. You simply step on the tongue—the jaws open and you place your work in the vise. Designed especially to hold doors while planing and drilling by the Stow Metal Products Co., Los Angeles, Calif., "Door-V-isE" lends itself to many other woodworking operations.

**GARAGE DOOR HARDWARE AB4812**

Upward-acting garage door hardware that operates in only 3½ inches of headroom and provides rigidity not usually found in this type of hardware is offered by the Holmes Manufacturing Co., 211 N. Madison, Los Angeles 4, Calif. Requiring no tracks, cables, weights or pulleys, this hardware is completely noiseless and, through a patented turnbuckle adjustment, accurately balanced. It is designed for 8-foot or 16-foot one piece doors.

**HEATING UNITS AB4801**

The Richmond Radiator Co. has added three new home heating units to the regular line of plumbing and heating equipment. These include a gas boiler with built-in domestic hot water coil; a horizontal gas winter air conditioner, and an oil winter air conditioner. The latter is the first oil burner put out by this firm and marks its entry into the oil heating business. It is a vaporizing



type air conditioner designed for low cost homes. Housed in a white enamel jacket, it comes completely assembled and wired to simplify installation. The gas-fired air conditioner is also completely assembled and ready for use. This unit requires a relatively small amount of floor space and allows ample head-room to ease installation of duct work. In the gas boiler, identified as Type K, the same cast iron sections can be used with different sets of controls for hot water, steam or vapor heating systems. The Richmond Radiator Co., an affiliate of Reynolds Metals Co., is located at 19 East 47th St., New York 17, N. Y.

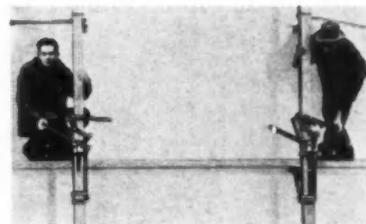
**NEW WALL TILE COLORS AB4814**

The introduction of eight new colors in Miraplas plastic wall tile is announced by the S & W Moulding Co., 990 Parsons Ave., Columbus 6, Ohio. The colors are solid and in the pastel shades. They are designed to blend

with other colors and are said to be restful to the eyes and unlikely to become tiring. Samples of these colors will be sent to anyone interested.

**PUMP SCAFFOLD AB4803**

A revolutionary scaffold bracket which elevates an entire platform with men and materials up or down on any 4x4 is on the market. The scaffold is held to the beams by means of pumps, and a simple brace holds it rigidly upright. The pumps, which operate and safety-lock automatically, employ three grips. This



provides triple safety, as any one of these grips will hold the scaffold under normal weight. The pumps accommodate a 24-inch painter's scaffold and can be adjusted to 12 or 18-inch scaffolds. This type scaffold not only speeds up work in the construction or repair of homes, factories, and barns but eliminates manually raising and lowering planks to each new working level. The manufacturer is the Newark Ladder & Bracket Co., Clark (Rahway), N. J.

**PAYLOADER BUGGY AB4806**

To its line of material-handling equipment the Frank G. Hough Co., Libertyville, Ill., have added a "Payload Buggy." It is a gasoline powered four-wheel unit built low and compact that can be operated in congested, low head-room areas and through narrow doorways and aisles.



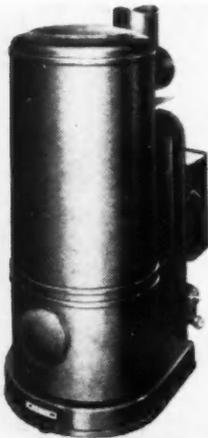
Its overall height is only 5 feet, 8 inches. The dump body is ideal for trucking sand, slag, castings, coal, cinders, gravel, ore, concrete or other bulk material. Built as a companion to the Payloader Shovel, the Payload Buggy matches it in capacity, compact size, speeds and operation. In addition, all main parts of the Buggy are interchangeable with those of the Shovel.

(Continued to page 146)

(Continued from page 145)

**INDUSTRIAL HEATERS AB4804**

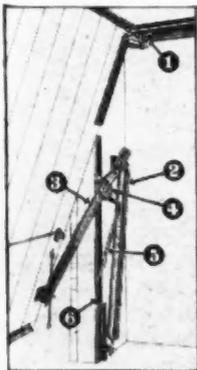
To answer the need of industry for high heating capacity at low cost, the Perfection Stove Co. designed two new Ivanhoe radiating heaters which are equally at home in a store or on a construction job. These heaters, of polished steel with enclosed bases finished in black japan, are identified as Model 2050 and Model 2030. The 2050, with a rated output of 50,000 BTU per hour, is an oil-burning heater equipped with Perfection's



patented "Multi-Heat" burner and "Midget" pilot, an automatic draft regulator, a combination oil control and constant level valve, and a fuel line clean-out rod. Model 2030, with a rated output of 30,000 BTU per hour, is a self-vaporizing burner equipped with an automatic draft regulator. A five-minute operation at the beginning of the day will assure uninterrupted heat from either unit throughout the working hours. The Perfection Stove Co. is at Cleveland, Ohio.

**GARAGE DOOR EQUIPMENT AB4819**

Complete freedom of garage design is an advantage that "Over-The-Top" door equipment offers builder-contractors. The



equipment utilizes a one-piece door which tilts out at the bottom, in at the top, and rises to a full overhead position by means of arms, a track in the ceiling to guide and carry the door, and counter-balancing springs. The

door can be architecturally designed to harmonize with the home. Roller-bearing hangers; over-size springs;

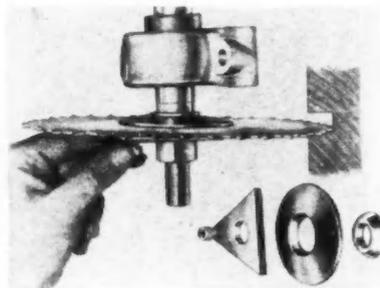
patented automatic opener are a few of the other features of merit. Made by the Frantz Manufacturing Co., Sterling, Ill., this equipment comes in 19 sizes and is available in complete wood or aluminum door units.

**ROOFING FASTENERS AB4811**

New type roofing fasteners which reduce erection costs of asbestos corrugated roofing and provide for movement between the steel frame and the asbestos roofing have been placed on the market by Keasbey & Mattison Co., Ambler, Pa. Trade-named "Top-Side" these fasteners eliminate the need of scaffolding and workmen beneath the roof since the entire installation is completed from the roof surface. In addition, lead covering tabs permanently weatherproof each fastener, making the cementing of bolt heads unnecessary. A drill and speed wrench are the only tools required when using this fastener.

**POWER SAW ATTACHMENT AB4813**

Unlimited variation of dado width can be accomplished by installing a new dado attachment known as the "Da-Dall" on bench, table, radial-arm and similar types of power saws. This attachment operates by means of a single adjustment screw which tilts the saw blade off the centerline to



one-half the desired dado width. The saw will then produce the same width dado until the adjustment is manually changed. This device permits high-speed dadoing on plywood, hard,

green or knotty woods. The Pacific Coast Tool Co., Oakland, Calif., is the manufacturer.

**MASONRY SAWS AB4817**

Important improvements in the 1948 "Versa-Tile" Clipper Masonry Saw has resulted in a tool appropriately labeled "the 100 per cent answer to masonry cutting." Chief among these is the addition of a coolant to eliminate dust and to provide for wet or dry cutting. Others are a dual belt drive for increased power; snap-on-



blade cover; streamlined positions for instant one-man change, and adjustable conveyor clamps, both elevating and non-elevating types. This model also cuts intricate shapes without stops for adjustments. It is produced by Clipper Manufacturing Co., 2800 Warwick, Kansas City 8, Mo.

**MASONRY COATING AB4816**

Kay-Tite, the well-known coating which controls water seepage and moisture penetration in all types of porous masonry is now available in brick red, green, blue, buff, cream, Spanish buff, and rose in addition to gray, and white. The addition of colors to the line will enable the user to apply Kay-Tite to blend with existing color scheme. It is packed in ten-pound cans and 50-pound drums. The manufacturer is the Kay-Tite Co., West Orange, N.J.

**CHECK NUMBERS AND MAIL COUPON FOR INFORMATION**

American Builder, 105 West Adams Street, Chicago 3, Illinois

NAME ..... ADDRESS .....

CITY ..... STATE .....

- |        |        |        |        |
|--------|--------|--------|--------|
| AB4801 | AB4806 | AB4811 | AB4816 |
| AB4802 | AB4807 | AB4812 | AB4817 |
| AB4803 | AB4808 | AB4813 | AB4818 |
| AB4804 | AB4809 | AB4814 | AB4819 |
| AB4805 | AB4810 | AB4815 |        |

When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder.



## Up front and up right When it's a Ro-Way

Ro-Way Distributors are hand-picked to serve you better. They are as fussy about installing Ro-Way Overhead Type Doors as we are in building them.

They know that Ro-Way manufactures every part of the Ro-Way Doors—even the springs and the hardware—right in our own plant.

They know that Ro-Way engineers have perfected each part to give better service for more years.

They know that the Springs for each Ro-Way Door are "power-metered" for the weight of that door.

They are trained in Ro-Way's methods of exactness.

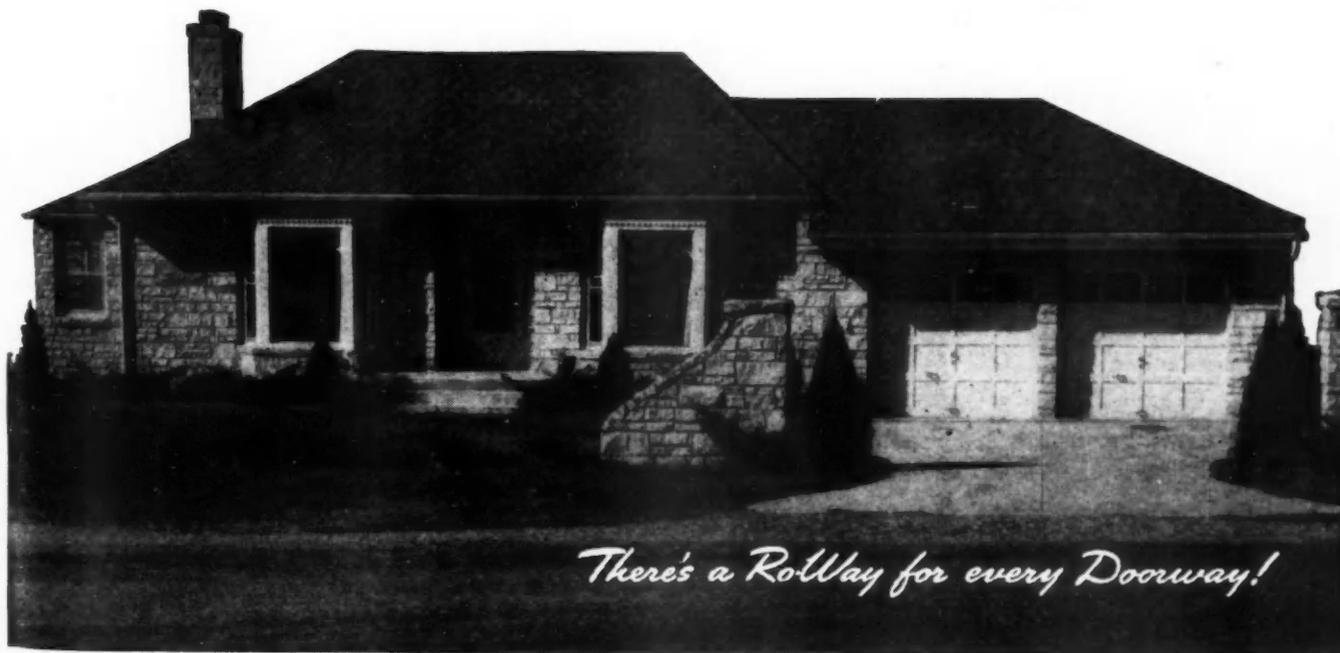
They value their Ro-Way franchise.

They are as jealous as we are of Ro-Way's nationwide good will.

...That's why you get so much more than good doors when you specify Ro-Ways. You get Up-Front Doors that are put up *right*. Available for residential, commercial and industrial installations.

**ROWE MANUFACTURING COMPANY**  
735 Holton Street • Galesburg, Illinois, U.S.A.

*Ro-Way Distributors in all principal cities.  
Consult your Classified Telephone Directory or write for distributor's name. See our Catalog in Sweet's.*



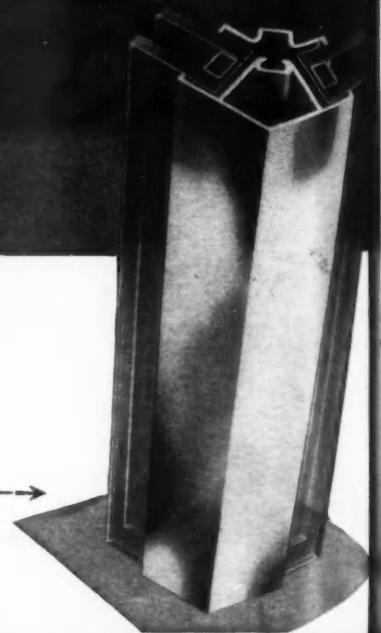
*There's a Ro-Way for every Doorway!*

# Construction ideas for "the modern look"



**AN OPEN VISION FRONT** draws attention to an attractive store interior and the merchandise displayed there . . . makes the inside of a store part of the window display. Up-to-date merchants want this added sales appeal. Sell them a "Pittsburgh" job. "Pittsburgh" is well known to your customers as the leader in the store modernization field. With Pittsburgh Glass Products, Pittco Store Front Metal, and an experienced crew of "Pittsburgh" workmen to handle the installations, you can easily provide modern store fronts and interiors to meet modern demands.

**NEW SETTINGS** specially designed for Twindow, have been added to the Pittco line of Store Front Metal. These settings are insulated, thereby increasing the effectiveness of Twindow in cutting heat losses, minimizing downdrafts near window areas and eliminating window fogging. Twindow settings may be used with Pittco De Luxe frame mouldings, making Twindow available for a wide range of store front and residential installations.

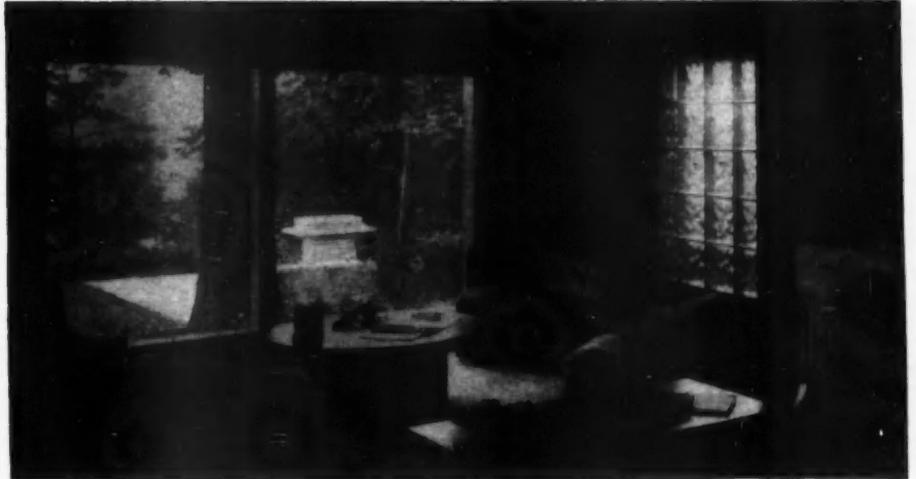


PITTSBURGH PLATE GLASS COMPANY PIT

# ... and that means *lots of Glass*



**EVERY HOME NEEDS** at least one full length door mirror of Pittsburgh Plate Glass. Most homes need more than one. A full length door mirror is a convenience that is appreciated by every member of the family. Other likely spots in the home for Pittsburgh Mirrors: over the living room mantel to reflect color and movement and make the room seem larger; in entrance hall and kitchen for a quick check-up before answering the door-bell.



**A LIVING ROOM WITH A PICTURE WINDOW** combines interior comfort with outdoor beauty. It's smart, attractive, up-to-date. Pittsburgh Polished Plate Glass fits ordinary window requirements perfectly. If insulated windows are desired,

suggest Twindow. "Pittsburgh's" new window with built-in insulation. Note the Pittsburgh Corning Glass Blocks . . . ideal for preserving privacy, yet admitting plenty of natural light.



← **A SPLASH PANEL** of Carrara Structural Glass behind kitchen stove or bathroom lavatory saves work for many a housewife because it's easily cleaned with a damp cloth. Carrara is available in ten attractive colors to blend with practically any color scheme. Walls or wainscots of Carrara Structural Glass keep bathrooms and kitchens bright and cheerful indefinitely. Other uses: fireplace surrounds, shelves, window sills.

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

\* Build it better with

# Pittsburgh Glass



PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS

Pittsburgh Plate Glass Company  
2123-8 Grant Building, Pittsburgh 19, Pa.

Please send me without obligation your "Builders Kit" of illustrated literature.

Name.....

Address.....

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

# DEALER REVIEW



## NEWS OF NRLDA AND STATE AND REGIONAL ASSOCIATIONS

### Industry Suffers Loss in Sudden Death Of Past President S. Lamar Forrest

**S.** LAMAR FORREST, president of the National Retail Lumber Dealers Association in 1945 and 1946, passed away suddenly of a heart attack in Gallup, N. M., February 28. Mr. Forrest, whose home was in Lubbock, Texas, was 55 years of age. He was known nationally in the industry as a fine leader, a humanitarian and a vociferous advocate of the American system of free enterprise.

While Mr. Forrest was president of NRLDA he traveled more than 60,000 miles, visiting hundreds of lumber dealers and delivering addresses at meetings and conventions. His years of service to the industry were the outgrowth of the firm creed of selflessness by which



S. LAMAR FORREST

he lived. In addition to holding the office of president through the trying and constantly changing days of 1945 and 1946, he served for several years on the executive committee of the National and held himself constantly ready to present the industry's viewpoints to congressional, inter-industry, and governmental committees. He was also past president of the Lumbermen's Association of Texas and represented Southwestern lumbermen's interests on OPA and WPB industry advisory committees during and after World War II.

Mr. Forrest owned and operated eight lumber yards just south of the Texas Panhandle, with head-

quarters in Lubbock. He was always prompt and enthusiastic in defending the American system which provided opportunities for him to develop his business by thrift and hard work. During the last few years one of his prime interests was operation of the Forrest Foundation which he established and through which he provided thousands of dollars for the care of cripples, unfortunate children and others in need.

Mr. Forrest is survived by his wife, Mrs. Myrtle Forrest; two sons, S. S. Forrest, Jr., of Lubbock, active in the business; Edwin Forrest of Slaton; and a daughter, Mrs. Mary Jo Copenhaver, of Lubbock; his father, S. S. Forrest, Sr., of Slaton; and five grandchildren.

Final rites were conducted Monday, March 1, at the Lubbock First Methodist church, where Mr. Forrest was chairman of the board of stewards.

### Sound Slide Film Now Ready To Promote Engineered House

**A** FULL-COLOR, 15-minute, 35mm. sound slide film which tells the complete story of the Industry Engineered Homes program has been developed by the National Retail Lumber Dealers Association. The film is an answer to repeated requests for source material to use in developing talks and programs for dealers, clubs and the public concerning the Engineered House.

The film explains fully what the Engineered House is, how it can be built and why it costs less. One copy of the film and disk will be provided by the National to each state and regional association for use in dealer group meetings. Dealers may also arrange to purchase a film and disk set, through state association secretaries for \$9.50, plus the express charges. Projectors, screens and record players for presenting the film are for sale or for rent at most film supply dealers in larger cities.

### Production and Distribution of Materials

by H. R. NORTHUP,  
Secretary-Manager NRLDA



If production and distribution of building materials could be viewed only from the standpoint of cold statistics, this country would be in the greatest position for home construction in its history. A combined index covering all building materials shows that in 1947 we were at the highest peak of production. Using 1939 as 100, the production figure for 1947 was 139.6.

Production years nearest that figure were 1925 with 134.0 and 1926 with 133.3. Highest production peak during the war years was reached in 1942 with 126.9. In 1920, often compared with 1947 because both years marked the second year's production after a major war, the figure was comparatively 95.9.

Production of all basic building materials has increased since 1945, but the amount of this increase is not always a key to the relative scarcity of the product. For example, since 1945, cast iron radiation has increased 216.7 per cent and may still be one of our scarce products, whereas cement has increased 81.6 per cent and is presently in adequate production for the construction contemplated for 1948.

Increases since 1945 have ranged from structural insulating board with 22.9 per cent to bathtubs with 549.4 per cent. Lumber is up 30.3 per cent, brick is up 119.7 per cent, cast iron soil pipe and fittings are up 184.2 per cent, gypsum board production, including lath, is up 79.3 per cent, wire, nails and staples production is up 32.4 per cent.

With few exceptions, preliminary studies being made by the  
(Continued to page 152)

*Now Ready!*



...a sales-making new booklet on  
**Hydro-Flo Heating**

You've never seen a more attractive, convincing presentation of forced hot water heating... prepared especially to answer the pressing demand for information on B & G Hydro-Flo Heating Systems. You'll

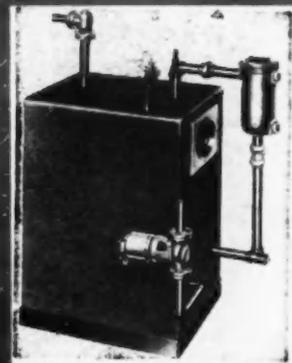
find this booklet an excellent help in visualizing to your prospects the benefits of today's preferred heating method... a valuable contribution in the interest of better heating for modern homes.



*Send for Your Copy*

Beautifully printed in four colors—every page alive with interesting, vital information on forced hot water heating... fascinating reading for home planners. Shows how the comforts of radiant heating can be obtained with radiators, panels, baseboards or convectors—plus the convenience of year 'round, low-cost hot water for kitchen, laundry and bath.

Please write on your business stationery.

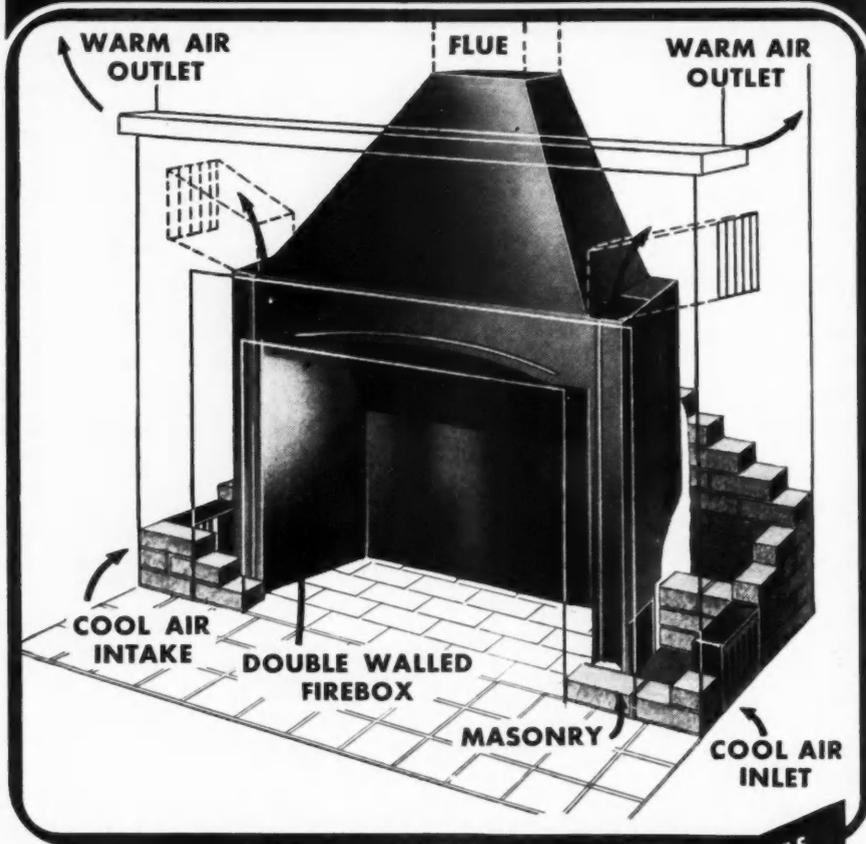


**BELL & GOSSETT**  
*Company*

Dept. AM-11, Morton Grove, Illinois

REG. U. S. PAT. OFF.

# A Correctly Operating FIREPLACE this Easier Way



## Heatilator\* Assures Correct Construction Saves Labor and Materials

Building any style of fireplace is easier when you build around the Heatilator Fireplace unit. The Heatilator is a *complete* fireplace form, with smoke dome, throat, downdraft baffle, and damper all built-in. Masonry is easily laid around the Heatilator . . . minimum of time, labor, and material is required.

### Circulates Heat . . . Will Not Smoke

The Heatilator assures a correctly designed fireplace free from the faults that commonly cause smoking. It circulates heat to the farthest corners of the room, and to adjoining rooms if desired. Twenty years' successful use—in all parts of the country—have **PROVED** the Heatilator. It is America's leading fireplace—accept no substitutes! Write for installation information.

HEATILATOR, INC.  
814 E. Brighton Ave., Syracuse 5, N. Y.

\*Heatilator is the registered trade name of Heatilator, Inc.

# HEATILATOR FIREPLACE

## Dealer Review

(Continued from page 150)

Construction Industry Information Committee show that the production of all basic building materials will be up even higher in 1948. Production of sinks will be down 3.6 per cent and fabricated structural steel will be down 3.4 per cent. Of course, fabricated structural steel is purely a demand item. It is fabricated upon order and its production depends largely upon the orders received for it.

In all other categories, production is estimated as being higher in 1948 than in 1947.

**Lumber production** in 1947, for example, was 36.6 billion board feet and in 1948 will reach 38 billion board feet.

Gypsum board production was 3.7 billion board feet in 1947 and will go to 4.3 billion board feet in 1948. This was one of the scarce items in 1947 and the tremendous jump in production will be accounted for by new production from new plants which have been erected.

Shipped production of cast iron soil pipe and fittings in 1947 amounted to 577,000 tons and should reach 625,000 tons in 1948, barring strikes. Labor trouble which has since been straightened out was the cause of shortage in this item during 1947.

Wire nails and staples production in 1947 reached 799,000 tons and can reach 900,000 tons in 1948. Spotty shortages of nails were experienced in 1947, much of this production moving through gray market channels. Increased production depends largely upon steel company policies, the demand for the production, and the market price that can be obtained for nails.

**Cast iron radiation** production amounted to 57,000,000 square feet in 1947 and can increase to 65,000,000 square feet in 1948. Radiation, however, may be one of the shortages in 1948.

The above figures indicate the general increases that may be expected in the production of materials in 1948. In 1947, the industry completed 835,000 homes and started 860,000 homes.

On the basis of material production, there is no foreseeable shortage of building supplies for the BLS figure of 950,000 houses or approximately a million homes, except for an uncomfortably tight situation in mill-work and cast iron radiation.

(Continued to page 154)



# Johns-Manville Asbestos Flexboard is **STRONG AND TOUGH**



*One man can handle the big sheets*

Exclusive J-M manufacturing process makes this fireproof, rotproof building board so strong and tough that it can be lifted and handled by one man without cracking or breaking. You save on time and labor, and avoid waste.



*It can be nailed close to edge*

Another advantage of Flexboard—you can drive a nail even close to the edge of the sheet without cracking or chipping . . . no drilling required!



*It bends to fit curves*



**Send for this FREE Handbook**—contains complete information about cutting and working asbestos Flexboard. Easily understood drawings show how to apply it indoors or out . . . how to handle the joints, door and window openings, ceilings, and floors. Your copy is ready. Ask for the Flexboard Handbook. Address Johns-Manville, Box 290, New York 16, N. Y.

Still another exclusive feature . . . Flexboard is so tough and flexible it can be bent on either axis to a degree unmatched by any other product of its kind . . . a great advantage where curved surfaces are required.

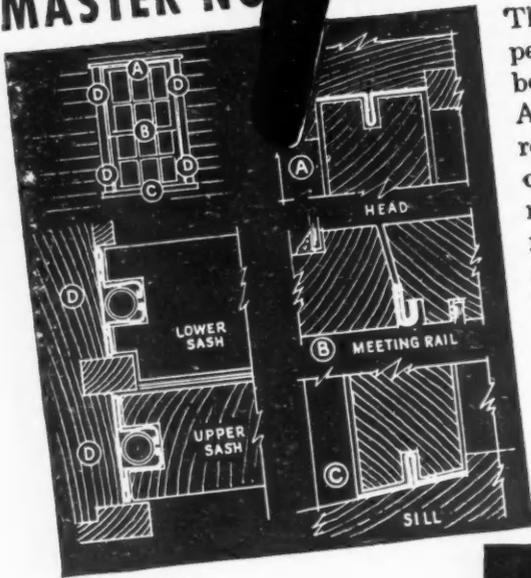


# Mr. Builder! SAVE MONEY WITH THIS SALES FEATURE

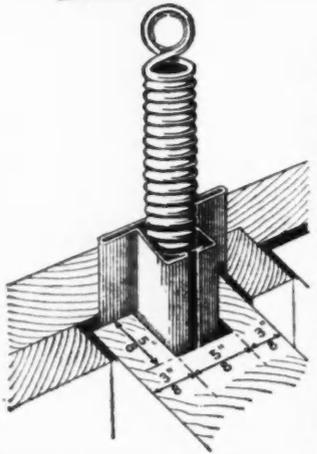


Here is the double-hung sash equipment that combines spring balance and weatherstripping in one unit of obvious economy . . . Use it on new or old windows . . . It eliminates weights, pulleys and cord . . . It prevents binding and sticking . . . It gives sash "finger-tip" control.  
**TIME TESTED...PRACTICAL...ECONOMICAL**

## MASTER NO-DRAFT SASH BALANCE



This equipment acts as a perfect weatherstrip for both sides of the window. As shown on the left we recommend Master Metal cross strips for meeting rail and top and bottom rails. Properly tempered springs give upper and lower sash perfect balance. Self-adjusting metal housing provides for swelling and shrinking of wood and furnishes metal runways for sash that never need painting.



Write today for complete information about this modern window combination equipment that saves you time and money and gives your customers complete satisfaction on plank or box frame windows, old or new of any size. Use the coupon below.



**MASTER METAL STRIP SERVICE** 1720 N. Kilbourn Ave. Chicago 39, Ill. } **MASTER NO-DRAFT SASH BALANCE**  
Please send me, without obligation, complete information about Master No-Draft Sash Balance.

Name .....

Address .....

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

## Dealer Review

(Continued from page 152)

Without strikes, without an undue increase in the export of building materials, and without government interference typified by controls and allocations, 1948 can be a most healthy construction year and produce the largest number of homes ever completed. It must be remembered that during the last six months of 1947 when the industry was free of controls, it produced homes at a rate of almost a million homes a year.

### NRLDA Plans Folders In Public Relations Program

Five new folders carrying concise facts and arguments to counteract numerous attacks being made on the retail building material industry and the home building industry are being prepared by the National Retail Lumber Dealers Association, according to an announcement by Paul Watson, public relations director. Because the attacks usually fall into one of five categories, the five folders will each deal with one of the five classes of arguments advanced.

They will deal with the following topics:

1. Private or public housing? A complete analysis of why public housing is more expensive than private building, without actually adding one single additional housing unit to the supply at hand.
2. Are housing costs out of line? Breaking down of housing costs as they exist today and comparing them with other costs provides an answer to the question of just how high home costs are—and why.
3. Housing record. Should we have a free industry—or a controlled industry? A comparison of construction rates while the industry was under government control and the rate since controls were lifted provides all the answers to this argument.
4. Why the middleman is in the middle. The retail lumber and building material dealer has a definite part in the private home building industry and the public should be acquainted now with his functions. An analysis will be made of what the dealer does, why he is necessary and how the profit he takes actually reduces costs.
5. How to bring prices down. Some clear, concise suggestions as to what the American people can do to halt the rise of prices.

These five folders will be available.  
(Continued to page 156)

# INSTALL Stainless Steel Sinks and build SATISFACTION



## REASONS FOR *Lustertone* SINKS

- To millions, stainless steel means permanence, sanitation and lasting beauty.
- One-Piece bonded construction eliminates all seams—no crevices to harbor dirt and germs.
- Housewives know that greater resilience means safer dishwashing—less hazard of breaking fine china.
- Hot utensils can't mar the lustrous surface. Never a crack or craze from waste food disposer or automatic dishwasher action.
- Will not chip, peel, flake or wear off—never can discolor.
- Guaranteed to outlast any home or building.

THIS ILLUSTRATION headlined, "You can't wrap your kitchen in cellophane," will appear soon in ELKAY's House Beautiful advertising... one step in a national program to intensify consumer preference for quality-built stainless steel sinks.

### FACTS YOU SHOULD KNOW:

- Available from stock in 7 popular sizes.
- Single Bowl—54, 60, 72 inches
- Double Bowl—66, 72, 84, 96 inches
- To fit any cabinet—or as complete unit.
- 
- Custom built in any size, shape or arrangement.
- 
- #18 Gauge Stainless Steel—satin finish for lasting beauty and easier cleaning.
- 
- Seamless—one-piece bonded construction—no overlapping or soldered edges.
- 
- Corners and intersection rounded to large radius (no sharp angles).
- 
- Structurally reinforced and scientifically sound-deadened by master craftsmen.

### CONSULT

1948 Sweet's Architectural File—23a/6,  
or write for further facts.

**ELKAY MANUFACTURING CO.**  
1872 S. 54th Avenue, Chicago 50



# *Lustertone* STAINLESS STEEL SINKS

ELKAY for over a quarter century — first choice of America's Leading Sanitary Engineers

# STANLEY SAFETY SAWS MAKE HARD JOBS EASY

**S**TANLEY SAFETY SAWS put the "know-how" of the skilled workman right on the job. The toughest jobs such as cutting compound angles, stair stringers, floor joists, flooring, etc. become simple, easy tasks.

Stanley Saws handle easily as a hand saw. Duplex handle for convenient holding in any position. Simple wing nut adjustment for depth of cut. Safety

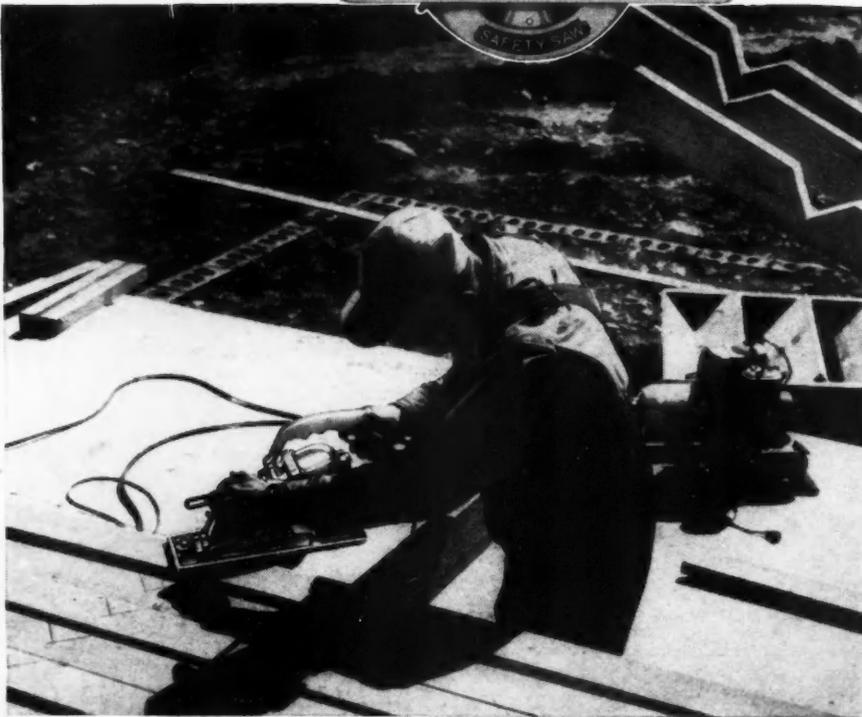
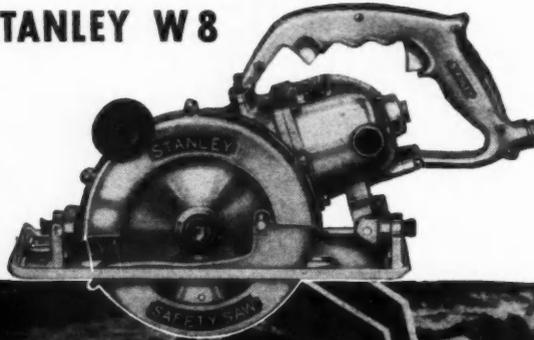
guard covers cutting edge at all times.

Motor and arbor mounted on sealed ball bearings. Independent trigger switches for each of duplex grips. Tilting base for bevel cuts.

Operate on AC or DC. Write for folder showing Stanley Saws and Adjustable Saw Track. Sold by industrial distributors. Stanley Electric Tools, 492 Myrtle St., New Britain, Conn.

## STANLEY W 8

Three popular sizes for builders — W7 cuts up to 2½"; W8 cuts up to 2¾"; W9 cuts up to 3¼".



*The greatest name in tools*

# STANLEY

HARDWARE · HAND TOOLS · ELECTRIC TOOLS.

Reg. U.S. Pat. Off.

## Dealer Review

(Continued from page 154)

able to dealers and copies of the envelope stuffers in sufficient quantities for local campaigns can be secured at extremely low cost. The National also will carry on a supporting campaign in newspapers and other media that meet the public directly.

## Record Crowds, High Interest Feature Dealer Meetings

Continued high interest in industry and association affairs have featured dealer association meetings this year and there has been no change as the season progressed. Prime interest of dealers is in satisfying an apparently insatiable demand for their products in addition to preparing to meet problems expected when the situation changes into a strong buyers' market. Reports on a number of meetings were carried in the March issue. The following reports are on meetings conducted in late February.

### MOUNTAIN STATES

W. P. Harley of Albuquerque, N. M., was elected president of the Mountain States Lumber Dealers Association at the 55th annual convention conducted at the Shirley-Savoy Hotel in Denver February 11, 12 and 13. Paid registrations totaled 1,030, the largest in the association's history. Space limitations held exhibits to 61. The Old Guard breakfast was again an outstanding feature of the meeting, and at this convention a President's Club was organized and will be an annual get-together feature for these men. More than 1,000 were in attendance at the banquet.

Other officers elected in addition to Mr. Harley are: C. A. Wangberg, Colorado Springs, Colo., vice president; J. V. Smith, Denver, secretary-treasurer, and John E. Gorusch, general counsel. Directors are R. B. Allen, Portales, N. M.; A. W. Edwards, Cheyenne, Wyo.; W. P. Harley, Albuquerque, N. M.; R. E. Nutting, Littleton, Colo.; C. C. Phillippe, Basin, Wyo.; J. F. Scott, Denver, Colo.; W. J. Truitt, Sterling, Colo.; C. A. Wangberg, Colorado Springs, Colo., H. I. Williams, Curango, Colo.

### CAROLINA

The Carolina Lumber and Building Supply Association members gathered at the Francis Marion Hotel in Charleston February 11, (Continued to page 158)

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The Famous  
**Bruce**  
**Scratch Test**  
shows the way to  
**Finer Hardwood Floors**

The durability and beauty of a floor depend greatly on the *finish*. That is why Bruce has devoted years of research to improving floor finishing materials and methods. The Scratch Test, pictured above, shows convincingly the results of this research.

In this test, one half of an oak panel is finished by the Bruce penetrating seal method; the other with a commonly used surface finish. A coin scraped across the panel scratches and chips away the surface finish . . . but leaves the Bruce Finish unharmed, because it's "in the wood."

You get this more beautiful, longer-lasting finish in Bruce Finished Floors—completely sanded, finished and waxed at the factory. Similar results can be secured on the job through the use of Bruce floor finishing materials on unfinished flooring.

The Bruce formula for finer hardwood floors: highest quality flooring plus the "Scratch Test Finish."



**BRUCE HARDWOOD FLOORS**



STRIP



BLOCK



PLANK

**E. L. BRUCE CO., MEMPHIS, TENN.**

**World's Largest Maker of Hardwood Floors**

Other Bruce Products: Floor Maintenance Materials • Everbond X Floor Mastic • Terminix • Terminix Ventilator • Ceda'line Yellow Pine & Hardwood Lumber • Hardwood Moulding & Trim • Furniture & Furniture Parts

"Thanks a Million,  
American—



YOU SHOWED ME  
HOW TO  
**MAKE MONEY**  
IN A BUSINESS ALL MY OWN!"

Now—you, too, can be your own boss and step into big profits in the building industry as a floor surfacing contractor! Make \$35 to \$50 a day—that's what hundreds of men everywhere are earning in floor surfacing work today with an American Floor Sander! Easy to operate—no big overhead—no large investment—no special schooling. Prospects everywhere—sand new and old floors. Start now and get ahead! Send coupon for money-making booklet.



**A** **AMERICAN**  
FLOOR MACHINES

The American Floor Surfacing Machine Co.  
511 So. St. Clair St., Toledo 3, Ohio

Enclosed find 25c in stamps or coin for booklet "Opportunities in Floor Surfacing", telling me how I can start my own floor sanding business.

Name .....

Street .....

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



**Dealer Review**

(Continued from page 156)

12, and 13 for their 25th annual convention. W. C. Godwin of E. W. Godwin's Sons, Wilmington, N. C., was named president.

Other officers elected are: C. G. DesChamps, Spartanburg, S. C., first vice president; H. G. Sherrill, Statesville, N. C., second vice president; L. C. Fischer, Charleston, S. C., third vice president; W. V. Groome, Charlotte, N. C., treasurer. E. M. Garner continues in his capacity as secretary-manager. H. J. Munnerlyn is the NRLDA director.

**WEST VIRGINIA**

The 25th annual convention of the West Virginia Lumber and Builders Supply Dealers Association was conducted at the Daniel Boone Hotel in Charleston February 13 and 14. Attendance was largest in history.

No exhibits were featured because of inability to obtain suitable accommodations for display purposes.

James C. Borden of Bluefield was named 1948 president succeeding Hartsel L. Turner of Clarksburg. Vice presidents are: Earl Lilley, Beckley; Charles P. Houston, Welch; Paul T. Butcher, Weston; Earl Meek, Wheeling; Hartsel L. Turner, Clarksburg. Directors are George A. Bailey, Wheeling; A. W. Laing, Jr., Charleston; D. C. Thompson, Huntington; Charles E. Badger, Parkersburg; C. G. Conaway, Fairmont; C. I. Cheyney, Bluefield, and Charles P. Thorne, Morgantown. Sam H. Diemer is secretary of the association.

**WESTERN**

Members of the Western Retail Lumbermen's Association gathered in record numbers at the Davenport Hotel in Spokane, Wash., for the 45th annual meeting of that association February 16, 17 and 18. Ninety-one exhibits drew intense interest of those in attendance.

H. W. Blackstock, of the H. W. Blackstock Lumber Co., Seattle, was elected president to succeed A. J. Huddleston of Oswego, Ore. Vice presidents elected are Harold Uglen, Lewiston, Idaho; W. L. Johnson, Boise, Idaho; Ralph T. Howard, Klamath Falls, Ore.; F. G. Mauser, The Dalles, Ore.; E. C. Schoeneman, Wenatchee, Wash.; R. E. Wert, Spokane, Wash., and C. W. Johnson, Bremerton, Wash. New directors named are Gunder

(Continued to page 162)

# ARCHITECTS-DEALERS

# *In brief* BUILDERS

# Your Best Date In '48



More Beautiful and Lasts Longer



**HERE'S HOW TO DATE HER**

You can make your arrangements for a profitable lifetime date by writing Metal Tile Products, Inc., Hastings, Michigan, today for full information. Once you have seen Hastings Alumitile, checked and tested it, you'll adopt it as your steady date.

# Miss Alumitile!!

"Don't miss investigating Hastings Alumitile now. It's your best date in '48", says our attractive Miss Alumitile. Available in 14 rich beautiful colors. Hastings Alumitile has the plus features that will keep your business humming.

## METAL TILE PRODUCTS CO., INC.

### HASTINGS, MICHIGAN.

Check these features in Hastings Alumitile—fire, water, chip and stain proof. Impervious to alkali and will never crack or peel. Alumitile is unbelievably economical, costs up to 50% less than other conventional tiles.

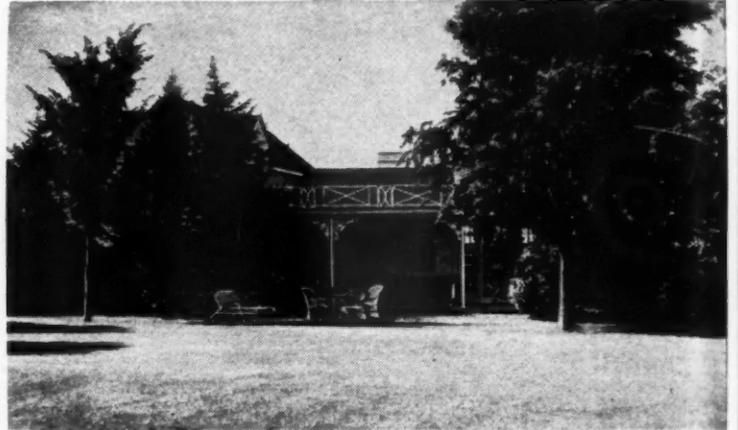
METAL TILE PRODUCTS, INC.  
Hastings, Michigan

I am interested in learning more about Hastings Alumitile. Please send literature and the name of my closest distributor so that I may personally investigate Alumitile.

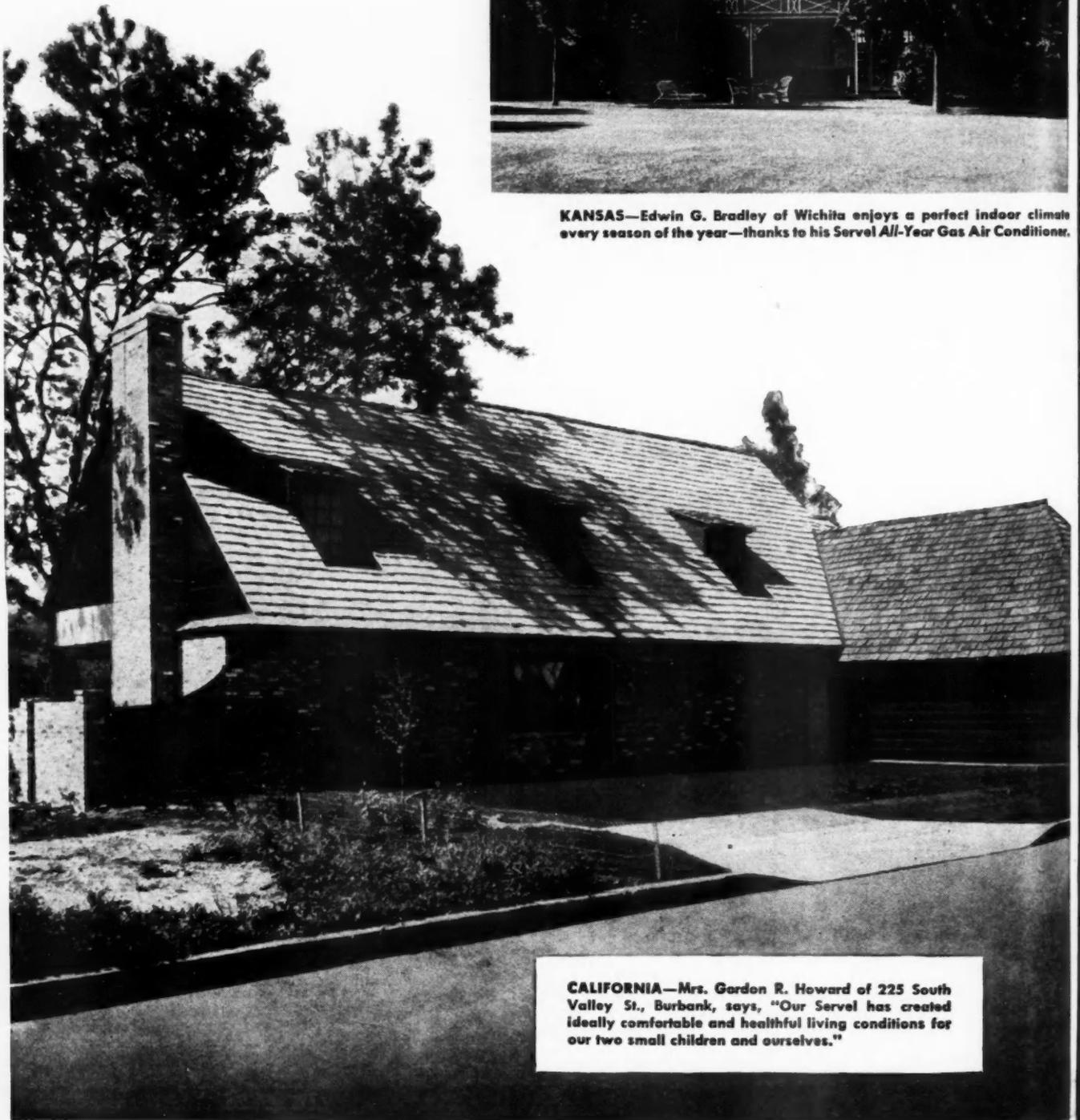
Name \_\_\_\_\_  
Position \_\_\_\_\_  
Business \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

# Through every season...

**COMFORTABLE TEMPERATURES!  
JUST-RIGHT HUMIDITY!  
FREEDOM FROM DUST!**



**KANSAS**—Edwin G. Bradley of Wichita enjoys a perfect indoor climate every season of the year—thanks to his Servel All-Year Gas Air Conditioner.



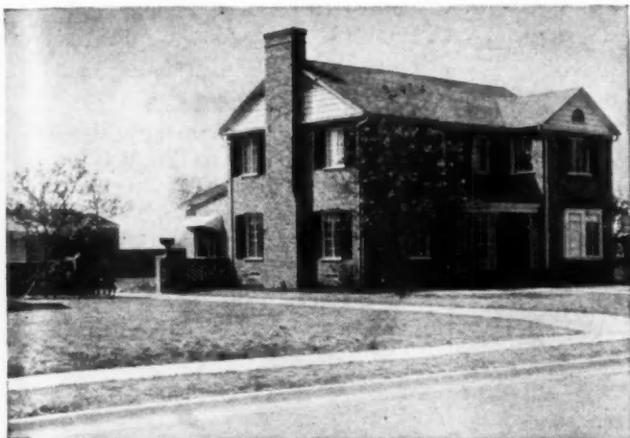
**CALIFORNIA**—Mrs. Gordon R. Howard of 225 South Valley St., Burbank, says, "Our Servel has created ideally comfortable and healthful living conditions for our two small children and ourselves."

Am

TEXAS  
Dallas  
Servel

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offer  
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In  
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the

## Give your new homes twelve-month comfort with Servel *All-Year* Gas Air Conditioning



**TEXAS**—The home of builder John W. Taylor, 4329 McFarlin Boulevard, Dallas, is kept comfortably cool all summer, cozily warm all winter by Servel *All-Year* Gas Air Conditioning system.



**OKLAHOMA**—"Our entire family praises our Servel *All-Year* Gas Air Conditioner, and we are always proud to have visitors come in," writes Mr. G. W. Athey, of 1106 W. York Street, Enid.

**Y**OU GIVE your clients a real plus in modern home construction when you plan your new homes around Servel *All-Year* Gas Air Conditioning. For this wonderfully efficient year-round conditioner offers the peak in indoor climate control . . . every season of the year.

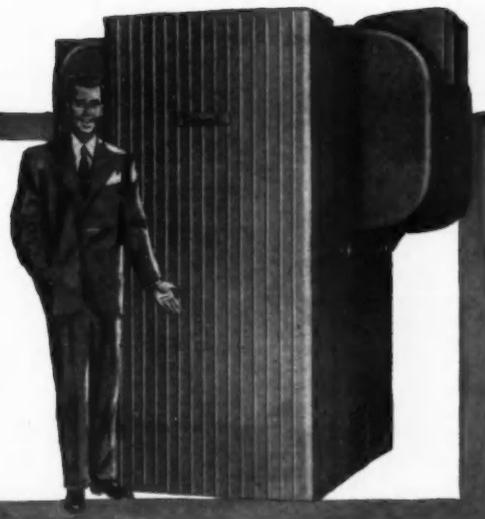
In summer, the Servel *All-Year* Gas Air Conditioner refrigerates the air, removes sticky, wilting humidity. In winter, this same unit floods the home with warmth, adds just the right amount of moisture for comfort. In between seasons, Servel circulates air without drafts or "layers" of hot and cold air. Year round, Servel filters out

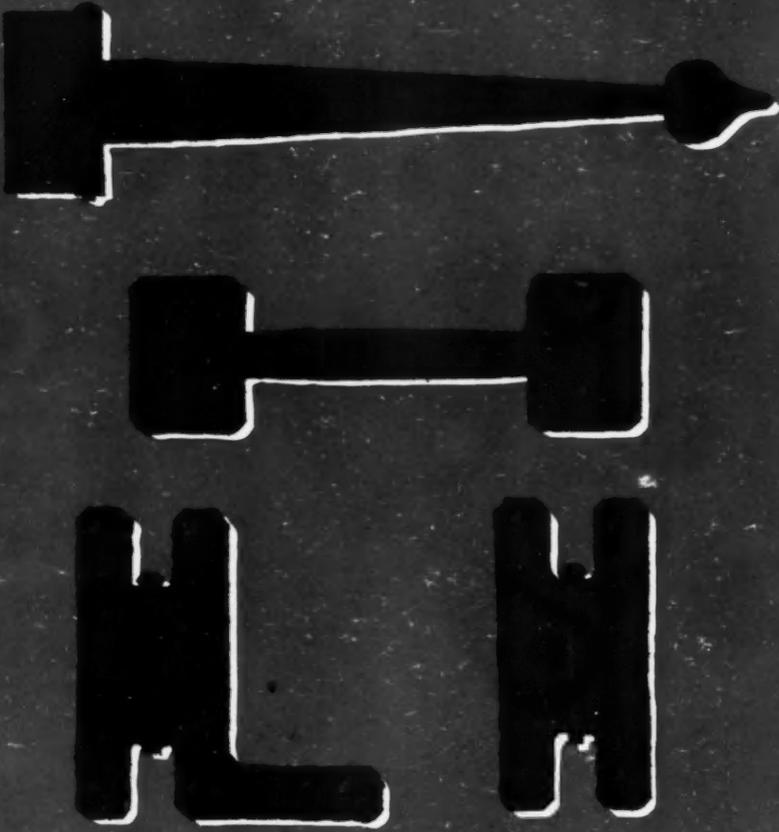
dust, dirt, and irritating pollen. A flick of the finger controls all operations, through every season.

Owners everywhere praise Servel air conditioning. Many say it's the finest feature a new home can offer. Shown on these two pages are a few of the many hundreds of installations now operating successfully from coast to coast. So you can be sure you're on safe ground when you recommend Servel *All-Year* Gas Air Conditioning.

Ask your local Gas Company for detailed information about specific types of applications. Or write direct to Servel, Inc., 1804 Morton Avenue, Evansville 20, Indiana.

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





**FORGED IRON  
CABINET HARDWARE**

for use on painted surfaces as  
well as on natural wood finishes.

*Quality Hardware*  
*Since 1865*

**McKINNEY**

MANUFACTURING COMPANY

PITTSBURGH 12, PENNSYLVANIA



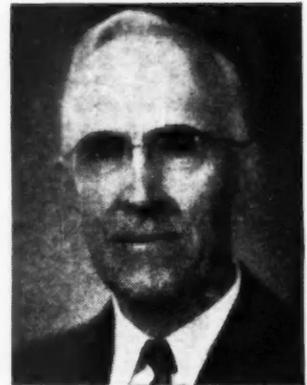
## Dealer Review

(Continued from page 158)

W. Kjosness, Lewiston, Idaho; F. O. Garrigus, McMinnville, Ore.; Clayton C. Morse, Astoria, Ore.; George A. Reed, Eugene, Ore.; George L. Scharpf, Albany, Ore.; Xavier Baker, Kelso, Wash.; Grant Dixon, Jr., Spokane; J. P. McEvoy, Kirkland, Wash. J. W. Copeland of Portland, Ore., was elected national director. W. C. Bell is the managing director.

### WISCONSIN

Total registration at the 58th annual meeting of the Wisconsin Retail Lumbermen's Association was 2,870, an increase of 303 over a year ago. Business sessions were conducted in the Milwaukee Auditorium where the exhibit hall was crowded to capacity with 168 ex-



C. K. ARP

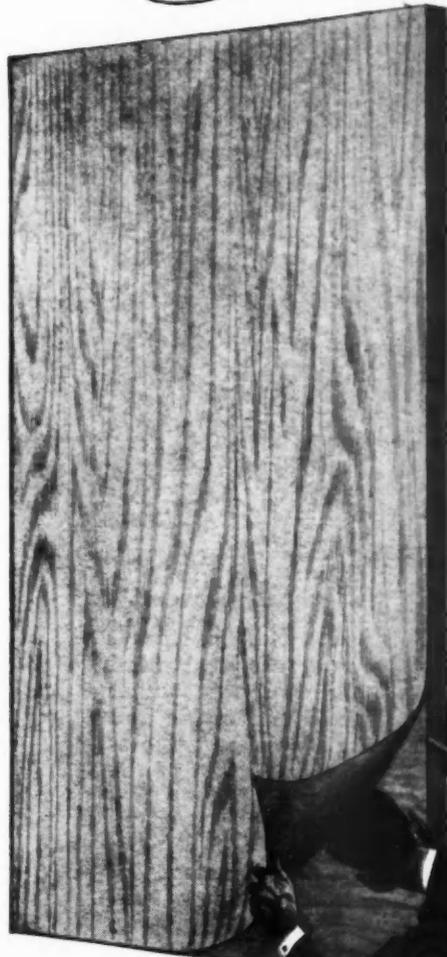
hibit booths manned by 945 representatives of exhibitors.

C. K. Arp, of the Home Lumber & Fuel Co., Elkhorn, was reelected president and the treasurer, Joseph E. Richardson, of the Richardson Lumber Co., Sheboygan Falls, was also reelected.

The program was built around the problems of merchandising and managing lumber yards under today's conditions. Program topics included: "How We Build Homes for Our Customers"; "What Shall We Advise Our Customers About Building in 1948"; "Dusting Off Some of the Principles of Salesmanship"; "Lumber Dealer Advertising" and a presentation of the Industry Engineered House. One of the highlights was a debate the last day on "Should Cooperatives Pay Income Taxes". Richard M. Rice, attorney of Milwaukee, took the affirmative and Erich Lenz of Madison, the negative. Don S. Montgontery is secretary of the Wisconsin association.

(Continued to page 164)

# Roddiscraft Quality



... is an inside job



You know that the faces of Roddiscraft Doors and Hardwood Plywood are smooth as satin — that edges are clean and true — but the quality that gives Roddiscraft Doors and Plywood long life and lasting beauty is an inside job. It's the inside materials — core blocks, glue, crossbandings, plus the care and craftsmanship used in

fabrication that makes it possible for Roddis to unqualifiedly guarantee materials and workmanship.

Yes, — Roddiscraft backs its Doors and Plywood with a guarantee bond. That's your assurance that Roddiscraft beauty is more than veneer-deep.

**NATIONWIDE Roddiscraft WAREHOUSE SERVICE**

Cambridge 39, Mass. . . . . 229 Vassar St.	Long Island City, N. Y., . . . . .
Chicago 8, Ill. . . . . 1440 W. Cermak Rd.	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 Southwest 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**

**Roddiscraft**  
Roddis Lumber & Veneer Co.  
MARSHFIELD, WISCONSIN

FRIENDLY AND LIVABLE CABINETS OF WOOD



These new Kitchen Maid Cabinets with flush panel surfaces and gently sweeping contours are years ahead of the field in styling. Built of hardwood and other fine materials, they are friendly, cozy and livable, and harmonize ideally with any make of appliance. Moreover, the kitchen becomes an integral room of the house—inviting and hospitable.

**COMPOSITE CONSTRUCTION**

Kitchen Maid Cabinets have all the advantages of composite construction—the quiet, easy action of rustless aluminum drawers—the warmth and flexibility of hardwood—the stability and durability of new compositions—the permanence and beauty of factory-applied enamel finishes.

The Kitchen Maid dealer organization, oldest and most experienced in the field, will gladly assist you in your planning and installation problems. See your dealer or send coupon below for colorful new booklet containing illustrations, plans and details of 10 model kitchens.

**A FEW TYPICAL ARCHITECTS AND BUILDERS WHOSE PROJECTS HAVE INCLUDED KITCHEN MAID CABINERY:**

Leonard Schultz Associates, New York; Eugene A. Stopper, Wilbur C. Henderson, Philadelphia; Gray & Pauley, St. Louis; Hamilton Brown, Houston; Thompson Starrett Co., New York; Merrick & Kleist Co., Cleveland



New! Aluminum Drawers. Operate smoothly on hardwood guides and slides. No rust, no chipping, no noise, no denting.



**THE KITCHEN MAID CORPORATION**  
584 Snowden Street, Andrews, Ind.

Please send free copy of colorful new booklet containing 10 practical kitchens with floor plans and working details. I am an  Architect  Builder  Dealer.

Name \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

**Dealer Review**

(Continued from page 162)

**VIRGINIA**

Forrest E. Paulett, of W. F. Paulett & Son, Scottsville, was elected president of the Virginia Building Material Association to succeed Earl R. Hunt of Norfolk at the 22nd annual convention of the association at the Hotel Roanoke in Roanoke, February 19 and 20. Vice presidents are S. L. Burrough, Tappahannock; Earl S. Talbert, Danville; Ernest L. Whitehurst, Norfolk, and John B. Young, Fredericksburg.

Craig Ruffin of Richmond was elected treasurer and the following men are directors: J. G. Bosang, Pulaski; George B. Early, Galax; H. G. Fowler, Newport News; R. H. Hinton, Lillian; J. T. Hirst, Leesburg; M. R. Large, Farmville; M. M. Maddux, Marshall; W. N. Neff, Abingdon; L. R. O'Hara, Yorktown; J. F. Raff, Sr., Richmond; Paul F. Rosenberger, Winchester, and E. R. Woolridge, Roanoke.

Earl R. Hunt is the NRLDA director and Harris Mitchell is secretary.

**NEBRASKA**

A total of 1,200 registrations were made at the 57th annual convention of the Nebraska Lumber Merchants Association in the City Auditorium, Omaha, February 23



**O. N. FLATEN**

and 24. Eighty-seven exhibitors occupied the 100 booths in the exhibit hall. Secretary Phil Runion reports that 35 applications for exhibit space has to be rejected because of lack of space.

The dealers elected O. N. Flaten, of Gering, as their new president to succeed Arthur W. Melville, of Broken Bow. Carl Johnson of Shubert was named vice president. Harold Holmquist of Oakland is

(Continued to page 166)

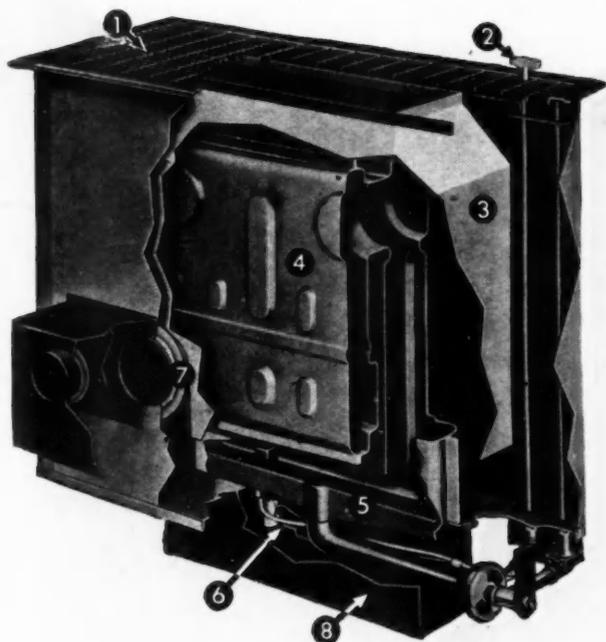
# self-seller

## FOR A BIG-TIME HEATING JOB

**FITS BETWEEN STANDARD FLOOR JOISTS...**

### THE BRYANT HEAT-CHAMBER

**GAS-FIRED FLOOR FURNACE with Electric DIAL-LITE Ignition**



● For 1948 housing . . . the floor furnace with the features that will attract buyers in both new and replacement markets. Engineered for ease of installation and operation, the *Heat-Chamber* fits between standard floor joists, provides *floor level* access to ignition and control. Made in fully automatic or manual control models. Three sizes for natural, manufactured, LP or mixed gases.

1. Rigid, non-trip grille with pleasing, lasting finish.
2. Main and pilot burner controls readily accessible. Simply turn key to ignite and operate.
3. Single radiation shield, floating support.
4. Electric-welded, gastight combustion chamber, die formed for rigidity.
5. Raised, drilled port, cast iron, venturi type, high-efficiency burner
6. Easy, safe *Dial-Lite* ignition with electric coil.
7. Sealed casing prevents dirt or insects from entering dwelling.
8. Scientifically designed burner pan prevents drafts blowing out burner.



**BRYANT HEATER COMPANY • CLEVELAND, OHIO**  
One of the Dresser Industries

**BUILD  
NOW**  
WITH

**Duo-Laps**

**DOUBLE COURSE  
RED CEDAR  
STAINED SHINGLES**

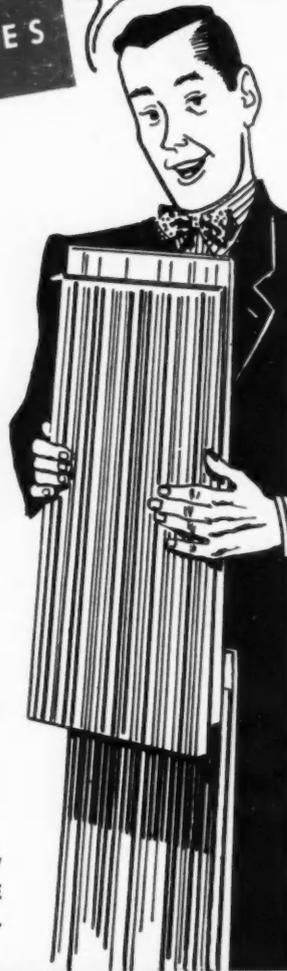
**YOU CAN'T  
BEAT GENUINE  
RED CEDAR  
FOR SIDE WALLS**

The demand's for broad siding. With Duo-Laps, you get the beauty of wide, expensive, Red Cedar siding with deeper horizontal shadows, at a fraction of usual cost. Build for beauty and instant sales with Duo-Laps double-course shingles, laid with full 12" or 14" exposure over solid or spaced sheathing.

#### **FASTER, EASIER TO APPLY**

Duo-Laps are dipped and stained by hand, butted, squared and tapered and require no painting. The genuine Red Cedar of Duo-Laps is unexcelled as insulation — keeps homes warm in winter, cool in summer. Selection of eight colors. Get two shingles in one (Stained No. 1 Red Cedar top course and rugged, genuine Red Cedar undercourse) with cost-cutting Duo-Laps.

**WRITE FOR YOUR FREE COPY OF THE NEW DUO-LAP COLOR FOLDER AND THE NAME OF THE DUO-LAP DEALER NEAREST YOU.**



**American**  
RED SHINGLE CO.  
COLUMBUS 3, OHIO

## Dealer Review

(Continued from page 164)

NRLDA director. Dates for the 1949 convention were set for February 23, 24 and 25.

### Dealer to Build Engineered Home for Chicago Home Show

The Edward Hines Lumber Co., Chicago, has announced plans to construct an Industry Engineered house for display at the annual Home Show of the Chicago Metropolitan Home Builders Association.

The show will open May 12 at the Coliseum. The Hines organization will build the house on the floor of the exhibit hall. It is expected that more than 200,000 residents of Chicago and its suburbs will attend the show during its eight days. Thus, the Industry Engineered house will get its first middle west showing, and will be viewed by one of the largest audiences to see it anywhere up to this time.

The Industry Engineered home is the result of joint planning, research and design by the National Retail Lumber Dealers Association, and the Producers' Council. Full information, with plans, is available from either the association or the council.

### Plywood Association Names New Chief Inspector

Arthur Larsen, inspector of Douglas fir plywood production since 1934 when Pacific Northwest panel manufacturers introduced industry-wide quality control of their product, is the new chief inspector for Douglas Fir Plywood Association.

Mr. Larsen's experience in the production of plywood dates back to 1925 when he started work for Washington Veneer Co. at Olympia, Wash. He remained with that firm until joining the industry-maintained inspection force when standardization of grades and quality of the material was initiated as a part of the fir plywood trade-promotion effort.

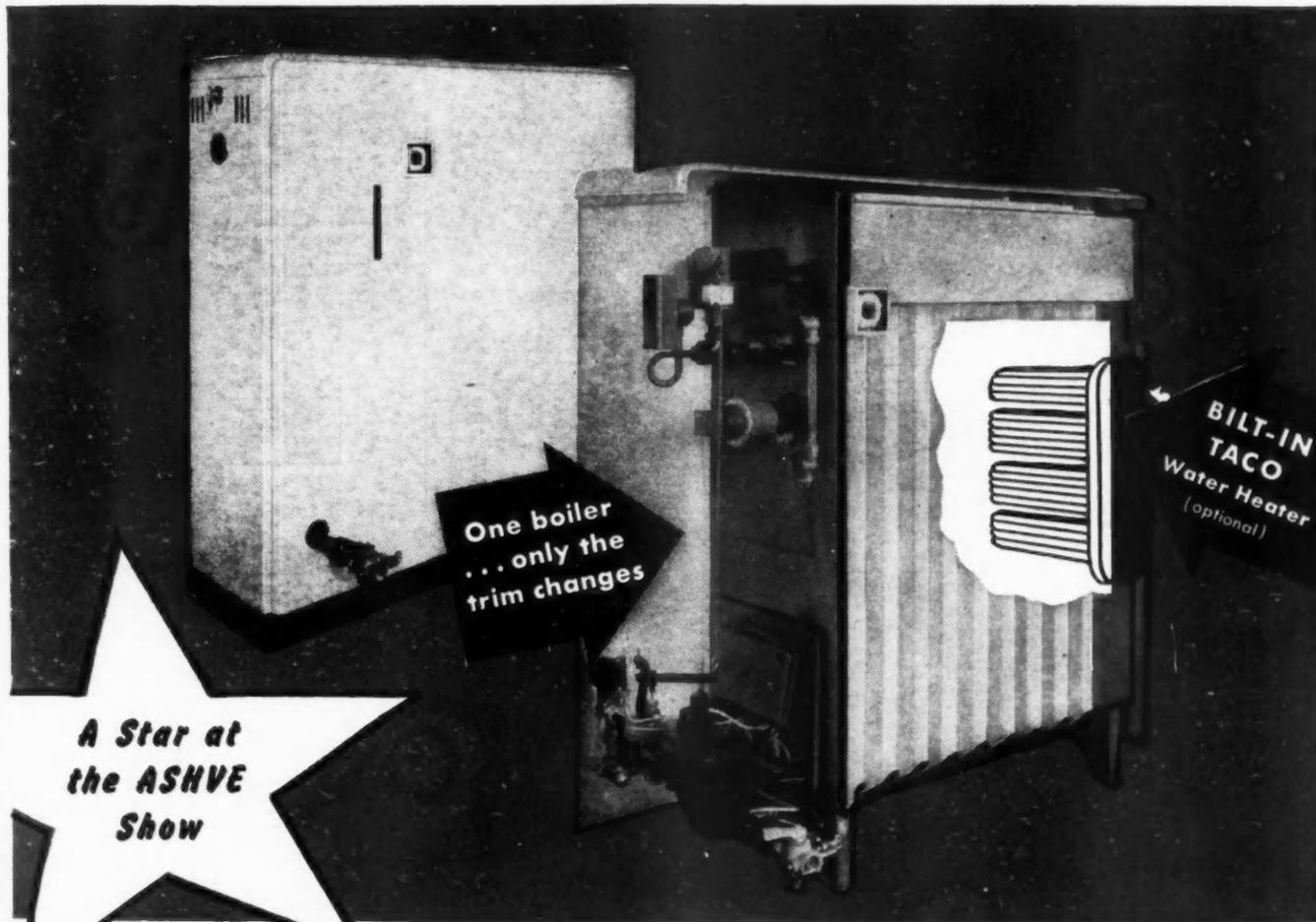
In moving to the top inspection position in the Douglas fir plywood industry, Larsen replaces George M. Williams who resigned to join the sales and service force of American-Marietta Co., Adhesive, Resin & Chemical Division at Seattle.

(Continued to page 168)

# New! Versatile!

## **RICHMOND Gas Boiler**

**...for Steam, Vapor or Hot Water Heating!**



**A Star at  
the ASHVE  
Show**

**One boiler  
... only the  
trim changes**

**BILT-IN  
TACO  
Water Heater  
(optional)**

1. Designed for either steam, vapor or hot water heating. The same cast iron sections work for all three systems. Simply select the trim to fit the job.
2. The built-in domestic hot water coil (optional) saves on storage, floor space and installation.

**Versatile in capacity, too!**

With the new Richmond Gas Boilers capacity is no longer a problem. They are available in thirty-one

(31) sizes ranging from 315 to 13,000 sq. ft., of equivalent direct steam radiation.

The sturdy streamline construction and the brilliant white enamel jacket add powerful sales appeal.

Full details about this popular gas boiler upon request.

**Clip and mail  
coupon today**

Dept. 4A8

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

Gentlemen:  
I am interested in the new Richmond Gas Boiler. Please send me full details. No obligation, of course.

Name.....

Company.....

Address.....



**RICHMOND RADIATOR COMPANY**  
AFFILIATE OF REYNOLDS METALS COMPANY

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



- ✓ Eagle RTU is *pure white lead*. It has all the famed durability, beauty and economy of this most famous of painting materials.  
**And**, Eagle RTU comes factory-mixed for perfect brushing. It goes to the job in the original container, all set to open, stir and apply.
- ✓ Eagle RTU spreads smoothly and easily. It covers completely, leaving no brush-marks, has real white lead hiding and staying power.  
**And**, Eagle RTU makes a smooth, gleaming elastic coat that won't crack or scale . . . defies time and weather, ages evenly by gradual chalking.
- ✓ Eagle RTU is favored by builders for time and labor saving convenience . . . because it enables them to do a *better* job more efficiently.  
**And**, Eagle RTU is preferred by homeowners because of its beauty and durability . . . because of its *whiter* white that stays white *longer*.
- ✓ Eagle RTU is white lead paint in a *modern* form.  
**And**, Eagle RTU is backed by Eagle-Picher's 104-year-old reputation as well as by the 2,000-year-old reputation of white lead.

**EAGLE PURE  
WHITE LEAD**  
*Paint*

**EAGLE**  
**EP**  
**PICHER**  
Since 1843

**THE EAGLE-PICHER COMPANY**  
CINCINNATI (1), OHIO  
*Member of the Lead Industries Association*

## Dealer Review

(Continued from page 166)

### Western Association Sets Pace in Short Courses

Western Retail Lumbermen's Association continues to set the pace for 30-day short courses in retail lumber and building materials merchandising. The sixth class was graduated with appropriate exercises early in February. Classes are



W. C. BELL

held at the University of Washington, with cooperation of the University Extension Department.

The sixth class, containing about 35 students, including two girls, was given a banquet at the Edwin Meany Hotel in Seattle. Attendance was over 70, and included wives and husbands, as well as employers of some of the class members, and graduates of other classes.

The festivities were opened with remarks by chairman W. C. Bell, executive secretary of the association. Certificates of graduation were presented by the head of the university extension department. Visitors included Martin Chamberlain, former head of educational activities for NRLDA, and now on the University of Washington faculty; and W. C. Rodd, western editor, and E. G. Gavin, editor, of *American Builder*.

### New Directory Available

A new Membership Directory of the West Coast Lumbermen's Association is now available.

A convenient means of finding sources of supply, the new directory supercedes that of April 15, 1947, and contains information on 38 mills not previously listed.

Free copies of the directory may be obtained by writing the West Coast Lumbermen's Association, 1410 S. W. Morrison Street, Portland 5, Ore.

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T&B  
copp  
trol,

Add *Appearance*  
to **CH** *comfort*



Furnishings by Peck & Hills

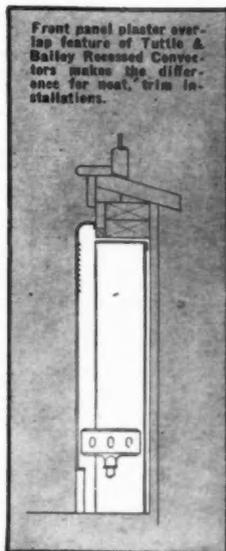
*\*We mean Convection Heating*

In selecting heat distribution equipment, you must keep in mind two important home-owner demands . . . it must provide real comfort on even the coldest days . . . it must be attractive in appearance, harmonize with modern furnishings.

When you recommend Tuttle & Bailey Recessed Convectors, you are sure of meeting *both* demands.

Convection heating — as provided by Tuttle & Bailey — means constant circulation of room air, even temperature from floor to ceiling. T&B heating elements—constructed entirely of copper—assure fast response to thermostat control, quick transmission of heat from boiler to

rooms. More efficient heat distribution . . . more economical operation!



Front panel plaster overlap feature of Tuttle & Bailey Recessed Convectors makes the difference for neat, trim installations.

Then add appearance! Tuttle & Bailey Convectors — *exclusively designed for recessed installation* — add a touch of beauty to any room. Front panel, designed with trim, rounded corners, extends only 1 1/4" from wall . . . plaster overlap feature eliminates unsightly cracked plaster so often a problem when ordinary convectors are used. Recessed convectors save space . . . assure a permanently neat installation!

For complete facts, send for a copy of Catalog C6R. Write today . . . Tuttle & Bailey, Inc., New Britain, Connecticut.

ASK YOUR JOBBER TODAY

**TUTTLE & BAILEY**  
*Standardized* COPPER CONVECTORS

# Facts you should know about WRIGHT RUBBER TILE



## UNMATCHED BEAUTY, COLOR AND QUALITY

Wright Rubber Tile is absolutely the finest flooring tile you can buy! The color goes clear through — that means truly permanent beauty. The wide variety of colors means that floor design and floor style are limited only by imagination. It fits in any surrounding — home, office, church or store.



## EXCEPTIONAL DURABILITY AND PERMANENCE

Wright Rubber Tile has super-smooth, non-porous top — resists wear and scuffing. Rubber content defies dents, chipping, cracking, or depressions. Two types available: *Wrightex* for greater resiliency and quiet—*Wrightflor* for harder surface to absorb more punishment with less upkeep.

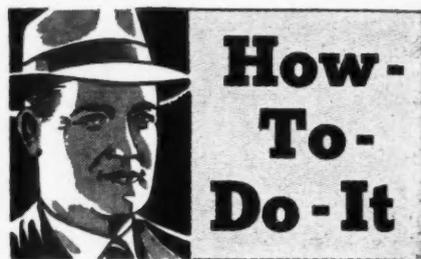


## LOW COST, EASY UPKEEP

Low-cost, easy care goes with every Wright Rubber Tile Floor. Its super-smooth, non-porous top keeps all dirt and stains right on top accessible to light cleaning. Gentle mopping, occasional light dry buffing and once-in-a-while scrubbing keeps it brilliantly clean and glowingly beautiful.

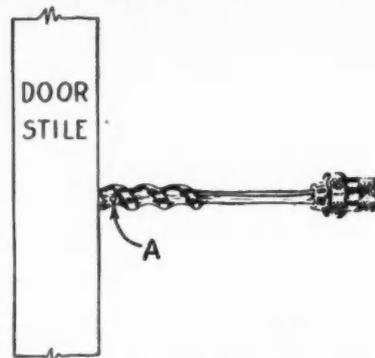
There's nothing that bespeaks more quality and permanence; nothing that lends itself more readily to conventional and dignified, or startling colorful room atmospheres than Wright Rubber Tile. A fifty-year floor, with long-run economy and simple upkeep that make it a truly modern aid to finer building. Send for illustrated leaflet and information to help make your flooring jobs better. TAYLOR MANUFACTURING CO., 3050 W. Meinecke Avenue, Milwaukee 10, Wisconsin.

**WRIGHT RUBBER TILE**  
*Floors of Distinction*



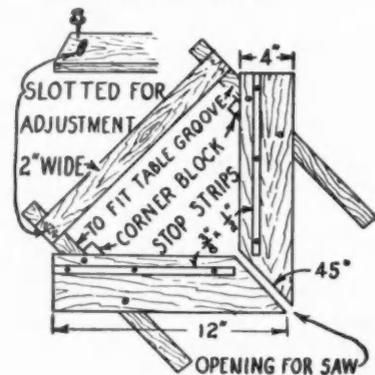
(Continued from page 142)

## Handy Gauge For Mortising Locks



CHARLES O. YANKOVICH, 969 South Main St., Meadville, Pa., suggests that a drop of white paint be placed on the bit at point of the required depth (as at "A" in figure). This, he said, will save a great deal of time, and will prevent boring through the stile as well as help to make all holes uniform.

## How to Cut Miters On Circular Saw



THIS accurate way to cut miters on a circular saw was submitted by Herbert E. Fey, New Braunfels, Texas. Work, mitered on a circular saw with the aid of the jig (above), will fit accurately when joined because the two cuts are made simultaneously.

Wood strips slide in the miter-gauge grooves of the saw table to keep the jig in alignment. When the stop strips are fastened to the jig, a square must be used to set them exactly at right angles. The jig can be built to accommodate any width of material.

(Continued to page 172)

New . . . Needed . . . Priced Right!

# REYNOLDS *Lifetime* ALUMINUM Gutters and Downspouts

**Rustproof and stainproof gutters at half the former "rustproof price"!**

Here's the rustproof advantage you recommend—no painting required. But in addition you get gutters that are never colored by corrosion—cannot stain a wall. In addition you get far lighter weight—lighter to handle, lighter on the eaves. And best of all you get all this at just about *half the price* of the only rustproof material used in the past. Any wonder that both the public and the trade are united in demanding Reynolds Lifetime Aluminum Gutters and Downspouts!

Choice of round or Colonial box-type design. Both gutters 5" across top, in 10' lengths, with slip-joint "S" connectors—no soldering. Weight, about 3½ lbs. per length. Round and corrugated round downspouts are 3" diameter, and square type 2¾" x 3½". Matched fittings: inside and outside mitres, drop sections, end caps, hangers, elbows. See your supplier or write for literature. Reynolds Metals Company, Building Products Division, Louisville 1, Kentucky.



. . . and for every built-up roof, new or old!

## REYNOLDS *Embossed* ALUMINUM Built-up Roofing!

.004" embossed aluminum in 36" rolls, 10 squares per roll. As a re-coat on old roofs or in 2- and 4-ply new roofs it's a barrier against all weather plus the sun's radiant heat. Preserves the life of asphalt . . .

keeps interiors up to 15° cooler in summer . . . lightens roof load by 400 to 500 pounds per square compared with slag or gravel dressed roofs. Booklet with full specifications on request . . . address above.



REYNOLDS PIONEERING MADE ALUMINUM COMPETITIVE . . . TAKE ADVANTAGE OF IT!

# "Lumite is the screening"



say thousands of homeowners

**STAINPROOF!**

**RUSTPROOF!**

**NEVER NEEDS PAINTING!**

**LASTS A LIFETIME!**

Homeowners are no longer satisfied with ordinary screening—once they've heard about LUMITE. For this amazingly different plastic screening (woven of saran) absolutely cannot rust, corrode, or stain a house—no matter what the weather or climate.

Specifying LUMITE today in modern homes and buildings can mean substantial savings for your clients in time, trouble, and expense—now and in the future.

You'll find the facts about LUMITE in SWEET'S FILE, or, if you want samples and more complete information, simply write LUMITE DIVISION, Chicopee Mfg. Corp., 47 Worth St., New York 13, N. Y.

Sold through Hardware and Lumber Dealers and Screen Manufacturers.

**SPECIFY BY NAME**

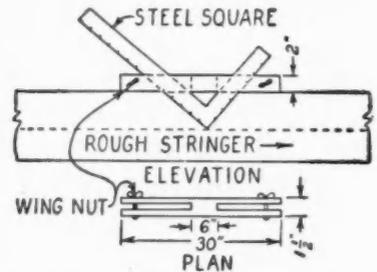
**LUMITE**

Woven of saran



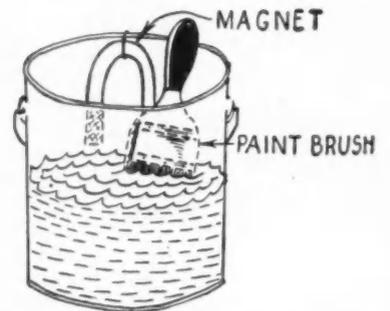
(Continued from page 170)

## Steel Square Fence For Cutting Risers



TO save considerable time in cutting stair risers, this handy steel square fence was suggested by Earl W. Ferber, Borden, Ind. The fence, which can be adjusted to hold the steel square in place by means of thumb screws, is made of a piece of hardwood. Suggested dimensions of the board are 30 inches long, 2 inches wide, and 1½ inches thick. As illustrated above, saw into the board at both ends, leaving about 6 inches near the middle. Insert screws in each end of the fence; clamp down on steel square at angle desired and at desired run, and raise figures and proceed with marking and cutting.

## Magnet Holds Paint Brush



AN EASY method of keeping paint brush bristles from resting on the bottom of the paint can is suggested by Ray Harrison, Dafoe, Saskatchewan, Canada: When soaking paint brushes in a container, place a horseshoe magnet over the top of container as illustrated. The metal portion of paint brush handle will cling to magnet and keep it suspended.

(Continued to page 174)



## Why do these thousands of new Levitt homes all include New Bendix Washers?

**America's biggest home builders insure their leadership by giving extra value in every home!**

In the giant housing development at Levittown, Long Island, there are now 2,000 homes occupied by veterans. Each rents for \$65 a month. When the community is completed at the end of this year, there will be 6,000 homes with a population of 20,000! And each home will be equipped with a Bendix automatic Washer!

Certainly there's a reason. A Bendix-equipped home provides more efficient living, better living, easier living from the prospect's point of view. And, from the builder's viewpoint, Bendix equipment already installed in the home means easier selling or renting—today, tomorrow, and the day after tomorrow!

A Bendix installation is an even more potent selling point, when the prospect discovers that it can be bought, along with the house, on a "package mortgage" plan!

These are a few of the reasons why so many "Look-Ahead Builders" like Levitt & Sons are including Bendix Home Laundry facilities right in their blueprints! These men set the trend toward giving more for the housing dollar. They realize how important it is to establish a reputation for giving greater value today in order to keep selling after the housing boom is over.



**BENDIX**  
automatic  
**Washer**



**DISPLAY THE SIGN OF A "LOOK-AHEAD BUILDER"!**  
*It means more profit . . . today and tomorrow!*

**WRITE TODAY FOR VALUABLE BOOK!**  
*Send today for the beautiful "Architect's Handbook" . . . 40 pages of ideas for modern home laundry installations!*

This cutaway view shows why the **IMPROVED ACME TWIN** is the most efficient sash balance ever designed



See your dealer or write for literature

# ACME

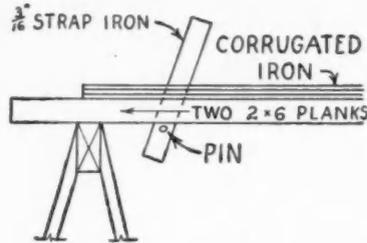
SASH BALANCE COMPANY  
1626 Long Beach Ave.  
Los Angeles 21, Calif.



## How-To-Do-It

(Continued from page 172)

### Easy Way to Cut Corrugated Iron

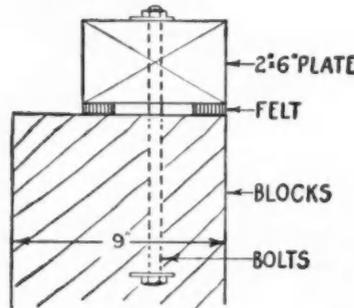


A **SHORTCUT** submitted by M. K. Fitzsimmons, 1704 Michigan Ave., LaPorte, Ind., suggests a simple cutting tool that will save time and fingers.

A piece of 3/16-inch strap iron is sharpened on one edge; then a 3/8-inch hole about 3/4 inch from one end is bored, through which a bolt or short rod can be run, projecting on both sides.

To use this tool, two 2x4 or 2x6 inch planks are laid on two saw horses with room left for the blade to work freely. Lay corrugated iron so that line to be cut is directly over space between planks; insert strap iron in space with bolt or rod below the planks with cutting edge towards the iron.

### How to Make Airtight Plate



**I**N setting plates on block walls, William E. Hammons, 312 South Sullivan St., Gary, Ind., wrote, the usual procedure is to bed them in mortar or leave them open to drafts. By tacking ordinary weatherstrip felt to the underside of the plate, he suggested, they can be made airtight.

(Continued to page 176)



## DON'T! BE A BEAVER

The beaver does a good job, but he does it the hard way. Don't wear yourself out on the end of a hand-saw, or struggle with heavy, cumbersome mechanical saws that waste your time and are only half accurate.

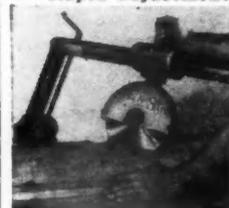


## FLEXSAW MAKES ANY CUT

Use it for Production Work, Construction out on the Job, or in Job Shop or Hobby Shop

A rigid, rugged, accurate, portable saw that makes cuts 3" deep and up to 15" wide. Knocks down into two 55 lb. units for transport in any car. A truly ONE MAN portable saw. Ideal for farm use, builders, hobbyists.

Rapid adjustment for any cut—no wrenches required. Rigid in all positions. Large, easily read dials for setting all cuts, eliminate all guesswork. Lifetime Fafnir ball bearings. Highest quality, flexible drive shaft. Balanced tubular base.



priced so anyone can own it \$125

SEE YOUR LOCAL DEALER, OR WRITE DIRECT TO: THE FLEXSAW CO. PORT AUSTIN, MICHIGAN

ROUT • DADO • RIP • CROSS CUT • PLANE • DRUM SAND • MITER • BEVEL • COMPOUND MITER

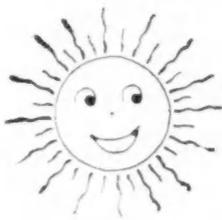
BUI

*Deep* SHADOW LINES  
MAKE BEAUTIFUL ROOFS



## CERTAIN-TEED THICK-BUTT ASPHALT SHINGLES

The story of the wide acceptance of Certain-teed Thick-Butt Shingles among home owners is a two sided one.



On the "fair weather" side Certain-teed Thick-Butts create roofs of beauty through rich solid colors and Certain-teed's outstanding and superior blends. Their deeper shadow lines impart character to any roof.

On the "rough weather" side Certain-teed Thick Butts give added years of service at low cost. The felt base is "Millerized" for longer life and the exposed part of the shingle has an extra layer of mastic coating and mineral surfacing to provide double protection against the elements.



Today reliable figures indicate that in excess of 85% of all roofing purchased is some type of Asphalt. YOU supply a fair share of the increased demand for fire-resistant Asphalt Shingles when you feature popular Certain-teed Thick-Butts.

BUILD ON

# CERTAIN-TEED

THE WELL-KNOWN NAME

CERTAIN-TEED PRODUCTS CORPORATION • 120 E. LANCASTER AVENUE • ARDMORE, PENN.

ROUT • DADO • RIP • CROSS CUT • PLANE • DRUM SAND • MITER • BEVEL • COMPOUND MITER •

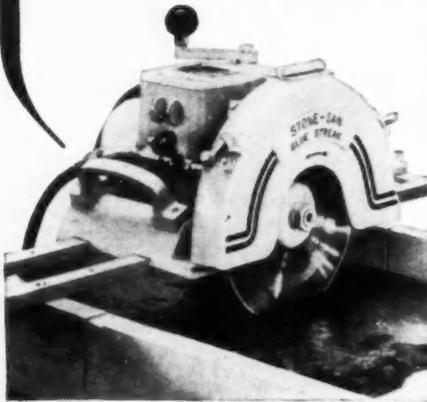
25 Motor J.B. Terry INTEED

Cut 7 to 10 times  
**FASTER—**  
**ON THE JOB**  
with a



**Blue-Stream**

**MOST POWERFUL PORTABLE  
ELECTRIC GUIDED SAW**



**CUT WET  
OR DRY**

using Diamond or  
Abrasive Wheels

BRICK • TILE • TERRAZZO  
MARBLE • SLATE • GRANITE  
ASBESTOS PRODUCTS • REFRACTORIES  
CONCRETE and CONCRETE PRODUCTS  
LIGHT STRUCTURAL STEEL and PIPE

**WEIGHING ONLY 78 LBS.,**  
The Stone Blue Stream is rated  
2½ H.P. — 110 universal or 220  
single phase. Will cut 5-inch  
depth of cut and up to 10 feet  
in length with a 14-inch wheel.

Write us today  
for further information

**STONE MACHINERY CO., INC.**

Dept. A4 Box 1363 Syracuse, N.Y.



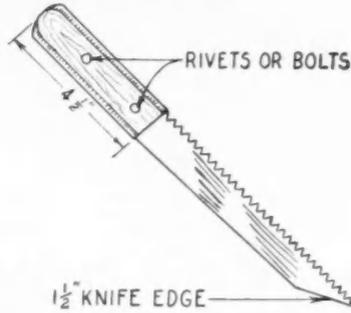
**HIGH SPEED CUTTING MACHINERY**



**How-  
To-  
Do-It**

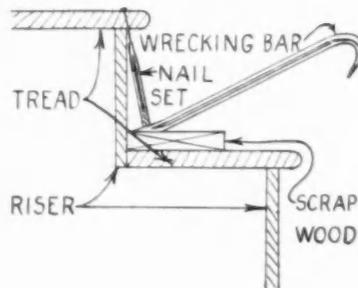
(Continued from page 174)

**Handy Saw Serves  
Many Purposes**

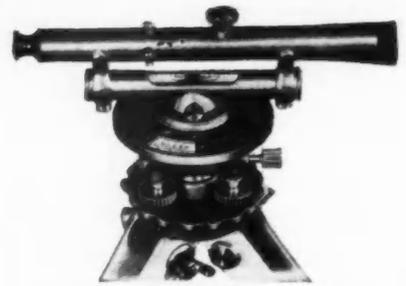


**T**HIS HOME-MADE saw, wrote Roy Johnson, 831 Baker Ave., New Philadelphia, Ohio, "is one of the handiest tools I have in my tool box for cutting rock lath, plaster board, to start openings in siding and Celotex; and it can be driven through pine flooring to save boring a hole." To make one, he suggested, take a good stiff compass saw blade about 10 inches long; file the back edge sharp 1½ inches from the end, and bolt or rivet a good, hard hickory handle on, and it is ready for use.

**How to Remove Nail  
In Narrow Place**



**T**HIS suggestion is made by Alex Iseppon, 484 Portage Road, Stamford Centre, Ontario, Canada. For example, to remove a nail that has come through the good side of a stair riser, put a scrap piece of board on the tread below the nail; put a nail set on the point of the nail, then put a pinch bar under the nail set and on top of the scrap piece of wood. Push down on the pinch bar to force the nail up.



**BUILDER'S LEVEL**

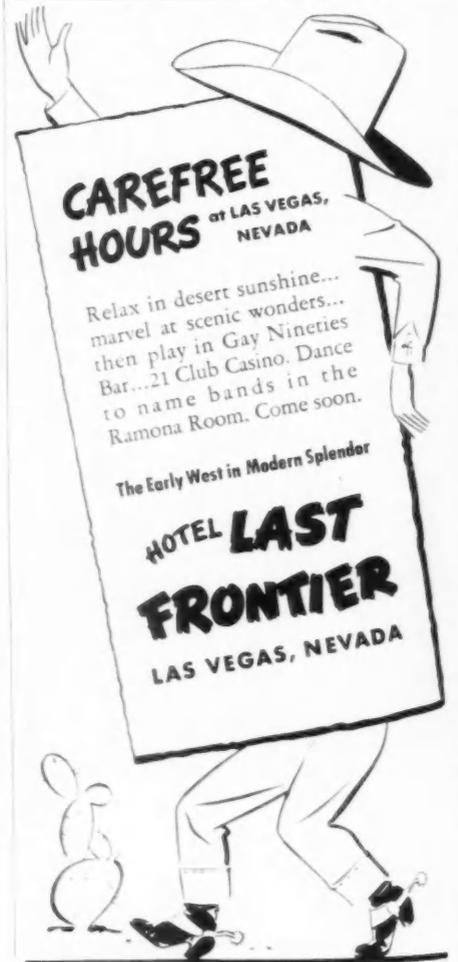
(DUMPY TYPE)

- Needs No Servicing
- Sealed Against Dust
- Ideal for On-the-Job Work
- Longer Lasting Accuracy

Manufactured to the same exact standards as all Brunson Instruments. Write for detailed information and name of nearest distributor.

**The BRUNSON  
INSTRUMENT CO.**

1405 Walnut Street, Kansas City 6, Mo.



**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

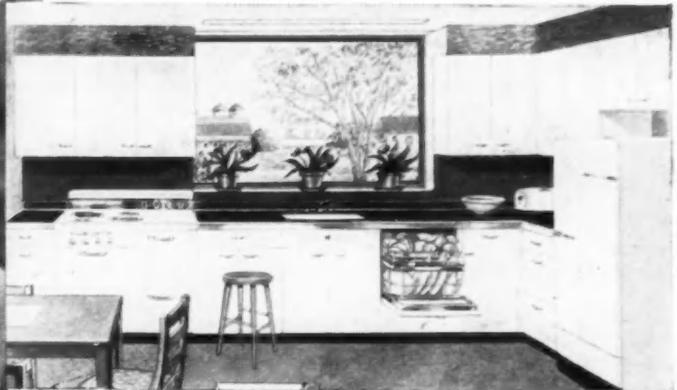
# Why Hotpoint Kitchens Are The "Measure Of Value"



## Confidence Goes Up, Prices Seem Lower, When Home-Buyers Look At The Kitchen

**B**UILDING COSTS are steep today, but buyers find that prices look more reasonable through the windows of a Hotpoint All-Electric Kitchen. That's because thirty million people know Hotpoint is a reliable measure of value—the finest in electric kitchens.

**Alert Builders** and architects find that it pays to invest enough extra and make the kitchen a real showplace. For powerful advertising and merchandising have made Americans kitchen conscious. And they look to Hotpoint for the biggest values.



Today the Kitchen is the Measure of Value

**Hotpoint All-Electric Kitchens** create confidence in the quality of the whole house. The price seems better, too, for in many cases a "package mortgage" can be arranged to include cost of electric appliances.

**See Your Sweet's Catalog** for details or consult your nearest Hotpoint Distributor. Hotpoint Inc., 5641 West Taylor Street, Chicago 44, Illinois.

### Hotpoint has everything for the kitchen and laundry:

- RANGES • REFRIGERATORS • FREEZERS • DISHWASHERS • DISPOSALS\*
- CABINETS • SINKS • WATER HEATERS • FLATPLATE IRONERS
- ROTARY IRONERS • WRINGER-TYPE WASHERS • DRYERS

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

Everybody's Pointing to

# Hotpoint

Hotpoint Inc. A General Electric Affiliate

PIONEER IN THE ALL-ELECTRIC KITCHEN

## POWDER OPERATED CONSTRUCTION TOOL

Drives Threaded Studs  
3 Inches Into  
Concrete Instantly!



.38 Cal. (top)  
.22 Cal. (bottom)

Thousands of DRIVE-IT Powder Power Tools are now in constant use from coast to coast.

### 3000 PERCENT FASTER

DRIVE-IT does in seconds what used to require hours. Eliminates drilling, hammering, compressors, electricity, cords, expansion bolts. Anchors anything to concrete, masonry or steel in a split second.

### HOW IT WORKS

DRIVE-IT derives its power up to 25 tons from a small powder charge encased in a standard .38 or .22 cal. cartridge. The desired anchor stud and cartridge are placed in the tool. The DRIVE-IT muzzle is forced vigorously against the work and at the same time the safety catch is released. This detonates the charge, and drives the stud with pile-driver force into steel or concrete. DRIVE-IT studs in ordinary concrete will hold the weight of the heaviest automobile.

### ABSOLUTELY SAFE

DRIVE-IT is the original power-operated tool. It functions without recoil shock . . . is as safe as an ordinary carpenter's hammer.

### UNLIMITED APPLICATION

Thousands of contractors, sub-contractors, and maintenance departments use DRIVE-IT tools to anchor wood sleepers to concrete; to "bolt" machinery; to hang metal lath, pipe, switch boxes, etc. See DRIVE-IT for yourself. Write for name and address of your nearest distributor, and full information.

## POWDER POWER TOOL CORPORATION



P. O. BOX 1610 (DEPT. F)  
PORTLAND 7, OREGON

### Catholics Plan Building Exposition in Chicago

A NATIONAL Catholic Building Convention and Exposition will be conducted in Chicago at the Stevens Hotel June 30, July 1, 2 and 3. His Eminence Samuel Cardinal Stritch, Archbishop of Chicago, is honorary chairman. An attendance of some 5,000 pastors, religious superiors and college officials from all parts of the country is anticipated.

The convention program will present outstanding authorities from the fields of architecture and engineering, construction and remodeling, equipment, furnishing and decorating in a series of general and panel sessions which will thoroughly explore the problems involved in all types of Catholic structures. The convention and exposition is sponsored by the Business and Industry Foundation of the College of St. Joseph's of Indiana. James V. Malone, general manager of the show has offices at 185 North Wabash Avenue in Chicago.

### International Contest for City Arterial Road Plan

THE Town Planning Board of Stockholm, Sweden, has invited highway planning experts in all nations to participate in competition for the most suitable plan for a new main highway artery between the districts of Sodermalm and Ostermalm via Sodra Djurgarden in Stockholm. The proposals must be in keeping with the present and future plans of the districts and suitable from aesthetic, practical and economic aspects for an arterial road carrying all forms of traffic including trams. The problem also involves a relatively extensive system of approaches as well as bridges and junctions with other main arteries. Competition closes May 1, 1949, and the first prize has been tentatively set at 20,000 Swedish crowns. A total of 48,000 crowns will be awarded in prizes.

Full details on the competition may be obtained by writing direct to Tavlingsfunktionaren, Stockholms stads stadsplanekontor, Stadshuset, Stockholm, or by contacting any Swedish legation, embassy or consul.

### Raydol Corporation Moves To Tuscola, Illinois

THE Raydol Division of the Cottom Corporation has been moved to Tuscola, Ill., about 150 miles south of Chicago, according to an announcement made recently by Truman Cottom, president of the firm which manufactures radial arm saws. The establishment was formerly located at Bartlett, Ill., and was chartered as a corporation April 26, 1947.

A Portable  
SAW-JOINTER  
FOR DOING  
FINISHING  
WORK  
ON THE JOB



Also doubles as a production machine in your shop. Particularly useful in finishing cupboards, bookcases and special casements.

Only Boice-Crane makes this popular unit, in which a 10" tilting-arbor saw and a 6" jointer are compactly combined on a steel cabinet stand, and driven by one, rather than two motors. Imitations have saws on which the TABLE not the BLADE tilts. Features improved saw performance by unique drive which permits mounting motor rigidly and separate from machine.

This "complete workshop" rips, cuts-off, makes compound miter cuts, planes, rabbets, grooves, and miters. Longer table and fence equipment on our jointer guarantee perfect work on longer stock than usually handled on 6" machines. Jointer planes or rabbets 1/2" deep. The saw cuts stock up to 3" thick, and rips up to 21" wide with standard bars for fence, or to 37" wide with No. 2537 bars at slight extra cost. Built to last.

Welded steel, cabinet style floor stand arranged to collect sawdust and shavings. Hinged clean-out door. Possible to use both machines at once for maximum production.

Overall size: 47" wide; 45" deep; 39" high.

Boice-Crane, with its complete line of power tools, can, at minimum cost, completely equip a contractor's shop that will make you practically independent of the mill.

For a guarantee of satisfactory service specify only the products of established manufacturers who SPECIALIZE in producing power tools, rather than making them a sideline.

Write for free literature

## BOICE-CRANE COMPANY

966 Central Avenue • Toledo 6, Ohio

BAND SAWS • JIG SAWS • SAW JOINTERS • BELT SANDERS  
SPINDLE SANDERS • LATHES • THICKNESS PLANERS  
SPINDLE SHAPERS • DRILL PRESSES • JOINTERS

# 275,000 FLOOR FURNACES IN 1948\*

YOU'LL GET A BIGGER SHARE OF THE MARKET BY FEATURING

\* Estimated, 1948 American Builder

## EVEN TEMP

OIL FLOOR FURNACE

Trade Mark Registered



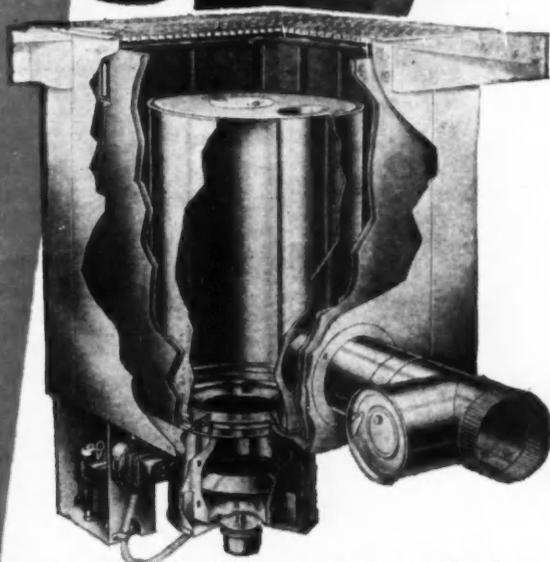
### ONLY EVEN-TEMP MEETS ALL REQUIREMENTS OF ARCHITECTS, CONTRACTORS AND HOME OWNERS, FOR LOW COST AUTOMATIC HEAT!

Here is the newest, most advanced development in the popular priced automatic heating field! Because Even-Temp is a "natural" for architects, builders and home-owners in search of improved, low cost, heating equipment, dealers are assured a bigger slice of this year's anticipated volume.

Even-Temp is an amazing combination of compact efficiency, fool-proof operation, and exclusive conveniences. Compare its advantages! Even-Temp, for example, takes less floor space—only a two-foot square area! Thermostatic controls and booster fan are standard equipment. Even-Temp is a packaged heating Unit—completely wired and assembled at the factory—simpler, less expensive to install and service. And it operates quietly—carbon free—at a rated efficiency which assures substantial fuel savings!

Compare its extra conveniences, too. Instead of removing the entire grill to light or clean, just lift out a small section! Valve controls and electric switches are on one panel, accessible at floor level from inside the house. Then compare its smartly finished outer casing, double wall galvanized pressed steel inner casing, and so on!

Make this test today—order an Even-Temp Floor Furnace from the distributor in your locality and display it in your sales room. See for yourself how enthusiastically customers react to it! Write today!



Even-Temp Floor Furnaces are of course listed by Underwriters' Laboratories, Inc., and meet as well, the requirements of Commercial Standard CS-113-44 of the U.S. Department of Commerce, National Bureau of Standards.

Made and guaranteed by

**NORTHWEST METAL PRODUCTS, INC.**

558 SPOKANE STREET

SEATTLE 4, WASH.



IT'S THE  
*Colors*  
THAT COUNT

**CABOT'S HOUSE PAINTS**, made by our patented collopaking process, offer you a wide choice of beautiful, non-fading colors. Development builders can find the right color for every design and a variety of color combinations that give each house in a group pleasing individuality.

Cabot's Collopakes produce a porcelain-smooth surface that shows no brush marks and resists the elements for years.

*Cabot's Collopakes*

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**Samuel Cabot**  
INCORPORATED  
2223 Oliver Building  
Boston 9, Mass.

**Walter E. Curtis Victim Of Heart Attack**

**WALTER E. CURTIS**, general manager of the Wausau, Wis., Division of Curtis Companies Inc., died suddenly of a heart attack at his home in Wausau, on January 15. His death came as a great shock to his family and friends.

Mr. Curtis, who was widely known throughout the lumber industry, was born into, grew up with, and spent his entire life in the sash and door business. Born in Iowa, May 9, 1880, he moved to Wausau when less than a year old with his parents, the late Mr. and Mrs. Cornelius S. Curtis. His father was one of the early associates in the Curtis business, which today is one of America's oldest and largest manufacturers of windows, doors, and millwork.

Mr. Curtis spent his entire life in Wausau and took active part in the civic and social affairs of the community. He was a member of the First Universalist Church, which he served in various offices in his lifetime, and was active for many years in Masonic work. He was past commander of St. Omer Commandery, Knights Templar, and was a member of the four York rite Masonic bodies of Wausau, the Scottish Rite Consistory and the Shrine. He was a graduate of the University of Wisconsin.

In addition to his wide interest in the millwork business, Mr. Curtis was a director of the Employers Mutual Liability Insurance Co. of Wausau and a director of the Employers Mutual Fire Insurance Co. He was also a member of Mutual's executive committee.

He is survived by three daughters: Mrs. Russell Lyon, Neenah, Wis.; Mrs. C. W. Gilchrist, Charlotte, N.C.; Miss Harriet Curtis, of Wausau; and a brother, John, Los Angeles, Calif. Mrs. Curtis died in 1942.

**Promotion of Koolshade Announced**

**T**HE activities of A. F. Hinrichsen, Inc., well known sales engineering organization of New York City, are being directed exclusively to promoting the use and sale of Koolshade for hospitals, industrial buildings, and office buildings, according to an announcement received from A. F. Hinrichsen, president of the firm. This organization specializes in equipment and materials allied and associated with air conditioning, heating and ventilation.

An associate company, The Brown Conditioning Co. of New Jersey, New York and Long Island, will take over  
*(Continued to page 182)*



Improve working efficiency with the new Stow Metal dor-V-ise. Made of highest quality materials. Sturdily built to hold any size door firmly. Rubber padded jaws increase grip and prevent damage. Holds door or window sash while planing, drilling and sawing.

- Heavy duty
- Cast aluminum
- Weighs only 2 3-4 lbs.
- 20 inches long
- Easy to operate
- Use any place

Only  
**\$9.65**  
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**WE PAY POSTAGE**  
SEND CHECK OR MONEY ORDER  
(ALL C.O.D. ORDERS \$9.65 PLUS POSTAGE)  
**STOW METAL PRODUCTS CO.**  
758 E. Kent Road . . . . . Stow, Ohio



*For Windows Everywhere*

Worried over high construction costs? Save dollars per opening and time on the job with Vikre New Economy Sash Holders.

No weights—no cords—no mortising. Just drill one hole, that's all. No drafty weight pockets to give you insulation headaches.

For oversize windows, or where prolonged hard usage is expected, Vikre Heavy Duty Sash Holders do the job. Easy to install. Once adjusted, they require no more attention. Use them wherever there are windows and for windows everywhere.

Tested and proved for years on thousands of construction jobs, Vikre Sash Holders are available through your building supply dealer. For full details write:

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3016 14th Ave. S. • Minneapolis, Minn.



## What the "unbeatable combination" can do for your new homes

**M**ODERN hard coal stokers and clean, dependable anthracite are an unbeatable heating combination. This pair offers the owners of your new houses these important benefits.

**Completely Automatic Heat**—Modern hard coal stokers are fully automatic . . . from bin feed to ash removal. Sensitive thermostatic controls respond to the slightest change in room temperatures. They go to work immediately to send steady heat to every room in the house.

**Plenty of Heat**—A full year's supply of plentiful, small size anthracite can be stored

in the house. Every day, regardless of the temperature outside, the house is healthfully, comfortably warm. Owners have no worries about fuel supply with clean, economical anthracite.

**Economical Heat**—Stokers use the smaller, less expensive sizes of hard coal. Thousands of satisfied owners of anthracite stokers testify to reduced fuel bills . . . as much as 50% lower!

Get all the facts on heating with all types of anthracite equipment including modern automatic stokers. Simply fill out the coupon and send it to us, today.

### Manufacturers of Approved Automatic Stokers

COOPER STOKER  
ELECTRIC FURNACE-MAN  
FAIRBANKS-MORSE STOKER  
FUEL SAVERS STOKER  
FURNACE TENDER STOKER  
THE GILKOAL STOKER  
IRON FIREMAN  
MOTORSTOKER  
NEWTON STOKER  
STEWART-ROGERS STOKER  
STOKOL ANTHRACITE STOKER  
VAN WERT STOKER  
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New York 17, New York

Please send me more information on anthracite and anthracite heating.

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Address \_\_\_\_\_

Company \_\_\_\_\_

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

# SEPTIC TANKS



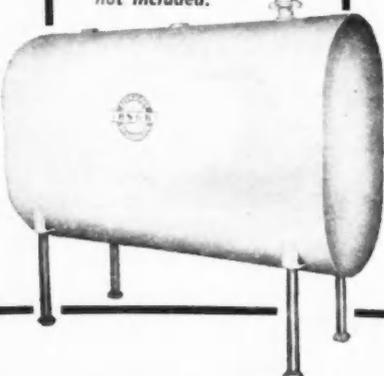
Two Sizes . . . 300 and 500 gallon capacity. 14 Gauge Steel, Black Asphalt Coating.

## AVAILABLE FOR DELIVERY

Top quality steel tanks, fabricated by a manufacturer with over 55 years' experience. Write today for prices and complete delivery information.

**BLACK, SIVALLS & BRYSON, INC.**  
24th Floor, Power and Light Building  
KANSAS CITY 6, MISSOURI

Capacity, 275 gallons. 14 gauge black steel, or aluminum . . . Legs not included.



# BASEMENT TANKS

(Continued from page 180)

the entire combination storm window business as well as all the installation work of residential and commercial Koolshade.

The uses of Koolshade have expanded considerably since it was introduced to the engineering profession just prior to World War II. When used in connection with air conditioning, it has been found to reduce the total cost by the reduction of one ton of refrigeration for every 100 square feet of sun exposed glass area.

### Penberthy Names Ruebelmann As General Sales Manager

THE Penberthy Injector Co., of Detroit, Mich., subsidiary of the Buffalo Bolt Co., announces the appointment of Fred E. Ruebelmann as general sales manager. Mr. Ruebelmann has been a member of the Pen-



FRED E. RUEBELMANN

berthy organization for more than 36 years, most recently as supervisor of sales. He succeeds A. D. Thomas, resigned. This is the only major change in the Penberthy Injector Co. since it became a subsidiary of the Buffalo Bolt Co.

### The Upson Company Promotes Two

THE appointment of Henry W. Schmidt as secretary-treasurer, and of James J. Upson as assistant to the president is announced by The Upson Co.

Both men are widely known throughout the industry. Mr. Schmidt, who is a member of the New Jersey Bar, joined The Upson Company as assistant to the president, and later became secretary. He was elected to his new office of secretary-treasurer by the Board of Directors.

Mr. Upson, who saw action during World War II in the Pacific theater of operations as lieutenant, joined the company upon his release from the Navy. His appointment was made by W. H. Upson, Jr., president.

## All Aluminum Red Devil GLASS CUTTERS

Sensitive to touch  
— light to handle  
— relaxing to use.

CAN'T RUST

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Twelve to a box

Chapmanized steel RED DEVIL wheel.

A Product of Red Devil Tools.  
IRVINGTON 11, NEW JERSEY

# DRY WALLS

Interior or Exterior Above or Below Grade

Eliminate costly guess work in solving wet wall problems. Seal and beautify porous walls of concrete block, tile, stucco, etc., with Spray-O-Bond Concrete Sealer. It's easy to apply — almost like brushing on paint. Used successfully by contractors for over 20 years. A post card will bring you the name of your nearest dealer.

SPRAY-O-BOND COMPANY  
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# Proved in the Laboratory\* . . . and the Home STEELCRAFT Steel Casements



## Housewives Praise STEELCRAFT Casements for Remarkable Ease of Operation and Cleaning!

Proved in use by their most demanding critic, the housewife . . . STEELCRAFT Casement Windows are found to provide huge premiums in *benefits that count!* Great new advantages of beautiful appearance, fool-proof operation . . . plus wonderful ease of cleaning and screening . . . are everywhere encouraging more and more installations of STEELCRAFT Casements. This growing market stands ready for evidences of finer engineered casement construction, greater durability . . . and prompt delivery . . . all realized when you solve your window problems with STEELCRAFT Casement Windows.

### \* STEELCRAFT CASEMENTS PROVED LIGHTER YET STRONGER IN INDEPENDENT LABORATORY TESTS . . .

Here it is . . . vivid, indisputable proof of the superiority of STEELCRAFT Steel Casements! When analyzed with the steel casements of three other leading manufacturers, STEELCRAFT showed 15% less pressure-induced deflection than the next strongest window, 34% less deflection than the weakest window tested. Results testify that STEELCRAFT is built to withstand from six to eight times the normal masonry load on openings of the width tested.

The on-the-scene laboratory photo (right) shows STEELCRAFT Type 2423 steel casement undergoing vertical deflection analysis in load-testing machine. Supports at bottom edges of casement allow deflection measurement at center of bottom as load is applied top center. Loads were up to equivalent of 600 lbs. per lineal foot.



### MAIL THIS COUPON TODAY!

STEELCRAFT MFG. CO.  
9046 Blue Ash Rd.  
Rossmoyne (Cincinnati), Ohio

Please send me, without obligation, complete descriptive literature on STEELCRAFT Casement Windows.

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Position . . . . .

Business Address . . . . .

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

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MANUFACTURING COMPANY  
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*Build  
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... with

**VENTO**  
*Finest-quality*  
Casement  
**STEEL WINDOWS**

WHEN you use VENTO steel windows in home or commercial construction you can do it with full confidence in the enduring beauty these finest-quality windows will bring to your structure.

That's because attractive-looking VENTO windows are sturdy in construction, being made of heavy-section steel, electrically welded throughout. They fit better—stand true and swing true. You buy them completely assembled, too—additional manufacturing time goes into their construction, saving your time on the job.

VENTO now makes a complete line of steel casement windows for residential use, featuring easily-installed screening or storm sash, roto hardware, and locking device.

Write for  
price list  
and  
catalog  
... today!



**VENTO STEEL PRODUCTS**  
COMPANY, INC.  
247 Colorado Avenue  
Buffalo 15 N. Y.

**Sargent Tells Purchase Of Wm. Schollhorn Co.**

SARGENT AND CO., New Haven, Conn., has purchased the operating assets of The Wm. Schollhorn Co., manufacturers of the nationally famous Schollhorn and Bernard pliers as well as special purpose tools.

The Schollhorn trade marks and patents, the right to continue manufacture of the Schollhorn products and the machinery with which to do it were included in the sale. The Schollhorn factory building was not a part of the purchase, however, and will be occupied by Sargent and Co. on a rental basis.

The Schollhorn Co., founded over 75 years ago, has developed many special tools, the most famous being the Bernard line of pliers. Sargent and Co. are known throughout the world for their lines of builders' hardware and allied products. Thousands of items ranging from beautiful lock sets to cup hooks; liquid door closers to window catches; food and meat choppers to plumb bobs carry the Sargent label.

In a statement issued by Forbes Sargent, president of Sargent and Co., users of Schollhorn products are assured their requirements will continue to be promptly served.

**Fuel Oil Scarcity Delays Minneapolis Construction**

THE retarding effect on home building of the fuel oil shortage is showing up. In a survey of its members, the Minneapolis Contractors and Builders Association found homes still unsold, homes under construction delayed and new starts postponed because of the lack of fuel oil guarantees to prospective purchasers.

From 25 fuel oil questionnaires returned by members, it was reported that the lack of guarantees has prevented the sale of 13 houses, delayed completion of 83 and held up the starting of 69 houses planned for 1948 construction.

J. W. Clark, Fuel Conservator of Minnesota, told the association in a recent address that there was insufficient oil to heat Minnesota's new homes this year and that there probably would not be enough next year and possibly longer.

The Minneapolis association is continuing its participation in a weekly radio broadcast on homes over Station WLCL. Members who will appear on the forthcoming programs are Earle C. Ware, P. M. Zubert, S. A. Johnson and W. R. J. Jessup. The broadcasts take the form of a question and answer program, with the builders answering questions posed by home owners.

**HOW TO GET A Smooth  
HAND FINISH  
WITHOUT Costly  
HAND LABOR**

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- ✓ DOORS
- ✓ MANTELS
- ✓ TREADS
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EASY cuts no swirls or other abrasive marks. Straight-line action produces "hand sanding" results on white wood, filler and final coats in 1/3 the time. For CURVED or flat, WET or dry work. EASY is not a disc, belt or orbital sander.

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1000's ARE SAVING WITH IT!  
— Write for Facts!  
RECIPROCATING  
**ELECTRIC SANDER**  
*EASY*

**I V I E S**

*Casement Window*  
**OPERATOR**



**HEAVY DUTY**

Time proven operator for heavy duty ... smooth, trouble-free operation. For right or left hand. Heavier arm ... sturdy flanges ... forged gear teeth ... deep drawn and hardened housing ... self lubricating worm ... full length bearing surfaces ... sash track slide assembled with phosphor bronze, non-rusting spring, takes up wear and eliminates rattle.

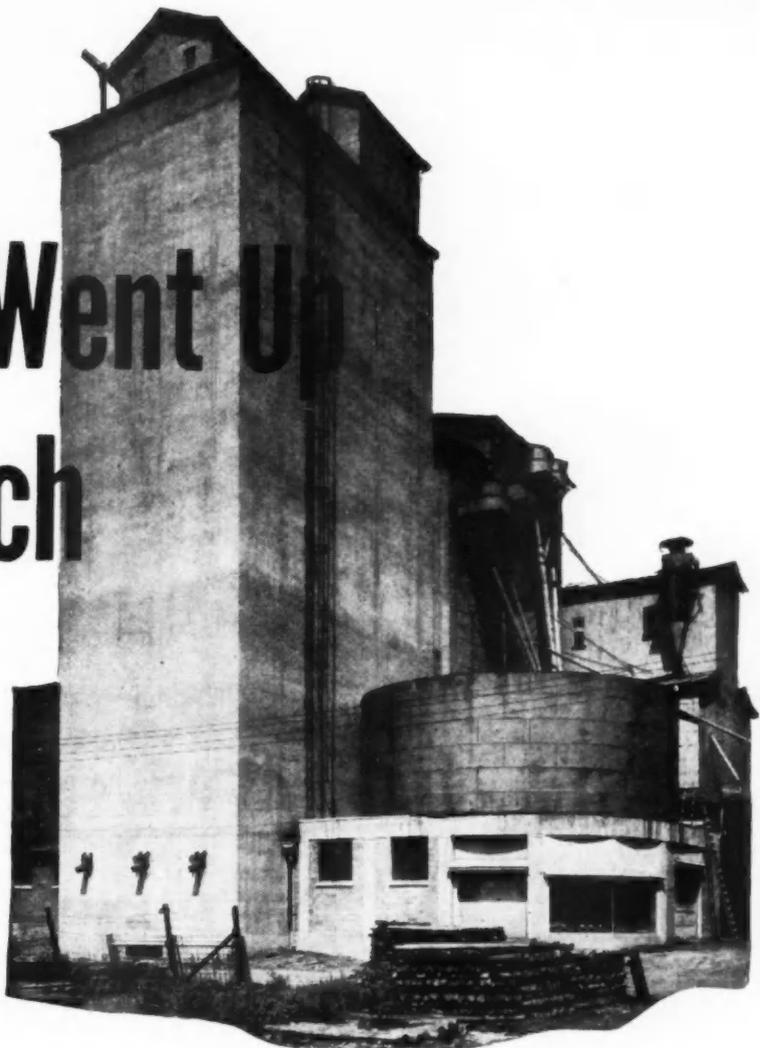
See Your Jobber

**THE H. B. IVES CO.**  
NEW HAVEN, CONN.  
*Quality Hardware*  
SINCE 1876

# The Elevator Went Up Without a Hitch

*on this Slip-Form construction job*

**... with Duraplastic**



Duraplastic air-entraining cement used exclusively on this grain elevator of Delphos Grain & Milling Co., Delphos, Ohio. Engineer and Architect, R. C. Reese, Toledo, Ohio; Contractor, Green and Sawyer Co., Lima, Ohio.

**Another grain elevator** built fast and clean with Atlas Duraplastic air-entraining cement. Further proof that the greater workability of Duraplastic makes it ideal for slip-form work.

Because it makes a more plastic, more uniform, more cohesive mix, Duraplastic saves time and work in placing and finishing. Requiring less water for a given slump, Duraplastic minimizes segregation and bleeding.

Duraplastic works as well for paving, structural, and mass concrete as it does for slip-form construction. No unusual changes in procedure

are required. A denser, more durable concrete results.

Duraplastic complies with ASTM and Federal specifications... sells at the same price as regular cement... makes better concrete at no extra cost. 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-59

## ATLAS DURAPLASTIC

AIR-ENTRAINING PORTLAND CEMENT

**MAKES BETTER CONCRETE AT NO EXTRA COST**

TRADE MARK REG.  
U. S. PAT. OFF. U. S. DEPT. OF COMMERCE



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"The boys in the plant look comfortable"

"Sure they are. They have REZNOR SUSPENDED TYPE HEATERS"



**IDEAL FOR**

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**AUTOMATIC**

In spring, winter and fall, working comfort is automatically maintained with Reznor gas-fired heaters. Reznor thermostatic control is your non-salary fireman . . . you can forget expensive furnace firing with its family of operating and maintenance bothers.

**WITH THE BIG, QUIET FAN**

Reznor heaters circulate live, warm air in abundance.

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The gas used is efficiently converted to heat by the "special" heat exchanger . . . Reznor Heaters yield more BTU output per foot of gas burned. You will get the information you want by writing today.

**REZNOR**  
*Gas fired unit heaters*



**SUSPENDED OR FLOOR MODEL**

A SIZE FOR EVERY NEED

**REZNOR CO.**  
MERCER 17, PENNA.

*Gas Heaters Since 1888*

NO BOILERS · NO STEAM LINES  
NO FUEL STORAGE · NO FIRE TENDING

**Building Market Information Service Offered Distributors**

AS supplement to their plan to enter the home construction market on a major scale, American Kitchens, Connersville, Ind., have set up a comprehensive building market information service for distributors.

Organized under the direction of American's market analyst, Warren Campbell, the service is intended to keep distributors and dealers well informed on new home building trends, day to day changes in the market, and to equip them to more ably meet the builders' demands.

"It is our belief that the salesman who is to do an intelligent and successful job must be kept well-informed on the market he is planning to attack," Mr. Campbell explained.

"In addition to the market information which I will develop from my own sources," he stated, "the service will include statistical data purchased from such well known organizations as the F. W. Dodge Corp. and Roy Wenzlick and Co."

**Asphalt Roofing Bureau Elects L. M. Cassidy**

THE Asphalt Roofing Industry Bureau, an association of 28 leading manufacturers of building materials, elected L. M. Cassidy, vice president of sales for Johns-Manville Corp., chairman of the board of governors. Mr. Cassidy succeeds E. W. Smith, vice president of Philip Carey Manufacturing Co.

P. C. Rowe, executive vice president of Flintkote Company, was named vice chairman of the board, and E. L. Chamberlain, vice president of Bird and Son, Inc., was re-elected treasurer.

**Cotton Insulation Re-Elects Cole**

THE Cotton Insulation Association at its annual meeting in Washington, D. C. re-elected T. D. Cole, president. Mr. Cole is president of Lockport Cotton Batting Co., Lockport, N. Y. Tom Barnhardt, of Barnhardt Manufacturing Co., Charlotte, N. C., was elected vice president and Lawrence M. Gilman, Gilman Brothers Co., Gilman, Conn., treasurer.

Reports given at the meeting traced the growth in production and sales of cotton insulation from 55,000 pounds in 1940 to more than 14,316,000 pounds last year. With demand steadily increasing for the cotton product, industry leaders predicted continued success for the market expansion program they are conducting with the National Cotton Council.



**Stainless Steel Sinkbowl**

Legion sinkbowl 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.**

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ASSURES PAINTING SUCCESS  
*Every Painter!  
Every Homeowner!*



Needs **PA'SO**

- to **Quickly**
- SOFTEN PAINT
  - CLEAN HARDENED PAINT BRUSHES
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Important news for all builders

# STOP VAPOR and MOISTURE with revolutionary KAPCO BOARD!

69½ times better vapor seal than any other wall board on the market!

There's absolutely nothing like Kapco Board—resists water, vapor, alkali, acid, brine and alcohol. It's odorless, rigid, vermin-proof and termite-proof. Fire retarding. New superior strength. Stands up where other boards can't—will not rust, rot, mildew, mold, oxidize or de-laminate.

Bureau of Standards report reveals moisture penetration of Kapco Board is practically nil—only 1/25 gram (0.04) per sq. meter per day with quarter-inch board. This is 69½ times better protection than any other board on the market gives. Nothing finer for plaster base or dry wall construction. OK'd by F. H. A.

### NOW AVAILABLE—THREE TYPES FOR A THOUSAND USES!

**1 PLASTER BASE—*Monolath*.** Prevents vapor and moisture condensation inside of outer walls. 99.92% perfect vapor barrier. No more soggy, packed-down insulation—no more ice formations inside the walls. No chance of walls sweating—the cause of most plaster failures. Gives rigid support. Strong-armed workmen won't push through Kapco Board. Plaster clings better, is stronger—dries slower—from one side only. Comes in standard sizes. Cuts easily, or just score and break off. Priced competitively with ordinary sheet plaster base.

**2 DRY WALL CONSTRUCTION—**May be sealed and painted any color, or wallpapered. Filler or tape conceal joints perfectly. Use also as backerboard, as roofing base, as sheathing board, as flooring and linoleum underlayment, as a general utility construction board. Wonderful for basementless houses and concrete slab construction. Waterproof. Use on the farm for lining poultry houses, barns, silos, sheds. Stands all weathering. Easy to cut. Sizes to 4 x 8 ft. Costs less than ordinary building boards.

**3 DECORATIVE WALL BOARD—**Kapco Board in knotty pine and light walnut wood-grain finishes on one side now available. Nothing finer for finishing basements, attics, porches. Other decorative finishes available soon.

## KAPCO BOARD

KEYSTONE ASPHALT PRODUCTS CO.

A Division of American-Marietta Co.

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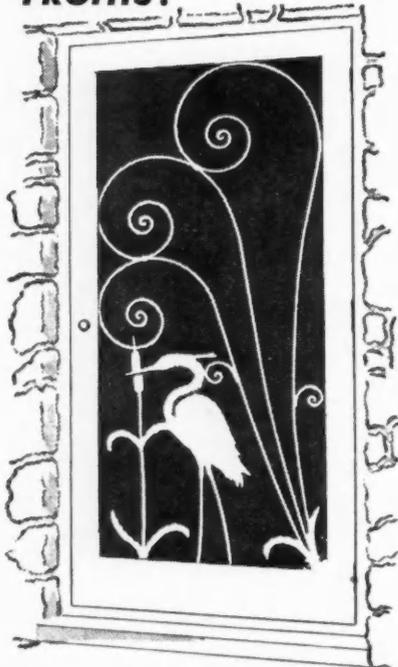
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**MR. DEALER:**  
**Springtime Is Screen**  
**Door Grille Time.**  
**Feature Wrought Iron**  
**SCREEN DOOR GRILLES**  
**NOW FOR EXTRA**  
**PROFITS!**



No. 7 Hand-Wrought Iron Screen Door Grille adds distinctive beauty to this doorway. Grille strengthens door and protects screen—blends with any style architecture.

● Now is the time to promote Screen Door Grilles ● Springtime is peak selling time! Genuine **COFFMAN WROUGHT IRON SCREEN DOOR GRILLES**—your extra profit line . . . greater sales appeal because it has more decorative beauty and lasting quality ● **COFFMAN'S** modern production methods retain all the charm of the custom crafted product yet make it available at low cost ● Now you can sell the Genuine **COFFMAN** Line in stock designs and sizes . . . just like other building materials . . . and at **EXTRA PROFIT FOR YOU!** Sold thru Lumber and Material Dealers ● Send for catalogue of designs, sizes and prices—and name of your nearest jobber.

- Canopy Brackets
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- Railings - Stoop, Porch and Balcony

Manufacturers of the Original  
**"Complete Builders Line"**  
 of Hand-Wrought  
 Ornamental Iron



**The R. G. Coffman Co. Inc.**

Since 1925

Dept. A.B. P.O. Box 259  
**ORLANDO, FLORIDA**

**That New Look**  
 For Old and Present Day Homes  
 With Aluminum Siding



OLD house is given a new appearance by the application of aluminum siding

**A** NEW aluminum siding and roofing with baked enamel finish is being manufactured by the National Aluminum Products Company of Canton, Ohio. The new product is becoming increasingly popular for use in new home construction as well as for refinishing old structures in need of new siding or roofing. According to S. L. Daniels, president of the company, a large number of the firm's dealers in Ohio and Pennsylvania are being kept busy satisfying the ever-increasing demand for the product. The product is being used by several manufacturers of prefabricated houses.

The National Aluminum Products Company was founded by Mr. Daniels in 1946 and started production with an experimental crew of only six employees. The firm has since moved to

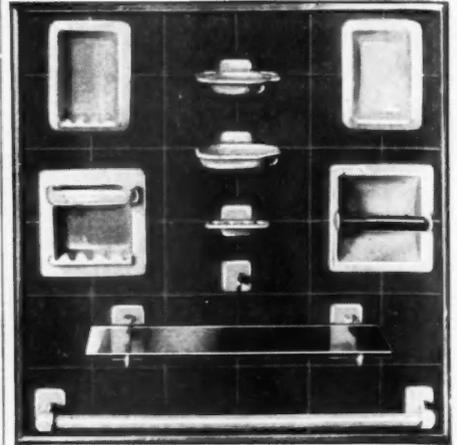


USE of aluminum siding adds beauty and permanence to this new home

larger quarters and now employs more than 50 people, who operate new and modern equipment installed to fabricate the aluminum siding and roofing. Previous to founding the present firm, Mr. Daniels was engaged in general construction work.

In the March issue of *American Builder*, it was erroneously stated that this firm prefabricates roof and wall sections for aluminum houses. The firm's activities are confined to the manufacture of baked enamel finish aluminum siding and roofing.

**AVAILABLE NOW!**



**PORCELAIN ENAMELED CAST IRON BATHROOM ACCESSORIES**

A complete line of recessed and screw-on type accessories now available in quantities in standard colors—White, Black and Green. Display board, shown above, No. D-995 furnished at net cost of applied fixtures only, with stock order.



Order from your wholesaler.  
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**SPEED YOUR JOBS**



**BUY BEARCAT!**

You'll finish jobs faster with a Bearcat! Speedy foot-pedal swing cut-off . . . Rip; cut-off at all angles . . . Portable from job to job . . . Rugged welded steel frame and top . . . Heavy-duty ball bearings. Two sizes: XJR for home builders, X C O for heaviest jobs. **QUICK DELIVERY.**

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 SOME AREAS  
 STILL OPEN

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**THE PAXSON CO.**  
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**BUILDING BEARCATS FOR 25 YEARS**



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Your houses will have the new look, and will always sell more readily and at better prices if they are painted with the distinctive new Pratt & Lambert Paint colors. And you can save time, material and money because these fine P&L paints and varnishes go on so easily, hide in fewer coats and cover more square feet per gallon. Your painters will like them. Your prospects will want them. And your sales will prove it! Pratt & Lambert-Inc., 80 Tonawanda Street, Buffalo 7, N.Y. In Canada, 6 Courtwright Street, Fort Erie North, Ont.

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*Valuable*  
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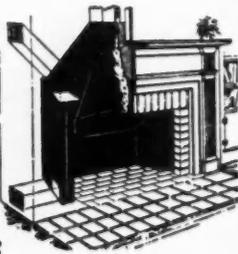
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**You Help Owners**  
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on the design and materials for their fireplaces. Covers the entire field — from classical to ultramodern — in a wide variety of materials.

Any of these designs lends itself to the use of a heat-circulating fireplace — built around the

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FYRO-PLACE, the improved Steel Form, saves up to 16 hours labor, plus damper, firebrick, etc. — more than offsetting its cost.

The owner gets a warm-air-circulating fireplace instead of a smoky, drafty, old-fashioned one — at no greater cost. He becomes a satisfied booster for you.

*Send today for this*  
**Valuable Book**  
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**PRICE** FIREPLACE HEATER  
& TANK CORPORATION  
2 Austin Street Buffalo 7, New York

**Gypsum Product Prices**  
**Only 29.4 Per Cent**  
**Above 1939**

**I**NCREASES in gypsum product prices have been held at a minimum John C. Best, vice president of the National Gypsum Co., told the joint Senate and House Committee in Washington set up by Congress to investigate the current high cost of building.

Drawing on the experience of his company as being typical of the industry as a whole, Mr. Best presented conclusive proof that while manufacturing costs have doubled since the end of World War II, the selling price of his firm's building materials in 1947 was only 29.4 per cent above that of 1939. This in contrast with the figure of 95 per cent published in September by the Bureau of Labor Statistics as being the average increase in cost of all building construction materials since 1939.

As an example, Mr. Best cited the case of an actual residence built in Buffalo, N.Y., which cost about 40 cents per cubic foot or \$5,100 in 1939 and today costs practically \$1.00 per cubic foot or \$12,500. Of this amount, the total increase in the cost of all the products by National Gypsum used in the house amounted to exactly \$75.54 over 1939.

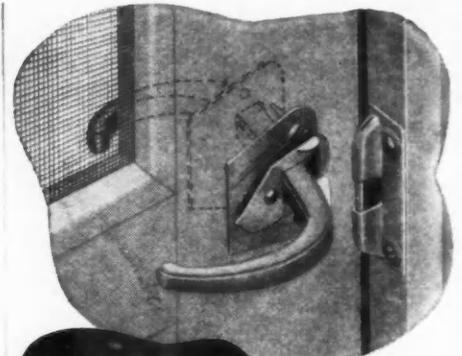
“During 1947, my company made an outstanding contribution toward relieving the shortage of certain critical building materials, and will make an even greater contribution in 1948,” Mr. Best reported.

“This increased output was not attained through the simple process of building additional board machines. It involved the extension of our activities into several other fields. Four of our plants on the Atlantic seaboard depend on gypsum rock brought down by boat from Nova Scotia. To insure a continuous supply of raw material for these plants, we purchased and operate a fleet of 10,000 ton steamers.

The second most important item in the manufacture of gypsum wall board and lath is the heavy paper liner on each side of the board. When this became difficult to obtain, we purchased three paper mills to insure the continued operation of our gypsum board plants.

“Retarder is another essential ingredient which could not be obtained in sufficient volume, and so we built our own retarder plant.

“In brief, additions to our existing gypsum wall board and lath  
*(Continued to page 192)*



**ONE-BORE LATCH** *Automatic*  
**PUSH or PULL ACTION**

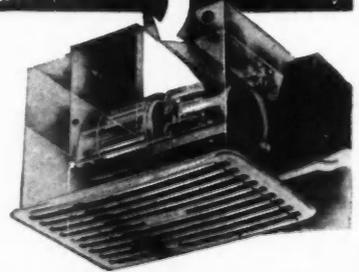
Push the handle if the door swings away from you; pull it if the door swings toward you. That's the simple principle of the Ideal Latch for screen and storm doors, as well as many other applications. New '48 model includes latching action in the strike... silent operating... easier latching... stronger 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. Also latch with stamped steel handle manufactured as previously. Ask your jobber, or write for literature.



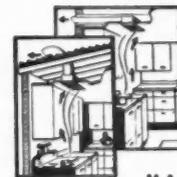
**Display Models**  
**For Dealers**  
**Ask Your Jobber**

250 EAST FIFTH STREET  
ST. PAUL 1, MINNESOTA

**Only THE CLIPPER**  
**HAS THIS GREASE** **PARTITION**



Hundreds of pounds of grease and dust suspended in the air as mist pass through a kitchen ventilator during its operating life but only the Clipper moves this harmlessly outdoors without gumming or wearing the motor. The Clipper is guaranteed for 5 years because the motor is entirely removed from the air stream. It's easy to install in old or new houses. Mounts in the ceiling between joists with only the



dripless ceiling grille visible.

Sketches show how easily Clipper is installed between joists and vented through roof or a side wall

**MAIL THIS COUPON TODAY**

Trade-Wind Motorfans, Inc.  
5705 S. Main St., Los Angeles 37, Calif.  
Send complete information on the Clipper

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

# inflation missed!



# THORN

## ALUMINUM WINDOWS

It's hard to believe, but residential aluminum windows cost less than pre-war.

They actually cost less today than windows made of perishable materials, that require constant painting and maintenance.

Thorn aluminum windows are completely finished at the factory with sash hung in frames, adjusted,

weatherstripped and all hardware applied.

There are no additional parts or fittings to buy, no expensive field work to perform.

Just set them in the prepared openings or build them in masonry, and send for the glazier—That's All.

J. S. THORN COMPANY PHILADELPHIA 32 PENNA.

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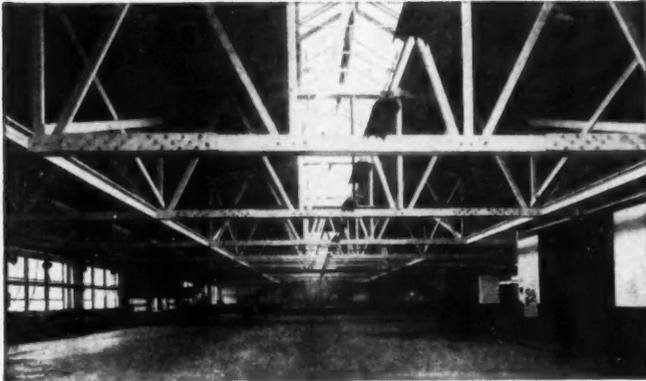
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YOUR WAREHOUSE . . .  
AMERICAN-BOWSTRING ROOF TRUSSES**



- American Roof Trusses eliminate center walls and posts . . . increase your storage space. Strong and safe, they cut your building costs considerably. 25 to 150 foot spans built to your requirements. Prompt delivery . . . low cost. Write for an estimate today.

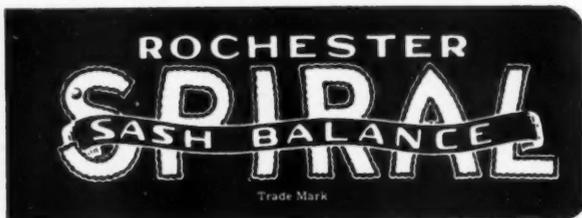
**AMERICAN ROOF TRUSS CO.**

6852 STONY ISLAND AVE.  
CHICAGO 49, ILL.  
PLAZA 1772



235 W. 37TH PLACE  
LOS ANGELES 7, CALIF.  
ADAMS 3-4191

ESTABLISHED 1922

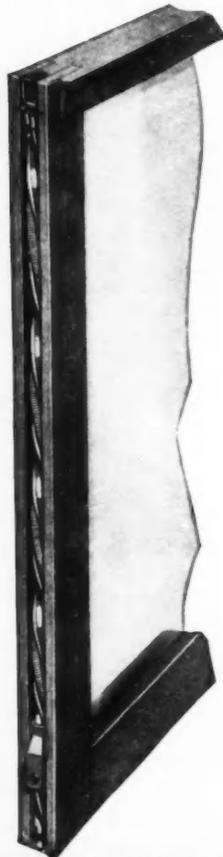


**IMPROVED DESIGN!  
FASTER TO INSTALL!  
SAME LOW COST!**

The best sash balance for modern window construction is now made even better! — *stronger than ever and requires one-third less time to install.*

Built-in stops, to prevent sash traveling too far, have been made stronger. No loose parts. Actuating bearing is longer and three times as heavy, for easier installation. The Rochester Spiral Sash Balance is completely concealed — there are no exposed tubes, ropes, tapes or cables. It's weather-tight — no pulley-holes or weight boxes. And it's neat—top of sash stile groove is closed. No mortising, no adjusting, no rusting! Nothing to break! Efficient, modern, space-saving. And the Rochester Spiral Sash Balance still costs no more than old-fashioned balances.

Ask your jobber for complete information, or write direct for literature and detailed installation bulletin.



**MILWAUKEE STAMPING CO.**

Our 54th Year of Quality Production  
802 S. 72nd STREET • MILWAUKEE 14, WISCONSIN

(Continued from page 190)  
plants; the construction of new plants and obtaining the additional shipping, paper and retarder facilities represent a total expenditure on the part of our company of \$27,000,000."

Using gypsum products as an example, Mr. Best gave a breakdown of the increases in the unit cost of material, labor and services from 1939 to November, 1947 with which his firm was faced. Starch, a basic ingredient in manufacture, showed an increase of 244.6 per cent while the next high was fuel oil with an increase of 163.1 per cent.

"Despite these increased costs," Mr. Best pointed out, "selling prices on our gypsum building products today average only 27.7 per cent more than in 1939.

"While we speak only for ourselves, and have no authority to speak for other members of the industry," he continued, "it is obvious that their experience must be similar to ours. We therefore believe that the gypsum industry as a whole has probably done more to increase its output and, in spite of greatly increased costs for labor, materials, and services, has held its selling prices lower than any other major industry serving the building construction field.

"However, there is a point beyond which increases in cost cannot be absorbed or compensated for by increased output or the most intelligent management. The railroad increases effective this month (January) and the further increases in wages now being advocated, will not only add in each case many thousands of dollars to our costs, but will also affect the cost of materials that we have to purchase.

"As these elements increase our costs, they will have to be reflected in some further increase in our selling prices.

"Our objective for 1948 is to produce more building materials than we have ever turned out in any single year in the history of our company. We are geared to do just this. As a further stimulant to building, we will continue to hold price increases to the lowest level consistent with good management."

**Taylor Company Holds Annual Sales Meeting**

"IN THE interest of economic stabilization, there will be no increase in the price of Wright Rubber Tile." This was announced in the annual sales meeting of the Taylor Manufacturing Co., Milwaukee and Racine, Wis.



**Now...**  
**You Can Have Your Doors**  
**“Signed, Sealed and Delivered”**



*Official Fir Door Institute Inspection Service covers workmanship, appearance, grade, and dimension specifications. Every inspected door is clearly stamped with an official F.D.I. “grade trade-mark”—graded A, B, C, or MR in accordance with Fir Door Institute quality standards. The F.D.I. grade mark—plus the notarized Certificate of Inspection—is your symbol of fine craftsmanship.*

THIS Certificate of Inspection—signed by an F.D.I. Inspector, sealed by a Notary, and delivered with a shipment of Douglas fir doors—means the shipment comes up to rigid quality standards adopted by member factories of the Fir Door Institute. Member factories of the Fir Door Institute will, at your request, enclose a notarized copy with your shipment, and attach another to your invoice. Doors, “Signed, Sealed and Delivered” in this manner, are in every respect up to official F.D.I. standards. Ask for this Certificate of Guaranteed Quality when you buy.



**FIR DOOR INSTITUTE**

**Tacoma 2**

**Washington**

**THE NATIONAL**

**ASSOCIATION OF DOUGLAS FIR DOOR MANUFACTURERS**

**NEW!**  
**FASCO** AUTOMATIC  
 KITCHEN VENTILATOR



**NOW** AVAILABLE IN 10" SIZE, TOO!

Regardless of whether the homes you are building have large, average, or small size kitchens, built with standard, thick, or thin wall construction . . . you can now get the new FASCO ventilators to keep them cool, clean and comfortable. Their many quality advantages and amazing low price enable you to add much to the sales appeal of your homes for so little. \*\*

\*\*8" Models Sell Retail For Only \$24.95 Incl. Tax.  
 (SLIGHTLY HIGHER IN THE WEST)



NO OTHER popular-priced ventilator gives as many Quality Advantages

WRITE FOR COMPLETE INFORMATION

A PRODUCT OF



\*

F. A. SMITH MANUFACTURING CO., INC., ROCHESTER 2, N. Y.

Gentlemen: AB-4  
 Please send complete information on the New FASCO Automatic Kitchen Ventilators.  
 Name \_\_\_\_\_  
 Street \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_

**Fact Finding Group To Stress Industry's Accomplishments**

**TO COUNTERACT** the uninformed and misleading propaganda to which the building industry has been subjected, a fact-finding program has been inaugurated by a group of key men representing manufacturers of building materials and equipment. Headed by Melvin H. Baker of Buffalo, president of the National Gypsum Co., the organization has adopted the name Construction Industry Information Committee.

Their objectives are to inform both the public and the industry of the importance of the building industry to the individual citizen, whether he be employed in a factory, a store, on a farm or within the industry itself; and to bring to the attention of all groups the story of the industry's accomplishments, and the importance of maintaining a vigorous, dynamic program of construction.

"There is a lot of uninformed criticism directed toward the industry today," Mr. Baker explained. "That criticism has been far flung and persistent. If it is permitted to continue unchecked, it can seriously undermine public confidence in the industry and thus discourage people from building. Actually the critics are far behind the facts, and it is time that they and the public realized it.

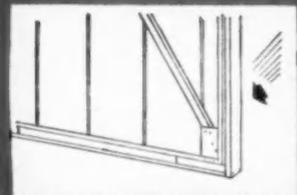
"The greatest need as we see it is to present the facts about the industry's progress. We know it is doing a good job; that it has become more efficient and that it is constantly striving to lower costs. Over and above that, it is one of our largest sources of employment, and a mainstay in our economic well-being.

"Many people do not realize that their own jobs depend upon construction. While there are actually about 7,500,000 individuals employed in on-site operations and in supplying the needs of building, the jobs created by the building industry stretch far back of on-site construction.

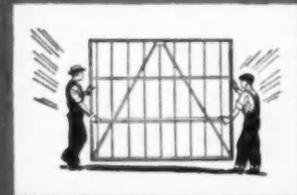
"Therefore, a major phase of our program will be to foster, through the use of accurate information material, an industry-wide consciousness of responsibility and pride in its continued progress. This is a job that needs to be done for the sake of all who have a direct stake in the status of the industry. This means every American."

The committee has obtained the  
 (Continued to page 196)

# WHY THIS STRONG GARAGE DOOR IS INSTALLED *Quicker*



LESS CRATING



LEAF IN 1 PIECE



HARDWARE COMES ALREADY ASSEMBLED



INSTALLED WITH ORDINARY TOOLS



## Check these Outstanding Advantages:

**1. INSTALLED QUICKER** (see illustrations at right)—Experienced 2-man crews are installing Strand Canopy Doors in prepared openings in *minutes*; Receding (track-type) Doors take somewhat longer;

**2. AVAILABLE**—you can get Strand Doors without waiting and without limit.

**3. STRONG AND DURABLE**—all-steel, all-welded construction provides outstanding strength and durability for a lifetime of service. Galvannealing provides a hot galvanized zinc coat for rust protec-

tion, oven-baked to provide a clinging base for paint.

**4. ATTRACTIVE IN APPEARANCE**—its good looks are permanent! Steel won't warp, shrink, sag or rot.

**5. LOW IN COST**—new low price results from volume production concentrated in one plant, and standardization on two models. Strand is America's greatest garage door value!

Your Strand doors are waiting for you! Order today from your dealer — or mail the coupon, mentioning your dealer's name.

ALL STEEL GALVANNEALED • OVERHEAD • ONE PIECE

# STRAND GARAGE DOORS

TWO TYPES . . . RECEDING (TRACK) AND CANOPY

STRAND BUILDING PRODUCTS CO.,  
Dept. AB-4, 1710 Buhl Building, Detroit 26, Michigan.  
Please rush literature with detailed descriptions of Strand all-steel Garage Doors.

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

Name \_\_\_\_\_

Address \_\_\_\_\_

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

actual jobs  
**PROVE**

Basic unit, the Speed Panel, made of rugged steel.

Ingenious, quick-action Wedge Bolt. For rapid joining or stripping.

Speed Panels combine into units of two or more for quick handling.

Forms are quickly positioned for easy pouring.

Light and sturdy. Easy wall assembly. Rapid stripping.

Forms assembled into multi-unit panels for rapid crane handling.

## ATLAS SPEED FORMS

Save to...  
**50%** of poured concrete costs

**T**he Irvington engineers are in constant touch with the contractors all over the country who use Atlas Speed Forms — their experience and knowledge are at your disposal, too.

**B**ecause of this close contact, we can actually show you job after job where Atlas Speed Forms are saving 50% of Form Costs, Form Labor Costs, and Job Time.

(Continued from page 194)  
services of Miles L. Colean, well known housing economist, to direct research activities. Studies will be made of current reports on the progress of the industry, the industry's housing record, material production, cost trends, trends in worker productivity, labor supply, adoption of labor saving methods, adequacy of manufacturers' and dealers' inventories, building code revisions, relation of general price inflation to construction costs, and similar subjects.

These studies will be sent to editors, members of Congress, columnists, commentators, and others. They will also be available to all industry associations and related business groups.

The address of the Construction Industry Information Committee is Room 706, 815 Fifteenth St., Washington, D.C.

In addition to Mr. Baker, who serves as chairman, the committee members are: E. A. Tanner, Inland Steel Products Co.; Forbes Sargent, Sargent & Co.; B. W. Druckenmiller, Penn-Dixie Cement Co.; Fred Hauserman, The E. F. Hauserman Co.; H. R. Peck, Armstrong Cork Co.; and R. S. Hammond, Johns-Manville Sales Corp.

To guide the program, the committee has appointed an operating committee. This group is composed of Mr. Tanner, Mr. James M. Ashley, Libbey-Owens-Ford Co., who is chairman of the Industry and Public Education Committee of the Producers' Council, and Mr. Wilson Wright, Armstrong Cork Co., who is chairman of the Council's Construction Economics Committee.

### Controls Developed by Honeywell in 1947

**M**ORE than 60 new instruments and control systems were announced by the Minneapolis-Honeywell Regulator Co. during 1947, Harold W. Sweatt, president, told stockholders in his annual report made this month.

An increase of about 30 per cent in sales, which he said was general throughout major company divisions, resulted in an approximately equal percentage of increase in net earnings.

Slightly more than half of the company's total sales during the year were made up of products newly designed or re-designed since 1939, the report stated, and today, Minneapolis-Honeywell spends nearly as much for research and engineering as the company's entire net income 10 years ago.

So light a child can lift them

**IRVINGTON FORM & TANK CORPORATION**  
IRVINGTON, NEW YORK

Please send me information on Atlas forms. I am particularly interested in  
 Walls  Floors  Tunnels  
 Bridges  Sewers  Columns

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Mail inquiries to Irvington Office.

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 PHILADELPHIA, PA. Broad St. Station Bldg.  
 SAN FRANCISCO, CAL. Sixth and Hooper Sts.  
 TACOMA, WASH. 2412 N. 10th Street  
 WASHINGTON, D.C. 805 G Street  
 NEW YORK, N.Y. 43 Cedar Street

Contact us via the coupon.

# no installation problem here!



plan on  
*Marlite*  
walls

## Marlite PLASTIC-FINISHED Wall Panels

**F**or the homes you're building—and the commercial buildings, too—plan on Marlite plastic-finished wall and ceiling panels for simple, easy installation in every room where colorful, practical interiors are needed. Marlite wall-size panels are quickly and easily installed with regular carpenter's tools and, once installed, Marlite becomes an added value feature that appeals to every property owner. What's more, Marlite's enduring beauty and ease of maintenance means real, long-range economy for your customers.

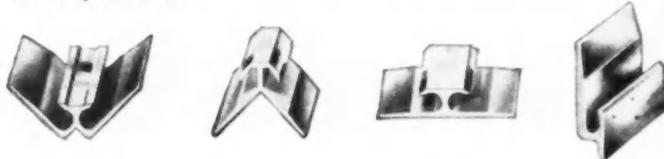
Better check up today on Marlite and the entire line of genuine Marsh Products, designed to simplify your installation problems and help you do a better job. Complete details available in Sweet's File for Builders, or write Marsh Wall Products, Inc., 403 Main St., Dover, Ohio.



Marlite comes in a complete range of colors and patterns, in panel sizes from 4' x 4' to 4' x 12', that meet every installation requirement. Easy to cut and fit, Marlite goes up quickly and neatly over new walls or old.

### MARSH MOULDINGS

Available in many attractive patterns, Marsh "Panel-Tested" Mouldings are scientifically designed, provide a perfect, finished appearance that enhances any wall panel installation. Adequate expansion space and wide flanges for easy nailing and fastening make installation quick and easy, and guarantee lasting satisfaction.



### MARSH ADHESIVES



Easily applied, permanent and waterproof, Marsh C-200 and C-300 Adhesives are scientifically compounded to provide a flexible bond. Use Marsh Adhesives for wall-board installations that go up right, and stay right.

### MARSH BATHROOM ACCESSORIES



Exclusive Marsh design, finished in brilliant chrome for a lifetime of sparkling modern beauty. A complete line of fixtures, including recessed and flush mountings. Easily installed, simple installation instructions are included with each fixture.



For CREATING BEAUTIFUL INTERIORS

# Art in Iron

**NEW stock designs — lower prices!**

Alternately twisted 1/2" sq. spindles, forged finials, 1" sq. terminal posts. Drilled lugs attached. Standard 32" height.



Artcraft stock rails No. 395 in 4 lengths. Priced per pair.  
 2'6" — \$12.00 3'6" — \$14.00  
 3'0" — 13.00 4'0" — 15.00

### STOCK PORCH COLUMNS

Corner & Single-panel

Height corners 12" panels

7' 0"	\$25.00 ea.	\$14.50 ea.
7' 6"	27.00 ea.	15.50 ea.
8' 0"	29.00 ea.	16.50 ea.

**IMMEDIATE DELIVERY** on all Artcraft stock items. Prices net F.O.B. Columbus, Ohio. Terms: Payment with order or C.O.D. Have **ARTCRAFT** do your most exacting custom iron work too.

**ORDER DIRECT!**

No. 20 **SATISFACTION GUARANTEED!** No. 14

Write for our new 36 page catalogue

## ARTCRAFT Ornamental Iron Co.

724 E. Hudson St. Columbus 11, Ohio

### New Hardware Sales Manager

**JACK McCUE**, former western manager of Russell Erwin Manufacturing Co., has been appointed manager of hardware sales for the Edward Hines Lumber Co., according



**JACK McCUE**

to an announcement made by James F. Mahoney, vice president of the Hines Co.

McCue was with the Erwin Manufacturing Co. for the last 25 years. In his new position, he will head up a greatly expanded hardware division dealing in builder's hardware as well as consumer items which will be sold through Hines' 24 stores in Chicago and suburbs.

### L. W. Smith, Sales Manager Passes Away After Illness

**L.** W. (LARRY) Smith, Chicago, for many years sales manager for the Sisalkraft Co., passed away Feb. 16, 1948, after a long illness.

Mr. Smith started in the lumber and building material industry in the lumber mills of the Northwest. He came to the Sisalkraft Co. 18 years ago, and worked in a sales capacity until recently.

Mr. W. L. Kennedy, formerly manager of the New York branch office of the Sisalkraft Co., has taken over the duties of sales manager, with headquarters in Chicago.

### Relocate Eastern Offices

**R**ELOCATION of their eastern regional offices has been announced by the Jaeger Machine Co., Columbus, Ohio. Previously located at 8 East 48th St., New York, the offices are now established at 1504 Widener Building, Philadelphia.

L. T. Phillips, regional manager at the new Philadelphia offices, stated that this change of location has been made in order to more efficiently serve the thirty Jaeger distributors in the Maine-to-South Carolina territory and the steadily increasing number of users of Jaeger pumps, compressors, hoists, concrete mixers and paving machines.

# RILCO

**RAFTERS and TRUSSES**  
*for* **POST-FREE**  
*Commercial Construction*

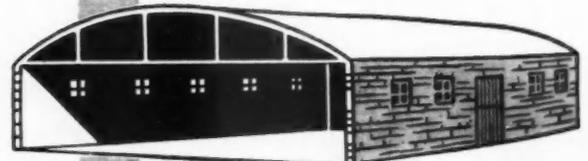
● Architects and builders find new values in modern Rilco construction for every type of commercial building. Engineered for dependable load bearing and great wind resistance, Rilco glued-laminated rafters and trusses are economical in cost and easy to erect.

The interior of a Rilco building needs no additional support of posts or braces. This fits the requirements of most hangars, warehouses, garages, skating rinks and recreational buildings.

Investigate Rilco framing for modern, permanent, commercial construction. See your nearest Rilco representative, or write us for details.



**BOWSTRING TRUSS**



**TIED RAFTER**

**RILCO** *Laminated* **PRODUCTS, INC.**  
 1669 First National Bank Bldg., St. Paul 1, Minn.

Eastern Division: Wilkes-Barre, Pennsylvania • Western Division: Sutherlin, Oregon  
 Factories at: Albert Lea, Minnesota, Independence, Kansas, Wilkes-Barre, Pennsylvania, Sutherlin, Oregon

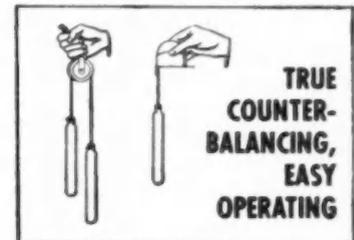
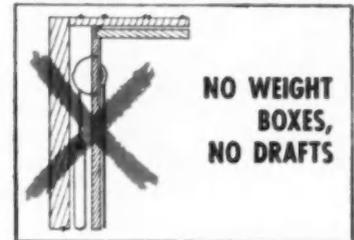


The average six room house has at least fifteen double hung windows. Every window is an important item of construction cost. One way to keep the cost down without sacrificing quality is to install pre-assembled window units. They save time, save labor because they come complete—ready to install.

Pre-assembled window units equipped with Pullman Sash Balances are even better. Windows open freely, easily, noiselessly. You aren't lifting the weight of the window against friction. Pullman Balances fit inconspicuously into the window frame and are trouble-free even when painting or varnishing. Pullman Balances require no weight boxes. That means you can use modern, narrow trim or no trim at all. To the home owner that means no drafts, for insulation can be butted up to the frame.

Windows equipped with Pullman Balances give you an extra sales feature in that they are guaranteed for the life of the building... come what may. No cords to break. No weights to drop. That alone is a plus for any home buyer.

Ask your dealer for Pullman-balanced pre-assembled window units. Or for information write Pullman Manufacturing Corporation, 325 Hollenbeck Street, Rochester 5, N. Y.



*Specify Window Units with*  
**PULLMAN** *Sash Balances*

# NOW! Step Up Your Sales With—

*The New* **HIGH-BAKED PLASTIC ENAMEL SURFACE**  
**Miracle Walls by TYLAC**



From all parts of the country our outlets are telling us their sales have stepped up with the new High-Baked Plastic Enamel Surface—Miracle Walls by Tylac. And, there's a good reason: It's tougher, more resilient and flexible, has a higher gloss, longer life and many other features of superiority.

There's a wide range to choose from — 4 basic patterns and 18 colors, offering an endless selection of color combinations.

There's greater profit in greater sales — Tylac offers you both. Write us for color chart and full information.

THE GREATEST POST-WAR DEVELOPMENT IN THE INDUSTRY

**TYLAC COMPANY** MONTICELLO, ILLINOIS  
 PIONEERS IN THE PREFABRICATED WALL PANEL INDUSTRY



## Catalogs and HOW-TO-DO-IT INFORMATION

**415—ALUMINUM WINDOWS**—for moderately priced homes are covered in a pamphlet issued by Alcasco Products, Inc., Muskegon Heights, Mich. Assembly details, typical installation details and exact dimensions of the standard types of windows available make up its content. These all-aluminum casements blend with any style architecture and feature the larger glass area.

**416—DRY WALL CONSTRUCTION**—what it is and how materials can be speedily and properly applied in this type of construction are the principal points covered in literature titled "Short Course No. 901," prepared by The Reardon Co., St. Louis 6, Mo. Written primarily to instruct contractors in construction techniques, the material contains information of value to architects and builders who are interested in planning, specifying, selling or building dry wall structures.

**417—GAS VENT AND FLUE PIPE CATALOG**—this catalog features the complete Metalbestos line of fittings. It describes the problems of gas appliance venting and points out the advantages of Metalbestos patented pipe-within-a-pipe construction. Specifications, dimensions together with installation instructions are given. It is published by Williams-Wallace Co., 168 Hooper St., San Francisco 7, Calif.

**418—SPEED PRIME PUMPS**—are illustrated and described in Bulletin No. 47-12 published by the Chain Belt Co., 1600 W. Bruce St., Milwaukee 4, Wis. Helpful application information and tables together with detailed specifica-

tions are features. Advance design features of the unit are described in detail and pictured by cutaway and "exploded" photos.

**419—WOOD KITCHEN CABINETS**—how the Boro line of wood cabinets lend themselves to varying arrangements to meet individual requirements is the subject of a four-page folder offered by the Boro Wood Products Co. Inc., Bennettsville, S.C. The warmth of wood is combined with beauty of design in these units. The complete line is illustrated and described and floor plan of a typical corner layout shown.

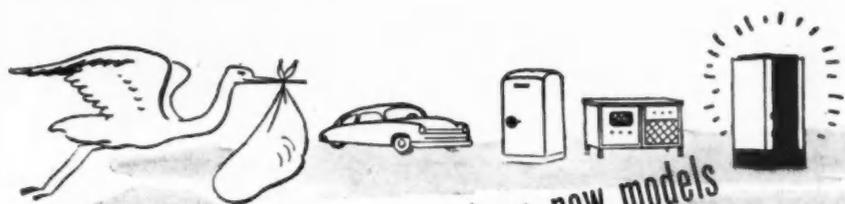
**SERVICE COUPON—CLIP and MAIL to CHICAGO**

Readers Service Department (April, 1948)  
 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.



Boilers, too, have new models

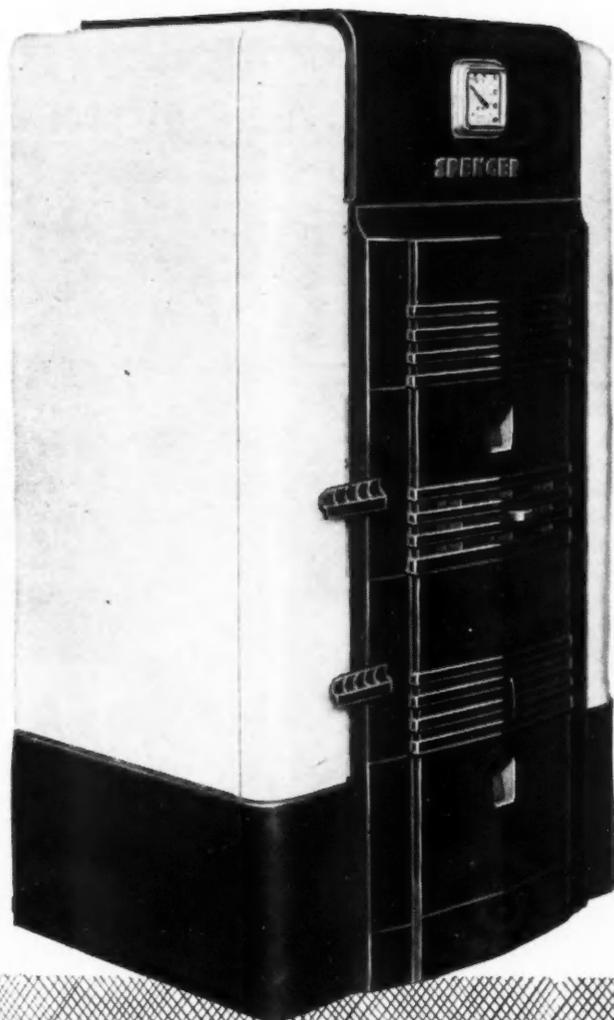
NOW . . . .

the new, all purpose

# SPENCER

SERIES 21

# BOILER



Spencer—known since 1888 for manufacturing only quality boilers—now brings you this splendid new all purpose cast iron sectional boiler. New in design . . . design proven under actual conditions in our testing laboratories. New heights in performance from Spencer's long experience gained in manufacturing quality heating equipment . . . Write today—get complete details.

### Just look at these added features—

Designed to burn any type fuel—easily and quickly converted. Year round domestic service hot water. Easily installed—a sectional boiler designed for iron to iron air tight fit. Attractive, colorful jacket combined with modern design door assembly that features pyrex observation ports. Adds a note of beauty to that extra room in the basement.

## SPENCER HEATER

DIVISION—AVCO MANUFACTURING CORPORATION  
DEPT. BB-2 WILLIAMSPORT, PA.



FULLY APPROVED  
REG. U. S. PAT. OFF.

**ANOTHER AVCO PRODUCT!**



**GOOD HARDWARE  
FOR  
GOOD HARD WEAR!**



**NO. 4715  
CASEMENT  
OPERATOR**



No question about it—casement hardware has to take plenty of punishment . . . punishment from friction, from weathering, from temperature, from careless owners or tenants. Getty casement window operators, preferred by leading builders for over a quarter of a century, have amply proved their ability to absorb the daily wear and tear and still give the same smooth, effortless operation as the day they were installed.

Available in Bronze Lacquer and several plated finishes, the Getty No. 4715 Operator combines sturdy construction and sound design for lifetime performance. Write for Catalog E.

**8 Vital Points with Getty built-in quality—**

- Operating arm is 5/32" cold rolled steel, cadmium plated, with teeth accurately machine ground (hobbed) at exact operating angle.
- Full 1/2" diameter case-hardened steel worm. Shaft is integral with worm.
- Solid Bronze bushing acts as a bearing for worm shaft. Bushing is deep-cut machine-threaded and locked in housing so worm cannot back-out under pressure.
- Arm pivots around 3/8" diameter case-hardened steel bearing stud.
- Solid brass button is locked in channel—cannot come out accidentally; prevents rattling. Button is protected from weather—cannot freeze.
- Heavy channel guide has 3-point anchorage on window—cannot bend or bind. Furnished with Cadmium Plated Steel channel guides.
- Also available with solid brass channel guides at additional cost.
- Worm shaft and crank handles are serrated to accurately match each other. No slipping or play in handle.
- Simply Installed (with only three screws for operator; three screws for channel guide).

**Dependable Casement Control—with a flip of the finger**

**H. S. GETTY & CO., INC.**  
3348 N. 10th ST., PHILADELPHIA 40, PA.

*Builders...*

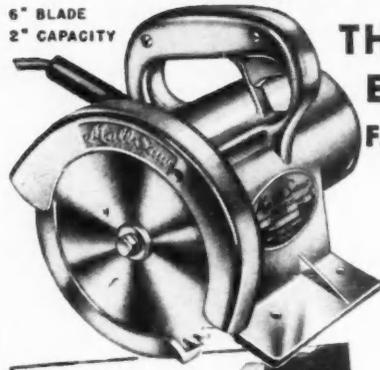
**Do Your  
Sawing · Shaping  
Sanding · Grinding  
Wire Brushing**

WITH A

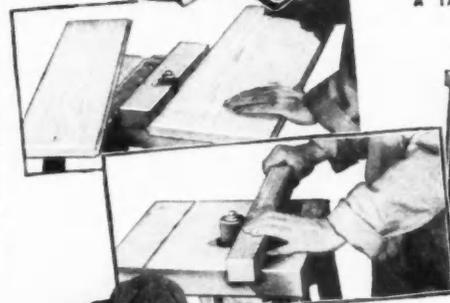
**Mall Saw**  
REG. U.S. PAT. OFF.

6" BLADE  
2" CAPACITY

**THAT CUTS  
EVERYTHING  
From Wood To Steel!**



EQUIPPED AS  
A TABLE SAW



This one tool—the Model 60 MallSaw—does the work of many tools. Used as a hand saw, it will crosscut, rip or angle cut rough or dressed lumber, groove mortar joints, cut metal, cut or score tile, concrete and other aggregate compositions. When set in a sturdy, portable floor stand, it serves as a table saw—complete with rip fence and mitre guide; as a shaper for contour grooving, quarter round and tongue groove work; as a drum or face sander, as a wire brush, or as a grinder.

Other MallSaws include: Model 70—7 1/4" blade, 2 1/4" capacity; Model 86—8 1/2" blade, 2 7/8" capacity; Model 128—12" blade, 4 1/2" capacity. All three larger models can be adjusted to bevel cut to 45 degrees.

Ask Your Supplier or Write Power Tool Division for Literature

**MALL TOOL COMPANY**

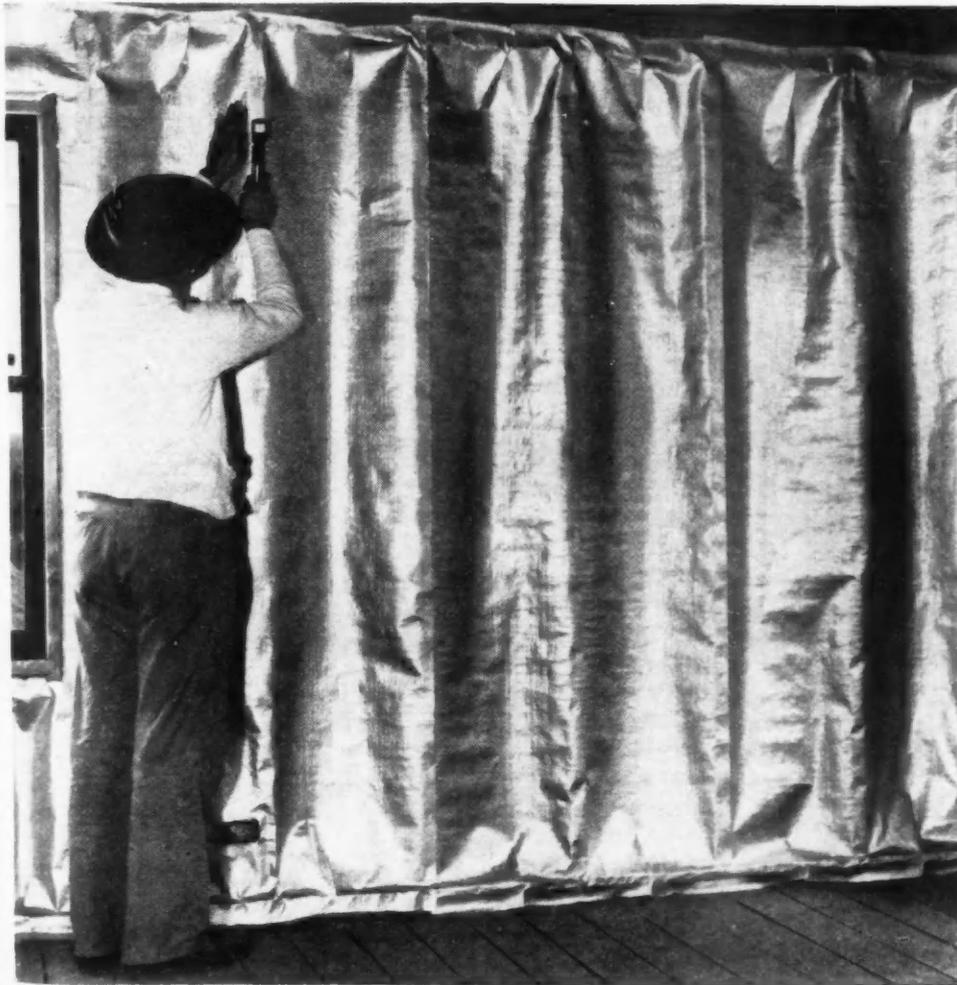
7737 South Chicago Avenue, Chicago 19, Ill.

Over 26 Years of "Better Tools for Better Work"



# SAVE 50% OR MORE BY INSULATING WITH SISALATION at about \$25\* per 1000 square feet

\*Contractors' Price



**1** You get insulation that is completely effective, since SISALATION, properly applied, is equivalent in heat-saving values to approximately  $\frac{3}{4}$ " of flexible or rigid types of good insulations most commonly used...based on M.I.T. tests on sidewalls constructed with a single layer of reflective SISALATION.

**2** SISALATION acts as an air-tight moisture-vapor barrier, thus protecting against dry-rot, paint failure, condensation. Exceeds FHA requirements as a vapor-barrier.

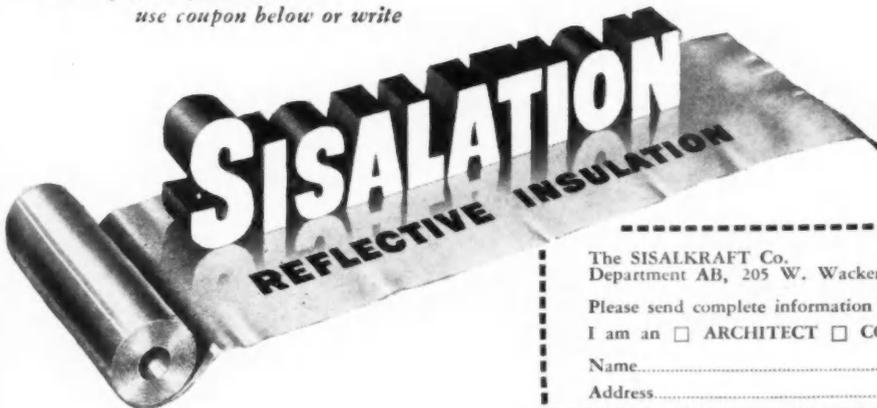
**3** SISALATION, reinforced with steel-like sisal fibres, is so strong that one man can apply it over two stud-spaces at one time without danger of having the SISALATION rip or tear (see illustration). This makes for low application costs.

**4** SISALATION does two jobs at one application cost . . . provides insulation and a vapor-barrier both at the same time.

**5** SISALATION is AVAILABLE NOW for prompt delivery through your lumber or building supply dealer.

The SISALKRAFT Co.  
205 W. Wacker Dr., Chicago 6, Ill.  
New York 17, N. Y.  
San Francisco 5, Calif.

For complete information,  
use coupon below or write



The SISALKRAFT Co.  
Department AB, 205 W. Wacker Drive, Chicago 6, Ill.



Please send complete information and tell me where I can buy SISALATION.

I am an  ARCHITECT  CONTRACTOR  OTHER.....

Name.....

Address.....City, Zone & State.....

# 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".

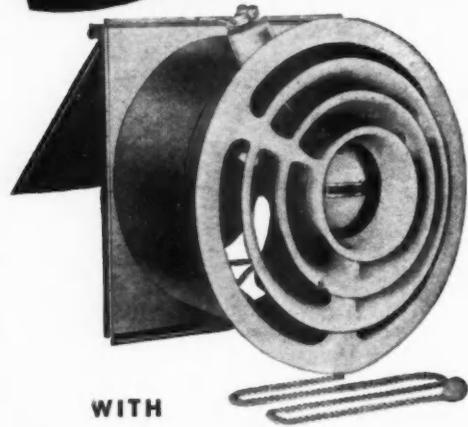
Write today for full details and free booklet "How to lay out building lots."

*We repair all makes of instruments*



**MANUFACTURERS OF  
INSTRUMENTS FOR ENGINEERS,  
SURVEYORS AND BUILDERS.**  
311 West Court St., Milwaukee 12, Wis.

**SELL CLEAN  
KITCHENS**



WITH  
**Westinghouse**  
NEW, IMPROVED  
**\*Poweraire**  
HOME VENTILATOR

Prospects look for convenience features which mark the home as *modern* in essential details. For instance, *ventilation* which keeps the home sweet and clean is an impressive selling point . . . especially when it's a Westinghouse *Poweraire* Home Ventilator. This is so easily installed and moderately priced that you can include it in any building or remodeling plans.

With the new *Air-Injector* Grille, this Home Ventilator can completely change the air in an average kitchen every **TWO MINUTES**. It is easily installed in practically any type wall from 4 3/8" to 30 3/4" thick.

## CHECK THESE FEATURES

- Modern, streamlined design
- White, snap-on, Air-Injector grille
- Insulated outside door
- Economical to operate
- Easy to clean
- Easy to install in practically any wall thickness
- Single pull chain control



*The Westinghouse Supplier in your locality will demonstrate its many other plus advantages. Contact him today.*

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

# Westinghouse Fans

WESTINGHOUSE ELECTRIC CORPORATION  
Electric Appliance Division • Springfield 2, Mass.

# INSULATED with OUTSIDE STORM SASH!

Here at last... the *insulated* metal case- ment. No more cold drafts, condensation, frosting. Mesker outside *metal* storm sash blankets the entire *American Home* Casement with two inches of insulating dead air, yet opens and closes at a touch ... from the inside. Practical, slick- appearing, inexpensive. Combines case- ment style and beauty with the most effective window insulation known. Exclusive with the...



**MESKER**  
*"American Home"*  
**COMPLETELY PRE-FABRICATED  
METAL RESIDENTIAL CASEMENT**

### Easy, Quick Installation Cuts Building Costs

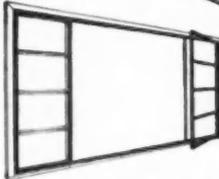
Specially designed factory-fitted wood-surrounds make *American Home* Casements easiest, quickest of all to install. Minimum on-job labor. Adapted to any type residential construction. Steel or aluminum. See the Mesker Catalog in Sweet's File for Builders, or write for descriptive folder. Stocked and sold by leading dealers and lumberyards.

### INDIVIDUALLY PACKAGED • PRE-FABRICATED PICTURE WINDOWS

Each *A. H.* Casement packed in sturdy shipping carton. Protects window from factory to job.



Distinctive, popular picture windows are formed of stock size *A. H.* Windows. Factory made to order and shipped with wood surrounds for easy installation.



FIRST WITH BUILDERS SINCE 1879

# Mesker Metal Windows

RESIDENTIAL • COMMERCIAL • INDUSTRIAL

MESKER BROTHERS, SALES DIVISION, 4342 GERALDINE AVE., ST. LOUIS 15, MO.

# YOUNG Announces... New, Circular "VERTIFLOW" UNIT HEATER

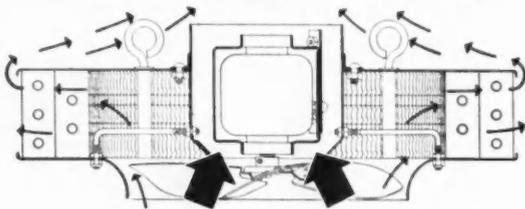


Young circular "Vertiflow" Unit Heater, shown with "Aerojet" Nozzle diffuser.

## How to Get Effective Heating from High Ceiling Installations

Increased airflow and lower final air temperatures of the new, circular "Vertiflow" Unit Heater make it possible to heat floor areas from greater heights than previously practical . . . thereby providing greater heating efficiency with fewer units. The new, Young heating element provides correct final air temperatures, maintains more even heat at thermostat levels, and eliminates excessive air buoyancy, which causes over-heated air to rise before reaching the floor areas. An added bonus in assuring trouble-free installations is the patent-applied-for protective motor cooling principle, described below. Young-designed diffusers and "Anemostats" are available for specific installations. Write for new, free Catalog No. 2648 today!

### "VERTIFLOW" by YOUNG Offers Protective Motor Cooling



When motor is off, radiant heat from core rises, creates "chimney" effect, protects motor from "baking" by drawing cool room air upward through stack (indicated by large arrows).

# YOUNG

## HEAT TRANSFER PRODUCTS



**YOUNG RADIATOR CO.**  
Dept. 628-D, Racine, Wis., U. S. A.  
Sales and Eng. Offices in All Principal Cities.

**HEATING, COOLING AND AIR CONDITIONING PRODUCTS**  
Convectors • Unit Heaters • Heating coils • Cooling coils • Evaporators • Air conditioning units •

**AUTOMOTIVE AND INDUSTRIAL PRODUCTS**

Gas, gasoline, Diesel engine cooling, radiators • Jacket water coolers • Heat exchangers • Intercoolers • Condensers • Evaporating coolers • Oil coolers • Gas coolers • Atmospheric cooling and condensing units • Supercharger inter-coolers • Aircraft heat transfer equipment

# CLIPPER MASONRY SAWS

Work like **MAGIC**  
Saving  
Time and Money



Yes, you'll be amazed how quickly and easily the hardest masonry materials can be sliced in two or any angle cut.

### CUTS DRY!

Wet or Dry your Clipper will always be ready for any job—large or small.

### CUTS WET!

Dustless at a moments notice—just turn on the circulating system of your new HD-48 Clipper.

### The 100% Answer

You'll want to cut Wet and need to cut Dry. With the New HD Clipper it makes no difference. Both methods in one saw for the 100% answer on every job.



GLAZED TILE  
Cut in 28 Seconds



VITRIFIED PIPE  
Cut in 14 Seconds



CONCRETE BLOCK  
Cut in 19 Seconds



ROOFING TILE  
Cut in 27 Seconds



FIRE BRICK  
Cut in 8 Seconds

## FREE TRIAL...You Judge

You can have a Clipper delivered to your job on Free Trial. See it! Use it! Watch it! Then compare it with any other method, if you are not perfectly satisfied in every way, you may return the Clipper without cost. This means you have the opportunity to judge the Speed, Ease and Economy before you buy. That's been the Clipper guarantee for ten consecutive years.

## THE MASONRY SAW WITH Dual Control

For more than ten years Clippers have been synonymous with masonry Cutting. The reasons are proven daily on jobs throughout the world. Clipper exclusive Patented features! And Now! New 1948 Clippers are available with new features to make them better than ever. Priced from \$195.

Write for Descriptive Catalogs Today!

# CLIPPER MANUFACTURING CO.

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KANSAS CITY 8, MISSOURI  
Philadelphia • St. Louis • Cleveland • Austin, Tex.



They'll look for  
*Quality Hardware*

The extra cost is little . . . the pay-off is big . . . when you use *quality* hardware. And the outstanding name in *quality* hardware is YALE.

In our new advertising in BETTER HOMES & GARDENS, SATURDAY EVENING POST and SMALL HOMES GUIDE, we're telling new home buyers why it's so important to specify or look for quality hardware.

You'll be making a hit with your customer when he sees the name YALE on his hardware. He'll recognize it as a good sign of a well-built house.

The Yale & Towne Manufacturing Company, Stamford, Conn., U. S. A. Makers of the famous YALE Lines of Locks, Door Closers, Hardware.

It's Always Moving Day at Your House

New parts of your house will be put in motion dozens of times a day. That's why it's important to realize that your house moves on its hardware and so the hardware should be top-quality to serve you for years to come.

On hardware that opens and closes fastens and protects doors, windows and drawers look for the name YALE—The Yale & Towne Mfg. Co., Stamford, Conn., U. S. A.

Books! Offers Quick Guide to Hardware Selection

Write for "Your Home Master" or "Your Handy 8 page guide for everyone who is planning a home." Provides a check-list which your architect, builder or hardware dealer can help you fill out.

**YALE**

YALE HARDWARE—SIGN OF A WELL-BUILT HOUSE



**SIGN OF A WELL-BUILT HOUSE**

# Thoro System

One little rain drop  
doesn't mean a shower



But it can mean disaster  
with that new building!

It may be the home or garage!  
It may be the cellar!  
It may be the cistern or pool!  
It may be the dairy barn or milkhouse!  
It may be the stable or pens!  
It may be the commercial building!  
It may be the factory or warehouse!



This is a 100% THOROSEAL home, not only the interior and exterior, but over the roof, THOROSEAL adds protection and beauty.

Not only the exterior walls surfaces of any type of masonry, including the sills and lintels, the roof, but the interior walls of light manufactured block can be filled and sealed with THOROSEAL and then a beautiful finish coat of QUICKSEAL.

## MR. DEALER

Write now for Dealer Plan and our No. 17 Circular, describing, in photographic detail, the methods employed in The THORO System.



Standard Dry Wall Products, Inc.

Box X - - New Eagle, Pennsylvania

Protects the Earth's Masonry

WATERPLUG THOROSEAL QUICKSEAL



## YOUR HOUSES *Sell Easier* ...WITH OAK FLOORS

Maybe you don't have too much trouble selling houses today. But don't they sell even more easily when you talk about their oak floors?

Most people know how beautiful, durable and adaptable oak floors are. But sometimes they forget about their long-time economy. Oak floors need only normal, simple care to withstand all the use the average family gives them.

A dustmop every day keeps them bright and clean, and an occasional simple treatment with floor wax quickly brings back their glowing luster. No other floors give such complete, long-time service.

Ask your oak flooring dealer for a supply of the helpers we have prepared for you. The booklet, *Oak Floors for Long-time Beauty*, tells prospective home owners about the values of oak flooring. The *Builders' Data Book* gives detailed information and specifications for planning, laying and finishing oak floors.

Oak floors help you make friends . . . and keep them.

Copyright 1948 . . National Oak Flooring Manufacturers' Association, Memphis, Tenn.



# in 4 ways... your best deal in basement windows

## 1 PRICED LOW FOR WIDE USE

Mass production of standard types makes this possible.

## 2 PROMPT DELIVERY

Standardization enables your dealer to carry ample stocks of 3 Basement windows and 1 Utility window to meet most building needs.

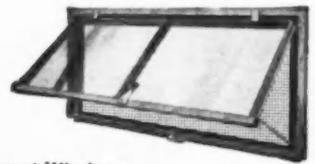
## 3 FENESTRA QUALITY IN EVERY RESPECT

Well made, easy operating, easily screened... Fenestra quality is nationally known.

## 4 SOLD EXCLUSIVELY THROUGH DEALERS

Provides a ready, local source of supply for you.

For further information, write to Detroit Steel Products Company, Dept. AB-4, 2260 East Grand Blvd., Detroit 11, Michigan.



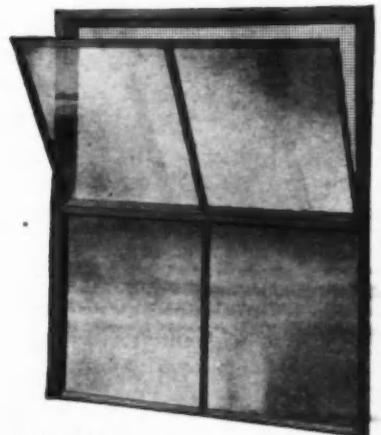
Basement Window  
Two-Light, 15" x 12"



Basement Window  
Two-Light, 15" x 16"



Basement Window  
Two-Light, 15" x 20"



Utility Window  
Four-Light, 15" x 20"

All-metal screens are available for all four windows.

# Fenestra

## BASEMENT and UTILITY WINDOWS

## AIR AT SHORT NOTICE...

A light-weight, handy compressor that can get around fast! Powers light hand-held Rock Drill, Paving Breaker or equivalent air tools through its easy-breathing Feather\* Valves — with unfailing dependability and economy.

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



60' Contractor's Portable Compressor. Other Blue Brute Compressors up to 500' capacity.

## FOUR FAST WORKERS...

Though tough and powerful, Blue Brute Air Tools are light and compact, with the easy handling that means more satisfied workers . . . more work done . . . more profit for you.



Paving Breaker, WB-50

Rock Drill, WJ-45

\*Clay Digger, W-19

Backfill Tamper, W-8

Your nearby Worthington-Ransome Distributor (write us for his name) has the complete line of Compressors, Rock Drills and Air Tools, Contractor's Pumps, Portable Mixers, Truck Mixers and Pavers.

Distributors In All Principal Cities

## WORTHINGTON



WORTHINGTON PUMP AND MACHINERY CORPORATION

Worthington-Ransome Construction Equipment Division  
263 Canal Street, Holyoke, Massachusetts

IF IT'S A CONSTRUCTION JOB, IT'S A BLUE BRUTE JOB HD-10



# NORGE

## AUTOMATIC ELECTRIC WATER HEATERS

The clients you satisfy now are your best boosters in the years ahead. "But," you ask, "why do Norge automatic electric water heaters give my clients greater satisfaction?" We would like to answer that with a few simple facts.

### 1ST MORE HOMEMAKERS WANT THEM

A recent NEMA survey reveals three times as many women want electric water heaters as own them. Their reasons, in order of preference, are: Safe; Clean; Modern; Adaptable; Automatic; Economical.

### 2ND HOMEMAKERS GET MORE WITH A NORGE

. . . more features to assure satisfaction on every "reason for preference": No fumes, flame, smoke, soot or vent. Accurate thermostatic control. Smoothly baked white enamel on heavy-gauge steel jacket containing three-inch wall of glass fiber insulation. Cold water baffle. Heat trap in outlet. Direct-contact "Nichrome" heating elements, embedded and sealed, project into water and reduce operating cost. Easy-to-install electrical connection. Modern in every detail! And in seven sizes, from 12- to 82-gal.

Norge Division, Borg-Warner Corporation • Detroit 26

- Refrigerators
- Electric Ranges
- Water Coolers
- Washers
- Electric Water Heaters
- Home Heaters
- Gas Ranges
- Home Freezers

SEE  
**NORGE**  
BEFORE YOU BUY

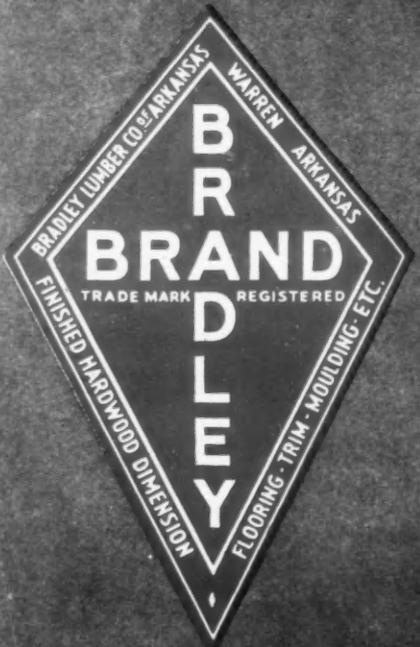
"...we shall continue using it at every opportunity."

BRADLEY PRE-FINISHED

STRAIGHT-LINE HARDWOOD FLOORING OAK BEECH PECAN

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

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



STANDARD of COMPARISON in PRE-FINISHED HARDWOOD FLOORING

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

BRADLEY LUMBER COMPANY of Arkansas WARREN, ARKANSAS

# Success Formula

## FOR BUILDERS, DEALERS, ARCHITECTS



### 1. WINDOWS THAT OPEN WIDE

Men and women everywhere want windows that open wide at the slightest touch of the hand . . . smoothly . . . silently.

### + Plus 2.

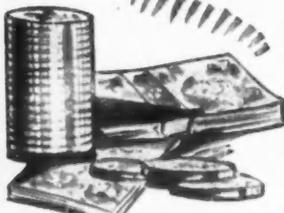
### INVIZIBLE SASH BALANCES



The "Grand Rapids Invincible" Sash Balance is always at your service . . . never in your sight. It is completely concealed in and moves with the sash itself.

### + Plus 3.

### SAVINGS IN MONEY . . .



This preferred balance more than pays its cost in the savings on installation alone.

**= EQUALS =**

### SATISFIED HOME OWNERS

Tested in the laboratory and proved in thousands of homes, these preferred spiral sash balances will give you a lifetime of dependable service.

ADVERTISED TO



134,445,000 READERSHIP IN NATIONAL MAGAZINES

← **BALANCE 100%**  
concealed in the sash . . . no tapes . . . no cables . . . no corrosion.

← **EASY TO INSTALL**  
. . . just drive in two fasteners . . . screw in one screw.

← **10 SIZES FIT 95%**  
of all new and old windows . . . completely interchangeable.

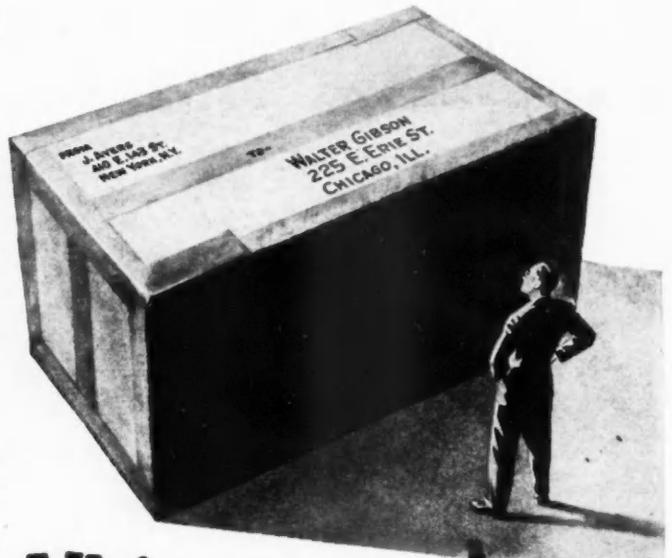
**GRAND RAPIDS SASH PULLEYS**

No. 103 face plate, cone bearing type, and Nos. 175, 109, 110 sawtooth drive type sash pulleys cover 95% of all sash pulley requirements.

SEE OUR CATALOG IN SWEET'S

**WRITE** for Illustrated Specifications and Instructions

**GRAND RAPIDS HARDWARE COMPANY**  
GRAND RAPIDS 2, MICHIGAN  
Quality Leaders in Sash Hardware for over 50 Years



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You must have thought often of the mighty important role shipping plays in your business and private life, for you depend on shipping for practically everything you eat, wear or otherwise use . . .

We of Railway Express know how diverse shipping requirements can be. With the addition of hundreds of new express cars, motor vehicles and other equipment, we are building our service to meet every one of your transportation needs.

Such improvements, as well as rising maintenance and operating costs, have made higher charges inevitable—but these charges will aid us in making Railway Express the high standard shipping service for you and for all America.



### RAILWAY EXPRESS



- . . . Maintains 23,000 offices (there's one near your factory, office or home);
- . . . Uses 10,000 passenger trains daily;
- . . . Has 18,000 motor vehicles in its pick-up and delivery services;
- . . . Offers extra-fast Air Express with direct service to 1,078 cities and towns.



**NATION-WIDE RAIL-AIR SERVICE**

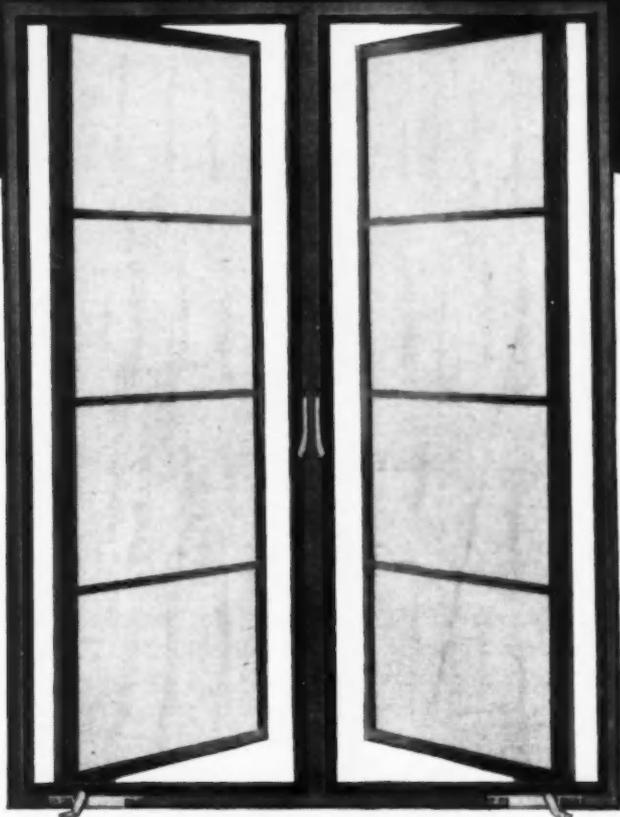
# TRUSCON Residential STEEL CASEMENTS offer you an unusual group of advantages!



No other type of window offers the utilitarian advantages of Truscon Residential Casements. Nor does any other type of window offer such features of beauty and distinction in design, applicable to every style of architecture, in every size of home.

Study the group of Truscon Steel Casement features illustrated below. These are benefits the home-owner wants and appreciates. He will buy them willingly, for you can offer them to him at a reasonable figure. And remember, too, that these Truscon Casements have the permanence of steel—no rotting, warping, sticking—no costly repairs or constant maintenance.

Write for illustrated literature giving complete specifications, instruction details and detailed information on Truscon Residential Steel Casements.



100% VENTILATION

EASY TO OPEN

EASY TO CLEAN FROM THE INSIDE

SCREENS EASILY INSTALLED

ATTRACTIVE AND EFFICIENT HARDWARE

WEATHERTIGHT - PREVENTS INFILTRATION OF AIR

STORM SASH THAT FIT TIGHT AND HELP SAVE FUEL

WILL NOT RATTLE WARP OR STICK

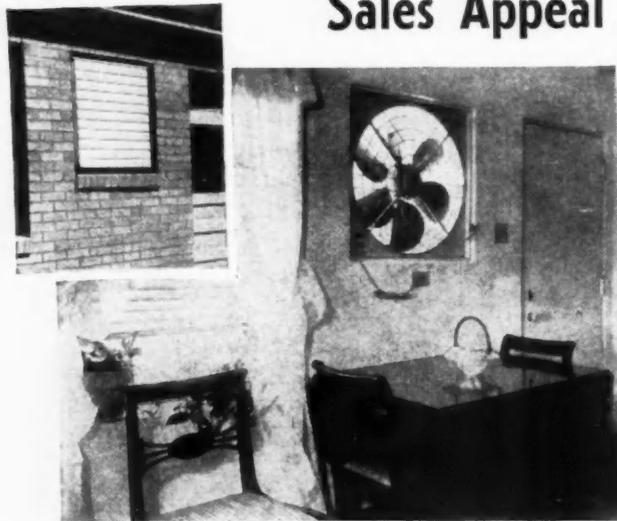
MAXIMUM DAYLIGHT

**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.

ICE

## PACKAGED Cooling Comfort for INCREASED Sales Appeal



### BAR-BROOK W-30 FAN UNIT

You can increase the sales appeal of the small homes and apartments you build with the Bar-Brook W-30 Packaged Fan Unit. Its compact size—only 5¼" thick and 30" square—makes in-the-wall installation simple and inexpensive.

The W-30 has 30" blades, two quiet speeds (High: 4800 CFM; Low: 3500 CFM), and 11' cord and plug. Direct drive motor insures efficient, economical cooling comfort. Smart styling and beautiful ivory white baked enamel finish make the W-30 "at home" in the finest surroundings. Available with or without automatic shutter and attractive stationary louver.



Write today for full information about this popular—and profitable—Bar-Brook cooling appliance.



### BAR-BROOK BREEZEBUILDER\* FANS

have been consumer accepted and preferred for 16 years. 4 sizes: 36", 42", 48", 54". Air deliveries certified by ASHVE Code. UL approved. Designed for ATTIC or BASEMENT installation.



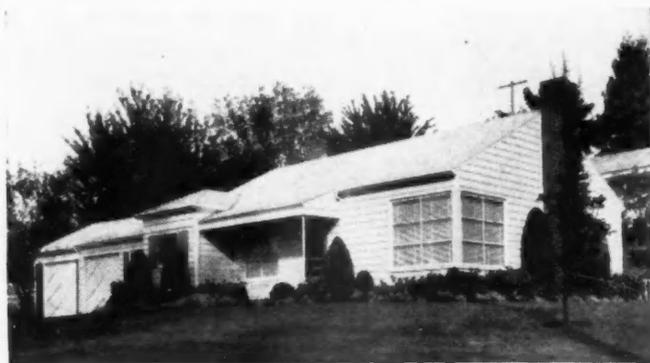
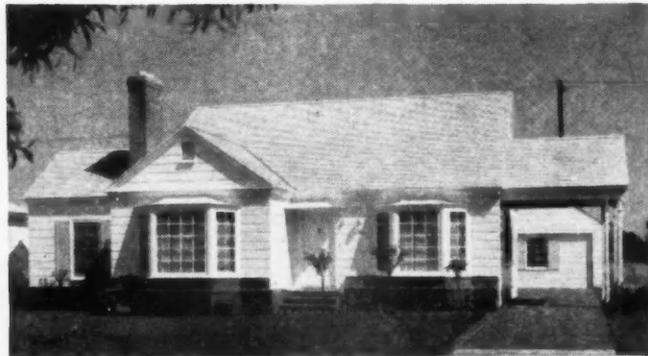
Write for free catalogs.

\*Trademark

**BAR-BROOK FANS**  
BAR-BROOK MANUFACTURING CO., INC.  
SHREVEPORT, LOUISIANA

## ECONOMY SIDINGS

*one answer to high building costs*



For those who want wood siding for their dream house but at the same time face the high building costs of today, Economy Sidings in Western Pines\* is one solution to the problem. In short, "Economy" lumber gives the home builder adequate service and lasting beauty with low-cost maintenance.

Economy Sidings are milled to a variety of pleasing patterns. The knots offer no problem when sealed with knot sealer WP-578 (see below).

In Economy Sidings, architects and builders have a material to recommend which is versatile and offers the same outstanding resistance to weathering as higher cost sidings.

### → GOT A KNOTTY PROBLEM? ←

Knot sealer WP-578, developed by Western Pine Association, is recommended for priming knots to prevent paint failure. In laboratory and field tests, it has out-performed all other sealers. Prepared solutions of WP-578 are made and distributed by 2 approved paint manufacturers from coast to coast. If your dealer does not have it, write Dept. 60-B, Western Pine Association, Yeon Building, Portland 4, Oregon.

\*Idaho White Pine    \*Sugar Pine    \*Ponderosa Pine

**THESE ARE THE WESTERN PINES**

*Well-manufactured—thoroughly seasoned—carefully graded—by all Association member mills*



# Copco

## STEEL WINDOWS

### Preferred by LEADING BUILDERS

The effective use of Copco Residential Steel Windows is demonstrated in the Schaefer Highway Project, Detroit, Michigan, part of which is shown above. F.H.A. APPROVED UNDER TITLE #603. Built by Curtis Development Co. These experienced construction experts PREFER Copco because they know that Copco cold roll-formed sections make perfect casements. Copco Steel Windows are always uniform, providing tight, faultless fit . . . and greater strength. Follow the example of leading builders . . . next time SPECIFY COPCO.

Write for free illustrated literature and price list on Copco Steel Windows and Building Products.

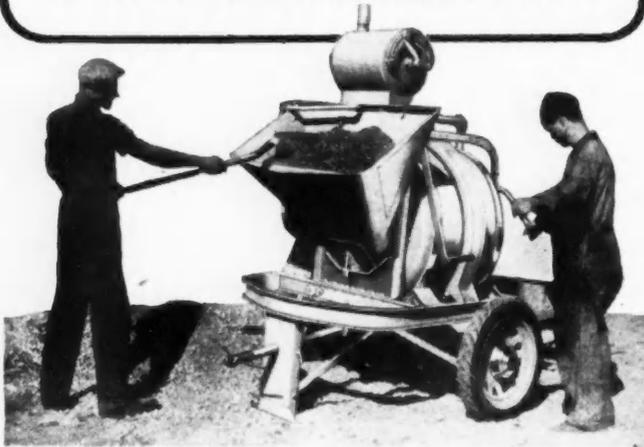


**Copco STEEL and ENGINEERING CO.**  
 14035 GRAND RIVER AVE. • DETROIT 27, MICHIGAN  
 EASTERN WAREHOUSE, 44 LISTER AVENUE, NEWARK 5, N. J.

**Pour 12 to 15 More Yards of Concrete Every Day!**

At the high wages you pay your concrete crews today, every extra yard you pour is worth real money. You can produce 30% to 40% more yardage every day with a —

**3½-S AUTO-LOADER**

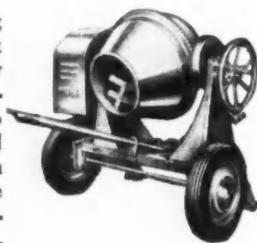


• A non-tilt half-bag mixer that keeps crews on their toes! Mixes up to 50 yards a day—fast as a power loader! While one batch mixes and discharges the next is being loaded and measured in the low-nouthed hopper. Lift the hopper gate, and in goes the new batch—*automatically shaken in*—quick as a flash and clean. Metering tank supplies water exactly. Drum turns on machined steel tracks, has famous “Dual-Mix” action for thro mixing and extra fast discharge—a 3¾ hp engine drives it. Machine trails and moves easily and safely on wide-tracking Timken bearing wheels and springs. The fastest 3½-S mixer made—for 30% to 40% greater daily yardage!

**JAEGER 3½-SPEEDY**

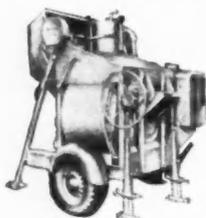
Fast Working End-Discharge Half-Bag Tilter

Patented V-bottom “Dual-Mix” drum gives double the mixing action of other tilters. Tows fast and stably. Spots by merely backing up to material pile, because loading end is at rear. No feet or legs on discharge end—wheelers get in and away with loads fast, no need to reverse direction. 2½ hp engine, Timken drum and wheel bearings,



**6S, 11S, 16S POWER LOADERS**

With Skip-Shaker, machined steel drum tracks, automotive transmissions, and other Jaeger features for bigger jobs and greater daily production.



Write for complete catalog M-8

**THE JAEGER MACHINE CO.**  
Main Office and Factory—Columbus 16, Ohio

**REGIONAL OFFICES**

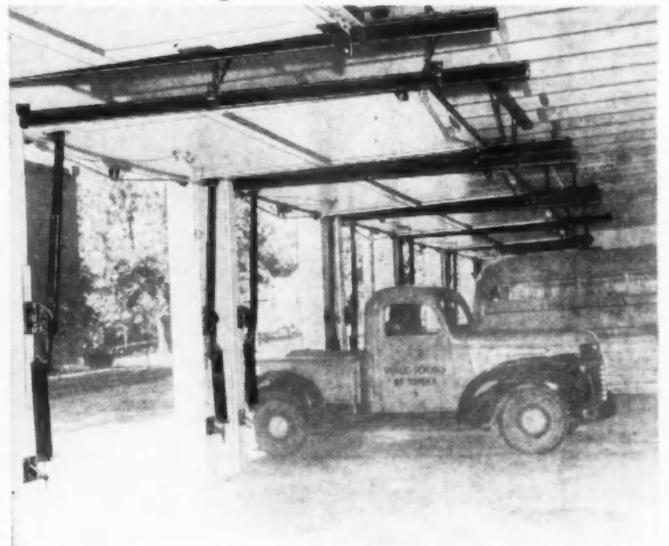
1504 Widener Bldg. 226 N. La Salle St. 235 American Life Bldg.  
Philadelphia 7, Pa. Chicago 1, Ill. Birmingham 1, Ala.

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**WEIGHT-LIFTING CHAMPION**



**for Heavy Industrial Doors**



Use of “over-sized” power springs is one of the success secrets of “Over-the-Top” Door Equipment. These heat-treated, oil tempered steel springs are adjustable to provide the right amount of lift for effortless operation, even on the largest industrial doors. Other important features are: simple, trouble-free mechanism; smooth, quiet operation; minimum head-room requirements (as little as 6” for a 12’ high x 14’ wide door); automatic opening (starter springs begin upward action, power springs do the rest). Little wonder “Over-the-Top” leads the field!

**Select “Over-the-Top” Equipment for Heavy-Duty Applications**

Type of Hardware	Stock No.	Door Width	Door Height	Weight Pounds
Heavy Series	716	8' to 10'	9'1" to 10'0"	200 to 250
	716	8' to 13'	8'1" to 9'0"	200 to 275
	716	8' to 16'	6'6" to 8'0"	200 to 300
	718	8' to 14'	9'1" to 10'0"	180 to 375
	718	8' to 16'	8'1" to 9'0"	210 to 425
	718	8' to 18'	6'6" to 8'0"	240 to 475
Extra Heavy Series	912	9' to 14'	11'1" to 12'0"	300 to 600
	912	9' to 16'	10'1" to 11'0"	335 to 650
	912	9' to 18'	9'0" to 10'0"	375 to 720

Write for free “Over-the-Top” Door Equipment catalog which illustrates the complete line, including Wood and Aluminum Door Units.



**FRANTZ MANUFACTURING CO., STERLING, ILLINOIS**

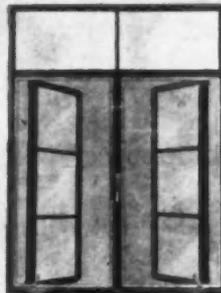


# Cut Spring Homebuilding Costs 3 Ways!

• Springtime is building time and for the budget-minded builder Ceco offers 3 ways to cut costs of new or remodeled homes. Consider the money-saving building suggestions below and call on Ceco for full details.

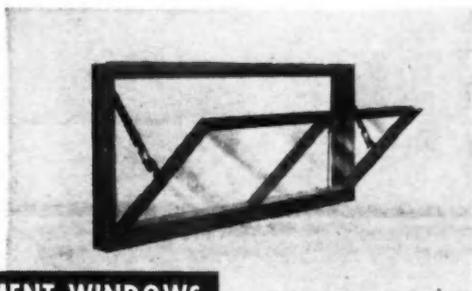
### STEEL CASEMENTS

• Cut installation costs 80% because there are no hidden costs to overlook such as hardware, prime coat, accessories, planning or fitting. No need for repair.



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• Standard sizes ready to install and easy to do, too. No fitting, trimming or painting necessary. Cannot rot and need no repair.



### THE CECO CREED

• Here is your guarantee of Engineering Excellence in Ceco products. Call on Ceco's 23 offices for help in reducing building costs.

**CECO STEEL**

### CECO STEEL PRODUCTS CORPORATION

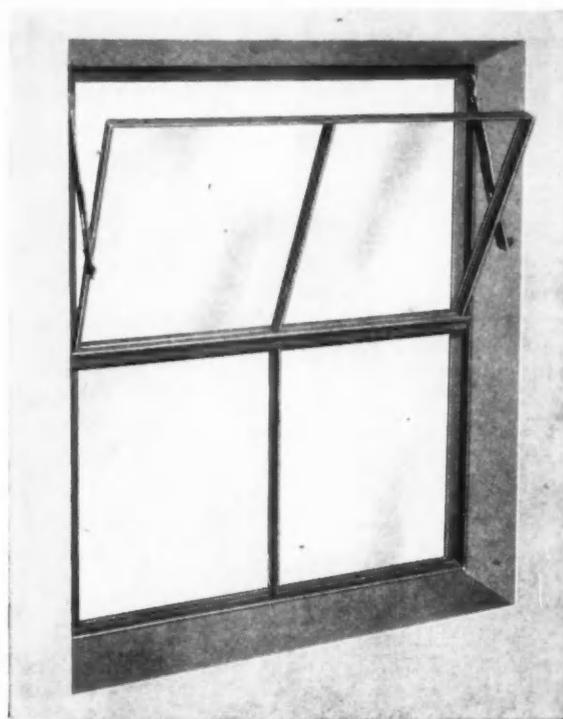
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*the Latest  
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**Gabriel Line**

**N**OW comes a new outstanding product to broaden further the well-known line of Gabriel Home-Building Specialties. . . . This new Utility Window incorporates the advantages of the standard Gabriel Basement Window, such as the exclusive side-arm locking detail, easy top or bottom opening to any position, automatic locking. . . . Gabriel high standard of quality and performance. . . . Designed for use in barns, garages, gas stations and miscellaneous small buildings. Size, 15" x 20"; 4 Light; Masonry Opening 32 $\frac{3}{8}$ " x 42 $\frac{1}{2}$ ".

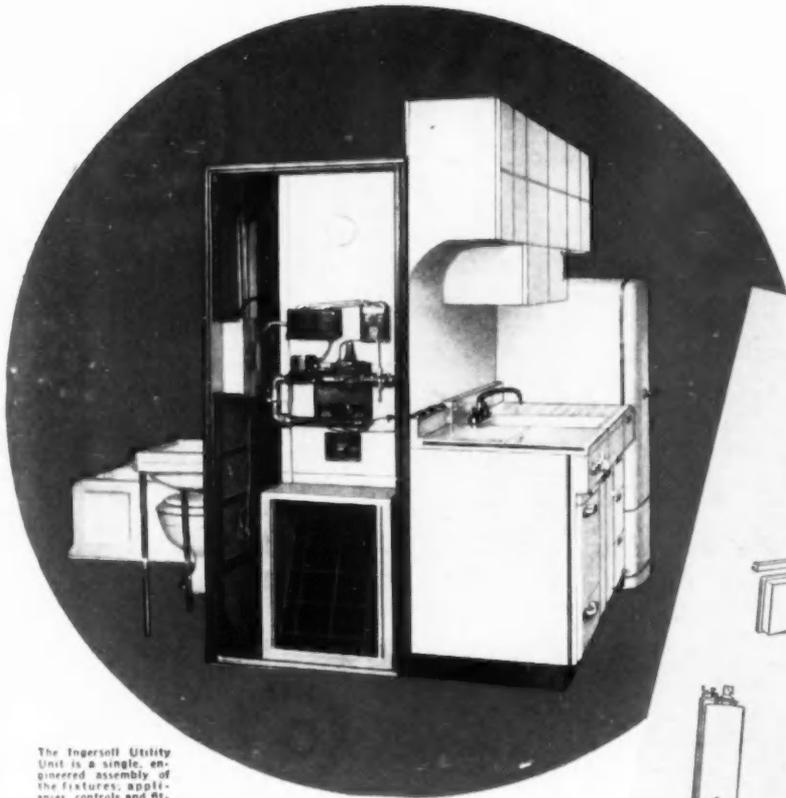


WRITE FOR CATALOG showing the  
 complete Gabriel line.

NATIONAL SALES REPRESENTATIVES, HARRIS, INC., 1157 CLEVELAND AVE., COLUMBUS 3, OHIO

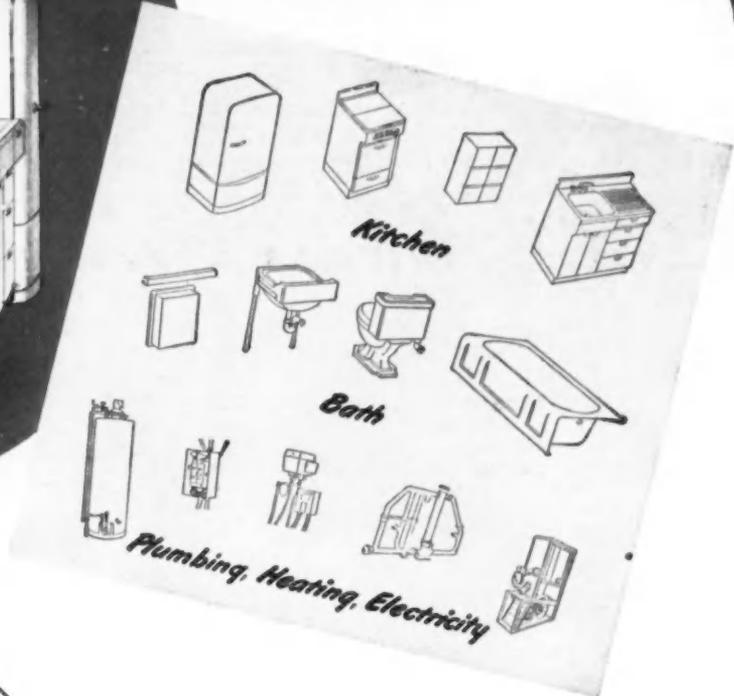


**G. A B R I E L S T E E L C O M P A N Y**  
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The Ingersoll Utility Unit is a single, engineered assembly of the fixtures, appliances, controls and fittings of Kitchen, Bathroom and Heating Plant, plus basic plumbing and electrical lines.

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UTILITY UNIT  
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**Now Available To Meet Local Code Requirements,  
Fit Individual Plans, Schedules and Needs**

*Permits Architects and Builders To Give Greater Value, Speed Up Small Home Construction*

You can give greater value, come out with a good profit, and do the job easier and faster if you figure the Ingersoll Utility Unit into your small home construction plans. With installations in 416 cities throughout the country, architects and builders have found that the convenience, adaptability and economy of the Unit is giving them a real competitive advantage in housing projects, large or small.

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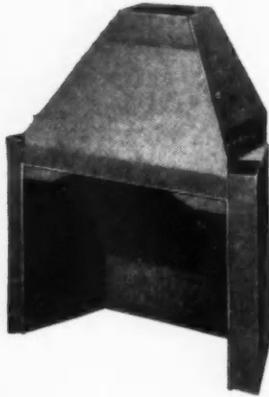
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For Modern, Insulated Homes, with Central Heating



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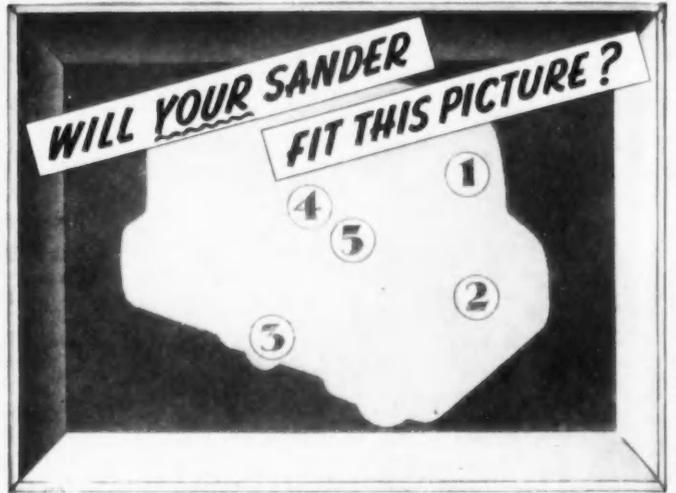
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AND YOU'LL CHOOSE—**HOLT**

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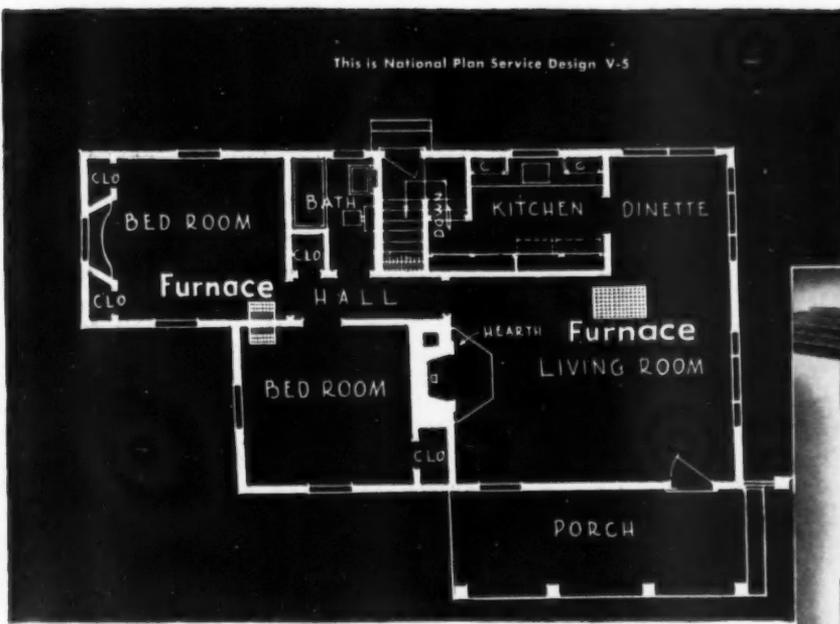
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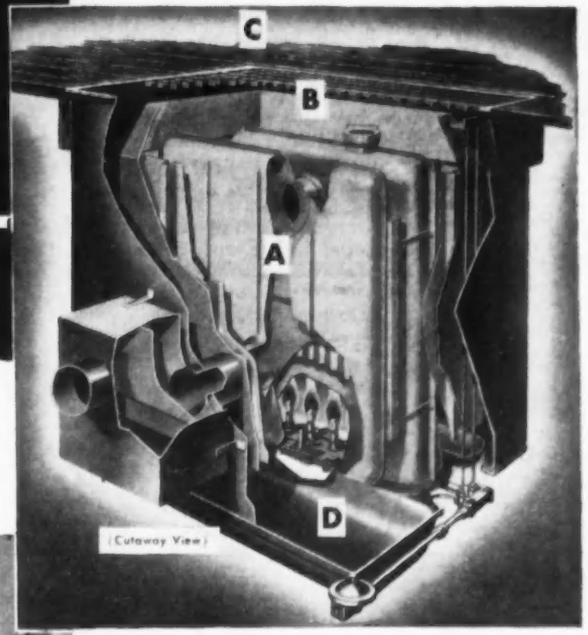
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**HOLT MANUFACTURING COMPANY** Oakland, Calif. Newark, N. J.

# Why it pays low-cost-home builders to revise plans To Include Coleman Floor Furnaces

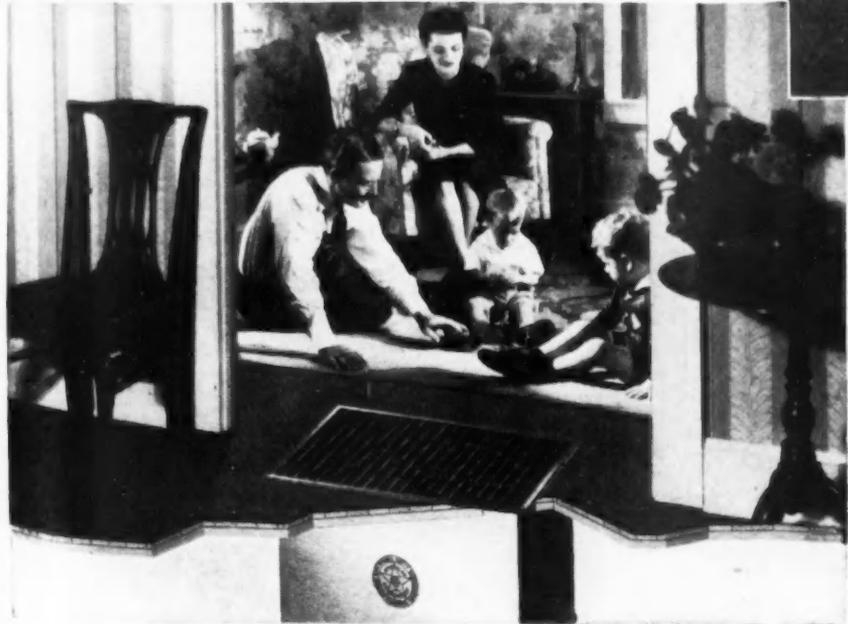


This plan offers savings that often improve value! This design, by National Plan Service (Design V-5), shows how this leader in small home design has secured maximum value and convenience in a genuinely moderate-priced home. Note how two Coleman Floor Furnaces can be used for "area" heating in this type of construction—to eliminate basement cost, and still require no first-floor space for heating equipment.



**Needs no basement. Easily installed.** Coleman Floor Furnace can be adapted to designs either with or without basements. This saves space in all cases, and often saves construction cost too. Coleman engineering has made it possible to give amazing "all-over-the-house" comfort, at exceptionally low fuel cost—along with the clean automatic heating today's housewives demand. And Coleman's reputation for quality and nationwide acceptance are powerful selling helps.

**Cutaway model shows the advantages of Coleman's automatic, "all-over-the-house", warm-floor heat that really sells homes.** Note how floor-level air is drawn through cool-air-chamber (A); how air is thoroughly heated in warm-in chamber (B); how 78% open register (C) lets warm air into house FAST. Note: Patented streamlined bottom (D) speeds up warm air flow 35% over old-fashioned designs.



**See how it sits in the floor—not ON it and not in the basement.** No basement is needed, so you can often save this cost—and much costly duct work. An experienced man can install in only 4 to 6 hours. Models from 25,000 to 70,000 BTU input; use one furnace, or combinations of two or three. In city, town or country, there is a Coleman Floor Furnace to fit your needs—models for oil, gas and LP-Gas.

The Coleman Co., Inc., Dept. AB-658 Wichita 1, Kas.; Philadelphia 8, Pa. (Terminal Commerce Bldg.) Los Angeles 54, Calif.

**Special cooperation for contractors!** Send coupon for full facts and latest contractors specification book.

**AUTOMATIC HEATING** **Coleman**

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24

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# Health and Comfort under Fingertip Control

**NO OUTSIDE CURRENT IS REQUIRED.**  
General Controls' B-60 Room Temperature Control Systems for all gas-fired appliances are fuel savers—silent—safe and fully automatic.

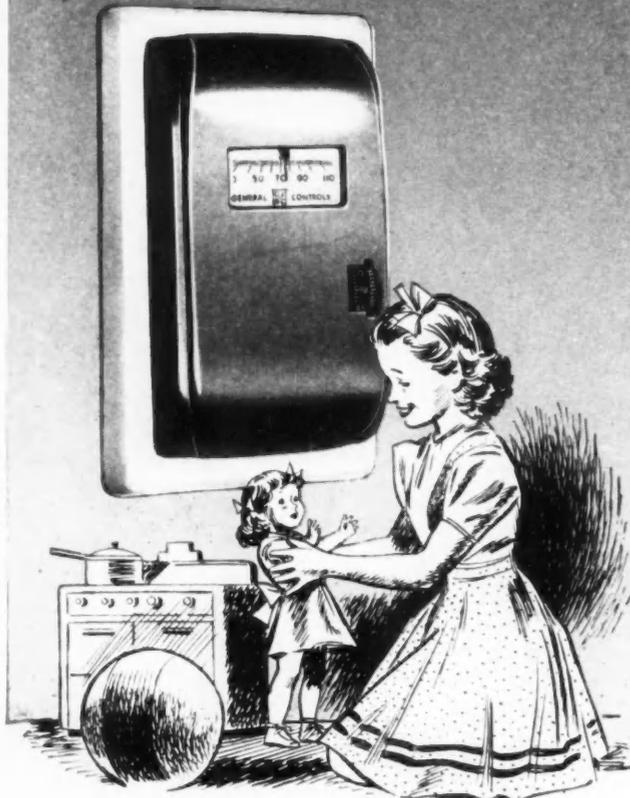


Avoid "over or underheating" conditions. The automatic METROTHERM (Thermostat) provides "EVEN" temperature which is so vital to the health and comfort of your family.

Relax in comfort—with the assurance that your METROTHERM is automatically providing continuous temperature around the clock.



Fingertip Control—simply set dial to desired temperature and the METROTHERM automatically responds for constant, healthful heat supply. (Timer Thermostats available soon.)



*Automatically Yours For Better Heating*

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## HOMASOTE gets a letter

Long Branch, New Jersey  
October 22, 1947.

President  
Homasote Company  
Fernwood Road  
Trenton, New Jersey  
Dear Sir:—

I am one of 56 men who constructed and then lived in the Byrd Expedition buildings (at Little America, Antarctica for over a year in 1934-35) which were assembled from Homasote lined sections left over from the establishment of the first Little America in 1929. These sections were already the veterans of five years' storage in damp New Zealand warehouses, but were still so strong and easy to saw, fit, and assemble that we were considerably surprised. But when we had dug down to the old camp and found also that the Homasote in the original buildings was in perfect condition after one year of soaking in melted snow (1929-30) and five years under the terrific pressure of 20 feet of ice, we were completely sold. When other wallboards would have pulped, cracked or dissolved, Homasote remained firm and trustworthy insulation against blizzards and temperatures to minus 75!

I am not in the habit of using my few leisure hours to throw bouquets. I have too much to do, but I feel that merit deserves reward, so here goes—believe it or not, the above remarks are pale into obscurity by my present opinion of your fine product. When, as a technical observer, on the recently concluded Navy "Operation Highjump", I was one of the few who were privileged to dig down 12 feet to our old home 10 miles from the newest camp-site. I found the 18 year old Homasote in the walls and ceilings of the "Messhall" and "Science Lab" (the only buildings we could reach) absolutely unharmed by time, water, or cold. Hundreds of tons of ice had forced up the wood floors and pushed down the ceilings until they met in the center of the rooms, and puddles of ice everywhere evidenced the repeated freezing and thawing of the many seasons, but the walls were straight, unbuckled and scarcely stained.

Later, when our Expedition was leaving for its return to the States (February, 1947) and I had occasion to make one last run to the old camp to mark the entrances against the future, I hacked out a piece of the messhall wall to send to you for analysis. I am mailing it to you for whatever purpose you may wish to use it, and if you ever want me to convince some doubting customer of yours, just lead me to him. At least I can assure you that when at last I build the home I've been planning throughout several years of roaming the world, the insulation will emphatically be Homasote.

Yours sincerely,

*Amory H. Waite, Jr.*

Amory H. Waite, Jr.  
Radio Engineer  
BAE II 1934-35 and 1946-47

P.S. I forgot one item. When I was carrying your specimen up the rope ladder from the whaleboat to the ship, it fell out of my pack and drifted away to sea. To my amazement its generation-old water-proofing qualities were still intact for it kept floating! Another boat speared it with a boat hook an hour later and returned it to me, punctured, but still definitely useable wallboard. The hole, therefore, is a badge of honor rather than a defect.

AHW



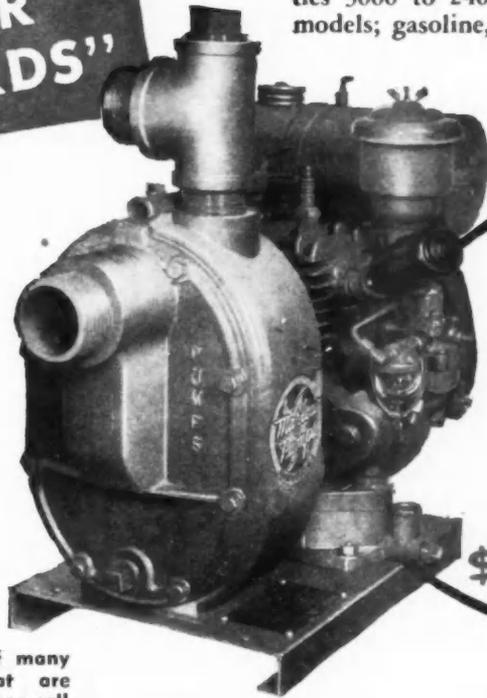
in **BIG SHEETS** up to 8' x 14'

**HOMASOTE COMPANY, Trenton 3, N. J.**

# MORE PUMPS IN THE LINE MORE FEATURES IN THE PUMPS

You can  
Sell More  
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"WATER  
WIZARDS"**

The world's most complete line of self-priming centrifugal pumps. Widest possible selection in 1½ to 10-inch sizes; capacities 3000 to 240,000 gallons per hour; low and high pressure models; gasoline, Diesel, electric and belt-driven.



**NEW 2-INCH  
MODEL 14  
6000 GPH\*  
ONLY**

**\$139.50** COMPLETE WITH STRAINER

\*Guaranteed capacity of over 15-foot total head.

### DEALERS:

Builders are just one of many important markets that are yours to cultivate when you sell versatile Marlow pumps. With the Marlow line you establish yourself as "pump headquarters" for your whole community.



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Filling tanks and tank wagons . . . for petroleum handling.



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## MORE FEATURES THAT BUILDERS WANT

**FASTEST PRIMING** pump yet developed and fully automatic. The 2-inch Model 14 illustrated primes itself in 55 seconds at 10 foot suction lift with engine at governed speed.

**PUMP MORE** water per horsepower than any other pumps of their type. The new 2-inch Model 14 pumps 26,000 gallons of water on only one gallon of gasoline.

**MOST ECONOMICAL** to use because simple, far-advanced design is most efficient. No recirculation, no wasted motion.

**TROUBLE-FREE** operation assured by absence of mechanical gadgets. No foot valves, no air binding, no auxiliary pitcher pumps. No parts to clog or jam.

**MOST DEPENDABLE** and longest lasting due to sound engineering and extra rugged construction. Built to last for years.

**BELT-DRIVEN** models, too, for thrifty efficient pumping where power is available. For example, Model 14 illustrated is available in belt drive at only \$69.50 list.

Prices are F. O. B. Ridgewood, N. J.

**DEALER AND DISTRIBUTOR TERRITORIES** still open in some choice localities. Marlows give you more to sell. And each Marlow sale stays virtually service-free . . . another satisfied customer for you. Attractive information promptly sent. Write Marlow Pumps, 564 Greenwood Avenue, Ridgewood, N. J.

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RIDGEWOOD, NEW JERSEY

MANUFACTURERS OF THE WORLD'S LARGEST LINE OF SELF-PRIMING CENTRIFUGAL PUMPS

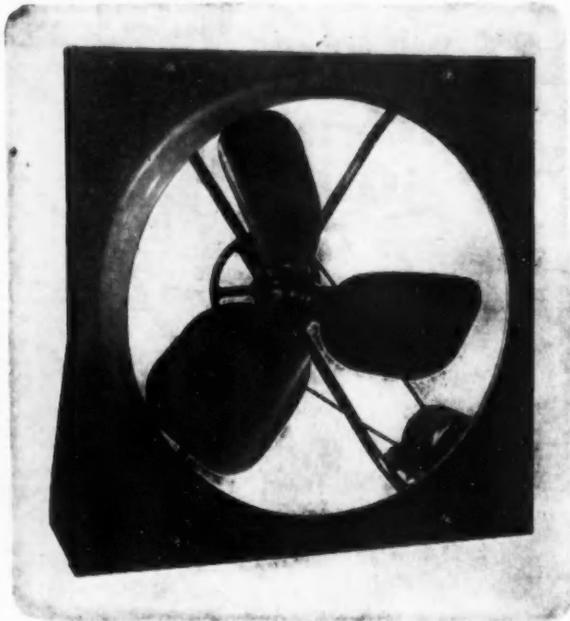


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**MORE MODERN**

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Capitalize upon the demand for new, modern comforts and conveniences . . . the BUILT-IN extras that mean extra sales and extra value for you. Install LAU "Niteair" Fans while buildings are being constructed . . . pave the way for future sales while installation costs are lower . . . create interest and desire in your new homes.

●Thousands of home owners the nation over are using LAU "Niteair" Fans with outstanding results . . . thousands more are seeking homes with this added convenience already built in.

Try this idea in your very next house so that you can actually "demonstrate" the benefits to your prospects. You will see how easy it is . . . how much more revenue it means.

LAU "Niteair" Fans have been engineered and built to exacting specifications. They operate at extremely low cost with a minimum of noise and maximum output of air movement with reduced power consumption. Their light weight means lower shipping costs.

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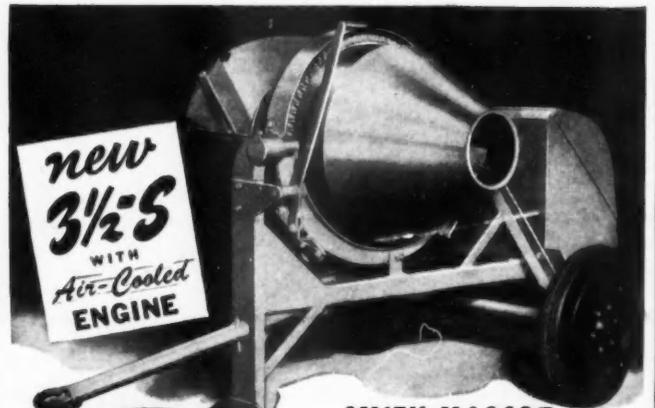


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Old Spanish White	Adobe	Grotto Blue
Oyster Shell	Tropical Coral	Ivy Green
Antique Ivory	Spanish Buff	Brick Red
	Also, Pure White	

Write nearest Reardon office for your copy.



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THE *Patented*  
**CEMENT PAINT**

that outsells all other cement paints combined

# QUALITY CONCRETE MASONRY CONSTRUCTION

## ADEQUATE FOOTINGS ARE OF UTMOST IMPORTANCE

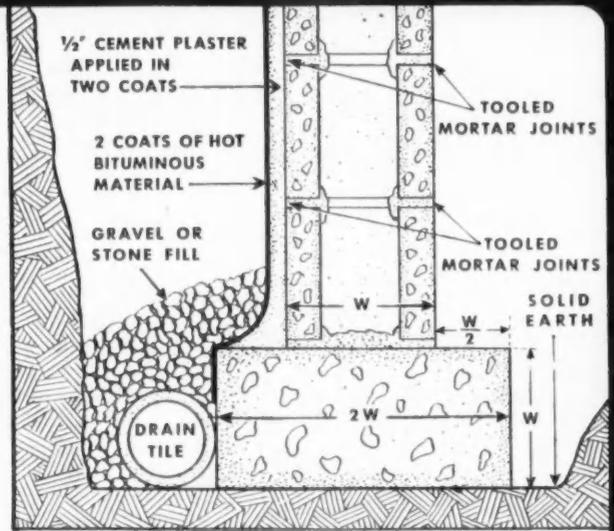
**T**OO MUCH cannot be said for beginning all concrete masonry construction with adequate footings—placed on solid earth below the frost line in forms that are true to line and elevation.

The diagram at the right shows the general minimum standards for adequate footings. Usually the depth of the footing proper is equal to the thickness of the wall while the width is twice as great.

The concrete for adequate footings should be a 1:2½:3½ mix, using not more than 6 gallons of water per sack of cement.

Drainage tile should be placed as shown.

Write today for free detailed instructions and suggested specifications. Distributed only in the United States and Canada.



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## PORTLAND CEMENT ASSOCIATION

Dept. 4-3, 33 W. Grand Ave., Chicago 10, Ill.

A national organization to improve and extend the uses of portland cement and concrete... through scientific research and engineering field work

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**YOU MAY SAVE MANY TIMES ITS LOW COST IN ONE USE!**

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**TEST THE TAMBLYN SYSTEM IN YOUR OWN OFFICE WITHOUT OBLIGATION**

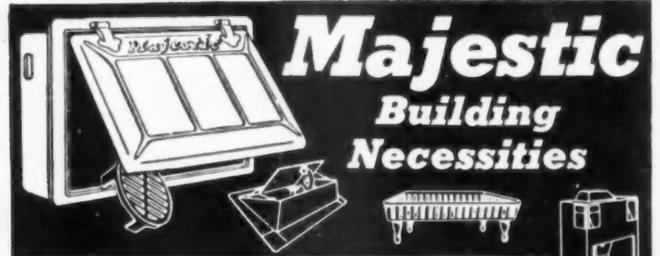
Send the coupon below for your complete Tamblyn System. Examine it in the privacy of your own home or office for 10 days. Try it on new jobs—check it against completed jobs. There is no obligation unless you keep it.

**SEND NO MONEY—TRY IT FOR 10 DAYS FREE! THE TAMBLYN SYSTEM, JOHNSON BLDG., A-16, DENVER, COLO.**

THE TAMBLYN SYSTEM, JOHNSON BLDG., A-16, DENVER, COLO.

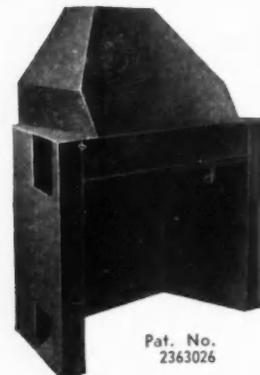
Send me the complete Tamblyn System on free 10 days trial! If I like it I will pay \$8.75 when 10 days are up and \$7.50 per month until \$38.75 is paid. Otherwise I will return it.

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 ADDRESS .....  
 CITY ..... STATE .....



## Majestic Building Necessities

### IMPROVED MODEL



Pat. No. 2363026

This preformed **STANDARD CIRCULATOR** turns old and new fireplaces into **SMOKE-FREE, FUEL-SAVING** home heating plants at an amazingly low cost!

Here is a really complete, improved fireplace package in answer to today's building needs. It fits any mantel design and is installed with minimum time and labor. The Majestic Circulator is a durable, steel-walled unit that distributes heat evenly all over one or more rooms. It includes firebox, smoke chamber, with built-in smoke shelf, and easy-to-use, patented, poker-controlled damper. For more details on this popular product, write.

## The Majestic Company

834 Erie Street, Huntington, Indiana

Majestic Building Necessities for Modern Homes  
 "Nationally Known and Advertised for 44 Years"



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PHILADELPHIA 33, PA.

PARK 2851-2

METALS  
NAILS

December 3, 1947

**"... a tribute to the rigid standard under which TEXACO Asphalt is produced"**

The Texas Company  
205 East 42nd Street  
New York 17, N.Y.

Gentlemen:

We felt we should write you regarding our experiences with your products in the Philadelphia area. During 1946 we purchased and sold to our applicator customers over one and one half million pounds of Texaco Solid Roofing Asphalt. Our purchases to date indicate that we will top that figure in 1947.

Considering that we will have sold more than three million pounds in the last two years to the complete satisfaction of our customers, without one complaint, we think this is a tribute to the rigid standard under which Texaco Asphalt is produced.

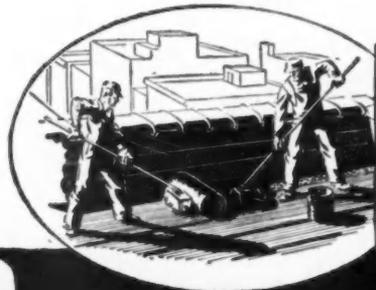
Many of our applicator customers report a trouble-free job results from the use of your products, and tell us that the well known Texaco trade mark is a large factor in selling their jobs to industrial and home owner customers.

Sincerely yours,

SCHECTER BROTHERS COMPANY

*Morris Schecter*

Morris Schecter



In 100 lb. Cartons and Paper Bags

# TEXACO SOLID ROOFING ASPHALT

## Asphalt SHINGLES and ROOFING

Member of the  
ASPHALT ROOFING INDUSTRY BUREAU

# Dunbrik-Dunstone

## Modern Masonry Construction that Opens up Many Manufacturing Opportunities for Men of Vision



Dunstone (multiple-sized Dunbrik) creates new styling in masonry—note random ashlar wall above. Dunbrik is standard size brick with rare eye appeal.



Many more Dunbrik are needed. It's the outstanding opportunity in the building industry for local manufacturing, using local labor, and local materials for local use. It decentralizes brick-making eliminating the high costs of long freight hauls and distribution, and making America's smartest masonry available to the home building public at prices below lumber.

For Dunbrik (and Dunstone) is masonry at a new peak point of beauty, symmetry and scientific design. Color clear through . . . reds, buffs, tans, etc. Millions used annually for all kinds of construction—everywhere.

### NEW PROTECTED TERRITORIES NOW AVAILABLE

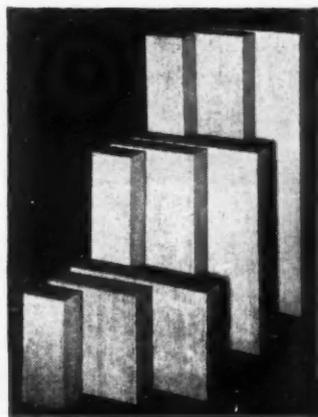
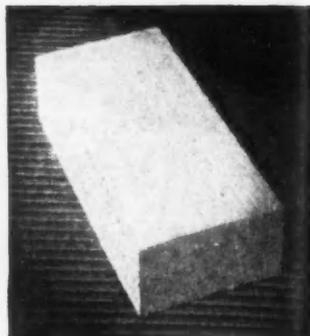
Get in the Dunbrik-Dunstone industry today and ride the tide of the biggest building cycle in history. We supply complete plant equipment. Broad franchise protection. Liberal and continued cooperation in all

phases of manufacturing and merchandising. Number of available territories is strictly limited. Early action is necessary. Write today for descriptive literature and tentative territorial reservation.

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**450 W. 24TH ST.,**

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FOR YOUR CONVENIENCE  
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MERCHANT SALES DIVISION

**NEW AND GREATER PUMP PERFORMANCE AT HIGHER HEADS WITH THIS A.G.C. RATING PLATE!**

**THIS A.G.C. Rating Plate, mounted on the pump you buy, now means increased performance, greater output at higher heads—and more, much more, for your money!**

New and higher Standards for pump performance have been set by the Contractor's Pump Bureau. For example: A pump rated at 20M formerly was warranted to deliver 40 G.P.M. at a 10 ft. Static Lift and Head of 80 ft. The same pump is now warranted to deliver 90 G.P.M. at the same head and lift—an increase of more than 100%.

All pumps made by the Member Manufacturers listed below will meet these new and forward-looking standards as set by the Contractor's Pump Bureau. And remember, only the pumps manufactured by these Companies carry the A.G.C. Rating Plate. Look for this A.G.C. Rating Plate on every pump you buy. It means the utmost in assured pumping performance!

**PUMP USER'S MANUAL**  
Forty pages packed full of useful information for the pump user. Answers all questions as to pump selection for the job—what size pump to use—the do's and don'ts of pump operation—standards for measuring heads and capacities—and other technical data. Contact your dealer or write any of the companies listed below for your copy.

**CONTRACTORS PUMP BUREAU**  
(Incorporated 1938)  
Affiliated with  
**THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, INC.**  
Monsey Building, Washington 4, D. C.

**MEMBER MANUFACTURERS:**

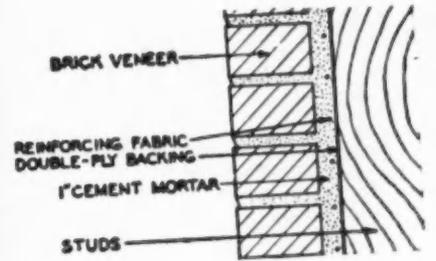
- WOOD ENGINE COMPANY, Lansing, Michigan
- STERLING MACHINERY CORP., Kansas City, Mo.
- WORTHINGTON PUMP & MACHINERY CORP., Toledo, Ohio
- BARNES MANUFACTURING CO., Westfield, Ohio
- CARVER PUMP COMPANY, Woodville, Ohio
- C. H. A. E. MANUFACTURING CO., WOODVILLE, MICHIGAN
- CHAIN BELT COMPANY, Milwaukee, Wisconsin
- CONSTRUCTION MACHINERY CO., Weymouth, Mass.
- THE COBBAN PUMP CO., Westfield, Ohio
- THE JACGER MACHINE CO., Columbus, Ohio
- MARLOW PUMPS, Ridgewood, N. J.

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# YOU GET SHEATHING, BUILDING PAPER, PLUS REINFORCED CONSTRUCTION

## All in One With **Pittsburgh Steeltex** for Veneer

Close-up of brick wall being laid-up with Steeltex reinforcing. Note how customary 1" air space is filled with mortar to tie bricks, reinforcing wire and frame into one strong unit.



Cross section shows brick veneer, slab with reinforcing wires.

Pittsburgh Steeltex for Veneer provides sheathing and building paper all in one. But better than that it gives you strong walls of reinforced brick or stone construction with economy. Steeltex will make you proud of the permanent house you have built—make the owner sing your praises as an architect or builder.

Construction with Steeltex provides many advantages—a monolithic concrete slab completely around the structure—positive protection from moisture penetration—greater fire protection through elimination of dead air space and resulting flue action—all mortar joints completely filled—reduces upkeep. In addition it is easy to apply, requires no special tools or methods and takes the place of sheathing and building papers. Many architects and contractors have found it makes for better construction—they specify it on all their jobs.

Pittsburgh Steeltex for Veneer is a combination of cold drawn, galvanized steel wire, welded into two-inch square mesh, laced to a double-ply waterproof backing that is sealed with mastic. The absorbent face of the backing provides a suction bond with the mortar. The mesh provides reinforcing for the mortar which is slushed in behind the veneer. When dry, the wall is a strong unit of brick or stone and reinforced concrete slab, attached firmly to the frame as an integral part of the structure.

The better construction and savings with Pittsburgh Steeltex for Veneer will appeal to owners—you will like the ease with which it is applied. Specify it for all your jobs. For your copy of our catalog D. S. 132, write today to Pittsburgh Steel Products Company, 3235 Grant Building, Pittsburgh 30, Pennsylvania.

*This background photo shows Steeltex—  
one-third actual size.*

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THE FASTEST-STEAMING BOILER MADE

**Koven**

**WATERFILM BOILERS**

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- Quick-Steaming
- Retards Accumulation of Soot
- Economical
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**FOR ECONOMICAL, QUICK HEAT**

Leading architects and builders specifically recommend KOVEN WATERFILM BOILERS for quick heat, even room temperature and an abundant supply of domestic hot water at all times.

Trimly designed in modern jackets, there are models and sizes for small homes, apartment houses and large industrial plants. For these larger installations, the Sectional Boiler can be taken through a 2-ft. door, assembled without expensive alteration or rigging costs, and is easily enlarged by adding sections.

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**Cuts Installation Time in 1/2**

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Now, two men can hang TWICE as much ceiling material as three men doing the job the old fashioned way. The Jackflat Lift is speeding ceiling work and profits for users everywhere... it lifts... it holds! Lightweight; rolls anywhere. Simple to use. Knocks down in 3 minutes; compact enough to carry in any car. Pays for itself in one week... guaranteed for one year.

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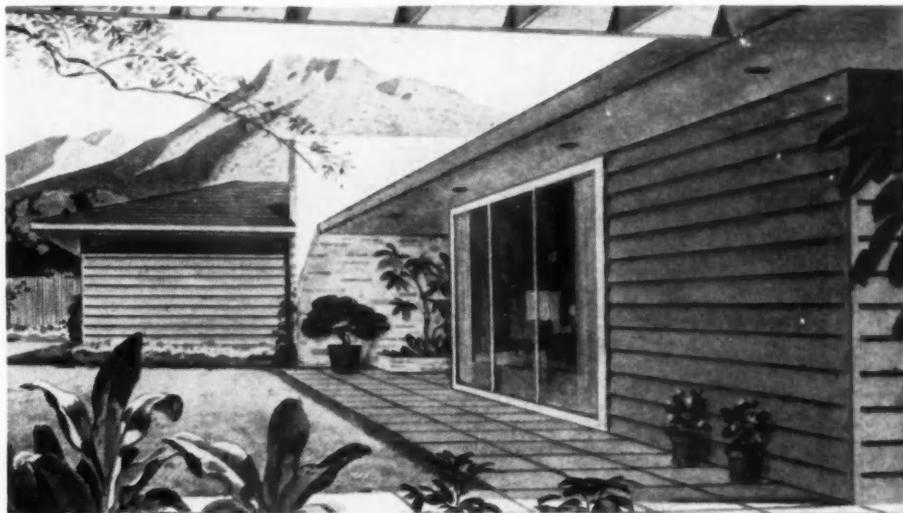
Dept. B1  
Michigan City, Indiana



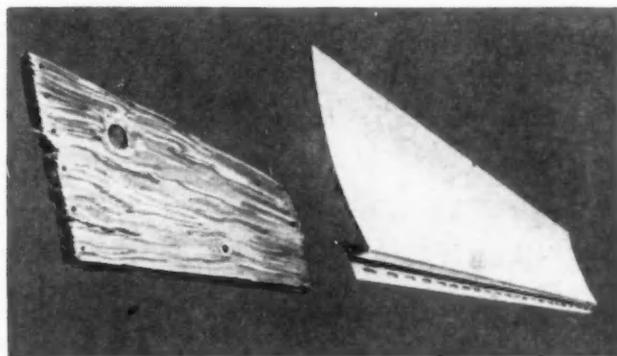
# You offer clients more with this new material!

(and at no extra cost)

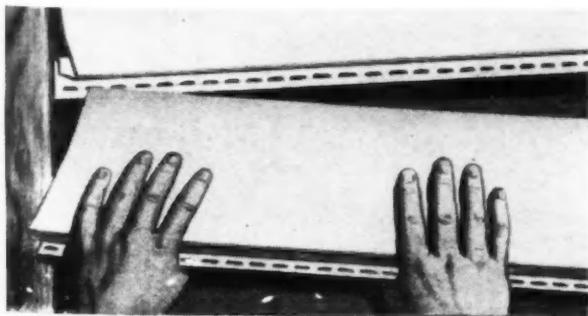
**MORE BEAUTY!** Here is a *better*, more beautiful kind of exterior building material—luxurious, precision-produced Kaiser Aluminum clapboard Siding and Roofing. It is flawlessly uniform in beauty and quality, forever free of splits, knots and rough sawing scars. It comes from the mill prime-coated, ready to receive smooth paint finishes that won't flake or peel. And it can be painted any color, any shade.



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**MORE DURABILITY!** No other material can match the long life of Kaiser Aluminum clapboard Siding and Roofing. It will last for *generations*. It can't absorb moisture, can't be damaged by vermin or rodents, can't be ignited by sparks. It is supplied in standard lengths of 10, 12, 14 and 16 feet. Siding is 6 7/8" wide, .030" thick. Roofing has an exposed width of 8 1/2", is .025" thick. 1143 base feet of the Siding weighs 580 pounds, will give 1000 sq. ft. of wall coverage.



**MORE PROTECTION!** Only Kaiser Aluminum clapboard Siding and Roofing has a curved surface. When each piece is nailed down by the lower edge, the pre-formed curve produces a tension which results in an absolutely tight, weather-proof joint. Concavity also eliminates wrinkles and sheen, produces attractive shadow lines that are 3/4" deep, and increases rigidity. Notice how nails are completely hidden!

## Kaiser Aluminum

### SIDING AND ROOFING

a Permanente Metals product

Get more information about the unique advantages of Kaiser Aluminum clapboard Siding and Roofing! Phone, wire or write today for free folder packed with detailed information.

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**O**UR office door is well known to a host of dealer friends who have visited us at Warren during the nearly 50 years of our business life. To them, and to those who have yet to pass through it the first time, we extend a cordial invitation to come and see how comprehensively Southern's operation has been streamlined to supply them with quality products for the next and succeeding 50-year periods. For, as growers of our own trees, Southern will be producing lumber and wood products perpetually.

**Manufacturers of  
ARKANSAS SOFT PINE  
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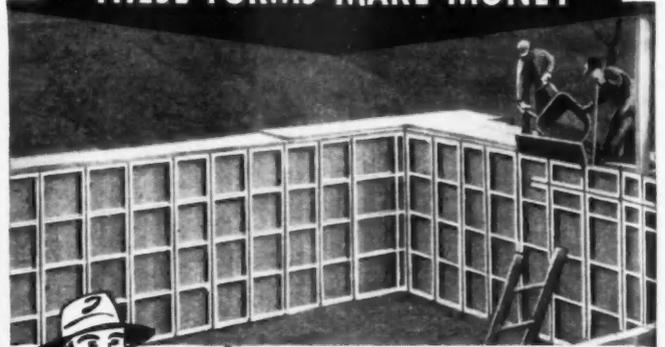
**PRE-FINISHED  
HARDWOOD FLOORING**

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**HARDWOOD  
LUMBER AND TRIM**

**SOUTHERN LUMBER COMPANY**  
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**BELIEVE IT OR NOT—  
THESE FORMS MAKE MONEY**



**SYMONS FORMS** Saved 56 hours of labor on our last job. Brother that's making MONEY!

The simple wedge clamp illustrated at left holds forms together, as well as the ties between forms. This eliminates the use of nails, spreaders or band irons, and requires the use of only one waler. The forms last 90 to 100 reuses without repair.

Symons Forms can be rented with purchase option or you may purchase the hardware with blueprints to make your own forms.



Write today for our big free booklet which completely describes and illustrates the Symons forming system.

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Sash Balances  
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**NOTED  
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Smooth Operation**

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OUR STREAMLINED *New* CG-4  
**SPEED LOADER**  
RETAILS FOR ONLY  
**\$1.95**

Here's the calking gun you've been wanting—a gun that is priced so low it paves the way to calking sales you've never been able to touch before. It's light, sturdy, fool-proof. This gun will sell itself.

OUR FAMOUS *Nu-CALK*  
**SPEED LOAD**

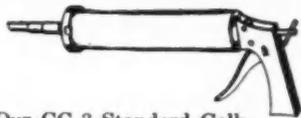
*Plus* **THIS**

With SPEED LOAD you offer your customers the world's finest calking compound *plus* the most efficient and practical load on the market. Our new, improved load has a specially designed cap that makes it impossible for the metal cap to pull loose from the fibre board tube.

SPEED LOADS packed 10 loads to a carton.  
Full freight allowed on 8 cartons or more.



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**INSTEAD OF PUTTY...**

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"Streamline proves indispensable for the many measurements I make on the job and in my home workshop".

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I enclose  \$2.00 for the 6ft. Streamline.  
I enclose  \$2.50 for the 8ft. Streamline.

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**ILLUSTRATED ABOVE IS NEW Lemco PANORAMIC VISUALITE SOLID SECTION CASEMENT-TERRACE DOOR**

Complete with Top and Bottom Bolts, Steel Kick Plate and Concealed Adjuster at Heads  
Cat. Type SD-1 (Builders' Price) **\$52.00**

**DELIVERED FROM STOCK**

All Panoramic Visualite Steel Casement Doors are **EXCLUSIVELY Lemco** and cannot be furnished elsewhere.

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**AMERICA'S OLDEST CASEMENT WINDOW MANUFACTURER**

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**READY TO INSTALL**—Fenestra Fireshield Swing Doors come to the job complete with hardware and frames already sized to fit—nothing else to order—no waiting for other parts.

**LOW COST**—Standardization of types and sizes results in manufacturing economies. That means lower first cost. You get a sturdy metal door for far less than many doors now on the market. They're quality doors in every respect—attractive and durable.

**SAVE INSTALLATION TIME**—it's easy and quick—no mortising, no drilling, no tapping, no prime painting . . . all this is done in Fenestra's factory. Thus installation is speeded—requires no special skill for a good fit.

### ORDER THESE SIZES TODAY

2'8" x 6'8"    3'0" x 7'0"    4'0" x 8'0"  
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**UNDERWRITERS' LABEL**—Doors of same design are available with Underwriters' B Label.

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# *Fenestra*

FIRESHIELD SWING AND SLIDE  
METAL DOORS



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Here is Cabinet Hardware that is really "Out of this world!" All of the "Stratoline" Cabinet Hardware patterns shown on No. 500 Demonstrators are now in full production and are available for immediate delivery from your Amerock jobber. Made of Solid Neo Die Cast, each piece is carefully polished by hand, then individually plated and finished to produce a gleaming Chromium finish of lasting beauty. Pulls and Catches are supplied with jewel-like plastic bases in *both* red and black colors to offer a choice of colored accent where desired. For those who want the very finest — you can now offer with pride — "Stratoline" Cabinet Hardware. *Ask your jobber!*



**AMERICAN CABINET HARDWARE**  
CORPORATION  
ROCKFORD, ILLINOIS

**HOW MATCHED DESIGNS UP HARDWARE SALES**



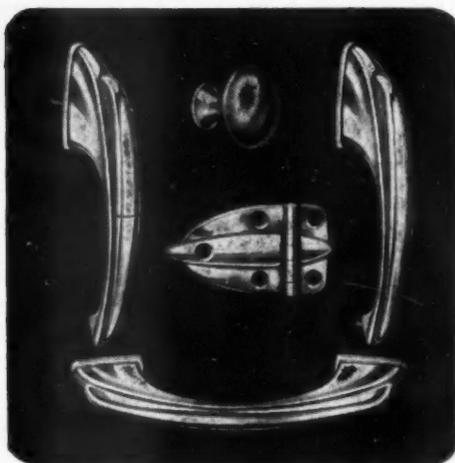
Remember way back when cabinet hardware sales were limited to a few individual items?



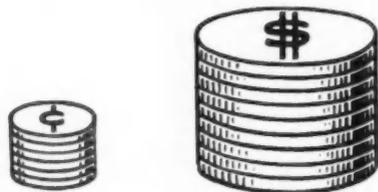
When customers bought a turn-button catch—a butterfly hinge—a glass knob?



In those days cabinet hardware profits were counted in pennies.



But today, Amerock offers you the finest cabinet hardware in complete matched sets of Pulls, Catches, Knobs, and Hinges — all matched perfectly in design —



So now you sell complete "matched" sets of cabinet hardware — and your profits are dollars — not pennies.

Other "Firsts" by Amerock: Raised Joint Hinges, Winged Latch Bolt Catches, Taped and Notched Screws, Flexi-Grip Catches, Beauty-Seal Platings, Color Selector Demonstrator, Envelope Packing.

# What's my Name?

(A 63-second quiz about typical products in our big family of wiring materials.)

## ANSWERS



**1**  
I never make a bit of noise, yet my smooth, efficient operation results in long service life that is something to shout about! Your clients like to see me in bedrooms, theaters, offices, and many other places where silence and top performance are especially desirable. What's my name?

**1**  
It's General Electric's silent mercury switch, the specification-grade switch that helps you plan to make good wiring better. We'd like to remind you, too, that it is now rated 10 amperes T, at 125 volts, to meet today's heavy loads.



**2**  
Cost-conscious builders have found that it is often advisable to use me in place of lead-covered cable for installations in raceways in wet locations. They find that I am easy to install and can use smaller conduit. I really have two names. What are they?



**2**  
My name is either G-E RW—for rubber-insulated, moisture-resistant wire—or G-E TW, for thermoplastic-insulated wire of the same type. We suggest you specify RW or TW for economy on the next raceway installation in any of the following: (1) underground; (2) in permanently moist locations; (3) in concrete slabs or masonry in direct contact with the earth.



**3**  
When you step into a smart, modern store, you don't see me, but the fluorescent lighting will need less maintenance, and will stay on the job longer than ever if I'm there. You'll find me in ceiling and showcase fixtures, protecting them from the effects of heat and moisture. My name is a famous synonym for "heat beater." What is it?

**3**  
It's Deltabeston\* fixture wire, the best protection you can specify for the wiring of lighting and fixture installations. And don't forget that *anywhere* you need to "beat the heat," Deltabeston wires and cables are the answer.



**4**  
I am coated inside and out. It's difficult to hurt me with even the toughest treatment. My color is white when I fight atmospheric corrosion, black when I fight chemical action. Many types of boxes and fittings have been designed to go with me perfectly. My name is so well known that it should be easy to identify.



**4**  
If you've ever specified conduit, you've probably guessed that these names are G-E White and G-E Black rigid conduit. They are bywords for top quality wherever conduit is used. The rest of the General Electric line of raceways includes boxes, hangers, fittings, "flex," and EMT—all made to work to the best advantage with one another.



**5**  
I have thousands of parts, of many sizes, types, and capacities. I am readily available in any quantity—all from a single source. My parent has the best-known name in electricity. Know what it is?

**5**  
The answer should be easy—General Electric's full line of wiring materials. Whatever you need—wire, cable, raceways, wiring devices, fluorescent accessories, of every variety—your best single source of supply for dependable quality is always General Electric. We'll be glad to give you full information on any products in this full line. Just write to Section K9-42, General Electric Company, Bridgeport 2, Connecticut.

# GENERAL ELECTRIC



**You Mean Beautiful  
Doors Like That  
Actually Cost Less?**



**Absolutely! And My  
Builder Told Me They  
Keep Their Beauty Years  
Longer Because They're**

***Tru-sized* DOORS!**

Reg. U.S. Pat. Off.

When you use Tru-sized Doors and figure all the hours of time and work you save, it's easy to see why you *save money!*

Tru-sized Doors are perfectly sized and squared. There's **NO** sawing, **NO** planing, **NO** fitting, **NO** priming. Resin prime coating protects them from dirt and moisture.

Available machined for standard lock and hinges, you can hang a Tru-sized Door in almost no time—with just a screwdriver.

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IN ASSORTED WIDTHS,  
WITH 100 NAILS**

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Tapered shape  
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# So many ways to *build* with **ZONOLITE!**\*

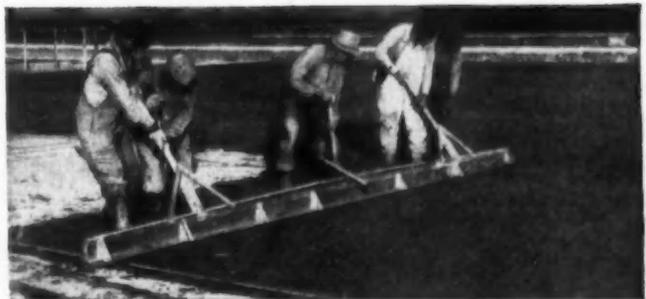
Simplifying the problems of architects all over the country, the many ways of using Zonolite are exemplified in thousands of jobs. Shown here are typical installations. Lightweight Zonolite reduces dead load, is an inorganic 100% fireproof and permanent material. Include dependable, easy-to-handle Zonolite products on your next specifications. Clients are better satisfied . . . time and money saved!



• Ten men install 16,000 cubic feet of Zonolite in 20 hours in giant cold storage plant. Zonolite Granular Fill in walls and ceilings—Zonolite Concrete for floors.

## Zonolite Fill Insulation

Easy to install between joists in attics and between studs in sidewalls. Weighs about 6 pounds per cubic foot. 100% fireproof—rotproof—verminproof. Won't irritate workers' hands! No masks required!



• Screeding Zonolite Insulating Concrete roof fill over concrete slab. Easily formed into saddles and cants for proper drainage.

## Insulating Concrete

Ideal for insulating fill and structural roof decks. Fireproof—rotproof—permanent. To make Zonolite Insulating Concrete simply mix with ordinary cement instead of sand. Weighs as little as 16 pounds per cubic foot when mixed. Used for floors in homes, commercial buildings and farm structures.

## Insulating Plaster

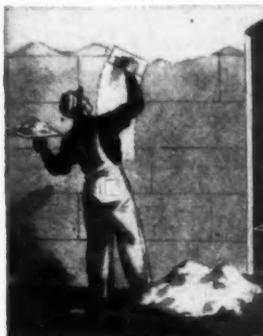
Zonolite Plaster Aggregate is used in place of sand. It's easier to mix. Reduces mortar weight one half. Can mix inside building to save handling time. Works easy. Won't freeze. Crack resistant. Insulates against heat, cold and sound and makes better satisfied customers.



• Zonolite Granular Fill easily installed in attics and sidewalls—new work or remodeling. No gloves or masks needed.

• (At left)—Zonolite Insulating Plaster being mixed indoors and applied. Can be applied to same surfaces as sand plaster.

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# It's surface smooth

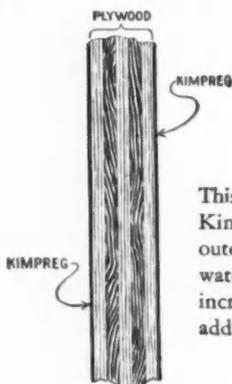
—thanks to Kimpreg\* + Plywood concrete forms



The new Kraft distributing branch — at Louisville, Kentucky. Note the exceptional smoothness of the architectural concrete. Credit goes to Del E. Webb Construction Co. and Kimpreg-surfaced plywood panels.

**Surfaces are smooth, attractive.** Kimpreg\* plastic surfacing is a hard, flint-like material that is bonded to plywood in manufacture. Its phenolic resin facing produces a remarkably even, long lasting concrete finish. Lessens rubbing down labor.

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This sectional view shows how Kimpreg surfaces are fused to the outer layers of plywood. A tough, water-resistant sheathing, Kimpreg increases the abrasion resistance — adds to the life of plywood.

**Ultimate cost of the forms reduced.** Handled with reasonable care, Kimpreg-surfaced plywood panels can be re-used many, many times. They're unaffected by rain, or snow, or temperature extremes.

**Panels are easily constructed.** These versatile panels can be sawed, drilled or nailed to erect any size form desired. They're available through your local plywood jobber; are also sold by individual plywood manufacturers under the trade name Laminex, Inderon and Westboard Industrial Plastic. For full information, write us on your business letterhead.

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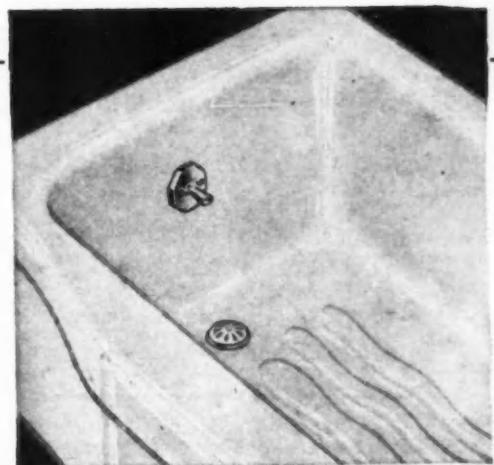
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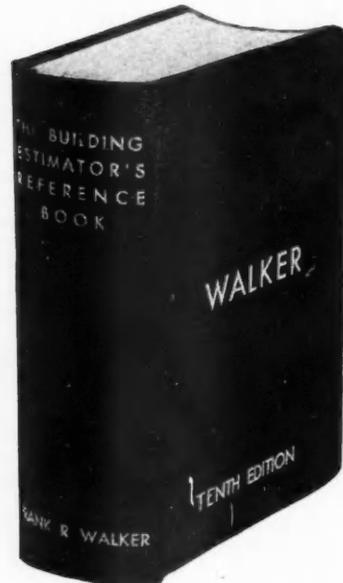
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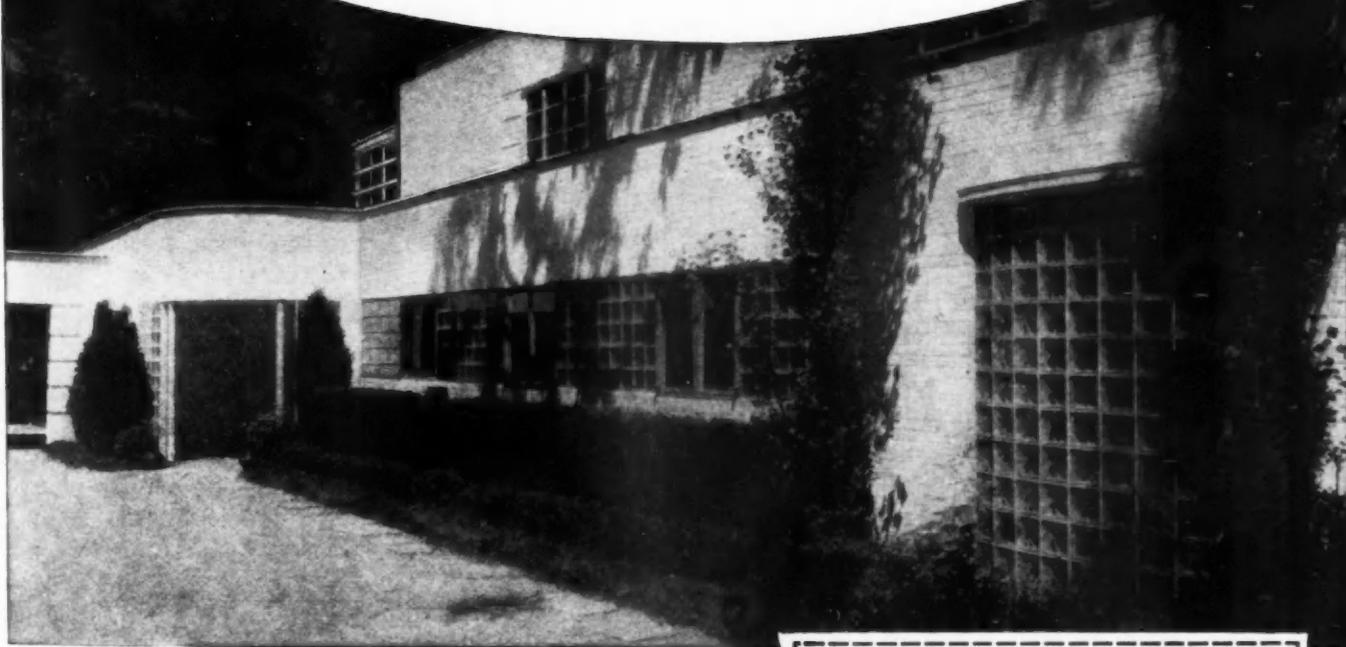


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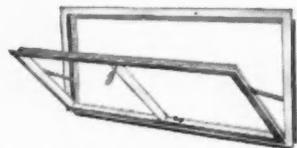
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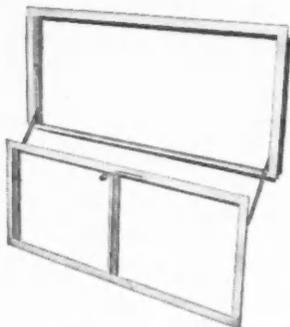
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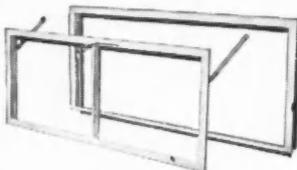
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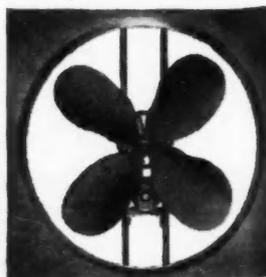
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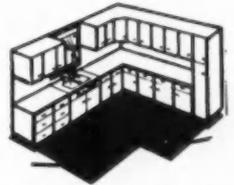
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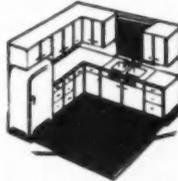
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Nu-Style Cabinets are manufactured as sectional units in graduated sizes and are easily adapted to fit any size kitchen.

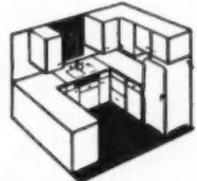
Easily adapted to fit any size or shape of kitchen  
As few or as many units may be used depending on the space available.



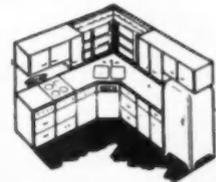
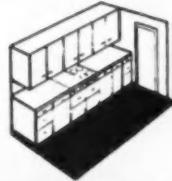
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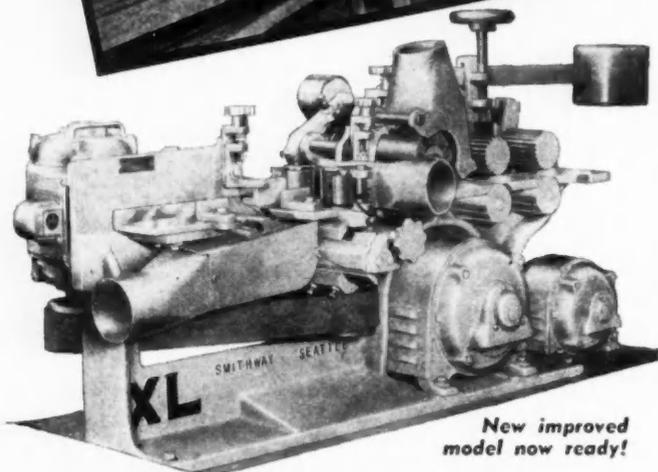
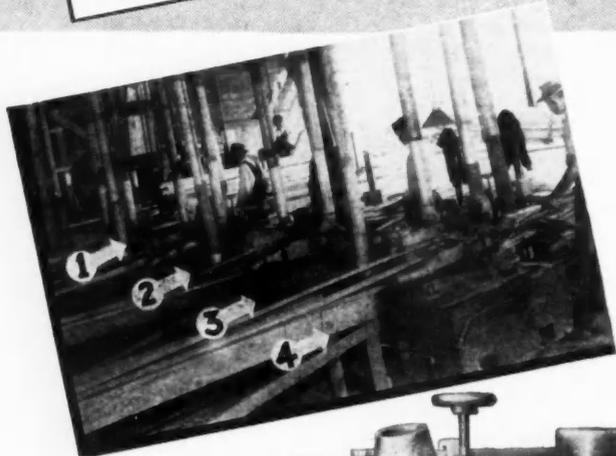


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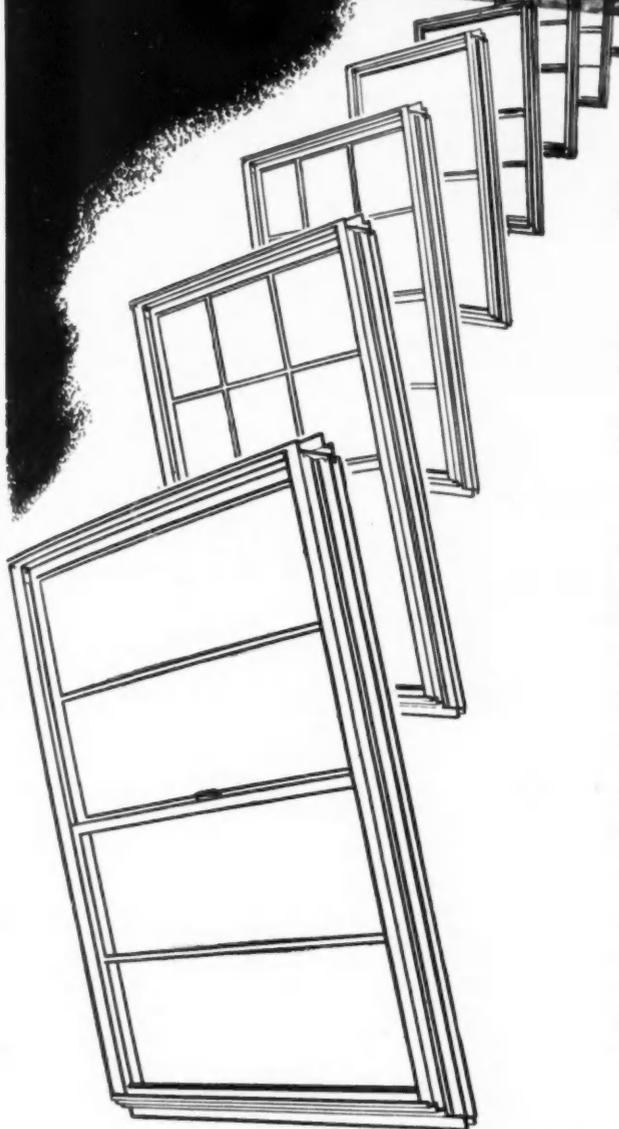
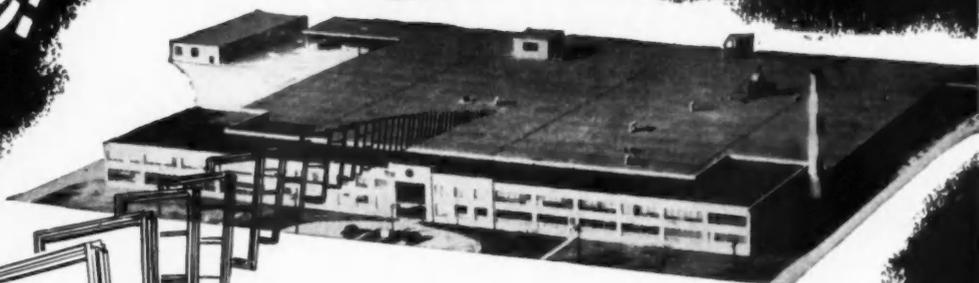
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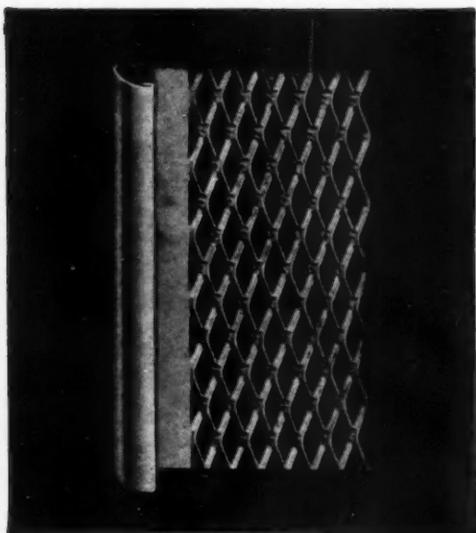
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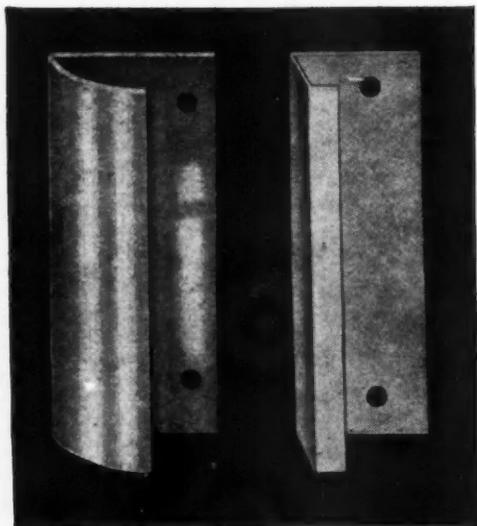
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other wall openings

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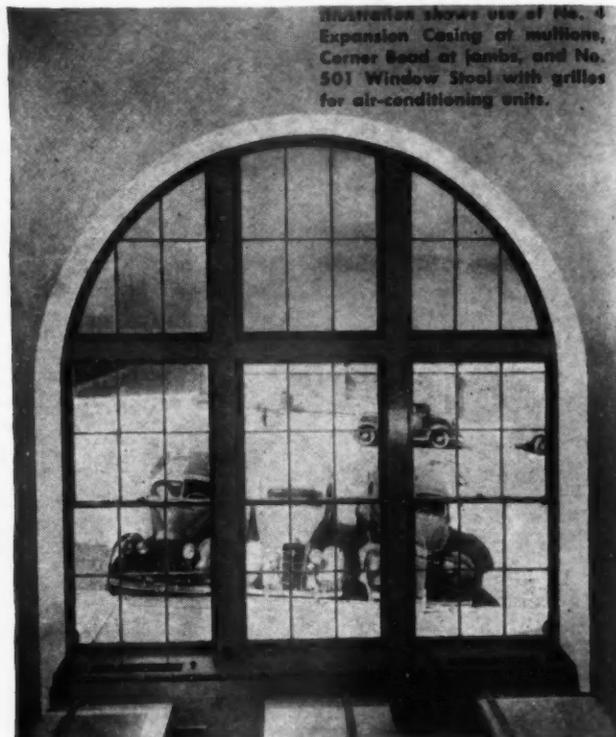


No. 4 Expansion



No. 138 Short Flange

No. 66 Short Flange



## The cost is lower than for less durable materials

*... and you get a  
better all-around job*

**Milcor Casings provide the permanence  
and long-run economy of steel at low cost**

Milcor Plastered-In Steel Casings come with either solid or expansion wings. Both styles are straight and uniform; it's easy to get perfect mitres at corners — and a neat, flush joint with the plaster surface.

Flush casing acts as trim *and* as ground for plaster.

The expanded metal wing of Milcor Casing provides a secure bond and key for the plaster around wall openings. The flush-type junction of wall and casing creates an airtight feature which resists fire and entry of cold air, insures a sanitary finish . . . easy to clean, with no cracks to become clogged with dirt.

Where "heavy" types of trim appear to shrink a room in size, Milcor Plastered-In Casings expose only a narrow face flush with the plaster surface, to give a feeling of greater roominess.

Milcor Casings save on installation costs, also. Erecting is simple. Finishing is easier. There is no warping or shrinking, no sanding to finish, fewer coats of paint—no going back to correct after installation.

The *complete* Milcor line of steel building products is illustrated in Sweet's Builders' File. Look for the Milcor pages.

Write today for free copy of Milcor Metal Casing literature.

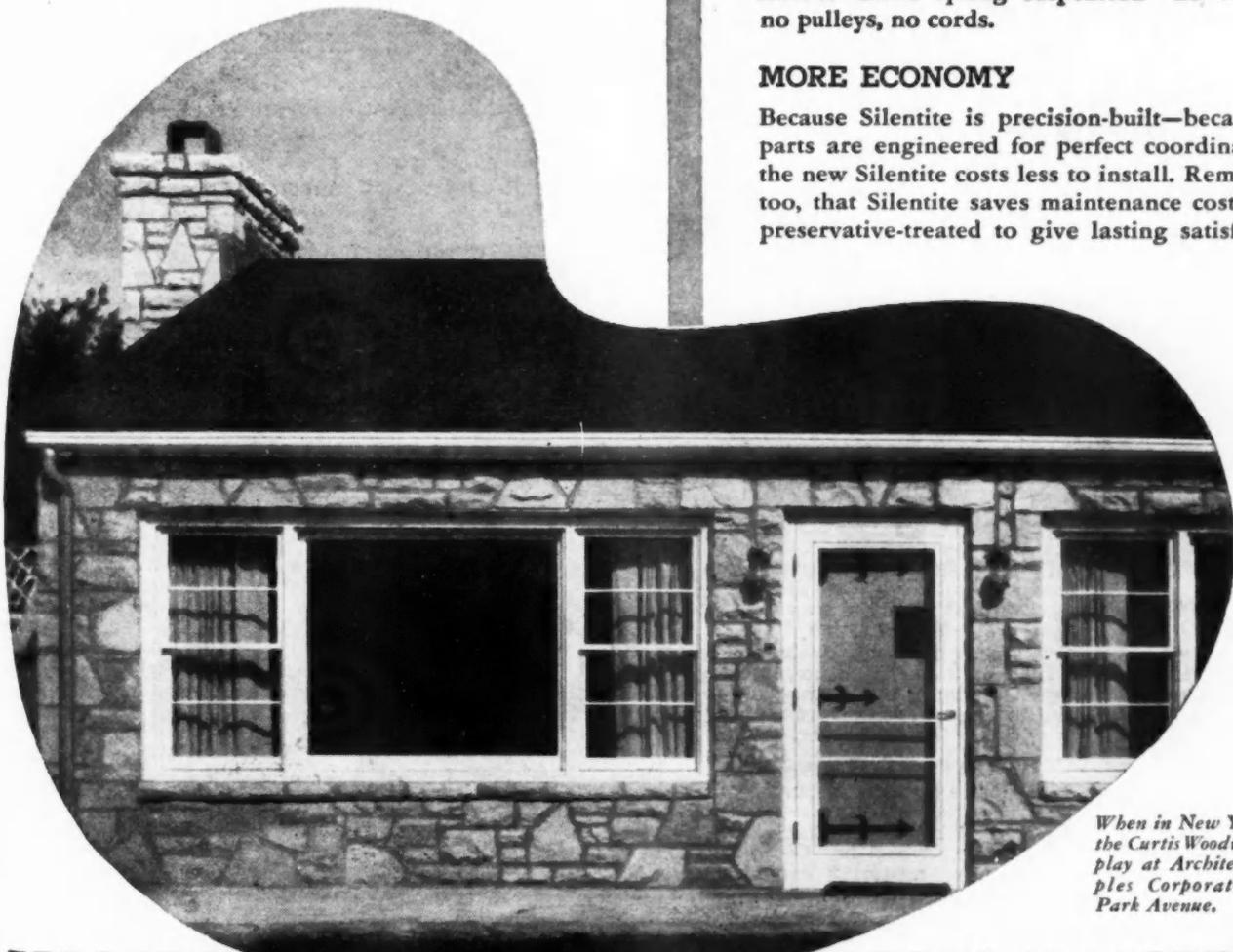
**INLAND STEEL PRODUCTS COMPANY**

FORMERLY MILCOR STEEL COMPANY  
MILWAUKEE 1, WISCONSIN

BALTIMORE 24, MARYLAND • BUFFALO 11, NEW YORK • CHICAGO 9, ILLINOIS  
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beauty

isn't the half of it...  
with the New **SILENTITE**



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

1866  
**CURTIS**  
WOODWORK  
**SILENTITE**  
PRE-FIT  
the "Insulated" window

Of course, the new Silentite, with its narrow mullions—its large glass areas—its modern streamlined design—is *beautiful*. But beauty is only *one* feature of this truly modern window. For instance:

**GREATER WEATHER PROTECTION**

Made of wood—in itself an insulating material—Silentite has new advantages that make it 20% more weathertight even than the famous original Silentite, introduced in 1932. "Floating" weatherstrips that always fit snugly, yet permit easy movement of the sash, are an important, patented feature.

**GREATER OPERATING EASE**

Silentite opens without effort when new—and continues to operate easily throughout its long life. It won't rattle or creep. And Silentite has the famous Curtis spring suspension—no weights, no pulleys, no cords.

**MORE ECONOMY**

Because Silentite is precision-built—because all parts are engineered for perfect coordination—the new Silentite costs less to install. Remember, too, that Silentite saves maintenance costs. It is preservative-treated to give lasting satisfaction.

CURTIS COMPANIES SERVICE BUREAU  
AB-4S Curtis Building, Clinton, Iowa

Gentlemen: Please send me book on Silentite Window Line.

Name.....

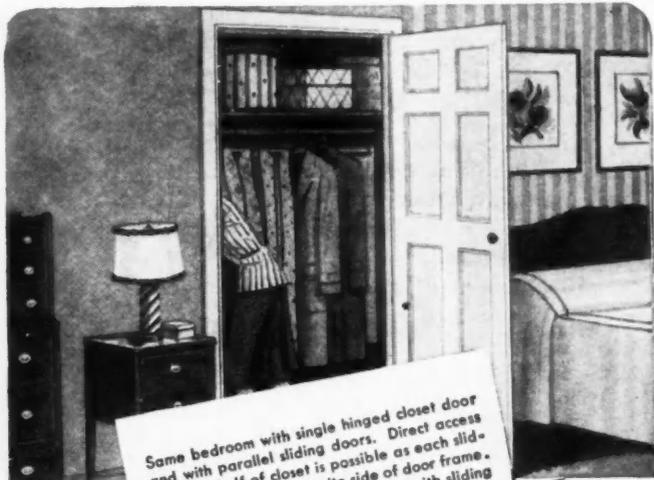
Address.....

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

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

(Please check above)

# For more "Living" room



Same bedroom with single hinged closet door and with parallel sliding doors. Direct access to either half of closet is possible as each sliding door opens to opposite side of door frame. Note added floor space available with sliding doors.



## USE VANISHING DOORS

Whether the job calls for tiny kitchenette apartments or a palatial mansion, there's no getting around one fact — hinged doors waste space! That is why more and more residential building plans specify vanishing doors.

With vanishing doors, sliding from side to side, there's no interference with the location of furniture, lighting fixtures, pictures, rugs—nothing in the room gets "behind the door." Used for closets and wardrobes, they permit direct access without fuss or bother.

### Specify R-W Vanishing Door Equipment

For smooth, silent, trouble-free operation, specify vanishing doors installed with Richards-Wilcox No. 719 Vanishing Door Hanger and Wood-Lined Steel Track. No oiling required. Hanger wheel has Oilite self-lubricating bearing, rolls on self-centering wood track lining without metal-to-metal contact.

### For Use in 2" x 4" Studded Walls

Richards-Wilcox No. 719 Vanishing Door Hangers and Wood-Lined Steel Track are designed for use in 2" x 4" studded walls. This outstanding feature is made possible by the R-W engineered "Ordinary Wall" pocket.

For complete details—or free consultation without obligation—contact nearest Richards-Wilcox office.



**Richards-Wilcox Mfg. Co.**

A HANGER FOR ANY DOOR THAT SLIDES  
AURORA, ILLINOIS, U.S.A.

1880-1948  
OVER  
68 YEARS



NO NAILS • NO BOLTS  
needed to make  
**Safe SCAFFOLDS**



Use **PATENTED DU-ALL** SCAFFOLD BRACKETS

TO MAKE SCAFFOLDS ON JOB—ANY HEIGHT

**NO STOCK TRESTLES.** Save time and money. Use Standard 2" lumber, build safe scaffolds on the job — quick, easy with DU-ALL BRACKETS. No damage to lumber. 12 gauge steel, anti-slip lugs. Used by general contractors, masons, plasterers, etc.

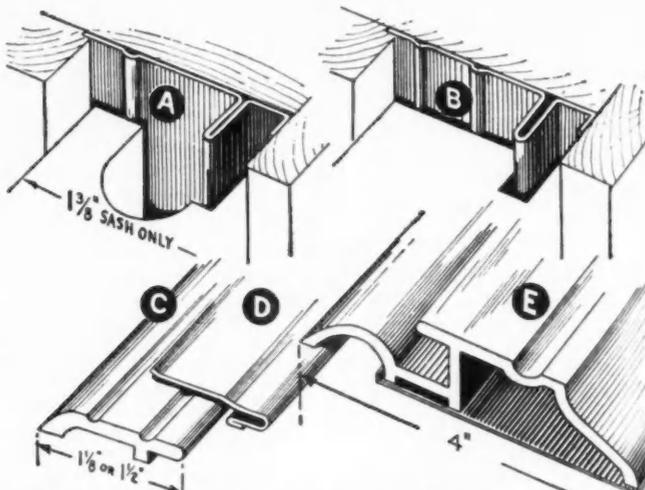
Write for free information on how to cut your costs with DU-ALL. Some excellent territories still available.

**DU-ALL SCAFFOLD BRACKET COMPANY**  
DEPT. M, 44 EAST BROAD STREET COLUMBUS, OHIO

## ALLMETAL

offsets----->

Channel Flange weatherstrip for easy sliding double-hung sash, and weather-proof interlocking thresholds.



- A** Closed rib channel flange side strip for 1 3/8" sash routed for Unique or similar sash balance.
- B** Open rib channel flange for ordinary sash.
- C** Interlocking door bottom in Brass or Aluminum.
- D** Bronze Hook for either threshold.
- E** Interlocking door bottom in Brass or Aluminum.



ALLMETAL WEATHERSTRIP CO.  
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Please send me information and prices on Allmetal equipment.

Name \_\_\_\_\_  
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One has extra

*"Hidden" Values.*



*— so do*  
**CHROMEDGE**  
REG. U. S. PAT. OFF.  
*Metal Trims*

You can't pick a winner on looks alone! That's why it pays to know the "hidden qualities" that make Chromedge the leader!

Chromedge assures you of the best metals for each purpose. Alloys are selected only after careful research, and their specifications are rigidly maintained. That means brighter luster, tougher finishes and extra strength.

In the Chromedge line you get *more shapes to choose from*—a full range of sizes for all types and gauges of covering materials. They include many special purpose trims designed to solve your problems, save you time and lower your costs.

Also, Chromedge offers you *more in*

complete preforming facilities, special finishes and extra services.

Chromedge extruded aluminum alloy trims are quality-controlled—produced from ingot to finished moulding by the B & T Metals Company. *The manufacturer's name is on every package . . . the complete tube-packaging and labeling program makes Chromedge easier for you to identify, handle, stock and inventory.*

And remember, Chromedge metal trims come to you only through B & T's authorized distributors—established firms that you can rely upon.

There are many other reasons why it pays to insist on genuine Chromedge. Write for desired information.

**The B & T Metals Co., Columbus 16, Ohio**

Here's why you should  
**Standardize on**  
**Duplex Sash Balances**

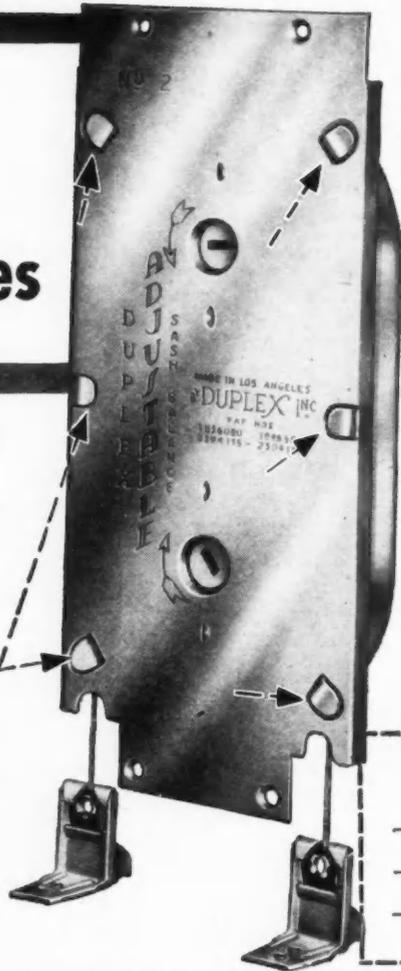
**1 The Face Plate is FLAT... PERFECT TO WEATHERSTRIP**

There are no protrusions to interfere with quick, tight weatherstripping—no gaps to admit cold air. Due to the patented construction of Duplex sash balances, it never will be necessary to redesign the face plate to prevent cable jamming.

**2 The Cables Can't Jam... PERFORMANCE GUARANTEED**

Cables **CAN'T JAM** on a Duplex sash balance because the face plate is secured to the back housing permanently and rigidly at **SIX** points (see arrows) by patented integral clamps. Duplex was the first flat sash balance to be guaranteed against mechanical defects for the life of the building.

*These two features ALONE make Duplex sash balances worth standardizing on PERMANENTLY!*



**BY WAY OF A BONUS**

Here are other features

1. No special overhead framing required.
2. No side stud mortises needed.
3. No routing of sash stile; installation in jamb.
4. Permits narrow mullions and trim.
5. TWO sizes meet 98% of residential building needs.

*Duplex*  
 INCORPORATED

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Please send information on Duplex Flat Sash Balances

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Type of Business

**SO MUCH MORE IN BEAUTY...IN VALUE...**

**YET Modernfold**

**COSTS NO MORE\*!**

Look at the beauty Modernfold Doors offer . . . with their colorful fabrics! Amazing utility, too! They save space . . . eliminate the area required for the swing of conventional doors. *And they need cost no more!* For, in figuring the cost of a closure, you must consider not only the actual door, but the trim, jamb, hardware, painting, etc. So in your plans, remember Modernfold, the accordion-type door—fabric-covered for beauty, metal-framed for rigidity and strength.



Remember, too, that larger Modernfolds can be used as beautiful "movable" walls—ideal for providing convertible rooms. Write for full details.

\*A door 2'4" wide x 6'8 1/2" high, costs \$26.00 (F.O.B., New Castle). Other Modernfolds at correspondingly low prices.

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 NEW CASTLE PRODUCTS  
 New Castle Indiana  
 Consult your telephone directory for the names of our installing distributors.

**I**nternational Competition for  
 a new traffic route  
 bridge or tunnel ("Osterleden")  
 in Stockholm

The city of Stockholm invites experts of all countries to take part in a competition in connection with a new main traffic route (bridge or tunnel with approaches) in Stockholm between Sodermalm and Ostermalm — Norra Djurgarden.

The sum of 60.000 Swedish crowns will be distributed unconditionally in prizes. The first prize will probably be 20.000 Sw. crowns.

Entries must be received by latest 1st April 1949.

Full conditions etc. can be obtained from the "Competition Secretary, Stockholm stads stadsplanekontor, Stadshuset, Stockholm". A deposit of 100 Sw. crowns is required. Application may also be made to any Swedish Embassy, Legation or career consul, and the deposit paid in the currency of the country concerned. An abridged form of the conditions etc. may be obtained free of charge from the Competition Secretary.



# Now **INSL-COTTON** NATIONALLY ADVERTISED

## More Than 7,161,007 People From COAST to COAST Will Read This Powerful Selling Story in

THE SATURDAY EVENING POST

Better Homes and Gardens

Packing a punch, this sales-making Insl-Cotton advertisement will reach literally millions of potential Insl-Cotton users from coast to coast. It sells while it tells—it will create Insl-Cotton customers wherever you are located—it will put extra dollars in your pocket!

**IT'S THE ALL-WEATHER PROTECTOR ... THE ALL-WEATHER SALES MAKER**

Yes, Insl-Cotton is the all-weather protector—the perfect insulation winter and summer. You'll sell it in every season... it's nature's own insulator, made of flame-proofed, fire-retarding cotton—the most effective type insulation available today. With a "K" factor of only 0.24, Insl-Cotton is extremely efficient—it exceeds 7d, FHA, FPHA and HH-I-528 specifications. Light-weight, easy to handle and install, moisture and vermin resistant and an excellent sound deadener, Insl-Cotton is preferred by homeowner, architect and builder alike.

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Heat summer to the south... insulate now with low-cost Insl-Cotton Insulation. Lower summer temperatures in your home as much as 12" and make your home more livable and life more enjoyable all year round. Insl-Cotton is the most efficient type of insulation on the market today—only three inches give so much protection from heat and cold as a five-foot thick insulator, giving the finest cold weather protection in the winter-time and saving 2 & 8 on your fuel bill!

**BRINGS YEAR-ROUND COMFORT**  
Insl-Cotton keeps your home comfortable year-around. It keeps your home cool in the summer and warm in the winter. It is the most efficient type of insulation on the market today—only three inches give so much protection from heat and cold as a five-foot thick insulator. It is the most efficient type of insulation on the market today—only three inches give so much protection from heat and cold as a five-foot thick insulator.

**FLAME-PROOF AND FIRE-SAFE**  
Insl-Cotton is made of a specially treated cotton which is flame-proof and fire-safe. It is the most efficient type of insulation on the market today—only three inches give so much protection from heat and cold as a five-foot thick insulator.

**3 INCHES OF INSL-COTTON EQUAL 5 FEET OF BRICK\***  
Insl-Cotton is the most efficient type of insulation on the market today—only three inches give so much protection from heat and cold as a five-foot thick insulator.

**INSL-COTTON DIVISION**  
TAYLOR BEDDING MFG. COMPANY  
TAYLOR, TEXAS

**DEALERS ... DISTRIBUTORS**  
Excellent territories available for competitively priced Insl-Cotton. Write for details.

**MAIL THIS COUPON TODAY!**  
Taylor Bedding Mfg. Co., Taylor, Texas  
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Please send specifications and full information on Insl-Cotton.  
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Check here  Distributor  Dealer  Architect  Building Contractor  
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Address \_\_\_\_\_  
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City and State \_\_\_\_\_

**TIE IN WITH INSL-COTTON'S STRONG NATIONAL ADVERTISING CASH IN ON MORE PROFITS!**

**DEALERS ... DISTRIBUTORS**  
Excellent territories available for competitively priced Insl-Cotton. Write for details.

**INSL-COTTON DIVISION**  
TAYLOR BEDDING MFG. COMPANY  
Taylor, Texas • Belton, Texas  
The Originators of Flame-Proof, Fire-Retarding Cotton Insulation

**Certified**  
Insl-Cotton is all new material. Every lot is tested and certified to the U. S. Government. No other insulation except flame-proof, fire-retarding cotton insulation made under Federal supervision can make this claim.

**Insl-Cotton Division**  
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Gentlemen:  
Please send specifications and full information on Insl-Cotton.  
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Check here:  Dealer  Wholesaler  Architect  Contractor

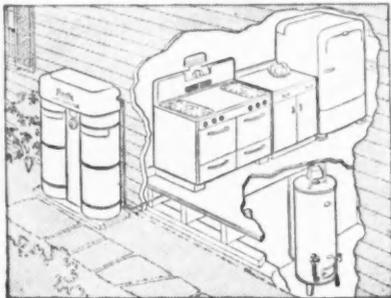


**KITCHEN HELPERS FOR HOMES  
BEYOND THE GAS MAINS**

Why not give your clients the extra "hands" they need to make their homes completely livable? When building homes beyond the gas mains specify a PYROFAX gas installation. With it, you can offer the *extras* of a gas-operated refrigerator, range, and water-heater. These are the appliances home-buyers need and want—and with a PYROFAX gas installation you can be sure of complete satisfaction.

For more information, see our catalog in Sweet's File, or write to PYROFAX Gas Division, Dept. B-5, Carbide and Carbon Chemicals Corporation, New York 17, N. Y.

No special preparations are needed for a PYROFAX gas installation. The whole unit is easily installed above ground ready for immediate service. PYROFAX



gas is insurance against service interruptions caused by bad weather and provides a dependable supply of fuel for cooking, heating, and refrigeration.

**Pyrofax**  
TRADE-MARK  
SUPERIOR BOTTLED GAS SERVICE



Product of a Unit of Union Carbide and Carbon Corporation.

**"The Ole Reliable"**  
**MARKWELL**  
**"RB3" SCREEN TACKER**  
**AND RB 5/16" SCREEN STAPLES**  
*Immediate Delivery!*



**OTHER MARKWELL PRODUCTS NOW AVAILABLE**  
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INSULATION TACKERS — MOULDING TACKERS  
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INDUSTRIAL PRODUCTS DIVISION

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*for Easier Installation*  
*for Longer Life!*



**SPECIFY**

**Hidalift**

**THE 100% CONCEALED SASH BALANCE**

Plough the sash, attach two screws and Hidalift is installed . . . as easy as that! The self centering guide bushing maintains perfect balance, prevents jamming and eliminates the need for templates in installation. The tension spring is sealed inside the tubing to prevent wear caused by dust. Home owners appreciate the trim architectural lines made possible by the elimination of bulky, drafty sash weight boxes . . . approve Hidalifts "100% Concealed" feature.

**WRITE** for completely descriptive literature which includes installation details and lists sizes and specifications to fit all standard sash.

**THE TURNER & SEYMOUR MFG. CO.**  
TORRINGTON, CONN.





**BARNES PUMPS give me 33,000 for 1 odds . . .**

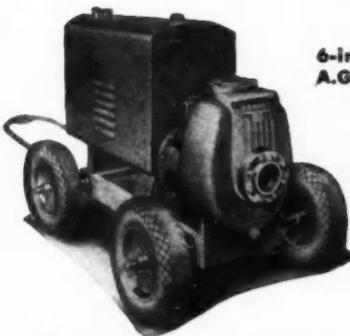
**1½-in. — THE FLASH — (3M)**  
 Rating **3,000 G.P.H.**

This dynamic Barnes portable meets the need for an easily moved and quickly set-up light-weight pumping unit. Weighs only 50 lbs. Automatic prime. Base mounted. Bail-type handle makes easy carrying by one person.



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 A.G.C. Rating **90,000 G.P.H.**

Here's a reliable pump for heavy work under the roughest conditions. Ideal for contractors demanding the utmost in pump capacity and non-stop performance. Put it to work on any job—and it delivers the goods!



**BARNES MANUFACTURING CO.**  
 MANSFIELD, OHIO

That's right! Not 1000 for 1! Not 10,000 for 1! But 33,000 gallons of water pumped for 1 gallon of gas used. That's the amazing economy of Barnes Automatics. That's filling 4½ tank cars on a gallon of fuel. That's what you call real performance and real economy. And it's yours when you use Barnes Automatic Centrifugals — the 33,000 for 1 Pumps.



**MAIL THIS COUPON TODAY!**

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- Gasoline-engine driven automatic centrifugals
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*Home Builders!* **SAVE COSTS - SAVE TIME**  
**MAINTAIN FLOORS LEVEL**  
 Use **TEL-O-POSTS** for Basement Beams

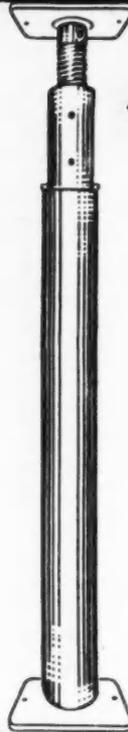


**Prominent Builders Use TEL-O-POSTS**

Pictured above is a Tel-O-Post installation as used in 400 new homes constructed by the Heslop Building and Realty Co. with FHA approval. Full information on this and similar installations will be mailed to you on request.

**TEL-O-POST**

The Original Telescopic  
 Adjustable All-Steel Post



**BUILT-IN JACK  
 KEEPS FLOORS LEVEL**

**ADJUSTABLE  
 5 FT. 7 IN. TO 8 FT. 4 IN.**

**ALL-STEEL CONSTRUCTION  
 SUPPORTS OVER 20,000 LBS.**

APPROVED BY  
 LEADING BUILDING CODES

Tel-O-Post will greatly simplify your basement post problems. Installation is faster and saves you cost. You simply adjust Tel-O-Post to the approximate height, then tighten with the built-in jack. Shrinkage and settling during and after construction can be quickly corrected to always maintain floor level. You'll like the time and cost saving of Tel-O-Posts — and the extra sales appeal to home buyers who will like the lasting advantages. Try them on your next job — and see the difference.

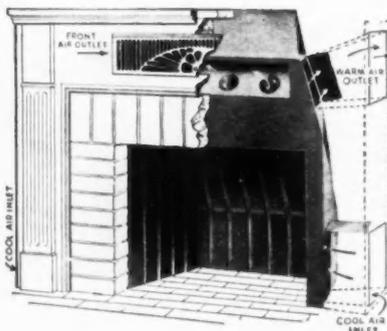
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**TEL-O-POST COMPANY**  
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**HEATFORM**  
 The *Superior* Heat  
 Circulating Fireplace

**THE MOST EFFICIENT AND DURABLE**

PRODUCES MORE HEAT because the air contacts the heating surface of the firebox and the upper throat. Super-heating round air passages connect both upper and lower heating chambers. This extra heating surface through and around the throat is the most valuable of all because it is directly above the fire.



Front view of HEATFORM installed, with part of masonry cutaway.

**GIVES MORE YEARS OF SERVICE**

because of the die-pressed ribbed construction of the firebox. Large air inlet and outlet capacity allows for greater flow of air over the hot metal, thus preventing deteriorating temperatures. Masonry downdraft shelf: no exposed metal parts beneath the chimney to rust out.

Two factories to give you quick service. Distributors and Dealers write  
**SUPERIOR FIREPLACE COMPANY**  
 EAST OF MISSISSIPPI RIVER • WEST OF MISSISSIPPI RIVER  
 601-N North Point Road • 1708-C East 15th St.  
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*behind the partitions  
 and side walls...*

**Hot Rolled FURRING STEEL**

• Complete Furring Requirements In A Wide Variety of Sizes (Angles, Channels, Bands) Made From High Grade Forging Quality Steel!

**BOIARDI STEEL CORPORATION**  
 MILTON, PENNA.

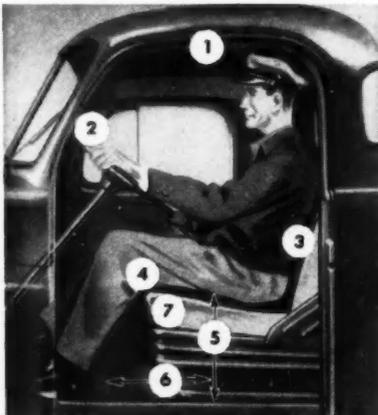
# Only Dodge gives so much

## VISION...

New Dodge "Pilot-House" cabs give you nearly 200 square inches more windshield area than other standard truck cabs! You get tremendously increased vision... in *all* directions. Windshields and windows are higher and wider. Available are new rear quarter windows that add still more to vision, and to safety... and vent wings on the door windows for controlled ventilation.



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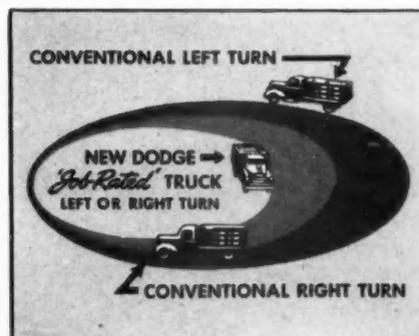


Comfort? Riding is believing! New and *better* weight distribution, wider tread axles and longer springs give a marvelous new "cushioned ride." "Air-O-Ride" seats give the kind of seat cushion you want—"soft," "medium," or "firm," controlled by a convenient lever. Seven full inches of seat adjustment provide exactly the right legroom. *All-season* comfort is yours, too, with "All-Weather Ventilation," an ingenious combination of truck heater, defroster vents, vent wings, and fresh air intake.

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|--|---|
| <p><b>1</b> PLENTY OF HEADROOM</p> <p><b>2</b> STEERING WHEEL<br/>right in the driver's lap.</p> <p><b>3</b> NATURAL BACK SUPPORT<br/>... adjustable for maximum comfort.</p> <p><b>7</b> "AIR-O-RIDE" CUSHIONS... adjustable to weight of driver and road conditions.</p> | <p><b>4</b> PROPER LEG SUPPORT<br/>... under the knees where you need it.</p> <p><b>5</b> CHAIR-HEIGHT SEATS<br/>... just like you have at home.</p> <p><b>6</b> 7-INCH SEAT ADJUSTMENT<br/>... with safe, convenient hand control.</p> |
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You can turn these new "Job-Rated" trucks in much smaller circles. You can park, back into alleys or up to loading platforms with much greater ease. This is due to a new type of steering design, with shorter wheelbases, that accommodate full-size bodies. You get much better weight distribution, too. Front axles have been moved back and engines forward, placing more weight on the front axle.



You get a truck that fits *your* job—saves you money... because every unit of every Dodge truck, from engine to rear axle, is "Job-Rated" for economy, dependability, performance, and long life. And remember...

**Only Dodge builds "Job-Rated" trucks!**

# NEW DODGE "Job-Rated" TRUCKS

FIT THE JOB... LAST LONGER

# ANDERSEN *Windowalls*

One of the remarkable things about an ANDERSEN WINDOWALL\* is its ability at once to open up the home to its finest view and to provide ample fresh air during mild weather.

This Andersen casement picture window in a Columbus, Ohio, home designed by Downie Moore, Architect, is a good example of windows that function simultaneously as walls and windows.

The installation is stock unit Number 542. The sash at each side swings out.

Specification data is in Sweet's Architectural and Builders' Catalogues or will be sent by Andersen Corporation on request. See your local lumber and millwork dealer for prices and delivery information.

\*TRADEMARK OF ANDERSEN CORPORATION

*Andersen Corporation*

BAYPORT • MINNESOTA



**FOR A VIEW • AND FRESH AIR, TOO**



The Sensationally **NEW** Low-Priced



# PARKS No. 20 20" PLANER

Here is a modernly designed, rugged, high-speed, low-priced planer that is ideally suited for every shop and industrial plant requiring a quality surfer. The Parks No. 20 Planer has a four-knife cutterhead with a speed of 3600 R.P.M. and offers two feed speeds—20 and 40 F.P.M., and 40 and 80 F.P.M. Write for complete descriptive literature.

PROMPT DELIVERY

**THE PARKS WOODWORKING  
MACHINE COMPANY**

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Cincinnati 23, Ohio

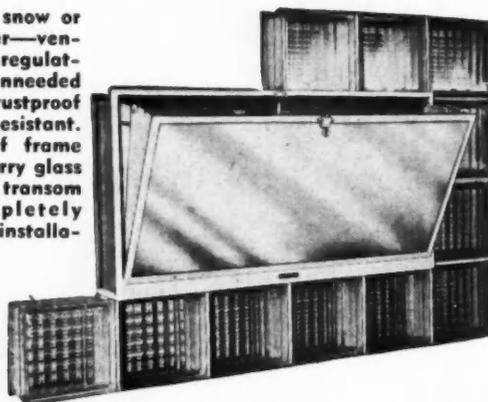
MANUFACTURERS OF QUALITY WOODWORKING MACHINES SINCE 1887

FOR GLASS BLOCK WINDOWS

## WINCO VENTILATORS AND FANS of EXTRUDED ALCOA ALUMINUM

No draft, rain, snow or insects can enter—ventilation can be regulated. Painting unneeded—frames are rustproof and corrosion resistant. Top channel of frame reinforced to carry glass blocks. Positive transom type lock. Completely assembled for installation.

8 sizes:  
for 6" and 8"  
glass blocks.



Detailed specifications on individual and continuous belt construction Ventilators sent upon request

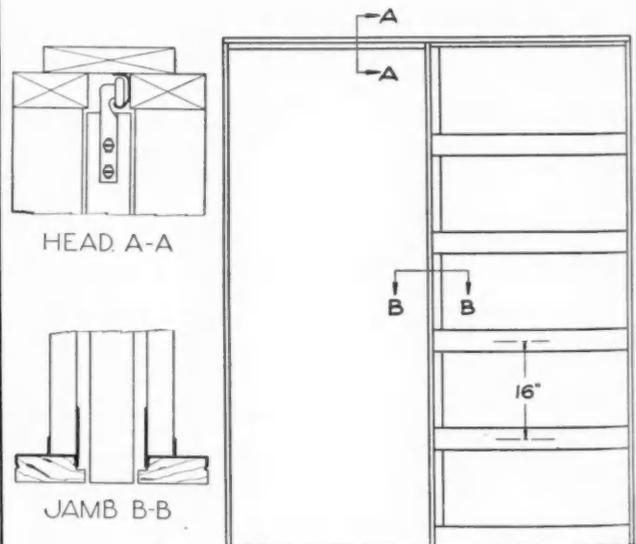
**WINCO**

*Ventilator Co. INC.*

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ST. LOUIS 20, MO.

### NORDAHL SLIDING DOOR FRAMES



Note the **METAL REINFORCED JAMBS**, exclusive with NORDAHL FRAMES. The pocket opening is held rigid and true. Sturdy metal track in a built-up header makes a smooth running surface for the wearever phenolic fiber rollers. Nothing to go wrong... easy to install. See your dealer or write for descriptive folder. Nordahl—180 W. Alameda Ave., Burbank, Calif.

**TOMORROW'S**

**HEATING TODAY!**



Comfort Heating



Laundry and Dishwashers



Personal Use



*3 way  
Service*

# The *Janitrol* Triple Service Hot Water System OIL OR GAS FIRED

**Supplies all household needs for hot water and heating**

**M**EET today's higher standards of modern living with this new Janitrol system by providing every heating comfort and all domestic hot water needs . . . at a reasonable cost—from only one unit.

Although the Janitrol Triple Service System is a revolutionary new development, its design is based on proven principles. Hundreds and hundreds of installations have already demonstrated its complete practicability, using room convectors or as a radiant panel heating application with small dimension tubing in ceilings or floors.

Designed for extreme compactness and high efficiency, units can be conveniently located anywhere

in the basement . . . in utility room; closet, attic or adjoining garage. Available in three models . . . 100,000, 150,000, 210,000 Btu per hour input; the gas-fired units and all controls are fully A.G.A. approved and rated.

Installations are simplified because complete units are factory tested and assembled and shipped with all necessary piping, fittings, etc. (Correct size convectors are included in factory shipments where this type of heating is specified.)

## **YOUR BIG SALES OPPORTUNITY**



This proven Janitrol system oil or gas-fired, offers you a wonderful opportunity to reduce building costs . . . by giving your clients what they need with extra advantages . . . giving them modern house heating and a hot water heater in one efficient unit, complete, ready for quick, economical installation.

*Write today for complete specification data and information on typical installations.*

**SURFACE COMBUSTION CORPORATION • TOLEDO 1, OHIO**



It's often "love at first sight" when the customer sees the gleaming, distinctive beauty of

**STAINLESS STEEL SINKS AND CABINET TOPS**

Yes... and it is easy to point out the extra advantages and obvious fine craftsmanship of the

**Just Line**

EXCLUSIVE *Radiiluxe* DESIGN

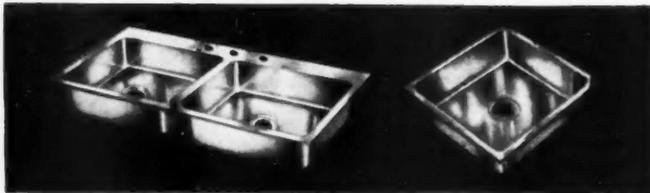
Only Just Line Radiiluxe has... IN-BUILT ANTI-SPLASH RIM on bowls to prevent water from splashing on floor and clothing; DOUBLE-PITCH DRAINBOARDS to give fast, perfect drainage, no channels to clean... no grooves to endanger fine glassware.

Just Line products give you all-welded and polished joints; bowls with radius corners vertically and horizontally, and many other qualities that enhance the beauty, permanence, economy and sanitary excellence of stainless steel.

**Custom-built or Standard Sizes**

We are specialists in stainless steel equipment for home kitchens, hospitals, schools, hotels, restaurants, institutions, office buildings, marine and industrial installations... including SCULLERY SINKS in stainless steel or hot-dip galvanized after fabrication.

WRITE TODAY FOR BULLETINS AND DETAILS



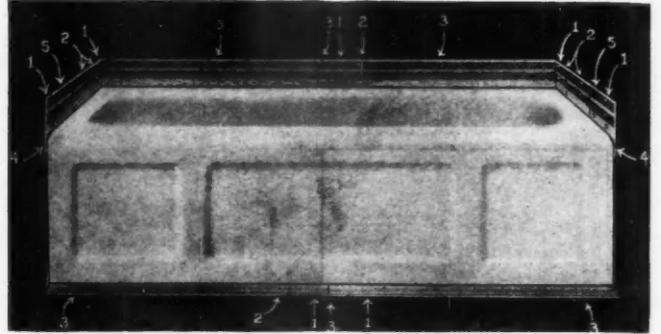
Stainless Steel Sink Bowls—flat rim or ledge back

**JUST** Manufacturing Co.  
4610-20 W. 21st Street, Chicago 50, Illinois

For Trouble-Free Bath Tub Edges } Specify **LUCKE**

**Leak-Proof Bath-Tub Hangers**

- No Leaks
- No Cracks
- No Repair Expense



**The Modern Way to Prevent Leaks**

There is no excuse for cracks or leaks or repair expense in good building. Leading architects specify LUCKE to overcome this problem.

Sold by Leading Plumbing Supply Houses

MANUFACTURED BY

**W. B. LUCKE, Inc.**

Wilmette,

Illinois



**For More Home-Building Business...**



Get this New Book of **150 HOME Designs.**

only **\$5** for Design Book - with Valuable **CONTRACTOR'S KIT FREE!** Or \$1 for Kit alone.

Every contractor, every lumber dealer can use this book to get new business (Hundreds already doing so). Because it offers just what home-builders seek: A BIG variety of designs (elevations and floor plans) for attractive, modern homes of 4, 5, and 6 rooms. With a choice of 150 designs, 'most everyone is sure to find one that's "just right"'

**PLANS AND SPECIFICATIONS** are available from us for all homes shown in Home Design Book. Meet all FHA, VA and local codes. **SPECIAL OFFER**, (to show quality of plans) we'll send ONE SET, for any ONE HOME design for only \$3. (regular price, \$12.50).

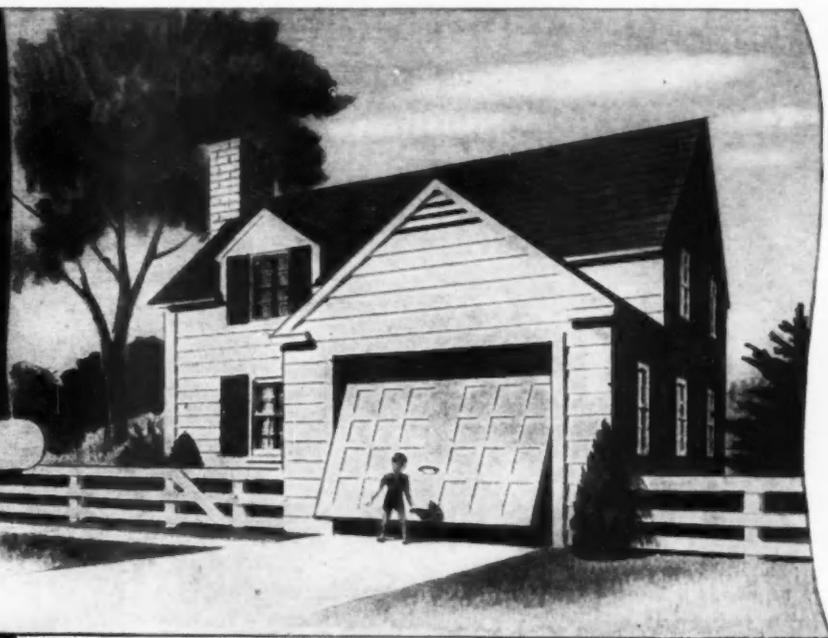
**CONTRACTOR'S KIT** (FREE with book) has every form a contractor needs to build any home anywhere. Makes it easy to figure jobs right. Prevents errors, disputes. Saves time and money.

**ORDER NOW.** A postcard will do

**Architects** CO-OPERATIVE PLAN SERVICE

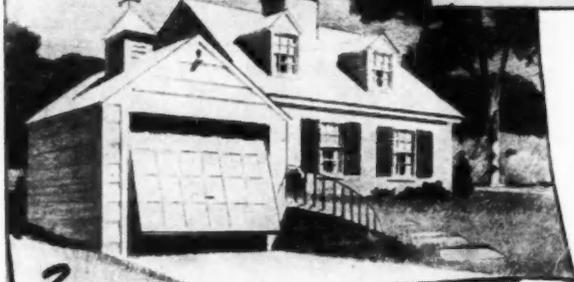
89 Elmgrove Avenue Providence 6, R. I.

Whether  
you build  
a house like  
this



or this...

1.



2.

or this...



3.

or this...



4.

**1. "ECON-O-MATIC"—**

The economical, automatic hardware equipment for lightweight doors up to 150 lbs. A twist of the handle and the door "floats" up and over.

**2. "SLIDE-UP"—**

A bargain in convenience. Can be applied to old or new doors. A simple weight-box, sand-filled, balances the weight of the door.

**3. "SWING-UP"—**

Simple pivot principle swings the door up effortlessly. For doors up to 250 lbs. and any size up to 8' x 8'. Excellent for converting old, hinged doors into a smooth working unit.

**4. "SWING-UP" (Heavy Duty)—**

De Luxe hardware equipment. Its rugged construction handles heavy 8' x 8' doors. By substituting heavier springs this set will swing up doors up to 16' wide weighing up to 700 lbs.

Install **STANLEY**

*floating\**

## Garage Door Equipment

**You'll Find Just the Right Type and Size to Fit the Job — and the Owner's Pocketbook!**

Large city residences or small country cottage — liberal or modest hardware allowance — Stanley Floating\* Door Equipment meets the whole range of style and price!

Four *floating* types are easy operating, weather-tight, long-lasting, easily installed. All are priced within a few dollars of ordinary, old-style garage door equipment. Worth looking into, isn't it?

Stanley Floating\* Door Equipment is stronger-built, better assembled, and backed by the greatest name in door hardware! Try one on your next house. See for yourself. Your local Stanley dealer can supply you. Folders on request. The Stanley Works, Garage Door Division, New Britain, Conn.

# STANLEY

THE GREATEST NAME IN DOOR HARDWARE!

For Any Residential, Commercial or Industrial Door  
That Lifts — Slides — Swings — Roll — Or Folds.

Req. U.S. Pat. Off.  
HARDWARE · HAND TOOLS · ELECTRIC TOOLS

© 1948 STANLEY

# TIME-TESTED Moultile IS THE up-and-coming FLOOR!

There's an ever-increasing demand for Moultile flooring in your community. First widely used in large public buildings, Moultile is becoming ever more popular for all types of building and remodelling . . . for homes, stores, offices, restaurants, schools, hospitals and churches.

You'll know why when you examine samples of Moultile. (We'll be glad to send them free of charge.) Moultile instantly captivates the eye with the beauty of its fresh, lustrous colors, its crisp, marble-like veining and the endless variety of patterns which it offers. And you can see for yourself that Moultile beauty won't wear off . . . because colors and texture are uniform throughout the thickness of the material. Costly periodic refinishing is therefore never necessary.

Moultile is surprisingly low in original cost, is easily installed and easily kept sparkling clean and bright. It makes a friendly floor to live with . . . quiet, foot-safe and comfortably buoyant. On cement in contact with the ground, it is immune to the alkali and moisture which destroy other floorings.

Increased production facilities will soon make stocks of Moultile available. Be ready to supply the demand. Send today for your free samples, and ask for a copy of our complete catalog. Write to: THOS. MOULDING FLOOR MFG. CO., 165 W. Wacker Drive, Dept. AB-4, Chicago 1, Ill.

THOS. MOULDING

# Moultile

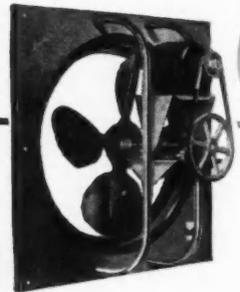
Flexible-Reinforced  
MASTER ASPHALT TILE

The colorful Moultile floor helped to transform an old-fashioned office into this modern suite for Cruttenden & Eger, Chicago.

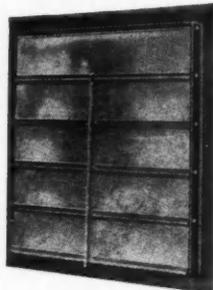


## Build Mid-Summer Comfort in Your Houses

WITH A  
*Peerless  
Electric*  
VENTILATTIC FAN



ADD luxury values at a practical cost to every home you build, by installing a Peerless Electric Ventilattic Fan. Operated during the day the Ventilattic fan *blows out* heat radiated from a hot attic to rooms below, but the chief purpose is to *pull in* to the living quarters the cool night air—10 to 20 degrees cooler than the air pocketed in the attic. Available in five sizes complete with motor, and with or without automatic-louver outlet—closes automatically when fan not operating. Supplied with automatic shut-off and suction box if desired. Excellent also for stores, dance halls, restaurants, theaters. Descriptive folder free on request.



Automatic Louvers

If your dealer cannot supply the Peerless Electric Ventilattic Fan, write us.

THE *Peerless Electric* COMPANY

Established 1893 • WARREN, OHIO

MANUFACTURERS OF MOTORS, FANS AND BLOWERS

# Goldblatt

## LONG HANDLE CEMENTERS' and PAVERS' TROWELS

Highest grade spring steel blade.



Steel-mounted ash handle 7 feet long.

- Size 18 x 5 inches, Price each . . . . . \$ 8.00
- Size 24 x 5 inches, Price each . . . . . 9.00
- Size 30 x 5 inches, Price each . . . . . 10.50
- Size 36 x 5 inches, Price each . . . . . 12.50

### ALUMINUM MOUNTING



### GOLDBLATT PLASTERING TROWELS

Correctly tempered flexible steel, pre-war quality blade. 10 1/2 or 11 inch lengths.

- CEMENT FINISHERS' TROWELS
- 12-in. @ \$3.35; 14-in. @ \$3.60; 16-in. @ \$3.85;
- 18-in. @ \$4.10, each.

Add 25c per trowel for packing and shipping.

A complete line of Cementers' Sidewalk Edgers, Curb Tools, Sidewalk or Pavers' Groovers.

No. 2S  
each  
**\$3.35**

## GOLDBLATT TOOL CO.

1515 Walnut Street, Kansas City 8, Missouri

TROWEL



BRAND

TRADE MARK REGISTERED  
Top Quality, Best Known Masons Tools of All Kinds for Over 60 Years.  
Send Check With Order. Catalog FREE!

# HUSTLE THOSE JOBS THRU WITH



## UP-TO-THE-MINUTE Equipment

Unit for unit—Feature for feature  
—Dollar for dollar—you can de-  
pend upon CMC Equipment to ren-  
der "Top" performance. See your  
CMC Distributor today, or write for  
bulletins and prices on the equip-  
ment you need. Get the full de-  
tails—then decide.

CONSTRUCTION MACHINERY CO'S.

*Also* WATERLOO • • IOWA

NON-TILT  
MIXERS

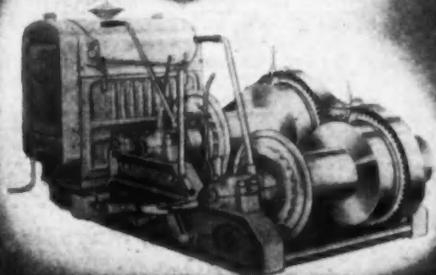
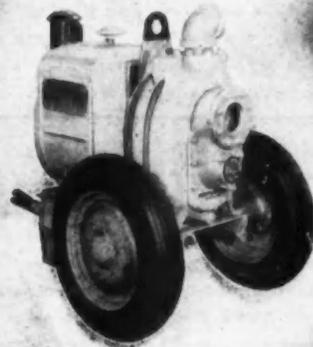
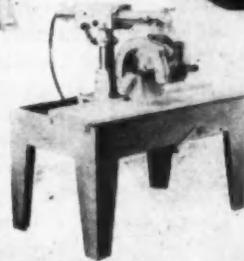
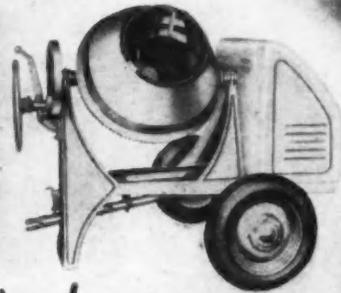
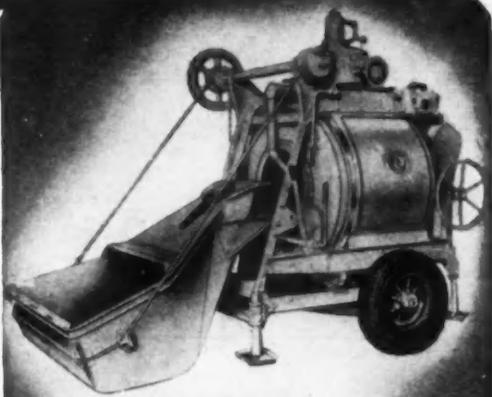
TILTING  
MIXERS

HOE TYPE  
MIXERS

RADIAL  
SAWS

PUMPS

HOISTS



JETCRETE GUNS • TILT-TABLE SAWS • BIN BATCHERS  
BUCKETS • HOPPERS • DUMP-OVER CARTS • ELECTRIC  
POWER PLANTS



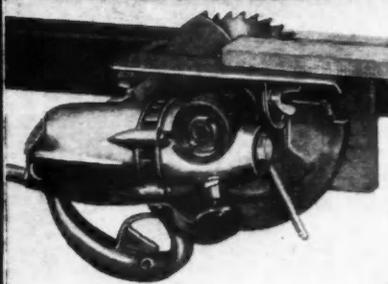
**MAKE AWKWARD CUTTING JOBS**  
*Easy!*



*Fred W. Wappat*  
ELECTRIC HAND SAWS ARE BALANCED FOR FATIGUE-FREE, SAFE OPERATION... RUN SMOOTHLY IN ANY POSITION!

ABOVE: Fred W. Wappat Saw trimming sheathing that has been nailed in place.

RIGHT: Fred W. Wappat Saw hung inverted over cleat on saw horse, performing ripping operation.



Model A-8"  
2 5/8" cut  
**\$115<sup>00</sup>**

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Model A-9"  
3 1/4" cut  
**\$135<sup>00</sup>**

Powerful Fred W. Wappat Electric Hand Saws make building shortcuts and savings anywhere on the job. Operation is almost effortless—even with only one hand; motors run smoothly in any position. You can quickly and accurately trim flooring and roof decking

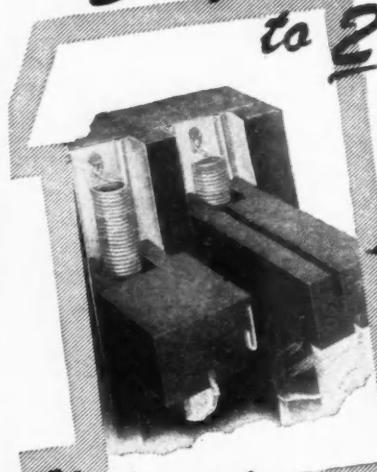
already in place... you can hang a Fred W. Wappat Saw inverted, for ripping... you can set up any angle cut on a production line basis and move the work through fast because a Fred W. Wappat Saw causes so little operator fatigue! And, safety devices protect the operator at all times, regardless of saw's position.

When you buy an electric hand saw, be sure to get a Fred W. Wappat—the saw that gives you a full day's work, that you can safely and easily use on awkward, hard-to-reach cuts as well as on ordinary electric hand saw jobs. See your nearest hardware man or equipment supplier today; or, have us send your Fred W. Wappat representative around.

Ask for free demonstration—there is no obligation.

*Fred W. Wappat, Inc.*  
135 Valley St., Mayville, N. Y.  
(on Chautauqua Lake)

A *Single* ANSWER to 2 PROBLEMS!



1. Efficiency?  
*Greater!*
2. Cost?  
*Less!*

*Milwaukee* SASH BALANCE WEATHERSTRIP COMBINATION

Write for free FOLDER and PRICE LIST

For new or old building. Easily installed bronze channel strips and rust-proof steel springs. Smooth, quiet, efficient operation. A tried product that builders swear by... used with outstanding results in Milwaukee for 10 years... now available on national market.

DEALER INQUIRIES INVITED

Manufactured by *Milwaukee* STRIP SERVICE, Inc.  
Dept. A-2—4621-23 W. Lisbon Avenue, Milwaukee, Wisconsin



Make **\$60.** PER DAY...



with a **FORD CEMENT BLOCK MACHINE**

FORD MACHINES CAN TURN OUT FOUR - 8 x 8 x 16 - BLOCKS A MINUTE. IT HANDLES SO EASILY, THREE MEN ALONE, CAN MAKE 1500-1600 BLOCKS A DAY!! MAKES 30 DIFFERENT TYPES OF CEMENT BLOCKS!  
FORD MACHINES MAKE A 37 LB. BLOCK MEETING A.S.T.M. SPECIFICATIONS. \$20 TO \$40 MORE PROFIT PER 1000 BLOCKS!!

**FORD** WRITE FOR INFORMATION  
**CEMENT BLOCK MACHINE CO.**  
DEPT. 25 CEDAR FALLS, IOWA

# Simple Secret for Perfect Plywood



Fir plywood plant of Peninsula Plywood Corporation, Port Angeles, Wash.

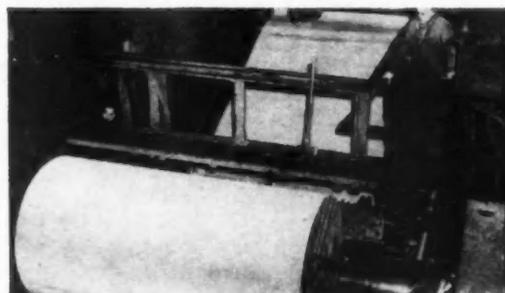
Combine equal amounts of excellent equipment, expert skill, the finest woods, and keen personal interest. That's the simple secret of the Peninsula Plywood Corporation's success. This cooperative mill was started by a group of men who pooled their money, their long experience, and their "know-how" to create one of the finest

fir Plywood mills in the northwest.

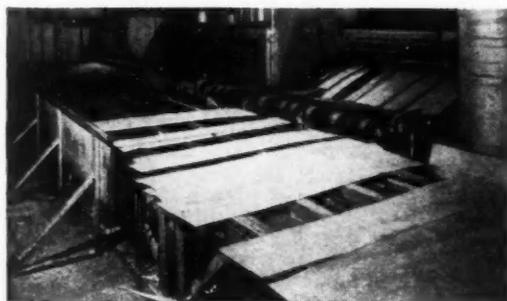
We are proud to point out that the entire production of this modern mill is devoted to Weldwood Plywood . . . and that this constantly increasing production makes an important contribution to our over-all activities in meeting today's huge demand for Weldwood Plywood.



1. Only the finest fir timber is selected for processing at Peninsula . . . where skilled workers cut the huge "peeler" logs into proper lengths for the lathes.



2. Giant rotary lathes turn out miles of veneer in ever-increasing quantities, as more and more efficient production methods and equipment are put into use.



3. Sheets are dried, trimmed, and glued into proper sizes. Modern machinery and improved methods help greatly to speed this operation.



4. The result . . . Plywood of the finest quality . . . finds favor with architects and home owners building today's modern, attractive, medium-cost housing.

## 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, Milwaukee, 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.

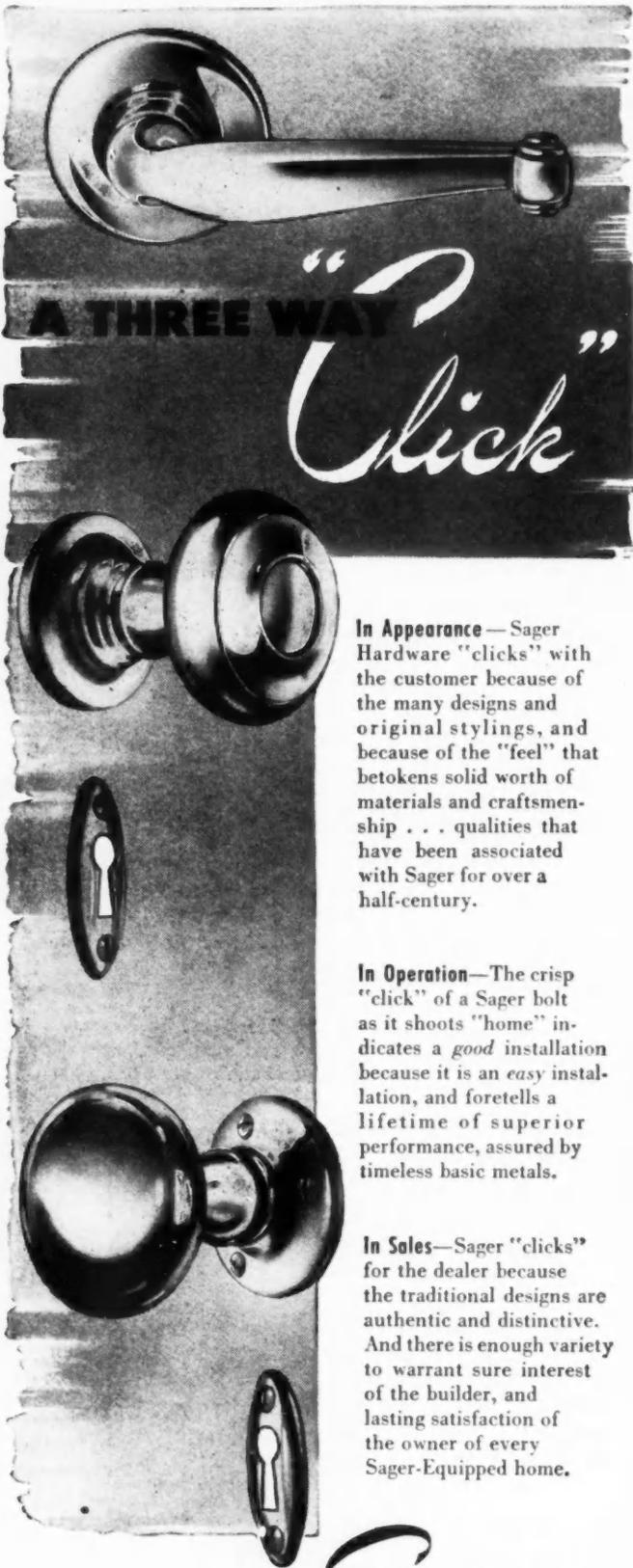
Weldwood\* Hardwood Plywood  
Douglas Fir Weldwood  
Mengel Flush Doors  
Douglas Fir Doors  
Overhead Garage Doors  
Molded Plywood  
Amorply\* (metal-faced plywood)

Tekwood\* (paper-faced plywood)  
Flexmetl  
Weldwood Glue\* and other adhesives  
Weldtex\* (striated plywood)  
Decorative Micarta\*  
Flexwood\*  
Flexglass\*  
Firzite\* \*Reg. U. S. Pat. Off.



Plastics and Wood  
Welded for Good

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



**A THREE WAY**  
*Click*

**In Appearance**—Sager Hardware "clicks" with the customer because of the many designs and original stylings, and because of the "feel" that betokens solid worth of materials and craftsmanship . . . qualities that have been associated with Sager for over a half-century.

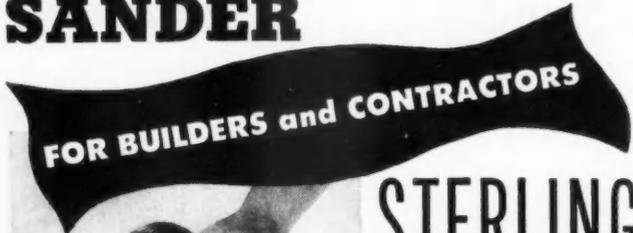
**In Operation**—The crisp "click" of a Sager bolt as it shoots "home" indicates a *good* installation because it is an *easy* installation, and foretells a lifetime of superior performance, assured by timeless basic metals.

**In Sales**—Sager "clicks" for the dealer because the traditional designs are authentic and distinctive. And there is enough variety to warrant sure interest of the builder, and lasting satisfaction of the owner of every Sager-Equipped home.

*Styled* BY



**SANDER**



**STERLING**  
PORTABLE ELECTRIC  
**SANDER**

Sanding — slow, tedious and expensive by hand — is easy, fast and economical with a Sterling Portable Electric Sander. Use it for cabinets, window and door trim, dry wall construction, undercoats, primers and finish coats. Sands (coarse or fine) on all types of wood, metal and composition. Lightweight, compact, vibrationless. Easy to operate in vertical or horizontal positions. Will not mar or gouge surface.

Sanding information offered with free catalog — write for them now!



Sanding cabinets is fast and easy with a Sterling.



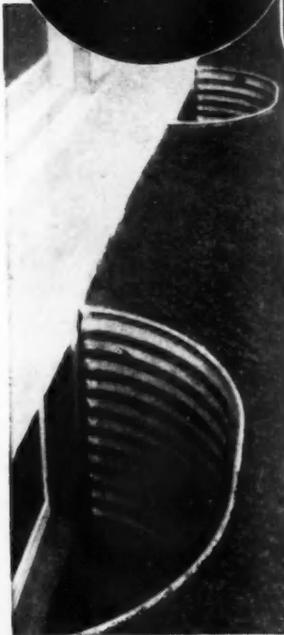
Doors sanded in one-third the time.



1334-A Milwaukee Ave., Chicago 22, Illinois



**THE ORIGINAL AND THE ONLY STEEL WINDOW WELL WALL HOT-GALVANIZED BY HAND-DIPPING**



This good-looking, permanent steel wall will not rust, streak, corrode. All surfaces and edges are heavily galvanized by hand-dipping in molten zinc after all shearing, punching and forming is completed.

Lux-Right\* Areawalls outlast your building. No expensive periodic replacements.

Speed of installation of one-piece units saves time and labor.

Made in wide range of standard sizes to fit any possible opening.

Ideal for side-hill jobs. Throw more light into basement.

Folder Free. See dealer or write. Buy the Best.

See Sweet's Arch. & Bldrs. Editions \*TM Reg. U. S. Pat. Off.

**SAINT PAUL CORRUGATING CO.**  
Manufacturers of Sheet Metal Products since 1885  
South End Wabasha Bridge AB1 Saint Paul 1, Minn.



# Coast to Coast...

Eye Witnesses Acclaimed This  
the Sensational Demonstration  
of the Builders' Show!\*



## \*1948 Chicago Builders' Show

● The Electronic Serviceman Garage Door Operator opened and closed an average size overhead-type garage door 14,400 times without a hitch. A grueling test of engineering simplicity and trouble-free operation before your very eyes that could never be paralleled in years and years of average residence usage. For five long days, hour after hour, this tiny giant raised and lowered the door . . . practically constant operation that left no mark of wear . . . proved beyond a doubt the long-life efficiency of the entirely revolutionary radio wave principle. And what's more, the Electronic Serviceman exhibit went directly from Chicago, intact, to another 5-day grind at Milwaukee.

**DEALERS! DISTRIBUTORS!** Sell and install the Electronic Serviceman in your community. Choice, fine-profit franchises available in key cities. Write, wire or phone.

# FEDERAL INDUSTRIES, Inc.

MANUFACTURERS and NATIONAL DISTRIBUTORS  
19720 W. Eight Mile Road • Detroit 19, Michigan • REdford 8880

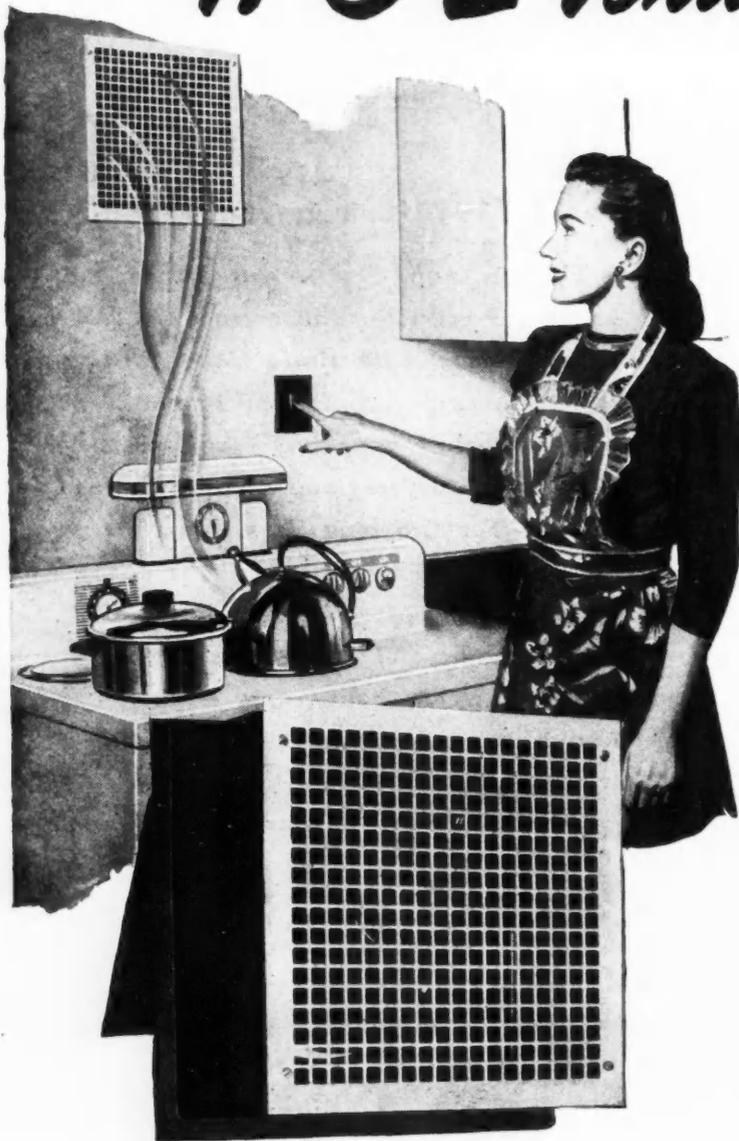
# CONTRACTORS!

HAVE YOU OVERLOOKED THIS PROFITABLE

At a cost of only a few extra dollars, these two fans shout "modern comfort" right out loud!

When demonstrated to prospective house buyers, they make an instant hit with man and wife.

## 1. G-E Ventilating Fan



INSIDE



Model FM10C1

OUTSIDE

INDISPENSABLE in kitchens and other rooms where grease, heat, smoke and odors are likely to accumulate, the G-E Ventilating Fan exhausts stale, smoke-filled air and replaces it with fresh air—FAST!—quietly.

Operates automatically—a flick of the wall switch turns fan on and off. Outside cabinet door opens *automatically* when fan is turned on, shuts when fan is turned off.

Easily installed—adjustable wall box fits walls from 5½ to 11 inches thick. Requires only 12¼ inches square opening in wall. 110/120 volts, 60 cycles.

Am  
"CO  
You ca  
desirable  
-the Kit  
Cooling F  
THIS in  
T doubt  
It moves  
house to  
and comf  
Genera  
pensive t  
cost can  
price of t  
P.S. Ever  
Electric  
defects in  
It's you  
G-E Fan  
ment, Ge  
2, Connec  
G-E  
Model  
Number  
FM24W1  
FM30K1  
FM36K11  
FM42K21  
FM48K11

# ... BUILDERS!

## "COMFORT PLUS" IN YOUR HOUSES?

You can make your properties *infinitely* more desirable by putting in two General Electric Fans—the Kitchen Ventilating Fan and the Home Cooling Fan.

## 2. G.E. Home Cooling Fan

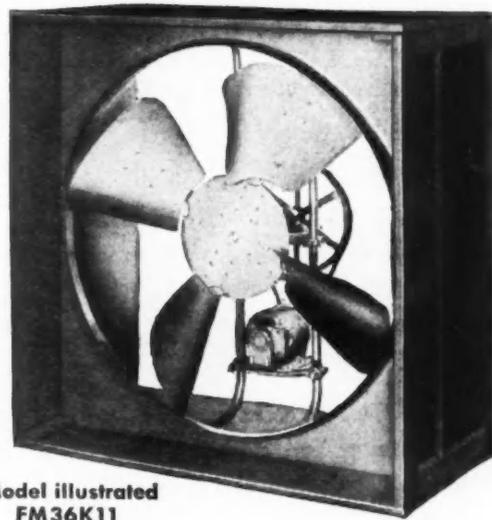
**T**HIS immensely useful fan makes a house doubly *desirable* to prospects.

It moves large volumes of air from inside the house to the outdoors—keeping every room cool and comfortable. This is done *quickly . . . quietly*.

General Electric Home Cooling Fans are inexpensive to buy, economical to operate. Their cost can be amortized as part of the purchase price of the complete home over many years.

**P.S.** Every G-E Fan is backed by the General Electric warranty—*good for one year* against defects in material or workmanship!

It's your insurance policy on each and every G-E Fan! Appliance and Merchandise Department, General Electric Company, Bridgeport 2, Connecticut.



Model illustrated  
FM36K11

### G-E HOME COOLING FANS AVAILABLE IN FIVE MODELS

Model Number	Blade Size in Inches	Volume Cu. Ft./Min.	Width Inches	Height Inches	Depth Inches	Net Wt.
		Pressure Test Method NAFM Rating				
FM24W1	24	4,000	30	30	13 $\frac{1}{4}$	80 lb
FM30K1	30	6,000	36	36	14 15/16	75 lb
FM36K11	36	8,500	44	44 $\frac{3}{4}$	24 $\frac{1}{2}$	136 lb
FM42K21	42	12,500	50	50 $\frac{1}{4}$	24 $\frac{1}{2}$	152 lb
FM48K11	48	16,500	56	56 $\frac{1}{4}$	26 $\frac{1}{2}$	190 lb

Note all fans 110/120 volts, 60 cycles.

General Electric Co.  
Box F-1  
Bridgeport 2, Connecticut  
Gentlemen: Please send me Home Cooling Fan Catalog and complete performance and installation data.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_

MAKERS OF TOP-QUALITY FANS MORE THAN 58 YEARS

# GENERAL ELECTRIC

# Elliott's UNI-TEX

CUTS  
YOUR  
BUILDING  
COST



High interior decorating costs put the pinch on construction budgets—and profits. Elliott's UNI-TEX cuts these costs drastically by conserving gallons of paint, hours of work. Moreover, it leaves a rich-looking appearance that pleases your most particular client.

Today thousands of contractors insist on Elliott's UNI-TEX, for it is a REAL OIL flat paint that covers wall board, wall paper, bare plaster, and water-thinned surfaces in one coat. Because it covers more area, with less man-hours, you save paint on every job.

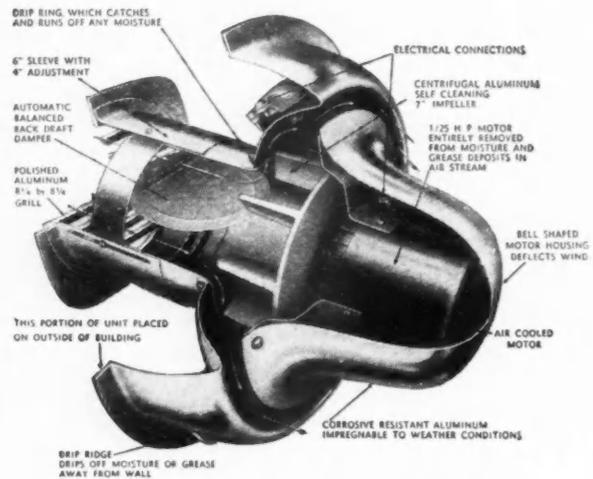
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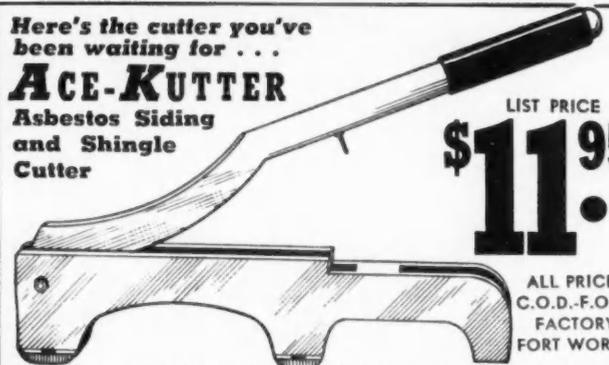
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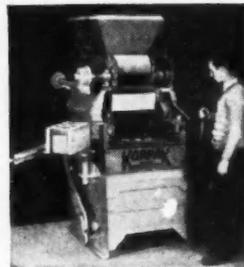


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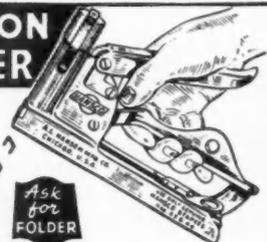
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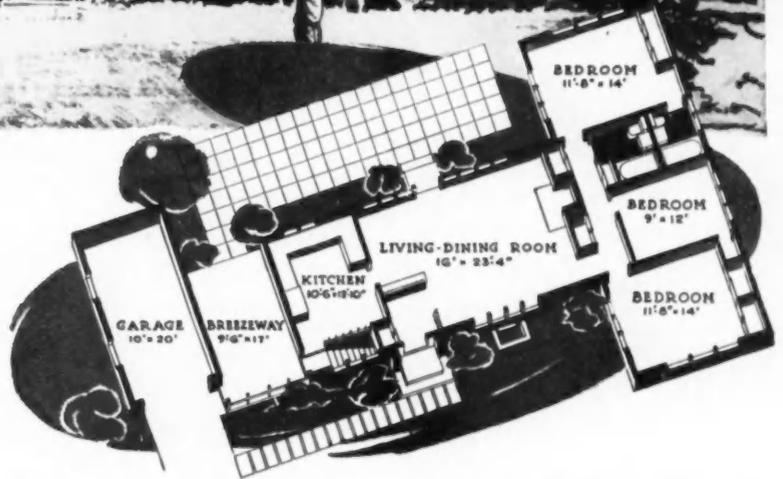
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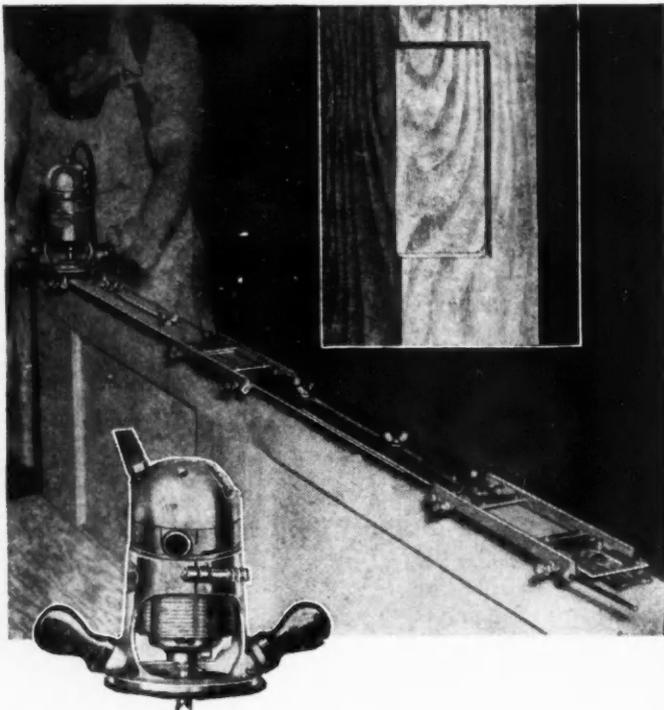
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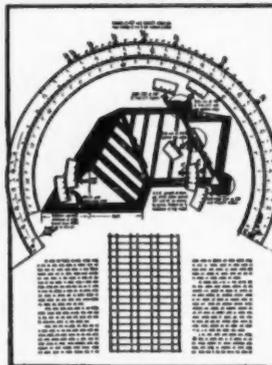
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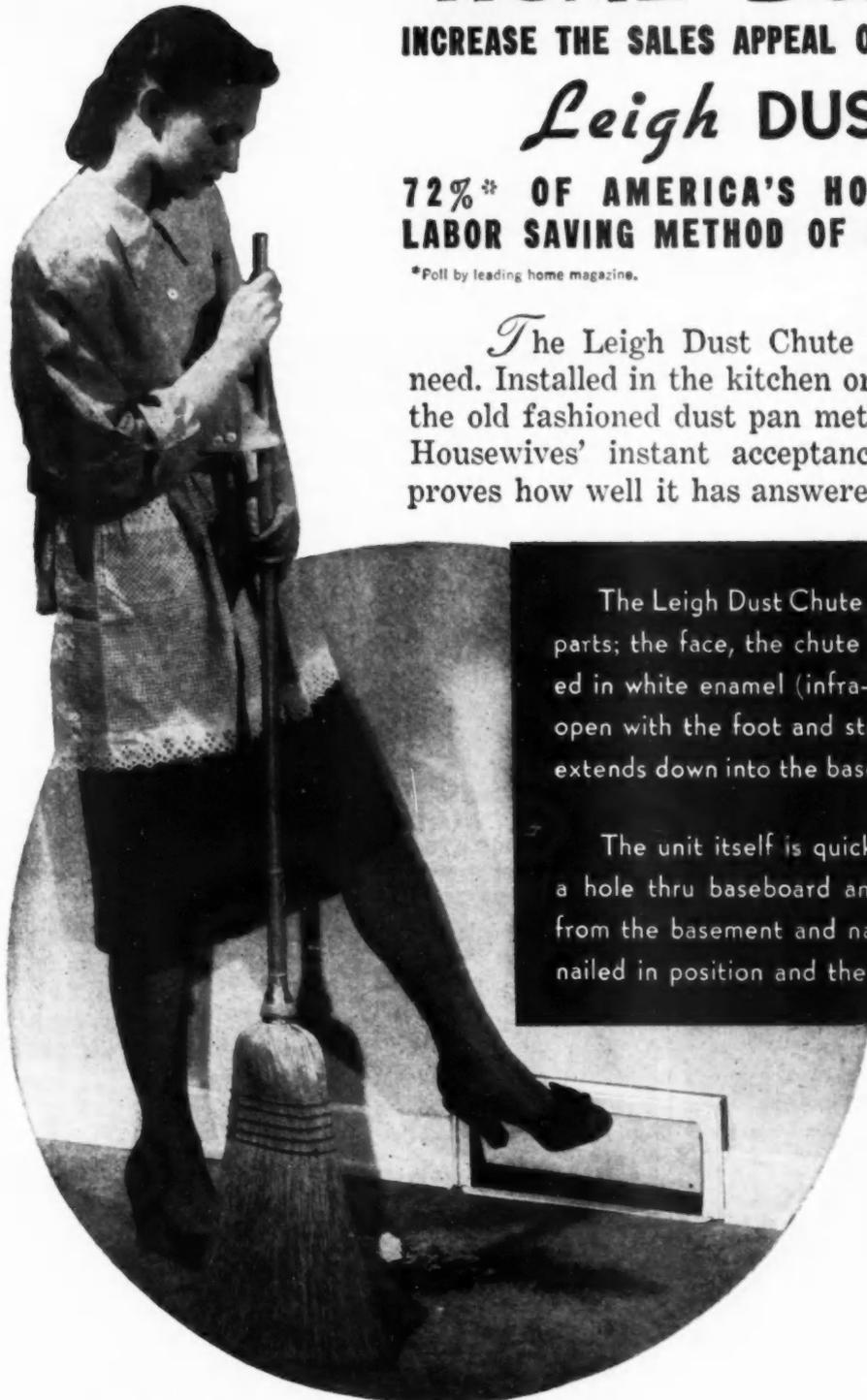
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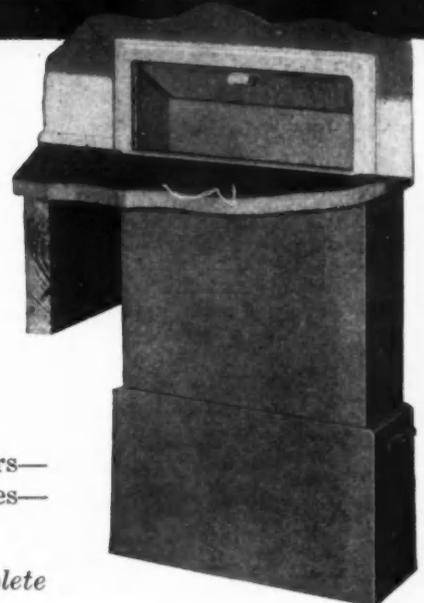
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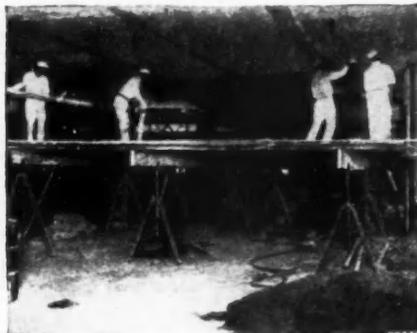


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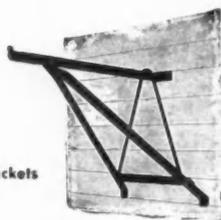
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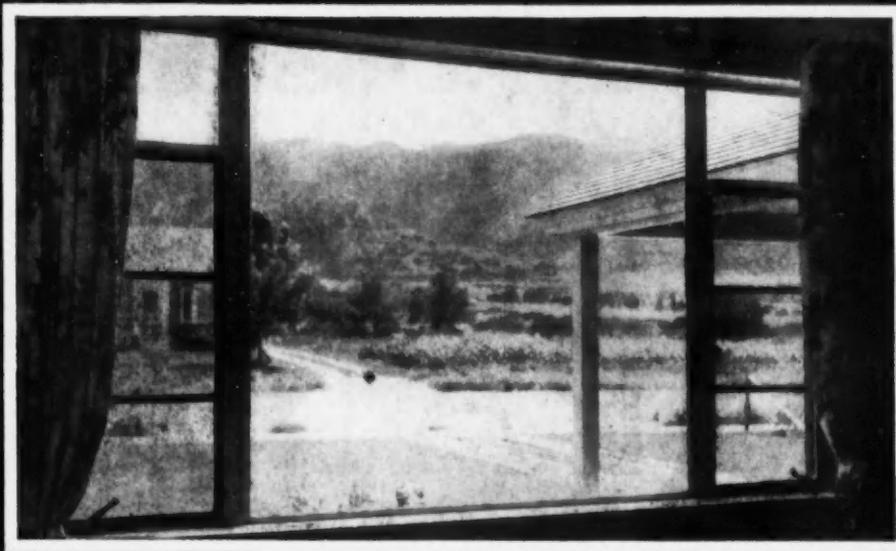
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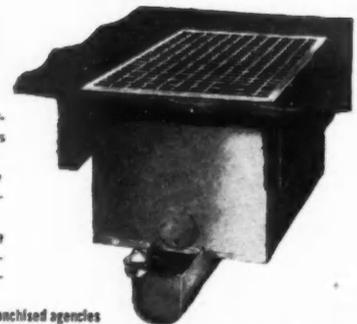
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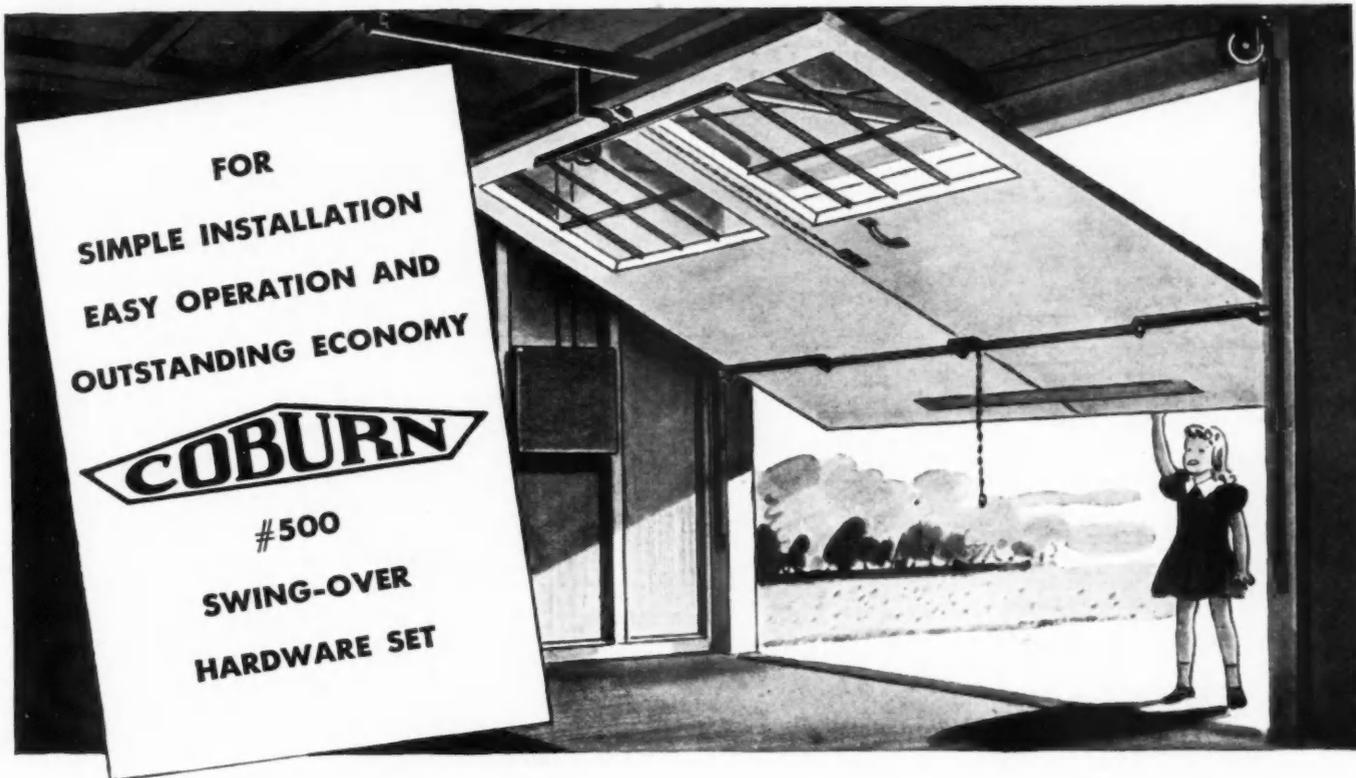
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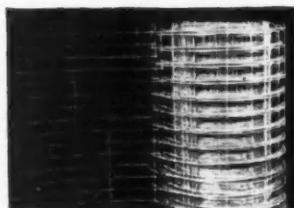
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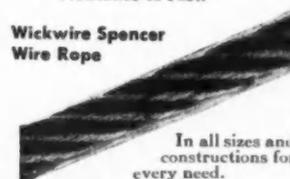
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