

AMERICA'S BIGGEST INDUSTRY MONTHLY FOR AMERICA'S BIGGEST INDUSTRY

FEBRUARY 1959 SIX DOLLARS A YEAR—ONE DOLLAR A COPY

# House & Home



**HOT WEATHER HOUSES** begin with screening and a big roof

What a builder learned from building for Frank Lloyd Wright  
How to design and build houses for the snow country  
What an architect can do for the builders' house



**A NEW** way to fascinate your women  
*Congoleum-Nairn's inlaid vinyl flooring*  
 ... a "custom look" at low cost

Smart builders have learned that the "extra" features of Congoleum-Nairn's inlaid vinyl fascinate women—and help clinch the sale.

First, your prospects are attracted by the gleaming colors and lustrous surface—a luxury touch that costs you so little. And they can *feel* the comfort of the cushion back. Then they are completely sold by the *easy cleaning* reputation of this vinyl by Congoleum-Nairn. For 8 years now housewives have been learning that grime and dulling film wipe right off this floor, *America's most widely used inlaid vinyl.*

And builders know that installations of this flexible, inexpensive floor are fast, easy, trouble-free.

Now there's a new design—*Picnic*®—a delightful decorator

creation of gay color chips and marbled backgrounds. Three of the patterns include sparkling GOLDEN flecks!

Congoleum-Nairn's Picnic vinyl is available by yard or tile, can be installed on or above grade, with or without radiant heating. For samples and data, write Builders' Service Bureau, Congoleum-Nairn Inc., Kearny, New Jersey.



**Congoleum-Nairn**  
 FINE FLOORS

© 1958, Congoleum-Nairn Inc., Kearny, New Jersey

Add Value to Your Kitchens with these Low-Cost...

# NuTone Built-Ins



NuTone Hood-Fan  
over the Range

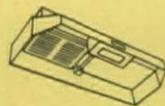
NuTone Hood-Fan  
over the Oven

Kitchen in Ceramic Tile by Suntile . . . RCA Whirlpool Range and Oven . . . NuTone Food Center in counter . . . NuTone Intercom-Radio and Clock Chime on wall.

Leading Builders, Architects and Contractors Specify NUTONE . . .

## Hood-Fans . . . Exhaust Fans . . . Food Centers

### Door Chimes . . . Intercom-Radio - Music



NuTone's Range Hood-Fan  
.. acts like a huge vacuum  
to keep kitchen air fresh.



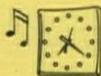
NuTone's Food Center . .  
saves space. One built-in  
motor for SIX appliances.



NuTone's Intercom-Radio  
is a step-saver. Fills the  
home with radio music.



NuTone's Exhaust Fans  
get rid of cooking odors  
grease, steam, excess heat.



NuTone Door Chimes make  
any home more inviting  
with a "friendly greeting"



NuTone's Oven Hood Fan  
traps the scorching heat  
when oven door is opened.

Add Value to Your Bathrooms with these Low-Cost...

# NuTone Built·Ins



Eljer Bathroom Fixtures . . . NuTone's Exhaust Fan in wall . . . NuTone Ceiling Heat-A-VentLite is Heater, Fan and Light . . . NuTone Built-In Scale folds out of way when not in use.

Leading Builders, Architects and Contractors Specify NUTONE . . .

## Ceiling Heaters . . . Exhaust Fans . . . Built-In Scales



NuTone's Ceiling Heaters provide instant heat on chilly mornings. They're safe — no danger of burns.

Luxurious NuTone Built-In Scales are so convenient for daily use . . . to help control overweight problems.



NuTone Bathroom Exhaust Fans get rid of damp moisture condensation . . . avoid lingering bathroom odors.

Send for FREE...

1959 DELUXE CATALOGS IN BINDER!  
Write to NUTONE, INC., Dept. HH-2  
Cincinnati 27, Ohio

"Sales-Minded"  
Builders  
Choose . . .

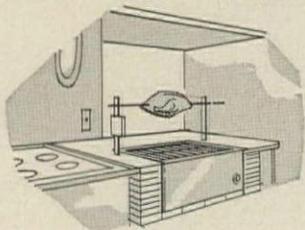


● THE NEW TREND IN MODERN KITCHENS...

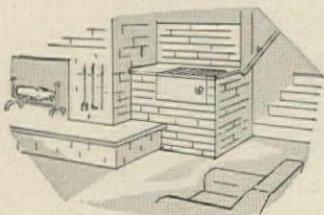


BUILD EXTRA SALES APPEAL INTO YOUR HOMES WITH

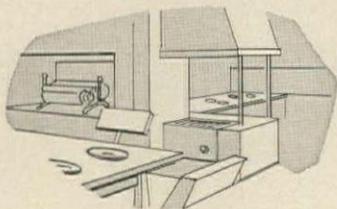
## Donley indoor barbecue units



KITCHEN



RECREATION ROOM



DINING ROOM

Families everywhere enjoy delicious charcoal-cooked foods . . . summertime, wintertime, *anytime* . . . with the new Donley Indoor Barbecue Unit. This eye-catching indoor range features a sparkling nickel-plated top frame and grill . . . plus attractive chrome-plated handles contrasted against a black wrinkle-finish door. Special Donley Fire Adjuster regulates cooking speed . . . swings out with the door for convenient fire-tending. The all-steel unit is shipped assembled and ready for easy installation in masonry in new or remodeled homes. Ask your local Donley Dealer for complete information or send coupon below.

**Donley**  
BROTHERS  
THE DONLEY BROTHERS COMPANY

The Donley Brothers Company  
13981 Miles Avenue  
Cleveland 5, Ohio

8298-DB

Please send me complete information about the new No. 33 Indoor Barbecue Unit.

NAME \_\_\_\_\_

COMPANY \_\_\_\_\_

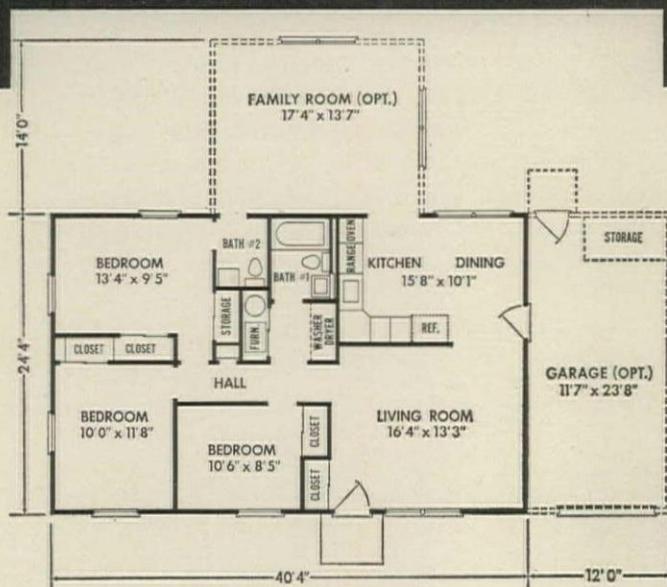
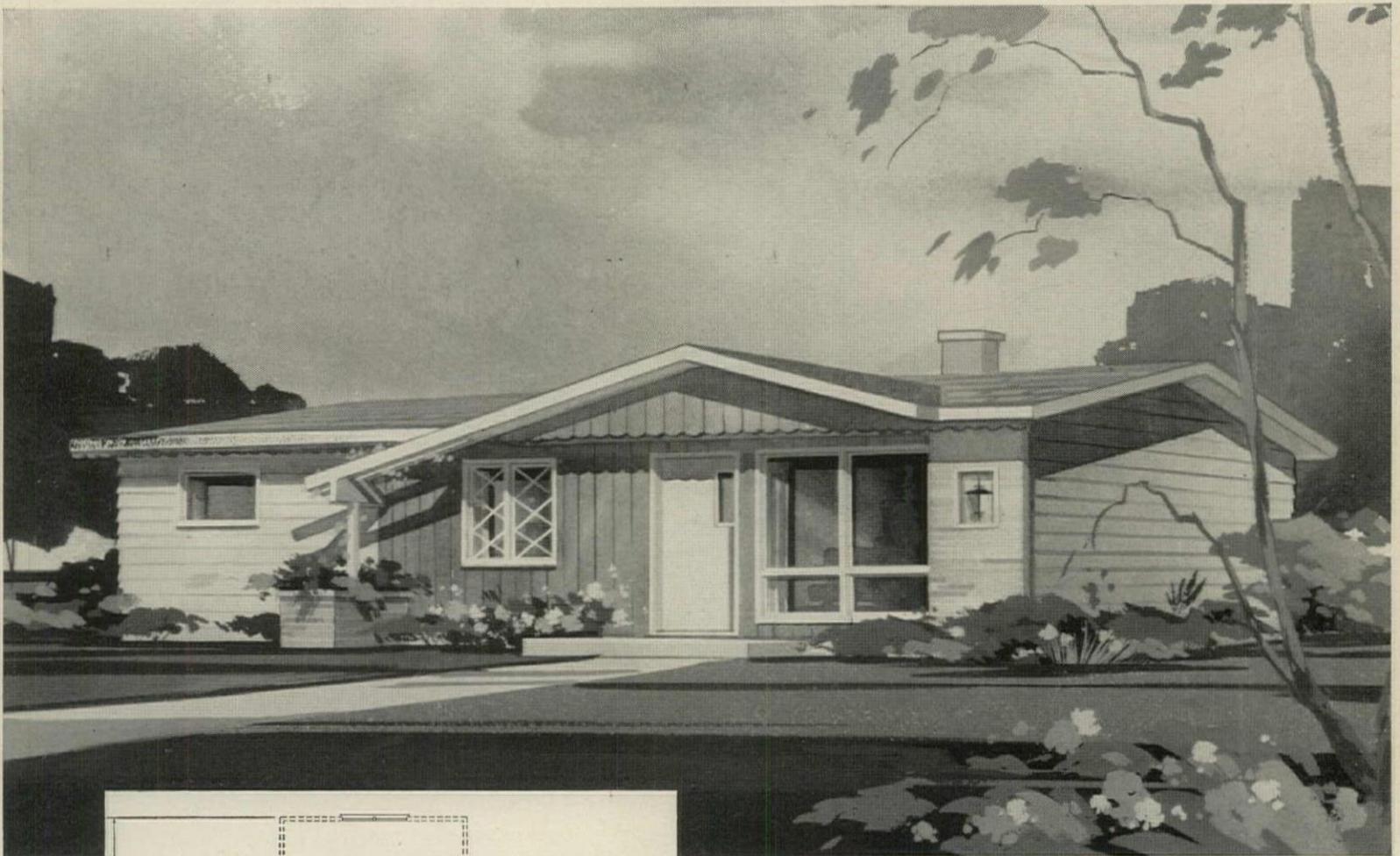
STREET \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

# \* builder of 220 homes per year tells why BEST is best

\* Mr. Marley Williams, President of Community Homes, New Whiteland, Indiana, says: "We built 220 Best homes in 1958. We were completely satisfied with Best. We had a minimum of shortages and errors. Their quality control is excellent. They actually ship houses like they say they will."

**BESTVIEW** • One of the popular priced homes in the TOPPER series.



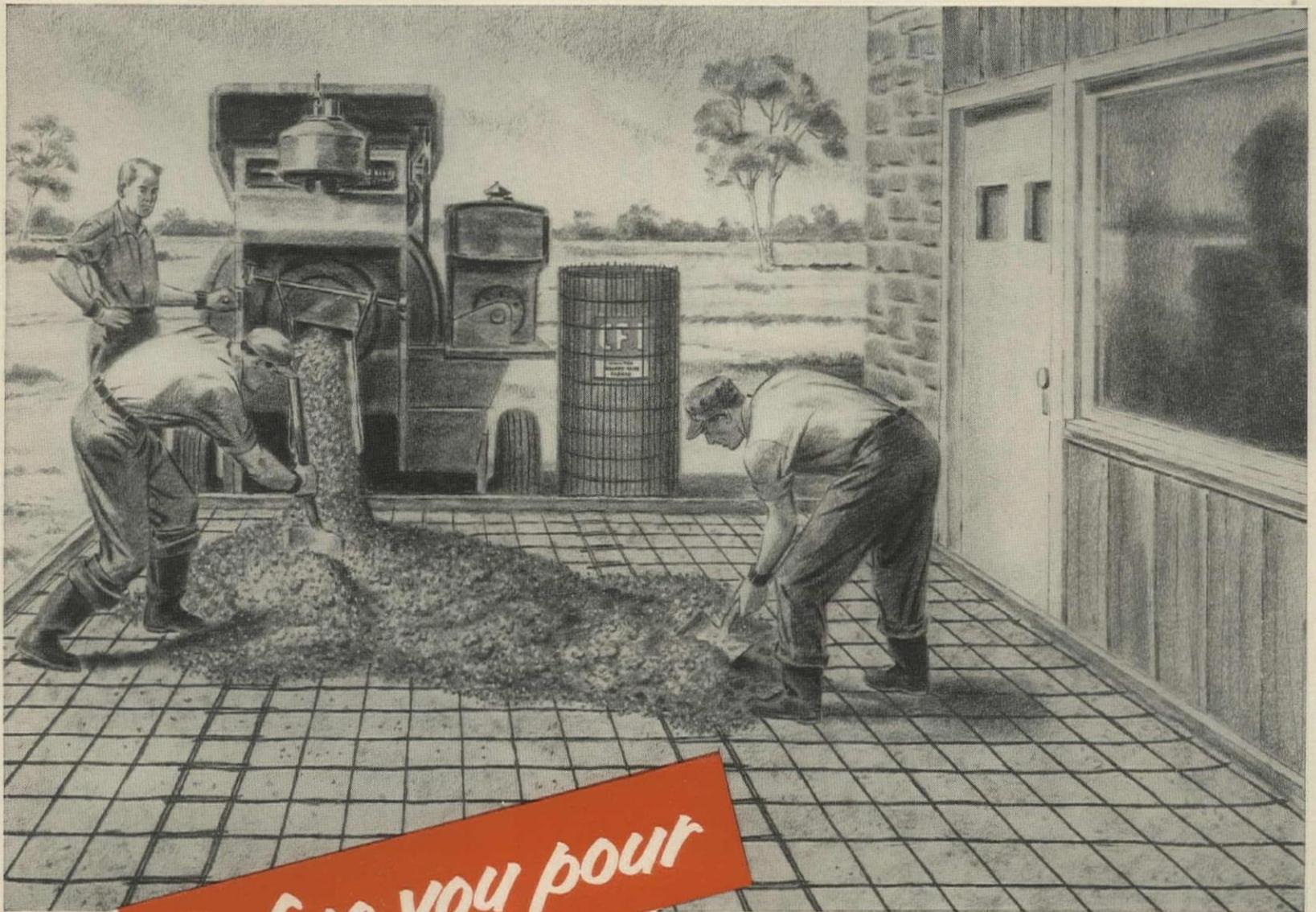
BESTVIEW is available with or without Family Room. 3 bedrooms, lots of storage and closet space. BEST Homes are the only manufactured homes that carry a Quality Guarantee. For more information about how you can make money building the new BEST Topper houses, phone, write or wire George H. Frederking, Vice President and General Manager.



**W.G. BEST HOMES**

Effingham, Illinois

THE BEST COMMUNITIES OF TOMORROW ARE BUILT WITH BEST TODAY!



*Before you pour*

## ... figure fabric in your job

Patios constructed with concrete stand up well under wear and weather, and enhance the home. However, unreinforced concrete constructions may eventually develop unsightly and costly cracks.

Contractors who figure CF&I Clinton Welded Wire Fabric in the job to reinforce concrete and prevent cracking, assure customer satisfaction. The fabric holds the surrounding concrete tightly in place, preventing earth pressure or excessive moisture from entering and expanding cracks. It means

longer life, better looks and absolutely minimum maintenance.

When you contract to put in a concrete patio, driveway or garage floor, figure Clinton Welded Wire Fabric in the job. Explain to the homeowner how this dividend of strength results in longer-lasting concrete. The slight additional cost of the reinforcing welded wire fabric is more than offset by the permanent, attractive concrete surface. And a satisfied customer is a "repeat" customer.

WHEN THEY ASK...

*"is it Reinforced"*

SAY YES... WITH

**CLINTON**  
**WELDED WIRE FABRIC**

THE COLORADO FUEL AND IRON CORPORATION



THE COLORADO FUEL AND IRON CORPORATION—Albuquerque • Amarillo • Billings • Boise • Butte • Denver • El Paso • Ft. Worth • Houston • Kansas City  
Lincoln (Neb.) • Los Angeles • Oakland • Oklahoma City • Phoenix • Portland • Pueblo • Salt Lake City • San Francisco • San Leandro • Seattle • Spokane • Wichita  
WICKWIRE SPENCER STEEL DIVISION—Atlanta • Boston • Buffalo • Chicago • Detroit • New Orleans • New York • Philadelphia  
CF&I OFFICES IN CANADA:—Montreal • Toronto • CANADIAN REPRESENTATIVES AT: Calgary • Edmonton • Vancouver • Winnipeg

5695

# This Long Island Building Team—

200 homes a year

## uses **PREWAY** Bilt-In ranges to add *Sell* to their homes and cut service costs.

Here checking out a house plan are Richard D. Shoenfeld, Abraham Donn and Herman Ringler — land developers and home builders whose most recent work, at Pickwick Oaks and adjoining Pickwick Park, has brought them national prominence.



Today's selective demand for *quality homes with quality features* is nothing new to the developers and builders of Pickwick Oaks and Pickwick Park on Long Island, New York. The "more-for-the-money house" is the only type of home Messrs. Donn, Ringler and Shoenfeld have ever built — a basic formula that has brought them outstanding success — 600 homes sold in three years' time.

And PREWAY Bilt-Ins have been an important selling tool in their presentation of the Pickwick kitchens. They concentrate on PREWAY ranges — both gas and electric — because they add so much beauty to appearance. But even more, say the builders, "PREWAY cooking and baking performance keeps housewives thrilled . . . and our service calls with PREWAY are negligible — 100% less than our experience with others, and we've given the best of them a try."

Here is seasoned experience — "for the record" — that has been proved time and again all over the country. PREWAY offers national distribution and service, and a full line of both gas and electric units. You are invited to call or write for full color specification bulletins and prices.



These are the pace-making, more-value-for-the-money homes of Pickwick developments. They sell for from \$14,000 to \$18,000.



**PREWAY Inc.** 2259 Second Street, N. Wisconsin Rapids, Wis.

Since 1917—Pioneer manufacturer of built-in appliances . . . refrigerator-freezer combinations, gas and electric ovens and surface units, ventilating range hoods, dishwashers.



PREWAY Bilt-Ins are a featured part of Pickwick promotions.

BY WISELY SPECIFYING California redwood for interiors as well as exteriors, the architect ingeniously relates house and garden . . . adds a feeling of spaciousness to the living area.



*All the wonderful warmth of wood is best expressed in redwood.*



CALIFORNIA REDWOOD ASSOCIATION • 576 SACRAMENTO STREET • SAN FRANCISCO 11, CALIFORNIA

**STUDENT  
ARCHITECTS!**

EDISON ELECTRIC INSTITUTE

announces the 1959 annual

**LIGHT  
FOR  
LIVING**

**MEDALLION HOME  
DESIGN COMPETITION  
FOR  
STUDENT ARCHITECTS**

For official entry form, rules,  
and additional information to  
help you win, mail coupon today



**\$18,000**  
in Cash Awards

4 First Awards \$2000 each

16 Honorable Mentions \$400 each

Additional Awards to all winners' schools  
(equal to 25% of winning students' awards)

A Special Certificate to every entrant

National publicity for winners' plans

(Approved by the Committee on Competitions of the American Institute of Architects.)

**Who may enter:**

Any student presently enrolled in an accredited architectural school.

**What to do:**

Design a Light for Living—Medallion home, any style, with special emphasis on lighting and electrical living.

**When to enter:**

Competition closes March 1, 1959.

**How the competition  
will be judged:**

A competent jury will judge the competition on the basis of (1) best practical lighting design, and (2) best architectural design for the region in which it is submitted (Northeast, Southeast, Southwest, Northwest).

Light for Living Competition  
Edison Electric Institute (Room 29)  
750 Third Avenue, New York 17, N. Y.

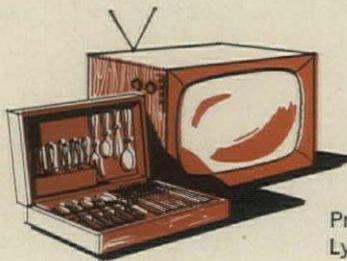
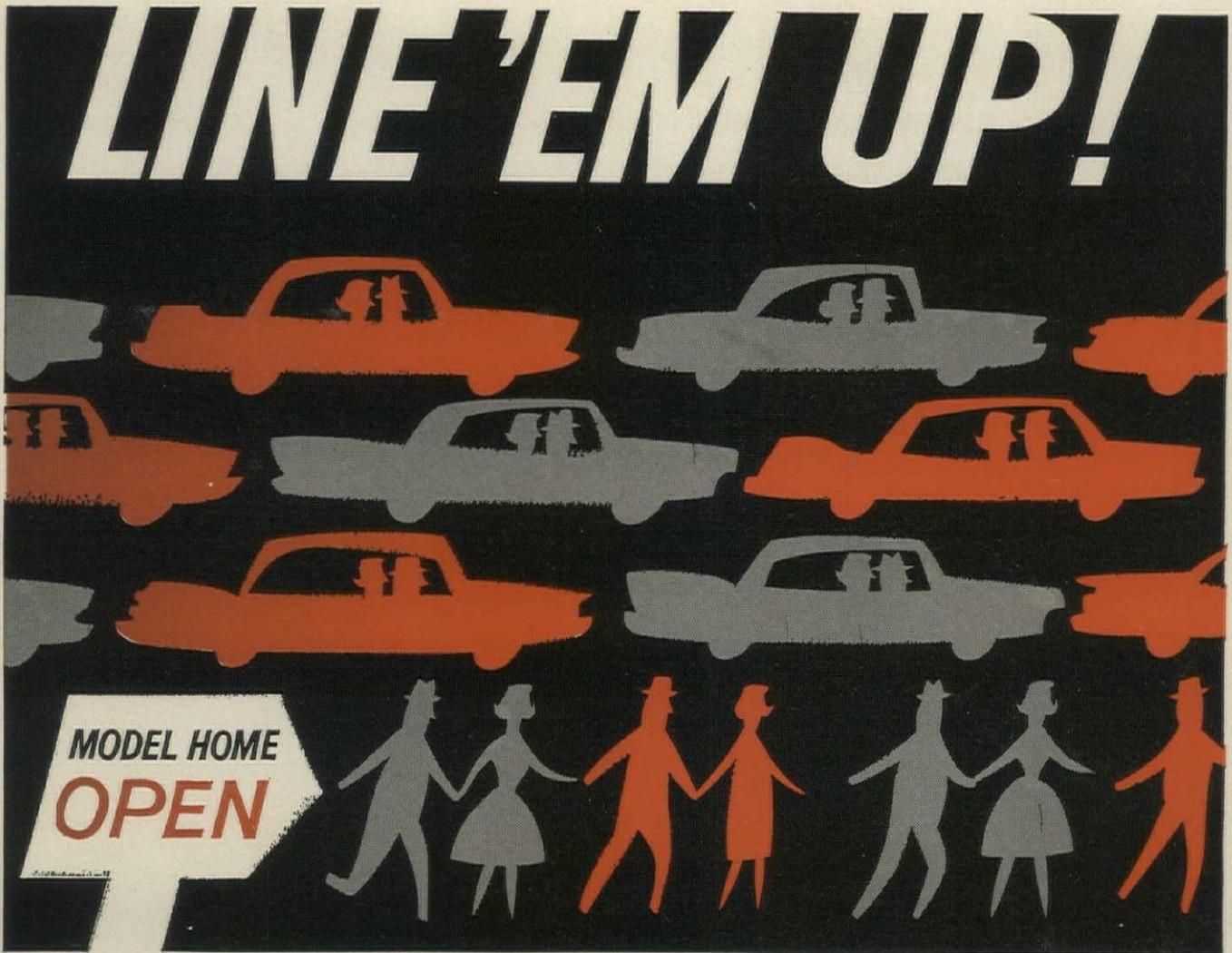
Gentlemen:

Please send me, immediately, entry form and reference materials for the 1959 annual Light for Living—Medallion Home Design Competition for Student Architects.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

NAME OF SCHOOL \_\_\_\_\_



## New Lyoncraft Traffic Builder Promotion pulls more sales into your model home!

Prizes and surprises in the big  
Lyoncraft promotion. Ask about it!

Cash in on this terrific traffic-boosting promotion! It's the Traffic Builder Promotion by Lyoncraft—makers of the exclusive Disposo-Well\* Sink, acclaimed in leading magazines, talked about in the trade! And Lyoncraft supplies you with everything you need to start the promotion rolling, to publicize it and to entice those prospects to come a-running. Do more houses get sold? You bet you sell more houses! Get in on the promotion right away! Just fill out the coupon below. Better still, call your Lyoncraft salesman right now to learn about the Traffic Builder Promotion!

\*T.M. AND PATENTS APPLIED FOR



DISPOSO-WELL . . . the only sink designed specially for garbage disposers! Another reason that housewives will be interested in buying the quality houses you build.

World's largest fabricator  
of Chrome-nickel stainless

**LYON STAINLESS PRODUCTS  
DIVISION OF LYON INCORPORATED**

13881 W. Chicago Boulevard, Detroit 28, Michigan



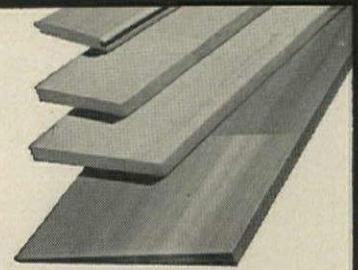
AUTOMOBILE WHEEL COVERS • PRESTIGE TABLEWARE • KITCHEN SINKS • HOUSEWARES

LYON STAINLESS PRODUCTS DIVISION  
Lyon Incorporated, 13881 W. Chicago Boulevard  
Detroit 28, Michigan

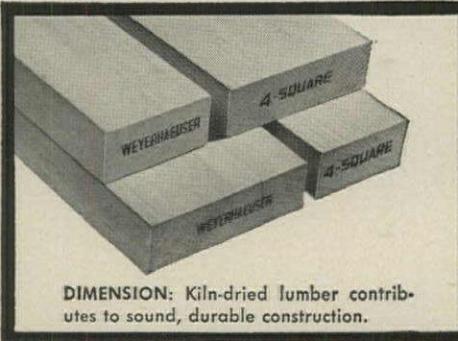
Tell me more about the Lyoncraft Traffic Builder  
Promotion.

NAME \_\_\_\_\_  
COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

**Many  
Weyerhaeuser 4-Square  
Lumber and Building Products...**



**NU-LOC:** A made-to-measure lumber . . . cuts labor costs, speeds construction.



**DIMENSION:** Kiln-dried lumber contributes to sound, durable construction.

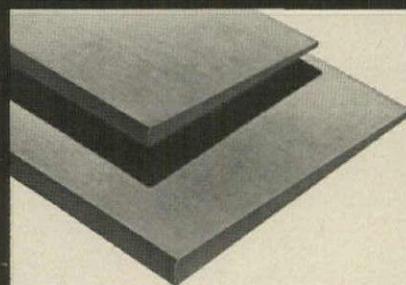


**PANELINGS:** Beautiful western woods available in a choice of patterns.

**to help you  
deliver greater  
building values  
economically**



**BOARDS:** Seasoned before surfacing to size. Available in a wide range of species and grades.



**SIDINGS:** Available in popular patterns for beautiful exterior stylings . . . in a broad selection of grades and species.



**END-MATCHED LUMBER:** Items include wall and roof sheathing, sub-flooring, finish flooring, drop siding and ceiling.

Today's broad line of Weyerhaeuser 4-Square Lumber and Building Products is helping many builders increase their profits. The Weyerhaeuser 4-Square trademark on lumber is well known to your customers because it has been consistently advertised nationally as a truly economical building material.

As the Weyerhaeuser 4-Square line of quality trademarked lumber products grows, so does the opportunity for related quality selling by builders. The broad line of identically trademarked Weyerhaeuser 4-Square products helps you gain complete owner acceptance. People are quickly attracted to homes built with nationally advertised brand name products.

With lumber trademarked Weyerhaeuser 4-Square, you are assured of lumber that is seasoned, precision-manufactured, accurately graded and carefully handled and shipped. The complete line of Weyerhaeuser 4-Square products in a wide choice of species and grades, includes boards and dimension, panelings, sidings, floorings, mouldings, steppings, plywoods, finish and trim, plus many specialty products such as Nu-Loc lumber and Loc-Wall paneling.

Consult your Weyerhaeuser 4-Square Lumber Dealer on your next project.

**Weyerhaeuser Sales Company**

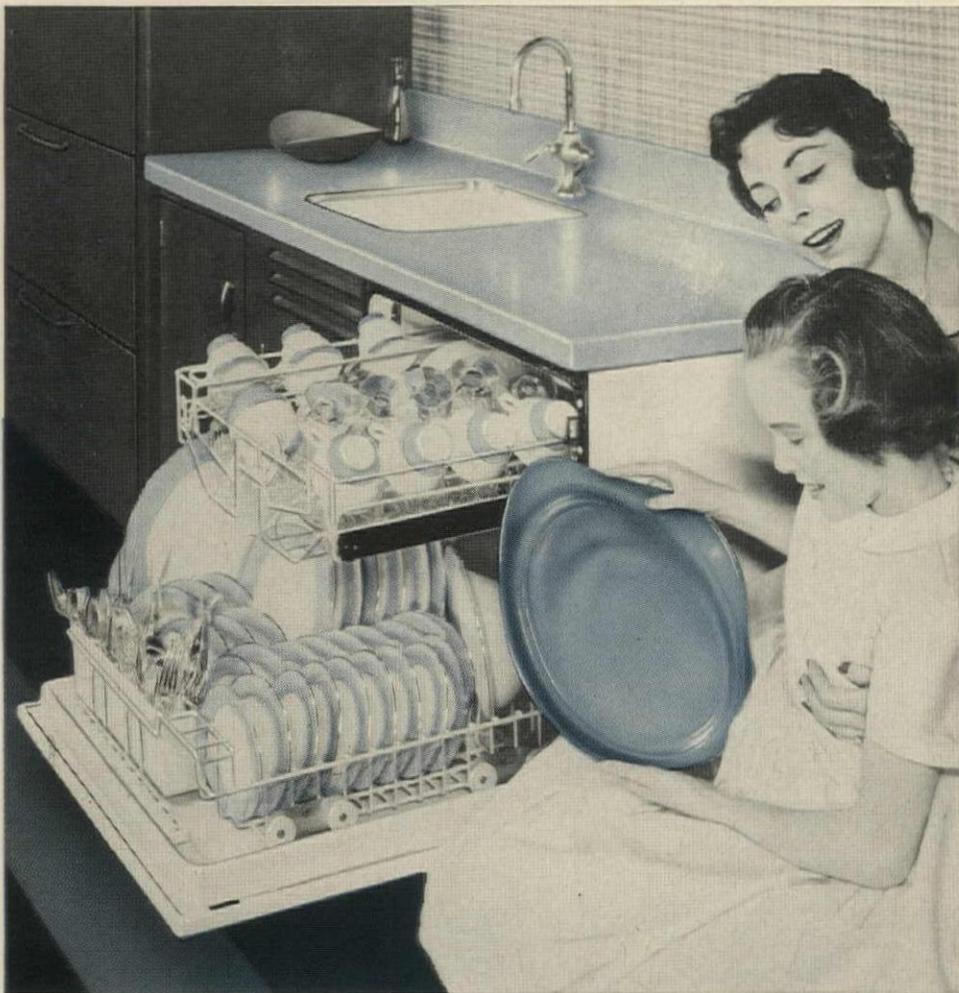
FIRST NATIONAL BANK BUILDING • ST. PAUL 1, MINNESOTA

**Weyerhaeuser** **4-SQUARE**<sup>®</sup>  
LUMBER AND BUILDING PRODUCTS

# DESIGNED WITH BUILDER SALES IN MIND

## ADVANCED FRIGIDAIRE DISHWASHERS

Install and test in as little as 29 min.



Custom Imperial Under-Counter Model DW-IUZ

### • How About This for Built-In Customer Satisfaction?

*Easiest Front loading!* Spacious vinyl-covered racks are scientifically designed for greatest loading flexibility. Both racks glide out smoothly to put every dish at user's fingertips. Easy-to-follow loading chart is enameled inside Custom Imperial full-width counter-balanced door.

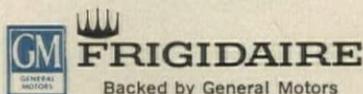
*Customer-Pleasing Capacity!* New Frigidaire 24" Dishwashers hold 12 place-settings (NEMA Standards) plus 15 additional pieces... 48% more than comparable models checked.

*Every Dish Comes Sparkle-Clean!* Frigidaire water-driven Turbo-Spray Tube spins safely between

the racks... soaks every dish with thousands of hot wash-and-rinse sprays. In Custom Imperial models each piece is double-scrubbed, triple-rinsed—including new Spots-Away Rinse.

Choice of Custom Imperial or De Luxe Under-Counter models in any Kitchen Rainbow color (Charcoal Gray, Mayfair Pink, Sunny Yellow, Turquoise, White, Satin Chrome or Aztec Copper). Custom Imperial Free-Standing, Mobile and 48" Sink-Combination models also available. Frigidaire Division, General Motors Corporation, Dayton 1, Ohio.

You and your home-buyer benefit when you build-in a Frigidaire Dishwasher that



# holds more, washes better, installs fast!

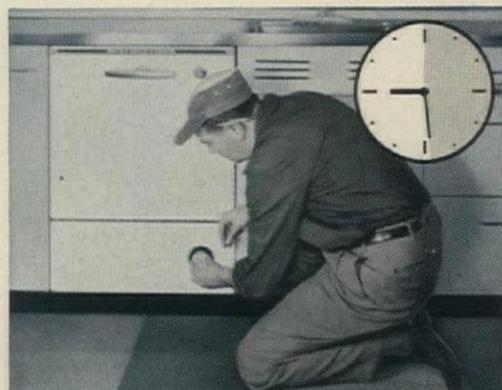
In actual time-tests, new, uncrated Under-Counter Dishwashers were completely installed, manually cycled and tested as quickly as this:



**9:00** In a typical base-cabinet opening (24" W x 34½" H x 24" D) with plumbing and wiring roughed-in; slide unit into position.



**9:17** Connect utilities. Easy-to-reach plumbing connections are made in front on left; wiring on right.



**9:29** Check for proper operation, attach bottom panels and Dishwasher is built in! (Left and right side panels available in matching colors for end-of-counter installations.)

*A problem that grows bigger every year...*

## WHAT TO DO ABOUT WATER?

### “How have you been getting water to your building projects?”

That was the question asked of 2500 builders in a recent country-wide survey. Their answers reveal it's a serious problem and growing more so. Like it or not, more and more builders are finding themselves in the water business.

Some highlights from the builder survey:

- Three out of four developers had to provide their own water to supply recent projects.
- Fully one-fourth have been forced to take over the whole job—drill their own wells or tap a nearby lake—in effect, provide their own water utilities.
- To the question “Do you expect greater problems, fewer problems, or no change?”, the largest number said “Greater.” In the next few years, the answers indicated, one builder in three will have the entire job to do.

Happily, the survey turned up two bright spots: First, developers reported getting a great deal of help from consulting engineers and water utility operators. These men, specialists in water supply, are well aware of the builder's problem. They know how to smooth his path, how to free his hands for other things.

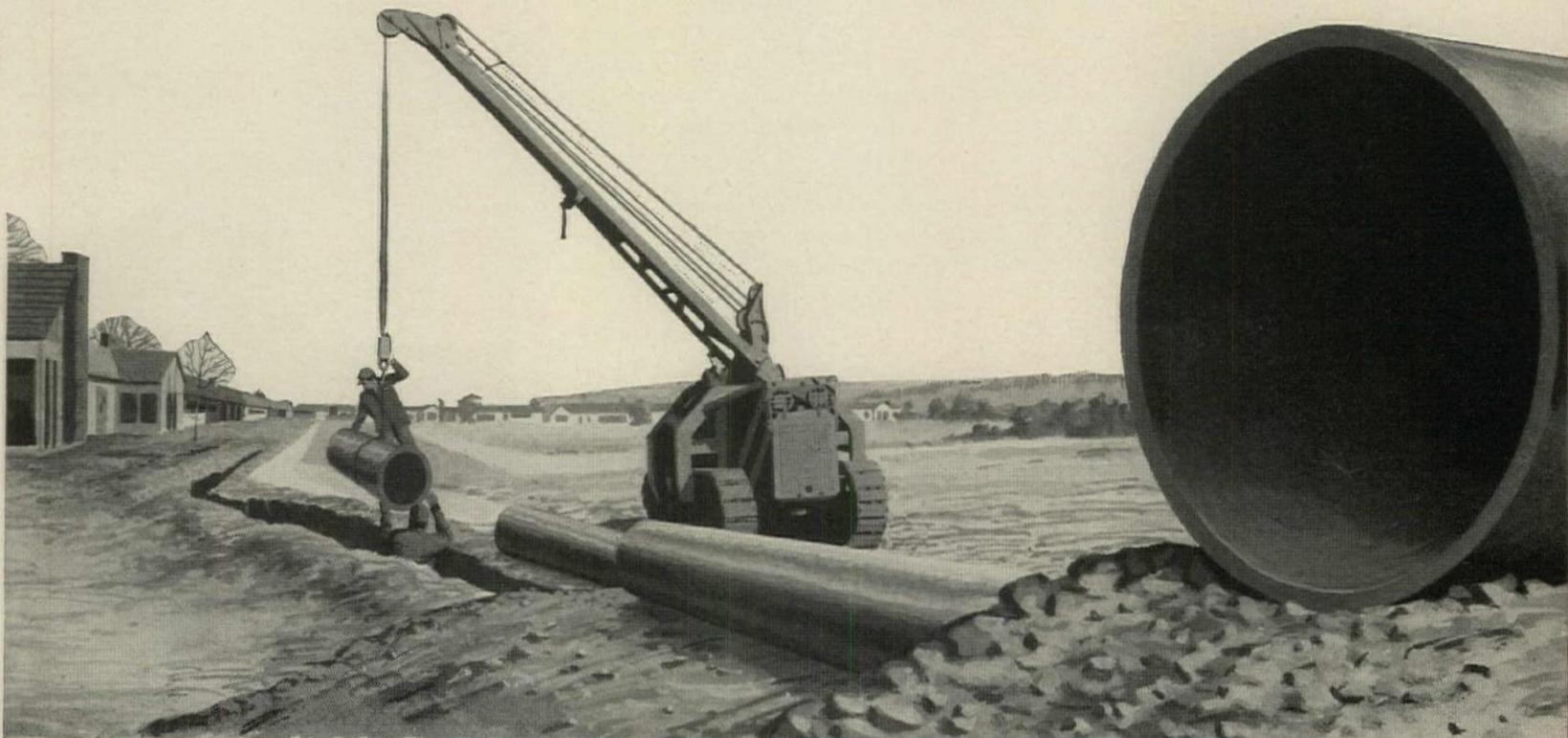
The other note of cheer: builders found that, once their water problem was solved, it *stayed* solved... they could safely forget it. Reason: the engineers and utility men steered them towards high-quality, long-lasting materials. For example, most recommended dependable cast iron pipe throughout the water system.

If you yourself are wondering what to do about water, you'll want to read the experiences of these other builders. Their problems. How they solved them. What it cost. Look for their stories, in forthcoming issues of *House & Home*, brought to you by the makers of America's greatest water carrier...

## CAST IRON PIPE

Send for your free copy of the survey results, including interesting comments on the water problem by large-project developers.

Write to Cast Iron Pipe Research Association, Thos. F. Wolfe, Managing Director, 3440 Prudential Plaza, Chicago 1, Ill.





# Realtors give Oak Floors the highest rating on sales appeal

88.8% SAY OAK FLOORS "MOST ACCEPTABLE" IN NATIONWIDE SURVEY

Realtors... the people who actually sell homes... are probably better qualified than anyone to pinpoint those features prospective home buyers want most. In the matter of floor choices, realtors give an overwhelming vote for Oak. In a new nationwide survey realtors were asked to rate the degree of acceptability to prospective home buyers of various floors and floor coverings used in living, dining and bedrooms. Strip Oak Floor was

voted "most acceptable" by 88.8% of the 844 realtors surveyed. This was more than *triple* the vote given the next highest-rated flooring. Here's convincing evidence of the sales stimulus Oak Flooring can give your new homes. When you use Oak Floors you can count on buyer acceptance without question... and benefit from the plus value of Oak's recognition as a mark of quality construction in any home.

## Oak Floors assure home buyers top resale value

Today, one out of five Americans moves every year. This high mobility rate has made home buyers more conscious of resale values. Floors, quite naturally, are an important consideration because they are subject to so much constant wear. Oak, better than any other flooring material, retains its beauty and resists signs of aging and use. The warm, rich grain and coloring of Oak Floors never fade or go out of style; never pose a problem of decorating harmony. This combination of outstanding characteristics helps assure top resale value for any home.



American families are on the move



NATIONAL OAK FLOORING MANUFACTURERS' ASSOCIATION  
814 Sterick Building, Memphis 3, Tenn.

## The most popular,



**Here's why home buyers prefer Oak Floors**

Lifetime durability

Distinctive grain and color

Resistance to damage

Easy to keep clean

High insulating quality

Natural wood beauty

Comfortable resilience

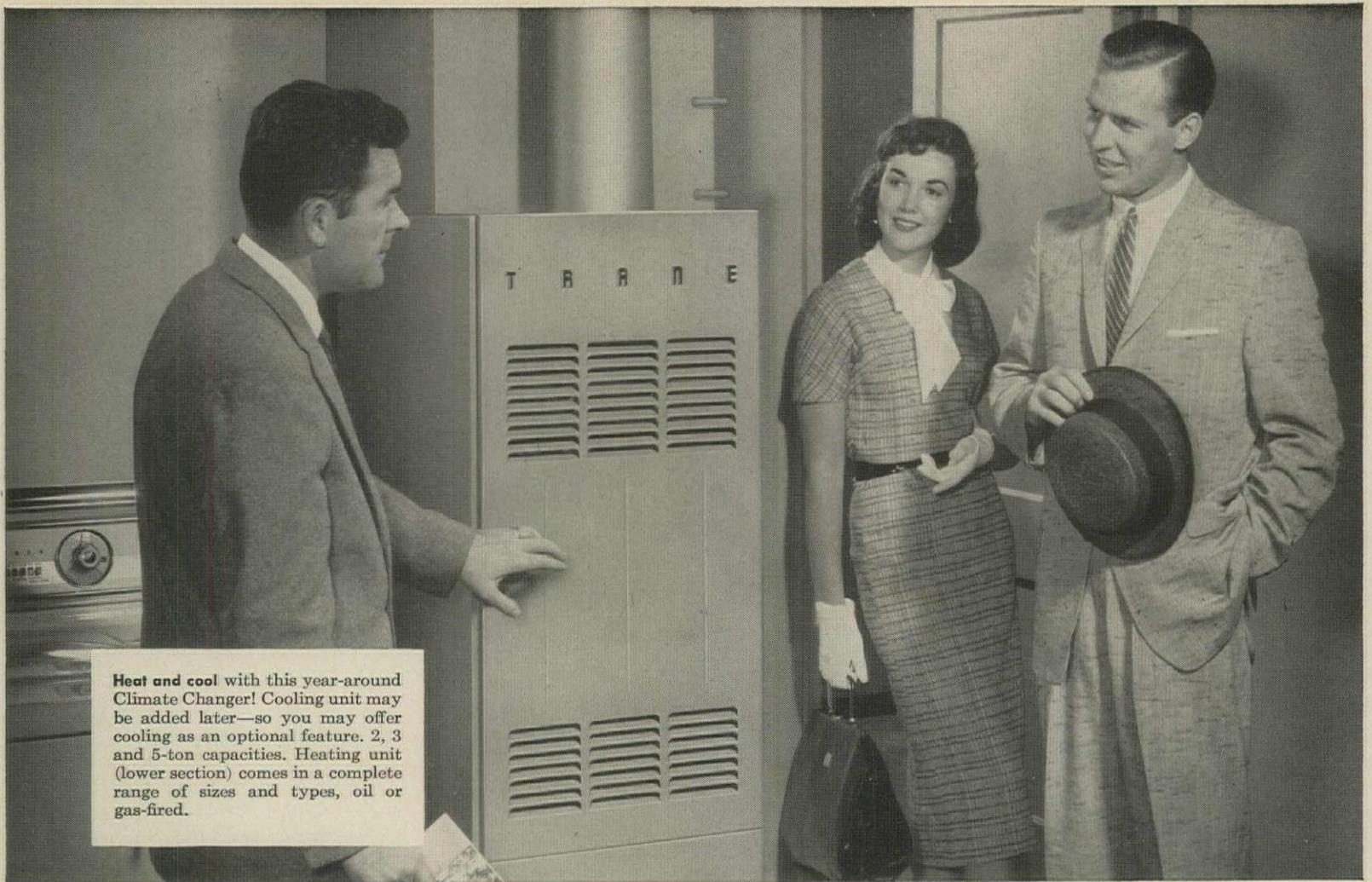
Non-denting surface

Warm and healthful

Low cost

**OAK  
FLOORS**

**most practical of all floors**



Heat and cool with this year-around Climate Changer! Cooling unit may be added later—so you may offer cooling as an optional feature. 2, 3 and 5-ton capacities. Heating unit (lower section) comes in a complete range of sizes and types, oil or gas-fired.

## Now! 3 ways to provide cooling and still keep building costs down!

*New Trane Climate Changers heat, cool—or both—add salability to your homes at minimum extra cost*

Here are *three ways* you can offer complete air conditioning in the homes you build—and still keep your prices competitive. New TRANE Climate Changer units give you your choice of any type of heating—with matched cooling systems. And this is *quality* air conditioning—manufactured by a leader in big building systems—backed by a national sales and service organization.

- 1 HEAT AND COOL** any type of home with a TRANE combination Climate Changer. Heating unit may be gas or oil-fired warm air type. Matched cooling unit fits on the furnace. This way, all ductwork and other equipment is installed at the same time, cutting your installation costs.
- 2 OFFER OPTIONAL COOLING** by installing just the heating unit now—letting the buyer decide on cooling, now or later. TRANE equipment is *matched*—making it easy to add the cooling units.
- 3 WITH HOT WATER HEAT**, install a Climate Changer fan-coil unit. Fits into utility room, attic, basement or behind partition.

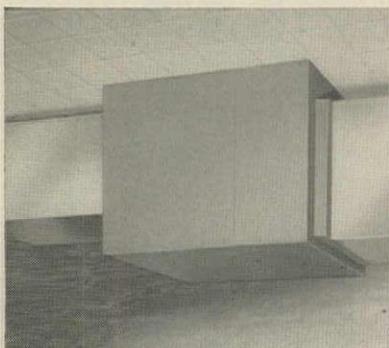
Every TRANE installation is handled by a carefully selected engineering contractor. Equipment is installed right—the first time! And the name TRANE on your heating-cooling system means full-capacity . . . trouble-free operation. It marks yours as a quality home. For facts on Climate Changers, call your nearby TRANE Sales Office. Or write TRANE, La Crosse, Wisconsin.

**For any air condition, turn to**

# TRANE

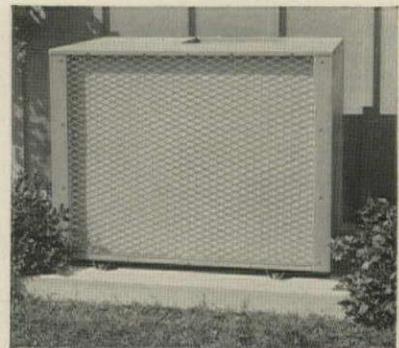
MANUFACTURING ENGINEERS OF AIR CONDITIONING, HEATING, VENTILATING AND HEAT TRANSFER EQUIPMENT

THE TRANE COMPANY, LA CROSSE, WIS. • SCRANTON MFG. DIV., SCRANTON, PA. CLARKSVILLE MFG. DIV., CLARKSVILLE, TENN. • TRANE COMPANY OF CANADA, LIMITED, TORONTO 97 U. S. AND 19 CANADIAN OFFICES



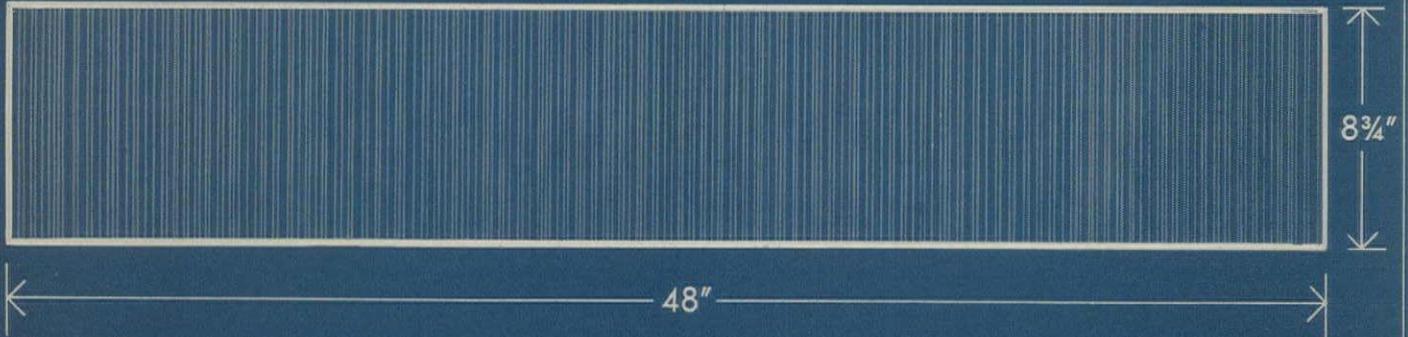
◀ **For cooling with any type of heat**, install this Climate Changer fan-coil unit. Fits into just 5 square feet in attic, utility room, basement or garage. Ideal for use with TRANE Baseboard and other types of wet heating. Sizes to cool any home or small commercial building.

▶ **Needs no water!** Compressor and condenser unit for TRANE Climate Changers described above is air cooled . . . eliminates water supply and disposal problems. Installed outside the home or building. Features high capacity, quiet operation and small dimensions.



Requires no painting, either prime or finish coat . . .  
a finished sidewall job right as it comes from the bundle.

Autoclaved to prevent shrinking and warping  
. . . Duroc® finish seals colors in, dirt out.



Long, 48" design means faster appli-  
cation . . . only 39 pieces to the square.

AVAILABLE IN  
*Trend Colors*

ANOTHER  
**RUBEROID**  
DESIGN...

FOR HOMEBUILDING ECONOMY!

## Autoclaved® **CLAPBOARD** siding

Here is an asbestos sidewall designed by Ruberoid to provide a custom look to any new house — *economically*. Autoclaved Clapboard sidewalls, in the exclusive new Trend Colors, mean long-lasting beauty for your buyers and extra building economy for you.

Autoclaved Clapboard Siding is another original Ruberoid product *designed* to improve new homes

and cut building costs. It's part of a line that has been serving builders better since 1886. On your next house or project, check with your Ruberoid dealer.

Learn how you can build a better looking home *and* cut your costs with quality Ruberoid building products. For information on Autoclaved Clapboard, write: The RUBEROID Co.

**RUBEROID**®

500 FIFTH AVENUE, NEW YORK 36, N. Y.



**designed for each other!**

# ONLY EDWARDS

has everything you need for a  
**low cost, zone control hydronic  
 heating system**

Everything you need for efficient, low cost zone control heating—heating unit, zone control valves, and baseboard elements—are now available from **one** dependable source: Edwards Engineering!

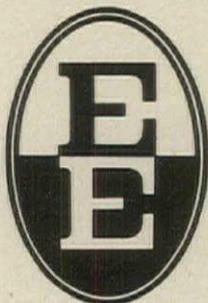
Only Edwards offers a completely integrated, zoned heating system, with components that have been designed to go together for the life of the system. You shop just once for everything, with one manufacturer guaranteeing everything. Your initial cost is lower—the Edwards zone control system is the most economical on the market. Your installation costs are lower—two men do the job in one day! That means higher profits for you and the world's finest zone control baseboard heating system for your customers. That's an unbeatable combination for selling homes.

**EDWARDS ZONE-A-MATIC HEATING UNIT** is guaranteed for 20 years, handles from 1 to 6 **pre-wired**

motorized zone control valves. All-copper tankless hot water heating coil; simple to install; complies with ASME code; completely assembled and pre-wired; compact and good-looking.

**MOTORIZED ZONE CONTROL VALVES** feature completely enclosed, hermetically sealed mercury switches; completely silent with positive shut-off valve. No thermal leakage when closed. Uses standard 3-wire low-voltage thermostat; electric power drawn only during opening and closing; excellent for hot water or steam systems.

**BOX-FIN BASEBOARD ELEMENTS** are factory cut to **any desired length**, making installation simple, economical, and eliminating ugly joints and splicers. No metal to metal contact; available in white, chrome, copper-tone and wood-grain.



*Write today for the full-color story...*

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*Member of BHC: Better Heating-Cooling Council*



## Another great selling season for U. S. Steel Homes Dealers

*U. S. Steel Homes exciting Promotion  
"Rose-Covered" bursts into full bloom April 26*

With Promotion "Rose-Covered," United States Steel Homes once again helps its dealers to sell as they never have before! This great nationwide promotion features the new Steelstyle line of homes, with an exciting array of improvements that your customers won't be able to resist!

*Creating greater consumer demand* is the goal of Promotion "Rose-Covered" . . . *nationally*, to add prestige and introduce the Steelstyle line to your customers . . . *locally*, to bring your customers directly to you!

*National consumer advertising.* Early this spring, USS Homes will bring the Steelstyle line to your customers' attention, through the pages of *Living for Young Homemakers*. This four-color ad will be seen by 3 million readers—young homemakers who want to buy *now!*

*Your own power-packed local promotion!* USS Homes has assembled into a hard-selling, idea-packed promotion kit, all you need to keep buyers coming in and sales climbing. Look at the contents:

*Newspaper advertising.* A handy guide book includes illustrations of the new Steelstyle homes and layouts of suggested ads, plus photographs and copy ideas which you can use.

*Radio and TV scripts.* Scripts for both radio and television commercials have been prepared for your use in local advertising.

*Site merchandising kit.* Materials to bring traffic to your site are now available . . . a large, colorful site sign, feature cards for use in your model home, and directional signs . . . plus a wealth of additional promotion aids designed to help you sell.

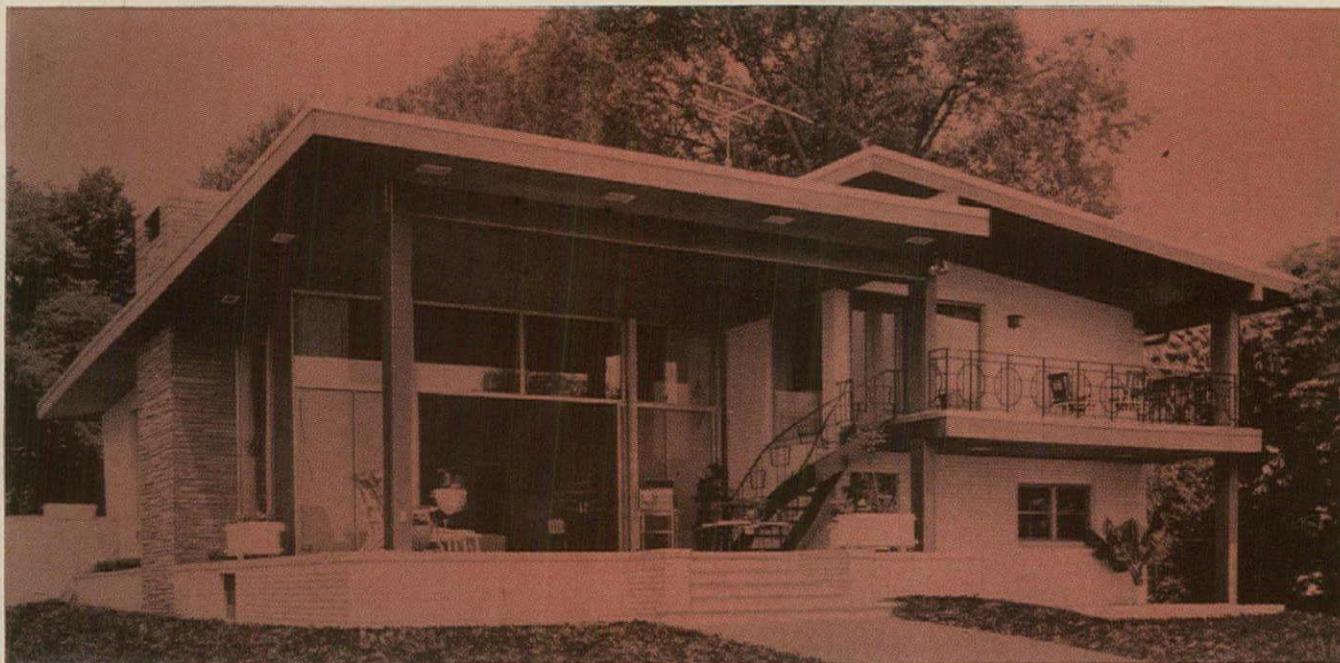
*Building help, too!* Our representatives are available to help you set up your successful sales promotion. They will also help with your planning problems.

*Profit now! Tie-in with Promotion "Rose-Covered."* For complete details, write to Sales Promotion Dept., U.S.S. Homes Division, United States Steel Corporation, 525 William Penn Place, Pittsburgh 30, Pa.

United States Steel Homes  
Division of

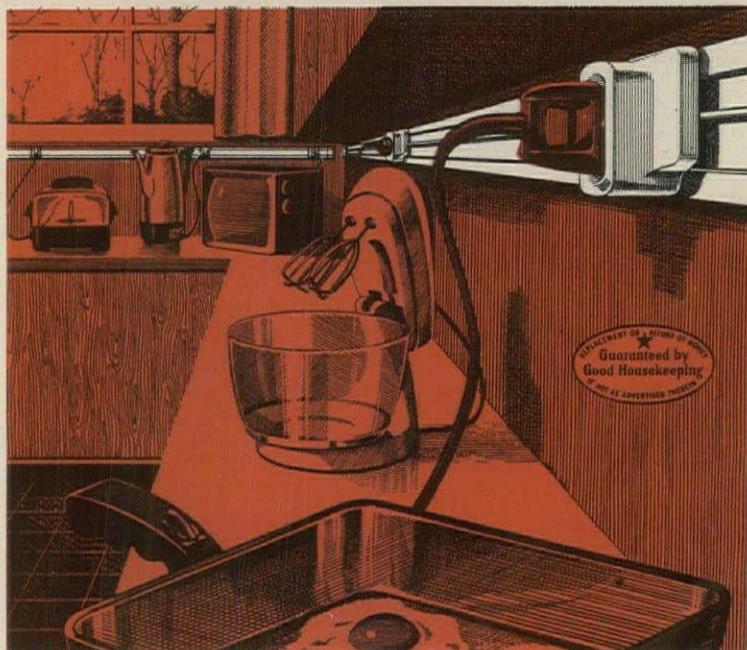


United States Steel



House of Charm, Grosse Pte., Mich.

Added  
convenience . . .  
added buyer  
appeal  
for your homes . . .



# Electrostrip

PATENTED ®

*It costs you no more* to give home buyers the very latest in electrical wiring . . . Electrostrip, the *movable* outlet system. And what a sales maker!

*Hundreds of leading builders* are giving their homes bonus sales appeal with Electrostrip. It installs quickly and easily . . . can be painted to match walls and woodwork . . . and completely eliminates the headaches of fixed outlet planning, because it's *every inch an outlet!*

*Home buyers love* the extra convenience of Electrostrip . . . in the kitchen, living room, bedrooms, all through the house. No more fixed outlets to dictate furniture and appliance placement! Outlet receptacles can be spotted

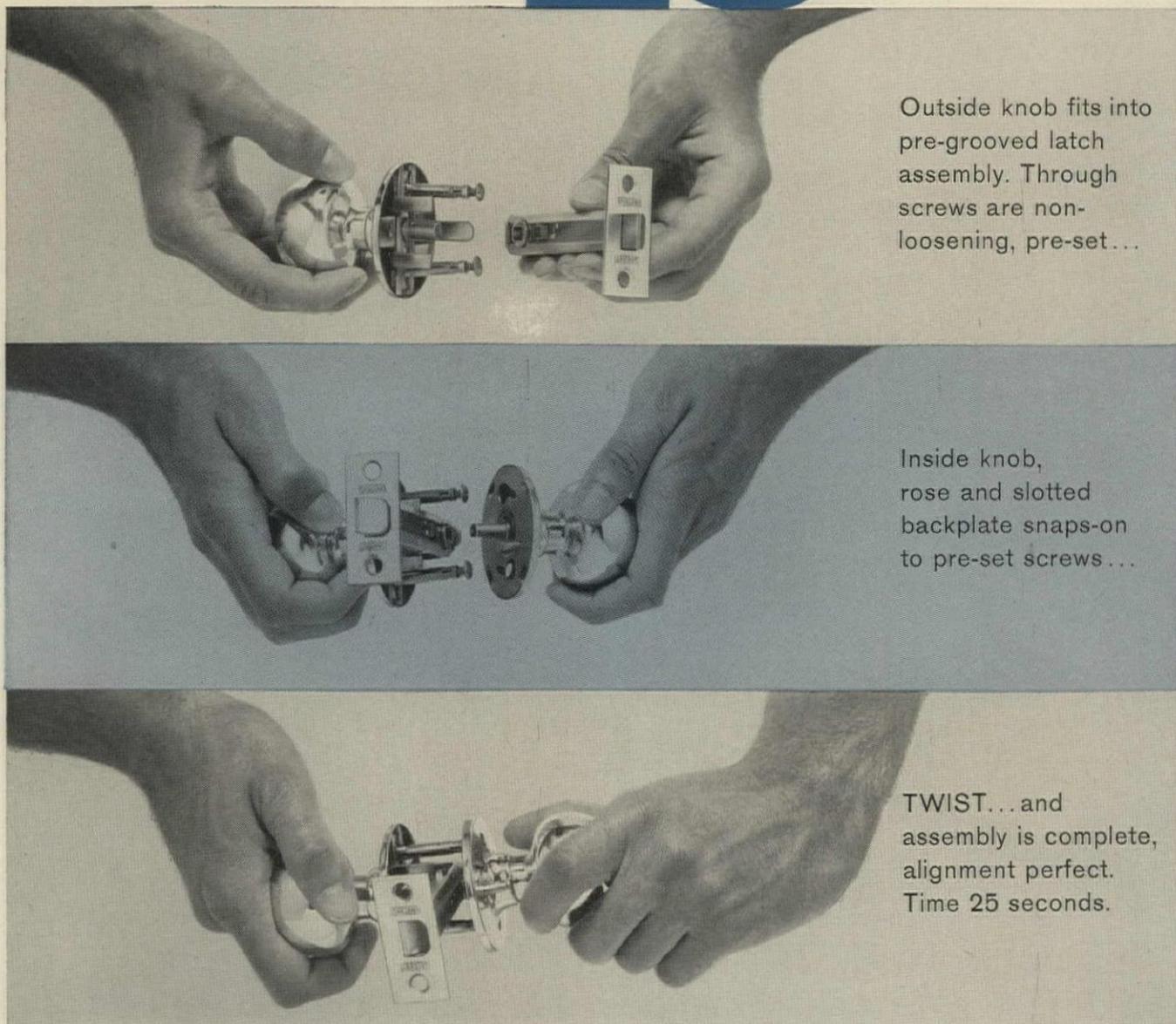
anywhere they're needed. And unsightly, hazardous extension cords and "octopus" outlets become a thing of the past.

Install Electrostrip in your next model home and watch the enthusiasm it generates. Electrostrip is listed by U/L and carries the Good Housekeeping Seal. © BEPCO

**BULLDOG** 

Bulldog Electric Products Company, Division of I-T-E Circuit Breaker Company, Detroit 32, Michigan. *Bulldog Export Division:* 13 East 40th Street, New York 16, New York. *In Canada:* Bulldog Electric Products Co. (Canada) Ltd., 80 Clayson Road, Toronto 15, Ontario.

# IMPROVED ALIGNALOCK LATCHSET assembles in **25** seconds!



Outside knob fits into pre-grooved latch assembly. Through screws are non-loosening, pre-set...

Inside knob, rose and slotted backplate snaps-on to pre-set screws...

TWIST... and assembly is complete, alignment perfect. Time 25 seconds.

What could be easier...simpler...faster?

The improved AlignaLock assembly will save you time and dollars in lock installation. Fewer parts—just 3 factory-assembled units—make installation quick, alignment foolproof.

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# SARGENT

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Designed and engineered for new and remodeled apartments, the Dwyer Kitchen doesn't *take space*, it actually *makes space*! Easy and economical to install, it provides complete, convenient kitchen facilities —yet allows more spacious living area. There's a big refrigerator, featuring roll-out shelves and large freezer; deep sink; plenty of storage; and choice of fast-heat electric range or gas range with automatic lighting. The entire unit is sealed in Lifetime porcelain set off against chrome anodized aluminum trim—your assurance of permanent beauty and durability. Models from 39 to 69 inches in length, for standard or recess installation.



## COMPACT KITCHENS

by **D**wyer

*For 30 years, America's leading manufacturer of compact kitchens.*

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 Gentlemen: Please send me complete information on Dwyer Kitchens.

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Also send information on Dwyer Snack Bars for the home recreation room and office.

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**GEORGIA-PACIFIC  
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REDWOOD SIDING**

**PLAN NOW! CUT COSTS ON  
SPRING BUILDING!**

Georgia-Pacific's immersion-sealing process coats bevel siding both front and back. Paint or stain flows on faster, covers better, lasts longer. No back-priming is needed, saves one front coat of paint! New sealer also prevents water spotting, superficial black stains, inhibits mold.



For specification data, refer to Sweet's  
Light Construction File, Sect. 3A

**Weatherproof Packaging**

New plastic-coated, heat-sealed package protects this siding at job site. You can take delivery early, be ready to work in good weather. New package cuts handling time, prevents damage and marring loss.

Georgia-Pacific, Dept. HH259, Equitable Bldg., Portland, Ore.  
Please send me complete information and nearest source  
for new Factory-Sealed Redwood Bevel Siding.

Name \_\_\_\_\_

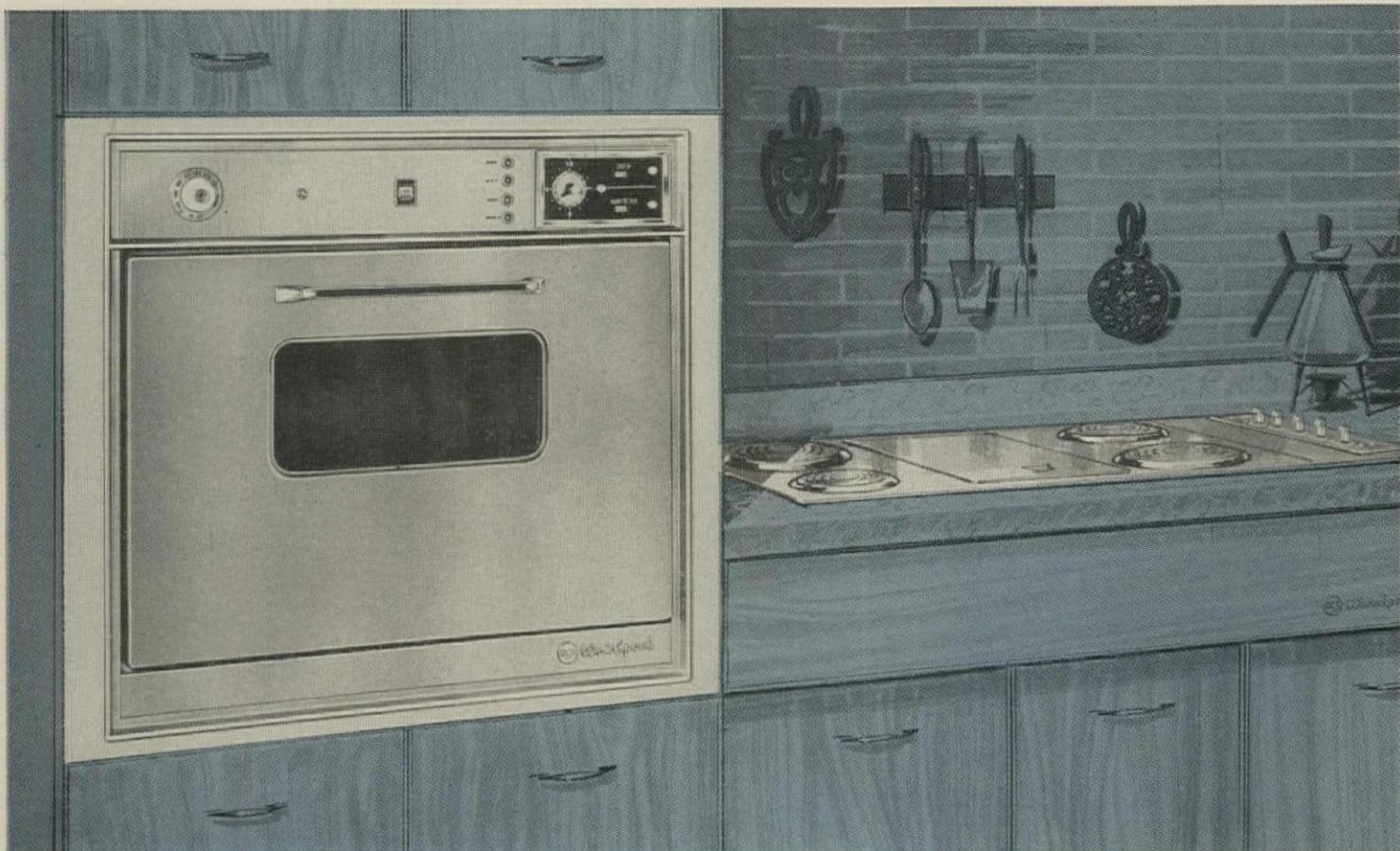
Firm \_\_\_\_\_

Address \_\_\_\_\_

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

NOW...IN THE RCA WHIRLPOOL COMPLETE KITCHENS...

## newest built-ins add extra



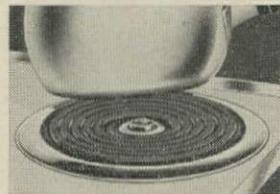
### NEW, big-capacity 24" oven

Rotisserie, barbecuer and Meat Probe offer more versatile cooking. And, there are "2-Set" automatic clock timer, oven window and light, Balanced-Heat baking, with Roto-Baste† and Ka-Bob† optional. RCA WHIRLPOOL ovens are available in 17" size also.



### NEW, automatic, faster cooking

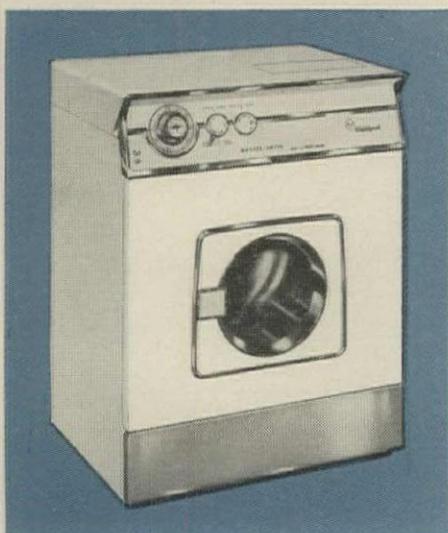
Thermostatic control and Jetube units give women new cooking efficiency and such speed! There are also infinite-heat controls, signal lights, Dispos-A-Bowl†. The RCA WHIRLPOOL complete built-in line includes a built-in griddle and 2-unit tops.



## everything for modern kitchens

### NEW, water-saving washing and drying

Filter-Stream† washing and Tempered-Heat drying get clothes sparkling clean and save up to 15,600 gallons of water a year over other makes in washing and drying a full load. Has built-in heater, cold-water wash and rinse, 5-temp heat selection.

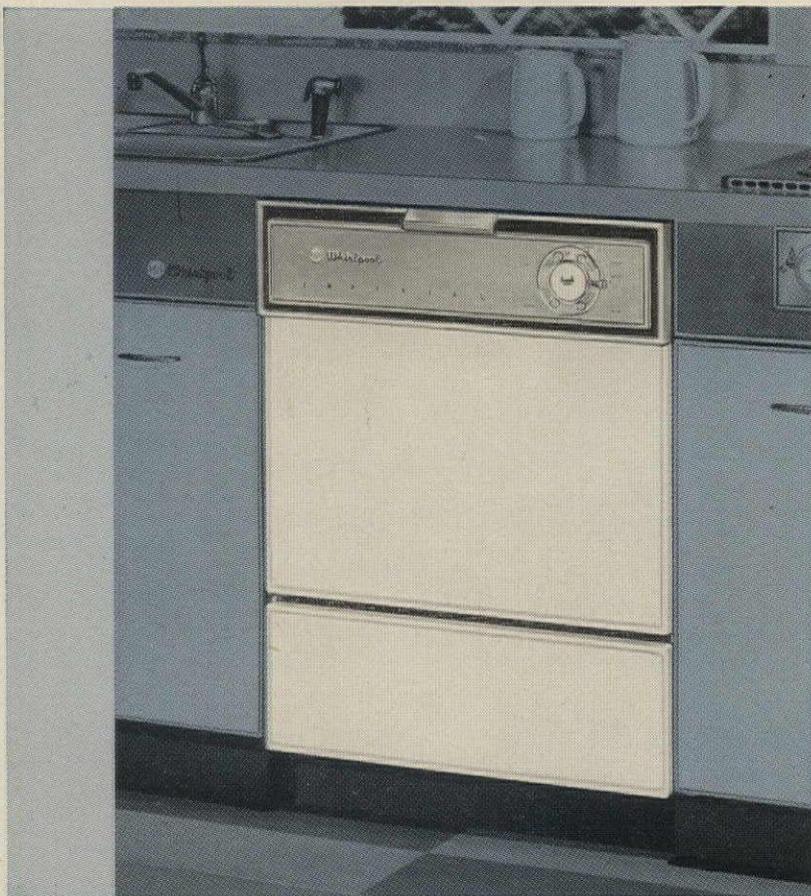


### NEW, efficient waste disposers

Batch-feed or continuous-feed models to suit your choice of installation. Both are especially designed to get rid of all food wastes in seconds... including egg shells, corn cobs, fruit pits, bones. Rubber mounted for quiet operation.

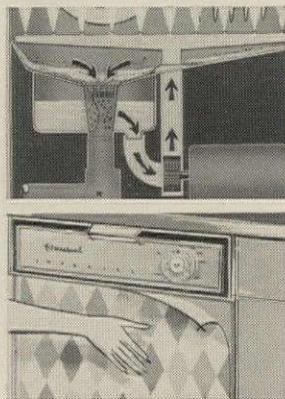


# "woman appeal" to your homes!



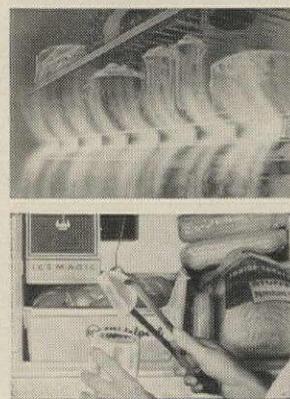
## NEW, 2-cycle, cleaner dishwashing

**Filter-Stream†** action and **Select-A-Door†** fronts . . . an exclusive action that whirls away all stains . . . changeable door panels that match any decor. Other features: Ready-Rinse, plate warming, Dial-A-Cycle† control, random loading, giant capacity.



## NEW, flavor-saving refrigeration

**Jet-Cold†** Shelf and automatic ice maker capture women's hearts! Food chills super fast . . . and ice cubes automatically replace themselves. And, look at exclusive Air Purifying System, magnetic door seal, automatic defrosting *plus* flat-back design.



with one brand name  **Whirlpool**

... available in decorator colors to fit any decor

From this complete line of RCA WHIRLPOOL appliances you can choose either built-in or free-standing units. Each is engineered for simple, fast and economical installation. Each is available from one supplier with undivided responsibility . . . a supplier ready to give you expert planning assistance and fast delivery on today's finest quality products.

Just as important, you'll have appliances with one brand name nationally-recognized for quality performance . . . wanted for dependable service, and bought with complete confidence . . . RCA WHIRLPOOL. Mail this coupon today for complete information.

Contract Sales Division,  
Whirlpool Corporation, St. Joseph, Michigan

Please send me complete information on the new  
RCA WHIRLPOOL appliances.

Name \_\_\_\_\_ Title \_\_\_\_\_

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

Firm Address \_\_\_\_\_

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

HH-2

†Tmks.

RCA WHIRLPOOL . . . America's first family of home appliances      Products of WHIRLPOOL CORPORATION St. Joseph, Michigan

**For the package deal at a package price...it's RCA WHIRLPOOL**

ANNOUNCING NEW

# Bolta-Floor<sup>®</sup> Cirrus

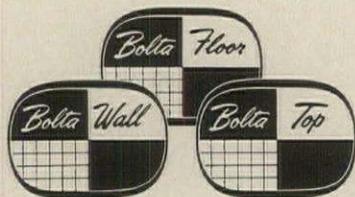


*... timeless beauty captured in modern all-vinyl tile*

New "Cirrus" by Bolta-Floor is the most luxurious flooring ever produced. In rich translucent colors that range from dawn to dusk, each exquisite tile is a handful of cloud-streaked sky. Wherever elegance and quality are not confined, let the sky be your limit and look to new "Cirrus," the new standard for excellence in long-wearing all-vinyl flooring.

*another quality product by*

**THE GENERAL TIRE & RUBBER COMPANY**  
Building Materials Division • Akron 9, Ohio



*A decorative durable vinyl  
for every surface*

Builders who "look ahead" specify  
hardware by *National of Sterling*



Competitively priced with  
built-in quality to

**Protect your  
good name**

It's the "little foxes that destroy the vines." And it's usually the small details that make a home buyer either happy or huffy. That's why so many prominent builders *insist* on hardware by "National of Sterling." It adds one more extra touch that helps build customer satisfaction—today, tomorrow and through the years.

WRITE FOR FREE CATALOG TODAY

**NATIONAL MANUFACTURING CO.**

19902 First Avenue, Sterling, Illinois





— almost on sight—  
the house that's

# Cooled in Summer... Warmed in Winter

by an **ARKLA-SERVEL SUN VALLEY\***

**All Year® Gas Air-Conditioner!**



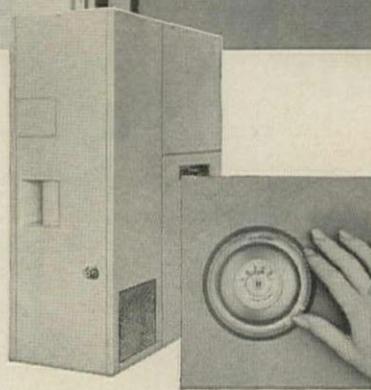
### Advantages for the Buyer:

Today's home buyers appreciate—and demand—year 'round comfort indoors. Show them the advantages of an Arkla-Servel Gas Air-Conditioner: summer and winter, one trouble-free unit, one easy-to-set thermostat provides just the right temperature. Fuel and maintenance bills are lower with Gas. *Never* any worry over deliveries. *And* Gas is cleanest.

### Advantages for the Builder:

The moment prospects enter, they can feel the difference. You are offering the best, with one, double-duty Arkla-Servel that heats and cools. And you're giving them low-cost maintenance and long life ... the secrets of economy with Gas. So for better sales, install Gas air-conditioning.

AMERICAN GAS ASSOCIATION



**ONLY GAS**  **does so much more...for so much less!**

\*Trademark. Product of Arkla Air Conditioning Corp., Evansville, Ind., & Little Rock, Ark.



Weldwood prefinished Surfwood paneling comes in easy-to-install 4' x 8' panels, and four pastel colors. Shown: Silver-Grey. Other colors: Havana Green, Fawn, Frosted Ebony. Ceiling is of Weldwood Weldtex® (striated plywood) 12" x 12" squares.

## Let the kids help you sell the house . . .

Any family with kids will appreciate a room like this. Why? Because the walls are paneled with a special type of wood that hides "careless kid mistakes." This paneling is Weldwood prefinished Surfwood®. It has a woody texture and swirl design which hide careless dents, scuffs, smears and smudges. Mother will find these walls easy to wipe clean, too.

Dad will be happy to hear that Weldwood prefinished Surfwood paneling needs no painting. Only upkeep it needs is an

occasional waxing. And this Weldwood paneling is guaranteed for the life of the home.

**No on-the-job finishing costs for you.** These Weldwood prefinished panels come ready to install, in a choice of four colors. Best of all, the price is only about \$38, retail, for a 12' x 8' wall. See the Weldwood Paneling display at your Weldwood dealer's or any of our 115 branch showrooms. New York showroom: 55 W. 44th St. In Canada: Weldwood Plywood, Ltd.



**WELDWOOD® WOOD PANELING**

Soft and Hardwood Plywood  
Doors • Lumber

Finishing Materials Products of UNITED STATES PLYWOOD CORPORATION

—Send For Free Prefinished Paneling Book—

**United States Plywood Corporation**  
55 W. 44th St., New York 36, N. Y.

Please send me HH 2-59

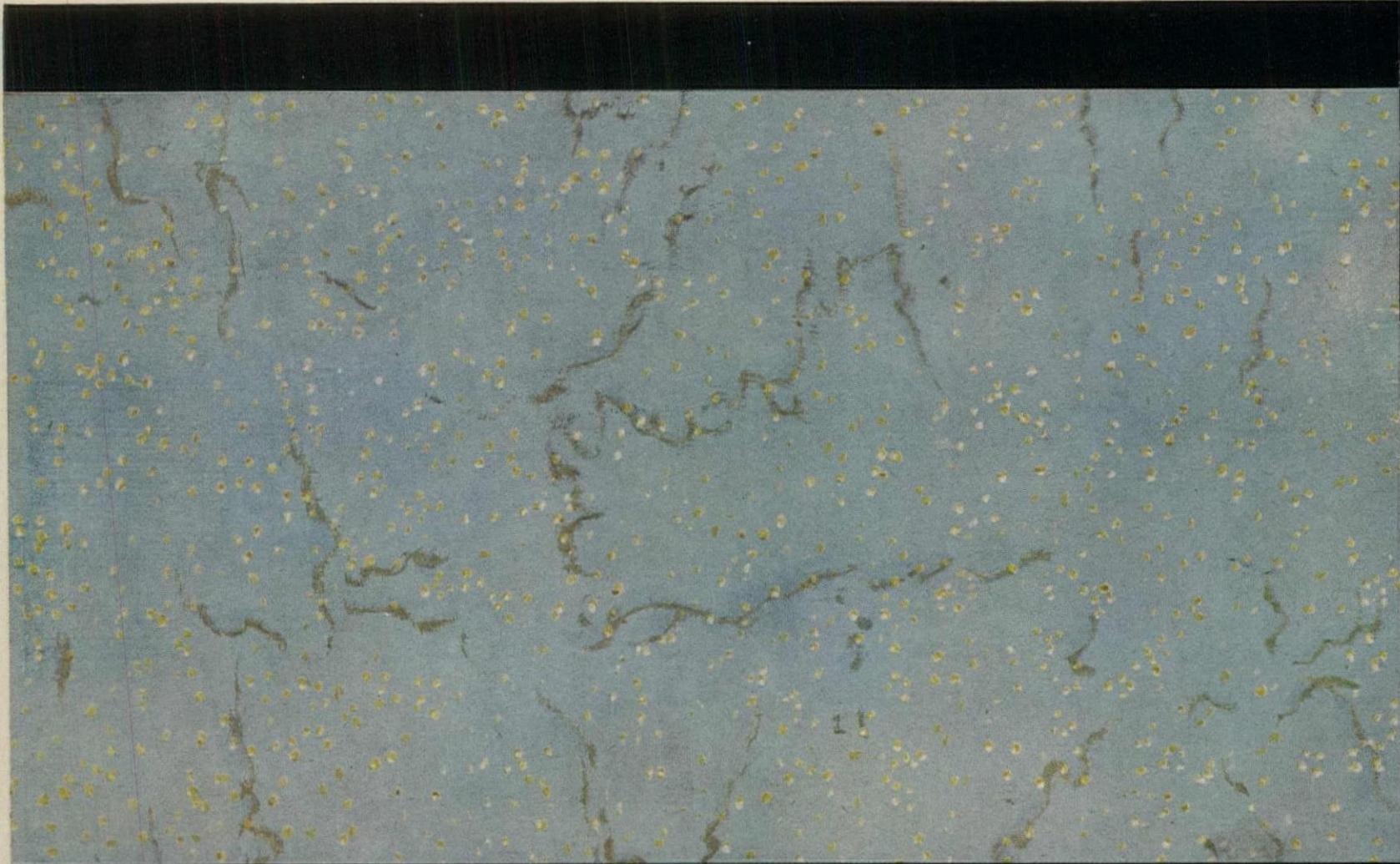
- "Weldwood Prefinished Paneling For Fine Interiors." Shows woods, installation photographs, specifications.
- "Family Rooms In Beautiful Weldwood—100 Interesting Ideas For The Room Your Family Lives In."

Name .....

Firm .....

Address .....

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



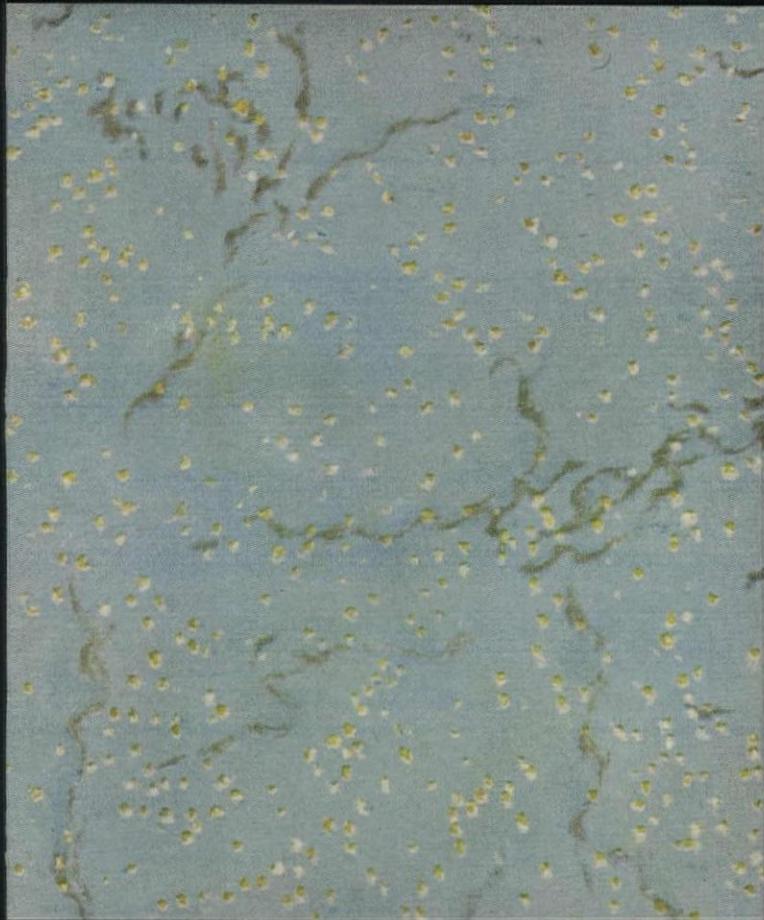
# This is General Electric Textolite<sup>®</sup> in SPUNGOLD... the new pattern with the lifelike flecks of gold

Made by G-E—with maximum national promotion by G-E.  
And it's just one of 67 Textolite patterns and colors  
that can put the G-E name to work in *your* homes!



It's *Spungold* time across the nation . . . and a great opportunity for builders who tie in with the big six-month promotion we're putting behind this gay, fast-selling Textolite pattern. Feature it in kitchen, bath, or family room—on walls, counters, floors, and ceilings—anywhere you need a bright, easy-to-clean surfacing that really attracts atten-

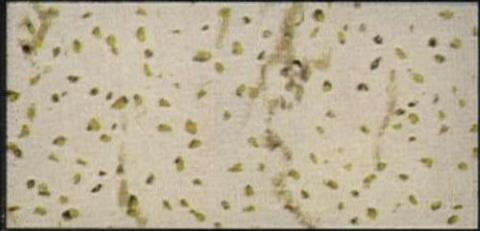
tion. See the complete Textolite line in full color in Sweet's Light Construction File. And for more information or assistance call your local Textolite distributor (you'll find him in the yellow pages under "Plastics"); or write: Laminated Products Department, General Electric Company, P. O. Box 495, Marion, Ohio.



BLUE SPUNGOLD TX-4706



PINK SPUNGOLD TX-4762



WHITE SPUNGOLD TX-4700



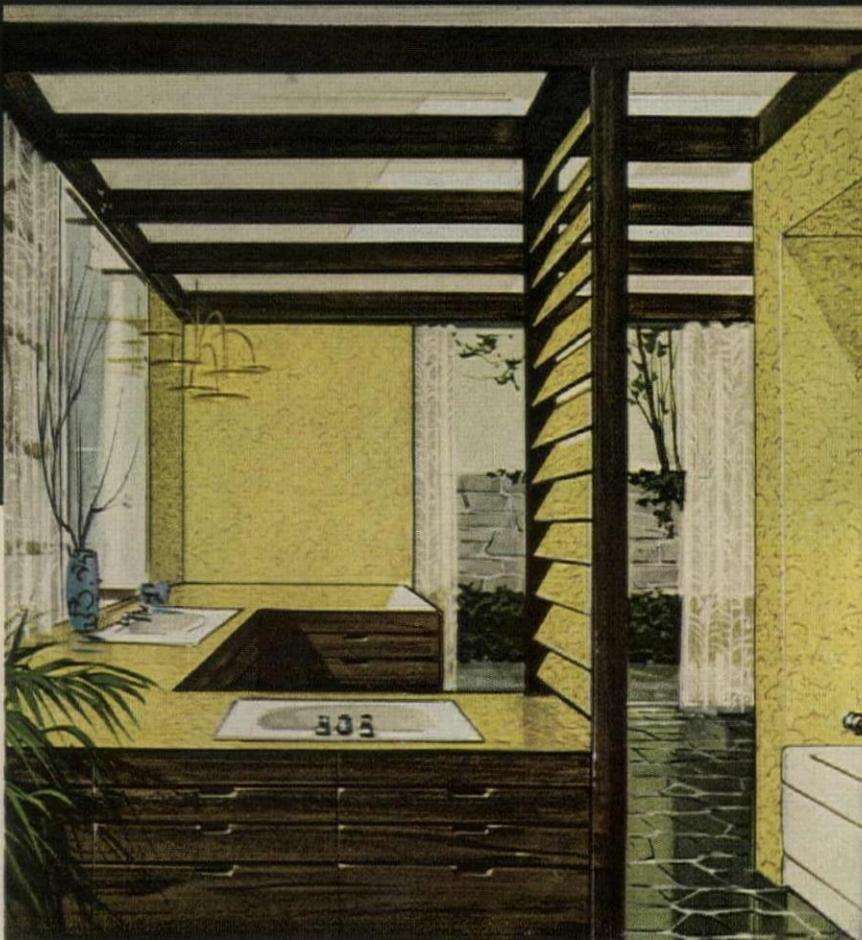
YELLOW SPUNGOLD TX-4704



TURQUOISE SPUNGOLD TX-4715



BEIGE SPUNGOLD TX-4779



Yellow Spungold highlights this modern bath. Used on walls, vanity tops, and shower enclosure, it is complemented by Walnut Textolite on cabinet front. A beautiful bath—a breeze to keep clean!

**Textolite**<sup>®</sup>  
LAMINATED SURFACING  
**GENERAL**  **ELECTRIC**

See our display at the New York Design Center



## WOODGRAIN® RUBBER PLANKS

*another exclusive style in*

**KENTILE®**  
**FLOORS**

...especially designed to create an atmosphere of natural wood in combination with the quiet, luxury and superior wearing qualities of rubber flooring. For color selection, call your Kentile Representative for samples, or consult Sweet's File.

SPECIFICATIONS—  
Size: 4" x 36"  
Thicknesses: .080" and 1/8"  
Colors: Silver Ash, Chestnut, White Oak

# Roundup:

## News index

|                                 |    |
|---------------------------------|----|
| Housing agencies.....           | 38 |
| Mason succeeds Cole at HHFA.... | 38 |
| Housing policy.....             | 41 |
| FHA .....                       | 43 |
| Mortgage market .....           | 44 |
| Mortgage briefs .....           | 45 |
| Housing market.....             | 46 |
| 1958's biggest builders.....    | 46 |
| Market briefs .....             | 46 |
| Closeup: the Mackle Co. ....    | 47 |
| Local markets.....              | 49 |
| Views on the news.....          | 51 |
| Opinions .....                  | 51 |
| Materials & prices.....         | 57 |
| Materials briefs .....          | 57 |
| Segregation .....               | 59 |
| Urban renewal .....             | 59 |
| Community facilities .....      | 61 |
| People .....                    | 63 |
| Labor .....                     | 65 |
| Canada .....                    | 65 |
| Statistics & indexes            |    |
| Mortgage quotations .....       | 45 |
| Housing starts .....            | 46 |
| FHA & VA applications.....      | 46 |
| BLS materials prices.....       | 57 |
| Boeckh housing costs.....       | 57 |

## Builders renew cry for mortgage subsidy

NAHB has reversed its stand against more Fanny May special assistance money for cheap new houses. Last fall, in San Antonio, the builders' directors voted down a proposal to ask Congress to replenish the \$1 billion "anti-recession" fund for par purchase of FHA and VA mortgages on houses priced at \$13,500 or under. Last month, in Chicago, the directors switched again, even asked a boost in the maximum house price to \$15,000.

NAHB overrode the advice of outgoing President Nels Severin, Executive Director John Dickerman, and many other top leaders. Dickerman, in his report to the convention, was sharply critical of "politically inspired solutions to supply needed (mortgage funds for new housing)—with the US Treasury as crutch."

## Mortgage market: is this a lull before the storm?

The Treasury's new \$3.25 billion issue of 4%, 21-year bonds seems to have sopped up a surge of money that might have nudged mortgage yields down, along with loan rates generally. The upshot is that discounts on FHA and VA loans, which have been plunging and soaring like a roller coaster for most of a year, hovered almost motionless through the first half of January (see p 44).

Strong pressures for a boost in FHA's interest ceiling, now fixed by the agency at 5¼%, are being resisted by the Treasury. It has to sell so many government bonds this season it doesn't want to let government-backed mortgages grow too attractive, Washington insiders explain.

Hints that FHA might soon raise its interest rate have been circulating quietly through mortgage circles for nearly three months. Some mortgage men say the stories have led some lenders to postpone normal first-of-the-year buying in the hope of getting yields the market demands without the big discounts they dislike.

## Builders move to find better markets

It's been years since competition was as stiff in building new homes as it is now. One of the best indications is the growing number of builders who are shifting their operations to places where profit margins are fatter.

Most astonishing plan among the mobile builders is that of Willard Woodrow who aims to be the first nationwide homebuilder (see p 46). From his base in Los Angeles he is already moving into Miami, West Palm Beach and Maryland. He also plans to build in San Diego, where there is already a sizeable contingent of Los Angeles builders. For example, Bollenbacher and Kelton moved into San Diego seven years ago. They found the market so fabulous they have built 5,000 houses there. The word traveled. Now, so many other mobile builders have recognized that San Diego is a lucrative market that B&K talk of cutting back their operations.

When Woodrow got to Miami he found friends. Herb Heftler of San Bernardino was the biggest builder in Miami in 1958 with 1,400 starts. Big Boston builder-realtor Martin Cerel is in West Palm Beach. Praver & Sons of Kansas City and Tandy & Allen of Hillsdale, N. J. are in the Miami area.

Centex Construction Co of Dallas was perhaps the first of the giant mobile builders. But when Tom Lively's Centex came into Chicago in 1957 it found Sam Hoffman's F&S Construction Co of Phoenix and Winston-Muss of New York already there. And since Centex, Huber Bros of Dayton and Alexander Construction Co of Colorado Springs have started tracts around Chicago.

Larry Morton, once part of big 608 builders Gross-Morton in New York City, is now building in New Orleans, one of the south's highest cost cities. When local competition got rough, Dallas Builder Herman Brown moved to El Paso. And who did he find there? Dale Bellamah of Albuquerque.

In all this crisscross invading of other builders' markets, mobile builders have probably benefited the public most, by sharpening competition in areas where it was dull. Competition, coupled with the economies of mass building, is still a very good way to keep the price of new housing down.

## Will the low priced house boom taper off?

Many mortgage men are predicting that if Congress does not put more money into Fanny May's special assistance program 10 for houses of \$13,500 and under, the year-old boom in cheap new homes will taper off. The \$1 billion set up by the anti-recession Housing Act was all committed last September. It's estimated that 75% or more of the 80,000-odd low priced units involved are now sold and started.

Because the program was financed with par money, many builders took the money that would otherwise have paid a discount and cut their sales price—to get down to \$13,500. Many who have used up their Fanny May commitments have asked for reappraisals. They are finding VA generous in most areas. FHA is showing similar consideration in high discount areas—unofficially, of course.

NEWS continued on p 38

# Mason succeeds Cole as HHFA boss

FHA's popular commissioner steps up to the No. 1 federal housing post as HHFA's second chief quits to become an executive of Reynolds Aluminum

Official Washington had heard such stories before. At least three times during Albert MacDonal Cole's six year tenure as Housing & Home Finance Administrator word had seeped out that he was about to depart the government's top housing post—usually, so the story went, by invitation.

But each time the White House kept the smiling, mild-mannered ex-Congressman from Kansas on the job—to the consternation of some of his critics.

So when word leaked around the capital's housing circles Jan 5 that Al Cole would soon be leaving, it was just another one of those stories—at first. This time it was true. On Jan 9, the Eisenhower Administration's housing boss sent his resignation to the President "for personal reasons" (ie to become executive vice president of a Reynolds Metals subsidiary). On Jan 13, with a "Dear Al" note, Eisenhower accepted it "effective on a date to be arranged."

Next day, the President nominated FHA Commissioner Norman Peirce Mason to succeed him.

On the surface, the timing of Al Cole's resignation seems strange. He quit just as the Administration went to the mat with Congress for what promises to be its toughest fight in six years over a housing bill (see p 41).

The real reason, it appears, is that Cole felt he could not afford to turn down Reynolds'

arguments of economy-minded Administration policymakers. For instance, he has been much criticized for not persuading the Federal Reserve and the Treasury to take credit screws off housing in 1956, thus perhaps averting housing's disastrous 1957. He—or higher ups in the Administration—may have made an even bigger mistake by keeping the Democratic housing bill from passing last August because it promised to squander taxpayer money. (Reason: now the Administration will probably have to swallow an even bigger dose of unwanted spending programs in the 1959 Act.)

But Cole worked under difficulties. Most of the time, he had to fight alone for housing. His predecessor, ex-Editor Ray Foley, had Harry Truman's complete support. Cole never seemed to enjoy the same kind of support—perhaps because influential lenders never quite forgave his acquiescence in the abrupt ouster of Guy T. O. Hollyday as FHA commissioner. Hollyday, former MBA president and one of the nation's most popular title insurance executives, was summarily sacked—without a chance to state his case—when Eisenhower blew his top at disclosures of 608 windfalls and gyp repairmen in 1954.

Despite his troubles, Al Cole can point to a lot of solid achievement during his term

## COLE'S NEW JOB

Builders and dealers are likely to bump into Al Cole almost anywhere in his new post as master strategist and trouble-shooter for Reynolds Aluminum's assault on the housing market.

Officially, the company describes Cole's duties as executive vice-president of Reynolds Aluminum Service Corp this way: "responsible for developing and guiding new programs for use of aluminum in monumental (Reynoldsese for major architectural), urban renewal and residential building." Unofficially, a spokesman admits: "It's essentially a selling job on a high level . . . We have in Reynolds what you might call an executive sales department—people who can talk to leaders in business on a first name basis. They are men who have access to the top people in industry. Mr. Cole will have the top operating job in this subsidiary—he'll run it."

Adds Cole's boss, David P. Reynolds, president of RASC and executive vice-president of the parent company: "Mr. Cole's standing . . . will be of great value . . ."

The former HHFA administrator will keep an office in Washington, close to the heart-beat of housing in and out of government.

His firm, set up in '57 as the Reynolds contracting agency for building projects, will grow in responsibility, taking over the company's big "House of Ease" program (launched last May at a Washington luncheon where Cole was a guest speaker) to boost use of aluminum in houses from an average 300 lbs to 3,000 lbs. It will also enter the urban renewal field with a method of face-lifting sound-but-ugly old buildings with a "new skin" of expanded, patterned aluminum panels.

Reynolds recruited Cole after hearing that he wanted to re-enter private life, waited "several months" for his decision. The company calls his salary a secret. But it is likely to be far above the \$21,000-a-year he got as HHFA administrator, probably over \$30,000.

Cole's move came only a month after William H. Slemp Jr was hired away from NAHB's Natl Housing Center to head Kaiser Aluminum's residential sales division (Alcoa's residential manager, Marketing Expert Frederick J. Close, is a home-grown product who started with the firm in '29).



H&H staff

## OLD BOSS COLE

An exit just before the battle

tempting offer—and the company did not want to wait any longer.

## The six-year record

Cole, the second man ever to head the multi-faceted HHFA, performed well enough during his six years in office to win much favor among home builders, if not lenders. Once, when he was threatened with disaffection in top Administration circles, his job was saved for him by timely protests from private housers. Cole was hard working, sometimes cautious and invariably loyal to policies and programs established for him by the Administration.

One weakness was an inclination to say too much, and political-minded members of the Democratic opposition sometimes succeeded in making him look foolish in committee hearings. Some critics have argued he failed to uphold housing case's against the suave



H&H staff

## NEW BOSS MASON

Changes will be 'gradual'

at HHFA. Reflecting on his accomplishments at a farewell press conference, he cited these as his best: 1. "Developing of a long range, comprehensive housing program related to the people." 2. "Developing the concept of a workable program for urban renewal."

Cole was first of all a conciliator—a man who knew when to skate lightly because the ice was thin. His knack for achieving compromise never shone brighter than when, as chairman of President Eisenhower's celebrated Housing Policy Advisory Committee, he managed to wring from such conflicting interests as the CIO and Mortgage Bankers Assn a report blueprinting the upheaval in US housing law that became the Housing Act of 1954.

The '54 Act made probably as many significant changes as all the legislation since. It:

- Broadened the bulldozer approach to slums of the 1949 Housing Act into the much more sweeping concept of urban renewal, which includes their prevention and rehabilitation without demolition and attendant displacement of problem families.

- Created the Urban Renewal Administration as a constituent agency of HHFA to carry out the new program.

- Established the principle, through the

"workable program," that federal aid to fight slums must go only to cities willing to show a little gumption about doing their own part to fight blight. Specifically, it required the HHFA administrator himself to certify that a city had a "workable program" to attack existing slums and prevent new ones from forming before the city can qualify for further federal aid for redevelopment, or public housing. (Public housing's tie to the workable program was subsequently killed by Congress, at the behest of freewheeling public housers. But in 1956, it was restored.)

- Took the first big stride (since completed) toward equalizing FHA down payments for old and new houses.

- Let FHA, for the first time, insure open-end mortgages on one- to four-family houses.

- Reshaped Fanny May into its present three-pronged setup including a secondary market operation designed to substitute private for US Treasury capital stock in six to 12 years.
- Created the Voluntary Home Mortgage Credit Program in a brave effort to show the nation that direct VA loans are unnecessary. (The program has since been hobbled by Congress.)

- Changed FHA Title I repair loan insurance from a 100% federal risk to a 90-10 sharing basis with private lenders. This came as a result of the FHA scandals of 1954—Cole's darkest hour—which showed FHA had been impotent in years past to stop chiseling by some home improvement firms.

- Adopted, for the first time, a limited profit philosophy for FHA rental housing—another dividend of the FHA scandals.

#### Carrot, not stick

Cole's No. 2 achievement is how much he has done with how little in administering the "workable program." If Cole had taken the language of the law literally, cut off federal redevelopment and public housing from cities too corrupt or lazy to do their share to fight the spread of slums, Congress might well have scrapped the vital requirement *in toto*. So Cole (who recently told a press conference he agrees with HOUSE & HOME's characterization of him [Nov, News] as "no knuckle-rapper by temperament") has never flatly refused to approve a city's antislum plan, however weak. He has delayed, or threatened refusal. But never acted.

Even so, the results are impressive. "When I became administrator," he said in a Chicago speech recently, "there were mayors of cities, many of them, who were 'reluctant dragons' on urban renewal. They didn't grasp either the full possibilities or potentialities. No one can say that's the case today. The mayors are on the bandwagon—and then some."

So much on the bandwagon, in fact, that one of Norman Mason's hardest jobs will be trying to persuade Congress not to respond to pressure from mayors by voting urban renewal more money than the President thinks the national budget can stand.

What Mason's other views are on the housing matters that have been outside his purview during his five years at FHA he is keeping to himself for the time being. Cole's Congressional record of opposing public housing (he also voted against creation of HHFA) gave him mild trouble winning Senate confirmation.

But Mason says: "I see no reason why I can't satisfy public housers and the council of mayors." For HHFA itself, he admits he plans to "make some changes" but adds: "There won't be any violent upheaval, just some different personnel."

## How Al Cole expounded policy

*As a former FHA commissioner once observed, the boss of a big government agency often finds that a public speech is his best way to tell his own staff what his policy is.*

*In his six years as HHFA administrator, Al Cole delivered himself of many a memorable mouthful on housing policy. Some of his words that bear remembering:*

**Par FNMA purchase:** "Can Fanny May support the market indefinitely at par? Can it buy all the mortgages presented at a price in excess of their value, irrespective of the economic situation in the US? Yes, it can be done. How? By taking the money from you and your workers and your families. And if it is done, that much of the private economy will be eliminated."

**The 1958 omnibus housing bill** (which is about to be reenacted by the 1959 Congress, with embellishments): "... a Christmas tree loaded with something for everybody, with the taxpayer footing the bill."

**The quality house:** "During this half decade (1953-'58) a profound change has been taking place in public attitudes. *How* people are housed has more and more become a matter of deeper concern not merely to the individual, but to the neighborhood, the town and the city. In housing all of us are raising our sights—and this is going to have

a profound impact on your [NAHB's] operations." (1958)

**Future of cities:** "Unless improvements [in slum-infested cities] are made across the board—and here we have the essence of planning—they will be largely wasted . . . There is still time. A year remains, perhaps two or three years. But if we lag and postpone, if we have not by 1960 begun to take across-the-board action, it may be too late. The people of any city without a comprehensive plan of action underway within the next five years will face municipal bankruptcy in 1965." (1955)

**Slums & ghettos:** "Regardless of what measures are provided to clear slums and meet low-income housing needs, the critical factor which must be met is racial exclusion from the greater and better part of our housing supply. No program of housing or urban improvement, however well conceived, well financed or comprehensive can hope to make more than indifferent progress until we open up adequate opportunities to minority families for decent housing . . . This is not primarily a federal problem." (1954)

**Suburbs:** "Suburban sprawl means we are on the way to creating a septic tank suburbia, repeating in principle the mistakes we permitted in our cities and which we are spending billions to correct." (1954)

## Closeups: HHFA's old and new leaders

### Albert M. Cole

It's a rare person who doesn't like Albert MacDonald Cole.

The departing HHFA administrator is gifted with a singularly placid disposition. He has shrugged off without bitterness some of the most biting criticism. He reasons, explains one old friend, that attacks on him are just "part of the game."

The game, of course, is politics. And Al Cole's good nature has been one of his chief assets in a political life that spans more than 30 years.

Cole, now 57 but still looking younger, was born in Moberly, Mo., son of a Baptist preacher. He was reared in Topeka, worked his way through Washburn College there and the University of Chicago law school.

He opened a law practice in 1925 in Holton, Kan. (pop. 2,705), 35 mi north of Topeka. Following the usual course for struggling young attorneys, he entered politics quickly. He moved up the ladder from county attorney to city attorney to school board attorney (and member) and then Kansas state senator (1941).

In 1944, he won a seat in Congress, defeating a veteran incumbent. He achieved this upset by hard, door-to-door campaigning, aided by his wife, Emily.

He served eight years, was defeated in 1952—a defeat generally blamed on the fact that he spent more time campaigning for Eisenhower outside his district than he did working for himself in the district.

Four months later, Eisenhower appointed him HHFA administrator, replacing Democrat Raymond Foley, the first to fill the post.

Cole has switched from cigars to a pipe. He still golfs, relaxes in his one-bedroom Georgetown apartment by reading.

### Norman P. Mason

Unlike his predecessor as HHFA administrator, Norman Peirce Mason has never been in politics.

On the other hand, he was the first FHA commissioner who had first-hand insight into the physical side of building before he came to FHA.

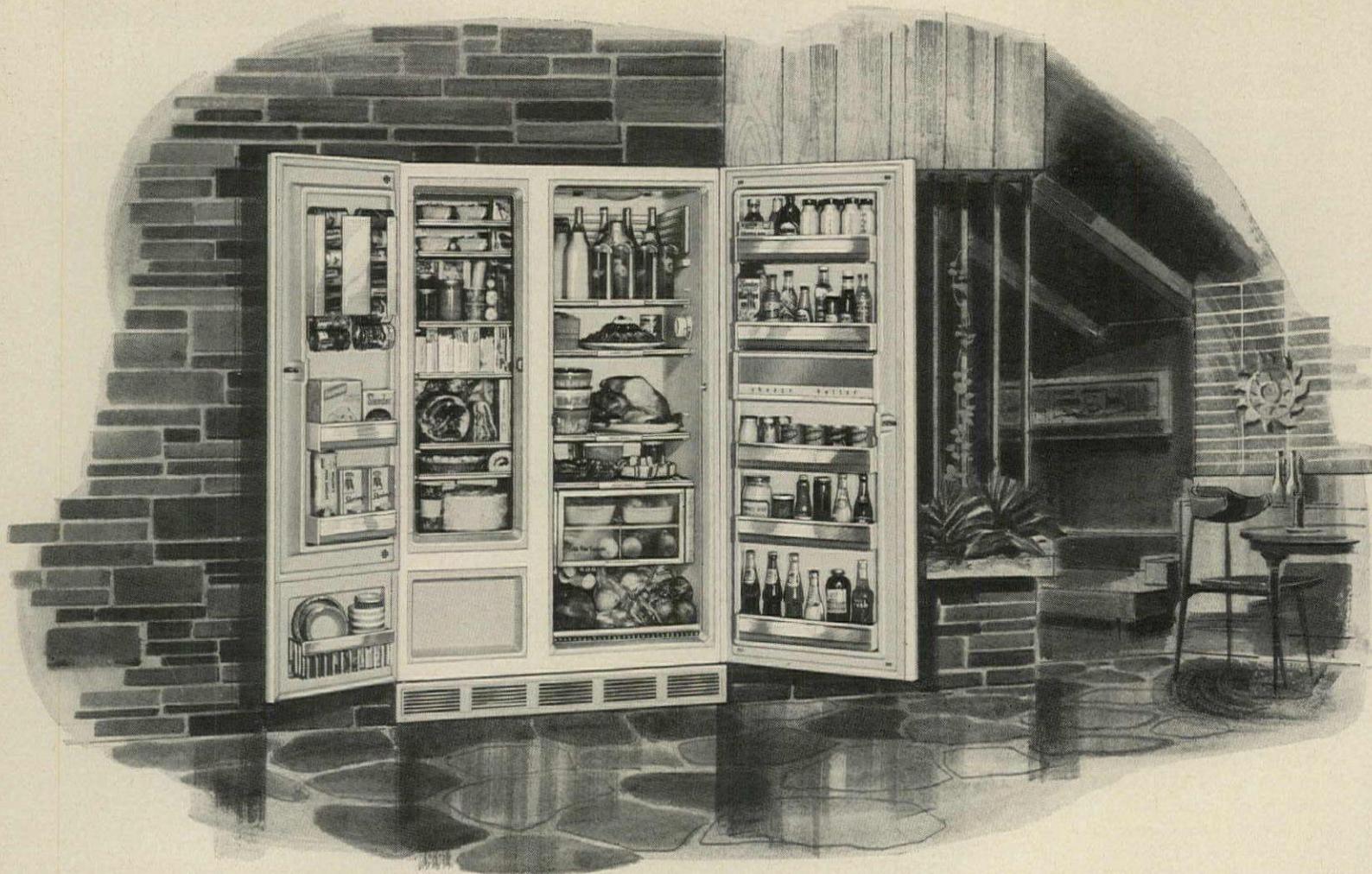
Mason, now 62, was head of the William P. Proctor Co—a thriving lumber business—in North Chelmsford, Mass., when he was called to Washington to take over at FHA at the height of the FHA windfall scandal investigation in 1954.

Mason is shrewd, smooth, yet direct. He never gets ruffled, makes a point of keeping public business in the public eye.

Born in upstate New York, Mason learned the rudiments of retailing early in life from his father—a hardware merchant in Willsboro, a small country village. An enthusiastic ham radio operator in his high school days, Mason found that the Navy had use for his ability in World War I. He was trained at Harvard, there met Helen Proctor, later married her.

When his wife's father died, Mason liquidated his own business in New York—inherited from his father—and took over the Proctor Co. From a struggling one-horse yard, Mason built the firm into one of the largest in New England.

Mason was chairman of the US Chamber of Commerce's civic development and construction department and president of the board of governors of Building Research Institute. He gave up both jobs when he became FHA commissioner, as he did his life directorship of the Nat'l Retail Lumber Dealers Assn of which he was president in 1946-48. *NEWS continued on p 41*



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## HOUSING POLICY:

## Ike asks: kill public housing, boost VA interest rate

Congress and the Administration have locked horns, as expected, over 1959 housing legislation.

There is little question that Congress, with its huge Democratic majority, will adopt a bill bristling with expensive new housing programs running into billions of dollars. The big questions are these:

1. Will Congress give housing and urban renewal so vast a pipeline to the US Treasury that President Eisenhower will veto the bill?

2. If he does, do Democrats have enough votes to override the veto?

A glance at the table (below, right) gives a birdseye view of the deep cleavage between the President's proposals, as outlined in his budget message, Jan 19, and those of Sen John J Sparkman (D, Ala.), chairman of the Senate housing subcommittee whose middle-of-the-Democratic-road bill is very likely to approximate what emerges from Congress.

## Basic rift

Never before in Eisenhower's two terms—and perhaps not for a generation—has the schism between Congress and the Presidency over housing policy gone so deep. Never before has the Administration so forthrightly stated its opposition to making housing a ward of the welfare state. Seldom if ever has a Democratic Congress seemed to lean so far towards making political capital of housing along the lines of Harry Hopkins' famous philosophy: "Tax & tax, spend & spend, elect & elect."

In both his state of the union and budget messages, the President minced no words. He said flatly that "large sums" have been "needlessly" spent by the Treasury to support programs like Fanny May special assistance, VA direct lending and college housing loans. He was especially acid about Congress' habit of imposing submarket interest-rate ceilings on federal lending programs. Said he: "This creates unneeded and hidden subsidies and requires excessive use of federal funds by discouraging private lending." And in asking Congress to give VA (and VA direct loans) the same interest ceiling as FHA (6%), Ike hinted that he blames Congress for the slowdown in VA housing. He said: Requests for VA direct loans now exceed available funds in large part because the law does not permit interest rates that are adequate to attract private financing."

## End public housing?

Biggest surprise is Eisenhower's plea that Congress authorize no more public housing—because it isn't needed for relocatees. By July 1960, he noted, more than 475,000 federal public housing units will house 2 million people. And 110,000 units already authorized will be under contract but unfinished.

To cut the Treasury drain caused by Fanny May and college housing loans, Eisenhower revealed, both programs will offer to trade part of their portfolio to private investors

for government bonds. Fanny May expects to offer some \$335 million, probably 4% mortgages from its management and liquidation portfolio, in exchange for 2½% bonds heavily held by banks and insurance firms. The bonds will then be retired, and Fanny May will get \$335 million to buy mortgages without running to the Treasury.

About \$50 million of college housing loans held by HHFA's little known Community Facilities Administration will be offered in a similar swap. The President noted that 60% of the demand for college housing loans now comes from state universities and other public schools which can borrow privately just as cheaply because they can issue tax-exempt bonds. To cut this drain on the Treasury, he asked Congress to prohibit federal college housing loans to schools that can tap the tax exempt securities market.

Eisenhower wants Congress to deal with his budget proposals later this year. To keep FHA in business beyond mid-February the administration wants Congress to vote a quickie resolution giving it \$6 billion more authorization. It wants \$200 million more

for urban renewal grants, \$200 million more for subsidized college housing loans.

Instead, congressional Democrats are pushing hard to cram through an omnibus bill by mid-February. Sparkman's version is milder than a bill introduced by Rep Albert Rains (D, Ala.), House housing subcommittee chairman. Rains would give Fanny May \$500 million more for special assistance loans on cheap new houses. But he would not require par purchase. Instead, he proposes only to order Fanny May to pay enough to make the program work—an evident compromise before administration insistence that mandatory par purchase will bring a veto. Rains would provide \$200 million for new direct loans to house the aged, \$500 million a year for three years for renewal, \$500 million more for college housing loans.

What the president will do, veteran Capitol hands agree, hinges on how much the Sparkman-Rains plans are watered down before passage—and on how critical FHA's need becomes for more authorization to stay in business.

NEWS continued on p 43

## ADMINISTRATION VS CONGRESS: WHERE THEY STAND

| ISSUE                                      | EISENHOWER   | CONGRESS<br>(SPARKMAN VERSION)  |
|--|--|---|
| <b>FHA insurance authorization</b>         | Remove all limits permanently, after emergency \$6 billion boost at once   | \$4 billion more for this and same for next fiscal year   |
| <b>FHA Secs 207 (rental), 213 (co-op)</b>  | Boost interest rates so taxpayers (via FNMA) won't have to buy so many loans   | Boost maximum mortgage per room and per unit but leave interest rate as is for rental housing. Boost 213s from 90 to 97% of replacement   |
| <b>FHA housing for the elderly</b>         | Create a new program (details not specified)   | Create new FHA Sec 229 with 100% mortgages (excluding profit allowance and minus "economic soundness" test)   |
| <b>FHA repair loans</b>                    | Make program permanent   | Extend it one year to Sept 30, 1960   |
| <b>FHA mortgage loan ceiling (Sec 203)</b> | Boost it (details not specified)   | Boost it from \$20,000 to \$22,500 for one-family homes, from \$20,000 to \$25,000 for two-family units, from \$27,500 to \$30,000 for three-family   |
| <b>Fanny May</b>                           | No more lending authority for anything   | Revive par purchase under special assistance programs until Aug 7, 1960. Boost maximum mortgage under secondary market operations from \$15,000 to \$20,000   |
| <b>VA</b>                                  | Give VA interest same 6% ceiling as FHA. No more direct VA loans   | No change in 4¾% interest ceiling. \$300 million more for direct loans  |
| <b>Public housing</b>                      | No more authorization after July 1 except for units already committed, because of huge backlog of unbuilt projects   | 35,000 units-a-year for two years, plus 17,500 units to be placed under contract before mid-1963. More autonomy for local authorities   |
| <b>Urban renewal</b>                       | \$1.35 billion for six years, with federal share of cost gradually cut from present 66% to 60, 55 and finally 50% by fiscal '63. \$250 million authorization for next three years, \$200 million for fiscal '63-'65.                             | \$2.1 billion for six years, with no change in federal share. \$350 million a year for capital grants, with Presidential option to boost this to \$500 million any one year.  |
| <b>College housing</b>                     | \$200 million for this fiscal year with stiff new curbs on gravytrain borrowing. For fiscal 1960, switch to a loan guarantee program under Health-Education-Welfare Dept. Raise interest rates at once to stop federal lending at less than cost | Boost present HHFA program by \$400 million with no change in subsidized interest rate. Create a new \$125 million loan program plus a \$250 million loan-guaranty program for classrooms, labs and related equipment & utilities |

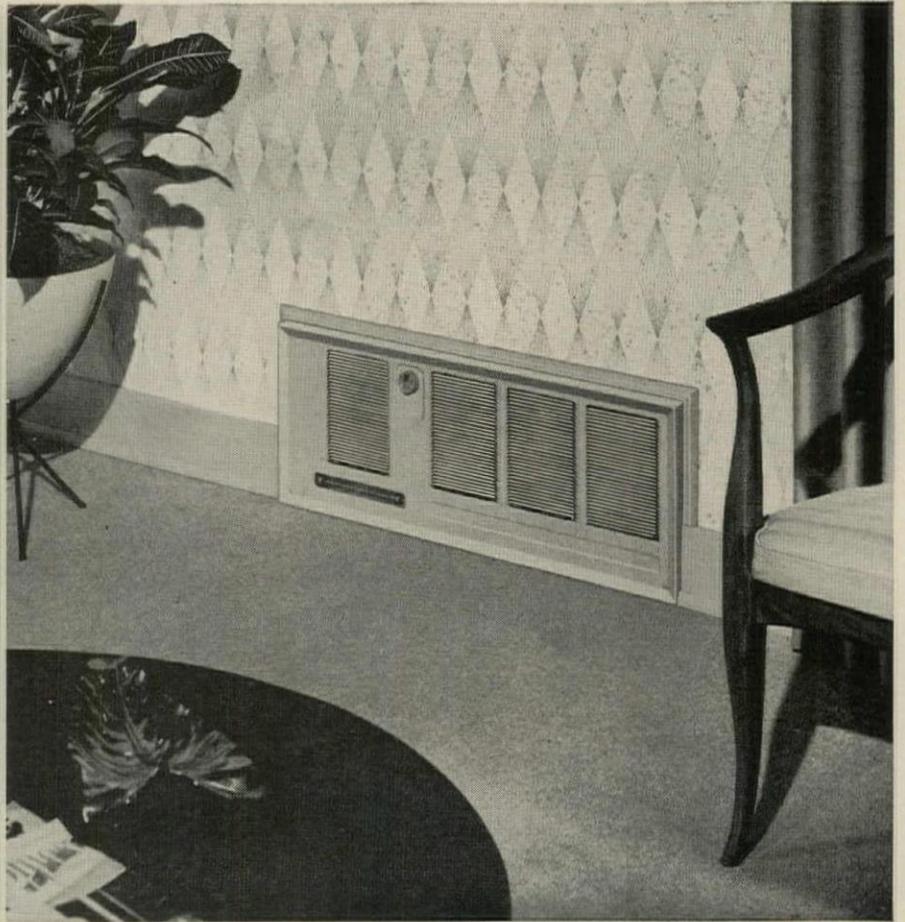
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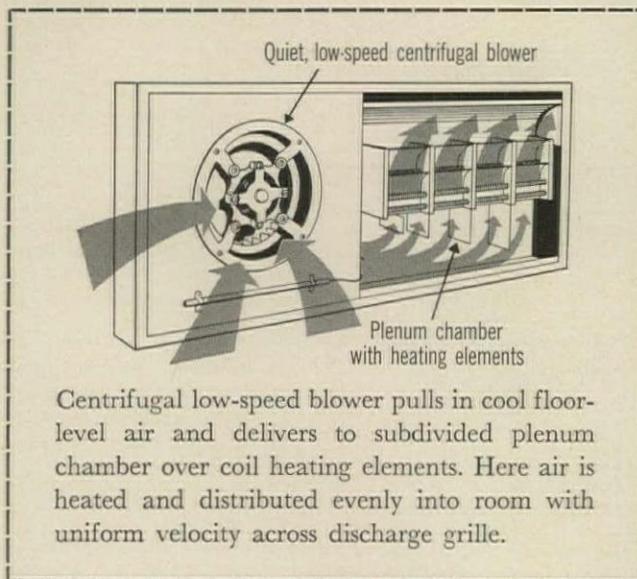
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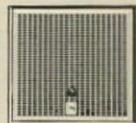
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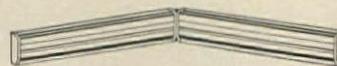


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## FHA extends CAP—but not as much as industry asked

FHA is putting its Certified Agency Program on a nationwide basis—but will limit it to cities and towns up to 20,000 population.

Effective date of the extension depends on when Congress gives FHA more insurance authority.

CAP was started on a trial basis in October 1957, in parts of six states limited at first to cities of 15,000 population or less. All or parts of six more states were added in the next year. Commissioner Norman Mason calls the trial "highly successful."

Under CAP, certified agents—banks, savings & loans and mortgage bankers—can accept applications for FHA commitments and issue them, themselves. Fee appraisers and fee inspectors are hired when needed. FHA itself enters the picture only for insurance endorsement when the deal is closed.

The plan for extension indicates Mason has decided to go along with recommendations of an FHA staff committee rather than an industry advisory group.

The industry committee had recommended CAP not only be nationwide, but that it be allowed anywhere, even in cities where FHA has field offices. The committee also proposed that the current limit of five commitments per builder be lifted.

Builders had evidence to show that CAP

can work in any city regardless of size. During the trial period FHA put the plan into Denver and 25 other large cities in Colorado, Oregon, Montana and Pennsylvania. Wherever it was used, builders and realtors praised the plan highly since it cut processing time on applications to less than a week vs the two to four weeks usually required in local FHA offices.

The FHA staff committee recommended that the program be continued as originally envisioned—that is, to get FHA into areas it has not reached in the past because of their size and distance from an FHA field office.

The staff also opposed any change in the five-commitment limit. They contended this would open the program to tract builders—could result in a large volume of shoddy construction. With a five commitment limit, they argued, slipshod building could be detected through spot checks by FHA staffers before any great volume was put in place.

Mason made some concessions to the builders. He ruled that a builder can get five commitments in each locality where he does business. But this does not mean five for each tract in the same locality. And he told field office directors that areas with a population over 20,000 will be considered

for inclusion in CAP if the director can show the need for it to Washington FHA.

Mason also held the door open for future changes in CAP, commenting: "We want to see that CAP is kept abreast of the needs of the American people . . . Further expansions or revisions may be possible after the first phases of operation are working smoothly."

FHA will let Denver and the other larger cities which already have CAP keep it. Says the commissioner: "In districts where CAP participation exceeds [the new limits], it will be continued for the present."

CAP Director Graham Northup has already started a program of education to get CAP started in the 51 offices which have never had anything to do with it. He estimates it will take two months to complete this job. Boundary lines must also be drawn between insuring districts. Boundaries have never been set down clearly for lack of any real reason for them.

The maps will also set out the areas which will not be eligible for CAP—despite qualification by population. Generally, everything within 50 mi of an FHA insuring office or 30 mi from a service office or valuation station must continue to be processed through FHA offices.



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## FHA moves to de-Balkanize, shakes up zone chiefs

FHA has struck another blow against its old nemesis—balkanization. At the same time it is giving important new help to field offices.

Commissioner Norman Mason took the unprecedented step of shuffling all six of FHA's zone commissioners. Three of the zone underwriting advisers have been moved with them. (Six others are so near retirement FHA left them where they are).

The shuffle points up dramatically Mason's efforts to beef up the authority of his zone officials while encouraging them to keep even closer checks on the field offices to forestall empire building.

Ultimate aim is to stop the local offices from falling into ruts, arbitrarily decreeing they will not accept certain house designs or construction techniques (such as the Milwaukee office's refusal to approve a house without a basement).

The shift was worked out by Mason and two assistant commissioners: W. Beverley Mason (technical standards) and Wendell O. Edwards (field operations). The changes:

WILLIAM A. PAINTER, 41, to Zone I from Zone V. Painter, from Naugatuck, Conn., was an administrative assistant in Congress from 1947 to 1954, then spent three years with HHFA doing Congressional liaison.

KLINE D. REED, 56, to Zone II from Zone IV. Reed comes from Rochester, Ind. Before

joining FHA he was first a school teacher, then an Indiana circuit court judge.

RAGNOR O. JOHNSON, 60, to Zone III from Zone II. A native of Norway, Johnson's home is Astoria, Ore. He is an ex Oregon real estate commissioner, has also been in the real estate business and a bank loan officer.

STRATFORD E. MCKENRICK, 45, to Zone IV from Zone I. McKenrick was an attorney in Baltimore specializing in real estate law and mortgages before becoming director of FHA's Baltimore office in 1953.

GEORGE A. HILLIER, 55, to Zone V from Zone VI. Hillier was a Phoenix banker and one time Arizona state tax commissioner before he was named director of the Phoenix FHA office.

W. HOWES MEADE, 46, to Zone VI from Zone III. Meade was an attorney in his hometown of Paintsville, Ky. before joining FHA in 1957. He was a Republican Congressman in 1947-49.

The zone commissioners serve under Edwards. All five operate out of Washington but spend 50 to 60% of their time visiting local offices in their zones. They are civil service grade 16 (\$14,190 to \$15,150 a year).

In the past year, zone commissioners have, for the first time, been given real authority over the technical personnel in the field offices. They always had such authority in theory. But in practice the technical men by-passed zone officers and went straight to the technical brass at FHA headquarters whenever they had a problem.

Each zone commissioner has his own zone staff, recently expanded to help break up the local FHA empires. Unlike the zone commissioner, the advisory staff members lives in a city of their choice in their zone.

The chief underlings are the zone underwriting advisers, at least one in each zone but two in Zones III through VI. Newest addition to the zone staffs are the valuation advisers—so new, there were still three openings in January.

The other zone staff members are the architectural advisers (the MPS experts), the cost examiners and the insurance program advisers (the chief administrative advisers).

NEWS continued on p 44



## MORTGAGE MARKET:

# Big new US bond issue threatens to push all interest rates up

Will the Treasury's big new bond issue drive interest rates—and FHA, VA discounts—up just as they seemed on the verge of a downturn?

Many mortgage men were afraid so in mid-January. They had outspoken official company. FHA Commissioner Norman Mason, talking to newsmen after his appointment as HHHF Administrator, insisted the Treasury issue has "caused a decided tightening in the mortgage market."

He hinted that it may force FHA to raise its interest rate, but added: "We will have to wait and see whether it is a bump in the market or a continuing trend."

**Other mortgage bankers were less pessimistic about effects of the new Treasury \$3.25 billion issue, though still favoring a higher FHA rate.**

George Dickerson of Stockton, Whatley, Davin & Co of Jacksonville, commented after a three week trip visiting New York and New England savings banks that he found only mild interest in the new bonds. This, even though the Treasury aimed \$750 million of 4% 21-year bonds right at savings banks, insurance companies and pension funds, offering bonds at 99 to yield 4.07%. It even offered to take payment in four installments.

Said Dickerson: "A bank can get a yield of 5¼% buying FHAs at 96. With that differential [from the bond yield] it would take more than 4.07% to excite them."

Another mortgage expert took a middle view, predicted the issue would have a tightening effect. "It may not cause interest rates [and discounts] to increase. But it will certainly prevent them from falling. It is apparent now that the Treasury, and not the Federal Reserve Board, will be the strongest influence in the money market for a while."

Even before the Treasury announced its new issue the bond market was causing serious misgivings among mortgage men—even those who had forecast shrinking FHA-VA discounts for January (Jan, News). Some key US issues hit record lows in late December, a good indication interest rates would rise.

**Two other forces are tending to make discounts shrink: a shortage of mortgages for immediate delivery and the astonishing rate of savings.**

Inventories of FHAs and VAs have been extremely low throughout the US. Most new production was committed for last year.

Savings in S&Ls and savings banks hit record highs last year (see next page). As a result there is ample mortgage money in most cities from local lenders. In California, banks and S&Ls are making FHA 30-year minimum down loans at 99 or par while mortgage bankers can offer no more than 96½. Even in cities like Philadelphia, Newark, and Cleveland, local lenders are making FHA mortgages at par while mortgage bankers can offer only 97-98½.

**Pressure for a boost in the FHA interest rate is growing.**

Ironically, the Treasury is apparently a major obstacle to an increase. Because of the long term issues it is bringing to the market, the Treasury would like to see FHA remain hobbled by its present 5¼% rate.

The Life Insurance Assn has tried to fortify the plea for a free rate. In a report to the Administration it disclosed that a survey of insurance companies who buy FHA loans shows all would continue to lend at a market rate—would not automatically boost the rate to 6% and pay premiums for loans in the East.

FHA itself indirectly recognized the case for a boost: it raised the interest rate on its debentures to an all-time high of 3¾%.

**Builders haven't had trouble getting advance FHA commitments—at prevailing prices. But demand has been low.**

Many builders are delaying firm plans, hoping for either 1) more money from Congress for the Fanny May special assistance program 10 for houses priced below \$13,500 or 2) higher prices on the open market.

Mortgage men generally agree with C. A. Bacon, vice president of Denver's Mortgage Investments Co, who predicts there will be enough money to handle spring building programs. Says Bacon: "There'll be a continued scramble for money. But I don't think this will materially affect builder planning. If the market [for sales] is there, builders will pay the price and get the money."

## Trend toward term life insurance may mean less money for mortgage loans

The nation's life insurance companies may have to trim, rather than boost, their mortgage lending in the building boom of the '60's.

A dramatic revolution in the public's insurance-buying habits has simultaneously produced 1) a big increase in insurance volume and 2) a tapering off in net increase of insurance company reserves attributable to savings. This is the money the companies have available for investment each year.

Term insurance is the new factor. As with automobile insurance, the buyer simply pays a premium for protection—but he is saving nothing. With regular life insurance a policyholder is both buying protection and saving.

Premiums for term policies are much less than for regular life policies. For example: if a man of 25 buys a regular \$10,000 life policy, the premium with one company runs \$176 a year. If he buys a \$10,000 five-year term policy, renewable for another five years without physical examination, the premium is only \$65 a year.

### Family policies popular

Two big new items in insurance sales are tilted in favor of term insurance. These are 1) the popular family policy and 2) group life policies. With a typical family policy, the husband has regular life insurance but his wife and children are covered by cheaper term insurance.

Most company group policies are term insurance. Many insurance men contend group policies have discouraged sale of regular life policies to working men because they feel the company-bought term policy is enough protection.

This change in "policy mix" in the insurance business is still so new there is wide disagreement over its long range effects. But net increases in life insurance capital funds are already showing a drop. They rose \$5.1 billion in 1954 and \$5.4 billion in 1955, but only \$4.8 billion in 1956 and '57. The increase in 1958 is estimated at \$5.9 billion, but a large part of it is due to increased valuation on investments, not savings.

### Annuity sales down

Other influences likewise darken the outlook for an increase in investable funds. Sales of annuities and endowment policies are off. Explains one New York insurance executive: "The sophisticated individual who would normally buy this type of insurance realizes that with creeping inflation and the whittling away of the value of the dollar his money is better invested in real estate or the stock market than tied up in insurance."

The same reasoning has led more persons to borrow against their policies' cash value to invest the money elsewhere. And when an insurance company must lend money back to its policyholders, its investable funds are reduced just that much.

Some individuals are now paying up new policies in one lump sum, then borrowing back the full cash value for reinvestment. They thus have full insurance protection while the interest they pay on the loan is deductible for income tax purposes.

The House ways and means committee, starting a new study to plug tax loopholes and widen the tax base, has indicated that this practice will be among the first holes plugged.



## MORTGAGE BRIEFS

### More money for mortgages

Personal savings were the highest in history in the recession year of 1958.

And, just as important, the biggest gainers were those institutions which put most of their money into home loans. Details:

- The nation's savings & loan associations report a \$6.7 billion net increase in savings, pushing total assets up 14% to \$55 billion. Best previous annual gain in savings for the S&Ls was \$6 billion in 1955. They gained \$5.3 billion in 1957 and \$5.3 billion in 1956.

S&Ls have now doubled their size in the last five years and are six times larger than they were in 1945 when assets were \$8.7 billion.

- Mutual savings banks had a \$2.5 billion net increase in savings—likewise the biggest in their history. Assets now total \$38 billion. Biggest previous annual gain was \$2.1 billion in 1956.

Savings banks put about \$2 billion into mortgages last year—highest since the \$2.4 billion of 1955.

### Interest on savings up

A trend toward higher interest rates on savings seems to be underway.

The boosts are widespread among institutions which cut them last year. More seem to be in the offing. Says James A. Hollensteiner, an executive of the US S&L League: "It would not be overly surprising that by midyear our business will be at or close to 4%."

Among those raising rates was West Side Federal S&L in New York City (assets: \$115 million). It went from 3¼% to 3½%, prompting speculation that New York City's big savings banks, now paying 3¼%, may soon go up also. If they do, mortgage officers will be under new pressure to find deep discount loans out-of-state.

### FHA debenture rate boosted

The interest rate on FHA debentures has been raised from 3½% to 3¾%—highest in history.

Last change in the rate was on July 1, 1958, when it was cut from 3½% to 3½%. A year ago, it was boosted from 3¾% to

3½%—the all-time high until the most recent change.

FHA issues debentures to mortgagees when a mortgagor defaults on an insured loan. The interest rate is based on average yield of long-term government bonds.

### S&L insurer to be liquidated

The trust account of the International Guaranty and Insurance Co of Tangiers has been ordered liquidated by a San Francisco court.

International Guaranty specialized in insuring deposits of savings & loans associations which do not have federal deposit insurance (May '58, News).

A superior judge held that the company was not only doing business in California without a license, but the trust, itself, was unsound. Though International Guaranty listed the assets of the trust at \$1.1 million, state officials told the court the trust had only \$1 million in overvalued first and second mortgages.

The firm had insured S&L deposits in Illinois, Arizona, Nevada, Idaho and Maryland—but not in California.

NEWS continued on p 46

## MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee, who retains servicing.) As reported to HOUSE & HOME the week ending Jan 9, '59.

### FHA 5¼s (Sec 203) (b)

| FNMA prices |       | Minimum Down* |          | Minimum Down* |          | 10% or more down |          |
|-------------|-------|---------------|----------|---------------|----------|------------------|----------|
| Spec        | Scdry | 30 year       |          | 20-25 year    |          | 20-25 year       |          |
| Asst        | Mkt   | Immed         | Fut      | Immed         | Fut      | Immed            | Fut      |
| VAwz        | FHAxy |               |          |               |          |                  |          |
| 96          | 97    | 96-97         | 96-97    | 97            | 97       | 97-98            | 97-98    |
| 96          | 98    | par-101*      | par-101* | par-101*      | par-101* | par-101*         | par-101* |
| —           | —     | 96-97         | 96-97    | 96-97         | 96-97    | 96-97            | 96-97    |
| 96          | 97    | 96-98         | 96-97½   | 97-98         | 96-97    | 97-98            | 96-97    |
| 96          | 97    | 97-99         | 96-97    | 97-99         | 96-97    | 97½-99           | 97½-99   |
| 96          | 96½   | 96-97½        | 96-97½   | 97-98         | 97-98    | 97½-99°          | 97½-99°  |
| 96          | 96½   | 97            | 97-97½b  | 97            | 97½b     | 97½              | 97       |
| 96          | 97    | 96½-97        | 96½-97   | 96½-97        | 96½-97   | 97-98            | 97-98    |
| 96          | 97    | 96-97         | 96-97    | 96-97         | 96-97    | 97-98            | 97-98    |
| 96          | 96½   | 96-96½        | 96       | 96-96½        | 96       | 97-98½           | 97       |
| 96          | 97½   | 99            | 98½      | 99            | 98½      | par              | 99½      |
| 96          | 98    | 99            | 99       | 99            | 99       | 99               | 99       |
| 96          | 96½   | 96½-97        | 95½-96   | 97            | 96       | 97½              | 96½      |
| 96          | 97½   | 98½-par       | 98½-par  | 98½-par       | 98½-par  | 98½-par          | 98½-par  |
| 96          | 96½   | 96            | 96       | 96            | 96       | °                | °        |
| 96          | 97    | 95-97         | 94½-97   | 95-97½        | 94¾-97   | 96-98            | 96-98    |
| 96          | 97½   | 98½           | 98       | 98½           | 98       | 99½              | 99       |

\*3% down of first \$13,500; 15% of next \$2,500; 30% of balance.

SOURCES: Atlanta, Robert Tharpe, pres, Tharpe & Brooks Inc; Boston, Robert M. Morgan, vice pres, Boston Five Cents Savings Bank; Chicago, Murray Wolbach Jr, vice pres, Draper & Kramer Inc; Cleveland, William T. Doyle, vice pres, Jay F. Zook Inc; Denver, C. A. Bacon, vice pres, Mortgage Investments Co; Detroit, Harold Finney, exec vice pres, Citizens Mortgage Corp; Houston, Donald McGregor, exec vice pres, T. J. Bettes Co; Jacksonville, Brown L. Whatley, pres, Stockton, Whatley, Davin & Co; Los Angeles, Chris Gebhardt, asst vice pres, The Colwell Co; Newark, William F. Haas, vice pres, Franklin Capital Corp; New York, John Halperin, pres, J. Halperin & Co; Oklahoma City, M. F. Haight, first vice pres, American Mortgage & Investment Co; Philadelphia, Robert S. Irving, exec vice pres, W. A. Clarke Mortgage Co; St. Louis, W. C. Rainford, pres, Mercantile Mortgage Co; San Francisco, Maurice V. O'Hearn, vice pres, Bankers Mortgage Co of Calif; Washington, DC, Hector Hollister, exec vice pres, Frederick W. Berens Inc.

### VA 4¾s

| City         | 30 year no to 2% down |                     | 25 year 5% down      |                     | 20-25 year 10% down or more |                 | Conventional Interest Rates |
|--------------|-----------------------|---------------------|----------------------|---------------------|-----------------------------|-----------------|-----------------------------|
|              | Immed                 | Fut                 | Immed                | Fut                 | Immed                       | Fut             |                             |
| Atlanta      | a                     | a                   | a                    | a                   | a                           | a               | 5½-5¾                       |
| Boston local | 99-101                | 99-101              | 99-101               | 99-101              | 99-101                      | 99-101          | 5-5½                        |
| out-of-st    | 92-92½                | 92-92½              | 92-92½               | 92-92½              | a                           | a               | —                           |
| Chicago      | 91-92 <sup>b</sup>    | a                   | 91-92 <sup>b</sup>   | a                   | 91-92 <sup>b</sup>          | a               | 5¼-5¾                       |
| Cleveland    | 94-95 <sup>b</sup>    | 92-94 <sup>b</sup>  | a                    | a                   | a                           | a               | 5½                          |
| Denver       | 90-91½ <sup>b</sup>   | 90-92 <sup>b</sup>  | 92½-93½ <sup>b</sup> | 92-93½ <sup>b</sup> | 94°                         | a               | 5½-6                        |
| Detroit      | 92½-93                | 92-92½              | 92½-93               | 92-92½              | 93-93½                      | 92½-93          | 5½                          |
| Houston      | 92-93                 | 92-93               | 92-93                | 92-93               | a                           | a               | 5¼-5¾                       |
| Jacksonville | 92-92½                | 92-92½ <sup>b</sup> | a                    | a                   | a                           | a               | 5½-6                        |
| Los Angeles  | 92-92½                | 92-92½              | a                    | a                   | a                           | a               | 5½-6.6                      |
| Newark       | 96                    | 95                  | 96½                  | 95½                 | 98                          | 97              | 5½                          |
| New York     | 97 <sup>f</sup>       | 97 <sup>f</sup>     | 97 <sup>f</sup>      | 97 <sup>f</sup>     | 97 <sup>f</sup>             | 97 <sup>f</sup> | 5½-5¾                       |
| Okla City    | 92-92½                | a                   | 92-92½               | a                   | 92-92½                      | a               | 5¾                          |
| Philadelphia | a                     | a                   | a                    | a                   | a                           | a               | 5½                          |
| San Fran     | 92 <sup>b</sup>       | 92 <sup>b</sup>     | a                    | a                   | a                           | a               | 5¾-7.2                      |
| St Louis     | d                     | d                   | a                    | a                   | a                           | a               | 5¼-6                        |
| Wash, DC     | 93½                   | 93                  | 96                   | 95½                 | 96                          | 95½             | 5½-5¾                       |

► Immediate covers loans for delivery up to 3 months; future covers loans for delivery in 3 to 12 months.

► Quotations refer to prices in metropolitan areas; discounts may run slightly higher in surrounding small towns or rural zones.

► Quotations refer to houses of typical average local quality with respect to design, location and construction.

Footnotes: a—no activity. b—very limited market. c—very limited demand. d—some offering at 91-92. e—local activity at 97. f—includes construction loans. g—some 5% and some 5¼%. w—FNMA pays 98 for FHA 5¼% mortgages of \$13,500 or less after ¾ point purchasing and marketing fee and ¾ commitment fee. x—FNMA pays ½ point more for loans with 10% down or more. y—FNMA net price after ½ point purchase and marketing fee, plus 2% stock purchase figured at sale for 50¢ on the \$1. z—price after ¾ point purchasing and marketing fee, plus ¾ point commitment fee; applies only to VA mortgages of \$13,500 or less.

## NEW YORK WHOLESALE MORTGAGE MARKET

### FHA 5¼s

Immediates: 95½-96½  
Futures: 95½-96½

### VA 4¾s

Immediates: 90½-92  
Futures: 90½-92

### VA and FHA 4½s

Immediates: no activity  
Futures: no activity

Prices for out-of-state loans, as reported the week ending Jan 16 by Thomas P. Coogan, president, Housing Securities Inc.

Note: prices are net to originating mortgage broker (not necessarily net to builder) and usually include concessions made by servicing agencies.

## FNMA STOCK

|             | Month's-Month's |        |     |      |
|-------------|-----------------|--------|-----|------|
|             | Jan 12          | Dec 10 | low | high |
| Bid .....   | 55¼             | 58¾    | 53¼ | 59   |
| Asked ..... | 57¼             | 60¾    | 55¼ | 61   |

Quotations supplied by C. F. Childs & Co.

# Biggest builders of 1958: Mackle, John Long, Centex

Two well-known names top the annual list of the nation's biggest builders of private housing—the Mackle Co of Miami and John Long of Phoenix.

Near the top for years, the two firms were virtually tied for most private starts reported in 1958: 2,504 for Mackle, 2,500 for Long. And right behind them was 1957's biggest, Centex Construction Co of Dallas with 2,261. (Centex also started 715 Capehart military housing units, classified as public starts by BLS, thus not counted in this year's big builder survey.)

The operations of the three top builders present an interesting contrast. The Mackles spread their starts over one state in 10 different tracts; have no intention of going outside Florida. Long is a one-site builder with all of his starts on his huge Maryvale tract north of Phoenix. Centex is building in Texas, Oklahoma and Chicago and will go into any other market which looks promising.

But all three have become much more than homebuilders. They all own utilities, shopping centers and industrial developments. The Mackles sell lots in a breathtaking volume (see next page), own and operate two resort hotels. Centex' busy President Tom Lively contracts Capeharts and other jobs, builds and operates rental units.

### Some of the biggest

A check across the US shows that at least seven other builders say they started 1,000 or more units in 1958—several of them selling low-priced homes on VA no-down deals using Fanny May special assistance money.

Perennial big builder Bill Levitt started an estimated 1,100 units in 1958—all of them in his new Levittown, N.J. project. He was slowed down by his transition from Levittown, Pa. His new smash-hit operation in Puerto Rico (see p 49) produced grading, but no house construction last year.

Hefltler Construction Co of Miami, claims

it started 1,400 units. It was helped by the 40-year terms of FHA 213 co-op financing. Dale Bellamah of Albuquerque reports 1,259 starts in four cities in New Mexico, and El Paso, Tex. (He had \$15 million in par money from Fanny May special assistance program 10, estimates 750 to 800 of his 1958 starts were based on this money. He has enough Fanny May No. 10 commitments to finance about the same number this year.)

Four Southern California builders put themselves in the 1,000-and-over category. R. A. Watt of Los Angeles is generally conceded to be the area's biggest builder but refuses to disclose his volume. Bollenbacher & Kelton report 1,276 starts in San Diego; Volk-McLain, 1,006 in San Diego; Tietz Construction Co, 1,100 starts in Orange County.

Starts reported by other giant US builders:

|  |     |
|--|-----|
| Ross Cortese, Los Angeles.....         | 910 |
| Burgener & Tavares, San Diego.....     | 849 |
| Practical Home Builders, Detroit.....  | 810 |
| Wallace E. Johnson, Kansas City.....   | 808 |
| Exhibit Homes, Los Angeles.....        | 800 |
| Joe Eichler, San Francisco.....        | 800 |
| A. L. Branden, San Jose.....           | 800 |
| Henry Doelger, San Francisco.....      | 800 |
| Perl-Mack Construction Co, Denver..... | 775 |
| Larwin Co, Los Angeles.....            | 739 |
| D & E Corp, Los Angeles.....           | 739 |
| Chris McKeon, San Francisco.....       | 740 |
| Bert L. Smokler & Co, Detroit.....     | 729 |
| Midwood-Signature Homes, L.A.....      | 706 |
| R&R Construction Co, Miami.....        | 700 |

### On the horizon

This year the roster of biggest builders seems likely to have a new challenger—Willard Woodrow of Los Angeles. He told

HOUSE & HOME last month that he aims to become the "first national builder" in the US. This year, he plans to make a start by building in Los Angeles, San Diego, Miami (in two locations), West Palm Beach and Waldorf, Md. He is negotiating for land in the New York City area.

Woodrow predicts he may start as many as 6,350 to 6,700 units this year. He and his Aldon Construction Co in Los Angeles have built 25,000 homes in the last 13 years. He frankly avows his ambition is to build in every part of the US, with central offices in each region. He admits he has encountered a good many skeptics: "There are a lot of people who believe that you can't run a nationwide homebuilding business producing a different product to suit each market you build in. I think I can."

The key to his goal is training executives. He brought some of his key California men with him to Miami to train people there. He will follow the same practice in each new market he enters.

Woodrow plans to deal with only one sub-contractor in each trade. "It would be an insurmountable problem to get new subs in each city," he explains. He expects his subs to follow him to each new market, set up their own business there. They would not be limited to working only for him.

Woodrow believes this system on labor, plus the savings on huge volume purchase of materials and equipment, will let him give more house for less money.

## MARKET BRIEFS

### More 6% commissions

The trend continues toward 6% commissions on sales of improved real estate. The latest: • The Portland (Ore.) Realty Board first raised its recommended commission on home sales from 5% to a flat 6% with a minimum of \$400 vs the former \$200. When brokers who handle a large volume of cheap homes complained, the \$400 minimum was eliminated.

• Realtors in Spokane agreed on a boost to 6% on the first \$150,000 of the price on the sale of improved property, with a minimum of \$250. But the commission on the price above the first \$150,000 will be only 3%. The rate had been a flat 5%.

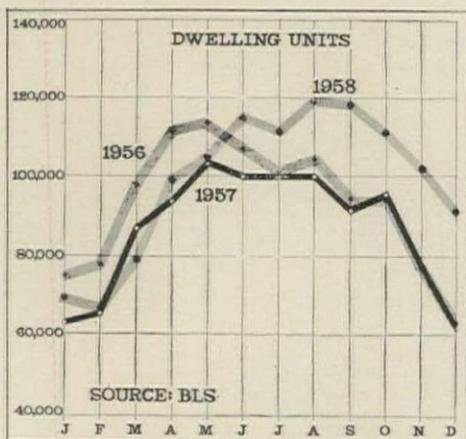
### NAHB: 40% builders

NAHB's 11 biggest chapters, which account for 6,426 of the association's 40,100 members, have 40% builder-members and 60% associates, NAHB figures disclose.

Associates include materials suppliers, salesmen, some realtors and lenders, many of whom have primary ties to other housing industry trade groups.

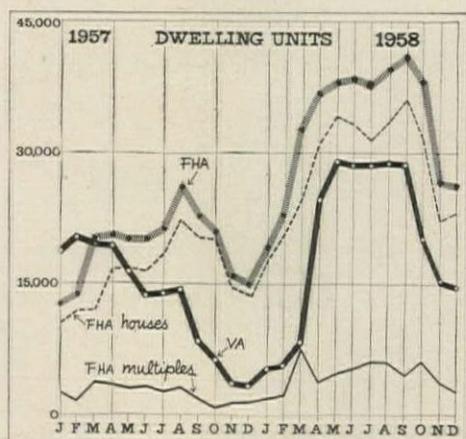
Biggest NAHB chapter is now Chicago's, with 823 members (283 builders, 540 associates). The others:

| Association                                 | Builders | Associates | Total |
|---|----------|------------|-------|
| Detroit.....                                | 434      | 263        | 697   |
| Washington.....                             | 248      | 359        | 607   |
| Houston.....                                | 242      | 350        | 592   |
| St. Louis.....                              | 212      | 368        | 580   |
| Los Angeles, Orange & Ventura Counties..... | 199      | 343        | 542   |
| Long Island.....                            | 183      | 358        | 541   |
| Kansas City.....                            | 181      | 349        | 530   |
| Milwaukee.....                              | 214      | 314        | 528   |
| Minneapolis.....                            | 188      | 314        | 515   |
| Dallas.....                                 | 231      | 253        | 484   |



**HOUSING STARTS** in '58 totaled 1,197,700 (1,130,600 private, 67,100 public). It was the fourth greatest volume on record and the best year since '55, bettering '57 by 15%.

Dec private starts (89,500) set a seasonally adjusted annual rate of 1,430,000, highest since Dec '54. Total starts of 91,000 (including 1,500 public) ran 43.5% ahead of Dec '57.



**FHA AND VA APPLICATIONS:** FHA new home applications rose to 22,965 in December, up 3% from November and 69.1% over December '57. Year-end total: 198,769, a 71.9% gain over '57. VA appraisal requests fell for the fourth month but not as sharply. Total 14,794 was 3.4% behind November, but 327.7% ahead of December '57. Year's total: 234,236, up 46.9% from '57.

H&amp;H staff



**MACKLE AGENTS** in 20 cities put their sales booths at dozens of pedestrian crossroads. This one was aimed at the commuter traffic through New York City's Grand Central Station.



**BEST SELLER** of all Mackle models in all tracts in 1958 was this three-bedroom, one-bath home with porch and carport. Prices ranged from \$11,200 to \$12,000 depending on the tract.

## CLOSEUP:

# The Mackles—they sell Florida for \$10 down

Five years ago, the Mackle Co of Miami was 45 years old—conservative but not stodgy—prospering with 500 to 800 starts in its best years.

Last year was its 50th anniversary year. And how the Mackle Co has changed. It led the nation with 2,504 starts and it sold 42,000 homesites in what must be one of the biggest real estate merchandising campaigns in history.

The money is pouring into its coffers at a \$400,000-a-month rate as lot sales continue to boom on a \$10 down, \$10 a month basis (for an \$895 lot).

And the three Mackle brothers, Elliott, 50, Robert, 47, and Frank, 42, now talk confidently of boosting their house production to 25,000 by 1965. And they may do it. Surveys of their lot buyers show that 70% plan to have homes built eventually.

And who can offer them more house for the money in a Mackle tract than the Mackle Co?

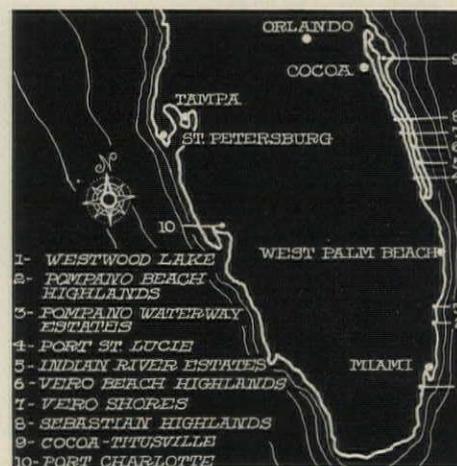
The Mackles are selling houses and lots in ten locations (see map). The biggest is 91,000 acre Port Charlotte near Punta Gorda. Their cheapest lot is \$895 but others run up to \$13,800 (a corner lot on the Intracoastal waterway on the east coast). Their houses are priced from \$6,690 for a one bedroom-one bath model with a screened porch to \$17,000 for a three bedroom, two bath model with carport and Florida room.

The Mackles credit their success to:

1. The international lure of Florida. ("Arthur Godfrey and the Chambers of Commerce built it up, we are just utilizing it.")
2. Past experience in homebuilding. ("When we get done building a house you can pile all the scraps on a card table.")
3. Availability. ("We make it as easy to buy a lot in Florida as to buy a loaf of bread—easier because you don't even have to go to our store.")

But there are other factors. The Mackles have helped restore the faith of many northerners in Florida real estate, a faith that was shaken badly by the bust of the 20's and by the large number of shady Florida land promotions of the past decade.

The Mackles go to great lengths to keep customers happy. They routinely offer refunds on lot sales if the customer asks within 30 days. But they have made refunds a year later in cases where couples separated because of death or divorce.



**MACKLE TRACTS COVER SOUTH FLORIDA**

Their developments are well planned. Lots are big (minimum 85x125 in Port Charlotte). They are delivering on promises—putting in roads, water and sewage disposal facilities. Every development has one or more recreational areas and the Mackles build a recreation building for residents.

Mackle houses have never been architectural gems. But they are well-built (concrete block-stucco), offer a lot of space for the money. The company has a staff architect, James Vensel, who does land planning as well as house designs.

The Mackles mix up their models in a tract. So amid Florida's lush subtropical climate, a profusion of trees and shrubs gives their communities a custom look after only three years.

### Merchandising marvel

Most spectacular part of the Mackle success story is the company's merchandising and promotion.

The brothers, operating as General Development Corp spent \$2 million on advertising and promotion last year, plan to spend as much in 1959. They advertised in *LIFE*, *Look*, *Saturday Evening Post*, *TIME*, *Newsweek* and a host of small publications, religious weeklies, union newsletters and magazines. And they get wonderful results—17,000 inquiries from a quarter page ad in *LIFE* alone.

They scouted the North, picked real estate



**THE MACKLE BROTHERS: ELLIOTT, FRANK AND ROBERT**

THERE'S A NEW TREND IN BATHROOMS



In Philadelphia, luxury living in the modern mode—new Stafford House, fully air-conditioned. Owner—Stafford House, Inc.; Builder—Stone Construction Co.; Architect—George S. Idell, F.A.I.A.; Plumbing Wholesaler—Girard Supply Corp.; Plumbing Contractor—Daniel J. Keating Co.

## U/R bathroom fixtures chosen for Stafford House

A residence of carefully planned elegance, Philadelphia's new Stafford House has 327 apartments whose comfort and luxury are well illustrated by the beautifully styled Universal-Rundle bathroom fixtures.

**All over the country**, in the finest housing developments, in the newest apartment houses, motels, hotels and office buildings, the swing is to new trend Universal-Rundle, the world's finest bathroom fixtures.

**Their lasting loveliness** has a practical basis in

U/R's pioneering for the last 58 years. U/R introduced the first color-matched bathroom fixtures. Pioneered the one-fire "Hi-Fired" method of making vitreous china. Added a distinction in design that is unrivaled.

**Builders and architects** are specifying Universal-Rundle bathroom fixtures because they offer by far the best value to their customers and clients. For new complete catalog, write to Universal-Rundle Corporation, 542 River Road, New Castle, Pennsylvania.

Universal  Rundle

**MAKER OF THE WORLD'S FINEST PLUMBING FIXTURES**

Plants in Camden, N. J.; Milwaukee, Wisc.; New Castle, Pennsylvania; Redlands, California; Hondo, Texas.

## LOCAL MARKETS:

## Dallas survey finds demand up in \$16,000 price range

Dallas home builders, surveying their own market, have come up with figures that suggest they may be underserving the market for homes priced over \$16,000.

More than half the 3,191 visitors polled at Dallas' 1958 Parade of Homes said they feel they can afford a home priced over \$16,000. But 57 builders (about 25% of the Dallas NAHB membership) surveyed by the Dallas chapter say their '59 plans call for 3,000 homes priced under \$15,000, only 1,300 priced higher.

The builders' market survey shows more than a third of the prospects intend to buy a home during the next year, though only a fourth do not now own one. More than 58% list their occupation as professional, managerial or sales. Nearly half say they can afford monthly house payments, including taxes and insurance, of more than \$120.

Checking a list of 66 lacks in Dallas homes, ranging from swimming pools to good workmanship, the prospects indicate most dissatisfaction with bedroom and lot size, lack of basements, individuality & originality.

The 19-question survey also covers such items as family size, number of children, sq ft requirements, loan eligibility, preferences on location, space vs built-ins, fireplaces, dining rooms, commutation time (only 7.1% will travel more than 30 min).

Big question not included: will new home buyers actually pay as much as they say they can afford. Big Builder Tom Lively, whose Centex Construction Co is aiming at a price \$1,000 under last year's \$13,500, says this is because his '58 experience shows Dallas demand is for a lower-priced house. But he says his operations elsewhere (Chicago and Honolulu, for example) won't necessarily be affected: "We're going to have to treat each market separately."

**Buffalo:** Is land price inflation beginning to reshape the housing market? Items:

- Nearly half the 41% price increase for new homes since 1950 is land price inflation.
- High prices have caused a steady rise in rehabilitation work on older homes, say builders. They estimate \$18 million was spent on rehab last year, expect to see \$21 million worth of rehab this year.
- New home starts sank to about 4,500 units in '58, off 20% from '57. Builders predict starts will climb 15% this year. Even so, many builders have shifted to apartment building, especially four-to-eight-family units (which can go on higher priced land and still make economic sense).
- Average sales price of new homes rose \$1,000 to about \$17,500 last year. Builders figure it will jump another \$200 to \$400 by summer.

The trend toward apartments and rehab could lure many suburbanites back to city living, predicts President Peter W. Braun of the Niagara Frontier Builders Assn.

**Lubbock:** Builders expect "as many or more" starts in 1959 as in 1958, when a near-record 2,054 dwelling units were built, 95% of them single-family homes. The record, set in 1950, was 2,072 units.

Builders see a continued trend toward better designed homes and expect buyers to demand "more for their money."

"I think there will be more starts this year than last," says President Ken Flagg, of

Lubbock Builders. "But 1959 is not going to be an 'order-taking' year. It is going to be a year when the builder will have to give more house for the money. Buyers will be more quality conscious. They will demand a modernly designed home which is practical as well as beautiful on the outside."

**New York:** "Our formula amounts to: look at what Levitt does and do the opposite."

This is how energetic Realtor Robert W. Dowling, president of \$45 million-assets City Investing Co of New York City, describes his latest venture in land developing: a 27 sq mi woodland site 40 mi from Manhattan.



DOWLING

Sterling Forest (in Orange County, NY on the west side of the Hudson just north of the New Jersey state line) will have 5,000 of its 17,000 acres set aside for parks and recreation. And Dowling plans to lease, not sell, the land. The reason, he says, is to keep strict control of design—not only of homes but also of the multi-million dollar complex of research offices and laboratories he expects to put on another 5,000 acres. Sample restrictions: colors must fit the natural landscape; no building above tree top height; no houses on three lake fronts or on hilltops.

Construction is already underway. Union Carbide, which took a 100-year lease on 500 acres, is putting up an \$8 million nuclear research center. Dowling has 10,000 acres ear-

marked for homes. The park will include a 125-acre floral garden, modeled after Holland's Keukenhof tulip gardens, and Dowling expects to cover upkeep with admissions.

Such a giant research park, expounds Dowling, is "the new American pattern"—an "isolated but accessible" rural area where work meshes with aesthetics, business and recreation.

**Memphis:** Used houses, especially vintage 1948 and older, are going begging, mainly because owners have inflated ideas of their value.

Unless location is choice, say Memphis sales agents, worth of established neighborhood and appeal of finished landscaping are more than offset by new features and improved design of new houses in the same price range. Result is that many owners who bought during the Korean War peak are reluctantly having to take a loss to sell.

Some other reasons for over-pricing: mistaken ideas that the rising price of vacant land in established areas means improved property should rise by same amount; too literal application of current square footage prices to house; gossip reports that tend to hike sale prices by 10% in transmission. New awareness: buyers know about FHA valuations, often refuse to pay any more, except in choice locations.

**Kansas City:** Housing has bounced back from its 18 month slump. Met area permits for the first 11 months last year soared to 70% above their 1957 pace. There is virtually no unsold overhang.

Only cloud on the horizon, says President  
*continued on p 50*

Michel Alexis



**LEVITT'S MODEL** is adapted to Puerto Rico building methods (i.e. reinforced concrete walls), rapid construction. Levitt expects to complete five a day when construction gets rolling.

## Bill Levitt expands to Puerto Rico, scores sellout

Big builder William J. Levitt has expanded his operations to Puerto Rico—and scored a hit.

He sold out a 278-house site, Campo Alegre, near the San Juan suburb of Baymon, two days after his model home opened. Impressed, Levitt announced a second, 700-home project, promptly got 800 signed orders. "We hardly started before we were inundated with business," says a Levitt aide. Levitt himself is now talking about a third project of 10,000 homes.

Incorporated with Boston Contractor Joseph Kelley as Projectos Borinquen Inc last

June, Levitt's operation offers a reinforced concrete three-bedroom house priced at \$8,250 with refrigerator, stove, water heater, carport, built-in kitchen cabinets and landscaped lot. Financing requires no down payment, but a \$100 binder is refunded when final papers are signed. The same model house (see cut) is being used for all sales. It lies on busy Franklin Roosevelt Ave in San Juan, far from suburban development sites. With graders at work on Campo Alegre and approval expected daily for the second project, Levitt is seeking more land to continue the Caribbean honeymoon.

J. D. Spears, of the local home builders is mortgage money. Builders expect this to ease by spring, partly through Congressional action. New house prices are firm and apparently unaffected by some slight rises in materials' costs. Used house sales are holding up well, though newer, better maintained neighborhoods show marked advantage over older ones, especially where the population has shifted.

A year-end report by KC realtors, based on 11-month figures for the five-county metro area, shows:

|                          | 1957  | 1958  | % Change |
|--------------------------|-------|-------|----------|
| U. completed.....        | 4,648 | 6,297 | +35      |
| Permits (residential) .. | 4,822 | 8,246 | +70      |
| Rental units .....       | 179   | 716   | +300     |

(988 public housing units not counted would put permits up 91%, rental units up 855%)

**Long Island:** Home builders, who've built up practically all available land within commuting time of New York City and were desperate enough for customers to woo industry through a Sept industrial symposium, are beginning to reap rewards. Rollson Inc, custom metal products, is in residence in Plainview, bringing with it 33 employes, some potential L I home buyers. It is the first of five firms moving to Nassau or Suffolk counties as result of the meeting (where State Commerce Dept and Area Development Council aides sang L I's praises).



WINNER, 3 TO 1: BEHYMER-REYNOLDS "HOUSE OF EASE"

## Aluminum breaks into the new house market

Aluminum, fighting for markets to match its defense-swollen production capacity, has apparently overcome homebuyers' traditional reluctance to accept new materials in their houses.

Homes featuring maximum use of the metal (roof, siding, ductwork, windows, doors, other components) are selling at least as well and in some cases far faster than homes of conventional materials—despite higher first costs. Items:

- Behymer Development Co, St Louis, selling houses with 20 optional aluminum components at \$475-\$550 extra on homes priced from \$20,000 to \$28,000, found aluminum outsold conventional homes three to one. It sold 35 all aluminum-and-brick homes priced at \$11,900 before the site was opened.

- National Homes, featuring aluminum in its 1959 Viking line, ran a market test in its home town, Lafayette, Ind. It sold 81 aluminum homes out of 90, even though they cost \$500-\$800 more. Later open houses by about 100 dealers show aluminum matching conventional homes. National says it will probably produce half aluminum, half conventional prefabs this year.

Leaders in aluminum houses are Reynolds Metals Co, whose "House of Ease" program calls for 2,000 lbs of the metal (against 20 in a conventional house); Alcoa, whose big "Care-Free" home uses 9,000 lbs; and National Homes (in cooperation with Reynolds, Alcoa and Kaiser Aluminum & Chemical Corp) using 1,400 to 3,000 lbs.

## Big, expensive promotions pay off in publicity for Mackles

continued from p 47

brokers in 26 cities from New York City to Houston, from Wilmington, Del. to Fargo, N. D. They flew them all down to Florida, showed them what they were to sell, gave them exclusive territorial rights. Armed with the slick brochures the Mackles have prepared, the brokers get to work. They open sales booths anywhere they can find room—in Times Square and in Grand Central Station in midtown Manhattan. (In a Philadelphia station models cavorted in bathing suits while salesmen made their pitch.)

### Junkets for editors

The company has spent heavily on promotion but has reaped a vast amount of free publicity. Dozens of editors from magazines and newspapers have been flown to Florida at Mackle expense to see the developments. The Mackles put their guests up in their oceanfront hotel on Key Biscayne (near Miami), then fly them in a chartered plane from one Mackle project to another.

They have some of their residents from northern cities on hand to meet the real estate editors of hometown papers. Resulting interviews have produced more free advertising for the Mackles.

Real Estate Editor Jack W. Kempson of the Newark News returned from a Mackle junket, reported: "What the Mackles have done in a year's time is a perfectly amazing accomplishment."

Real Estate Editor Ernie Baumgarth of the Detroit News talked to ex-Michigan residents, reported they are very happy in Port Charlotte. He concluded: "It's a very sound operation."

The Mackles hired TV Commentator John Cameron Swayze to make a film on Port Charlotte. The film is used by all the Port Charlotte salesmen and agents. A salesman

may walk into a fire station in the east or mid-west, anywhere a group is gathered with time on its hands. He shows them the film, usually succeeds in selling them a piece of Florida.

The three Mackle brothers were weaned on the building business. Their father, Francis Elliott Mackle, was a builder in Atlanta, Jacksonville and other southern cities—but did commercial work mostly. Before he died in 1941 he left his sons this advice: "Be the first man on the job and the last to leave. Build good houses; don't build monuments to yourselves."

Elliott and Robert both attended Washington & Lee for three years, Elliott studying architecture, Robert engineering. Frank graduated from Vanderbilt with an engineering degree.

They follow their father's admonition. They all work long hours, work together most of the time (but never fly together). None is a limited specialist. They share a large office in their Coral Gables building. They have identical blue executive chairs and identical desks and use only one secretary.

They seldom disagree. On those rare occasions when they do, they retire to a rear room to hash out the problem or their mother mediates for them.

The Mackles are devout Roman Catholics. (They designed and gave land for a new church on Key Biscayne where they built 1,000 houses and own their hotels.) Elliott and Frank are teetotalers; Robert will take a cocktail.

The Mackles own a horse ranch in central Florida, race thoroughbreds under the stable name Elkcam (Mackle spelled backwards). Like other Mackle enterprises, their horses make money.

After building defense housing and other buildings on government contract early in World War 2, Robert and Frank joined the Navy as engineering officers. After the war,

the Mackles built several tracts in the Miami area, got their first big break in a participation deal with Investors Diversified of Minneapolis on Key Biscayne.

Finished on the Key, they looked for a new market. They ran a blind ad in northern papers to get a clue to the size of the retirement market. The results indicated 68% of couples about to retire were willing to come to Florida and their average income was \$160 a month.

The Mackles bought land near Pompano Beach, 40 mi north of Miami, offered a one bedroom, one bath house for \$4,950 with \$210 down and \$38 a month FHA. They sold 78 houses in 18 hours.

"Our next step," explains Elliott, "was to get into land development. We noticed that young couples were just as happy in our retirement homes as the older people. We asked ourselves, 'Why not make Florida available to everybody?' This meant big land, like Port Charlotte."

### Gold mine in Canada

For a plan that big, they needed money. They found it from Chemical Research Corp of Canada, which has put nearly \$6 million into the General Development Corp.

They bought more land, leading the headlong rush of developers to tie up that most desirable part of Florida below the frost line (about the lower third). They have acquired the 5,500 acres of Publisher Gardner Cowles near Ft. Pierce on the east coast. Now, Cowles is on the board of General Development. And early in January they bought another 11,000 acres adjoining their Port Charlotte holdings.

The star of General Development is soaring in no less an astonishing fashion than the Mackles, themselves. General common stock was traded at \$12 a year ago. Last month it hit \$41 and was still headed up.

## Opinions

Noteworthy comment on matters of moment to housing:

H&H staff



**Nat Rogg**, NAHB economics director:

"It's about time the home building industry quit thinking of itself as a *minimum needs shelter* industry. This is basically the thinking of a nation in the early stages of its industrial development or in a shortage situation . . . Other industries analyze their markets in terms that go far beyond minimum needs. Such needs are a floor, not a ceiling."

Louisville Times



**Howard C. Reeves**, president, Louisville home builders:

"Prospective buyers are shopping more. They know what they want, and they recognize quality. And they're not buying when prices are not in line. This is good."

Robert R. Blands



AIA President **John Noble Richards**, in a talk to Texas architects:

"If we can bring the architect and builder together, we can again bring architecture instead of mere gadgetry into mass produced homes. And a walk through our suburbs could become a delight rather than a nightmare as it sometimes is."

H&H staff



**William E. Finley**, director of the Natl Capital Planning Commission:

"Indefinite growth in all directions is not necessarily good. I don't believe the Washington metropolitan area must of necessity join an Atlantic Coast megalopolis."

H&H staff



Executive Director **John Dickerman** of NAHB:

"The logical outcome [of too much reliance on government mortgage subsidy] would be to provide direct government loans at subsidized interest rates. But this might lead to controlled profits and audited costs for builders. If this ever came to pass, we'd have taken a long step toward surrender to government control."

## VIEWS ON THE NEWS:

# Is there a future for mortgage bankers?

By Gurney Breckenfeld

Years ago, federal intervention put mortgage bankers and most lenders out of the farm loan business. Today, farm mortgages are heavily dominated by the government. Instead of a mere \$150 million-a-year direct lending program for veterans only, the other FHA—the Farmers Home Administration—has \$400 million a year to make direct loans to farmers for almost any kind of building or fixup work. Federal Land Banks bulk big enough in the farm lending picture to control interest rates for private lenders, too.

The land banks now hold 18% of the nation's farm realty loans. Like Fanny May in its secondary market operation, the land banks raise their money by selling securities to the public. Uniquely, they float one-year 4% bonds, use the proceeds to finance long-term mortgages. But when you borrow from a land bank, it makes you take 5% of the loan in stock (vs Fanny May's 2%). Usually the stock pays about 8% dividend, cutting the net borrowing cost from 5% to as little as 3.8%.

No wonder the lending boss of one New England life insurance company says: "We've liquidated our farm loans. We're not willing to compete with federal agencies. And I don't see why some of our competitors do." A few years back, insurance companies were getting 4½% while the land banks loaned at 4. Today, as another farm mortgage man sighs: "It's straight competition. And if a farmer can't get a loan from a land bank or a private lender, the FHA will lend to him for the same 5%." In other words: no matter how bad the credit risk, the interest cost is the same in farm lending.

All this points a moral for mortgage bankers, say some experts who have watched the growth of US suzerainty over city mortgage lending. The city mortgage man is about where the farm mortgage banker was 20 years ago, they fear.

Right now, mortgage men are a prosperous lot thanks to the postwar VA and FHA housing spree. But some of their leaders are worrying privately lest mortgage bankers become almost extinct during the 60's. On one side, there is the threat of more government direct lending. On the other, there is more and more competition from S&Ls. Some top men in MBA fear mortgage bankers have largely forgotten how to originate conventional loans. It has been too easy—and profitable—to package FHA and VA deals for out-of-state investors. But now, out-of-state investors are beginning to reach out from New York to service mortgages direct—as far as Virginia. This deprives mortgage bankers of their bread-and-butter income from servicing fees.

What gave today's regiment of city mortgage bankers their start in business was that most commercial banks refused to have anything to do with FHA. The original idea was for local commercial banks to originate FHA loans, take the construction financing themselves and re-sell the mortgages to life insurance companies and savings banks, keeping the servicing. As business grows more competitive, some experts now predict, commercial banks may want to assume the role originally conceived for them. If so, mortgage bankers will find the going tougher.

All this helps explain why mortgage men are so excited about FHA's Certified Agency Program, which has just been made nationwide (see p 43). It lets them recapture business they had been losing to S&Ls. Says President Walter Nelson: "Mortgage bankers simply must make this plan successful, and, if possible, universal in application if they are to meet the competition they face."

S&L's, incidentally, aren't standing still. As chronicled in our People section (p 65), some of the top men in the business (including three past presidents of the US S&L League) have just been added to the board of Max Karl's Mortgage Guaranty Co in Milwaukee, which offers private insurance à la FHA. Federal S&Ls won't make many 90% loans without insurance. The US League couldn't get Congress to set up an insurance program. Now, the Federal Home Loan Bank Board has approved 90% loans. So savings & loan men are setting out to do for themselves what the government refused to do for them. That's a pretty rare thing these days.

**SIDELIGHT:** Roy Cooke, assistant FHA commissioner in charge of Title I repair loans, is getting a reputation for wit. A Carolina bank asked if it could finance cemetery lots under Title I. Replied Cooke: "Despite reports to the contrary, FHA is not a cradle-to-grave proposition."

NEWS continued on p 57

**NOW!** Take the *Labor* out of basement window installation



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- STANDARD 2-LITE WINDOW — Project builders report savings of \$3 per opening.
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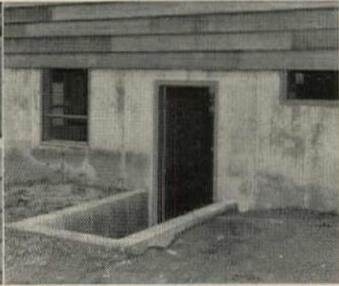
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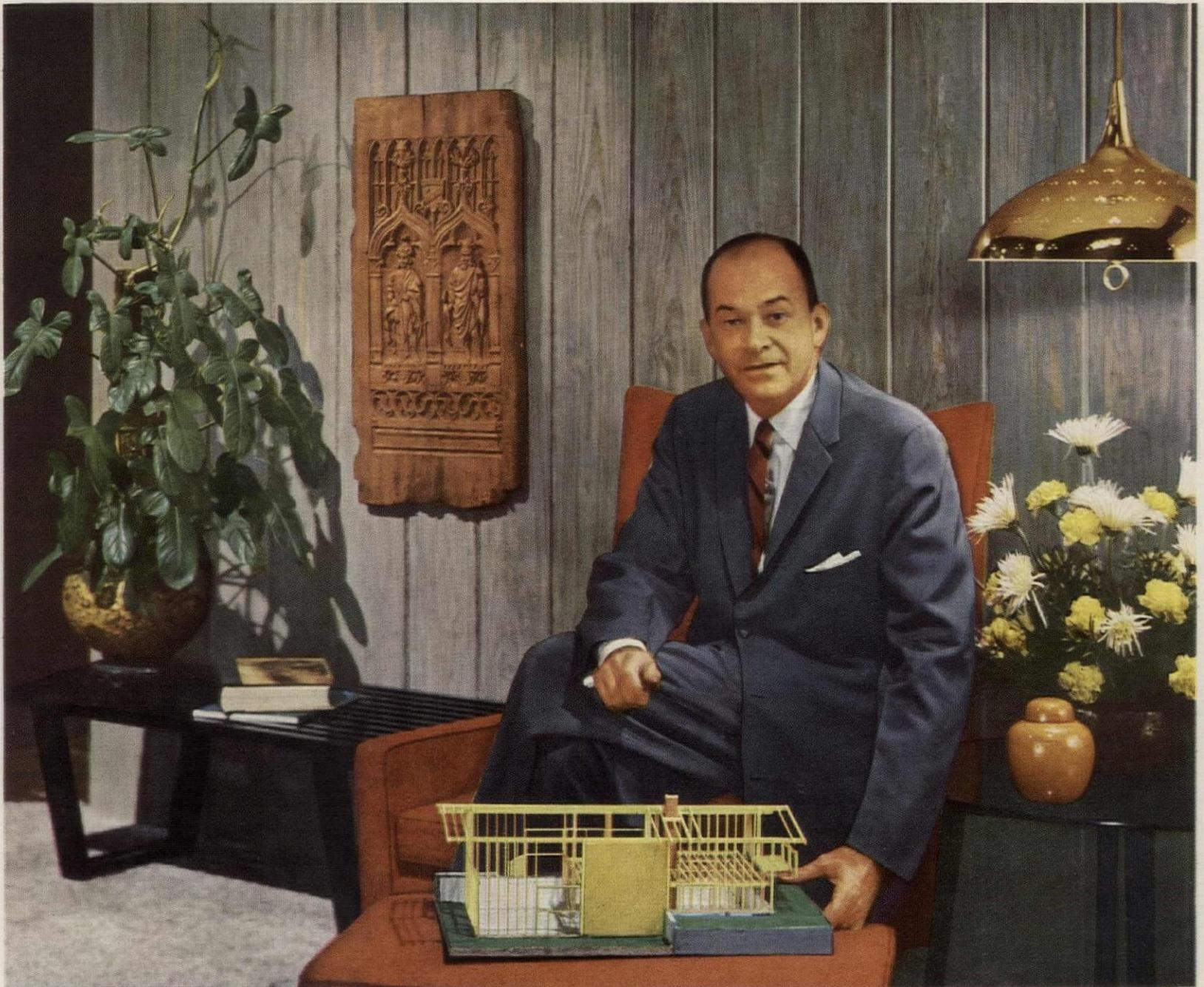
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| S. E. Belcher, Inc.           | Green Pond  |
| W. A. Belcher Lbr. Co.        | Birmingham  |
| W. E. Belcher Lbr. Co.        | Centreville |
| Clancy Lumber Company         | Grayson     |
| Graham Lumber Company         | Maplesville |
| Jackson Saw Mill Co., Inc.    | Jackson     |
| Ray E. Loper Lumber Company   | Tuscaloosa  |
| McMillan Mill Company         | Brewton     |
| McShan Lumber Company         | McShan      |
| T. R. Miller Mill Co., Inc.   | Brewton     |
| Reid Brothers Lumber Company  | Evergreen   |
| Scotch Lumber Company         | Fulton      |
| M. W. Smith Lumber Company    | Jackson     |
| M. W. Smith Sawmill Co.       | Camden      |
| W. T. Smith Lumber Co., Inc.  | Chapman     |
| Summerville Brothers Lbr. Co. | Aliceville  |
| Horace S. Turner, Jr., Inc.   | Mobile      |
| W. T. Vick Lumber Company     | Hamilton    |
| W. J. Word Lumber Company     | Scottsboro  |

## ARKANSAS

|   |             |
|---|-------------|
| P. E. Barnes Lumber Company                         | Hamburg     |
| Bearden Lumber Company                              | Bearden     |
| Bradley-Southern Division<br>Potlatch Forests, Inc. | Warren      |
| Crossett Lumber Company                             | Crossett    |
| Dierks Forests, Inc.                                | Hot Springs |
| Fordyce Lumber Company                              | Fordyce     |
| W. S. Fox & Sons                                    | Pine Bluff  |
| Fuller Lumber Company                               | Lewisville  |
| Gurdon Lumber Co., Inc.                             | Gurdon      |
| Ozan Lumber Company                                 | Prescott    |
| Reynolds & Draper Lumber Co.                        | El Dorado   |
| Sturgis Brothers                                    | Manning     |
| Urbana Lumber Company                               | Urbana      |
| J. L. Williams & Sons                               | Sheridan    |
| Herman Wilson Lumber Co.                            | Leola       |

## FLORIDA

|                                |              |
|--------------------------------|--------------|
| Alger-Sullivan Sawmill Company | Century      |
| Dantzler Lumber & Export Co.   | Jacksonville |
| Mutual Lumber Co.              | Jacksonville |
| Neal Lumber & Mfg. Co.         | Blountstown  |
| Ocala Lumber Sales Co., Inc.   | Ocala        |
| Thomas Lumber & Mfg. Co.       | Quincy       |

## GEORGIA

|                               |          |
|-------------------------------|----------|
| Alexander Brothers Lumber Co. | Columbus |
|-------------------------------|----------|

Augusta Hardwood Co.  
The J. N. Bray Company  
Ellijay Lumber Company  
A. T. Fuller Lumber Co.  
Georgia-Pacific Corp.  
Holly Springs Lumber Co.  
Jeffreys-McElrath Mfg. Co.  
Reynolds & Manley Lbr. Co.  
Rush Lumber Co.  
Shepherd Lumber Corp.  
L. B. Springle Lbr. Co.  
Sullivan Lumber Co.  
Tolleson Lumber Co.

## LOUISIANA

|  |              |
|--|--------------|
| J. A. Bentley Lumber Co.                                 | Zimmerman    |
| L. L. Brewton Lumber Co.                                 | Winnfield    |
| Ronald A. Coco, Inc.                                     | Baton Rouge  |
| Crowell Lumber Industries                                | Long Leaf    |
| Harless Lumber Co., Inc.                                 | Lake Charles |
| Hillyer-Duetsch-Edwards, Inc.                            | Oakdale      |
| A. J. Hodges Industries, Inc.                            | Shreveport   |
| Hunt Lumber Co., Inc.                                    | Ruston       |
| L. D. Kellogg Lbr. Co.                                   | Alexandria   |
| Lock-Moore & Co.   | Lake Charles |
| Louisiana Long Leaf Lumber Co.                           | Fisher       |
| Martin Timber Co.  | Castor       |
| Roy O. Martin Lbr. Co., Inc.                             | Alexandria   |
| Carroll W. Maxwell Lumber Co.                            | Pollock      |
| Olin Mathieson Chemical Corp.,<br>(Forest Products Div.) | Shreveport   |
| N. D. Roberts Lbr. Co.                                   | Alexandria   |
| Sabine Lumber Co.  | Zwolle       |
| Springhill Lumber Company                                | Springhill   |
| Sturgis-Nix Lumber Co.                                   | Ruston       |
| Tremont Lumber Co.                                       | Joyce        |
| The Urania Lumber Co., Ltd.                              | Urania       |
| Woodard-Walker Lumber Co.                                | Taylor       |
| Woodard-Walker Sawmill Co.                               | Heflin       |

## MISSISSIPPI

|                               |              |
|-------------------------------|--------------|
| Bailey Lumber Co.             | Laurel       |
| Crosby Lumber & Mfg. Co.      | Crosby       |
| The L. N. Dantzler Lumber Co. | Perkinston   |
| A. DeWeese Lumber Co., Inc.   | Philadelphia |
| D. L. Fair Lumber Co.         | Louisville   |
| Joe N. Miles & Sons           | Lumberton    |

## MISSOURI

|                      |             |
|----------------------|-------------|
| Dierks Forests, Inc. | Kansas City |
|----------------------|-------------|

Augusta  
Valdosta  
Blue Ridge  
Ocilla  
Augusta  
Atlanta  
Macon  
Savannah  
Hawkinsville  
McRae  
Gainesville  
Preston  
Perry

Fleishel Lumber Co.  
International Paper Co.  
(Long-Bell Division)

## NORTH CAROLINA

|                                 |                |
|---------------------------------|----------------|
| Evans Lumber Co.                | Nashville      |
| L. R. Foreman & Sons Lumber Co. | Elizabeth City |
| Hutton & Bourbonnais Co.        | Hickory        |
| W. P. Morris Lumber Co.         | Jackson        |

## SOUTH CAROLINA

|                              |                |
|------------------------------|----------------|
| Dargan Lumber Mfg. Co.       | Conway         |
| Flack-Jones Lumber Co., Inc. | Monck's Corner |
| Holly Hill Lumber Co.        | Holly Hill     |
| Lightsey Brothers            | Miley          |
| Carl W. Mullis Lbr. Co.      | Lancaster      |
| Russellville Lbr. Co.        | Sumter         |
| Tilghman Lumber Co.          | Sellers        |
| C. M. Tucker Lumber Corp.    | Pageland       |

## TENNESSEE

|                                |           |
|--------------------------------|-----------|
| E. L. Bruce Co., Inc.          | Memphis   |
| Vestal Lumber & Mfg. Co., Inc. | Knoxville |

## TEXAS

|   |             |
|---|-------------|
| Allen-Peavy Lumber Co.                  | Kountze     |
| Anderson Mfg. Co.                       | Tenaha      |
| Angelina County Lumber Co.              | Keltys      |
| Angelina County Lbr. Co., (Jasper Div.) | Jasper      |
| Atlanta Lumber Co.                      | Atlanta     |
| Boettcher Lumber Co.                    | Huntsville  |
| W. T. Carter & Brother                  | Houston     |
| Ealand-Wood Lumber Co.                  | Jasper      |
| Edens-Birch Div.                        | Corrigan    |
| Southwest Lumber Mills, Inc.            |             |
| Grogan Bros. Lumber Co.                 | Conroe      |
| Grogan-Cochran Lumber Co.               | Magnolia    |
| Lacy H. Hunt Lumber Co.                 | Nacogdoches |
| Kirby Lumber Corp.                      | Houston     |
| L. & M. Lumber Co.                      | Willis      |
| The Latcher & Moore Lumber Co.          | Orange      |
| Southern Pine Lumber Co.                | Diboll      |
| Williams Lumber Co.                     | Cleveland   |

## VIRGINIA

|                                   |                 |
|-----------------------------------|-----------------|
| Barnes Lumber Corp.               | Charlottesville |
| Union Bag-Camp Paper Corp.        | Franklin        |
| The Williams & McKeithan Lbr. Co. | Lynchburg       |

SPA mills also support The National Wood Promotion program

Such a gay and pretty effect...and for the walls

Lilly Daché chose oak

**Craftwall**

wood paneling!



Lilly Daché, famous fashion and beauty authority, is President of Lucien LeLong Perfumes. Here she displays her talent for smart design by using oak Craftwall to create a salon of distinctly feminine charm.



Lastingly lovely . . . Craftwall needs no care. Wipes clean. Nail polish, perfume, even ink in the grooves won't stain it.

Craftwall has that genuine hand-rubbed look . . . professionally pre-finished to give the most durable, stain-resistant wood finish known. Every "plank" is hand-selected to show rich, natural grain! Hardwood Craftwall for an 8'x12' wall costs as little as \$60 retail.

Today's home buyer is more discriminating . . . more conscious of quality and good taste. That's why Craftwall wood paneling is used by so many builders to give distinction to their new homes—or remodeling projects. The room above, featured in Craftwall advertising in *Better Homes and Gardens*, and other leading magazines, shows one way wanted richness and beauty can be "built in" with Craftwall.

Craftwall is versatile. In living room, family room, den . . . or any room . . . there's a Craftwall wood to do the job—beautifully! Use

*Elm, Birch (2 tones), Cherry, Maple, Oak, Knotty Pine, Mahogany or Walnut.* And prospects will like Craftwall's tough, factory-finish that resists dirt, scuffs and stains . . . cleans with a damp cloth. No waxing is needed.

Craftwall 1/4" panels come in modular sizes (48"x96", 48"x84", 32"x64", 16"x96", or

longer) for economy, speed of installation. No special skill required—just use nails or Roddis Contact Cement. Craftwall is guaranteed, in writing, for the life of the installation, too. It's easy to achieve that "look of luxury" in your homes with Craftwall. Coupon below brings all the details.

Roddis also offers custom Hardwood Paneling . . . Doors . . . Wood Finishes . . . Adhesives . . . Plywoods . . . Timblend



**Builders' Craftwall Fact File on request!**

Roddis Plywood Corp., Dept. HH-259, Marshfield, Wis. Please send me your Builders' Idea File on Craftwall wood paneling.

Name .....

Firm .....

Address .....

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

# USEFUL THINGS FOR BUILDERS

## Vinyl at low cost; above, on, or below grade —Armstrong Excelon Tile

Of all the low-cost floors now available, Armstrong Excelon Tile gives your prospects—and you—the most for the money. It provides the very features prospects look for: vinyl-asbestos flooring . . . smart appearance . . . minimum care . . . trouble-free durability . . . the backing of the most highly regarded name in floors. And it's been made famous by Armstrong TV and magazine advertising.

While Excelon costs only slightly more than asphalt tile, it is greaseproof, fire-retardant, and much more colorful. And its greater flexibility prevents the installation and maintenance

problems that sometimes occur with asphalt tile. From service and technical considerations, Excelon Tile is perfectly suited to any room. Here's the construction data on Excelon:

**recommended uses:** in any area, above, below, and on grade; **gauges:** 1/8" and Service (1/16") Gauge; **composition:** vinyl with asbestos fillers; **approximate price per sq. ft. installed over concrete:** 35-60¢; **available in:** Corkstyle, Spatter, Metallics, Woodtones, straight grain, burl grain; in over 60 colors.

For complete specs, data, samples, contact the Architectural-Builder Consultant at your Armstrong District Office. He will give you expert flooring advice. Since Armstrong makes all types of resilient floors, he is not biased towards any particular type and can recommend the one type best for each job. He will also set you up with the services to help you make the most of the Armstrong Floors you feature in the homes you build. If you prefer, write direct to Armstrong, 1502 Sixth St., Lancaster, Penna.



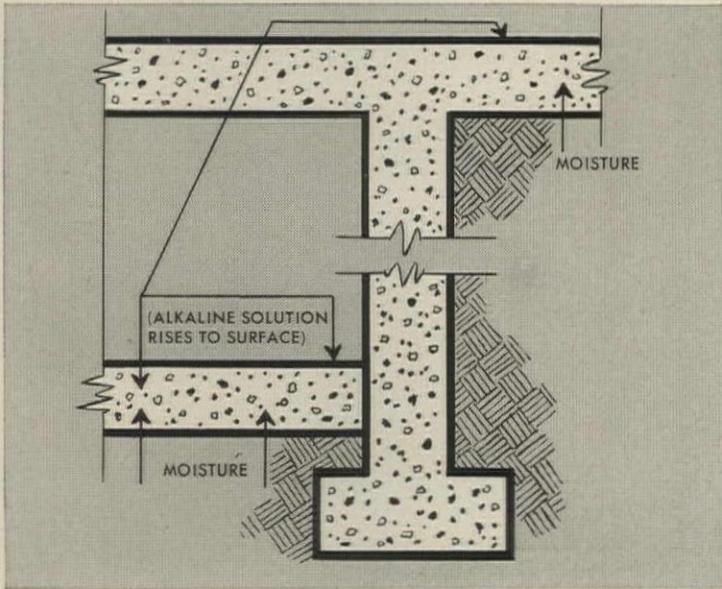
Living is appealingly free and easy in this multi-purpose family area, seen by millions in an Armstrong magazine ad. The rooms demonstrate the enjoyable benefits of new homes, helping develop

prospects for the homes you build. And they stimulate lots of interest in having floors of Excelon Tile. Powerful national magazine advertising like this, and on television, has made Armstrong Floors the

best known and most-wanted of all. (Floor is Excelon in the charming "Spatter Series"—Andover White No. 735 in foreground and Cape Cod Beige No. 737 to rear.)



# TO KNOW ABOUT VINYL FLOORS



## ITS ALKALINE RESISTANCE PERMITS EXCELON TO BE USED IN BASEMENTS AND ON GRADE.

With on- and below-grade concrete, ground moisture often rises into and through the concrete, activating the alkalis in it. The resulting alkaline moisture deteriorates many types of resilient floors—giving home owners good reason to complain. Excelon Tile, however, is not harmed because it's made of vinyl asbestos. And alkalis don't fade its colors. So Excelon can be safely used in basements and on grade, as well as above grade.



## TRIM, HANDY DISPLAY ENABLES YOU TO CASH IN ON ARMSTRONG BRAND NAME.

Here's a proven way to make the selling power of the Armstrong name pay off for you. This display in sample homes shows the selection of floors to your prospects and offers them decorative schemes for floors, walls, fabrics, etc., prepared by the Armstrong Bureau of Interior Decoration. For information on this decorating service and the above display, call your Armstrong office.

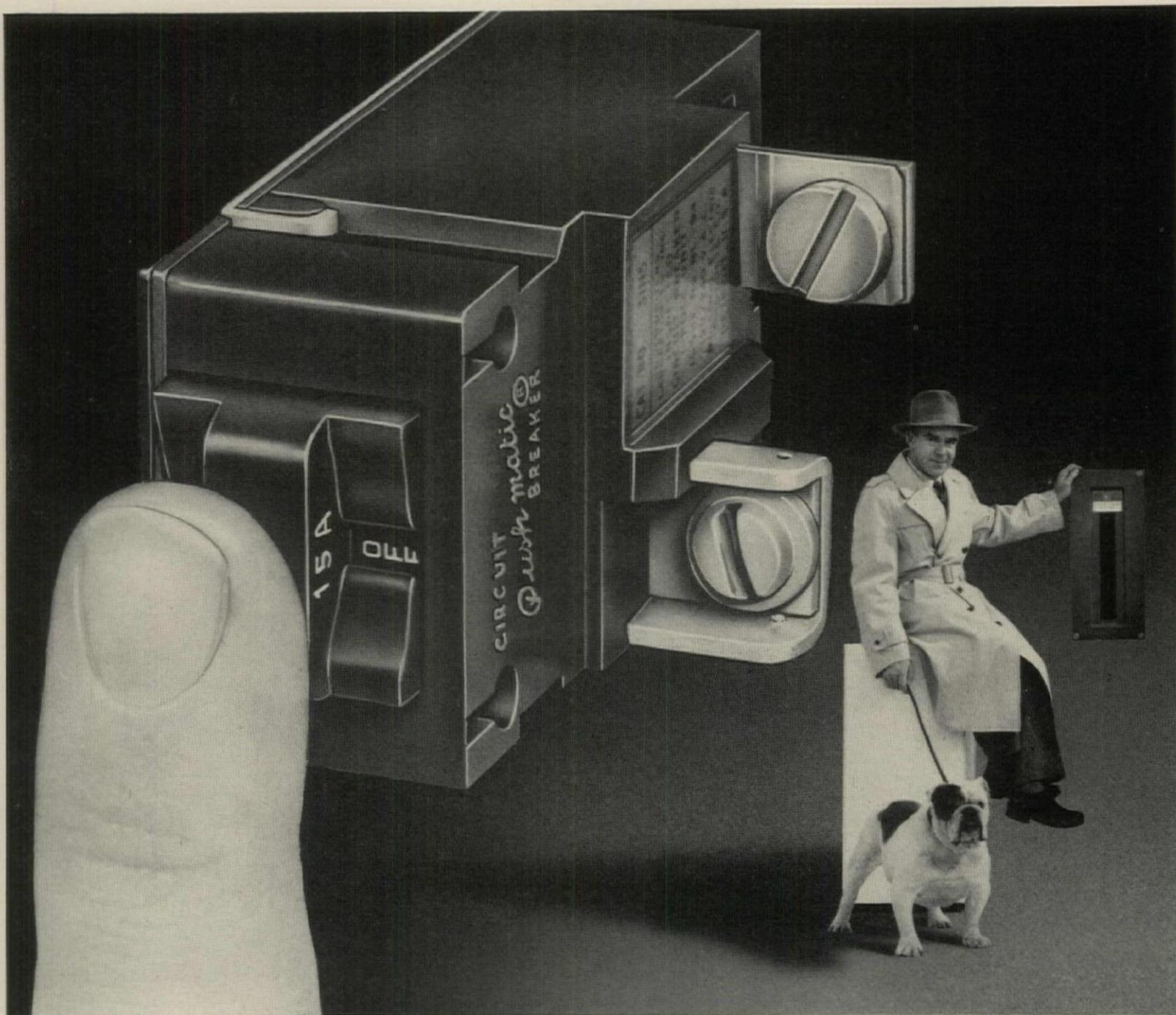


## Centex Construction Co., Inc., Dallas and Chicago SAYS EXCELON TILE IMPRESSES PROSPECTS ... PREVENTS OWNERS' COMPLAINTS.

From the start of its eventual 6000 home projects, Centex has been installing Excelon Tile in several areas of each Dallas and Chicago unit. Photograph shows Mr. Walter Carpenter (right), General Sales Manager for Centex, conferring with the Armstrong Architectural-Builder Consultant on sales points of Excelon Tile featured in local advertising. Construction assistant listens in for technical tips. Mr. Carpenter reports that the Armstrong name helps him in his selling and that none of his buyers have had any gripes or problems with their Excelon Tile floors.

**Armstrong FLOORS**

LINOLEUM • SHEET VINYL CORLON • EXCELON (Vinyl-asbestos) TILE • CUSTOM CORLON and OPALESQ (Homogeneous Vinyl) TILES • RUBBER TILE • CORK TILE • CUSTOM VINYL CORK TILE • ASPHALT TILE • LINOTILE



## EASIER SALES, RIGHT AT YOUR FINGERTIP, WHEN YOU SPECIFY TROUBLE-FREE PUSHMATIC BREAKERS

We asked builders, "How do Pushmatic® circuit breakers help you sell more homes?" And here are a few answers—

"Today, prospects go for the idea of safer electrical living—and no fuses to change."

"Maximum protection of everything electrical from the utility pole right to the appliance cord. That impresses them."

"I tell 'em Pushmatic means Full Housepower with complete safety."

"Great pushbutton convenience—just

push the button to operate."

Next we asked, "What do you, as a builder, like about Pushmatic circuit breakers?" We got many answers. Here are some—

"Pushmatic protection and full capacity—plenty for present and future electrical needs."

"Pushbutton convenience is easy to sell."

"Real consumer appeal and acceptance."

Specify BullDog Pushmatic so your buyers live safer electrically—enjoy a world of pushbutton convenience for years to come!

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# BULLDOG



BullDog Electric Products Company, Division of I-T-E Circuit Breaker Company,  
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In Canada: BullDog Electric Products Co. (Canada) Ltd., 80 Clayson Rd., Toronto 15, Ont.

## MATERIALS &amp; PRICES:

## Materials leaders seeking mergers to prepare for '60s housing boom

For a variety of reasons, three of the nation's top building materials firms have succumbed to the corporate urge to merge in the last eight months.

Their swallowing of smaller firms probably does not signify the start of a general wave of mergers in building materials (though some company officials think so). But it does suggest that some of materials' leaders are getting a jump on their competition in getting set for the next well-advertised attraction in housing: the mid-60s boom.

Mergers by National Gypsum, Flintkote and Johns-Manville have been, among other things, designed to:

- Expand product lines to get a "bigger take out of the house."
- Expand production facilities in established lines to meet tomorrow's demand.
- Reach into fields outside housing to offset the profit-shrinking up-and-down pace of starts as the government alternately tightens and loosens its money spigots.

### Forward look

"You don't catch much rain water during a thunderstorm unless you have a barrel ready for it," says Chairman Melvin H. Baker of National Gypsum. "All economic barometers . . . point to the busiest, building-decade in history during the '60s."

Baker's firm, long the nation's No. 2 producer of gypsum, acquired two tiling companies (American Encaustic and Olean) with assets of \$12.5 million, making ceramic tile its second largest product line. It also announced a \$90 million expansion program, and is amid negotiations to acquire Huron Portland Cement Co (which operates the world's largest cement plant at Alpena, Mich.) in a \$60 million stock swap.

"We want a bigger take of the building market, but in more than one field, so we don't have all our eggs in the housing basket," says National's executive vice president, John Brown. "The merger with Huron would put us into construction markets (e.g. highways, bridges) outside of housing."

Johns-Manville, largest producer of asbestos products ('57 sales: \$308.3 million) entered the glass fiber field with acquisition of LOF Glass Fibers, nation's second-largest glass fiber producer (sales \$23 million in '57 vs \$163 million for Owens-Corning Fiberglas). J-M immediately moved to expand its new property, which became the company's 10th operating division.

Company officials call the move mainly an expansion of product lines. But they note that LOF Glass Fibers was producing about 80% industrial products vs 20% residential, whereas J-M itself produces about 55% commercial, 45% residential products. E. K. Clark, general sales manager of J-M Dealer Building Products, says the new lines will give J-M dealers four new products: insulations, acoustic ceiling panels, bonding mats, reinforced translucent plastic panels. The growing remodeling business (now about 25% of J-M's business) is expected to shift a healthy 20% more of the glass fiber division's production into residential.

Flintkote, which credits 61% of its sales to building materials, advanced a long-range diversification and expansion program by acquiring a corrugated paper box maker (Hankin Container Corp) a fiber sewer and rain pipe firm (Orangeburg Mfg Co), and a lime and stone firm (Utah Lime & Stone).

"We think a smart operator could find efficiencies in buying lots of things from one place, instead of worrying about the reputations of a lot of suppliers, and chasing all over to fill his needs," says President George J. Pecaro.

"We believe in the early '60s there will be a major resurgence in building. We want to be in a position to get the cream."

The mergers expand Flintkote's international operations to 64 plants, give the company "the broadest line of building materials in America," says Pecaro.

Do the moves by National Gypsum, J-M, and Flintkote herald a groundswell of mergers? "Absolutely right," says National Gypsum's Brown. "Maybe a few Johnny-come-latelys will follow the leaders," counters Flintkote's Pecaro.

What would it mean to dealers and builders? Pecaro: "Greater efficiency, coordinated product line, stronger facilities for research, development, sales promotion."

## MATERIALS BRIEFS

### West Coast freight rate war

Oregon lumber and plywood mills have been given a better shot at the booming California markets by a shakeup in West Coast lumber shipping prices that is still going on. It began when Southern Pacific railroad cut interstate rates 20%—to dismay of truckers and Northern California lumbermen (latter enjoyed rate advantage in recent years because national freight rate increases were not matched within the state). Western Pacific and Santa Fe roads followed SP's lead.

Only part of California lumber's advantage was restored when the railroads pared intrastate rates also. Next move: likely cuts in truck and barge cargo rates to meet rail competition. Big question: whether ICC, still studying the original cut (it failed to reach a decision before its suspension period ran out) will prohibit the cut, restore status quo.

Meanwhile, lumber prices are generally firm, largely due to production cutbacks that let orders catch up with inventory. Mills are hoping that the usual early-year price drop may not occur. Green fir dimension is selling at \$62 to transit operators for standard and better randoms, \$64 on a firm order basis and East Coast cargo shipments bring \$69-70 for 2 in. dimension; plywood firm at \$76 per M sq ft for sanded fir, \$94-95 for DFPA grade-stamped 5/8 in.; upper grades, which took little of the '58 price drop are stable.

### More lumber competition?

Olin-Mathieson Chemical Corp, whose forest products division is the second-largest producer of Southern pine lumber, is eyeing more diversification into lumber and building materials.

The firm has opened a new forest products research center in West Monroe, La. where it is investigating particle board manufacture and methods of laminating stock to upgrade dimensional lumber.

"We're aiming to get better use of what goes into our sawmills," says Dr David C. Lea, research and development manager.

Huge (\$593 million sales in '57), diverse (paper bags to high-energy fuels) O-M has been in lumber since the 1954 merger of Olin Industries (which included Frost Lumber Co) and Mathieson Chemical Corp. The company bought Brown Paper Co Inc in '55.

### Pine vs fir (cont'd)

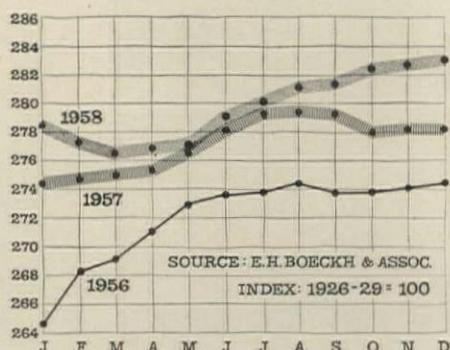
The Battle of the Boards is on again. Southern pine producers scored the first blow: a recommendation by the Southern Building Code Congress to 798 SBCC cities that they limit moisture in framing lumber to 19%.

The move stung West Coast lumbermen (who ship their fir green, while southern pine is all kiln-dried) into breaking their no-rebuttal policy.

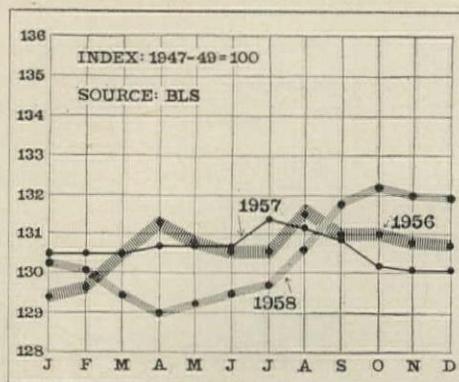
Robert Mahaffey, new general manager of the staid West Coast Lumbermen's Assn, is urging wholesalers and southern dealers to oppose adoption of the limit on the local level.

Mahaffey says the provision will bar a lot of green fir from the South, cost Pacific Northwest mills \$40 million a year in 10 southern states covered by the code. Possible side effect: dumping of green fir on other markets at price concessions.

NEWS continued on p 59



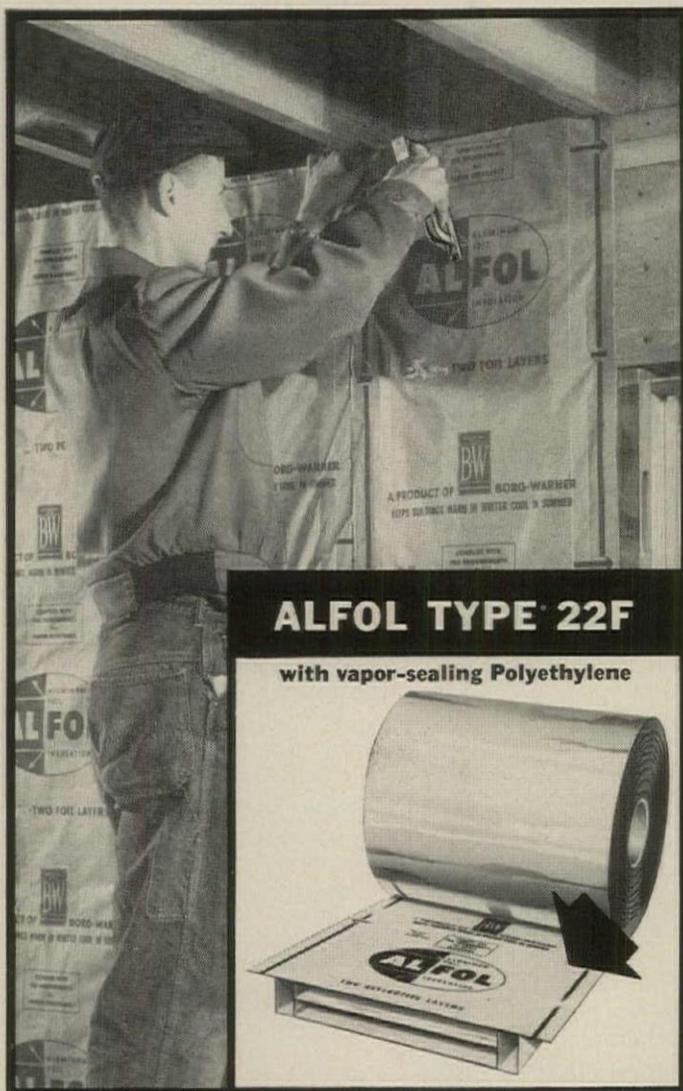
**RESIDENTIAL BUILDING COSTS** climbed 0.4 point in December to 283.0 on Boeckh's index. The rise was due to labor increases in four or five scattered cities. A few distress bargains in materials are available, but not enough to offset the labor hikes. Materials' prices are static.



**MATERIALS PRICES** dropped 0.1 point in December—to 131.9 on BLS' index. This left the index 1.4% higher than in December '57. A small drop in lumber and wood products slightly outweighed advances in plumbing, heating equipment, nonmetallic minerals.

A message of importance to:

# the **1** builder in **3** who **INSULATES SIDEWALLS**



Now...as you insulate...add  
the supreme moisture-protection  
of vapor-stopping polyethylene!

With **ALFOL Type 22F Insulation**, you can give your homes an entirely new dimension in year-round weather-protection.

Another Borg-Warner "first," this unique ALFOL blanket delivers *more* than the extra comfort and economy of superb insulation alone. In addition, it gives your walls the supreme condensation-protection of kraft-backed polyethylene lining!

In Type 22F, this exclusive polyethylene lining is an integral part of the ALFOL blanket itself. Automatically, the polyethylene is installed *as you insulate*. There's no extra labor. It's all done with one speedy application... one low cost product.

Yes, you'll save money with ALFOL, too. Value for insulating value, ALFOL usually costs less in your sidewalls than any comparable insulation you can use. Less to buy, less to apply.

Isn't it time *you* investigated the construction-improving advantages of ALFOL Reflective Insulation? Remember... there's an ALFOL Type for every purse and purpose. Send today for the informative new brochure shown below.

**SEND NOW** for free brochure on today's  
"New Directions for Sidewall Insulation"



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## Moves gain for anti-bias laws in two more states

Pennsylvania and Michigan are moving towards adoption of state laws prohibiting racial discrimination in housing.

The twin moves, coming on top of New York State's enactment of an anti-bias law last year, suggest the housing industry now faces a concerted effort to get state laws on the books making it a crime to refuse sales or rentals to minority customers.

Pennsylvania's Equal Rights Council has drafted a bill even stiffer than the anti-bias ordinance just adopted by Pittsburgh (Jan, News). It would prohibit racial barriers in sale or rental of all public or private dwellings except where an owner-occupant sells or rents not more than two units on his own behalf (i. e. without a realty broker). If the PERC bill gets snagged in a legislative committee (realtors have promised to fight it), the Philadelphia Commission on Human Relations is ready with a softer version.

Philadelphia realtors are speaking out bluntly against such measures. "You can't force integration by legislation," President Alan L. Emlen of the local board warned a meeting of the Natl Committee Against Discrimination in Housing there recently. "I, and most other brokers take orders from the owner and leave the problem of who the house is sold to to the owner . . . It is hard to sit back and take a beating all the time when you are not entirely at fault."

In Michigan, Gov. Soapy Williams' administration is studying the mechanics of drafting a law to make race discrimination in housing a civil wrong, not a crime. Last year, his administration proposed a law akin to New York State's. It died in committee.

## CED study warns slums will spread to city fringes

The celebrated Committee for Economic Development has gone into the urban renewal business—on a gloomy keynote.

Its year-old Area Development Committee, apparently overlooking the fact that a similar analysis was done in 1957 by ACTION's \$250,000 study of roadblocks to US housing, has issued a background paper describing the central city's decline in population, jobs, value.

The paper by Dr Raymond Vernon, director of New York's Metropolitan Region Study, warns that:

- The central business core will continue vital because some businesses, functions (e.g. head offices, business services, financial institutions), cannot go on except with many people concentrated in a small area.
- As people, business and jobs shift to the suburbs, a dying "grey zone" of obsolescent and decaying neighborhoods is growing between the core and the suburbs.
- There is no indication this trend will change. Why? Sites cost too much for factories. Multi-story lofts face a poor market. Office space and luxury apartments need little more space than now.

Vernon sees only one course open to cities: "subsidized government intervention, such as low-income housing or open-space projects, may be expanded to constitute a significant space-using force." He dismisses a big-scale return of middle-income families to cities as unlikely.

NEWS continued on p 61



H&H staff

**PROJECT DESIGN** by Architects Vernon DeMars and Don Hardison combined two-story row houses, walkups, duplexes and one-family detached homes. Facades and setbacks are varied to minimize the uniformity of 12-family per acre density. Almost all families have an auto.

## URBAN RENEWAL:

### Pilot project survives FHA red tape, starts blighted area on road back

Urban renewal can create a pleasant interracial neighborhood where once stood a deteriorating ghetto.

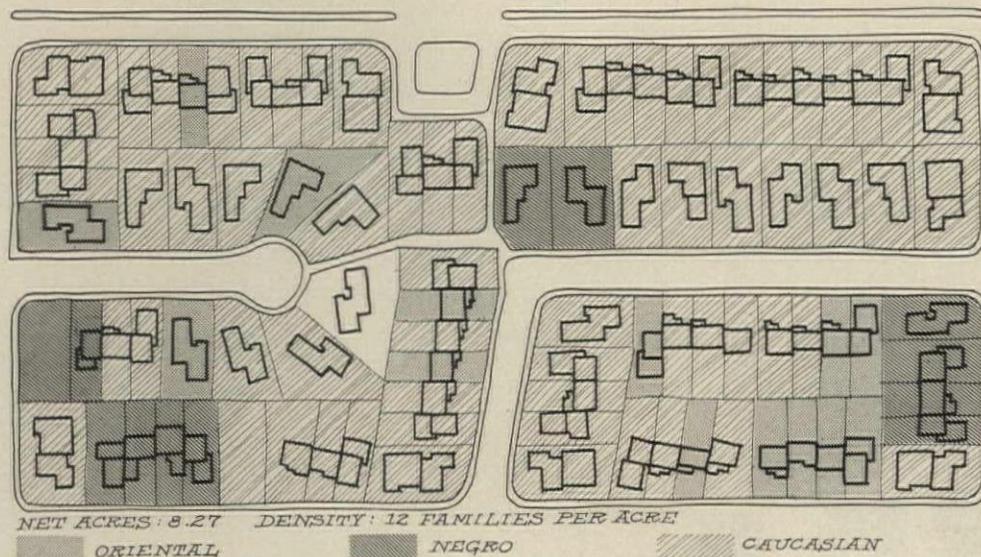
This project by Barrett Construction Co in Richmond, Calif. may well become one of the nation's showpieces of such achievement. Unfortunately for its power of persuading other builders to do likewise, it produced only a little profit for three or four times the effort a non-pioneering tract would take.

Barrett bought the 8½-acre site in Aug '55 from the City of Richmond as the dilapidated temporary war housing that covered it (and surrounding hundreds of acres) was being torn down. Then came 2½ years of struggle with FHA over Sec 220 commitments. So stubbornly did FHA's San Francisco office insist that 1) Barrett's prices—\$13,500 to \$16,650—were too high for the neighborhood and 2) row housing would not find market acceptance (in a suburb only 7 mi from San Francisco where row housing is normal) that the Barretts, who also do commercial and industrial building, finally built a sample block

nearby with conventional financing and \$100,000 of their own money to prove FHA wrong (May '57, News). The 100-unit project was supposed to be FHA Sec 220, but 73% was actually sold VA, much of it for no- or 2% down. Fanny May approved substitution of VA loans for FHA 220s.

Even so, it took 18 months to sell "The Plaza." Two problems stand out: 1) the adjacent elementary school was 85% Negro and 2) it was the first rebuilding in a vast cleared area. Explains Barrett's John H. Tolan: "We found we had about twice the usual marketing cost. We learned we had to stretch all our lead times, sales commissions, retention of model homes and advertising."

But the upshot was a spectacular demonstration of what perseverance can do in renewal—with no federal loan or grant for land write-down. Now, President R. H. Barrett plans to build 200 more units on adjacent cleared land. The houses will be slightly larger. Fewer will have fireplaces. Barrett found few buyers use them.



**RACIAL MIX** turned out 74% white, 15% Oriental, 11% Negro. One-third of buyer-families have no children. Their occupations range from doctor to waitress. Median family income is \$7,200. Only 14% work in Richmond, but 27% in San Francisco. Most are first-time buyers.

# Tampa Builder Attracts 19,348 Prospects in Weekend!



*Closes Over 284 Sales with*

## York Lift-For-Life Air Conditioning Program!

The success of builder Mel Larsen of Tampa is typical of the spectacular results that can be achieved by using York Air Conditioning as a primary sales appeal. One-third of the adult population turned out, 7,000 cars were turned away because of the traffic jam and over 284 sales were made when the Open House was over!

For full details on how you can profit with the complete York Lift-For-Life Air Condition-

ing Builder Kit, contact your nearby York Dealer or write York direct. Learn how York's national advertising plus local newspaper advertising, plus outdoor posters, radio and TV support can give your homes a lift for sales and profits—Just as York Air Conditioning gives your customers a lift for comfort, a lift for health, a lift for housekeeping and a lift for home resale values!

"I've been building for 20 years but never heard of traffic and sales like this!" says Mel Larsen, Clair-Mel City builder, Tampa, Florida.

# YORK

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RESEARCH & ENGINEERING

MAKE IT BETTER

## Court orders slum house painted, upholds Milwaukee housing code

Can a city force the owners of a dilapidated building to paint it? Yes, says Circuit Judge William I. O'Neill of Milwaukee. Not because of esthetics, but because lack of paint may permit decay and endanger public health.

The case was the first test\* of Milwaukee's housing code, which requires, that buildings have paint or other "adequate protective coating."

The ordinance was attacked when the city acted against a dilapidated 6-room frame dwelling which, among other things, had not been painted for 50 years. The owners (but not occupants) asked the court to rule the city had no constitutional power to dictate the use of their property.

The house, city inspectors testified, had 11 major violations of the code, was "neither weather tight nor water tight." Besides lacking paint, its siding was loose, rotted and missing, door and window sills and frames were loose and rotten. Inside, wiring was inadequate, floors buckled, the water system inoperative, the toilet an antiquated and illegal "flush hopper" in a half-basement.

After looking over the dwelling and hearing arguments, Judge O'Neill read law for three months, then ruled:

"... the city of Milwaukee has the right to protect itself against conditions and circumstances which, if permitted to go unchecked, would tend to seriously impair the health, safety and public well-being of such city." Ticking off the violations, he reached the paint one:

"The need of paint, both inside and outside of the building, is obvious from the exhibits. The basic principles of sanitation require some form of protective coating to a building in order to guard against decay.

"The required need for painting in the instant case is not motivated by an esthetic purpose, but

\*Milwaukee County circuit court case No. 263-571, *Boden et al v. City of Milwaukee et al.*

## Chicago, New York crack down on building department corruption

The nation's two largest cities at last are groping their way, under public pressure, toward dealing with graft and shakedowns in building and housing inspection—a major drag in slum prevention.

Their experience may provide a hint of problems that suburbs will face in the not-too-distant future as the commuting fringe becomes more densely populated.

The two cities—New York and Chicago—provide a contrast in approach:

- In New York, a fighting pastor, a forgetful building dept aide, and a disgruntled deputy commissioner have provided daily fireworks in the city's continuing string of slum scandals. Result: a reorganization of the city building dept.

- In Chicago, a quiet, internal crackdown is apparently reducing graft to nickel-and-dime levels as the city rides a wave of enthusiasm for renewal and conservation.

New York's latest scandals broke with year-end charges of widespread bribery in



IT MUST BE PAINTED

is required for the good and health of the community." He denied the owners' plea for an injunction against the city.

Crowed Asst City Attorney John F. Kitzke:

"The decision recognizes that the way a building is taken care of—such as paint, ventilation, plaster, electricity and plumbing—not only affects the public health and safety, but goes to the commercial value of adjoining property. That . . . goes directly to the attempts to prevent blight . . . the first decision in Wisconsin that recognizes the [blight] problem."

Quietly pleased, Dr E. R. Krumbiegl, city health commissioner and chief author of the code, pointed to two chief motives for inclusion of the paint requirement:

- Unpainted wood deteriorates, opens building to water, rodents, insects—and by harboring them, threatens health and welfare of neighbors.

- Unpainted, dilapidated structures affect surrounding property values, affect economic welfare of the neighborhood.

his parish by the Rev James A. Gusweller, Episcopalian pastor in Manhattan's slum-infested upper West Side. He offered tape recordings, superintendents' ledgers showing notations of payoffs to building, fire inspectors, and police. Dist Atty Frank Hogan, and the city investigation department began separate inquiries. As they did, Mrs Bernice P. Rogers, deputy building commissioner who spearheaded two door-to-door anti-slum drives in her five years with the department, resigned, saying her staff was "woefully undermanned, demoralized . . . unable to cope successfully with present problems."

Within a week, a special grand jury had indicted Frank P. Berardi, 36, acting chief building inspector for Manhattan on criminal contempt charges for failing to answer questions about an aide who took a packet of violation records out of the office and "lost" them in a restaurant. Hogan announced that evidence had been uncovered of payoffs, too.

As the probe continued, the city announced

a reorganization of the building department, in a surprisingly (and probably unintentionally) frank aside, said that acceptance of "gifts and gratuities" by inspectors (mainly at Christmas) was being prohibited.

In Chicago, by contrast, constant pressure by citizen anti-slum groups has resulted in three major deterrents to graft:

1. Flying squads of seven inspectors and a city attorney have made 2,500 special inspections of the city's worst slums in 18 months to make sure no major violations are being winked at by regular inspectors.

2. A new city zoning department can catch violations "missed" by other departments, get lax inspectors in trouble.

3. A city investigations department charged with watchdog functions has quietly forced several resignations in the past year where there was too little evidence for criminal prosecution.

One building dept official admits there is still a "substantial amount" of smaller bribes, "but the boys won't go along with illegal conversions and the major violations."

And as the cities wrestled with their problems, New York's Regional Plan Assn noted, in its bi-annual new homes survey, a spreading wave of apartment construction in suburban communities, warned that unless suburbs take steps to adapt to the new demands of such densities, "the seeds will have been sown for premature deterioration."

## COMMUNITY FACILITIES:

### Revenue raising sewer fee challenged in California

An ordinance requiring San Francisco area builders to pay \$150 for each sewer connection in exurban Livermore (pop. 10,163) is being challenged in court.

The Associated Home Builders of the Greater East Bay contend the charge is illegal because it is much higher than the actual connection costs. The town admits it uses the revenue to finance expansion of the sewer system, thus benefiting other property than that for which the fee is paid. A total of \$59,250 has been paid by homebuilders. They ask its return.

Livermore officials invited the suit. They want legality of the fee settled before more money is collected and spent.

### 73.1% of builders supply their own water lines

Most builders must put in their own water transmission and distribution lines for their tracts.

A new survey of 2,500 builders throughout the US by the Cast Iron Pipe Research Assn shows 73.1% install their own lines. Results also show 70% of these builders get their water from the city or town where their tract is located.

Builders who must find another source get their water this way: 18.7% from an adjacent city or town; 14.1% from their own wells; 7.2% from a private water company and 6.3% from a lake or other natural nearby supply.

The survey shows 42.9% of the builders expect to have worse water problems in the next three to five years. Only 12.8% expect their water problems to ease; 38.3% foresee no change. *NEWS continued on p 63*

BUILT-IN SALES CLINCHER

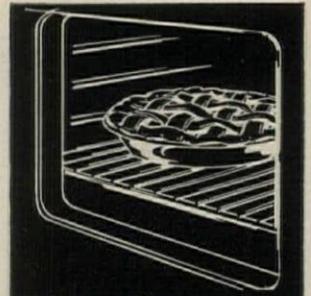
## Admiral built-ins sell homes!

## Cost less...install easier!

NEW CUSTOM-BEAUTY! NEW EFFICIENCY!

To the housewife, the kitchen is the heart of the home. That's why homes with Admiral Kitchens are easier to sell. Admiral built-ins are loaded with exclusive features that have instant appeal to women. What's more, these advantages are pre-sold nationwide by Admiral's continuing powerful national advertising.

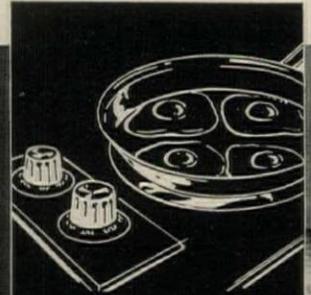
By any measure, Admiral built-ins give your house a built-in sales clincher that can *open and close* the sale. They're easier to install... actually cost you less! It will pay you well to investigate Admiral built-ins now!



Giant non-fogging picture window lets you look into oven from across kitchen.



Rotary Roaster in oven bastes as it roasts as it turns—automatically!



Automatic Temperature Control Units make utensils like automatic skillets.



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# Admiral®



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Name \_\_\_\_\_

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## PEOPLE:

## FHA tries again to fire James Salvant, chief underwriter in New Orleans

FHA is trying to fire the chief underwriter in its New Orleans field office—for the second time in a year.

Commissioner **Norman Mason** first dismissed **James Salvant**, in January 1958, charging inefficiency. (Feb '58 News). One complaint: for months, the New Orleans office had been jammed with an eight to ten-week backlog of applications. Despite this processing jam, Mason complained, Salvant let some of his underwriters go on leave. And when help was sent in from other offices, Salvant allegedly told more of his own men to take vacations. So the backlog was undented.



SALVANT

It is the first time in years FHA has tried to oust such a high ranking employe. In other instances employes under fire have resigned. It is a classic case of how hard it is for FHA to fire anyone it deems inefficient.

Salvant appealed his ouster to the Civil Service Commission. It ruled that FHA's charges were not specific enough and ordered him reinstated eight months later. Salvant, a career employe, came back to work Oct 20.

Meantime, FHA had hired a new chief underwriter, **William R. McGaw**. For six weeks, Salvant worked alongside McGaw as an "XT"—government slang for extra temporary. Then, on Dec. 9, he was notified that inefficiency charges were being refiled and he was again being fired. He was given a chance to answer and did.

FHA then decided to demote him from a chief underwriter's grade 13 (\$9,890-11,090 a-year) to a grade 9 appraiser (\$5,984-6,875 a-year)—about beginning rank. Salvant promptly filed a suit in federal court charging he was wrongfully fired and asking reinstatement as the civil service commission had directed. FHA contends he is only on leave. It also insists Salvant has not exhausted all administrative appeal, thus is not yet entitled to go to court.

This is not the first time Salvant has been suspended in his career with FHA. In 1954, he was taken off the job when he testified before a Senate committee investigating the 608 windfall scandals. Salvant testified that he had attended parties and gone on fishing trips with officials of the Shelby Construction Co, a big 608 builder. He also admitted accepting gifts of a briefcase, record player and luggage from them.

He was reinstated with the help of Rep. **F. Edward Hebert** (D, La.) who explained that Salvant had done nothing that other FHA employes had not done. "They were trying to make him the fall guy," Hebert said. The congressman spoke on Salvant's behalf during his 1958 troubles also.

There were complaints last year when Salvant was first fired that he again was being made a "fall guy." But no other changes were made in the New Orleans office and the backlog was quickly worked off. Later in the Year FHA Director **Ralph H. Agate** resigned to take a job as VA loan guaranty officer in New Orleans. He was succeeded in December by **Wade Sutton**.

Some of the top leaders of the savings & loan industry are being brought onto the board of Mortgage Guaranty Insurance Corp, the fast-growing insurer of conventional mortgages (Jan, News).

Added to the board of the Milwaukee firm: **Henry Bubb** of Topeka, **Walter W. McAllister Sr** of San Antonio and **Henry Irr** of Baltimore, all past presidents of the US S&L League, **C. A. Duncan** of Nevada, Mo. and **Harry Lindquist** of St Paul. **Kenneth E. Sarles** of Racine, a past president of the Society of Residential Appraisers, has also been elected to the board. (Sarles is setting up MGIC's appraisal system and minimum underwriting standards).

**Max Karl**, MGIC's founder, president and chairman of the board, will continue as president but will be succeeded by Bubb as chairman. Economist **Miles Colean** has been retained as a consultant.

MGIC, started insuring conventional mortgages two years ago. It is now operating in 14 states and has applications pending in 20 more.

### Former public housing official named NY housing chief

Gov **Nelson Rockefeller** of New York, whose campaign utterances on housing would almost put him in bed with the liberal fringe of the Democratic Party, has picked a former public housing executive as his \$20,000-a-year state housing commissioner.

**James William Gaynor**, 49, succeeds **Joseph P. McMurray**, former staff director of the Senate banking committee who held

Associated Press



GAYNOR

the New York post through the four years of Gov **Averell Harriman's** administration. Gaynor, who has a business administration masters from Rensselaer Polytechnic Institute (in his home town), served as a lieutenant colonel in the Corps of Engineers in the Far East during World War 2. Shortly afterwards, he became executive director of the New York City Housing Authority, the nation's biggest landlord. He left in 1952, but was hired as a consultant last year to study the authority's operations. At the time, the authority faced charges of mismanagement. Recently, Gaynor has been a private management consultant in Denver.

Announcing his appointment, Rockefeller described housing as a "major field where the state can give real leadership." He said that only by stimulating more private investment in housing will it be possible to overcome his state's "housing shortage."

For state rent administrator, Rockefeller picked **Joseph J. Caputa**, 51, New York lawyer and former deputy director of Korean reconstruction. He succeeds **Robert C. Weaver**.

The rent commission—last state rent control body left from World War 2—plans to

take what could be New York's most significant steps against slum formation in years. It aims at depressing rents in overcrowded converted apartments—now blamed for some of New York City's worst housing conditions. And it hopes to stop the continuing conversions through which landlords escape rent ceilings but pile up mounting densities of occupancy in Puerto Rican and Negro ghettos. The commission figures 27% of Manhattan's people now dwell in rooming houses.

**John R. (Jack) Doscher**, onetime ad promotion manager of HOUSE & HOME and former executive director of Operation Home Improvement, has been named vice president of the monthly *Christian Herald*, in charge of advertising and circulation.

### Met vice president sues S. F. mayor for slander

**Henry E. North**, for 30 years a vice president of the Metropolitan Life Insurance Co in San Francisco, has sued that city's Mayor **George Christopher** for \$1.3 million—charging slander.

North, 70, who announced his retirement from the Met as of Jan 30, has accused the mayor of calling him "a man who got drunk and made incoherent statements" and a man who is "fixable."

The feud between North and Christopher developed from an investigation the San Francisco grand jury (of which North was foreman), made of the city's deal on a new \$15 million baseball stadium for the former New York Giants. The jury called the stadium land purchase "a bad deal," charging the city paid from \$650,000 to \$1 million too much.

Vice Pres **Harry Held** was promoted to senior vice president by New York City's Bowery Savings Bank, the nation's biggest (assets \$1.6 billion).

Fresno, Calif. has adopted the unique plan of combining its city planning and building inspection departments—and naming a building official to run them.

He is **John F. Behrens**, San Francisco representative for the Intl Conference of Building Officials and former head of the Pasadena (Calif.) building department. The combined department was created when Chief Administrative Officer **Robert N. Klein** fired City Planning Director **Boris Stahm** and one of his top lieutenants by abolishing their jobs.

### Los Angeles attorney named state S&L commissioner

Attorney **Frank J. Mackin** of Los Angeles is California's new state S&L commissioner, succeeding **Milton O. Shaw**. Mackin, 51, a Republican, managed newly-elected Gov **Edmund G. Brown's** successful campaign for attorney general in 1950, and filled in as Brown's chief deputy attorney general when the latter took to the hustings last August. The two were law partners in San Francisco from 1929 to 1935.

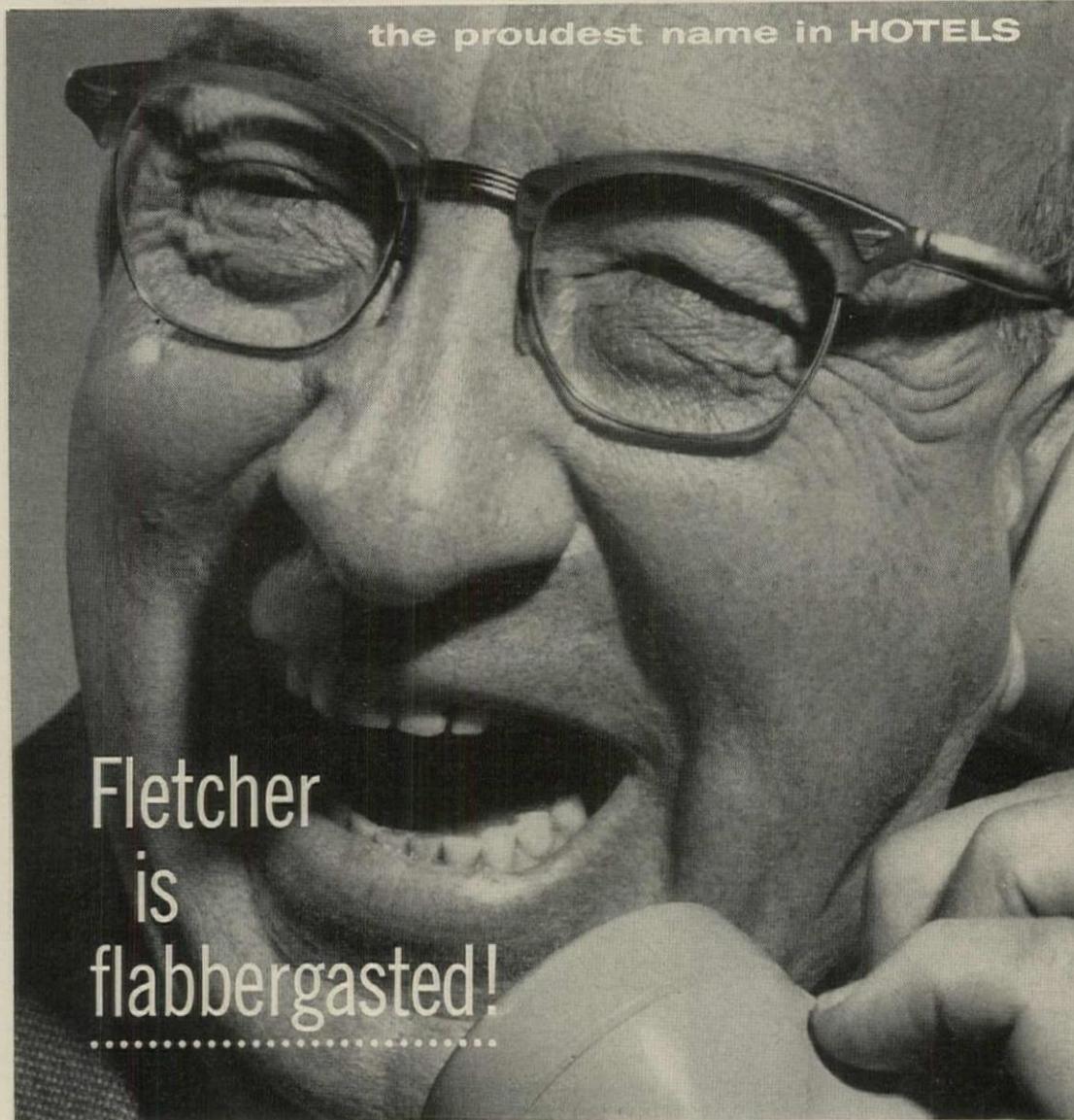
As the state's new \$20,000-a-year public works director, Brown named **Robert B. Bradford**, director of Sacramento's Redevelopment Agency.

NEWS continued on p 65

# SHERATON



Which of these 39 cities is your next stop?



the proudest name in HOTELS

Fletcher  
is  
flabbergasted!

- EAST**
- NEW YORK
- BOSTON
- WASHINGTON
- PITTSBURGH
- BALTIMORE
- PHILADELPHIA
- PROVIDENCE
- ATLANTIC CITY
- SPRINGFIELD, Mass.
- ALBANY
- ROCHESTER
- BUFFALO
- SYRACUSE
- BINGHAMTON, N.Y.  
(opens early 1959)
- MIDWEST**
- CHICAGO
- DETROIT
- CLEVELAND
- CINCINNATI
- ST. LOUIS
- OMAHA
- AKRON
- INDIANAPOLIS
- FRENCH LICK, Ind.
- RAPID CITY, S. D.
- SIOUX CITY, Iowa
- SIOUX FALLS, S. D.
- CEDAR RAPIDS, Iowa
- SOUTH**
- LOUISVILLE
- DALLAS  
(opens early 1959)
- AUSTIN
- MOBILE
- WEST COAST**
- SAN FRANCISCO
- LOS ANGELES
- PASADENA
- PORTLAND, Oregon  
(opens fall 1959)
- CANADA**
- MONTREAL
- TORONTO
- NIAGARA FALLS, Ont.
- HAMILTON, Ont.

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**DIED:** Henry Stoneson, 63, one of the San Francisco area's biggest builders for 38 years, Dec 30—five days after he suffered a heart attack.

He and his late brother, Ellis, started home building in 1920. Stoneson Development Co



STONESON

Hartsook

has built about 10,000 homes since. Biggest year was 1942, with 1,200 starts. The company started 700 last year, all in the \$15,000 to \$20,000 price range.

Its biggest and most impressive project was Stonestown, a 67-acre regional shopping and residential center at the fog-swept southwest corner of the city by the Pacific Ocean. Started in 1949, it includes 70 stores and 700 garden and high-rise apartment units. It cost \$40 million.

Stoneson, a native of British Columbia, was a director of the local home builders association and a past director of NAHB. His successor as head of Stoneson Development is E. B. Stewart, the firm's secretary-

treasurer since 1938. The company is just starting a 750-home tract in San Bruno.

**OTHER DEATHS:** Carl J. Bergmann, 76, retired president of Washington Permanent Building Assn, Dec 10 in his Washington DC home. Tull Ryall, 52, vice president of Northern Virginia Savings & Loan Assn, of a cerebral hemorrhage, Dec 15 in a Washington DC hospital; William Rose Gibbon, 65, a founder and past (1935) president of the American Savings & Loan Institute and retired vice president of the State Mutual Savings & Loan Assn, Dec 15 in his Los Angeles home; Paul Endicott, 68, president of Home Builders Savings & Loan Assn, Pomona, Cal., and a past president (1941) of the U S Savings & Loan League, Dec 19 in Good Samaritan Hospital, Pomona; Daniel Boyd, 35, member of the San Francisco city planning staff and former administrator of California School of Fine Arts, Dec 23 of head injuries after his motor scooter was hit by an auto in San Francisco; William C. Prater, 46, Sacramento-area shopping center owner and newly-elected president of General Savings & Loan Assn, of a self-inflicted gunshot wound Dec 26 in his Sacramento home.

## LABOR:

### '58 hourly wage gains average 14.5¢

Union building trades racked up another astonishingly good year at the bargaining table in 1958.

A survey of 612 wage settlements shows that unions won an average of 14.5¢ more an hour last year. This is 1.6¢ an hour lower than the average of 1957 settlements which were the highest in history. But it must certainly be ranked as an even greater victory for the unions—coming in a recession year when unemployment was high.

It could hardly be any solace to the nation's building industry that while it was giving its union trades 14.5¢ an hour, all other US industries reported a median settlement of only 9.3¢ an hour.

Two trades—teamsters and electricians—actually did better in 1958 than in 1957. Their average gains: 18.6¢ for electricians (vs 17.6¢ in 1957) and 15.6¢ for teamsters (vs 14.5¢ in 1957). Other average gains by trade:

| TRADE            | INCREASE | TRADE         | INCREASE |
|------------------|----------|---------------|----------|
| Boilermakers     | 16.0¢    | Carpenters    | 14.0¢    |
| Sheet metal      | 15.5     | Op. engineers | 14.0     |
| Iron workers     | 15.4     | Lathers       | 13.8     |
| Plumbers         | 15.2     | Bricklayers   | 13.6     |
| Roofers          | 14.8     | Laborers      | 12.3     |
| Painters-glazers | 14.4     | Others        | 12.9     |
| Plasterers       | 14.2     |               |          |

Settlements in the Far West again led the nation. Average was 19.5¢. Other areas: northeast, 14.8¢; southeast, 14.0¢; midwest, 13.6¢; and mountain states, 13.2¢. The same pattern prevailed in automatic wage increases written into long-term contracts.

The trend toward long-term contracts, which became so pronounced in 1957, continued in 1958. More than half of last year's new pacts were for two years or longer. Deferred increases in these contracts call for an average of 13.3¢ more at the beginning of each new contract year.

Health-welfare insurance benefits figured in

58% of the contracts and pension plans in 20%.

The survey was made by the Bureau of National Affairs.

### Minneapolis HBA refuses to accept closed shop pact

At least one local homebuilder group has heeded warnings from NAHB and refused to sign a contract with a closed shop clause.

Minneapolis HBA negotiated a new pact with carpenters last spring but balked at signing when the union insisted on this clause:

"It shall not be a violation of this agreement for any carpenter, millwright or pile driver to refuse to work on a job where non-union men are doing work of a type coming under jurisdiction of unions affiliated with a building trades council."

Builders and carpenters have worked under all other terms of the contract for nine months without trouble—though it remains unsigned.

HBA's stand is based on the Natl Labor Relations Board's warning that it may invoke the Brown-Olds remedy where closed shop clauses—which are illegal—are in a contract. This means all dues collected from union members while they work under such a contract must be refunded.

NLRB has invoked the remedy three times since the Nov 1 deadline it set for deletion of closed shop clauses from contracts. In none of these cases was management held liable, though NLRB has ruled in principle that builders and contractors who sign an illegal pact can be required to help pay back dues.

The three reimbursement orders have not involved contracts with homebuilders. Unions affected were teamsters in Newark and Portland and carpenters in Indianapolis.

## CANADA:

### Government may start central mortgage bank

Canada's mortgage market will soon get a much-needed double shot in the arm.

The government has announced it will probably put another \$250 million into direct NHA loans. More important, it promises amendments to the housing laws to "encourage the flow of private funds into mortgages." Builders are sure the government means to start a central mortgage bank.

Builders themselves have drafted a plan for a corporation of their own to buy and sell NHA mortgages. It would have initial capital of \$1 million, with members of the Natl House Builders Assn as preferred stockholders.

The corporation can be set up without legislation. But until it is accepted as an approved lender by the Central Mortgage & Housing Corp (the government housing agency) it will have to place loans through other approved lenders. Money for mortgages would be placed in a trust fund with a trust company. The latter would originate mortgages for the corporation, assemble groups of them into saleable packages and sell them, retaining servicing.

Builders at the annual NHBA convention in Montreal last month reelected President Maurice Joubert of Montreal to a second term.

### Montreal completes plan for new met government

Montreal will probably get Canada's second metropolitan government (the first: Toronto, set up in 1954). It would include 46 municipalities with a combined population of almost 2 million covering 1,200 sq mi.

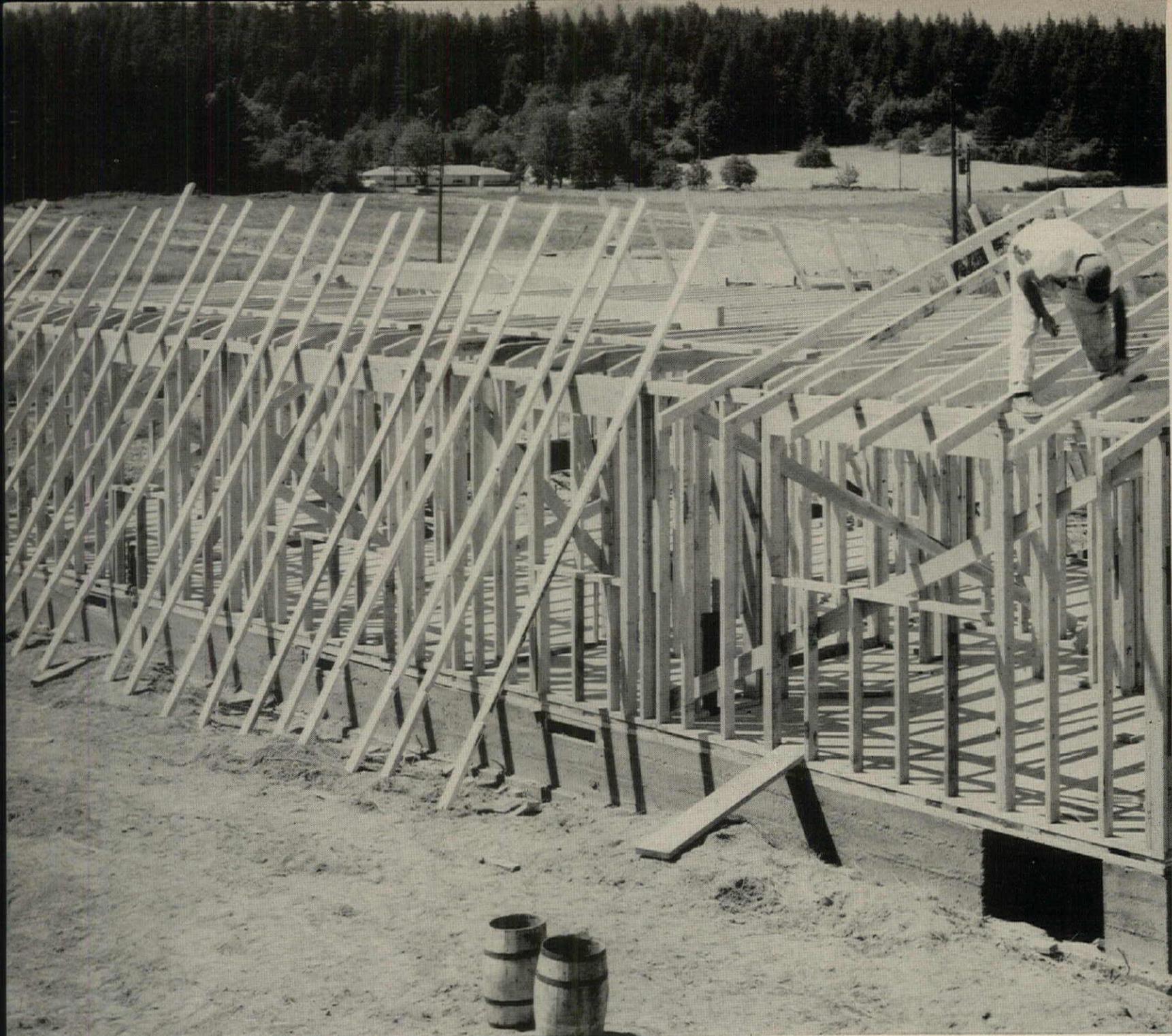
Plans for the metro—to be called The Greater Montreal Corp—were drafted late last year and due to be forwarded to the provincial government in Quebec late last month with a private bill to put them into effect.

Greater Montreal Corp would run some services on its own, share responsibility for others with individual municipalities. Examples: water would be supplied by GMC to municipalities who would fix its cost to consumers; sewage disposal would be handled at cost by the city of Montreal for municipalities near enough in, others would make their own arrangements; a master metro plan would cover the whole area, be subject to detailed enforcement and possible change by individual planning departments.

### OHI to put 10-car train on 36-city tour in fall

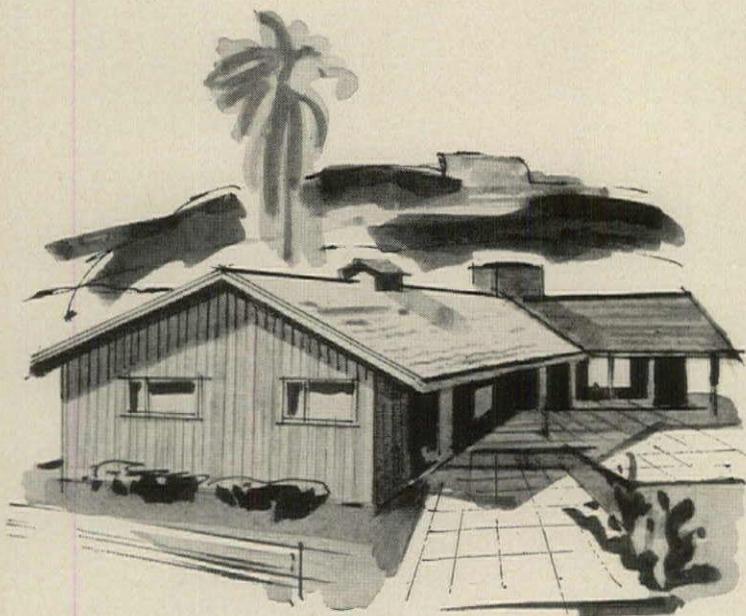
Canada's Operation Home Improvement will tour a ten-car exhibition train through 36 cities next fall. It was planned to run last month but lack of support forced a delay (official reason: fall is better than winter).

Promoters of the train (a Toronto publicity firm which handles the OHI campaign there) are already leary of beating a path for suede shoe operators. After a recent fire prevention week campaign in Canada, gyp operators made a killing in many cities.



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Wood's beauty, for example. The natural elegance of wood's many species makes it *right* for interiors as well as exteriors. And wood's *livability* creates a warmth and intimacy no other building material can duplicate.

On the practical side, the simple fact of wood's economy gives your prospects more value for the money. It is easily worked and available in abundance. It has a favorable strength-weight ratio. It has wide buyer acceptance, for this familiar building material *belongs* to any place, any time.



Build a better split level with wood



Build a better Cape Cod with wood

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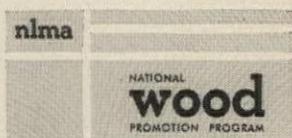
What does all this mean? That whatever size, price or kind of houses you build . . . wherever the locale or site . . . you will sell more houses and make *more dollars per house* when you build with wood!

For new information on better homes of wood, write to:

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# “KEYCORNER LATH

*makes LATH and PLASTER  
an even better buy”*

says **A. BERNARD OLSON**, president,  
The Olson Lathing Co., Chicago, Illinois

“Nobody questions the superiority of lath and plaster where greater fire resistance, lower maintenance costs and lasting beauty are concerned,” declares A. Bernard Olson, one of the country’s leading lathing contractors.

“Keycorner helps make lath and plaster even better. Our job experience proves what tests\* show—that Keycorner almost doubles crack resistance over other corner reinforcements,” he explains. “We know the Keycorner ability to fight cracks.”

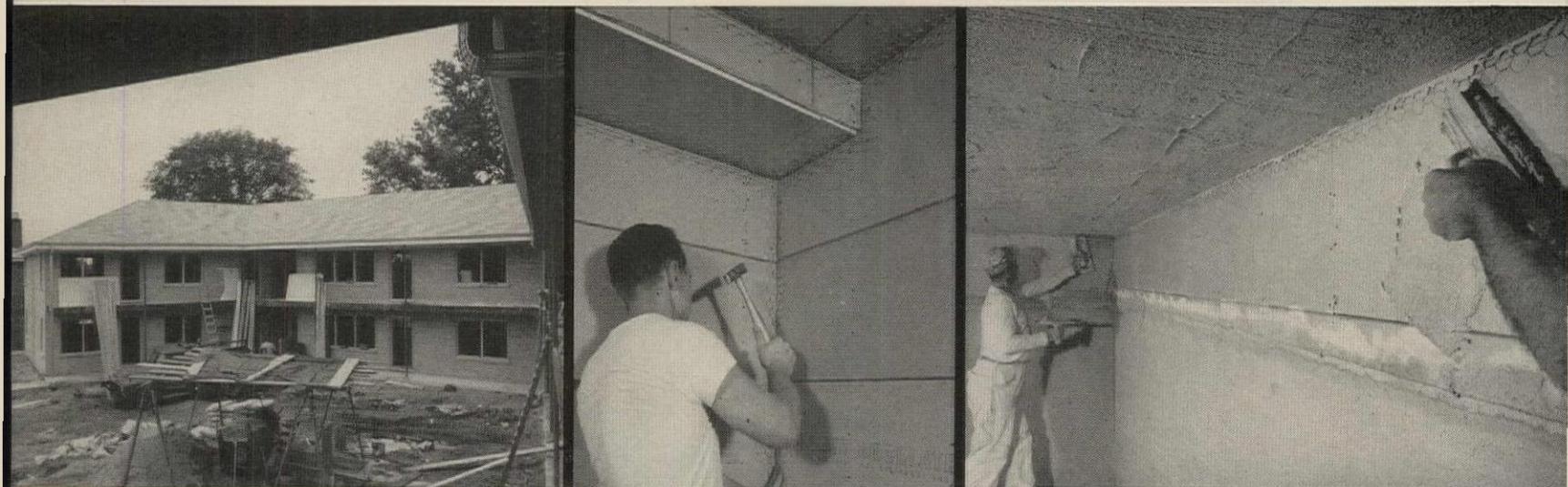
“And Keycorner is easier to use. The pre-formed 4-foot lengths fit into place with no effort at all. There’s no time lost, no waste. The open mesh of Keycorner makes it easy to plaster over—assures full bond with plaster and a better job.

“Keycorner gives this extra protection, yet at a saving. That’s why we use Keycorner exclusively!” Olson exclaims. “It lets us give greater satisfaction on every job.”

\*Tests with Keycorner, as well as other corner reinforcements, conducted by the Research Foundation, University of Toledo. Complete test reports FREE from Keystone Steel & Wire Company.

## KEYSTONE STEEL & WIRE COMPANY Peoria 7, Illinois

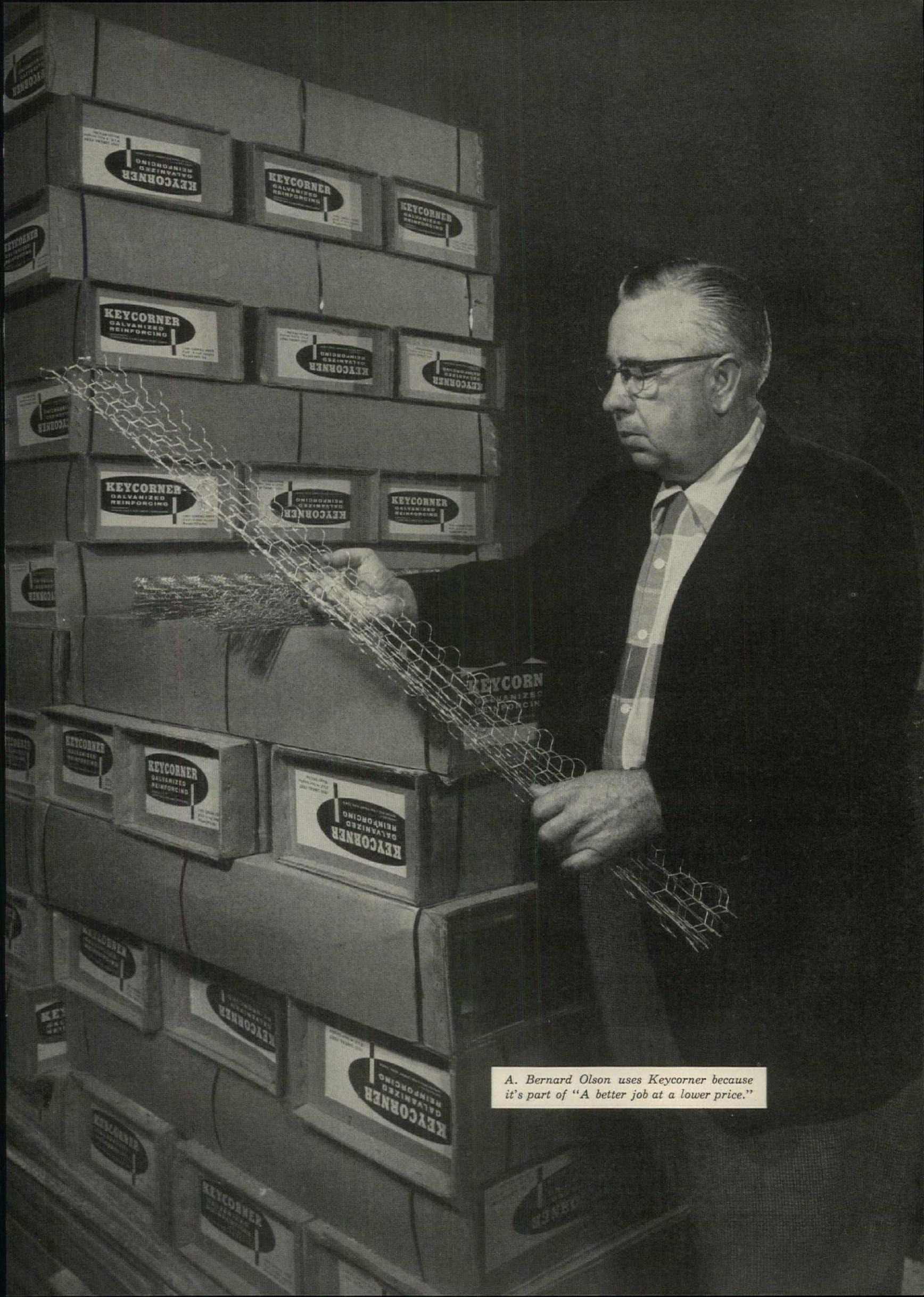
Keywall • Keycorner • Keybead® • Keydeck • Keymesh® • Welded Wire Fabric • Non-Climbable Fence



*A typical quality Olson Lathing job goes into this 17-flat apartment building in Chicago. Many builders are switching back to lath and plaster because of the increased fire resistance, lower maintenance and permanent beauty that plaster walls provide.*

*Keycorner is simple to handle and use. This fact assures better workmanship, which adds still further to the superior job you get with Keycorner.*

*Keycorner gives a better plaster job. The open mesh assures full bond with plaster and gives the strong reinforcement that provides maximum crack resistance. Keycorner is also galvanized to prevent rust.*



*A. Bernard Olson uses Keycorner because it's part of "A better job at a lower price."*

## Manufactured homes

This is the first opportunity I have had to write you since receiving my copy of your December issue. The entire staff has unquestionably done a magnificent job. You have certainly presented the facts of our industry in a manner which must impress everyone interested in home building.

KENNETH W. SPALDING  
Hodgson Houses, Inc  
Dover, Mass.

Well, you've done it again, only more so. I want to personally thank you for all home manufacturers.

GEORGE E. PRICE, *president*  
National Homes Corp  
Lafayette, Ind.

I was most interested in the December issue. HOUSE & HOME appears to go from strength to strength and is further ahead of its competitors than ever.

JAMES RILEY  
Brad Industries Ltd.  
Montreal, Quebec.

## Epoxy adhesives

In reference to the statement (H&H, Oct '58, p 131) concerning the moisture resistance of epoxies, it is our contention that properly formulated epoxy adhesives do not suffer any appreciable loss in sheer or bonding strength when exposed to moisture.

This is based on an overwhelming amount of published literature which includes technical bulletins prepared by the Thiokol Chemical Corp on Thiokol LP-3 epoxy resin adhesives, and bulletin 11F prepared by the Chemical Division of General Mills on structural adhesives and sealants based on Versamid epoxy combinations.

Both of these bulletins contain results of tests on epoxy formulations in which the tensile strength was substantially unaffected by immersion in water for periods of one week to 30 days.

LOWELL M. PALMER, *president*  
American Metaseal Corp

## Basements, slabs, crawl space

Your Sept '58 issue, pp 132-3 includes statements intended to discourage basements and on p 134 goes on to report that "Slabs and crawl spaces are equally good—slabs average quite a bit cheaper." These assumptions need further examination.

Your reported opinion that a basement is a dark, damp hole and thus wastes space fails to give credit to those architects who have studied and redesigned this space. They have made the construction watertight, placed large windows in the exterior walls, and so provided additional potential living space which can be just as attractive as the main floor. The recent Women's Conference on Housing expressed a substantial preference for a house with a usable basement.

We cannot dispute cost figures reported by Builders Levitt and Strauss, but our information from another source demonstrates that when all factors are considered the wood-joisted floor over crawl space costs at least 10¢ per sq ft less than the concrete slab on grade. The study to provide this information involved not only the cost of the floor itself, but also the plumbing and electrical work, the cost of which was lower in crawl space construction.

Your conclusion that "it is safer to

build on a slab if you are worried about water under the house, and better wherever bugs or termites are a problem," is not accurate.

Considerable investigation has demonstrated that, where earth in a crawl space contains excessive moisture, the application of a layer of impervious material over the surface will eliminate the hazard of condensation on the floor framing. Also, the use of properly designed and installed termite shields has proved an effective barrier against subterranean termites. Thus, in crawl space construction it is possible to provide satisfactory and permanent protection against ground moisture and against subterranean termites without adding appreciably to costs.

JOHN G. SHOPE, *chief engineer*  
NLMA

It was encouraging to see your words about eliminating basements, (H&H, Sept '58).

It is most disheartening to have to listen to the loan companies' reasons for not loaning money on a contemporary house. The old song about the basement is followed closely by, "how could I sell it if the owner didn't make his payments." This story is not a new one to you, I am sure, but the tragedy of the whole situation is how does any progress develop if the people who hold the purse strings refuse to open their eyes to what is happening around them.

DONALD E. HUSTAD, *architect*  
Minneapolis

## Seeing is believing

Some days ago I wrote you asking for three copies of an issue of HOUSE & HOME. Some days later I received a statement for \$3.00, for the three copies.

Not having any idea of the volume of data included, it seemed like an exorbitant price for a magazine. I returned the bill, assuring you the copies would be returned.

Yesterday the magazines arrived and I have decided to keep them. Enclosed find check for \$3.00.

V. A. VANHORN  
Denver

## More data on sewage lagoons

Your story (H&H, Oct '58) on Jackson County was very well done; as a result, the Jackson County Health Department and we have received numerous requests for further information regarding waste stabilization lagoons in this state.

The Public Health Service, the Missouri Water Pollution Board, and the city of Fayette, Missouri, are carrying on studies of optimum loadings for waste stabilization lagoons in this area. The studies, which have been carried on for approximately two years, have conclusively demonstrated that a loading of 200 persons per acre may safely be used in this state. Our experience has been that where lagoons are used as interim treatment pending the development of the watersheds, a loading of 400 persons per acre supplemented by sodium nitrate treatment during the winter months has proved entirely satisfactory. We are currently using 200 persons per acre for permanent municipal lagoons.

The use of waste stabilization lagoons has made possible sewage treatment for many small municipalities that could not afford the cost of mechanical treatment.

JACK K. SMITH, *executive secretary*  
Water Pollution Board  
Jefferson City, Mo.

## Featherbedding

Your news article in December on labor in Buffalo and Cleveland clearly describes our biggest problem—union featherbedding and refusal to accept the necessary change to new methods. The Cleveland strike this year clearly demonstrated the value of two things we must do:

1. Employers must band together to achieve some of the consolidated bargaining power which unions enjoy.
2. Employers must be ready to spend the same time and effort that unions do to gain their objectives.

Most employers give lip service to the above, but the defeatist attitude demonstrated in Cleveland, and the natural suspicion which competitors have of each others' motives, make many of us despair of ever getting the industry to present a united front.

Has HOUSE & HOME found any city, or trading area, where the employers are aggressively working together to solve their labor problems?

WILLIAM HENRICH, *president*  
Henrich Lumber, Inc., Buffalo

Home builders in Fresno, Calif. have made a start in this direction by signing up with John L. Lewis' United Construction Workers (Jan, News).—ED.

## Martin Cerel story

As always I enjoyed your most recent issue (Dec '58), and was especially impressed by both the content and presentation of your article on Martin Cerel, realtor.

MARK A. HOGAN, *realtor*  
Koelbel & Co  
Denver.

## Ed Stone's LIFE House

I never thought I would live to see a new house that wasn't done in a rock and roll manner (I am 81 years old), and I was very much surprised and delighted when skimming through the pages of H&H [Nov '58] I came to Ed Stone's inspired design. I hope it may mark a turning point in house design and that architects will be convinced that a house may have refinement and reticence and still be more original and modern than their zig zag concoctions.

WADE PIPES, *architect*  
Portland, Ore.

## Indoor-outdoor living house

I was surprised to see (H&H, Dec '58, p 136) a project on which we served as landscape architects, but for which we were given no credit. This particular house was featured as "A house to dramatize indoor-outdoor living" yet you included no photograph of the large terrace and made no mention of the importance of the design of the outdoor spaces by a professional designer.

ROBERT L. ZION  
Robert Zion-Harold Breen  
New York City.

H&H agrees that the landscape architects' made an important contribution to the success of this fine house, that professional designers are as important to surroundings as to houses, but with available space at a minimum, the photos shown were those which best explained the total house.—ED.

# Culinary Sales-Clincher!

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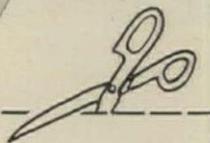
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HH259

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let it snow...**



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sure, they dry out amazingly fast. No long delays... no warpage... no waste.

To refresh your memory, Bildrite is our 25/32" sheathing. Graylite is our 1/2" sheathing. New XXX Graylite is a special, extra-density board, for use without corner bracing—same as Bildrite. All three are available 4'x8', 4'x9', and in other sizes.

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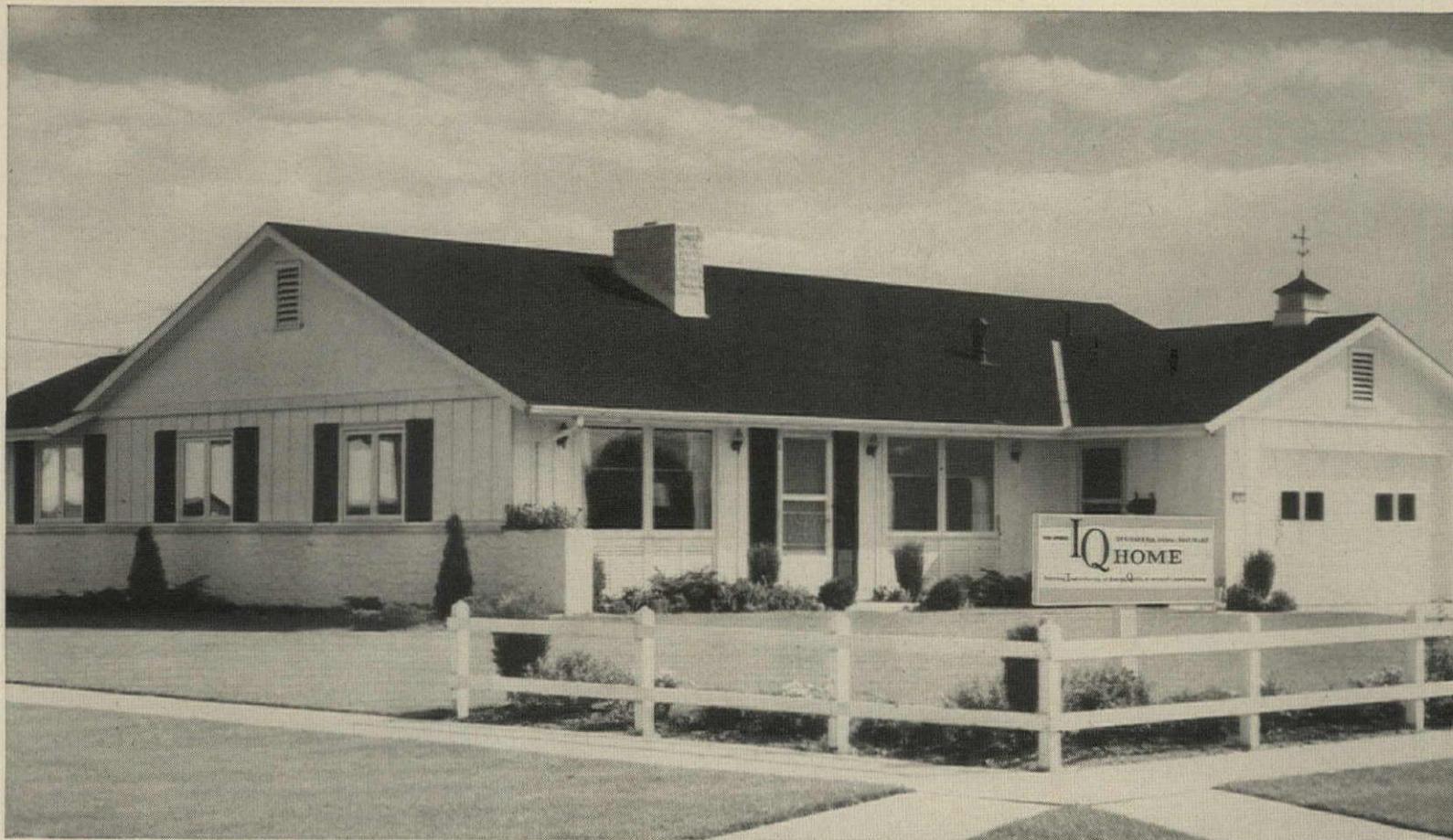
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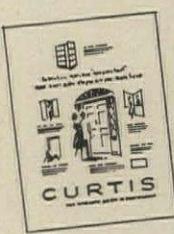
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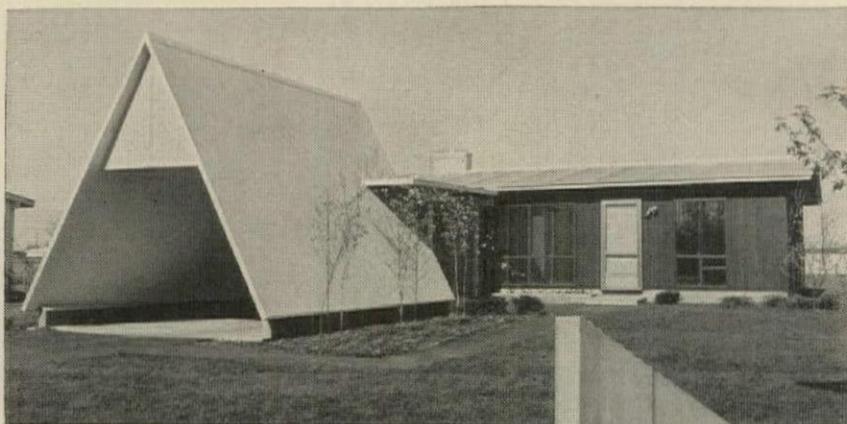
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HH-2-59

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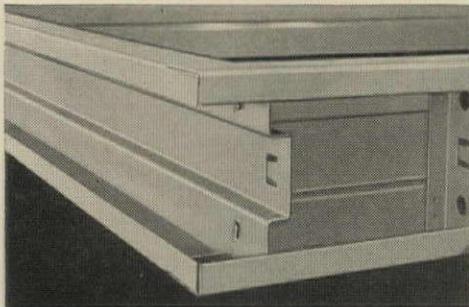
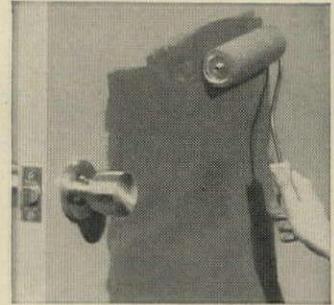
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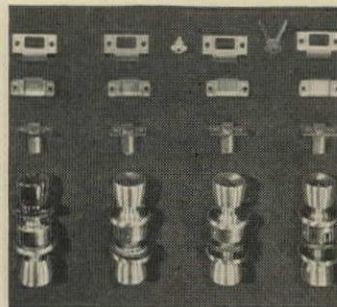
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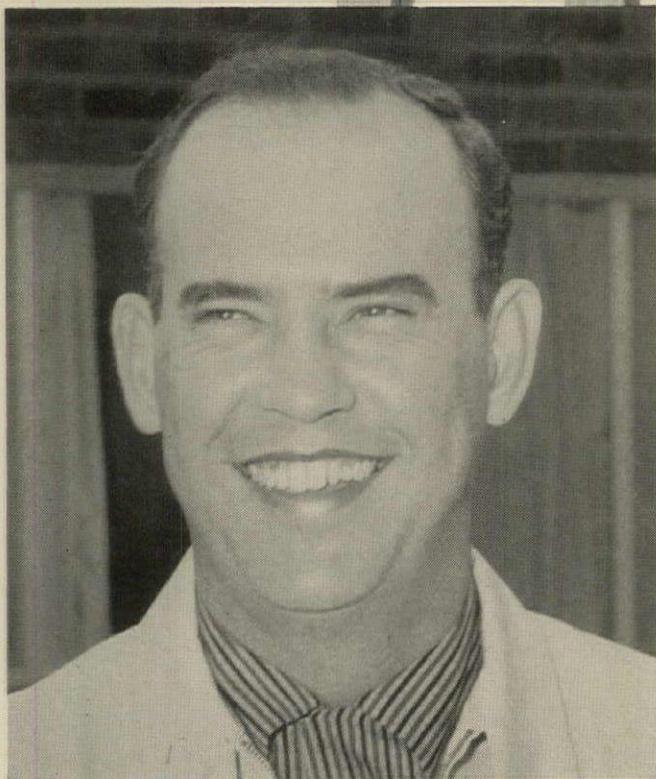
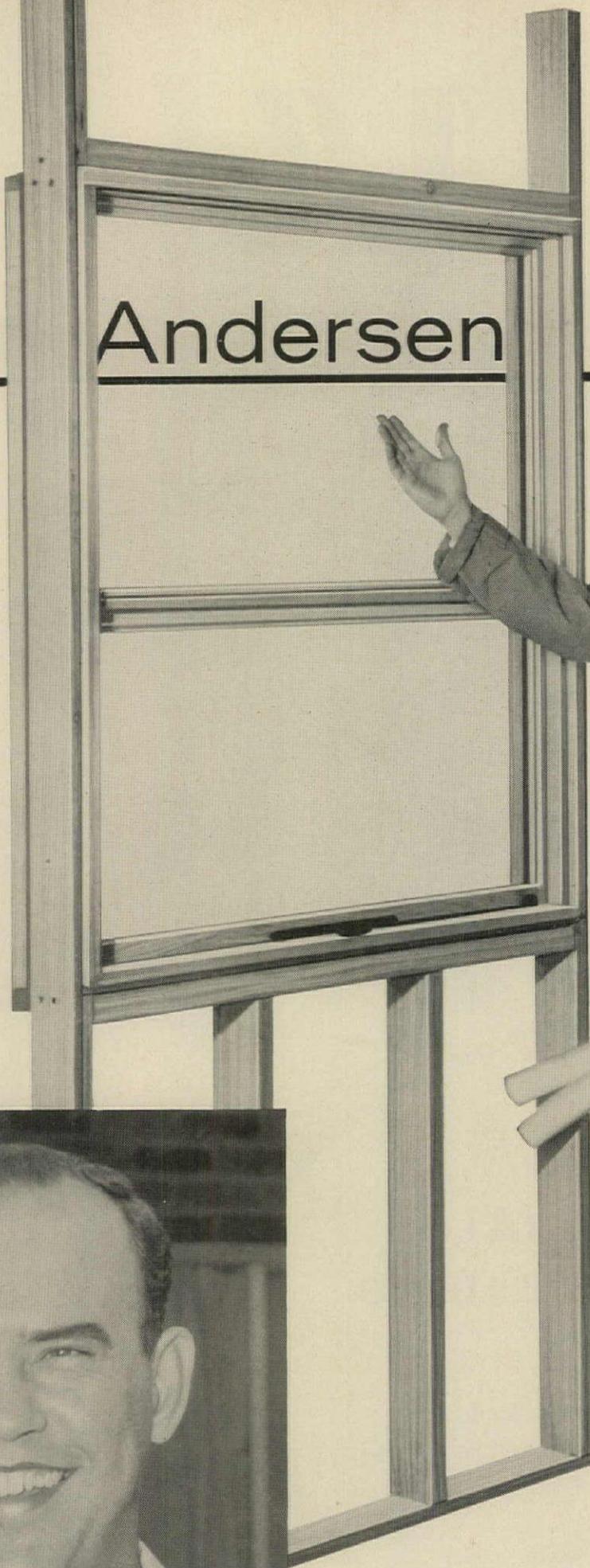
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**Comes assembled!** Andersen Window, load-bearing side struts, jack studs, other members are precision nailed and glued at the factory. This provides remarkable strength, unusual resistance to racking. Cuts normal window installation two thirds.

# gives builder better homes, helps him make extra profit!

With 77 homes left to go in a 210-home subdivision, priced from \$10,500 to \$15,000, Fister-Seeberger Homes, Inc., Lexington, Ky., switched from prefabs with aluminum windows to precut parts and new Andersen Strutwalls. After checking figures, the company reports an extra profit on its last 35 homes. It credits a large share of this amount to Andersen Strutwalls.

That's because new Andersen Strutwalls cut normal window installation two thirds—from around 22 steps to 7. They come with the Andersen Window, load-bearing side struts, jack studs, other members precision nailed and glued. To install you simply make two cuts

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New Andersen Strutwalls provide the strongest, tightest, most trouble-free joining of window and wall. Their handsome wood sash and frames add character, natural warmth and beauty.

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## Andersen Windowalls

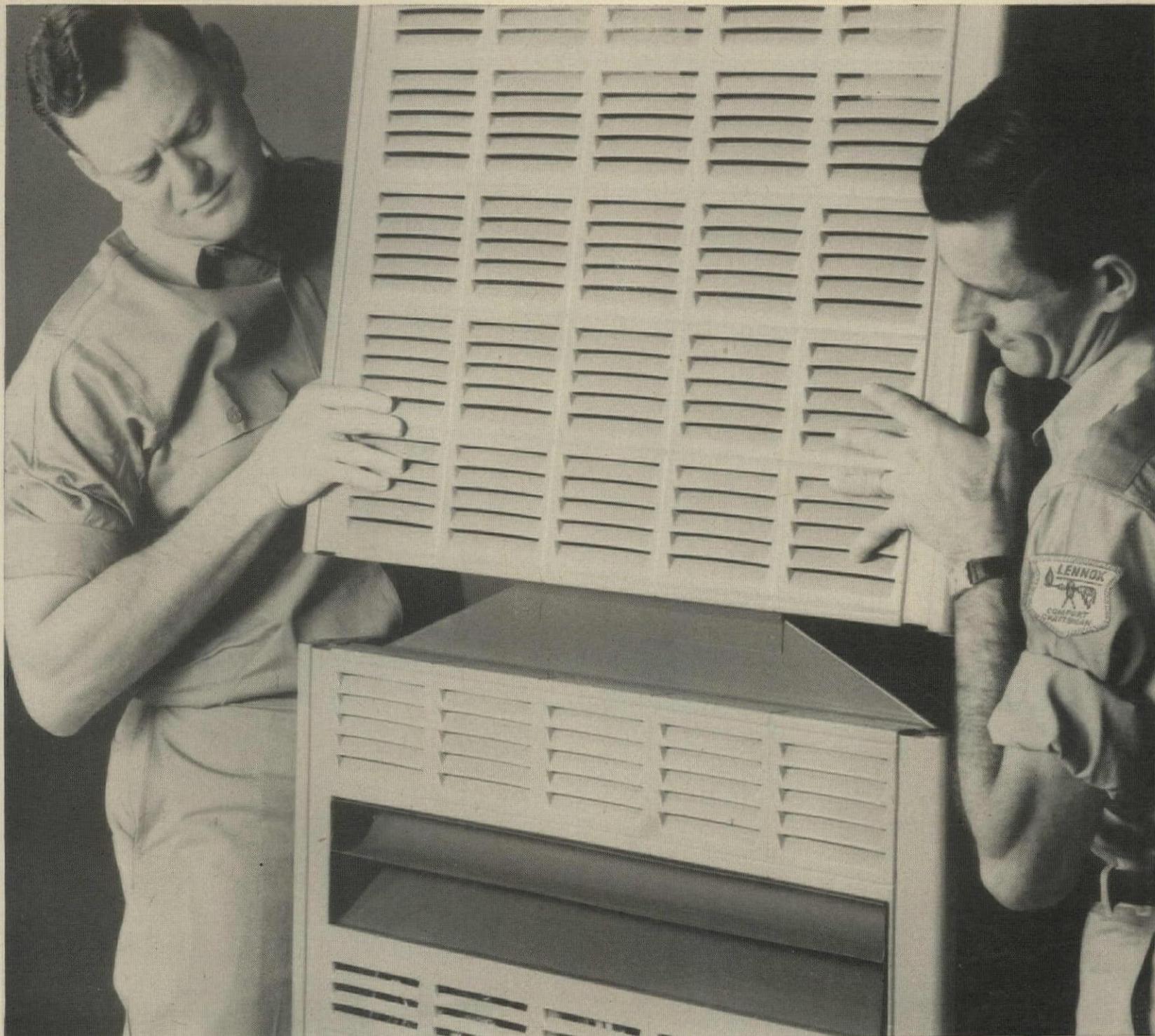
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HOUSE & HOME has just had its seventh birthday, so this month I would just like to thank you for everything you have given us.

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Thank you for giving us more readers among the builders of more houses than any builder magazine . . . more readers among the makers and distributors of building products than any building material magazine . . . more readers among the appraisers and mortgage lenders who put up the money to finance houses than any mortgage lending magazine . . . more readers among the realtors than any realtors' magazine ever had.

Thank you for giving us as many readers as any architectural magazine among the architects who draw the plans and write the specifications for US houses.

Thank you for liking HOUSE & HOME so much that more of you renew your subscriptions than renew for any other major magazine in the industry.

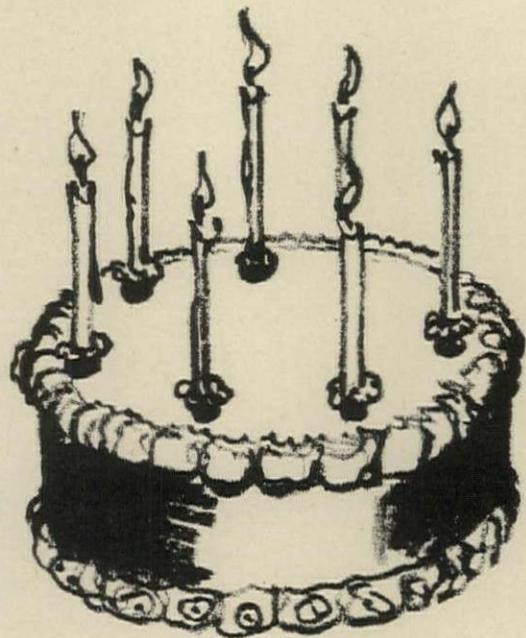
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Thank you for believing in us even when you disagree with us. Thank you for staying with us when we criticized you and said you will have to get your values up and your prices down if you want to regain your old share of the consumer dollar. Thank you for taking it when we said other industries were selling circles around you.

Thank you for supporting every program we have fought for—like dimensional coordination and building code reform, like easier FHA terms and easier FHA income requirements for better homes, like better financing for trade-in, like full credit for quality products in FHA appraisals, like the package mortgage to finance houses fully equipped with all the appliances.

**Thank you, in brief, for making HOUSE & HOME the one common meeting place of the whole housing industry—the meeting place where architects, appraisers, builders, lenders, dealers, realtors, decorators, and government officials can all go to find out what's new and good, to learn what the smart men in each group are doing to raise the standard of housing and broaden the housing market.**



Birthdays are a good time for good resolutions. So as we start our eighth year let me promise you that in the months ahead we will spare neither time nor effort nor money to deserve your continued support and confidence.

We have already invested nearly \$3 million in launching HOUSE & HOME. Now for 1959 we are budgeting to bring you nearly twice as many drawings and pictures per issue as you would find in LIFE or LOOK; we are budgeting to pack each issue with almost as much good editorial material as you can find in any two other magazines serving the industry. We are budgeting to spend nearly 40 cents for every published word, to get you just the facts and ideas and figures you need and to present those facts and ideas and figures clearly, simply, briefly, and vividly.

We believe America's greatest industry needs and deserves a great industry magazine. And we will do everything in our power to give it to you.

Cordially,

Editor & Publisher

**P.S.** And while we are thanking our subscribers, perhaps this is a good time to thank the building product manufacturers too for supporting us with far more advertising than they have ever bought in any housing magazine.

FEBRUARY 1959

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Published by TIME Incorporated

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#### STORY OF THE MONTH

88 *Houses for hot weather*

#### DESIGN

101 *Houses for the snow country*  
136 *What the architect can do for the builder house*

#### BUILDER STORIES

110 *A smart builder's methods make money for a brand new builder*  
126 *A small town builder tells what he learned building a Frank Lloyd Wright house*

#### MORTGAGE MONEY

134 *Big changes coming in FHA appraisal practice*

#### PROFILE

122 *Carl Mitnick, new president of the NAHB*

#### TECHNOLOGY

142A *This 196X panel is moving into home building right now*

#### NEW WAYS TO BUILD BETTER

143 *Showcase*  
146 *More on housing technology*  
152 *What the leaders are doing*  
158 *Power tool round-up: what's new for 1959*  
170 *Other new products*  
184 *New technical literature*

#### NEWS

38 *Al Cole steps out after six years as HHFA boss*  
41 *Prospects for the next housing act*  
47 *Closeup: the Mackle Brothers, Florida's biggest land merchants*  
37 *Index to these and other News reports*

#### DEPARTMENTS

70 *Letters*  
188 *Advertising index*



**COVER**  
House on Key Biscayne, Fla.  
by Robert Browne. Photo:  
House Beautiful, Ezra Stoller.



*People who design and build for Florida's hot wet climate  
can show you a lot about*

# How to make a house livable in hot weather

A good hot-weather house will keep out sun and rain and insects, let in the breeze and offer plenty of shade.

The houses shown on the next 11 pages are good hot-weather houses. Most of them are from Florida, because Florida designers have done the most to make houses livable in hot weather. But their hot-weather design ideas make sense for most parts of the country because in most parts of the country there is too much sun, too much rain, or too many bugs at one time of the year or another. Just as a typical Iowa house would be unbearable in Florida, an Iowa house can be unbearable in Iowa in August unless it is designed for comfortable hot-weather living.

## **A good hot-weather house combines three design ideas**

The first design idea that makes a hot-weather house livable is a sizable amount of enclosed outdoor space. The only way to enclose outdoor space and still make it seem like the outdoors is to put a screen around it (see opposite, the next page, and detail drawings of screening on page 90).

The second design idea that makes a hot-weather house livable is a big overhang (see page 92 and H&H, March '58). It makes a house cooler, and eases the load on the air conditioning.

The third design idea that makes a hot-weather house livable is provision to catch any breezes that do come along (see page 93).

The best hot-weather houses combine all these ideas. The built-for-sale house on page 94, and the custom houses on pages 96 and 98 are three good case study houses that show you how to make a house livable in hot weather.

← Screened outdoors encloses not only swimming pool but also a large lawn, fruit trees, shrubs, and vines. Framework is laminated fir beams, screening is glass fiber. Architect: Kenneth Jacobson; *House Beautiful* photo by Ezra Stoller.



**TERRACE**, screened on three sides, has platform and decorative concrete circles with gravel infill. Architect: William Bigoney.

Hedrich-Blessing

*To make a house livable in hot weather*

## Wrap some outdoor living in a big screen

Alexandre Georges



**SLIDING GLASS DOORS** open this living room to outdoor screened area. Living room ceiling sweeps out to cover outdoor area. Architects: Weed, Johnson and Assoc.

A screened-in outdoor area has three big advantages:

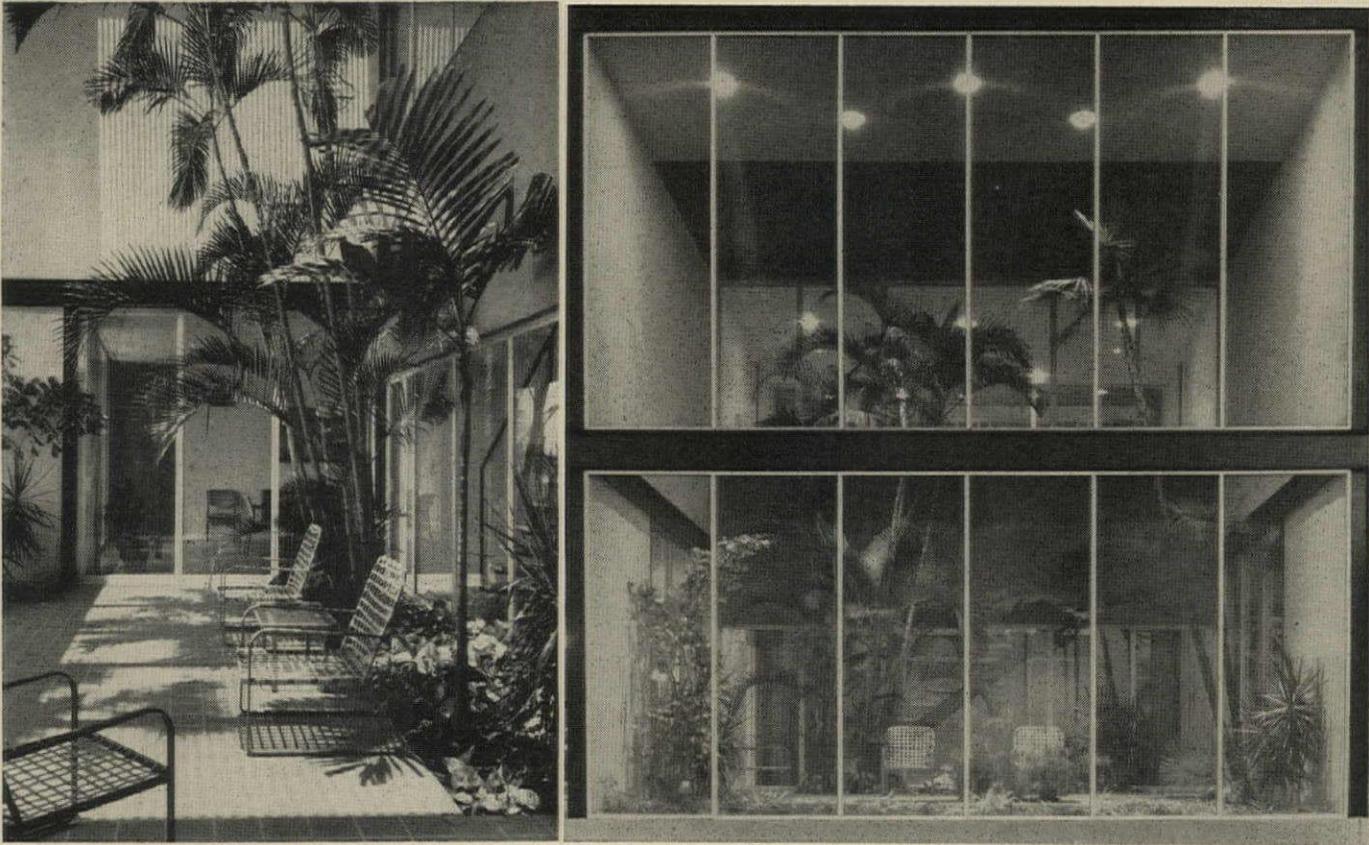
First and most important, a screened-in outdoor area makes it possible to enjoy the outdoors without insects.

Second, a screened-in outdoor area turns an ordinary terrace into an outdoor living room that combines the best of both indoors and outdoors. Screening lets you live amid outdoor surroundings with the sense of enclosure and privacy that most people like.

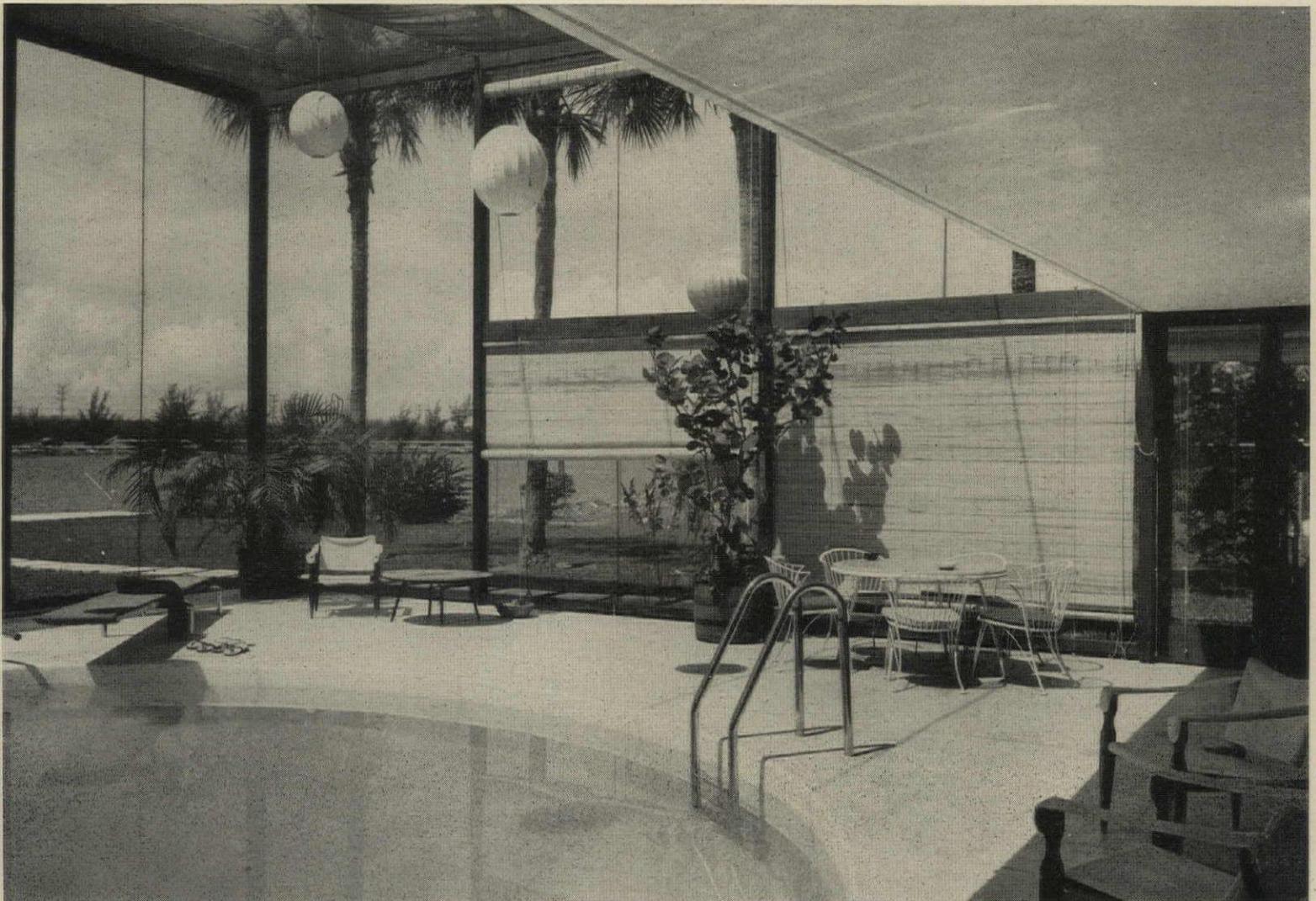
Some screened areas can be high enough for trees, and any screened area can have planting boxes or lawn. Some screened areas are big enough for swimming pools, and any screened area can get much of the same pleasant visual effect from reflecting pools.

Third, a screened-in outdoor area can make any indoor room that opens to it seem much larger. The far wall of the enclosure acts as the fourth wall of the room, tends to make the real wall of the room even less noticeable than if there were no enclosure. And this "extension" of indoor rooms is more marked with a well scaled screened enclosure than if the rooms open to the whole outdoors.

So, a screened-in outdoor area is pleasant and useful in almost every climate and in almost every kind of house—big or small, merchant- or custom-built. The photos on these two pages are of custom houses. But you can see examples of beautifully worked out screened areas in built-for-sale houses on p 94 and in H&H, Nov '58, p 100; Mar, '58, p 112; and Nov '57, p 118.

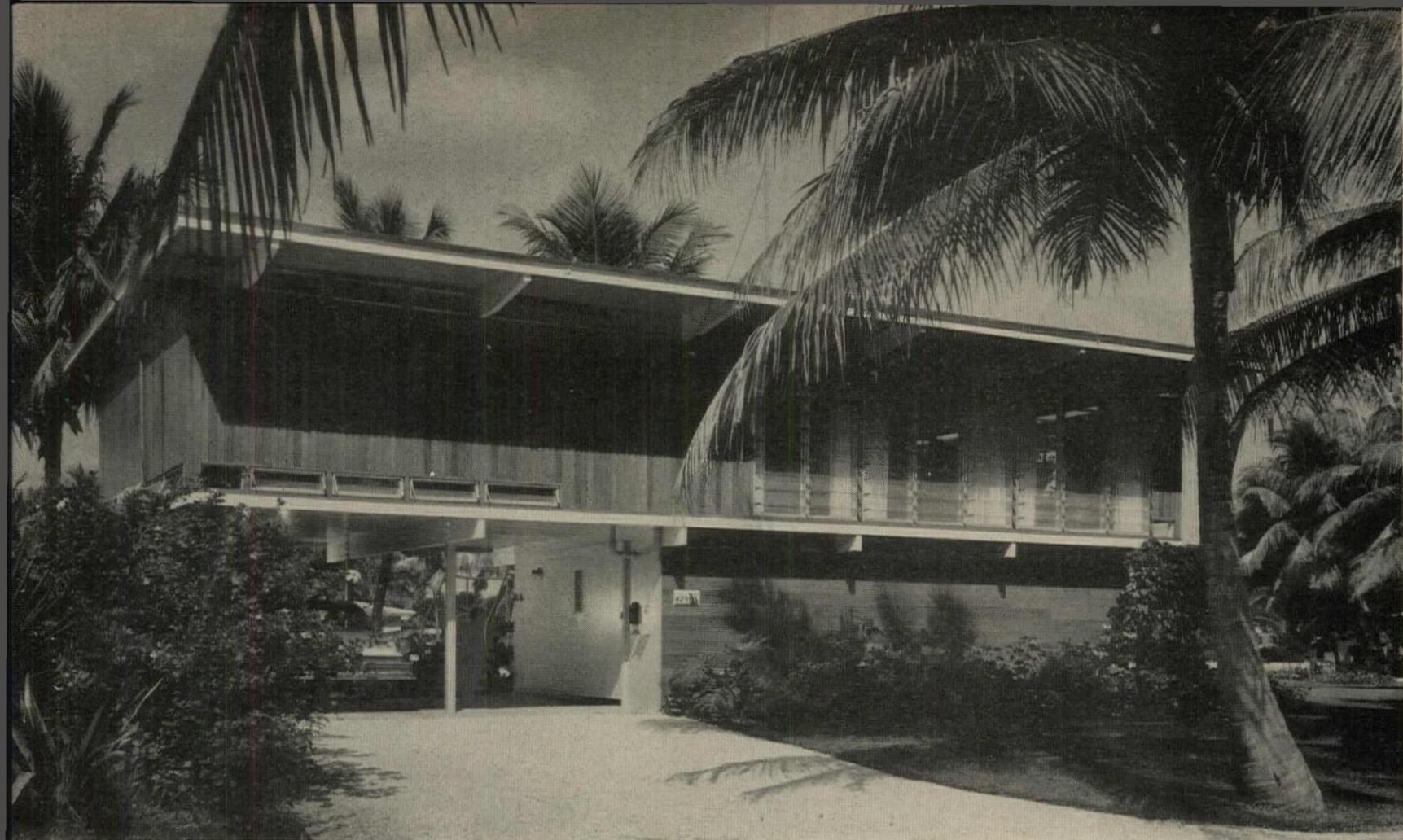


**TWO-STORY PATIO** is screened at the top and on one side, is almost an outdoor room inside the house. Designer: Phil Hiss.



**SCREEN** encloses pool and terrace; overhang shields terrace and glass-walled living room (out of photo). Architects: Nims and Browne.

*continued*



Lisanti Inc

**OVERHANG** on all sides of house shades walls as well as windows; second floor projects to make overhang for first. Architect: William Bigoney.

*To make a house livable in hot weather*

## Shade the windows with a big overhang

The big overhang is an absolute must for a good hot-weather house.

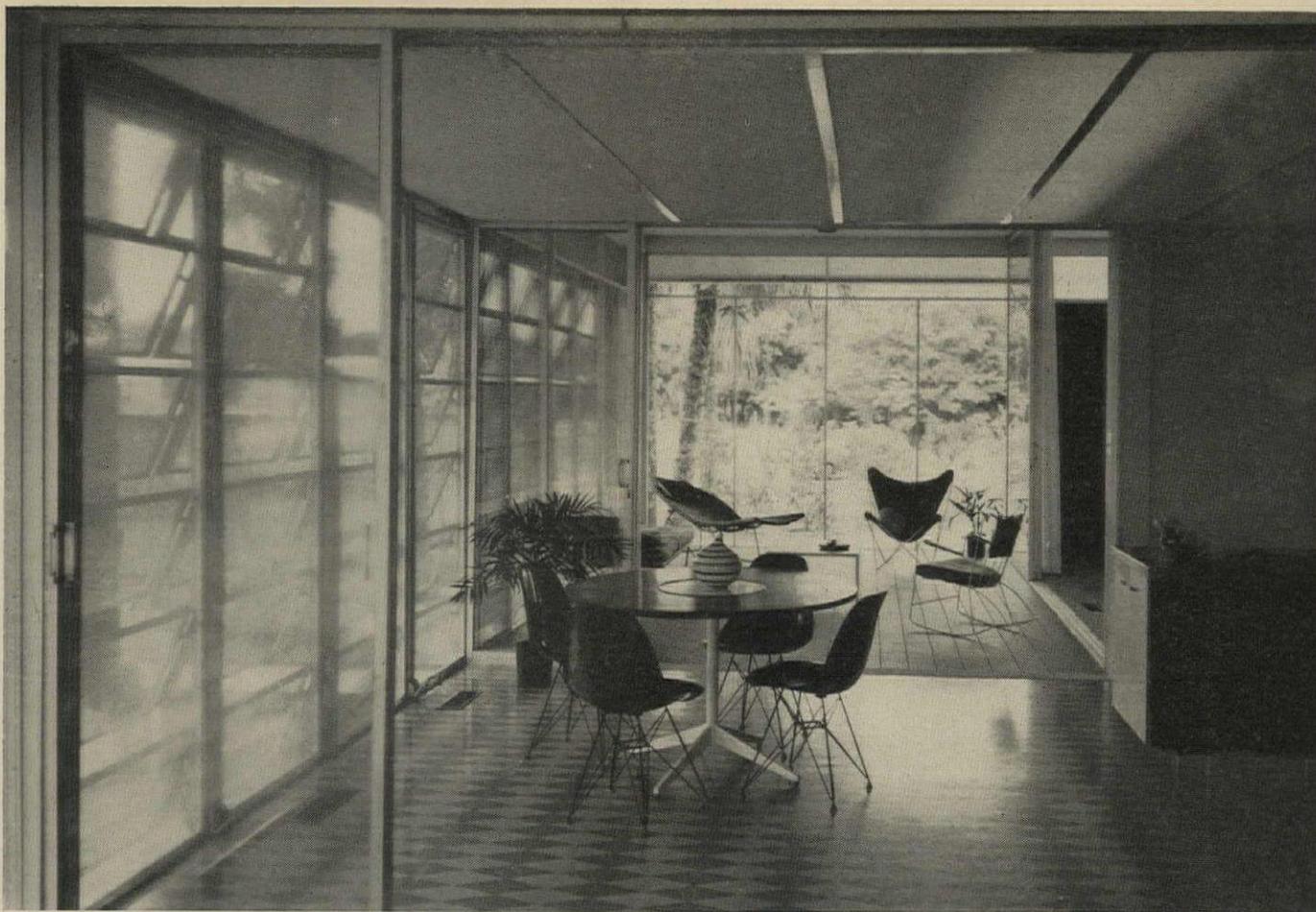
With a big overhang, windows can be left open in hot, rainy weather. With a big overhang the indoors stays cool (and is easier to air condition) because both the walls and windows are shaded from the sun. And with a big over-

hang, maintenance is cut because exterior walls take less of a beating from bad weather.

Every house, even those in Maine, needs sun control at some time of the year—and in the Northern states an overhang is doubly valuable because it keeps winter snows away from the walls.



**OVERHANG** runs length of fixed glass gable, center, and sliding glass doors, right; "eyebrows" shade jalousie windows. Architect: William Rupp.



**AWNING WINDOWS** open whole side of house to breeze. Both sides of dining area open to screened porches. Architect: James Kennedy.

## ... and open the walls to the breeze

Miami Herald: John Walther



Most houses would be easy to cool if the walls could be opened so breezes would flow right through the rooms.

So it makes great sense to put sliding glass doors in the walls of any room that opens to a screened outdoor area. It also makes good sense to use louvered doors, and jalousied or awning windows—they let a breeze through but still keep out a lot of blowing rain.

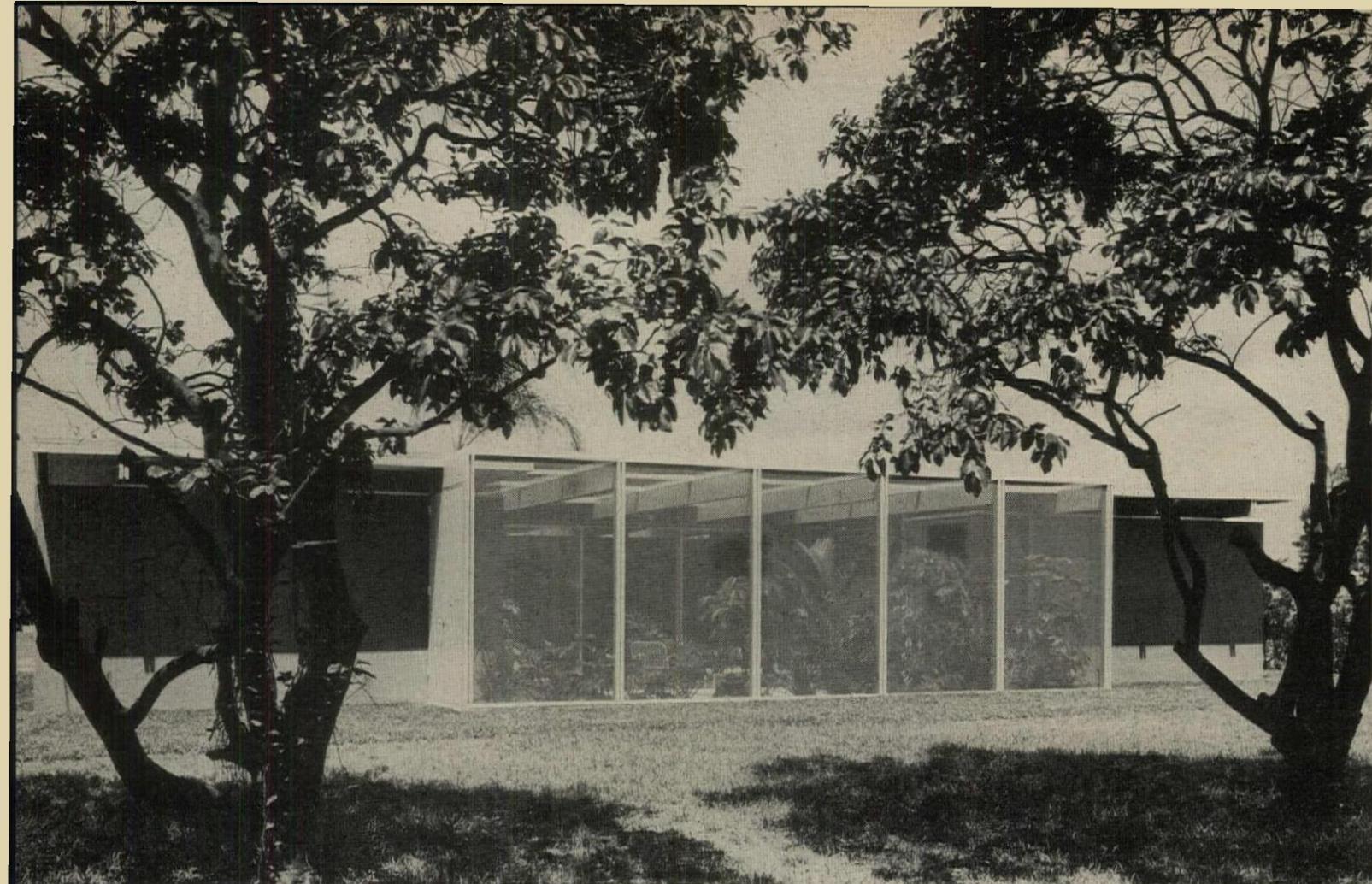
But there are other ways to help ventilate a house. You can raise the house on stilts (see top photo, opposite) and put all main rooms on the second floor. Then plantings or nearby buildings won't block breezes. The house will be cooler, too, because the wind can blow underneath it.

And one of the best ways to plan a hot-weather house so it will be cool is to make it only one room deep—which automatically insures cross-ventilation (see H&H, Oct '56, p 164).

An important point: when a house is designed to let the breeze sweep through, it makes particular sense to orient it so the open walls are perpendicular to the prevailing summer winds.

**LOUVERED OPENINGS** alternate with fixed glass so this room has ample breeze and a clear view. Architect: Rufus Nims.

*continued*



**SCREENED PATIO** is at rear of house; planting within it helps add privacy. Adjoining walls and high windows get shade from overhang.

*Hot weather case study No. 1*

## A screened patio is the biggest room in this house

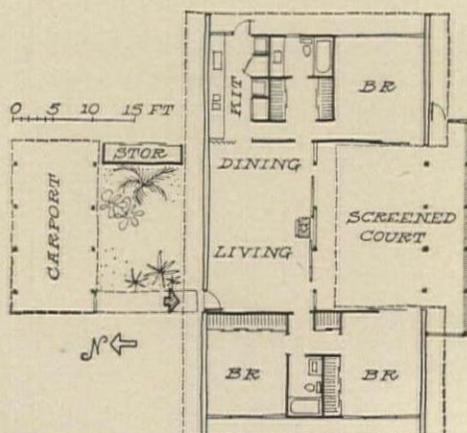


**STREET SIDE** view is entrance and children's bedroom wing.

It adds over 560 sq ft of outdoor living room to this built-for-sale house. Interior living space is over 1,500 sq ft—and the house sells, without lot, for about \$17,000.

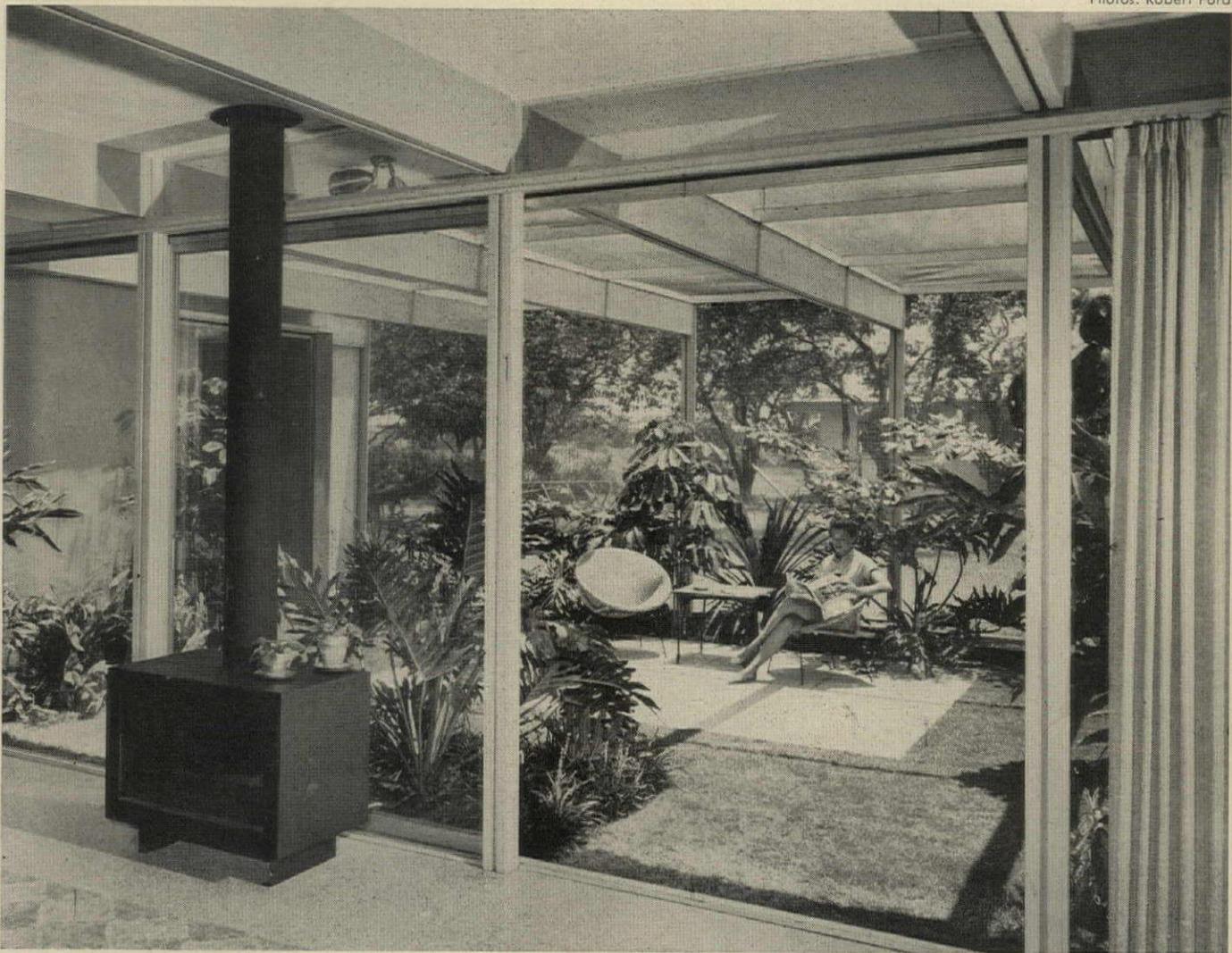
The big screened patio does more than just add space and keep out bugs. Because it is located in the "U" of the plan, it works as a second living room. The living room proper, the master bedroom, and a second bedroom all open directly to it.

And this big screened patio has the feeling of a room because the ceiling beams continue out from the living room to frame the screening of the patio. Three sides of the patio are actually walls of the house, and the lawn and paved terrace combine to make a floor.

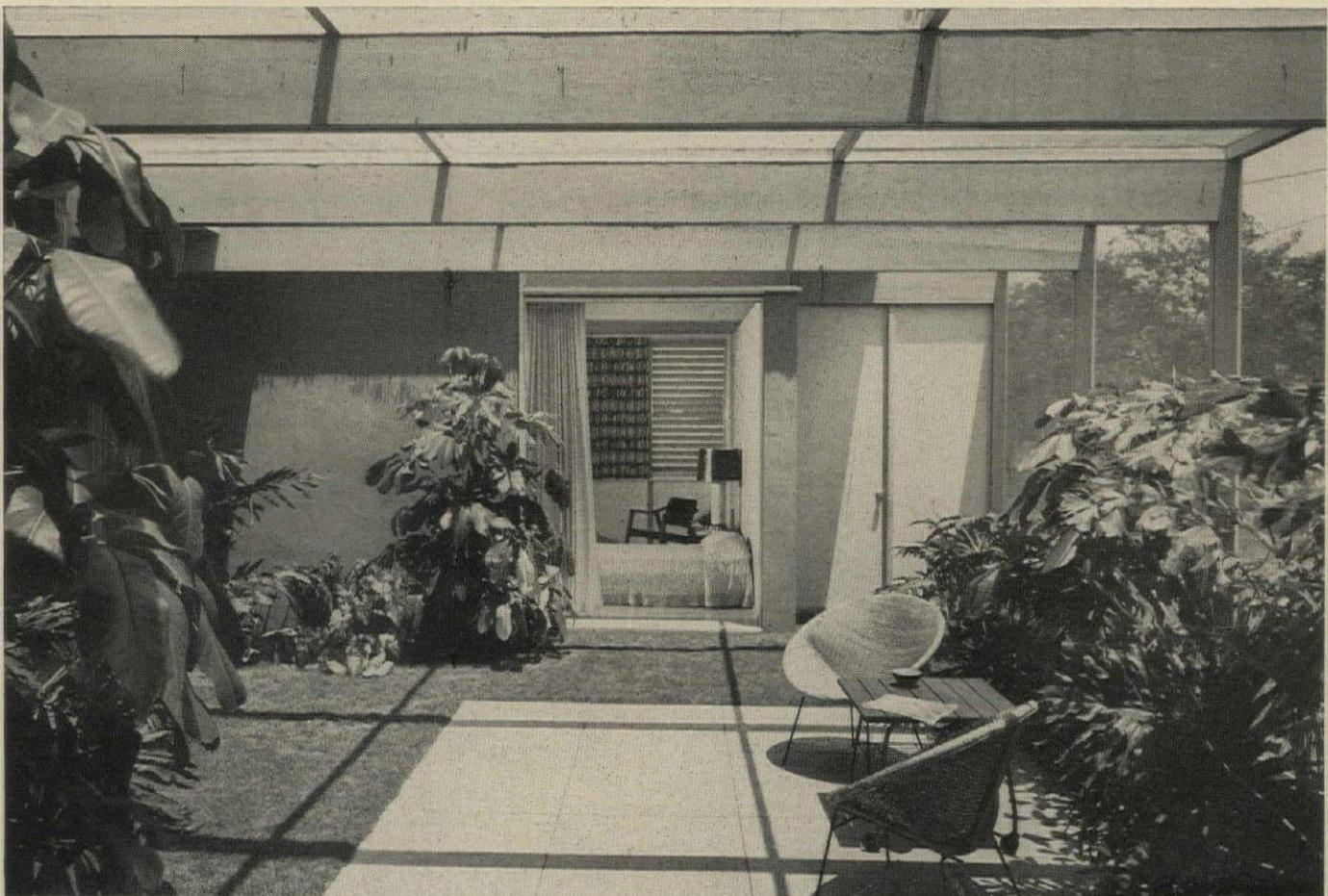


**BUILDERS:** *Thyne-Swain, Inc*  
**ARCHITECT:** *Edward Seibert*  
**LOCATION:** *Sarasota, Fla.*

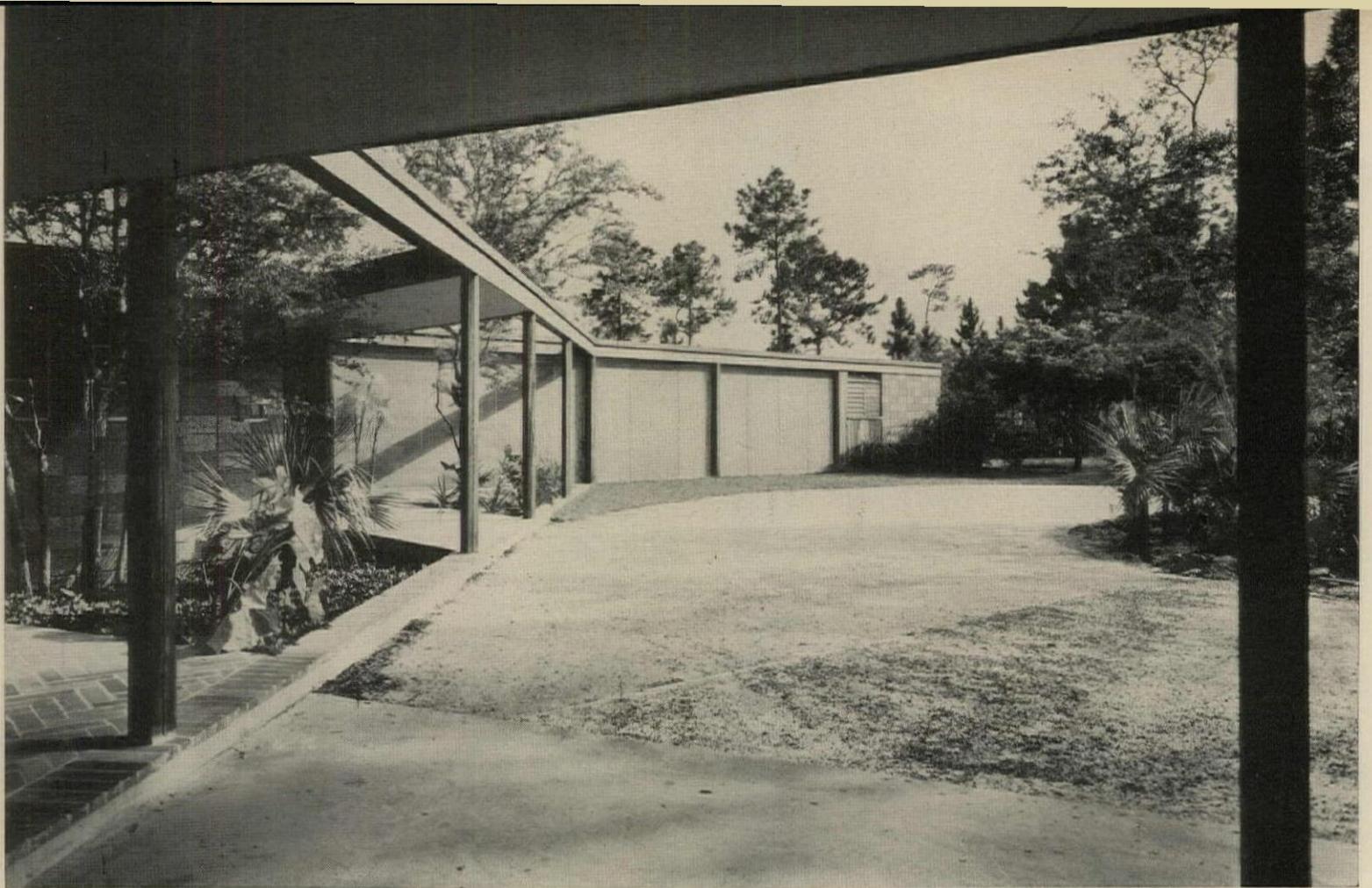
**U-SHAPED PLAN** makes much of house only one room deep; living room divides bedroom wings. Carport, storage form entrance court.



**LIVING ROOM** has whole glass wall on patio side; opposite side (out of photo) has high operable windows, so breeze is drawn through.



**BEDROOMS** face each other across patio, have sliding glass doors. Door, right, leads from patio to rest of lot.

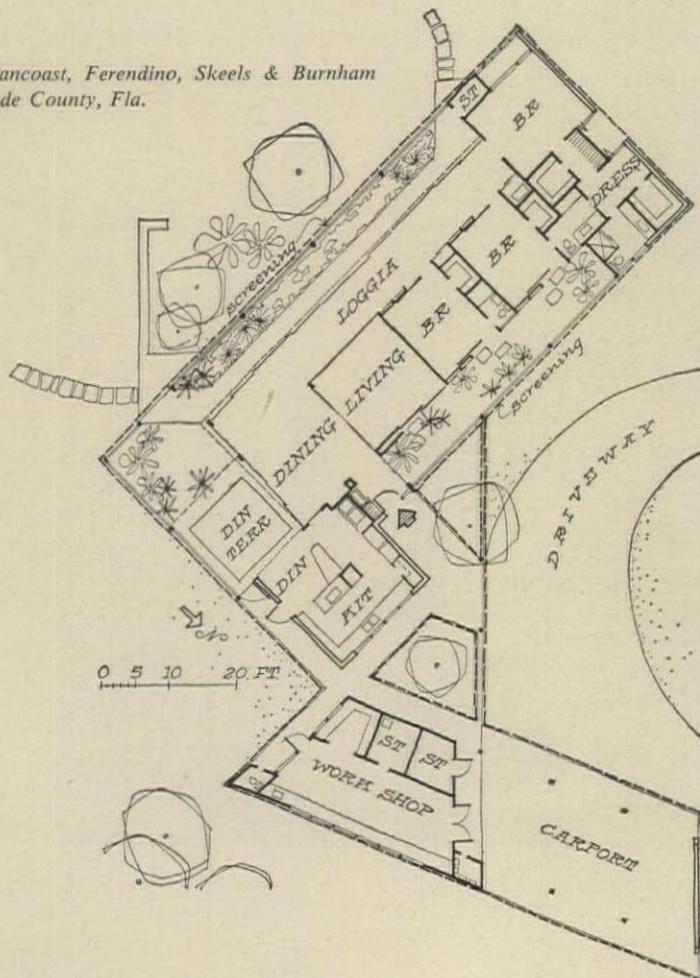


FROM CARPORT, roof line sweeps back to main part of house behind screenings. Entrance court is only unscreened area.

*Hot weather case study No. 2*

## The big roof shades outdoor living in this house

ARCHITECT: Pancoast, Ferendino, Skeels & Burnham  
 LOCATION: Dade County, Fla.



The 6,200 sq ft roof sweeps out from the "indoor living area" to cover more than 1,300 sq ft of screened outdoor space (see opposite)—large areas on three sides, plus a small private terrace off the master bedroom.

The flat unbroken plane of the roof ties together not only these areas but the carport and workshops (see plan at left).

Screening for the outdoor areas starts at the edge of the roof, so the house looks (above) as if it had no overhang at all. Nothing could be less true—the big roof stretches out 8' over most of the outdoor living spaces, and 15' over the dining terrace.

Over half of the exterior wall (protected under the big overhang and behind the screen) is either sliding wooden jalousies or glass doors, so the "indoor" spaces can be opened wide to the outdoor spaces and to the breeze.

Wooden storm shutters (1/4" plywood panels on 2x2 frames) can be quickly fitted into place over the screens when storm warnings go up. Cost of the house (including \$1,910 landscaping): \$39,000.

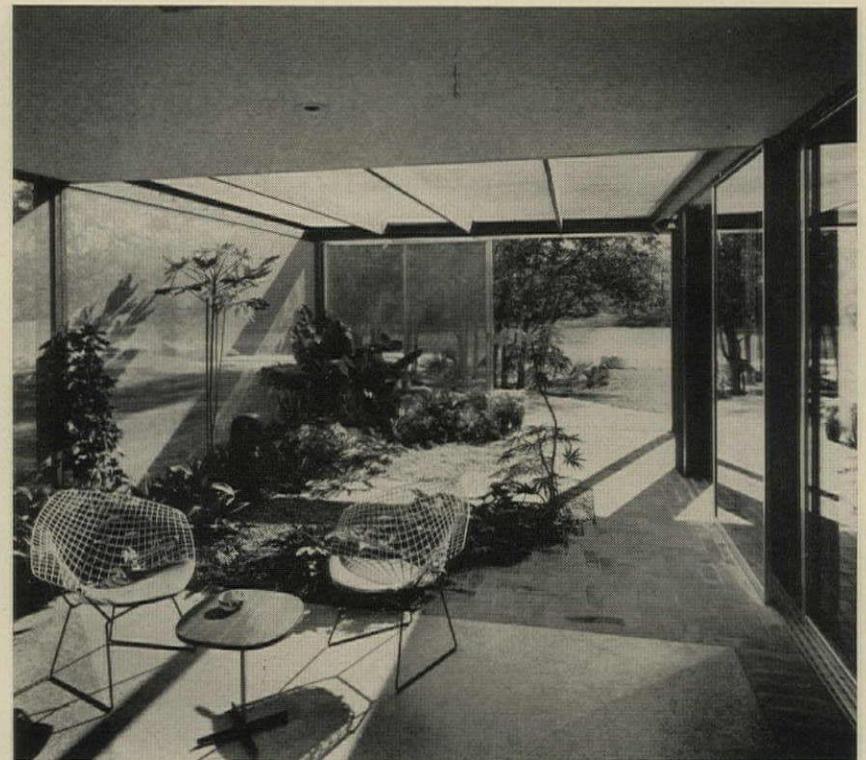
**PLAN** shows how roof outlines house, and covers workshop, carport, and walks. All three baths open to front screened area, but screening gives them plenty of privacy.



**REAR OUTDOOR AREA** is part of living room, has same brick floor.



**FRONT OUTDOOR AREA**, largely planting, opens to living room.



**LARGEST TERRACE** (512 sq ft) is off dining room. Space at rear is only screened outdoor area roof doesn't cover.

**MASTER BEDROOM** has own private little (31 sq ft) screened garden with lighting, planting, sliding doors.

*continued*



**FRONT ELEVATION** looks just like rear or water side (not shown). Both approaches are equally important.

*Hot weather case study No. 3*

## Wide-open walls make this house a breezeway



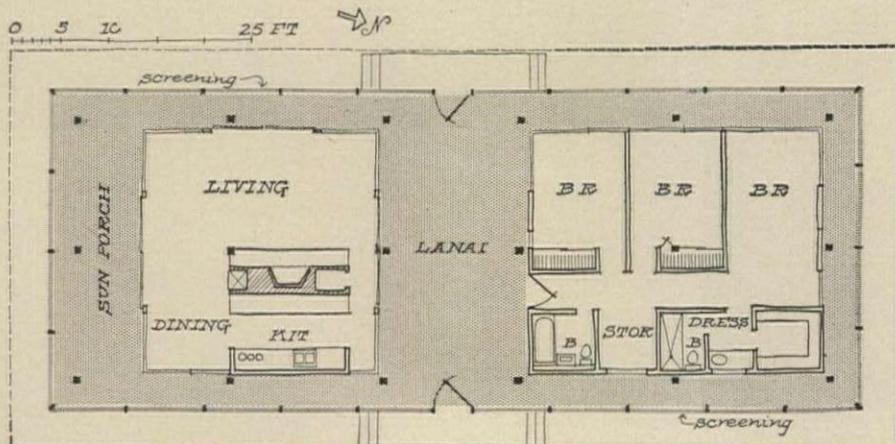
**WOOD JALOUSIES** open bedroom to breeze, break sun's rays.

The exterior wall that surrounds this whole house is a roof-to-floor screen—so there is nothing to keep the breezes from blowing right through the house.

Even the walls of the two enclosed areas (see plan below) are almost all sliding glass or wood jalousie doors. Oriented to catch prevailing breezes, the house is raised 2' off the ground, so breezes will blow under it, too. (This is good hurricane protection, because the house won't block the wind.) Foundation posts and floor joists are of concrete, so the house has extra protection against termites. (See details, *p 100.*)

The overhang of the huge pitched roof reaches 8' out past the screen wall (cover photo), and the screen is 8' out from the house's two enclosed areas (one for living, one for sleeping). These are separated from each other by a 15' wide lanai, which serves as entry.

Cost of house: \$26,080 without land.



**PLAN** shows basically simple concept of house: two enclosed areas, living and sleeping, freely placed under broad, sheltering roof.



**HIGH CEILING** and open quality of walls keep huge sheltering roof and overhangs from being weighty or oppressive.

© Ezra Stoller

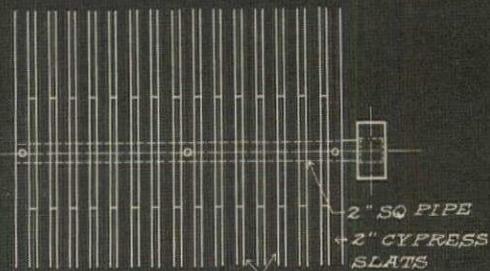
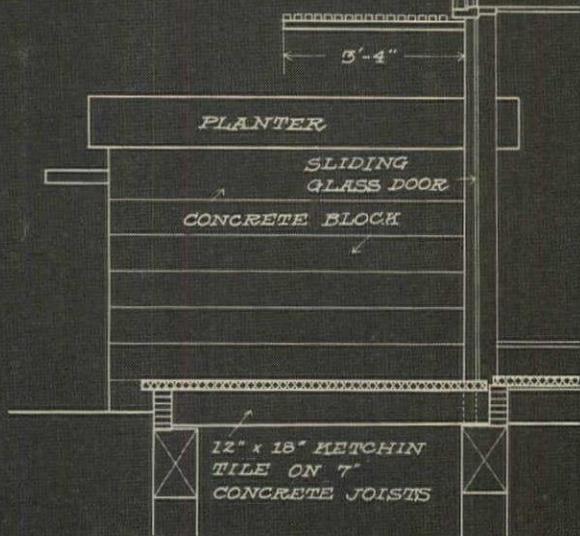
ARCHITECT: *Robert Browne*  
 LOCATION: *Key Biscayne, Fla.*

**SLIDING JALOUSIE DOORS** open living room to a 10' wide porch. Wall between door header and roof is all glass.



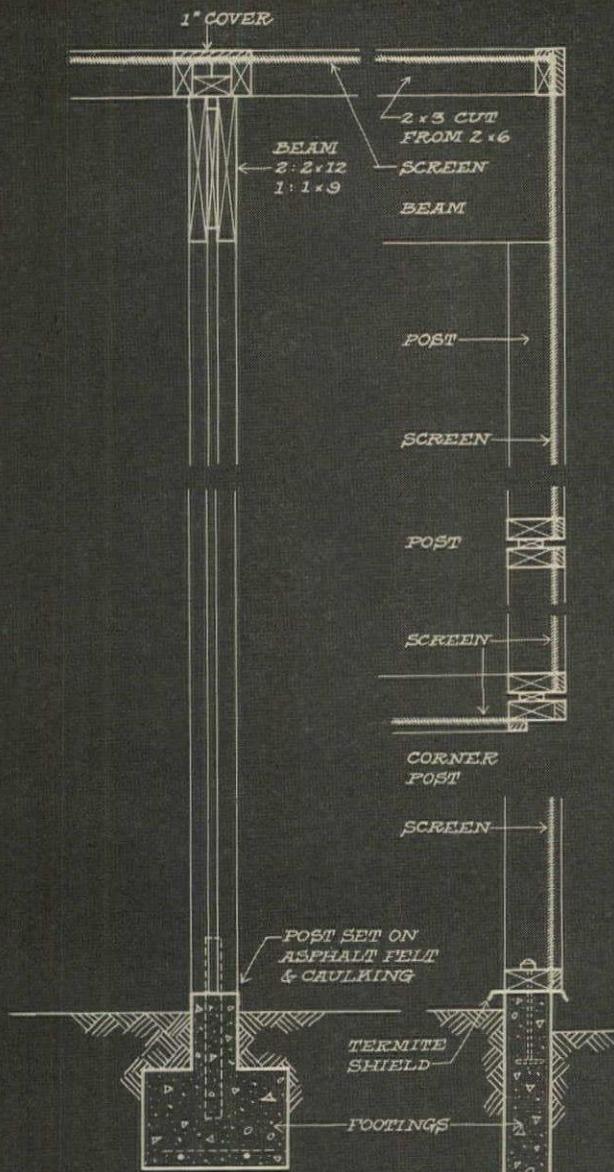
*continued*

EYE-BROW - 2" x 2" CYPRESS SLATS 3/4" APART ON 2" SQ PIPE WELDED TO 2 1/2" SQ PIPE COLS (SEE PLAN)



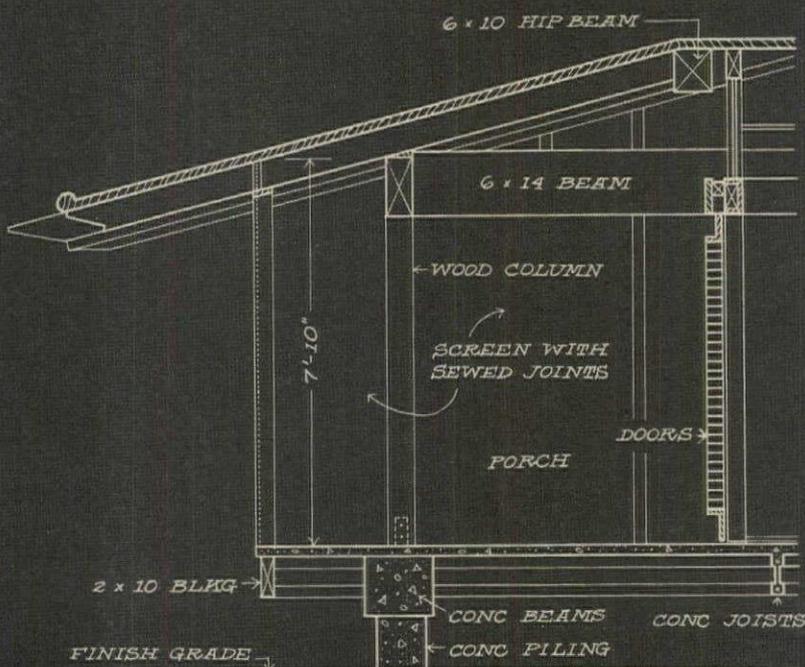
PLAN OF "EYEBROW" 1" x 2" CYPRESS SPACERS OVER 2" SQ PIPE SUPPORTS

ARCHITECT: WILLIAM BIGONEY



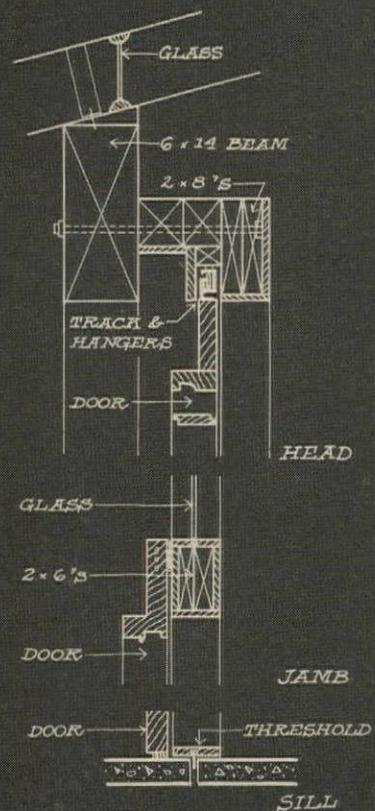
DETAILS OF FRAMING FOR SCREENING

ARCHITECT: EDWARD SEIBERT  
BUILDER: THYNE-SWAIN



ARCHITECT: ROBERT BROWNE

SELECTED DETAILS FROM HOT WEATHER HOUSES



SECTION THROUGH SLIDING JALOUSIE DOOR

END



## *Houses for the Snow Country*

No other type of snow country house has caught the fancy of the world like the Swiss chalet. The traditional chalet, like these in the Alps, has solved the problems of the snow country since the 15th Century. To learn more about chalets, turn the page.



**TWO-HUNDRED-YEAR-OLD CHALET** started as a farmhouse, is now a private residence in Les Anemones, near Gstaad, Switzerland.

## *The Swiss Chalet: the original pre-cut house*

The Swiss pioneered precutting—over 200 years ago they pre-cut chalets in order to build them quicker.

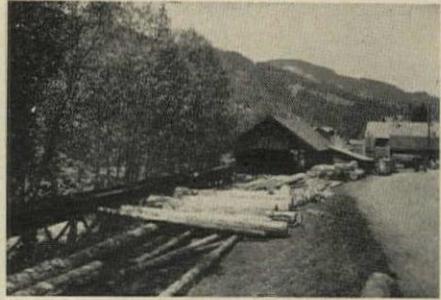
And chalets are pre-cut today, though there are differences between today's and yesterday's construction. For example, today's chalets are insulated (*p 104*). Before the development of modern insulation materials, walls were several layers of timber, 4" to 6" thick.

But today's chalets still have fine wood interiors (*p 106*) and deep overhangs to protect the exteriors from snow

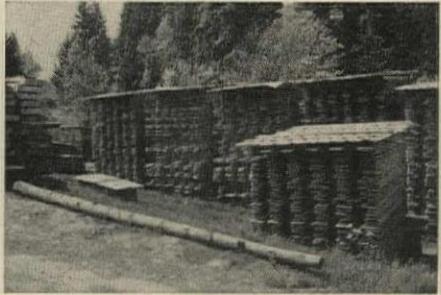
and water (*p 109*). Above all, chalets still follow a romantic tradition, most of which they owe to the way they are detailed and finished (examples from historic chalets are shown on *p 108*).

You probably would not want to build a snow country house in, say Sun Valley, the way the Swiss would. But the long experience of the Swiss proves that pre-cutting is a basically sound way to put up a good house quickly. The way they do it is shown across-page.

*First, the timber is cured...*



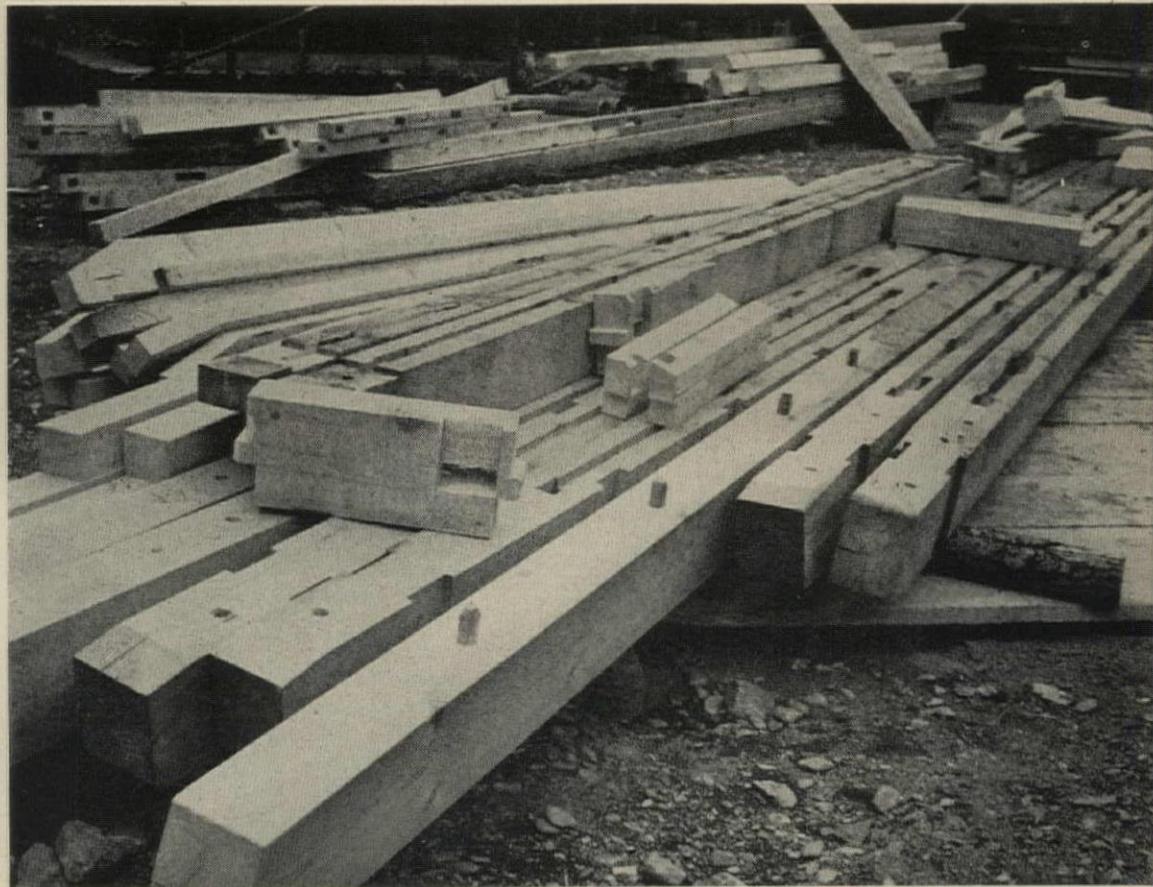
**SAWMILL** in Alps near Gstaad cuts logs to size for eventual use in a chalet.



**CURING STACKS** dry wood for one to ten years. Pine, pitch-pine, larch, oak are used.

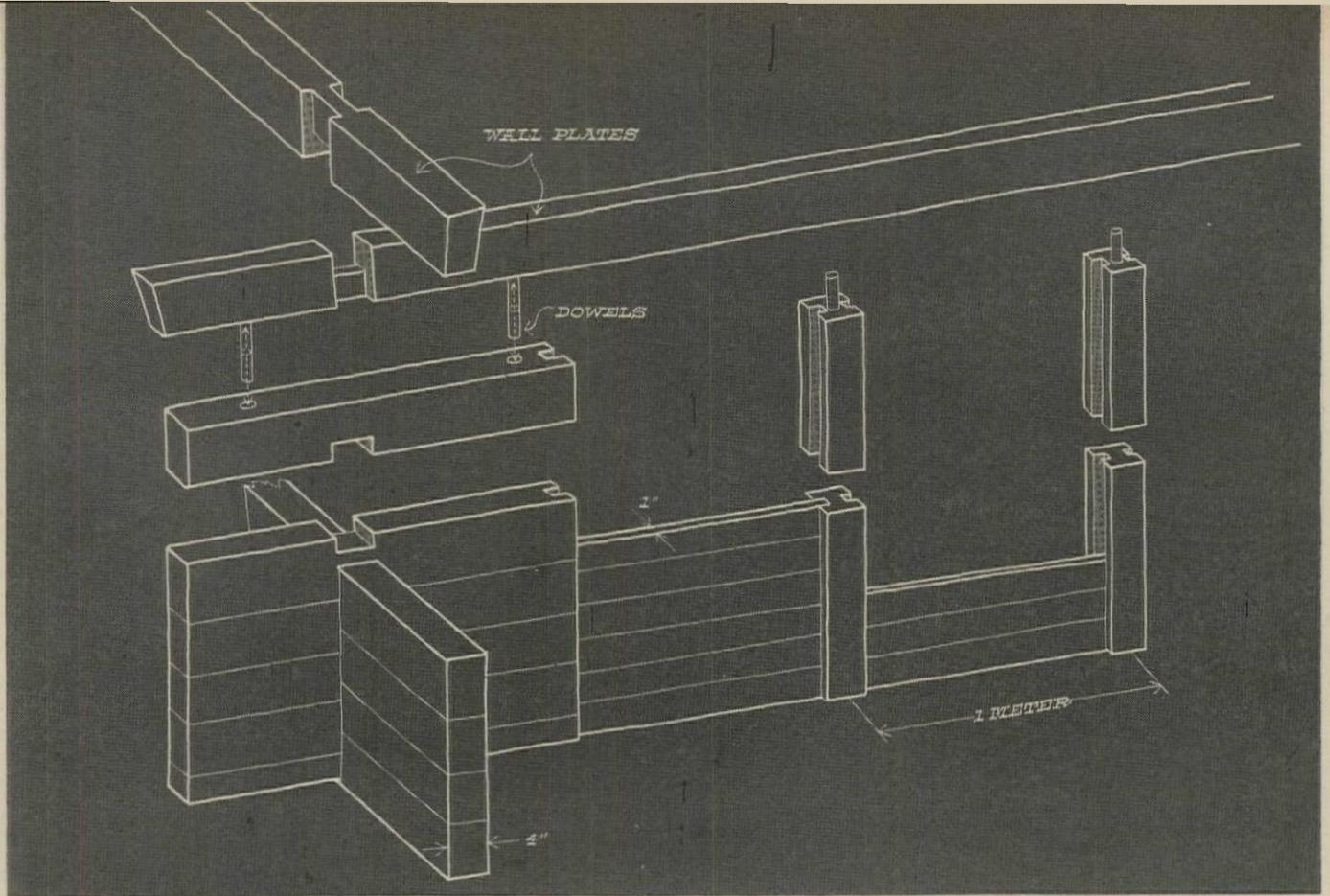
*...and precision milled*

Photos: H&H staff



**LUMBER** is shaped at shaping mill, located behind sawmill. Every piece is cut to exact size and shape. The two timbers at far right in photo are sill beams, rabbetted to receive

the wall. Next to them is a top plate header, cut to the full length of the wall. Dowels are  $1\frac{1}{2}$ " in diameter, will fit holes in top of wall posts when erected.



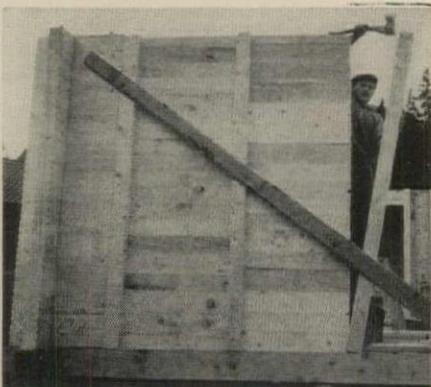
**EXPLODED VIEW** of modern chalet construction shows how each piece of wood fits the piece below it. Set on prepared foundation, pieces are notched so they interlock at corners. Posts run from sill

to top plate, are held in place with pre-set dowels at top and bottom. All other pieces are fastened with dowel pins driven on job. Insulation is in normal position between sheathing and interior wood finish of wall.

## *Here's how the Swiss put a chalet together*



**SHEATHING** is driven into slots in corner construction. Corners go up first. Photo shows work in afternoon of first day.



**POSTS** are fitted over ends of each section of sheathing, then another section is added. Common tools are axe and sledge hammers.



**TOP PLATE** is driven home on top of wall. Lower man in foreground is tilting a header already in place so that notches in it and wall

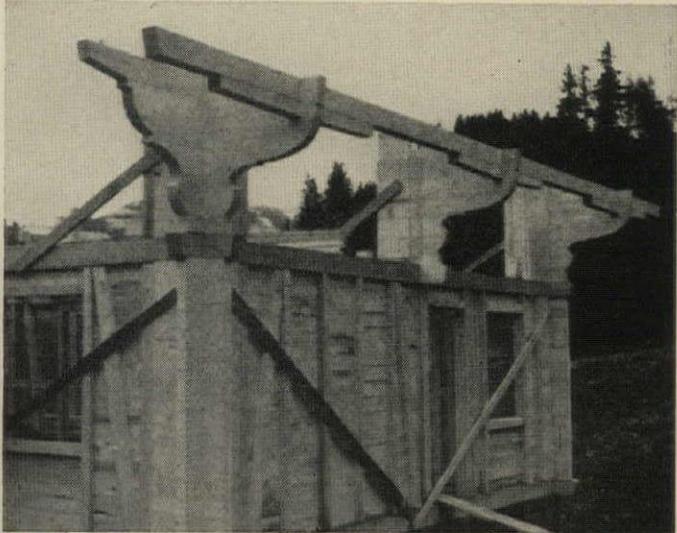
will interlock easily. Swiss builders (many chalets are do-it-yourself projects) spare no elbow grease driving these timbers.



**WALL PLATE** is interlocked with partition (seen through window), then fastened with dowels, shown being hammered in. Partitions are plastered. This stage marks end of second day of construction.



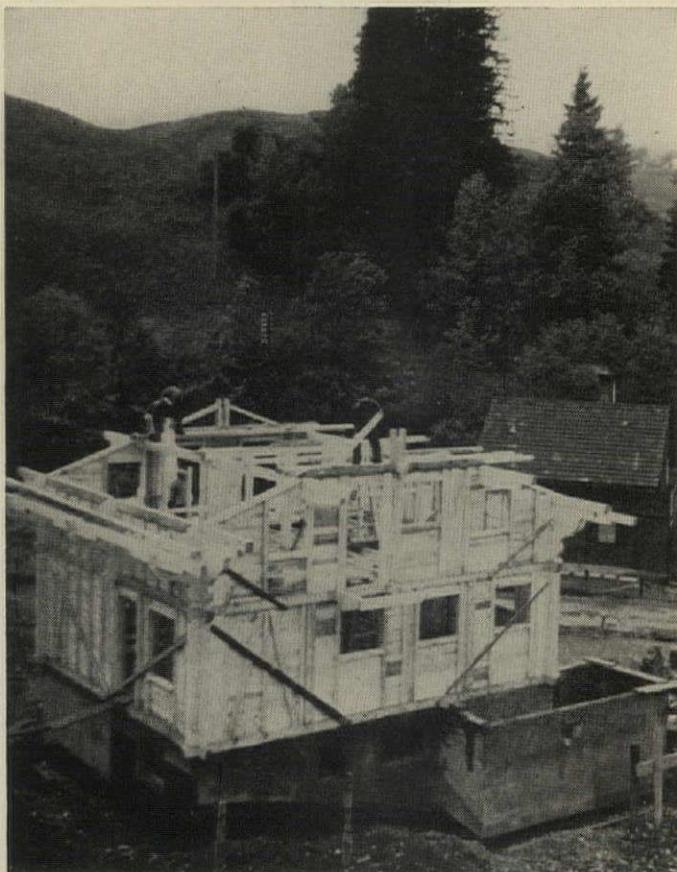
**ROOF BRACKET** is assembled and fastened with dowels on top of walls.



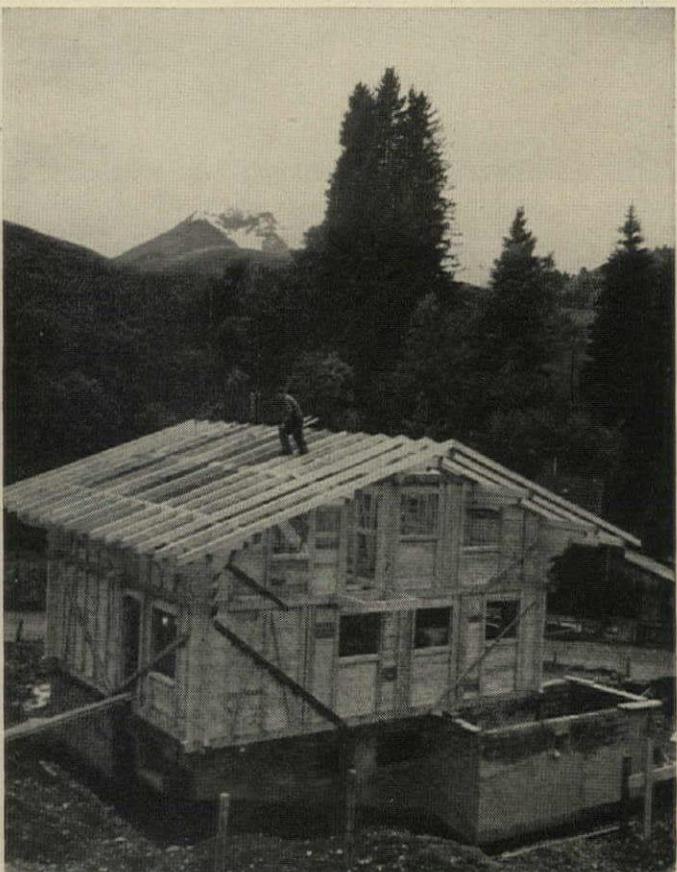
**ROOF PURLIN** is fitted into brackets on third day. Rafters will rest on the purlin. Brackets are 3' high, to form knee-wall along sides of the house. Second-floor joists are installed at this point.

## *in four days without using a single nail*

Photos: H&H staff



**SECOND-FLOOR WALLS** are assembled exactly like the walls on the first floor. Partitions are then installed, and the remaining roof purlins are dropped into place. Windows reach full width between posts.



**ROOF FRAMING** goes on in fourth day. Chalet is now ready for tile roof and final trim and finish. This chalet has a concrete basement for utilities. The finished house has 1,800 sq ft, cost \$20,000.

*continued*



**ENTRANCE HALL** has low ceiling (6'6") characteristic of chalets; some have ceiling as low as 5'7".

*This fine chalet makes handsome use of ordinary pine*



The unique character of the Swiss chalet results from the use of natural pine lumber.

Inside, exposed boards and posts give the rooms a simple and honest pattern. No attempt is made to hide joints. The rooms glow with the warm tan color of oiled pine boards. Outside (photo, left), the pine turns a deep brown. Carved moldings and inscriptions decorate the front of the chalet.

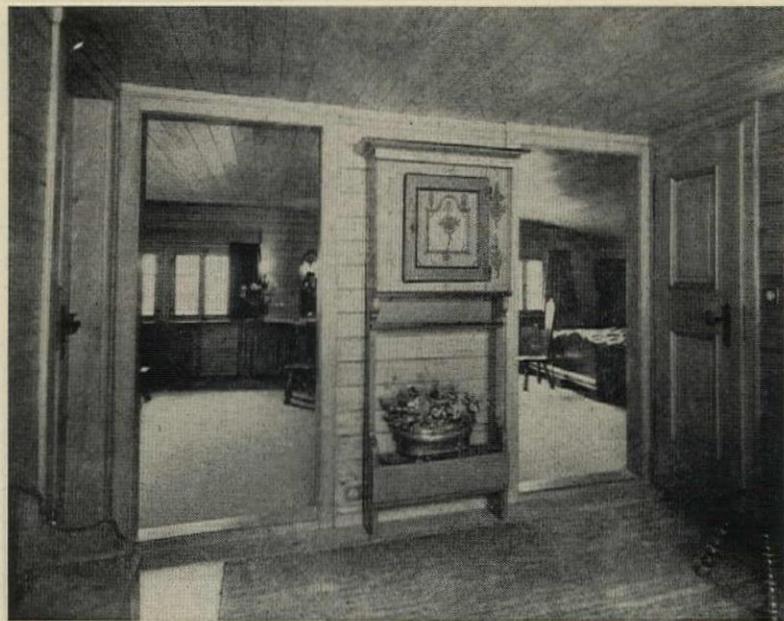
This chalet, like most others in Switzerland, started as a farmhouse. It was built in 1713 near Gstaad. In 1950 it was taken apart and moved to the Palace Hotel grounds.

**EXTERIOR** shows masonry base, balcony, and detailed exterior woodwork typical of chalets. Roof pitched at 25° to hold snow as insulation.



**LIVING ROOM** has the warm glow of natural pine interiors. Doorway lintel and posts are carved from solid wood.

Chalet "Les Aroles"  
Gstaad, Switzerland



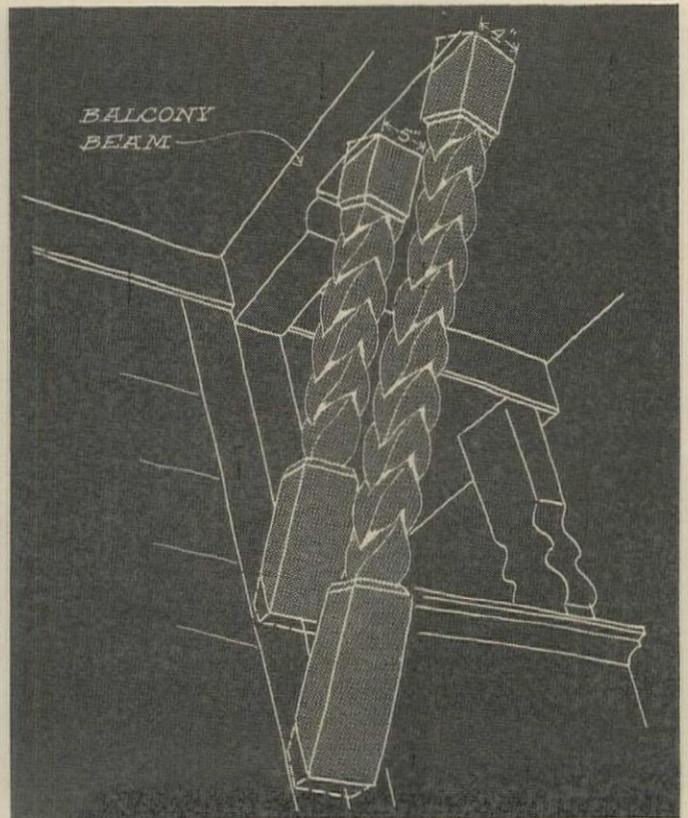
**BEDROOMS** have unusual curved ceiling reminiscent of a ship's cabin. Casement windows are typical. Hall (right) leads to two bedrooms, cabinet between the doors.



*continued*



**Carved struts** help support balcony on an Emmen-thaler chalet and also serve as hangers for drying flax. Near strut was hand-carved from a 5"x5" piece of pine, far one



was carved from a 6"x6" piece. Underside of the beam was notched to receive the top ends of the struts, they were then pegged with 1" diameter dowels.

## *Here are authentic details from centuries-old chalets*



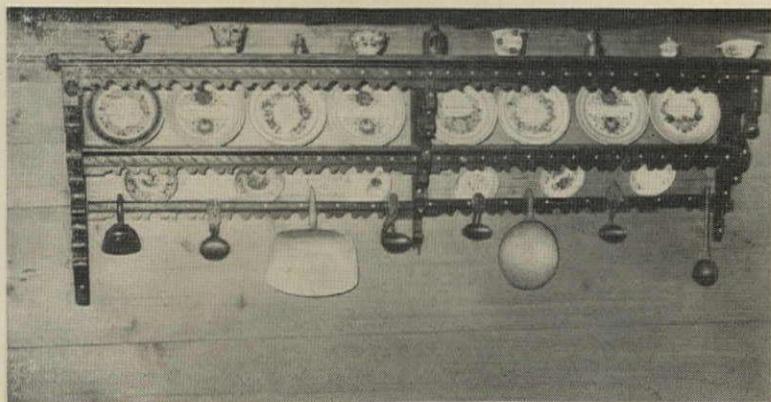
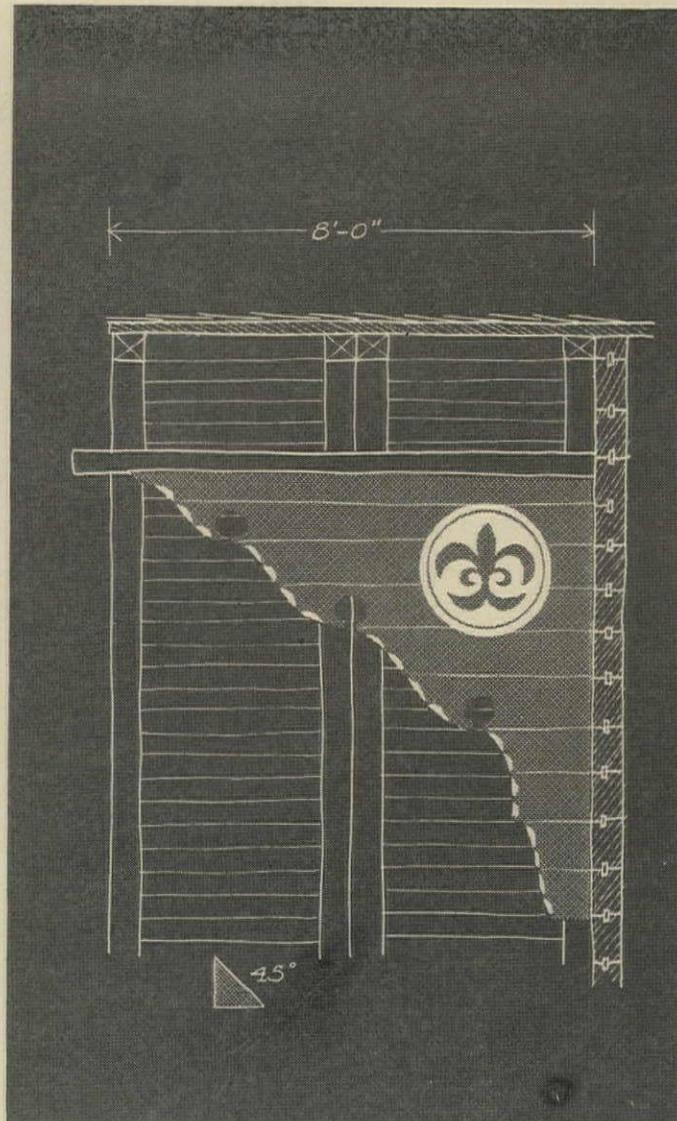
Photos: Photo-cine, F. Faeh, Gstaad



**Decorated ceiling** is over bedroom in chalet Bärghlamm (Gstaad), built in 1647. Battens are 1/2 meter (approx 20") oc, were milled from 2"x4" stock. The traditional flower and foliage pattern is painted on the panels in soft pastel tones. Bracket at right extends up to ridge, and out to deep gable overhang. Note traditional hardware on windows.



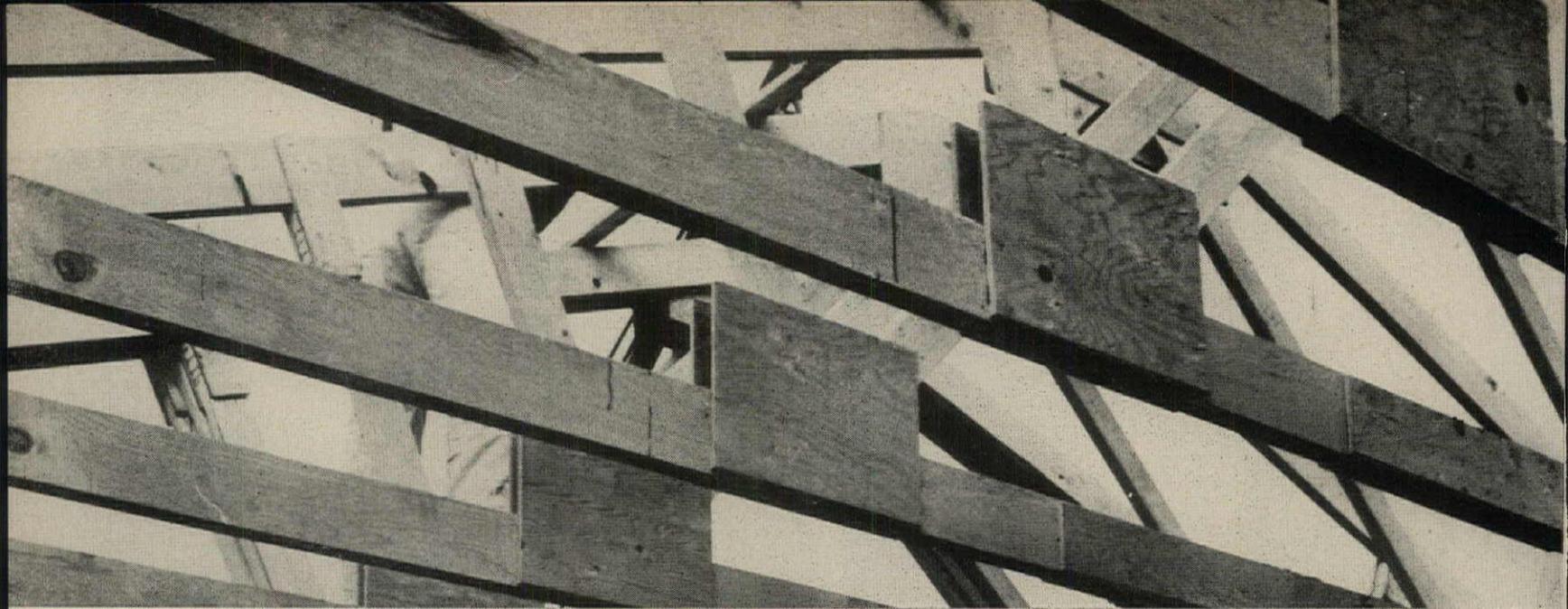
**Gable overhang** on Chalet Bärglimatt is 8' deep. It is supported by huge bracket spanned by purlins. This chalet is now roofed with shingles, but originally had a slate roof. Rocks are often placed on chalet roofs to hold them down in strong winds. The 25° roof pitch keeps snow on the roof for insulation (chalets were not well heated until recently). The deep gable overhang protects the end walls, with all their joints, from the weather.



**Hand-Cut shelf** is in Chalet Les Anemones, near Gstaad. Top shelf is 5" below the ceiling; center shelf is 10" lower. Bottom shelf is 5" below center shelf. Lip on fascia of bottom shelf is used to hook handles of kitchen equipment. The entire piece has been cut from clear pine; fascias are carved and decorated with spots of paint.

**Cleated door** at right is also in the 200 year-old Chalet Les Anemones. The door is simply two 1"x14" boards with the cleats 14" from top and bottom, on both sides. Wood scroll at top acts as a doorstop. Originally the floor was level with the bottom of the door, but present owners dropped floor to get headroom. /END

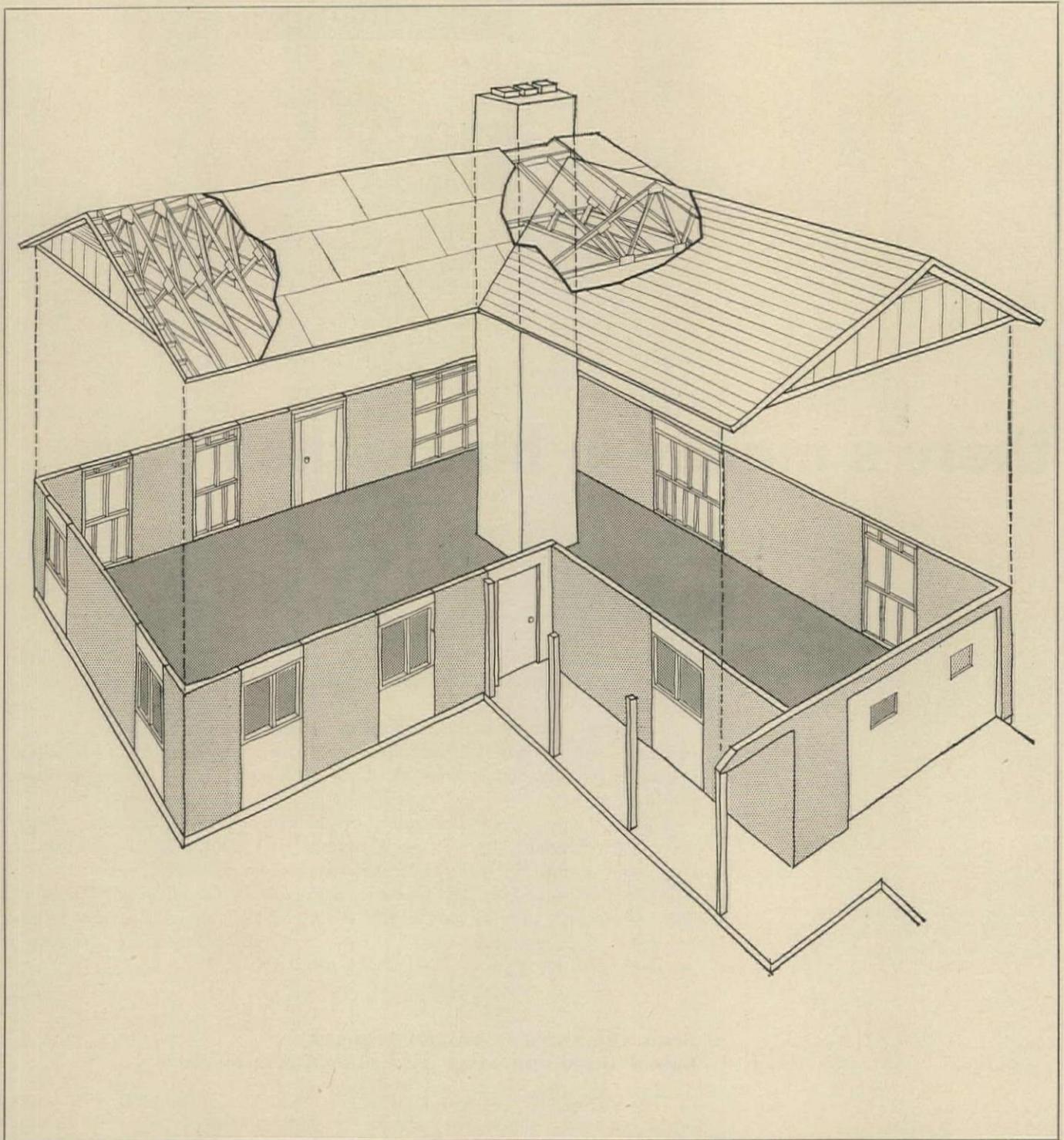




**“We copied Bob Schmitt—**







**COMPONENT HOUSE** fits together easily and quickly. Most parts are shop built but some (shown shaded) are site-built.

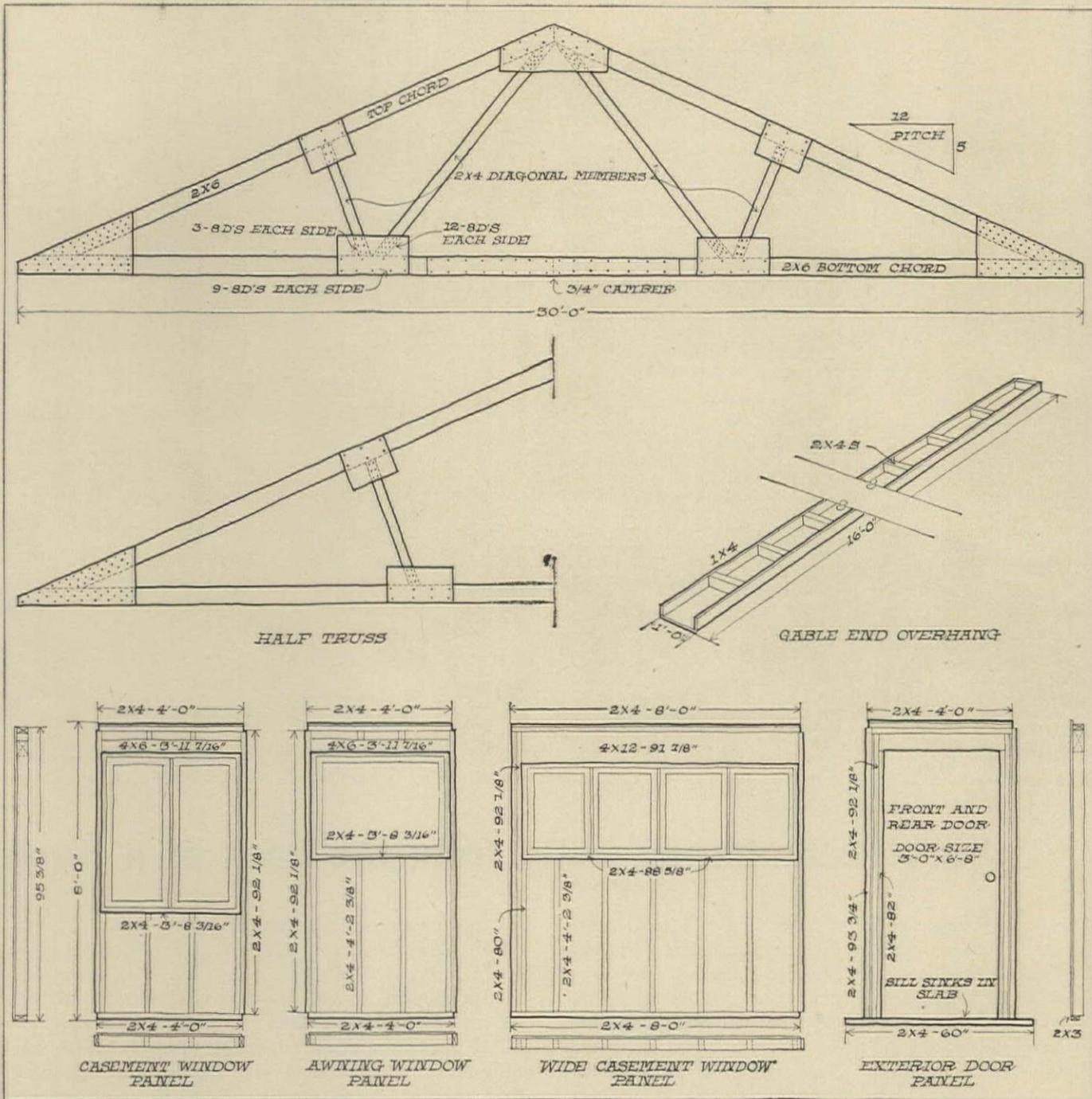
## “Like Schmitt, we build with pre-built components”

Cook and Johnson follow Schmitt's basic advice (as reported in H&H, Jan '57): “*First step, use standard components. . . . Components make the job mind-sized. . . . [They] are efficient because they save time and eliminate waste. But, more important, they help a builder coordinate one phase of building with the next phase. This eliminates inefficiency because it pinpoints production bottlenecks.*”

Cook and Johnson report: “We use the same components Schmitt does [see opposite]. And we use them not because we think they are necessarily the best components in the world [Bob Schmitt would probably agree, for example, that his truss is not the most advanced truss ever designed] but because we know that all his components fit

together simply and efficiently in his building system. And the system—the method—is the most important thing.”

Cook and Johnson buy most of their components from Schmitt's lumber dealer, because “there is no sense making anything on the site that can be made cheaper and better under shop conditions.” But, by the same token, they make non-modular framing sections for solid exterior walls and for interior partitions on site, from pre-cut materials. “Right now, at least, we cannot buy a blank wall section and haul it 90 miles as cheaply as we can make it ourselves. Every builder must work out for himself the comparative cost of buying vs making his components.”

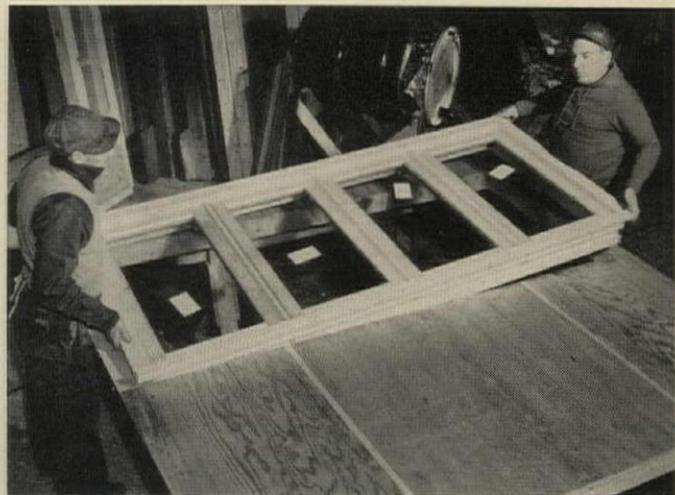


**COMPONENTS** made by Home Materials Co, lumber dealer in Mansfield, Ohio, include trusses with top and bottom chords sized to carry attic storage loads, \$19.95 each; half trusses used against fireplace wall, \$9.50; gable-end overhangs, \$6.05; window panels with double-glazed windows—awning type, \$61.43, deep casement, \$114.69; four-light case-

ment, \$163.94; exterior door with storm door and screen, \$84.85. Also bought from the lumber dealer (but not shown): double-glazed sliding door panels, \$235.10, entrance door with side lights, \$169.71, gable ends with louvers (22' to 32'), \$48.58 to \$70.68, nine-light window walls, \$330.80.



**ON SITE**, framing for solid wall is made from pre-cut studs, as shop-built section (at rear) is fitted into place.



**IN LUMBER DEALER'S SHOP**, double-glazed window is set into plywood-sheathed 8'-wide panel.

*continued*



TRAILER-LOAD of components, plywood, and precut studs for a house is backed into "L" of slab to get materials close to point of use.

## "Like Schmitt, we build from the back of a truck

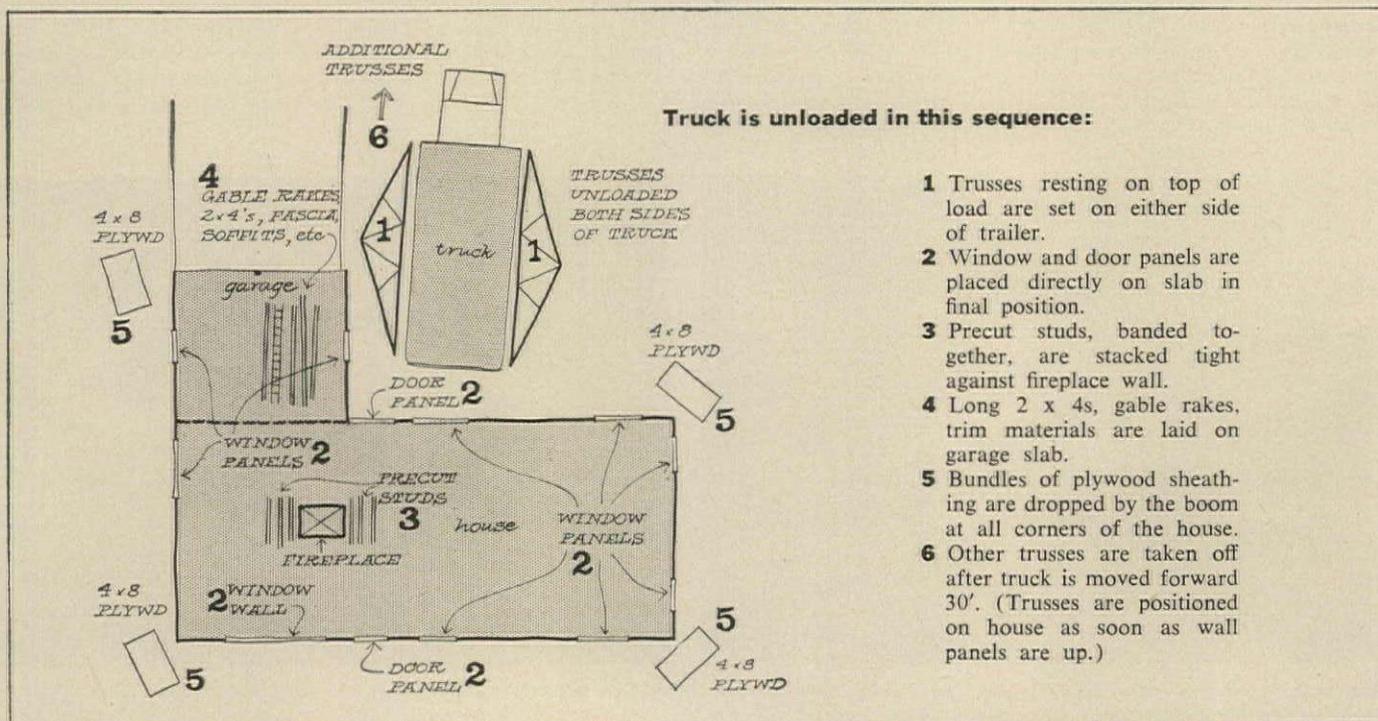
Cook and Johnson follow Schmitt's basic advice (as reported in H&H, Jan '57): "The lumber yard truck [should be] backed against the finished slab so panels and trusses can be unloaded quickly on a clear, smooth area."

Cook and Johnson report: "We unload a trailer load of components and materials—everything we need for a 1,800 sq ft house—in two hours. And we go a step further:

we build the house as we unload.

"We have the lumber dealer load the truck to a pre-arranged plan [see unloading sequence below] so we move most components only once—from the truck to their final position around the perimeter of the slab.

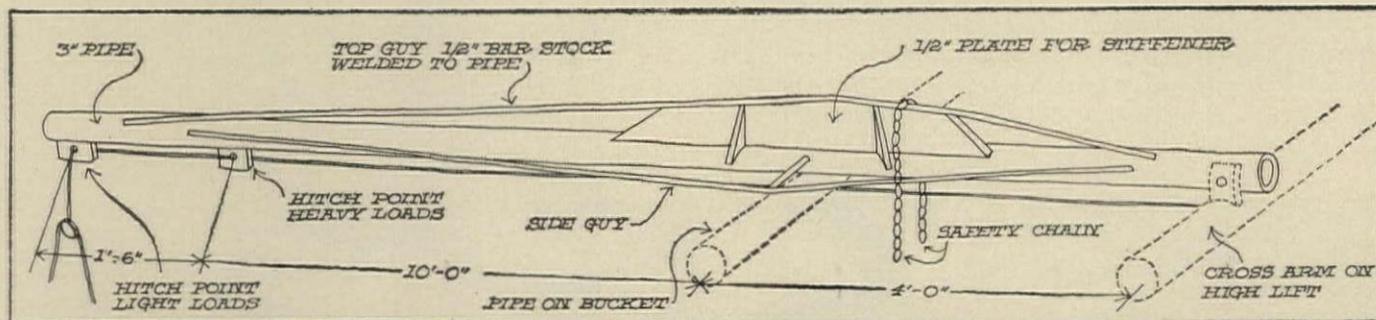
"Secret of our speed is a boom that can be attached to—and quickly detached from—our high-lift [see opposite]."





**BOOM** attached to high-lift tractor lifts trusses from top of load, sets them upright at sides of truck; later sets panels directly on slab.

## ... but we invented a new way to move materials"



**BOOM** made of pipe and bar stock for \$35 "can be attached to every high-lift we've ever seen," say builders, who designed it themselves.



**HIGH-LIFT** boom—now on slab—reaches into trailer to snake off heavy wall panels and move each to its place. Remainder of load seen on trailer includes plywood sheets stacked under inverted trusses at front of trailer, precut studs near tailgate, and trim material between trusses and panels at right.



**PANEL IN AIR** will be dropped into final position on sill where nail had previously been driven in to indicate center. Double-glazed windows in panels are protected from breakage by sheets of plywood. Plywood is removed and used for sidewall sheathing on blank wall sections, made at site with precut studs.

*continued*



**THREE TRUSSES IN AIR** were lifted from upright stack near house, will be set onto top plate of exterior wall in one pass.

## “Like Schmitt, we use trusses to save money ten ways”

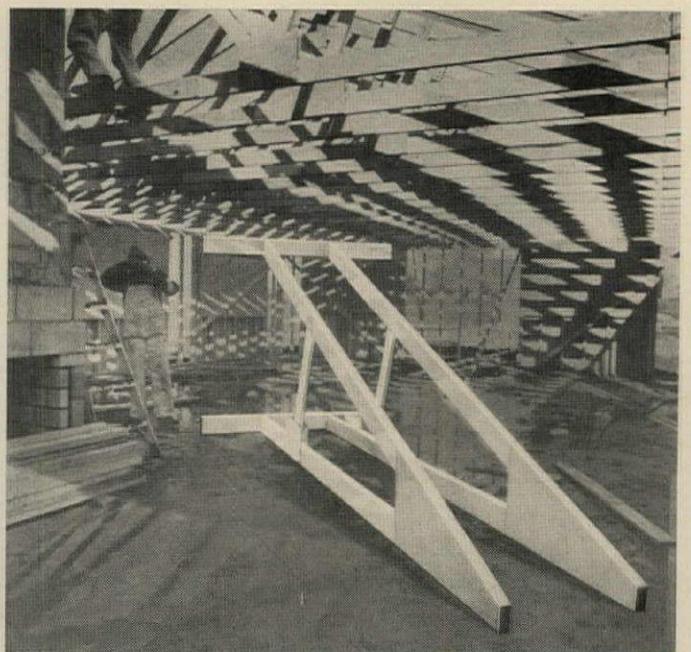
Cook and Johnson follow Schmitt's basic advice (as reported in H&H, Jan '57): *“Many builders say they can't save money with trusses. Generally that's because they use trusses as just another way to frame the roof. They don't take advantage of all the things a truss system lets them do. For instance, trusses let you build inside one big room where materials can be organized and men can work*

*without regard to the weather.”*

Cook and Johnson report: *“Doing it is believing it. Using our high-lift boom, we erect all the trusses for an 1800 sq ft house and garage in less than two hours. That's a big saving to start with. And truss construction lets us save even more money at later stages of construction [see the ten ways on the opposite page].”*



**OPEN SECTION** of wall, rear of photo, lets tractor move into house with load of trusses. Tractor sets trusses on plate where carpenters quickly fix them in position. Framed wall section, leaning against wall at right, will be used later to fill the opening.



**TWO HALF TRUSSES** are joined by two 2x6s. They will be used to frame roof around fireplace wall at left. Once all trusses are up, the protective plywood covering window panels in photo is removed and used to sheath site-built framing panels.

**1** **“Wiring is faster and cheaper.** At first our electrical sub said he would have to penalize us because he had to make two electrical rough-ins—one before, one after, interior partitions are set up. But he soon learned these two roughs are quicker than one regular job. The first rough-in was made in a single big room under the trusses and the electrician could move freely about stringing wire. He had ready access to the attic with the pull-down stair [arrow]. On the second rough-in he made his drops through the dry-walled ceiling quickly and accurately.”

**2** **“Plumbing is easier.** Just like our electrical sub, the plumber thought two rough-ins meant extra work—until he tried it. Since he didn't have to cut through studs (our plumbing wall is doubled), he cut his time and cut his bill.”

**3** **“Insulation goes in faster.** All the outside walls can be covered with insulation batts faster because the big room under the trusses is uncluttered by partitions.”

**4** **“A house can be heated sooner.** We hook up the furnace five days after we've started to frame. This really helps! Men work more efficiently when they're comfortable. How can anybody do good finish work when his hands are cold?”

**5** **“The house becomes a store room.** Instead of risking your materials to the weather or pilferage, you can lock them up inside the house within two days. And you can drive materials right into the house—up the concrete driveway and into a wide-open storage area where materials can be spotted for handy use.”

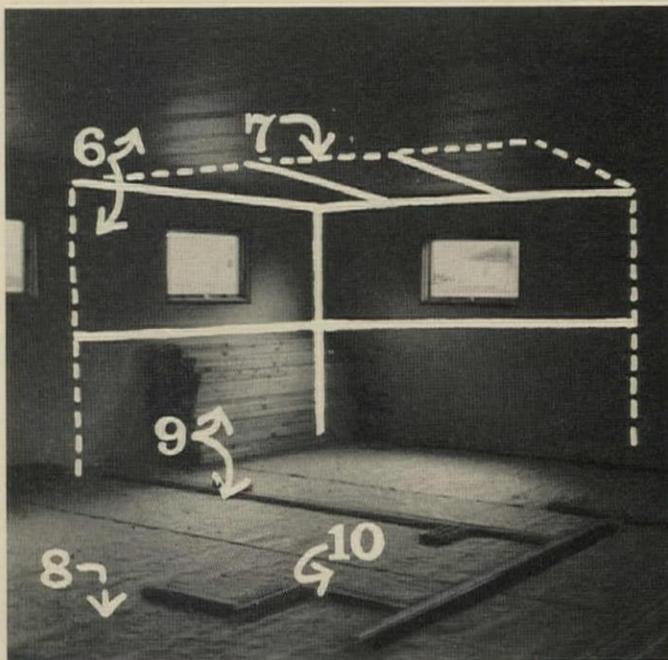
**6** **“Dry wall goes up faster.** The whole ceiling and all four outside walls can be covered in one operation. Instead of cutting gypsum every time you come to a partition, your men can use big, full-size 8' or 10' sheets with little or no cutting.”

**7** **“Dry wall taping is cut.** Almost half the dry wall joints [dotted lines] need no taping because they are later butted by interior partitions. Only the joints not covered by partitions [solid lines] are taped. (And in a heated house, taped joints dry faster.)”

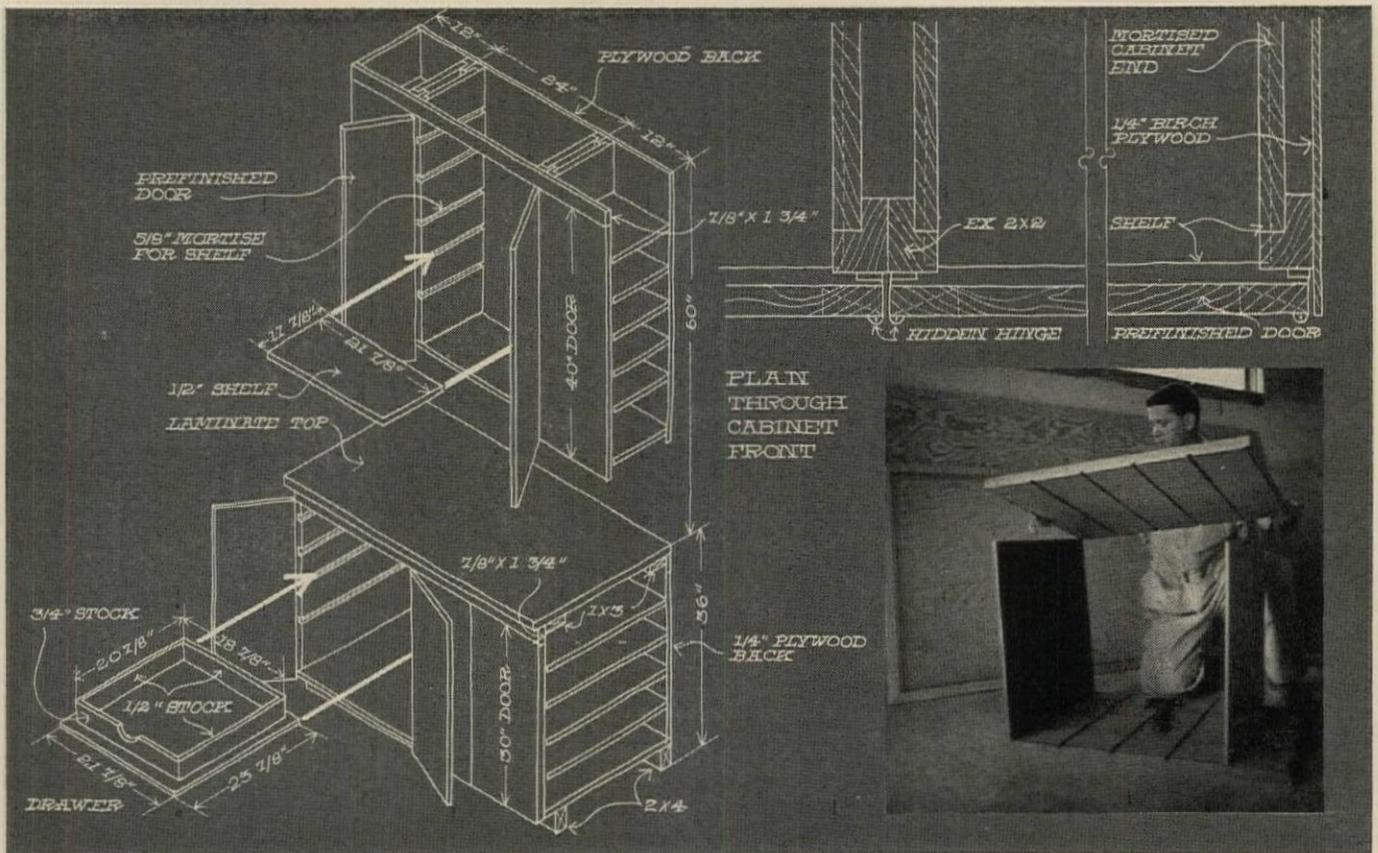
**8** **“Floors are laid in one fell swoop.** Instead of cutting flooring squares every time you come to a partition, you lay a whole floor on an uninterrupted surface. Because that's faster, it's cheaper.”

**9** **“Interior framing goes up faster.** We map our floor plan with our sills, cut a matching top plate (only one instead of two, thus saving lumber) and build framing sections on the slab from a bundle of pre-cut studs.”

**10** **“Cleanup time is cut.** Because we cover the whole floor with a heavy building paper as soon as the finished floor has been laid (and before partitions go up) we can protect the floor from scuffing and paint spattering. When we remove the paper with a razor knife (just before we put on our shoe molding) and wipe off the Bon Ami protecting the windows, the house is ready to move into.”



*continued*



**1** "We make kitchen cabinets from pre-cut pieces. They're shipped knocked-down from our lumber dealer. The pieces are few, simple, and modular (see drawing). We run our cabinets to the ceiling, eliminating the cost of a cabinet soffit and gaining added storage space for

seldom used articles. No hardware is exposed: the Washington hinges are hidden at the sides, the bottom of the wall cabinets extends below the bottom shelf for a hand grip. On base cabinets we use a pressure latch instead of magnetic latch, so they can be opened with a knee."

## "Like Schmitt, we use these new tricks of the trade"

Cook and Johnson follow Schmitt's basic advice (as reported in H&H, Jan '57): "Cost-cutting techniques don't save all the money they can unless they are integrated."

Cook and Johnson report: "Every one of the Schmitt

techniques [shown on these pages] is a better way to build for less. But, more important, the whole is greater than the sum of its parts—each technique saves money in itself and helps us save money on other operations that follow."



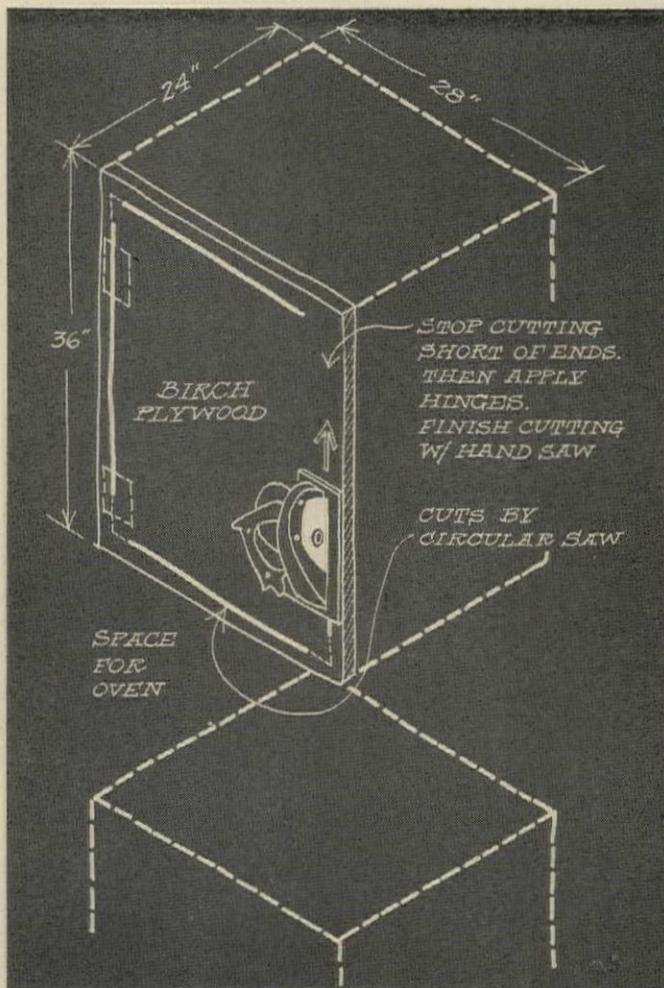
**2** "We use re-usable metal templates as forms for diffusers. They are flared to make an efficient diffuser opening. We put them in the concrete just before it sets up by scooping out a hole for them. Scored tile beneath the diffuser opening (marked by a nail in the sill) is broken through after the slab has set, and the forms are taken out in a flash. The units paid for themselves after the first two houses: we spent \$70 for 12, used to spend \$5.60 a piece for a diffuser template that was left permanently in place."



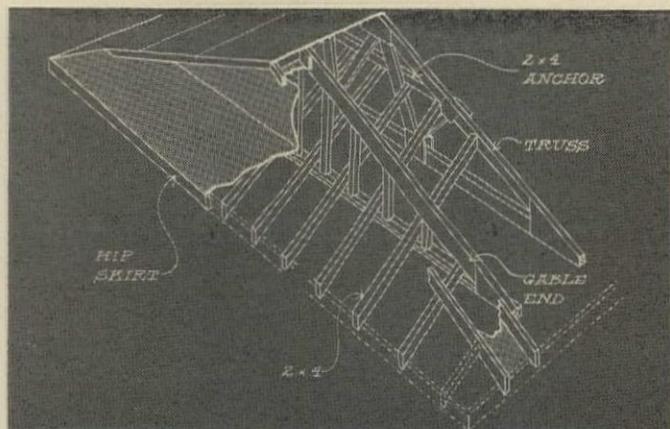
**3** "We use a ladder panel to get a low-cost overhang. We nail this pre-built component right on the face of the gable end. Chief advantage: it quickly gives us an accurate pre-applied soffit on the overhang. The plywood roof sheathing helps tie the overhang to the rest of the roof." This system is applicable only to 1' overhangs. It is faster than the usual method of using a gable end 4" lower than the trusses, nailing a ladder panel on top of it and tying the panel to the adjoining trusses with 2x4 nailers (see H&H, Sept '58).



**4** "We build the fireplace first. When the fireplace is up we build our house around it. This saves us at least \$100. We know because our mason once had to build the fireplace after our house was up. He spent 15 extra hours working his way through the trusses and through the roof. His extra time cost \$60, his helper's time \$40. To build the fireplace, we rig up a special scaffold that lets the mason work all the way to the chimney cap—on all four sides—without shifting scaffolding. Scaffold is easy to knock down and move."



**5** "We build closet fronts quickly and economically. The fronts are made of a  $\frac{3}{4}$ " sheet birch plywood cut from a 4'x8' sheet. We use 28" of the sheet for closet fronts over and under the built-in oven, 20" for a broom closet. To make doors in the fronts, we make four cuts with a power saw, stopping just short of the door corners. Then we apply hinges. Since the "door" is still a part of the whole sheet, the hinges position it exactly. We finish the door cut-out with a hand saw. This takes 12 minutes—versus two hours the old way."

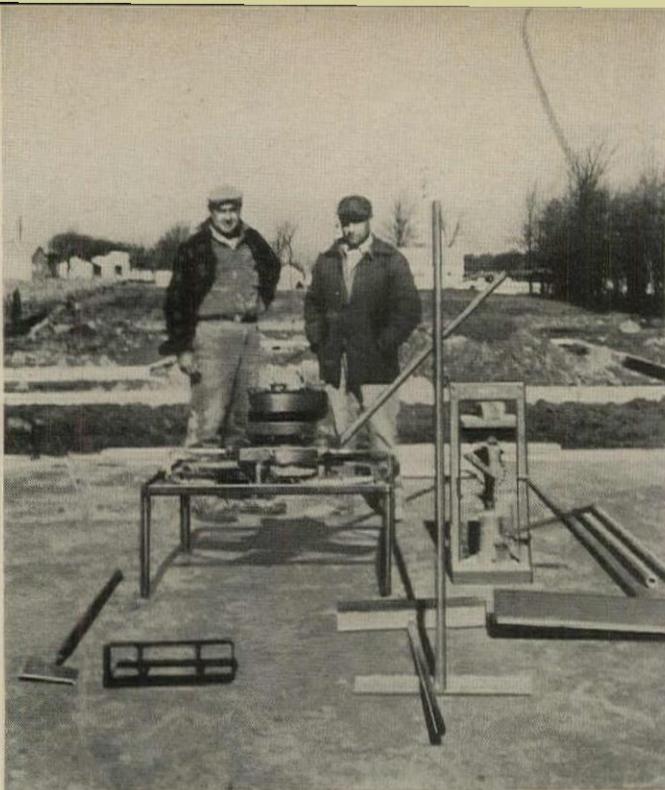


**6** "We build hip skirts quickly and economically. These skirts give us elevation variety. We get the lumber dealer to plow out the 2x6 plate of the gable end to take the 2x4 stringers of the skirt. Whenever we want to use a hip skirt, we make a 4" cut in the sheathing so we can slide the skirt stringers into the framework. To get a 5-in-12 pitch, we strike a line on the truss next to the gable end and nail a 2x4 anchor across the width of the truss. The anchor positions the overhanging skirt at the right pitch."

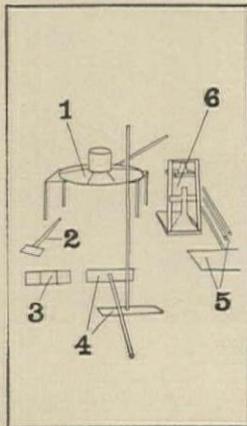


**7** "We use a better scaffold. We use half-horses for the structure and plywood box beams for the planking. The half-horses are light, easy to move, and set squarely on rough ground since they have only two points of contact. They are leaned against the wall, bringing workmen close to their work. The plywood box beam (16" wide) makes a wide platform for the men, takes less lumber than two 2x6s or 2x10s, and is sturdier." In photo, the beam is shown resting against the scaffold in order to explain how it is made."

*continued*



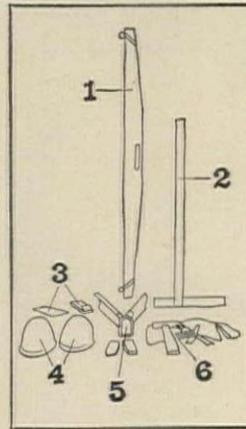
**TOOLS FOR SLAB BUILDING** recommended by Schmitt, include:



- 1 \$450 power trowel used to level and smooth slab.
- 2 \$2 spudder used to scrape cement droppings from slab.
- 3 \$6 steel form for heat diffusers.
- 4 \$3.75 cement rakes used to spread concrete.
- 5 \$30 magnesium bull float with 18' extension handles used to float wet concrete.
- 6 \$175 hydraulic stonecutter (see below for additional information).



**TOOLS FOR DRYWALL** application and finishing include:



- 1 \$25 wood jamb level with hinged pins to determine plumb between two points 6' apart.
- 2 \$15 metal T-square used to make square cuts across 4'-wide dry wall.
- 3 \$7 pair of Roll-Lifters used to jack dry wall sheets from floor tight against sheet above it.
- 4 \$2.50 protective helmets worn by men raising ceiling dry wall.
- 5 \$22.50 electric outlet cutter.
- 6 \$15 bag of tools: hammer with rounded head, tape rule, linoleum knife, circular cutter, belt.

## “Like Schmitt, we bought the best tools for each job”

Cook and Johnson follow Schmitt's basic advice (as reported in H&H, Feb '57): “[By using the right tools and equipment] I save cash money, I save capital, and I save time—and that is the biggest money saver of all.”

Cook and Johnson report: “Schmitt's advice on what tools to buy was some of the most valuable advice he gave us.

“We had never heard of some of the tools he recommended. But neither had a lot of local builders. Some ran out and bought them after seeing ours in action. We now understand Schmitt's main point: the right tools save so much labor time and building time that they pay for themselves quickly; and they help the workmen do a higher-quality job.”



“**THIS STONECUTTER** is like money in the bank,” says Nils Johnson. c&j bought it for their mason subcontractor, found it cut their costs and built good will with the sub.

Other tools\* and equipment Schmitt recommended as “best for the job” and Cook and Johnson bought:

|  |         |
|--|---------|
| High-lift tractor with scraper blade ..... | \$3,600 |
| ¾-ton pick-up truck .....                  | 2,650   |
| Generator .....                            | 350     |
| 8' swing saw .....                         | 325     |
| Table saw and jointer .....                | 165     |
| Door hanging kit .....                     | 157     |
| Transit level .....                        | 112     |
| 6" circular saw .....                      | 78      |
| ½" drill .....                             | 68      |
| Saber saw .....                            | 67      |
| Router kit .....                           | 37      |
| Bolt cutter .....                          | 9       |

c&j's next purchase will be a commercial vacuum cleaner and a power brush for cleaning concrete.

\*For news about new power tools, see p 158.

# “Like Schmitt, we are able to undersell the market”

Here is how Cook & Johnson's values compare with their competitors':

|         | LOT        |          | TOTAL SQ FT (incl gar) |       | SALES PRICE |           | PRICE/SQ FT |          |
|---------|------------|----------|------------------------|-------|-------------|-----------|-------------|----------|
|         | COMPETITOR | C & J    | COMPETITOR             | C & J | COMPETITOR  | C & J     | COMPETITOR  | C & J    |
| CASE 1  | \$ 3,500   | \$ 3,400 | 1780                   | 1884  | \$ 24,400   | \$ 21,350 | \$ 13.69    | \$ 11.30 |
| CASE 2  | 3,100      | 3,400    | 1620                   | 1884  | 21,900      | 21,350    | 13.50       | 11.30    |
| CASE 3  | 3,500      | 3,400    | 1670                   | 1884  | 25,000      | 21,350    | 14.96       | 11.30    |
| CASE 4  | 3,500      | 3,400    | 1860                   | 1884  | 34,500      | 21,350    | 18.54       | 11.30    |
| AVERAGE | \$ 3,400   | \$ 3,400 | 1732                   | 1884  | \$ 26,450   | \$ 21,350 | \$ 15.17    | \$ 11.30 |



**REALTORS** Cappy and Gerst, who sell c&j houses, stand by sign showing house features: including double-glazed windows and screens, insulated and heated garage, stone fireplace, floored and lighted attic, 100-amp electrical service, copper plumbing, dishwasher, garbage disposer, washer-dryer combination.

Cook and Johnson report: “The fact that we could start from scratch and, within a year’s time, undersell our competition is proof enough that Schmitt’s component system is a much more efficient way to build houses.

“Schmitt’s system is more efficient because every operation—from pouring the slab to cleaning up—is integrated with the step that precedes it and with the step that follows it.

“Schmitt’s system begins at the beginning by putting the house on a slab instead of over a basement. He—and we—can deliver more livable space because we don’t include a basement. Schmitt says you cannot schedule an efficient operation over a hole in the ground. He’s right. And *HOUSE & HOME*’s September issue was right when it said a basement costs \$3,000 or \$4,000. Using a slab you can make the best use of materials handling equipment. Using trusses and wall panels you can close in fast and take full advantage of the “one-big-room” technique.

“By copying Schmitt’s methods, we save—literally—thousands of dollars in building costs on each house. So we can offer lots more value—and lots more “extras”—than our competitors—and still beat their prices.”



**STREETSCAPE** of c&j houses shows every house different from its neighbors.

/END



Emil Weiss

## Carl Mitnick NAHB's new president

Carl Thomas Mitnick quit school at 13. Eight years later, when he had just turned 21, he built and sold 102 houses.

As one admirer put it on the eve of Carl's election as 17th president of the National Assn of Home Builders: "The NAHB is about to launch a Mitnick."

The metaphor is particularly apt, for Carl's parents were born in Russia. And as NAHB president, he is likely to get into orbit fast.

### **He has been building houses for 40 of his 54 years**

No one could say Carl Mitnick lacks experience to fill his new job. In his rise to the top of the association he has been chairman of many of the most important committees.

As for a building background, his is a broad one. One reason is that for most of his career he has run a one-man operation. At one time or another he has done all the things a builder must do. His projects have ranged from apartment houses and commercial buildings to single houses and the several big developments he now runs. And he keeps right on top of every project.

Carl has had plenty of ups and downs over the years, as builder, real-

tor, and mortgage lender. He knows better than most Johnny-come-lately builders how important it is to prevent the wild swings in the flow of mortgage money that have so long plagued the industry.

### **Mitnick has built 5,000 units and is still going strong**

At 54, Mitnick is at the peak of a career that was almost bound to lead to the NAHB presidency sooner or later.

He heads several building, real estate, and mortgage companies that last year were engaged in building 420 houses in New Jersey and acquiring big pieces of land for future building. And last year he also managed to travel 60% of the time doing business as first vice president of the association.

### **All this takes a lot of energy, and Carl has that**

He stands an even 6', looks comfortable—if a little bulky—carrying his 210 pounds. He is robust, quick in movement, and undeniably hearty. You feel almost no wall of reserve around him. He is friendly, easy to talk with—although, Carl says, "I tend to take control of the conversation a lot of the

time."

His manner can fool you, however. His open, buoyant attitude tends to conceal how smart he is. He is one of the shrewdest men in the business. He has, for example, a photographic memory and a special bent for numbers. This combination gives him a head start when he deals in complicated business details or plays gin rummy—and he does both much of the time.

So it is hardly a wonder that he is today a millionaire with excellent prospects for financial advancement.

### **He has been hard at work since he was ten years old**

Carl's grandparents on both sides were well-to-do Russian immigrants (one family were distillers, the other bred horses for the czars). His father and mother came to the US in the early '80s during the harsh reign of Alexander III. They met in Philadelphia, married in 1886, and started a clothing manufacturing company.

"My mother ran the business," Carl says. "My father just didn't have a head for business. When mother fell ill, they lost the company. After that it was hard times for the family. I was the fifth child after two brothers and



**MITNICK IN RUSSIA** with other US builders studied building methods in 1956.

sisters, and by the time I was ten I was at work as a delivery boy after school hours."

**"In 1918, I either had to quit school or quit eating"**

His first full-time job was with a brother-in-law who had a clothing business. This led directly to Carl's building career, for about the time of the 1920-21 postwar depression, the brother-in-law got into home building.

"In those days," Carl recalls, "being a builder meant you had a sub-contractor under bond 'for specific completion and performance.' But fortunately for me, as it turned out, our contractor skipped out in the middle of his job. The boss told me to go out and keep an eye on the workmen and learn the business. I was only 15, understand, but I was soon running the job."

**"I branched out on my own in 1922 when I was 17"**

"I figured I knew everything I needed to know by then to be a builder and a real estate dealer. And I guess I was right. When I was 21, I built 102 houses near Media, Pa. These were one- and two-story houses, and sold for \$3,550 to \$5,950. My men were using power saws that far back, you understand, where other builders weren't. I guess I was one of the few big tract builders of those days."

He was also one of the first mortgage brokers in the US. In the late '20s he built many more houses south of Philadelphia, plus a good many row houses there and in Atlantic City.

"That was when every buyer took a second mortgage. I was secretary of several building and loan companies and was arranging first mortgages with the banks and seconds with the building and loans, understand? I figured I really was set for life."

**A second try for an education started off fast and ended fast**

Carl decided to get more education when he was 21. This laudable effort

lasted just two years, but ended happily anyway, As Carl tells it:

"In those days you could get into college if you could pass the entrance exams, and I did it. I got into the University of Pennsylvania. Next I wanted to become a lawyer. But to get into law school then you had to have four years of Latin courses behind you or pass a stiff exam. Well, I got hold of a top-notch tutor and after six weeks' study managed to pass the Latin exam. Sometimes it helps to have a photographic memory.

"But this was in 1928," Carl adds. "That was the year I met Peggy Greenstein. End of the law business."

Peggy was a singer, radio entertainer, and, when she met Carl, assistant to conventions manager of the Ambassador Hotel in Atlantic City. They were married in 1930.

**March 1, 1933 was a day the Mitnick's will remember**

"Two things happened to me that day," Carl says. "Our son, Lawrence, was born, and the banks shut down. All the building and loans folded on me. And nobody, understand, wanted any houses built."

With what little he managed to save Carl moved to Atlantic City, where he and Peggy opened a real estate office. By 1941 they had a building business going well, but Carl fell ill. For months his health declined, until both legs were paralyzed.

"It proved to be a tumor the size of a walnut on my spine. Fortunately, the operation was successful.

**"The doctors told me I had to get out of home building"**

Carl spent more months recuperating, but by the time he was physically on his feet again he was financially flat on his back.

So, in 1942, after 20 years building homes, Mitnick went to work in another field. An engineering firm hired him as a construction engineer to build airports around New Castle, Del. He had charge of erosion control,

runway drainage, and hangar construction.

"I enjoyed it," he says. "And it gave me some education in large-scale work."

This paid off shortly when General Electric hired him as a construction expeditor in Philadelphia.

"GE put me in charge of their coil production for switch gears, whatever they were. I was there on VE Day. I felt I was ready to try my hand again in home building."

The Mitnicks moved to Collingswood, N.J. across the river from Philadelphia. Carl's first job was a new post office there. This led to a profitable row-house project and some rental units, built on cheap land bought for back taxes. He was on the way back.

**He hit his big jackpot in an old development**

Looking for more land he could buy up cheap, he came across a handsome tract in Merchantville, N.J. This was Colwick, which had been fully developed in 1924, partially built on until 1926, and then abandoned about 1929. It had 305 lots, shade trees, and all

*continued*



Peggy Mitnick

*A Page  
from the  
Mitnick Family  
Album*



*Carl's Mother at her  
85<sup>th</sup> birthday party*



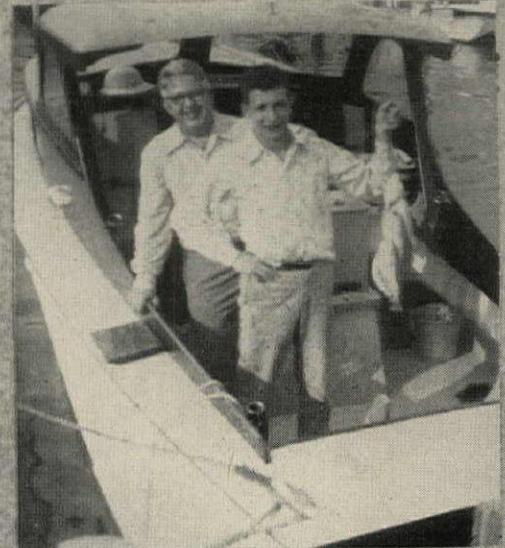
*Carl at 6 (left) with  
his brother Max and  
sister Clara*



*Peggy and Carl at  
Lenape Lake, May's  
Landing, N.J., just  
before their marriage,  
late in '29*



*The whole family  
at Atlantic City, 1943*



*Carl and Lawrence  
fishing at Beach Haven  
in '50*



*Home in Collingswood  
(of course Carl built it)*



*Somers Point houses  
(from the 12<sup>th</sup> green  
of the golf course)  
Building houses  
like these is fun.*

utilities—concrete streets, curbs, gas, electric lines, and sewers. The town owned it and was anxious to sell. The trouble was that deed restrictions called for \$35,000 homes. A few builders had looked into the matter but had given it up.

Mitnick had an idea the restriction was imaginary. The few handsome houses there were worth \$35,000, all right, but he doubted they cost that much to put up in the middle '20s. So he went to the courthouse to check on it.

#### **"After three days studying deeds, I found my hunch was right"**

It was the most profitable three days he ever spent. He promptly snapped up the land for \$50,000 and invited a lawsuit by building a \$16,700 house.

"A local home owner sued me, I sued him back for damages, and it wasn't long before he pleaded that we drop both suits."

Mitnick's total development cost was only \$20,000. He got over 300 lots at less than \$300 apiece. Today the few still not built on carry about a \$5,000 price tag. Oddly enough, he points out, the houses going up in Colwick now are all as high priced as the rumored restriction once would have required.

#### **"I've always made my money on the land"**

Says Mitnick: "Whenever I can, I buy land from public bodies rather than private owners. You'd be surprised how much developed land there is lying around for a song. Of course, there is the problem of what to do with it and when to build."

His big Cape May development at the southern tip of New Jersey is a case in point (see photo below).

This is a 1,750-lot seashore tract developed originally in an unsuccessful 1925 promotion by the Philadelphia *Record*. Several builders tried to revive it without luck. As soon as Mitnick heard about it in 1951, he bought it

sight unseen for less than \$100 a lot.

Today his North Cape May project is one of the nation's biggest developments aimed primarily at the retired couple market. So far, 1,280 houses are up (prices started at \$5,490 a few years ago, are now at \$8,250-\$11,400).

Mitnick has since bought more adjacent land from the US government, and plans a community of 3,500 families.

#### **He manages to stay relaxed juggling many operations**

Mitnick's office is a little frame building on his Colwick property in Merchantville. From there he manages 11 corporations. Among them is a building firm at Somers Point, N.J. where he has put up 400 houses so far on lots he bought from the town for \$100 each (fully developed, as usual, and some smack in the middle of a golf course).

Another Mitnick company is building higher-priced houses (\$15,290-\$19,100) at Brookfields in Haddonfield, N.J. One company profitably operates a big sewage treatment plant built on the latter tract (H&H, Mar '56, p 176). Another at Cape May operates a water utility system.

Mitnick's entire payroll is 60 people (he subcontracts most building). Key employees are his son, Lawrence, now running the Cape May water company; Sanford Miller, chief of the Cape May building company; William V. Higgins, in charge of the Somers Point tract, and Mrs Arletta Tulini, office manager and secretary.

#### **Many outside interests keep Carl from getting bored**

He is an advisor to HHFA on housing for the elderly, trustee of a hospital and a children's home, a 32nd degree Mason. In addition he is involved in various civic works with Collingswood's Mayor Arthur Armitage, one of his staunchest admirers.

The Mitnicks live in a big colonial

house Carl built a few years ago. Besides their son, Lawrence, Carl and Peggy have a daughter, Barbara, 20, a Bryn Mawr graduate and a social worker in Philadelphia.

Carl finds time for various interests—deep-sea fishing, his gin rummy games, the opera, reading "most of the best-seller novels, and all I can get my hands on about mortgage money."

#### **Taking it all in all, land is his chief interest**

"The most fascinating part about this whole home building business is the land," he says. "And I believe in paying cash for it, understand, and building on it myself. I own hundreds of scattered lots and large acreages. Right now I own 4,700 lots in South Jersey that can be built on."

It's a pretty safe bet Carl will build another 5,000 houses before he calls it quits.

#### **Here is how Mitnick sees his job as NAHB president**

"My first duty is to see that we get a central mortgage bank or some other kind of central mortgage reserve facility. We need an even flow of dollars to avoid the mortgage droughts that ruin the industry. I hope we will be able to sell debentures to the public on insured mortgages within a few years.

"I will work hard for an honest rental program under sections 207, 221, and the new 229 for the elderly. Rental units have been hard to build under the guise of non-profit ventures.

"We must also work with the Congress to get 40-year or even longer mortgages which are especially needed if the poorest people are to have a chance to buy new houses.

"As for FNMA money, a billion dollars would take care of the industry very well.

"We must also try to get legislation making it feasible for builders to borrow money for development purposes—for adequate sewerage and other utilities." /END

**RETIREMENT HOUSES** at Cape May are \$8,250-\$11,400. Price and ocean front location make this the North's fastest growing retirement area.



**About the story  
that begins  
on the opposite page:**

This is a story about a house that changed a town.

The town is Oskaloosa, Iowa; the house is a Frank Lloyd Wright house. The town was conservative; the house was not—and the house started a homebuilding revolution.

It sparked a demand for better new houses and started a series of trading-up moves to better older houses. That part of the story *H&H* reported in March 1958.

*This part of the story is about the local builder who worked on the Frank Lloyd Wright house, and his account (as told to Associate Editor Kathryn Morgan-Ryan) of what he and his crew learned on the job.*

The builder's name is Jim De Reus. He first began to study the work of Frank Lloyd Wright when he was an architectural engineering student at Iowa State College. After college De Reus came to Oskaloosa and got a job as carpenter with the Sparks Construction Co. He worked his way up from carpenter to partner in the firm.

Not long after De Reus was made a partner he heard that a local merchant was having a new house designed for himself and his family. The architect: Frank Lloyd Wright.

De Reus wasted no time going after the building contract. "It meant a lot to me," he said. "How often does a small town builder get a chance like this?"

Jim De Reus got his chance—and the contract. Although he did not

know it then, this was the start of the homebuilding revolution in Oskaloosa.

"Before we built our first Wright house you couldn't have sold a slab house or contemporary styling or walls of glass in Oskaloosa," says Jim De Reus. "People were afraid to be different. They were also afraid their

of new, architect-designed slab houses with contemporary styling and walls of glass.

*Oskaloosans aren't afraid to be different any more; and they aren't afraid to trust local builders with their new houses. They've found out that men like Jim De Reus can build modern houses with modern methods and still keep prices down.*

Because of this new attitude in town, Jim De Reus is busy all year round. His company does a yearly gross volume of from \$200,000 to \$400,000 and he has a staff of about 20 men. They build about ten houses a year, usually two or three on spec, the rest on contract. They take some trade-ins, and also do a lot of remodeling work. That's because all the older houses are constantly being upgraded to keep pace with their newer neighbors.

The architect who started the home building revolution in Oskaloosa and the builder who helped keep it going have never met. The construction of this house (and a second FLLW house built the same year) was supervised by John deKoven Hill, now editorial director of *House Beautiful*, then an assistant to Mr Wright in Wisconsin.

But Jim De Reus attributes much of his success today to what he learned from Frank Lloyd Wright. "His houses taught me that good handcrafted work is what good building is all about," says De Reus. "A builder must believe that; otherwise his work can't have much meaning."

Let Jim De Reus continue his story...

LIFE: Alfred Eisenstaedt



FRANK LLOYD WRIGHT

builders couldn't build anything new or different without running up costs."

That attitude doesn't exist any more in Oskaloosa. There are still plenty of big, old two-story houses with wide front porches and graceful, tree-sheltered lawns. But there are also plenty



"THE CREW AND I are proud of this Frank Lloyd Wright house. Here we are on the gravel court leading up to the entrance. That's me

in front. Behind me, from left to right: three masons, tender, concrete finisher, driver, apprentice, and three carpenters."

### Builder Jim De Reus tells you:

## "What we learned from Frank Lloyd Wright"

"The minute I saw the blueprints I knew that we were in for a completely new experience—new for us and new for our community. For the blueprints showed that:

"This was a new kind of house.

"This was a new way to site a house.

"This was a new way to build a house.

"The custom house that Mr. Wright designed and we built was different in every way from the kind of houses we had been building in Oskaloosa.

"When I was preparing my bid on the contract for this house and taking off quantities for my estimates, I figured that even if I didn't make a dime out of the job, the

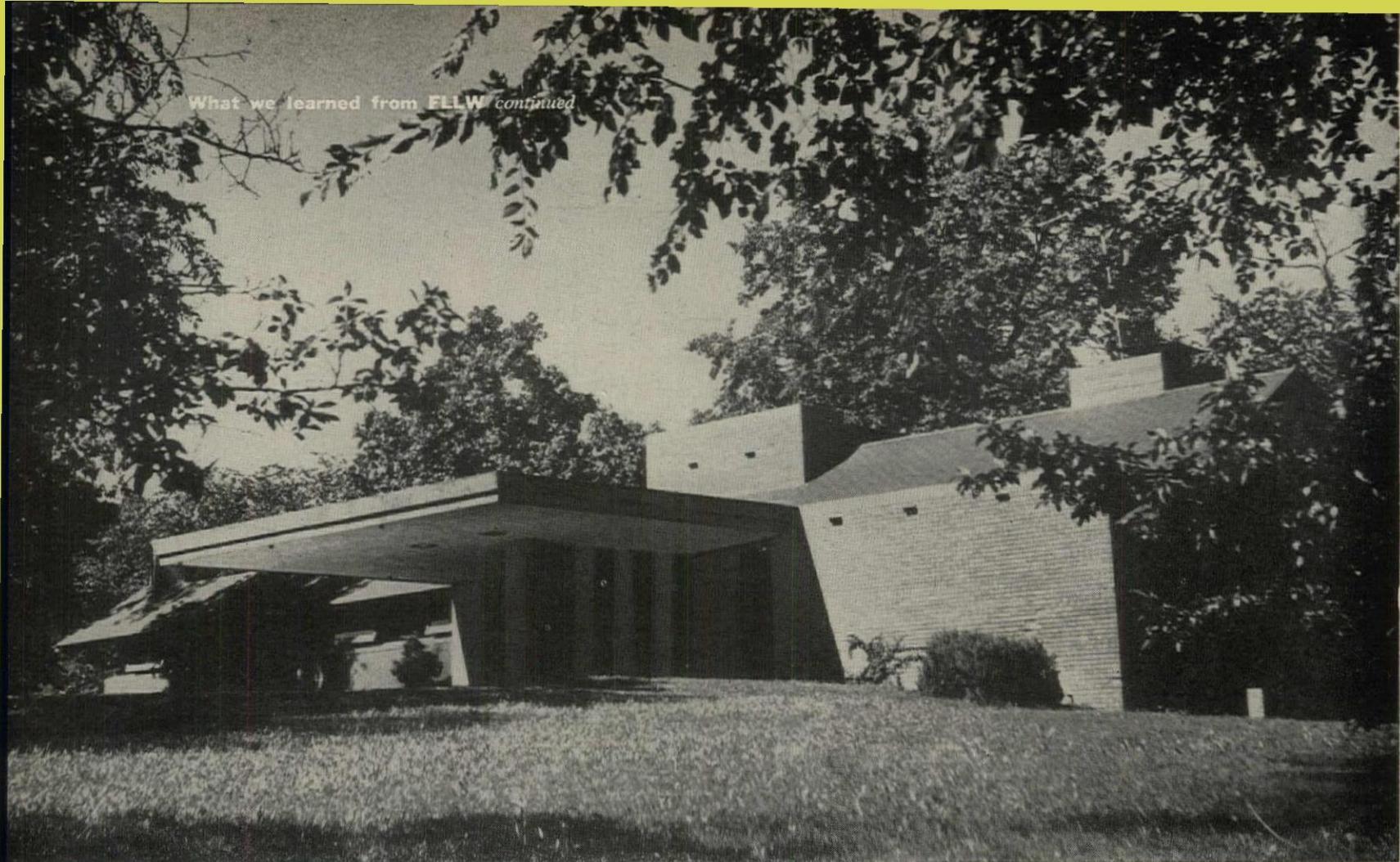
experience for my crew and for me would be well worth it.

"Well, we got the contract, we didn't lose money, and we learned things no money could buy.

"For instance: We had built only one slab house before. We had never worked with so much glass before. We had never carpentered such intricate built-ins. We had never done such fine finishing work on walls, floors, and masonry.

"So this house was more than just another job to us. It was a lesson in the art of homebuilding. I think what we learned from this house has given us a new perspective on our jobs and on every house we have built since. I think every one of us is a better workman today because of this house."

*continued*



"THE HOUSE looks as though it has always been here on the crest of the hill among the shade trees and the prairie grasses."

H&H Staff

## "This new kind of house got us out of the rut of always building in the same old way"

"So we're not afraid to build differently any more.

1) "We found out how important the land is to the look of the house. We used to level our sites and bulldoze scenery right out of the way. But Mr Wright designed this house to suit its site. He didn't change the site to suit the house.

2) "We learned you cut costs by not having a basement. We pared excavation time and work down to almost nothing, and the owners of this house got more storage above ground than they ever could have got with a basement.

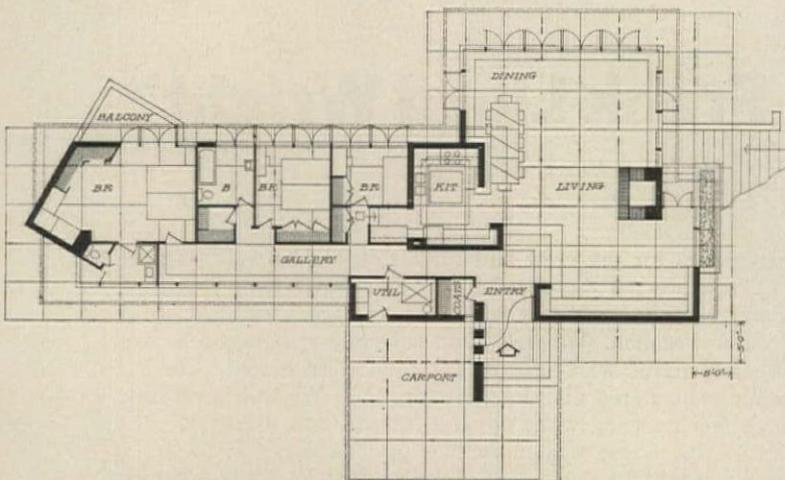
3) "We discovered the foundation for the house is about 20% cheaper and about 90% better than any other we'd seen. It's a simple trench—20" wide, 3½' deep. You put drain tile down the middle and fill up the trench with crushed rock. We used a certain amount of fines so the rock would stay firm. Then you pour a 9" reinforced pad on top of the rock—so the foundation is simply a 9" beam floating on a crushed rock sub base. With Mr Wright's trench, the moisture finds the tile so the foundation stays dry.

4) "We saw that the use of gravel for the motor court saved money, as compared to a conventional hard surface. It also gives you a better turn-around for cars, and I think the gravel drive makes the approach to the house a lot more inviting than rigid paving would."

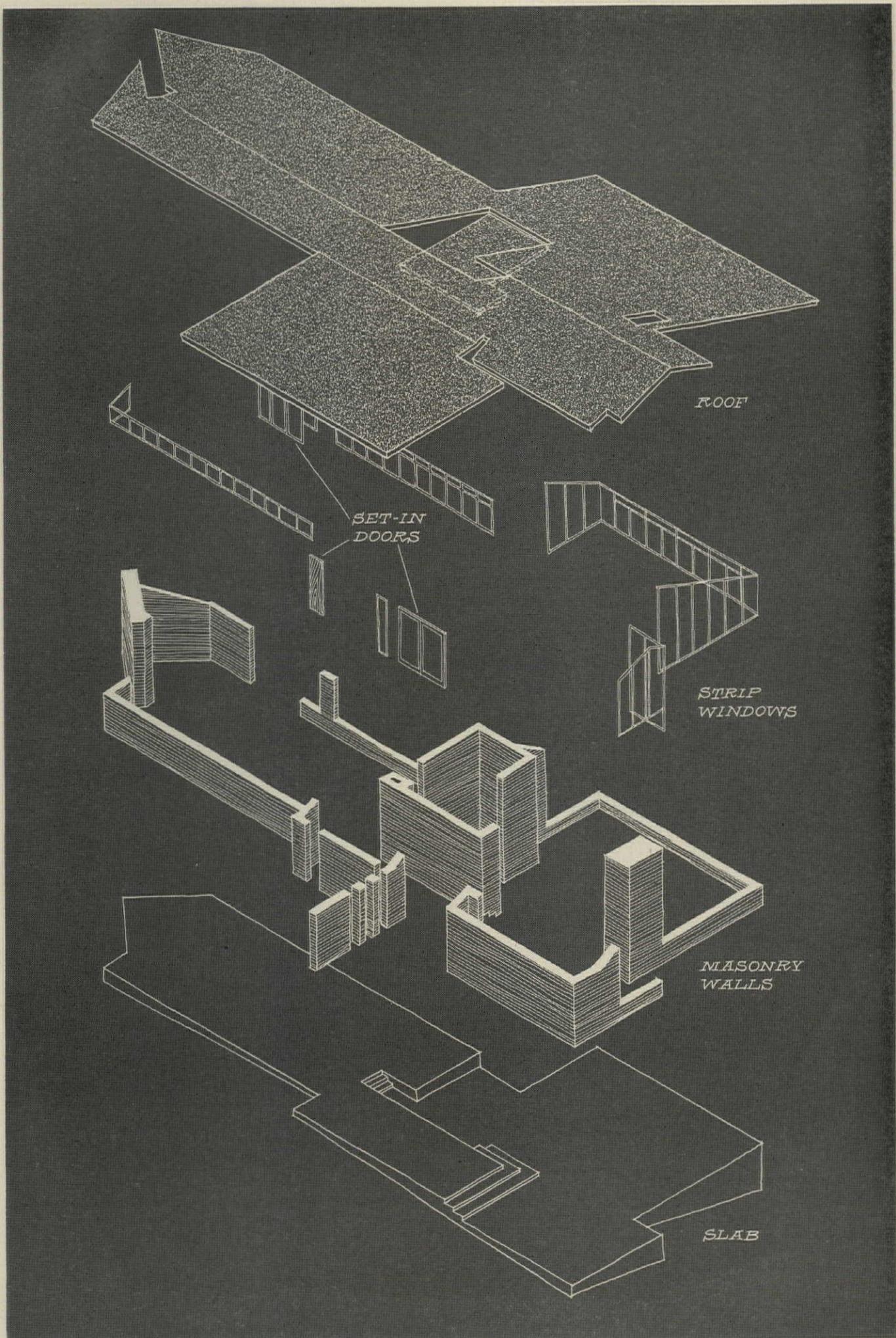
### "We learned it saves time to work in masses

5) "The house is divided into four distinct components: the slab, the masonry mass, the window mass, the roof mass [see detail, right]. You have only the men you need for each section on the job at any given time, which means the other trades can be off on other jobs. Here's how it works:

"My masons finished the slab and the brickwork, moved their equipment off the job and onto another. When they left, the rough carpenters moved in, set the structural mullions and put on the roof. Then they went on to another job. They were followed by the finish carpenters who did the interior work. We didn't tie up a single bit of equipment or a single man unnecessarily—and that certainly means as much to a builder like me as it does to a much bigger builder."



"THE PLAN gives lots of space to living and entertaining, keeps the bedrooms and the kitchen small. We'd never built a gallery before. It's light and airy—a far cry from the old, dark central hall."



"BUILDING IN MASSES avoids having two or three trades on the job at the same time."

*continued*



"THE FIREPLACE is the first thing you see in the living room. The next thing you see is the outdoors, because of all the glass."

## "This new kind of room is simple to build—

## if you have good details"

"Good detailing is why the fireplace, specially sized glass, and interior fittings gave us no problems, even though most of the work was different from our way of building.

1) "A big fireplace [see details, right] is no harder to build than a small one—although, of course, it takes more time. And because we had no trim or surround to put on, when the fireplace was done, the finishing was done too.

2) "Bands of grouped windows save time. So do the simple structural mullions used between windows since you don't break the wall structure as for ordinary windows.

3) "A mitered glass corner is actually quite easy to build—it is about as easy to miter the glass as to stick it together in

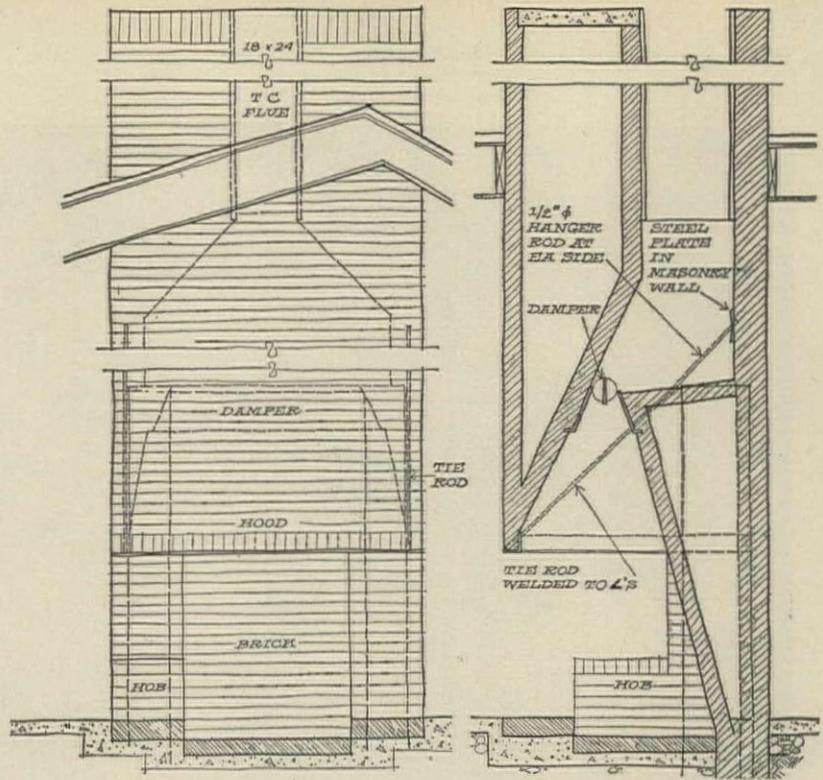
the middle. Also you save time and materials—ordinarily you'd have three layers of material to bring around the corner, plus your structural members. Here you have just glass—and you get an unobstructed view of the outdoors.

4) "Exposed materials let you eliminate trades and cut down on job time. It would have taken two plasterers and a tender four days on the brown coat, four days on the finish at \$2.50 an hour. And it would have taken two painters about a week to give the house three coats at \$1.85 an hour."

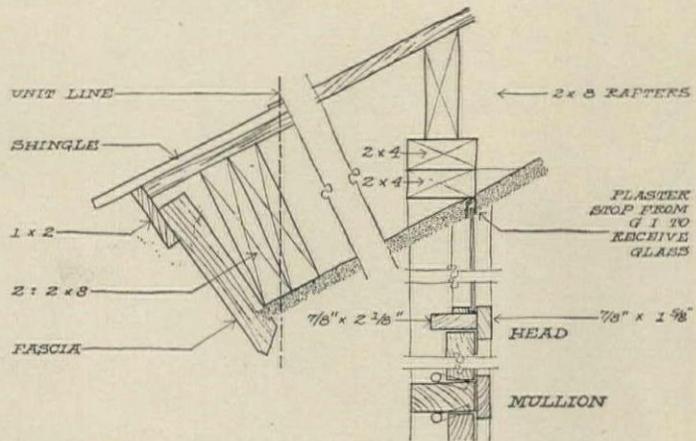
5) "Building on a unit system you can locate everything quickly. Each brick course in this house is actually counted right on the blueprint and the location of the finished work is tied right to the masonry lines."



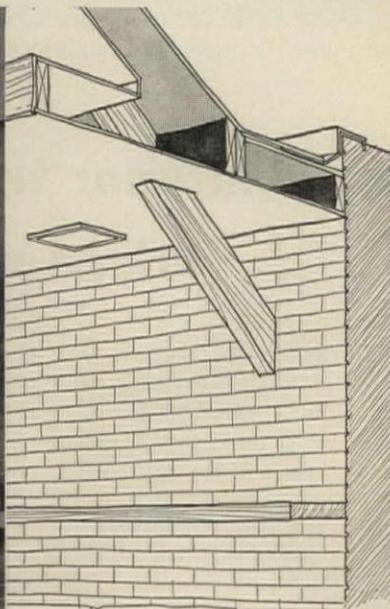
Photos: Hedrich-Blessing



"FIREPLACE HOOD is cantilevered over the hearth. It is supported by a steel angle lintel, which is tied to a steel plate high up in the rear masonry wall. Reinforcing rods in the back wall go down into a broad footing under the fireplace."

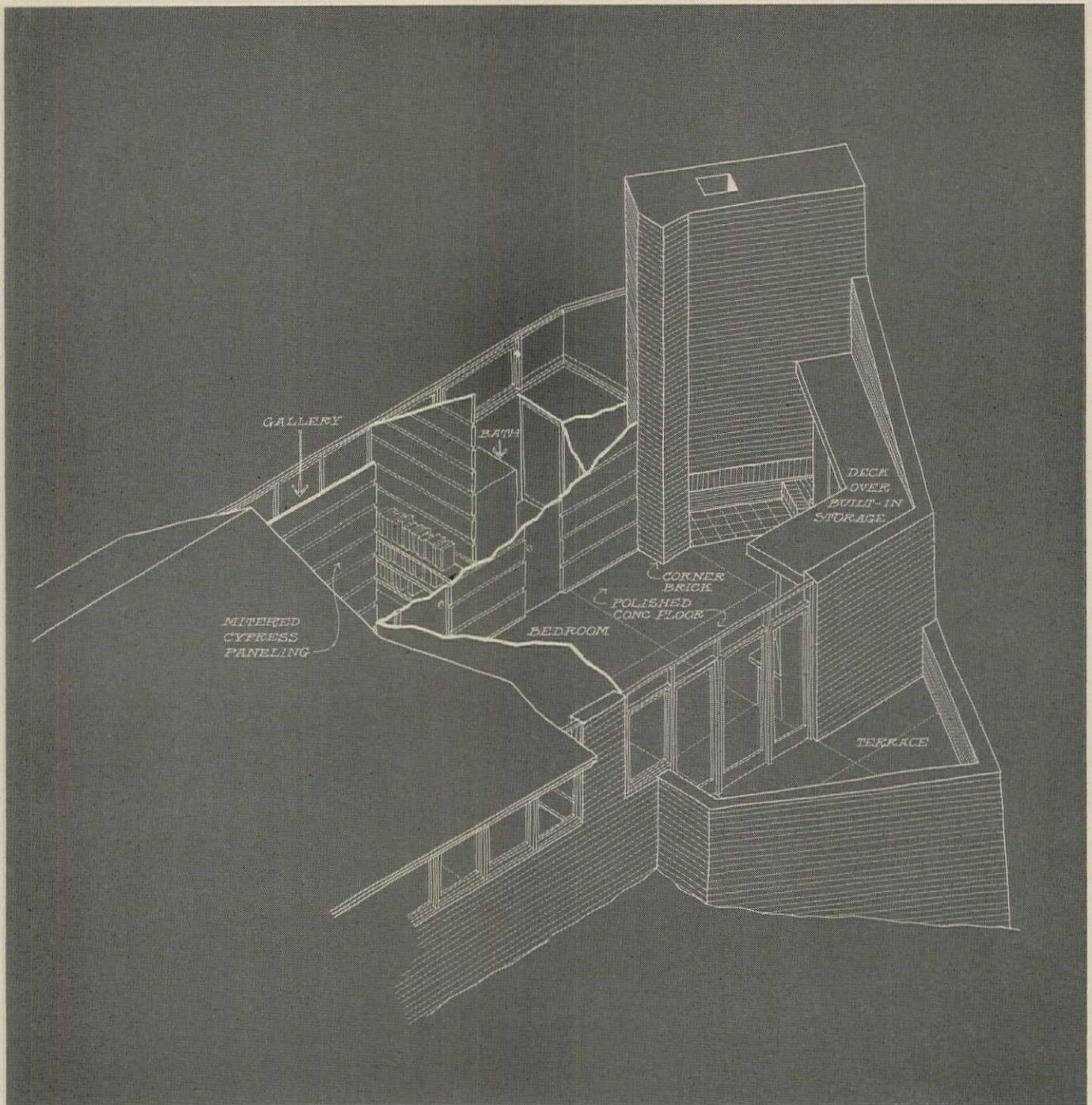


"GLASS INTO PLASTER carries the ceiling right through the room to the roof fascia. Fascia is rabbeted out for the plaster soffit and the bottom edges are beveled two ways. Sash details are simple: the mullion is the stile for fixed glass, the stop for moveable windows."



"DECK DETAIL shows how rafters come through deck and into masonry. Shelves and seating are easily located since they are laid out on unit lines incised in the floor. Light boxes are set into deck, lined with sheet metal, wired for an ordinary bulb."

continued



"EVERY DETAIL of the workmanship is always on view—brickwork, built-ins, paneling—so it must be right. There's no margin for error."

## "This new kind of interior treatment brings out the best in your crew"

"In conventional building you can cover up mistakes with plaster, paper or paint. But here everything is seen, so your crew has to do good work. Any mistake would show.

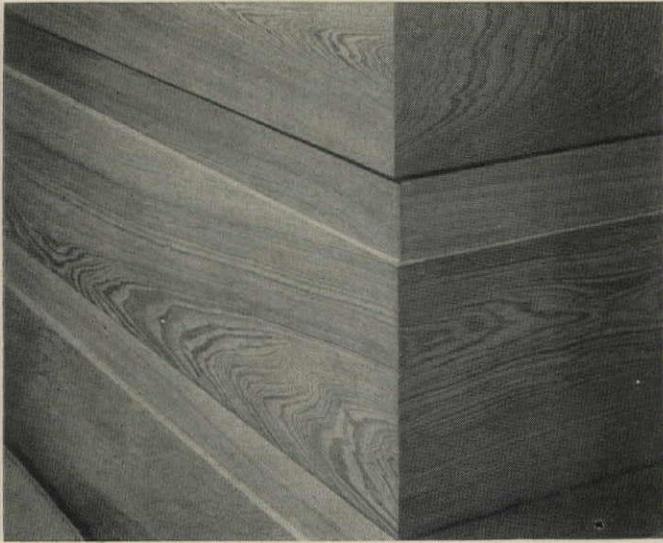
1) "Better materials encouraged better handling. Materials like cypress and redwood, corner bricks and rectangular T's of glass just naturally encourage a crew to handle them more carefully. We all learned a lot about why Mr. Wright uses the materials he does, and it helped us understand and appreciate our work more. The brick, cypress and glass in this house all contributed to the spirit of the building. The brick gave it line and color; the cypress gave it tone and character; the glass gave it light and a feeling of airiness.

2) "Mitering took time and patience. A good carpenter

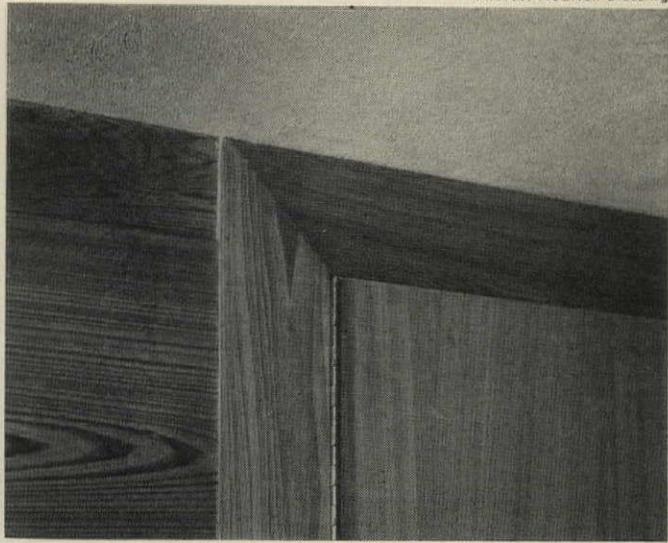
needs both. I think it is a rather esthetic point that the carpenter is trying for when he miters. Maybe no one else will appreciate it, but he knows it is there. [See detail, right.]

3) "Solid partitions demanded skilled work. We milled ours in the shop which took time, but was worth the effort. You save room space because these partitions are only 2¼" thick, compared to 5½" with plaster, 4¾" with drywall.

4) "Unusual techniques intrigued the crew. It's a challenge for a man to learn to do something differently. Mr Wright specified red cement for all vertical joints in the brickwork, white cement for the horizontal joints. At first the masons complained about using two mortar boards. Now they say brick houses two-years-old don't look new as this house."

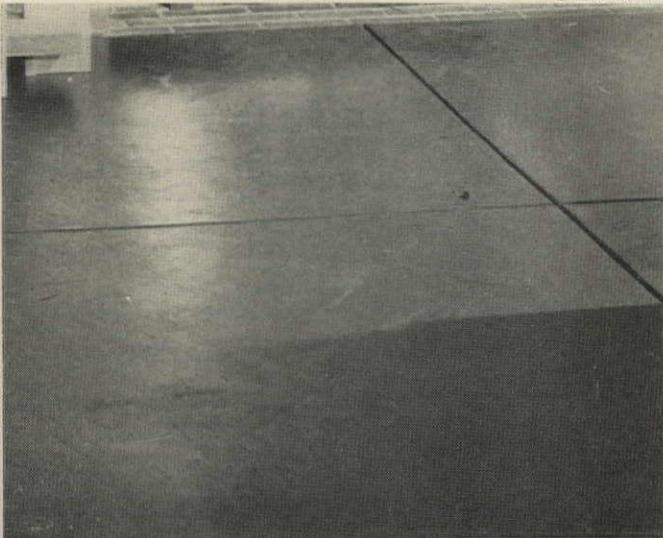


"MITERED CORNERS give you a tighter fit and make the paneling look as though it is all out of the same wood mass. Each cut takes a lot of fitting. It took four cuts on the machine to get this paneling."



"WOOD INTO PLASTER gives a nice texture contrast. Casing trim was mitered just like the paneling and here the wood was handled differently to give wood contrasts. The door is hung on piano hinges."

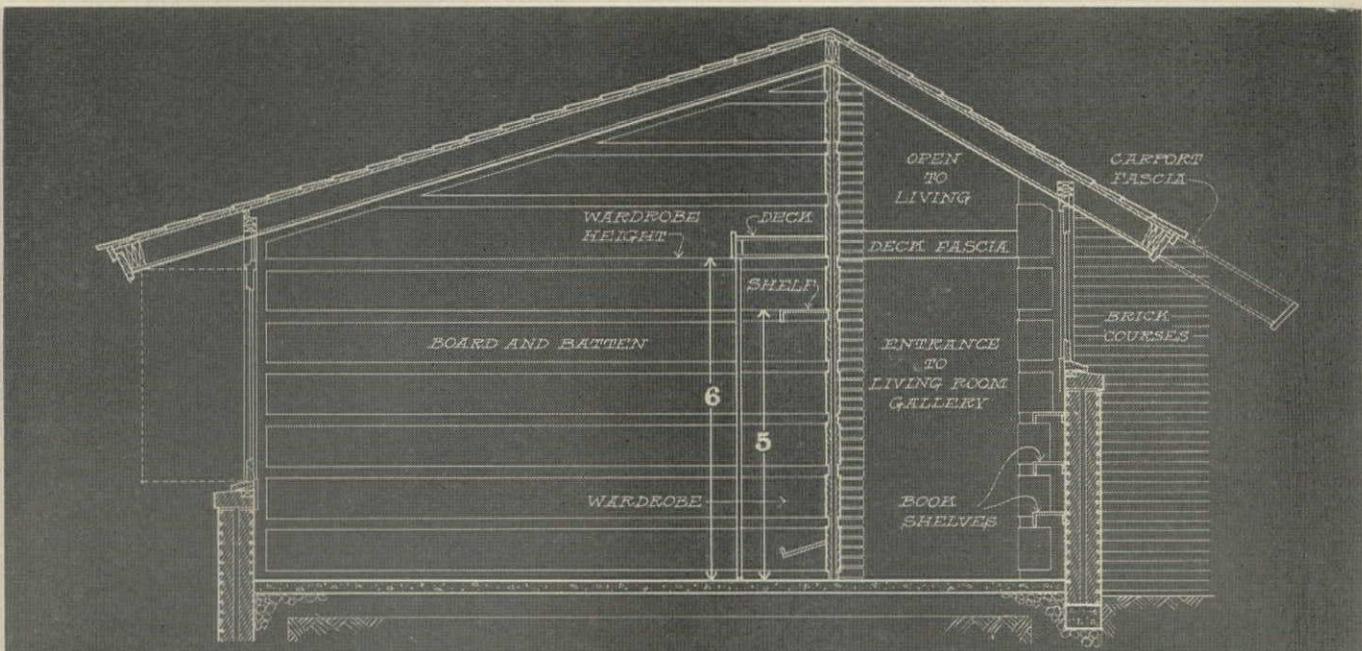
© Ezra Stoller



"POLISHED CONCRETE FLOOR is integrally colored red. You must use care to get a uniform color and a smooth trowel job. We used a special sealer and hardener. Floor is marked with V joint."



"CORNER BRICK had to be specially made because the corners were 60° angles so we couldn't cut bricks. I got a mold made up so we could run the bricks as long as we needed."



"VERTICAL UNIT SYSTEM is based on the number of brick courses and on the number of boards and battens. For instance, in the master bedroom, wardrobe height is based on six boards and battens, shelf

on five. Once walls are up, carpenters don't have to measure; they simply position their work along board and batten or brick modules. Decks in house maintain room scale, despite pitched ceiling." /END

**To encourage quality**



Roy Stevens

## **Industry advisory committee suggests seven changes in FHA appraisal practice**

FHA's No. 1 purpose as set forth by Congress is "to improve housing standards," but for years architects have protested that FHA's appraisal practice was discouraging better design; builders, dealers, and manufacturers have protested that FHA appraisal practice was discouraging the use of better products and materials.

A HOUSE & HOME industry round table reported unanimously that "the odds are loaded against quality at every step in the FHA appraisal procedure." Specifically:

1. No matter how well planned and well designed a house may be, its FHA valuation cannot exceed the estimated replacement cost of its materials in place—even if the appraisers find that the market value of the property is considerably higher.
2. The replacement cost estimate cannot be raised or lowered to reflect better or worse design as such. It can premiate better design only by including the architect's fee as a cost item.
3. Builders cannot be sure all the difference in cost for quality materials will be included in the cost estimate. Quite the contrary, many builders believe they have good reason to suspect it will not.
4. A builder cannot improve the valuation of a particular house by building it better. He is stuck with a quality rating based on the workmanship in his previous houses.
5. The lower maintenance cost of quality materials and quality construction used in built-for-sale houses cannot be reflected in lower credit requirements to buy these houses, as it is in cooperatives.

Last summer FHA Commissioner Norman Mason set out to correct this situation and named a top level industry committee to advise him on what FHA could and should do to give more encouragement to quality. This fall he named a committee of top flight appraisers in private practice to help him review the whole FHA appraisal system.

The industry committee met with Mr Mason in December; the appraisers' com-

mittee met with top underwriter A.W. Jarchow in January. The agenda for the two meetings were quite different, since the industry committee was concerned only with the encouragement of quality, whereas the appraisers' committee was concerned with the whole valuation procedure. At several points, however, their discussions overlapped. Wherever that happened, the appraisers went along with the industry committee's suggestions, though not necessarily for the same reasons.

The appraisers' committee was inclined to criticize the basic FHA valuation concept for putting so much emphasis on replacement cost; whereas the industry committee agreed almost unanimously that, whatever its faults, the present FHA appraisal system is better than any other. The industry committee then went on to develop these seven suggestions for making the present system simpler and better:

### To save waste effort

1. Let FHA appraisers figure the value of the house two ways instead of three, dropping the requirement that they also figure the value of the house on the basis of the capitalized value of its probable rental income. Let FHA confine its appraisal procedure to just two steps (a) calculating the replacement cost; (b) estimating the present sales price (or market value).

*The appraisers not only concurred, but declared that FHA does not collect adequate data on built-for-sale houses to make a good estimate of their rental value.*

### To encourage quality WORKMANSHIP

2. Apply the present plus or minus 5% quality-of-workmanship premium or penalty on the current project, instead of applying it (as now) to the builder's next project. Give the builder his provisional commitment on the basis of the quality rating earned by his past performance, but give him the option of asking to have the quality rating for his final commitment based on the quality of workmanship in the actual project covered by the appraisal.

### To encourage quality DESIGN

3. Give each house a design rating (probably plus or minus 10%), and where the market value appraisal of the house is higher than its replacement cost estimate, permit the final valuation to exceed the replacement cost in proportion to the plus amount of its design rating (ie, permit the valuation of a house with a plus 10% design rating to exceed its replacement cost by as much as 10%).

The industry advisory committee were unanimous that there is no good reason to make the in-place replacement cost of the materials in a house the top limit of its valuation. They pointed out that the No. 1 objective of private enterprise is to create products whose value exceed their cost.

*The appraisers' committee agreed the replacement cost should not necessarily set the top limit of valuation, though some appraisers said it "tends to set the ceiling." The appraisers' #1 recommendation was that FHA should put more emphasis on the market concept and less emphasis on cost, but they admitted that how to recognize the intangible values added by better design is one of their most difficult problems.*

#### Appraisers' Committee:

Hubert D. Eller, New York City.  
 Samuel W. Florence, Newark.  
 William A. Furman, Washington, D.C.  
 G. H. Hoyt, Berkeley, Calif  
 Victor Lundy, San Diego.  
 Arthur A. May, Arlington, Va.  
 Earl J. Morgan, Denver.  
 H. B. Patt, Kansas City, Mo.  
 Dr Alfred A. Ring, Gainesville, Fla.  
 Kenneth E. Sarles, Racine, Wis.

#### Industry Committee are:

Cowles Andrus, Committee on real estate mortgages, American Bankers Assn  
 \* Clifford J. Backstrand, president, Armstrong Cork  
 Richard A. Booth, past president, Nat'l Assn of Mutual Savings Banks  
 Lewis Cenker, chairman, Rental Housing Committee, NAHB  
 \* Miss Chloe Gifford, president, General Federation of Woman's Clubs  
 \* George Goldstein, past president, American Institute of Real Estate Appraisers  
 Joseph Grazier, president, American-Standard  
 Joseph Hollingsworth, lumber dealer  
 Richard G. Hughes, past president, NAHB  
 Mrs Marjorie M. Lawson, Washington, D.C.  
 Miss Frances K. Legas, editor, The Residential Appraiser  
 Earl J. Morgan, vice-chairman, Investment & Mortgage Lending Committee, USS&L League  
 W. Franklin Morrison, past president, Nat'l League of Insured Savings Ass'n's.  
 Walter C. Nelson, president, Mortgage Bankers Assn  
 Edward W. Pratt, treasurer, NAHB  
 Perry Prentice, editor publisher, HOUSE & HOME  
 Charles K. Rieger, vice-president, General Electric  
 Norman J. Schlossman, past first vice-president, AIA  
 Milford A. Vieser, past chairman, Mortgage Policy Committee, Life Insurance Ass'n

\* absent from first meeting

continued on p 145



Yale Joel, LIFE

## What the architect can do for the builder house

# Six studies in better PLANNING

The floor plan is often the weakest part of the built-for-sale house.

Too often it is not as livable as it could be. Too often it is not as saleable as it could be. And too often it is not as economical to build as it could be.

Many critics—among them HOUSE & HOME Associate Editor Arthur Piper—have often pointed out these shortcomings. For a long time, Piper, who is both a registered architect and a licensed builder, has been seeking an effective way to:

1. Increase appreciation for better planning by explaining the flaws in typical builder-house plans.

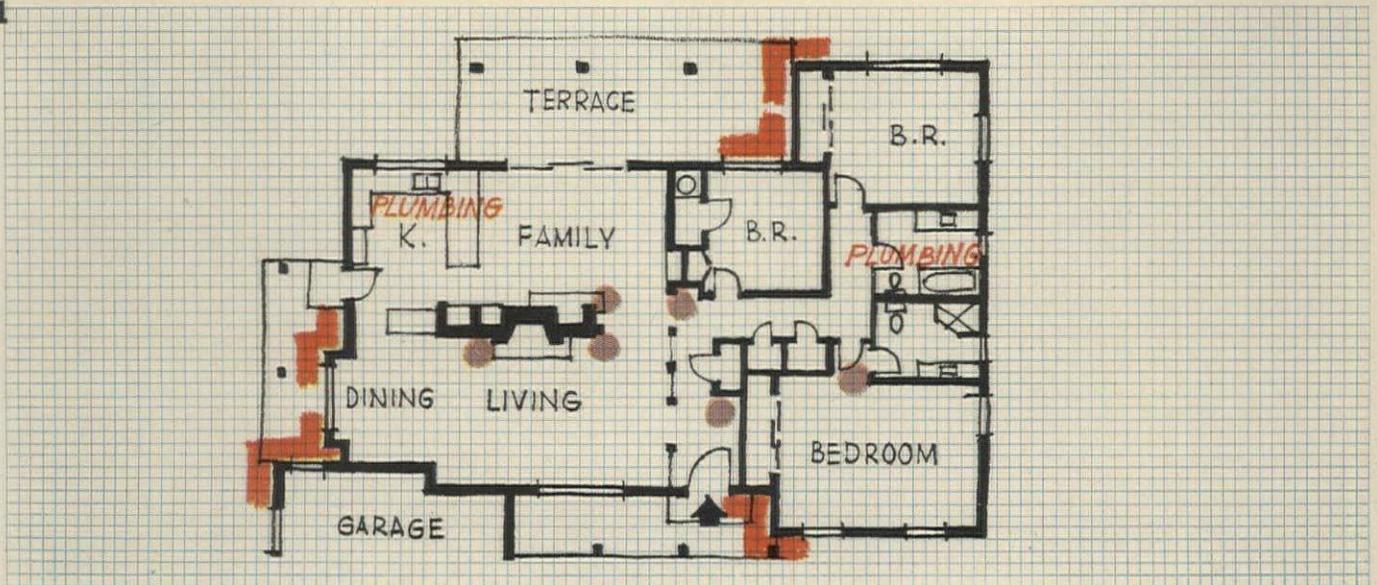
2. Show how an architect—bringing his specialized skill and training to the problem—can meet the builder's specialized requirements and at the same time produce a better plan.

Architect Piper aims to accomplish both of these objec-

tives in the six case studies you will see on the following pages. In each case, he started with a builder-house plan, analyzed it to show its faults, and then presented a second plan designed to accomplish the objectives of the original and, at the same time, improve livability and salesability without increasing cost.

Obviously, there are limitations to this dramatization of the architect's talent. Architect Piper's demonstration by no means approximates actual conditions under which an architect would be working with a builder. By the same token, his plans are not ideal solutions. He simply used the builder-house plans as a rough guide to the builders' requirements. And in his solution, he stuck to essentially the same plan patterns. As a result, his plans 1) have approximately the same square footage as the originals; 2) cost the same—or less—to build; 3) fit the same size site; 4) force no basic change in exterior treatment.

## Case No. 1



### The plan that adds needless cost

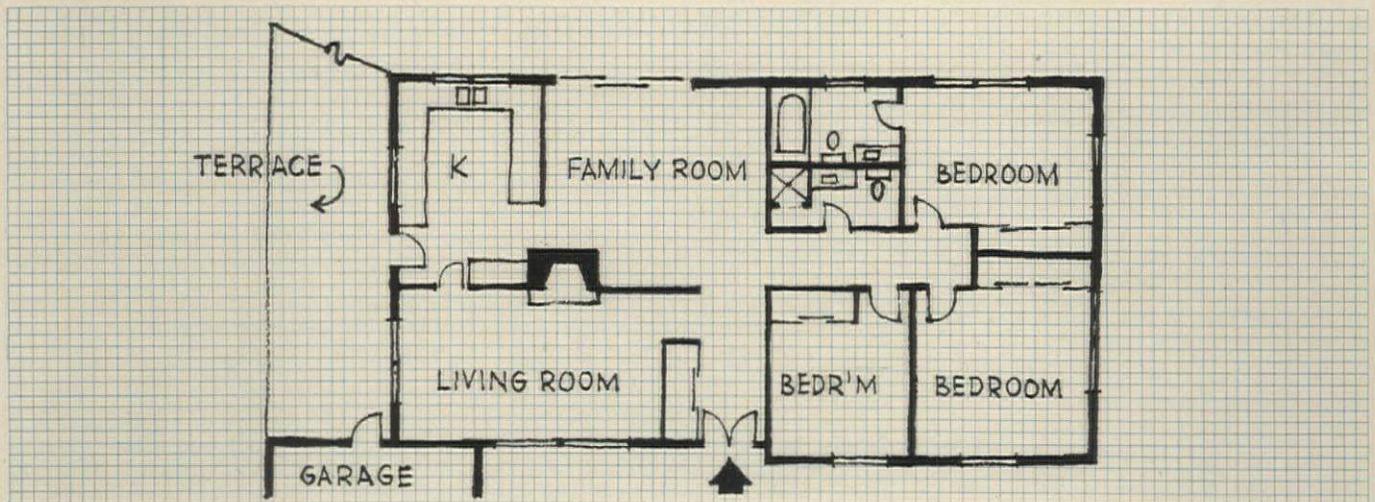
This plan inflated the cost of the house by almost \$2,000 without making it any more livable or any more appealing to buyers. Here is where most of the unnecessary expense went:

\$600 for the direct cost of 12 useless outside corners (red angles above). Each of these corners boosted costs by at least \$50 because each of them complicated construction from layout through roofing—required extra materials (ie, two extra studs) and extra labor for cutting and fitting odd-size materials.

\$1,000 for the indirect cost of the 12 outside corners. With an irregular plan like this, you can't use roof trusses (they make sense only with fairly simple rectangular plans). A truss system can knock \$1,000 off the cost of the average house (H&H, Sept '58).

\$300 for useless interior jogs (brown dots above). Inside wall projections, corners, and offsets—like outside corners—demand extra materials, odd-size materials, and extra labor. What's more, they make the interior confusing and hard to live in.

### How the same plan idea might have been handled



### The plan that avoids costly corners—inside and out

The result is a trim, easy-to-build house with the same square footage as the actual house and, if anything, greater livability and greater sales appeal.

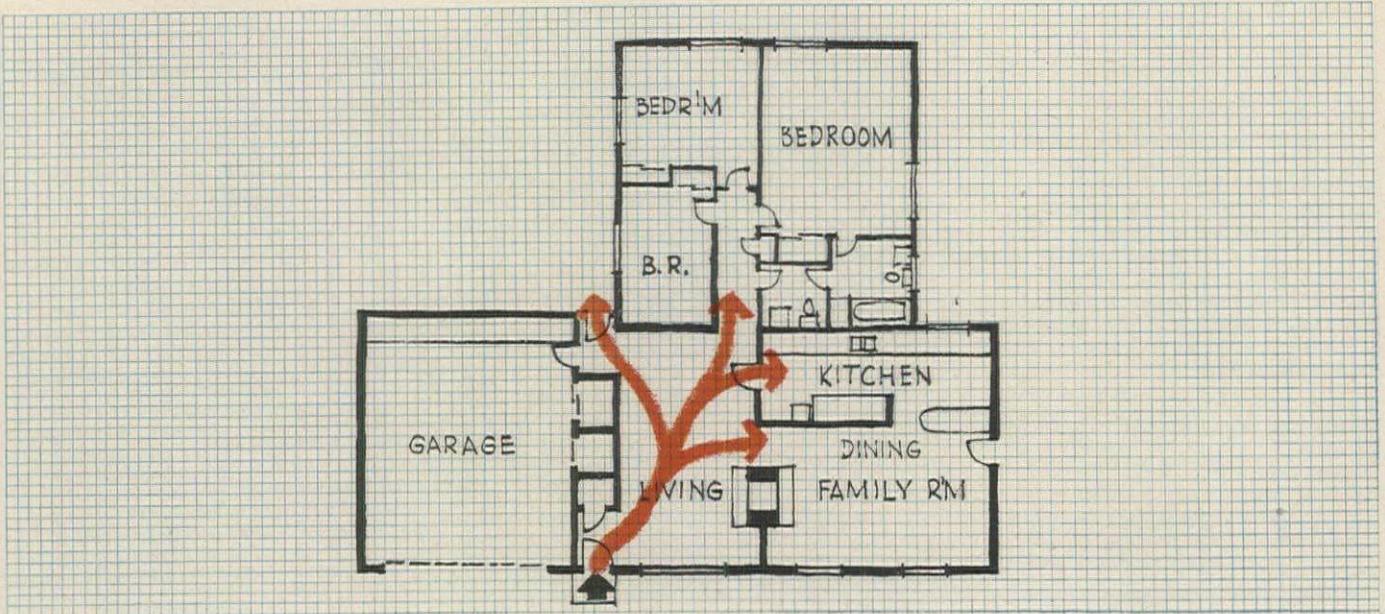
Unlike the actual plan, this plan simplifies roof framing because without the garage it is a straightforward rectangle. The 30' width of the house invites efficient use of 2x4 glue-nail roof trusses.

Unlike the actual plan, this plan lets you use large pieces of material because outside corners and inside jogs have been minimized. So there is less cutting and fitting and less waste of drywall, sheathing, and siding.

*Bonus benefits:* 1) less expensive bathrooms—all plumbing for both baths backs up against one wall; 2) a quieter master bedroom because the baths form a barrier between the master bedroom and the family room; 3) bigger and more efficient closets in two of the three bedrooms; 4) better separation of the entry hall from the living room (by a long coat closet instead of a short space divider); 5) less waste space for halls; 6) a larger kitchen with more counter space.

Why no family-room fireplace? Because, as in the actual plan, it would be in an awkward spot.

## Case No. 2



### The plan that makes the living room a hall

From the front door, there is only one route to every room in the house—right through the living room.

So the living room is hardly a place for relaxed living.

*Item:* it isn't private. Visitors walk directly into it from the front door. And it is wide open to the family room and the bedroom wing.

*Item:* it's drafty. Cold air sweeps through it every time the front door is opened.

*Item:* it complicates furniture arrangement. If the furniture is out in the room, people stumble over it. Yet there

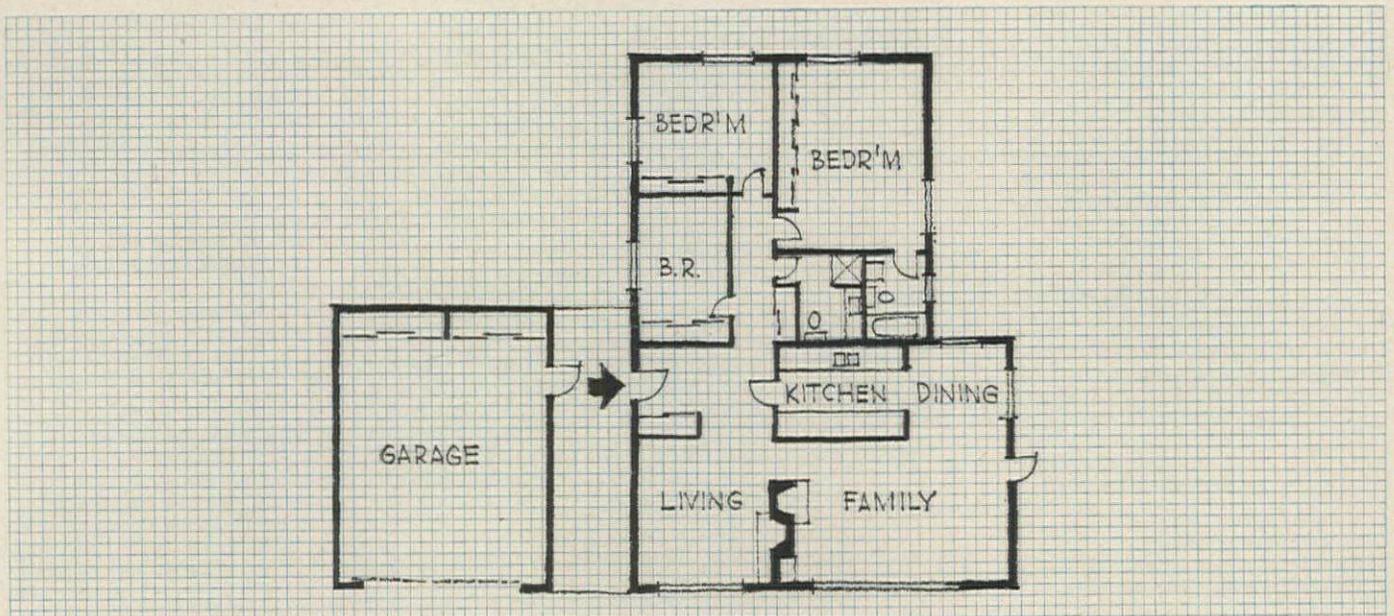
is little wall space for it along which to arrange furniture.

*Item:* it's hard to keep clean. Mud is tracked in from the front door, and heavy traffic wears out the carpet.

What's more, a house seems small when you step directly into the living room from the front door. People expect this only in very small houses, but never in a house as large as this (1,450 sq ft).

*A point to keep in mind:* first-time buyers may not recognize these faults, but second-time buyers are quick to spot them—they've learned how a house works by living in it.

### How the same plan idea might have been handled



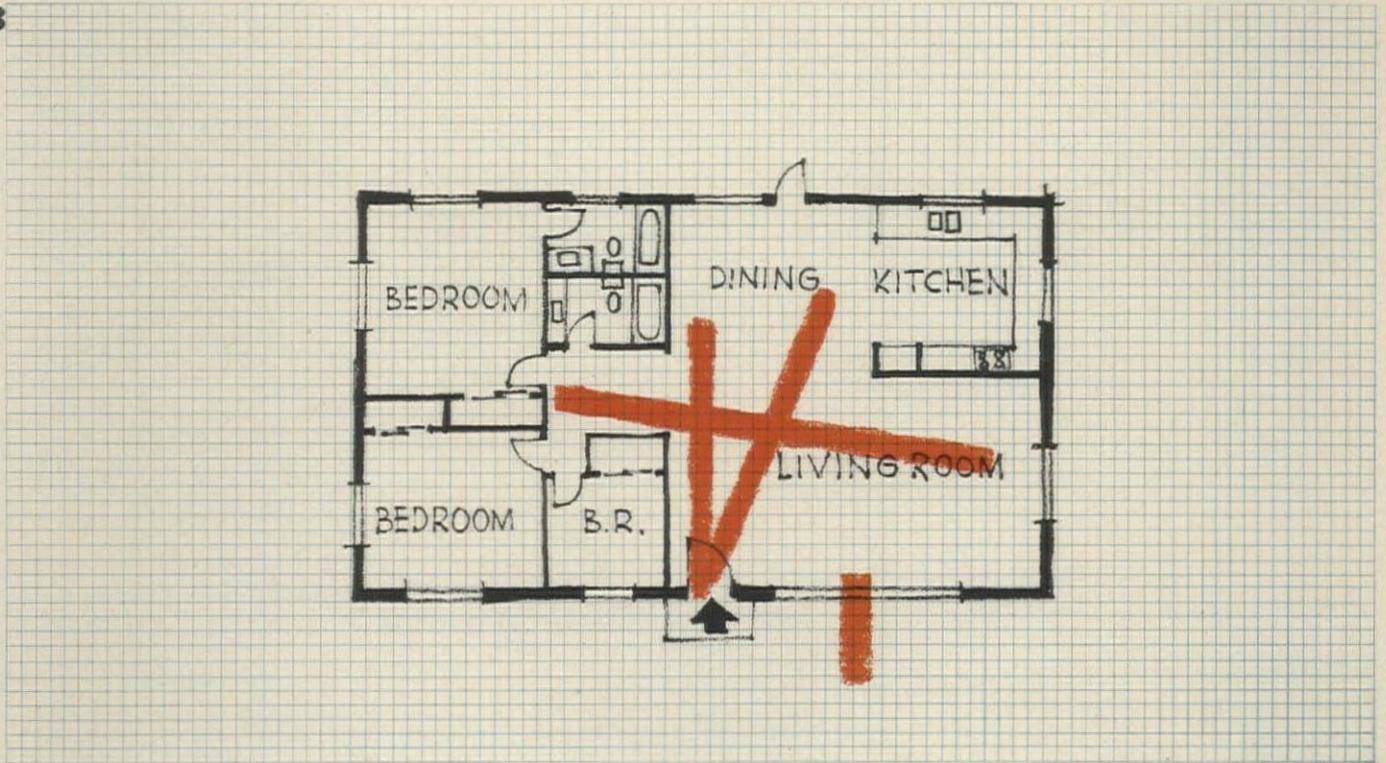
### The plan that works around a central entry hall

In this case a side entry seems ideal. A breezeway—cut through between the house and garage—gives access to it.

From the entry hall, you can enter each area of the house—living room, family room, kitchen, bedroom wing—without passing through others. The living room dead-ends, has plenty of wall space for arranging furniture so that it faces the fireplace and the view.

*Bonus benefits:* 1) the formal living room is separated from the informal family room; 2) the dining area no longer blocks traffic flow between the living and family rooms; 3) the house has more storage—more conveniently located; 4) there are two baths instead of one bath and a lavatory (in the actual plan, the only access to the full bath was through the master bedroom or through the lavatory).

### Case No. 3



## The plan that kills privacy

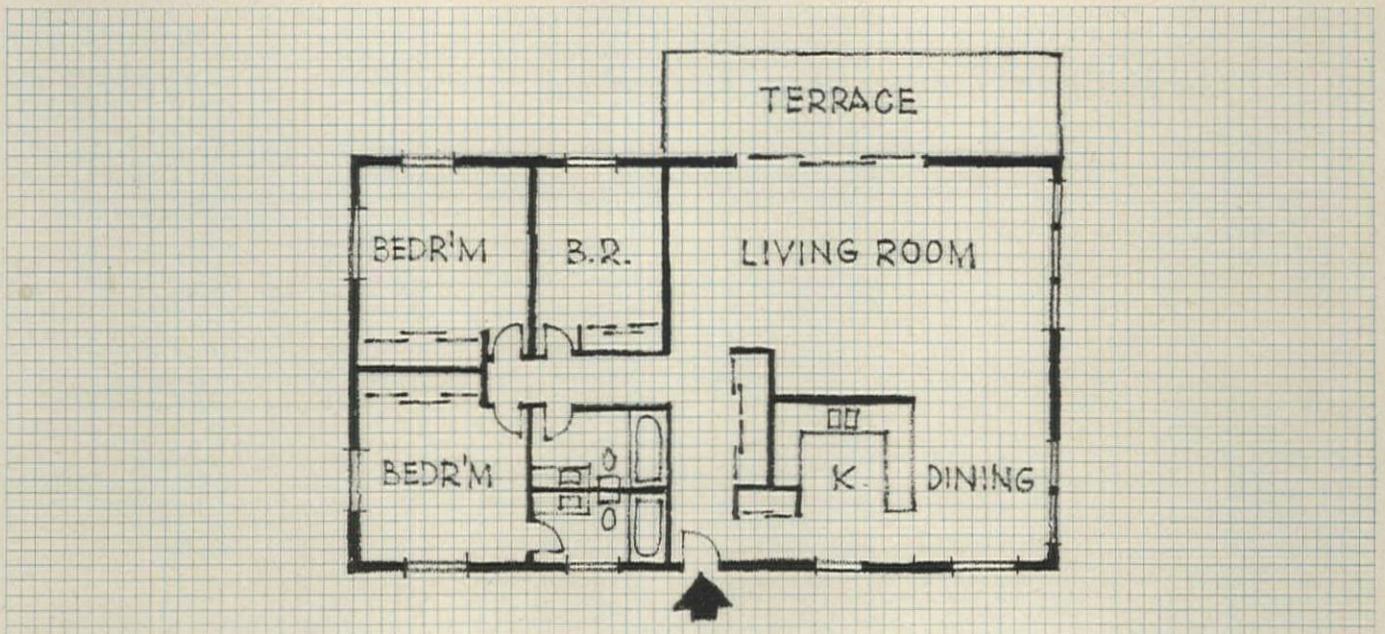
This plan kills privacy because:

1. The living area works like one undivided room, with the living room, dining area, and kitchen wide open to each other.
2. The bath and bathroom wing is in full view of the living room.

3. The front door opens directly into the living room—so callers see most of the house the moment they walk in the door.

4. The living room faces the street—so passersby get a view of the living area through the picture window.

## How the same plan idea might have been handled



## The plan that uses the kitchen as a space divider

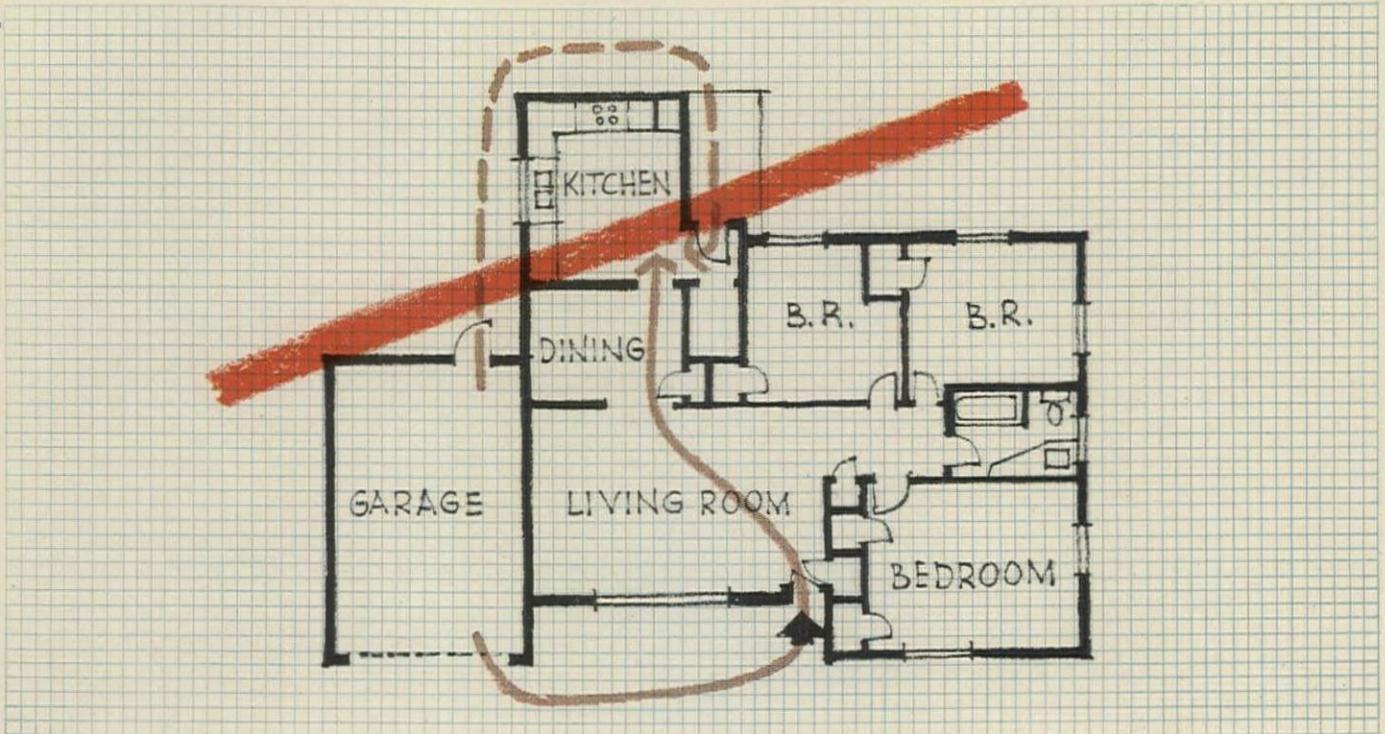
The kitchen is moved up next to the front door and the living room is shifted to the rear.

This kitchen location sets up an entry hall, screens the bath-bedroom hall from the living area, and makes possible a dining area that is off by itself instead of smack in the middle of things.

This living-room location gives the living room privacy from the street and frees it of traffic from the front door.

*Bonus benefits:* 1) the housewife in the kitchen gets better control of the front door; 2) the living room can be opened to a rear terrace through sliding glass doors; 3) the plumbing is closer together.

## Case No. 4



### The plan that makes the kitchen an isolation booth

This plan tucks the kitchen away in a rear wing. So the housewife—who spends a good part of her day there—has:

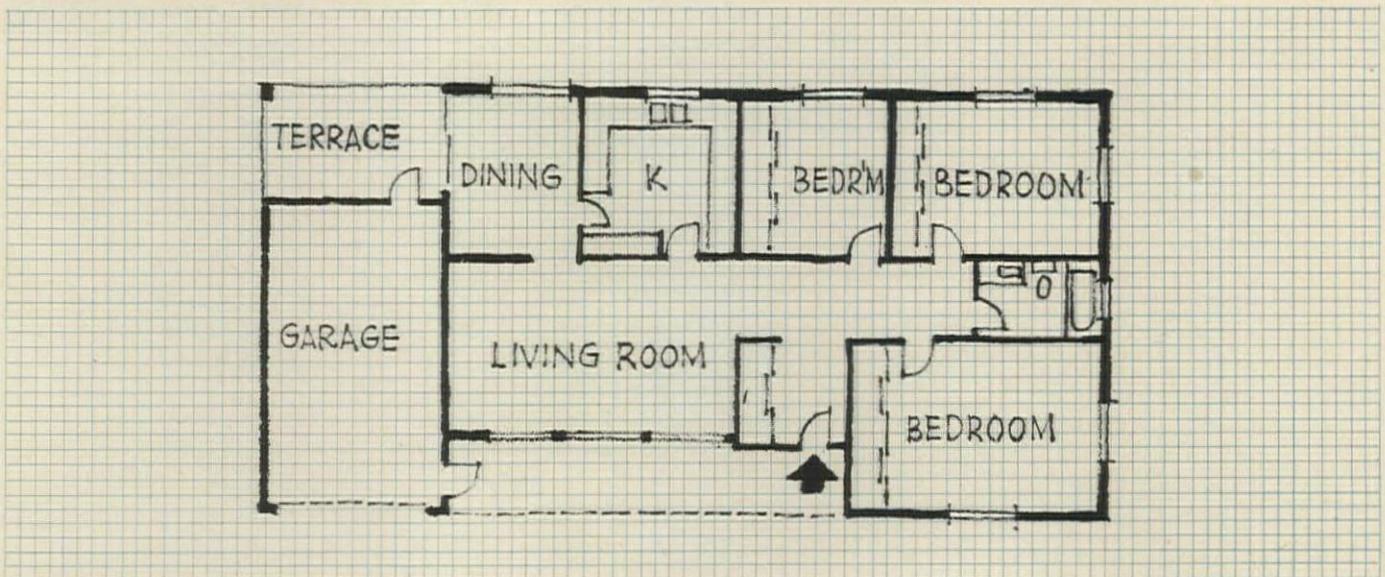
*No control of the front door.* She can't see people approaching the door, also has a long walk to answer the bell.

*No control of the children.* She can't keep an eye on children playing inside unless she wants them under foot in the kitchen. And she can't watch them playing outside because the only kitchen window does not overlook the back yard.

*No easy access from the garage.* To reach the kitchen with an armload of groceries, she has two choices, neither attractive—use the front door and walk through the house (solid line above), or walk around through the rear yard to the back door (broken line above).

And if the housewife likes to chat with guests while preparing a meal, she's out of luck because the kitchen is isolated from the living room.

### How the same plan idea might have been handled



### The plan that makes the kitchen a control center

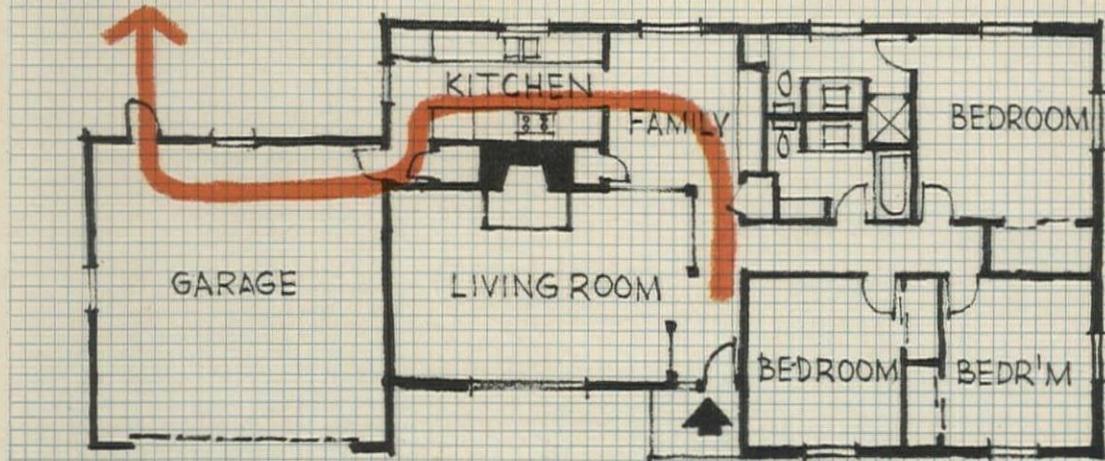
That, say most of today's housewives, is what they want their kitchens to be.

This kitchen is reasonably close to the front door. It puts the housewife where she can keep an eye on her children whether they are playing inside or in the backyard. And it

is a short walk from the garage—across a covered terrace and through the dining room.

*Bonus benefits:* 1) a simpler, less expensive plan from which to build (see Builder problem No. 1); 2) an entry hall; 3) an outdoor dining area—the terrace off the dining room.

## Case No. 5



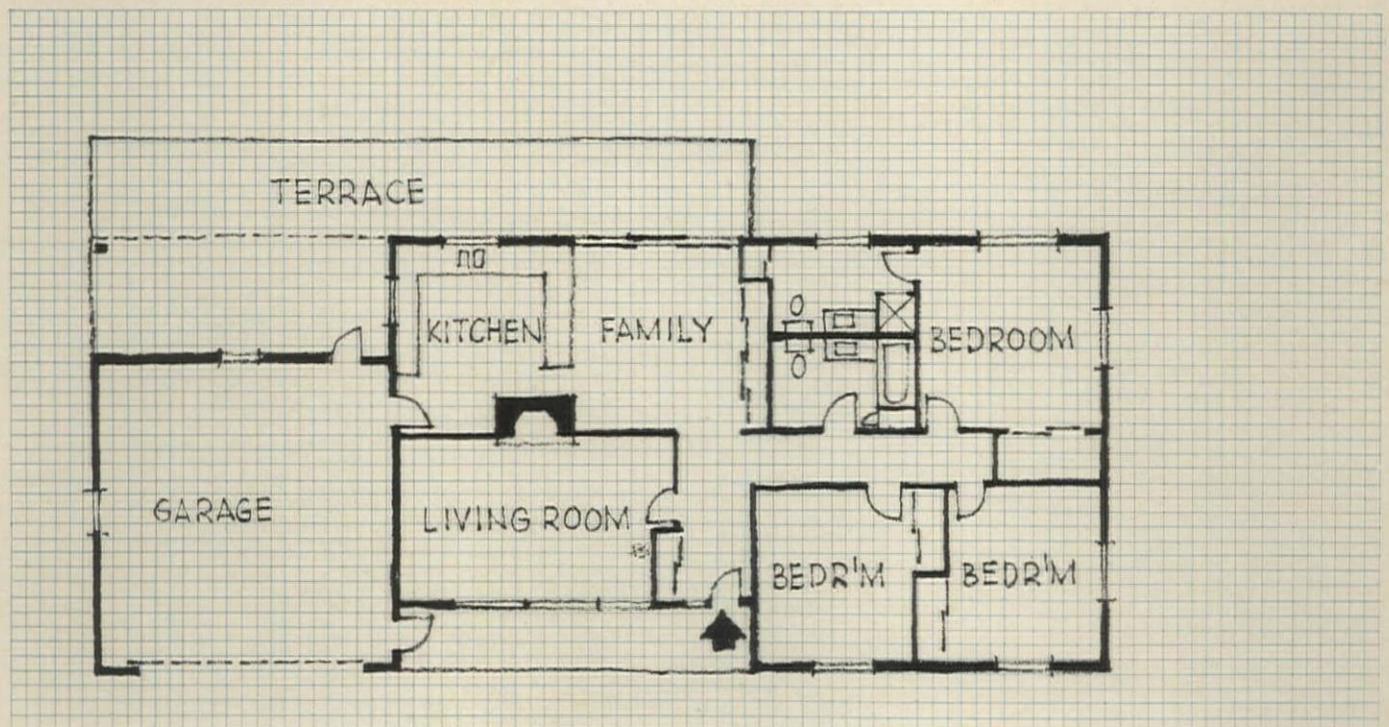
### The plan that ignores indoor-outdoor living

This plan—good in many other respects—lacks one of the top sales features in today's market: indoor living areas that open to outdoor living at the rear of the house.

The rear yard is best for outdoor living because, unlike

the front and side yards, it is screened from the street by the house and garage. Yet this plan almost discourages its use. The only rear outdoor exit from the living and family rooms is through the kitchen and garage.

### How the same plan idea might have been handled



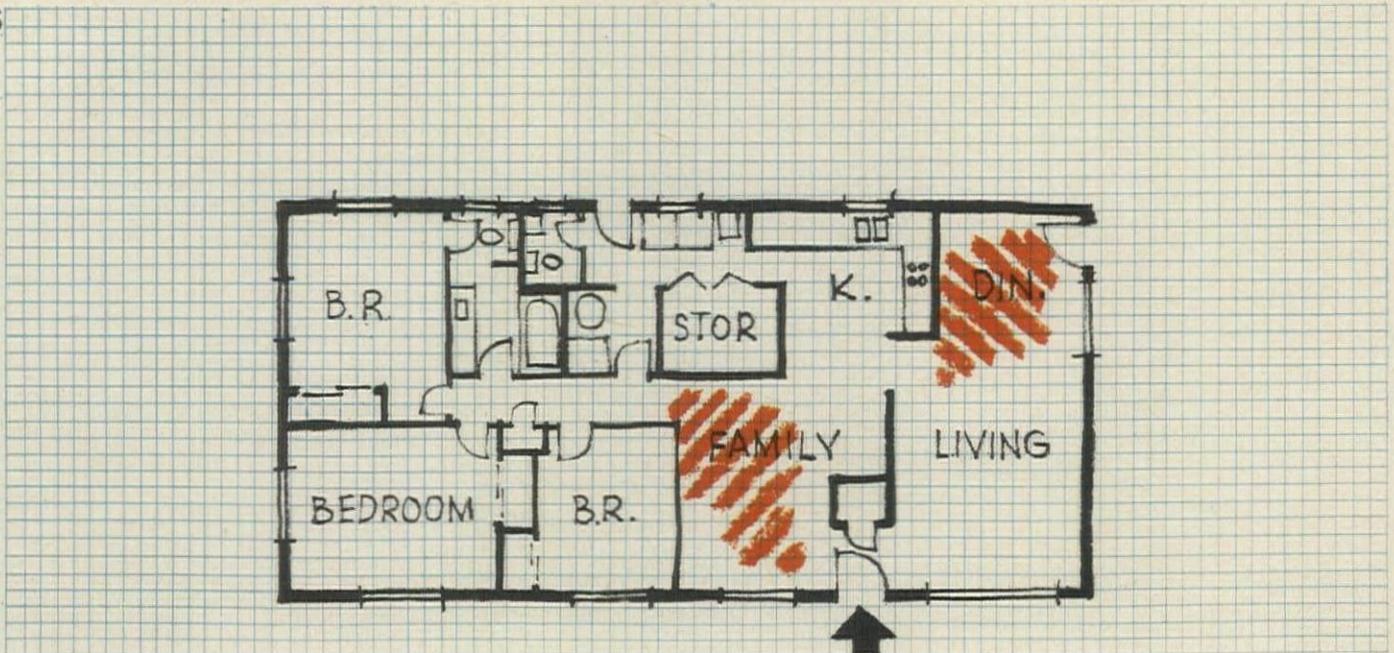
### The plan that opens to the rear yard

Sliding-glass doors give the family room direct access to a rear terrace—a fine spot for outdoor play, dining, and entertaining. Part of the terrace (behind garage) is covered.

*Bonus benefits:* 1) a better-shaped kitchen (U instead of corridor); 2) a bigger family room (made possible by U-

shaped kitchen); 3) a better entry hall (large closet at front door, no jogs); 4) a quieter living room (separated from family room and hall by walls and closet instead of space dividers); 5) better-planned baths (in actual plan, baths were unnecessarily large).

## Case No. 6



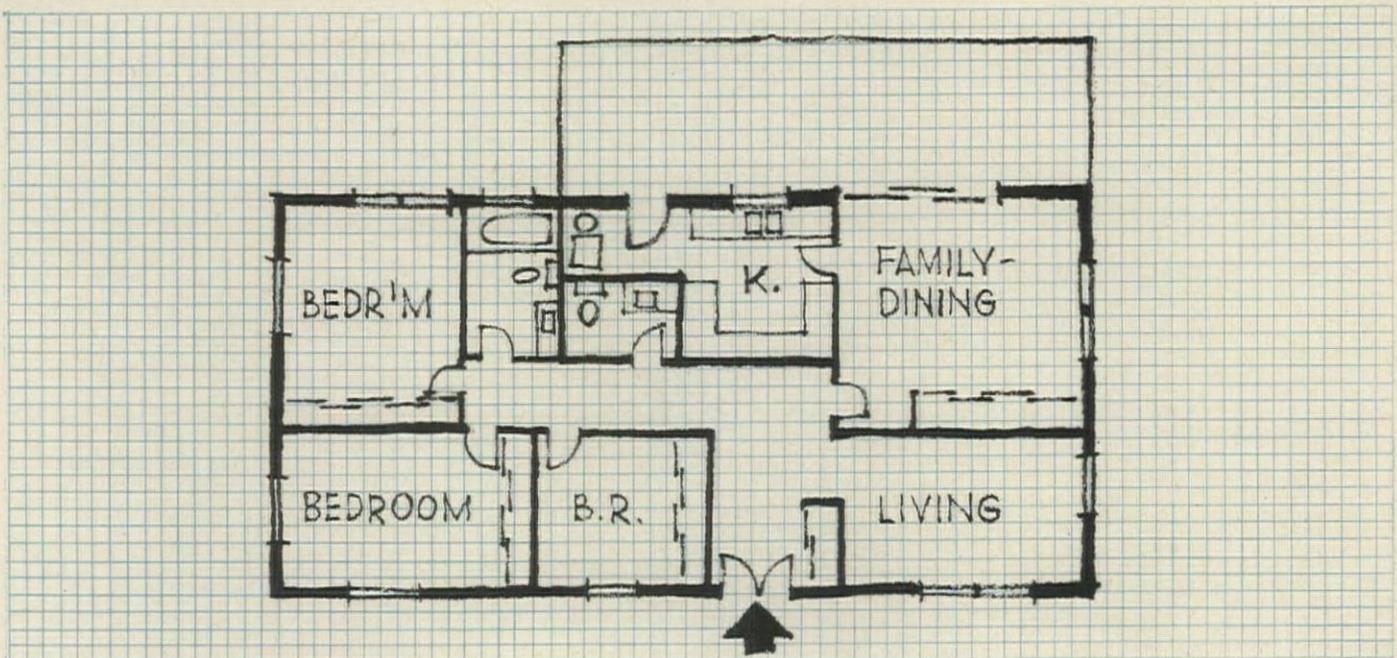
### The plan that tries to do too much with too little

This plan has neither enough space nor the right shape for separate dining and family rooms.

*Result:* neither room does what it should do. The dining room is too small and too broken up for formal dining. The

family room is little more than a wide and wasteful corridor from the front door to other parts of the house. It is also next to the bedrooms so that the noise of parties and TV will keep people awake.

### How the same plan idea might have been handled

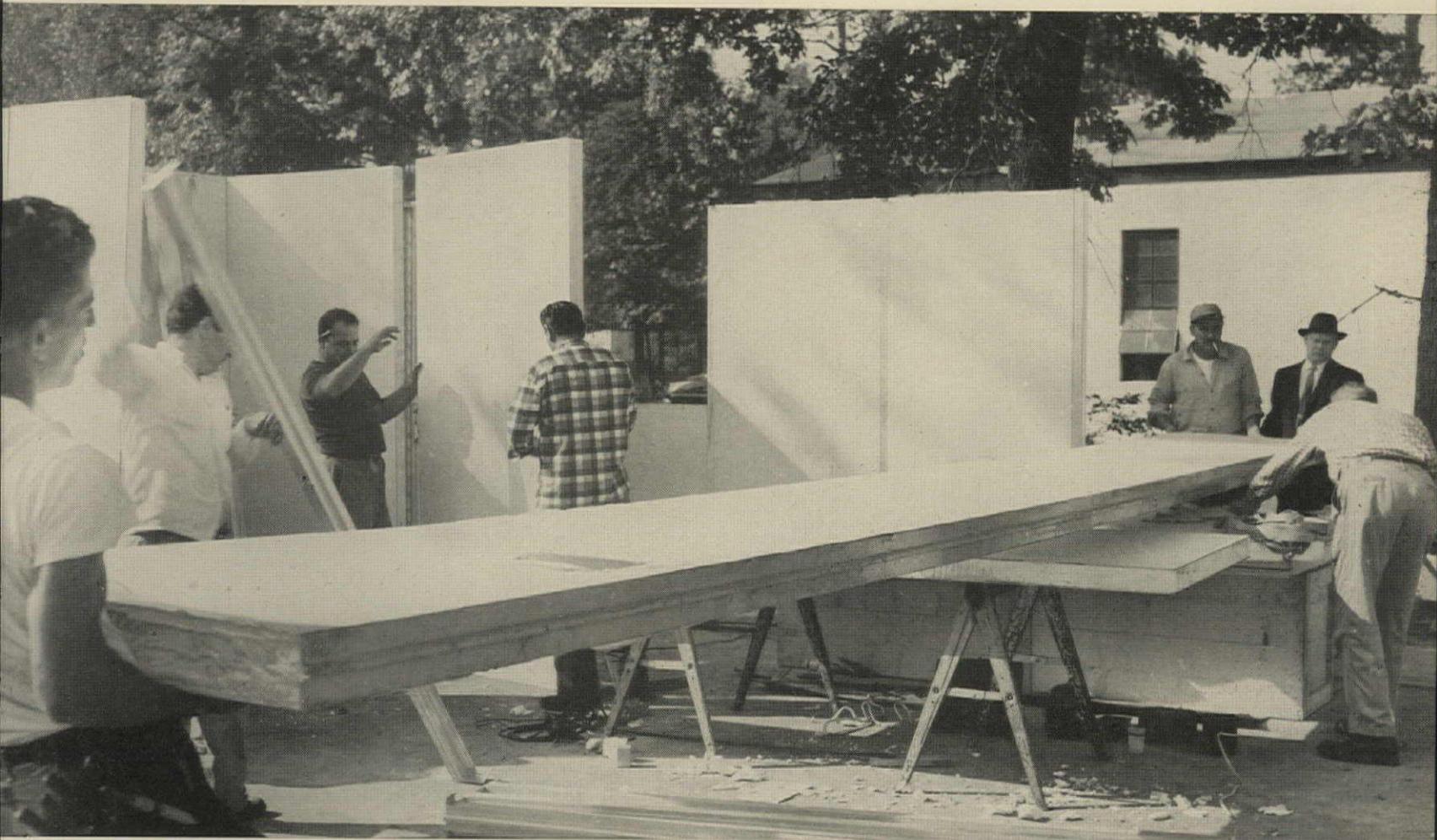


### The plan that combines its family and dining areas

The large family-dining room is well separated from the bedrooms. It works well for formal dining because it can be shut off from the kitchen by a door, and children's playthings can be stowed away in the storage wall.

*Bonus benefits:* 1) a private, dead-end living room with plenty of wall space for furniture; 2) a generous entry hall with double doors and a good-sized coat closet; 3) twice as

much closet space in the bedrooms; 4) a better-planned bathroom that is not cut up by jogs; 5) a lavatory that's easy to reach from the children's bedrooms and can serve as a powder room, too (a mud-room lavatory like the one in the actual plan makes sense only if the house has two other baths); 6) more counter space and less wasted floor area in the kitchen. /END



ROOF PANEL, 4' x 4' x 28', can be moved into position on top of wall panels by just two men. Panel edge is aluminum extrusion.

## This 196X panel is ready right now

Because panel construction is now gaining acceptance so fast, Alcoa is already putting into production an aluminum-and-foam sandwich panel (see above) which it originally planned to introduce in the mid-1960s.

First use of the panel (called Alply) is in the house shown at right, a prototype of 100 similar units planned for a subdivision in Puerto Rico. The whole house can be put up in a day, and panels cost less than \$1 a sq ft. Wall panels with .08 U factor are 3"x3'10"x8', have an aluminum exterior skin, an expanded styrene bead foam core (see H&H Jan, p 125), a Masonite interior skin. Roof panels are 4"x4'x28' and have aluminum skins on both sides for greater strength.

### Panels can be used in three different building systems

They can be used 1) as load-bearing walls, where they act as support and enclosure; 2) as non-load-bearing curtain walls in a post-and-beam house, or 3) as a combination of the two, as in the prototype house.

Exterior wall panels in this house are joined by an aluminum column (see details next page). The columns, at 4' centers, help the panels support the roof.

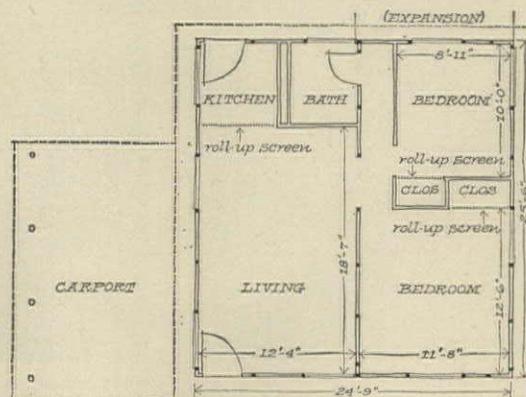
The aluminum column detail in this house is one that can be used only in tropic areas, like Puerto Rico, where there is no problem of heat transfer through the joint. For the US, the panels will need joints that do not conduct heat. In post-and-beam systems, posts could be rabbeted and panels would be set in just like glass—with a wood stop to hold them in place. In load-bearing systems, panels might be made with wood or plastic edges and joined flush with a wooden spline.

House and joint details by Architect Morton Jessup Rose.

Westfield Studios

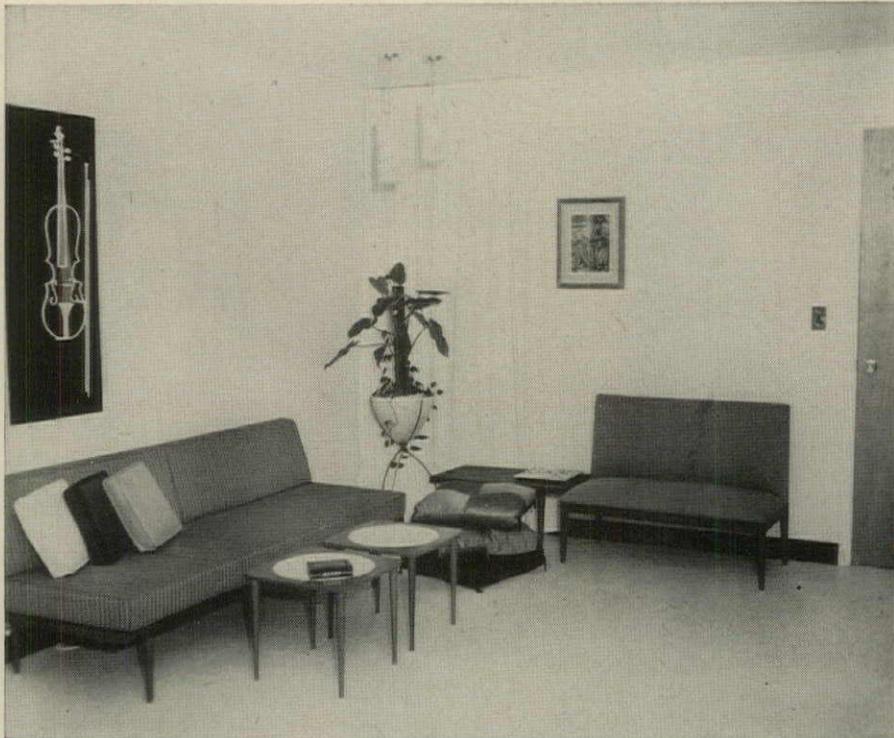


ALUMINUM PANEL HOUSE in Garwood, N.J. is a prototype built by Developer Nathan Lewis who is planning a tract of them in Puerto Rico.



FLOOR PLAN shows 630 sq ft of living space, but models for Puerto Rico will be less deep, have 425 sq ft, sell for well under \$10 a sq ft.

continued

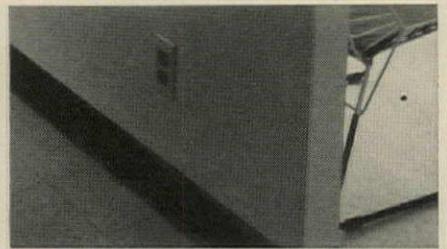


**FINISHED INTERIOR** has a flat wall paint on Masonite panel skins. V-joints hardly show. Cove mold covers wall-ceiling joint. Wiring

for ceiling fixture was drawn through panel core with fish wire. Violin decoration weighs 40 lbs, is supported by nail driven into panel.



**BATHROOM** tiles are glued to Masonite skin; hardware and pipes are cut into panels, through to plumbing space behind.



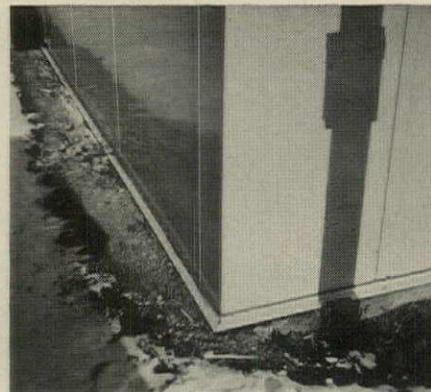
**OUTLET BOXES** are cut into panel and hole is drilled through core to wiring run in bottom of core.

## Here are building details of the panelized house

Photos: H & H Staff



**COLUMNS** between exterior wall panels have welded base plate held by anchor bolts to block foundation. Panels sit between columns, are not tied to foundation (see opposite).



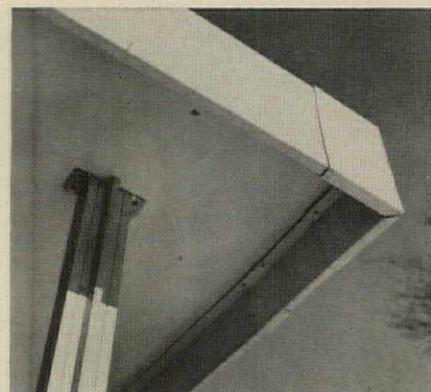
**EXTERIOR WALL** has special corner panels fabricated in 'L' shape. Finish is a baked alkyd enamel on aluminum skin. Drip cap extrusion covers sill-line joint.



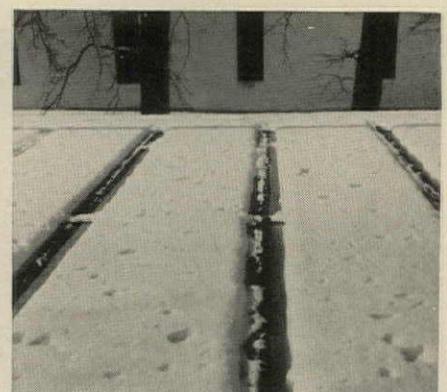
**WINDOWS** are floor-to-ceiling glass louvers set in panel-size bucks and 4' high louvers over 4' high panels. Sills of the bucks are fastened to plates anchored to the foundation.



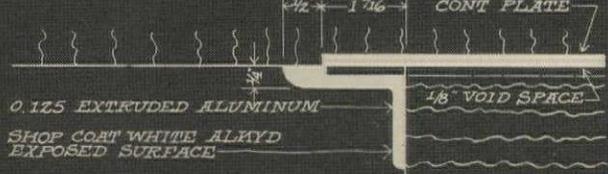
**COLUMNS** supporting carport overhang are the same as columns used at every panel joint in exterior wall and center bearing wall. The hollow members are one-piece extrusions.



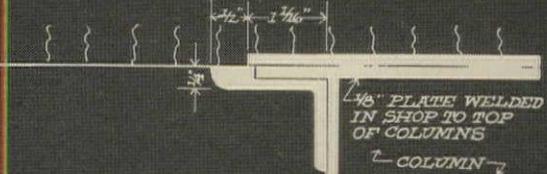
**ROOF EDGE** is finished with deep fascia strip fastened to panel edges. Shop-welded top plate of columns is simply fastened to panel's aluminum skin with screws.



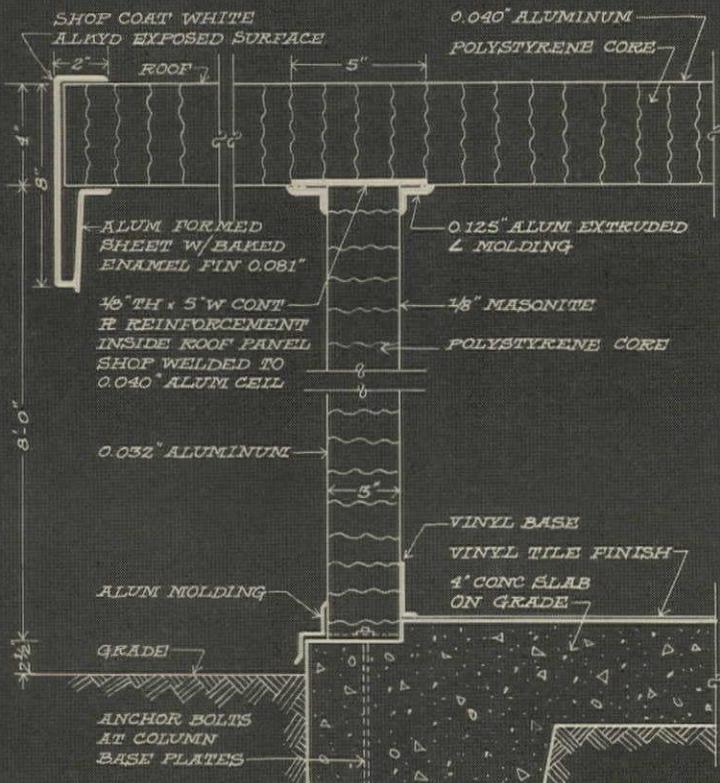
**JOINTS** between roof panels are designed for tropics—aluminum connections conduct heat. Panel edges and through connectors of wood or plastic would prevent heat loss.



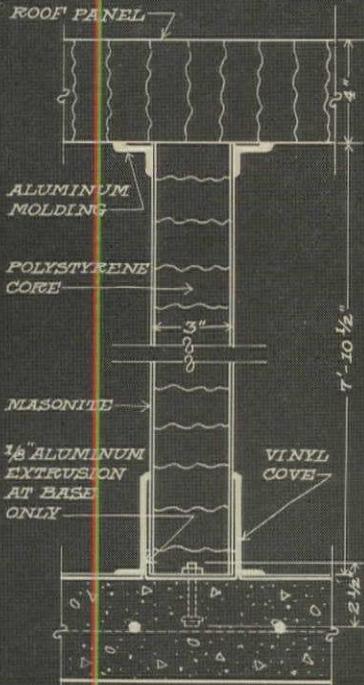
DETAIL AT WALL PANEL



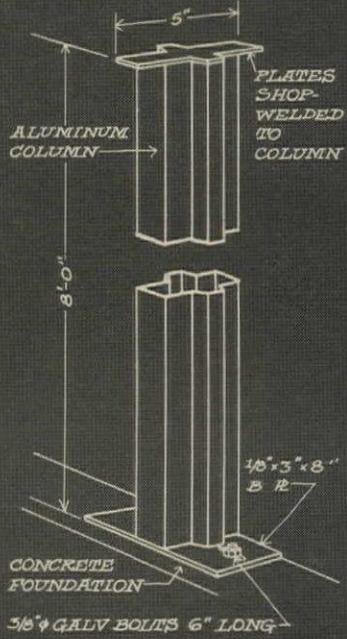
DETAIL AT COLUMN



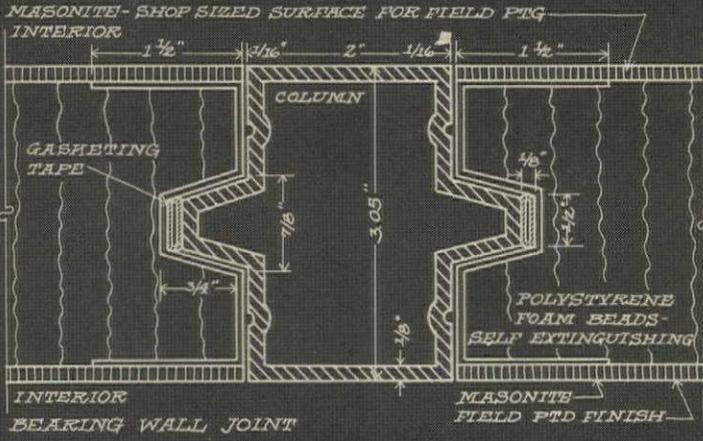
SECTION AT EXTERIOR WALL



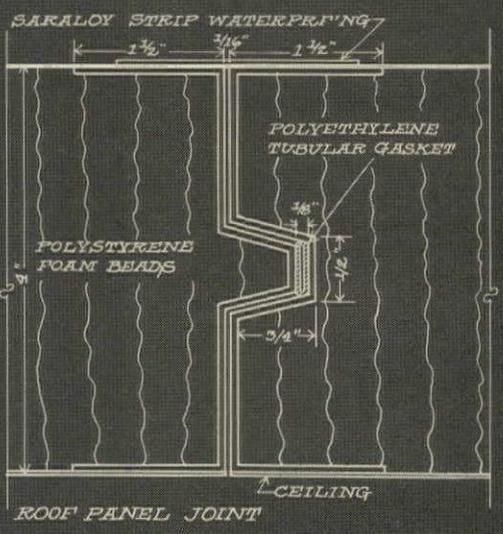
SECTION AT INTERIOR WALL



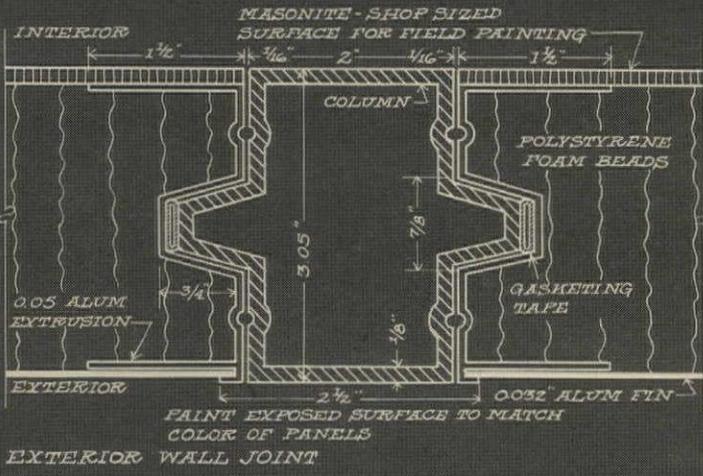
DETAIL OF COLUMN



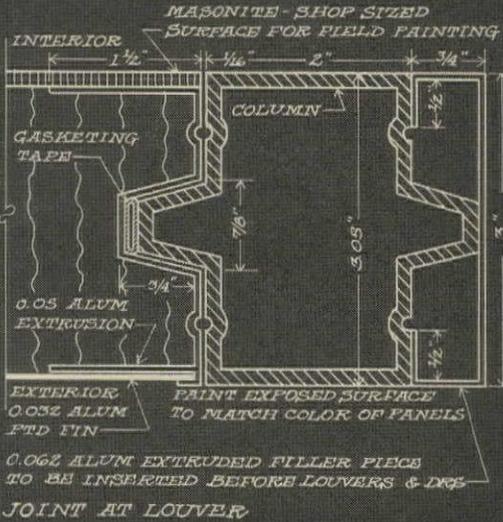
INTERIOR BEARING WALL JOINT



ROOF PANEL JOINT



EXTERIOR WALL JOINT



JOINT AT LOUVER

Be sure to see

# NEW WAYS TO BUILD BETTER

A monthly report on home building ideas, products, and techniques

Starting here

## New products



**Formica-faced appliances** are now available in Philco's Citation line of undercounter dishwashers, refrigerators, and freezers. All take stock snap-in fronts supplied by Formica distributors. 72 colors and patterns.

Philco Corp, Philadelphia.

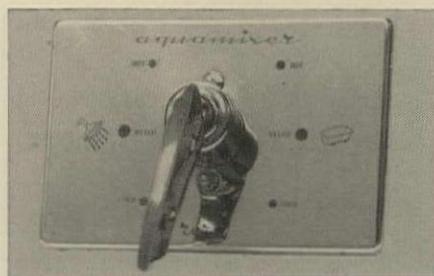
For details, check No. 1 on coupon, p 186



**Neoprene vent flashing** can be installed by one man in five minutes or less, the makers claim. Collar is double-seal, is made for standard vent diameters and 3-in-12, 4-in-12, 5-in-12, and 6-in-12 pitches.

Carrollton Mfg, Carrollton, Ohio.

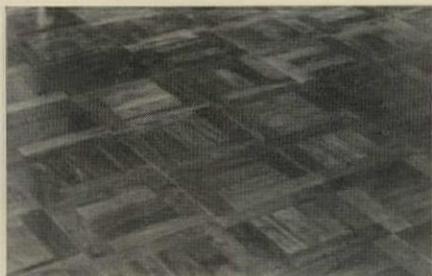
For details, check No. 2 on coupon, p 186



**Single water control** serves both tub and shower as off-and-on valve and mixing valve. Handle turns 360° to control temperature and flow, moves out and in to regulate pressure. Dial plate is chrome or colored Plexiglass. Made in Italy.

Aquamix Corp, New York City.

For details, check No. 3 on coupon, p 186



**Teak from Thailand** is now being marketed for use as flooring. Thai-Teak comes in wood block (above), t&g strips, and random widths in four patterns—straight-line, four square, swirl, and diamond. Price: about \$1.50 a sq ft.

Bangkok Industries, Philadelphia.

For details, check No. 4 on coupon, p 186

And on the following pages

## Technology

Will plastic panels change the shape of your houses? . . . Solar heating system also cools . . . Box beam spans 24' . . . High-pressure hot air cuts costs. . . .

See page 146

## What the leaders are doing

"Open" house shows off quality . . . Five ways to save paperwork . . . House-hunters pay \$25 for right to buy . . . How to boost quality workmanship . . .

See page 152

## Publications

How to make drywall partitions without framing . . . Keep up to date on aluminum . . . Concrete swimming pool guide . . . Catalogs of lumber products, ventilators, windows, raceways, etc. . . .

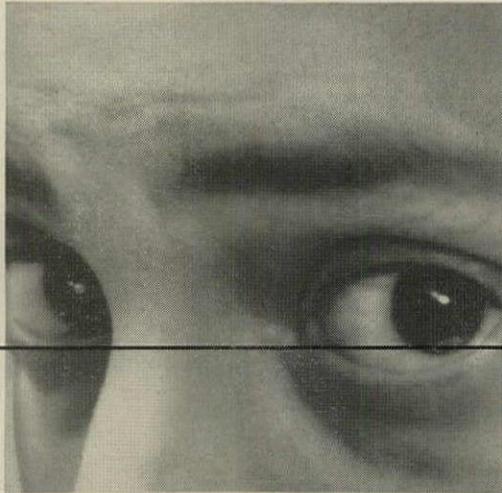
See page 184

## More New products

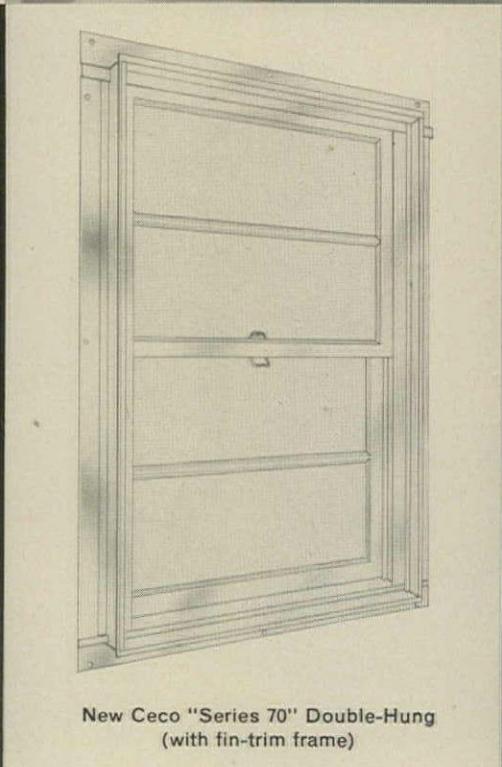
Power saws, drills, sanders, generators, tackers . . . New oil furnace offers high efficiency . . . New appliances for 1959 . . . New windows . . .

See page 158

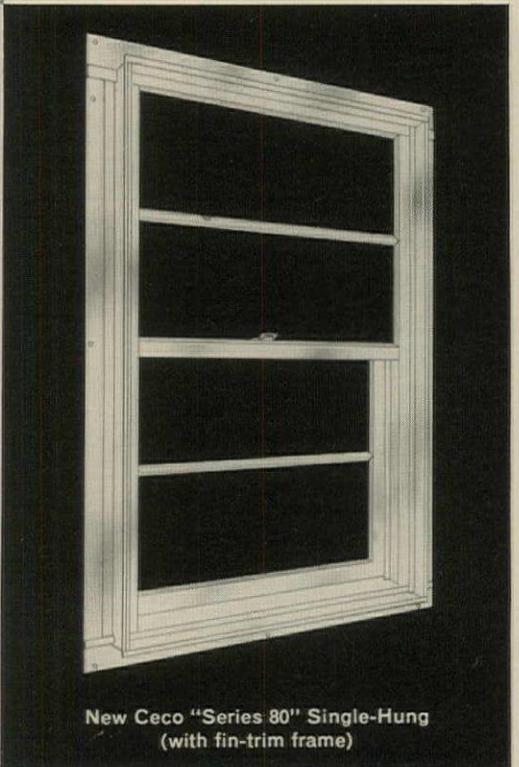
# THE "AYES" HAVE IT



New Ceco "Series 60" Double-Hung  
(with channel frame)



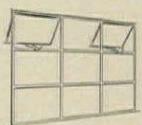
New Ceco "Series 70" Double-Hung  
(with fin-trim frame)



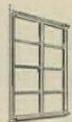
New Ceco "Series 80" Single-Hung  
(with fin-trim frame)

## Ceco's New Custom Quality Residential Windows Meet Customer Demands/P.S.—PRICED SENSIBLY

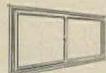
It takes a company with vast engineering and research resources to offer *truly custom quality windows* at production line manufacturing costs. And that's what Ceco gives you in its 3 great aluminum windows. You get silent operation, performance, precision weathertightness and smooth fingertip operation. Reason: Sash are countered with even-tensioned spiral balances and are cushioned with pre-tested silicone-treated wood pile weatherstripping. Small wonder home owners want these better engineered windows. Builders appreciate the easy installation. Series 70 and 80 have the labor saving fin and trim integrally extruded into the frame. In series 60 with channel frame, fast and positive anchorage is assured. See Ceco, manufacturers of the most complete line of steel and aluminum windows in the USA. P.S.—priced sensibly. Ceco Steel Products Corporation—offices, warehouses and fabricating plants in principal cities—general offices: 5601 W. 26th St., Chicago 50, Ill.



Window-Walls



Casements



Sliding Windows



Basement Windows



Double-Hung Windows



Picture Windows



Hopper-Vent Windows



Awning Windows



4. Allow the builder to include his actual architect's fee in his replacement cost instead of, as now, the local average of what most local builders are paying an architect (ie, \$25 or so). (One good reason why most FHA offices have hesitated to allow more for architect's fees is that so many builders overstated their fees on 608 projects.)

## To encourage the use of low-maintenance quality materials

5. Issue a directive from Washington that all FHA appraisers are to give full 100% credit in their replacement cost estimates for the cost differential for products and materials in excess of FHA minimum property standards. (Theoretically this is already done, but most builders think that on this important point there is a big difference between FHA theory and FHA practice.)

Some industry committee members urged that FHA should actually allow more than 100% credit for the extra cost because 1) the better product will often be cheaper in the long run, and 2) it will cost very much more to substitute a better product after the house is finished than to include it in the original construction. The more-than-100% credit would be in lieu of penalizing the use of minimum materials, which is common appraisal practice where the appraiser believes it will soon be necessary to replace an inferior product.

6. Instruct all FHA offices to follow the example set by Fort Worth, where the appraisal is done in a gold fish bowl and the builder can see and be sure the \$6 extra he spent for a big-enough laboratory (for example) is fully reflected in the replacement cost used in figuring his valuation. There is no use expecting builders to pay extra for quality products if they think FHA will underappraise them—whether their fears are justified or not.

*The appraisers were in full agreement that there should be no secrecy about how the appraisal is arrived at.*

7. Integrate FHA valuation procedure with FHA credit requirement procedure, so that FHA will actually require less income to buy a higher-price house if the lower-maintenance quality materials used in its construction promise savings on maintenance and operation greater than the added monthly mortgage cost.

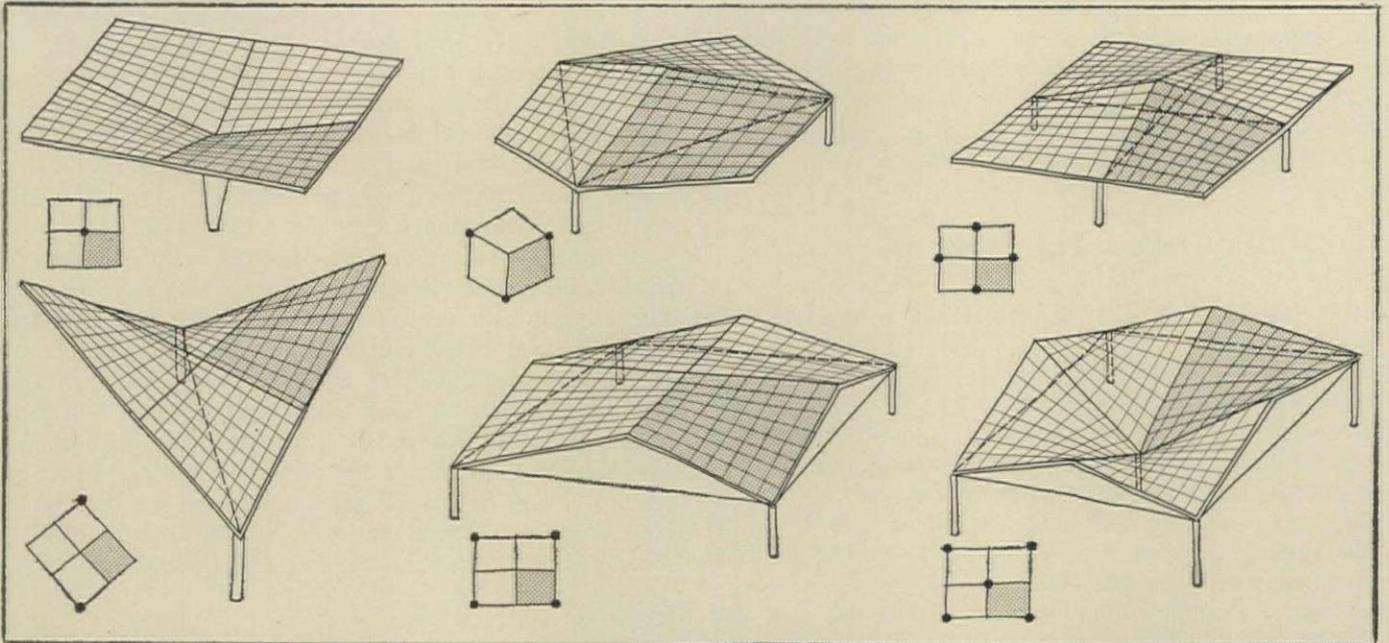
Mr Mason himself suggested that the added first cost of using low-maintenance quality materials throughout a 1,500 sq ft house (eg, specification-grade electrical devices instead of competitive-grade, vinyl asbestos flooring in kitchen and bath instead of asphalt, 100 amp electrical service instead of 60 amp, full-thick insulation instead of FHA minimum insulation) would be well under \$1,000. Adding \$1,000 to the first cost would add \$76.92 a year to the cost of a 25-year 5¼% FHA mortgage, and several members of the industry committee thought the resulting annual savings on maintenance and operation could be at least twice that much. In that case \$400 less after-tax income would be required to buy the higher-priced house.

*The industry advisory committee suggested that the proposed integration would do more to encourage the use of low-maintenance quality materials than any other change that could possibly be made anywhere in FHA.*

[This kind of integration between FHA valuation and FHA credit practice is clearly required by Paragraph 4A of the FHA credit directive issued Dec 7, 1957, but so far no procedure has been worked out to make it effective. It is not likely to work unless 1) FHA appraisers make the same careful maintenance cost estimate for each built-for-sale project that they now make for cooperatives insured under Section 213, and 2) FHA credit officers use that specific estimate as their guide for determining the income requirement to live in that specific project, instead of (as now) basing their operating cost estimate on the rule-of-thumb assumption that it will be roughly proportionate to the price of the houses.—ED] /END



COMMISSIONER MASON and his Industry Committee: front row, left to right, Andrus, Morrison, Lawson, Mason, Legas, Huges; back row, left to right, Nelson, Vieser, Booth, Grazier, Prentice, Hollingsworth, Cenker, Morgan, Pratt, Schlossman.



**HYPERBOLIC PARABOLOID:** "Its surface can be formed by a series of straight members. The scale can be varied from a few feet to a hundred feet. The shape can be varied from an almost flat surface to one with

a steep slope. If the sections are made flexible enough to bend slightly they may all be struck from the same mold. For prefabrication, a simple section joint must still be evolved."

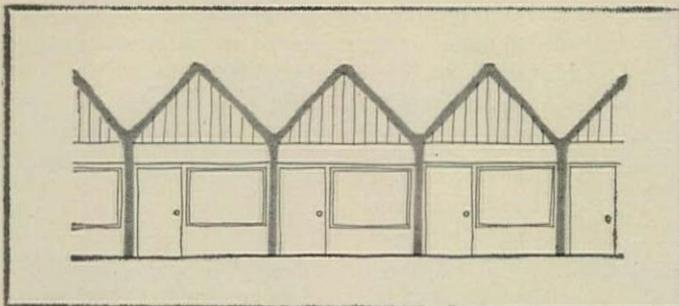
## Will plastic sandwich panels change the shape of housing?

Panelized shapes like those shown here could become an important factor in *all* light construction, a new study shows.

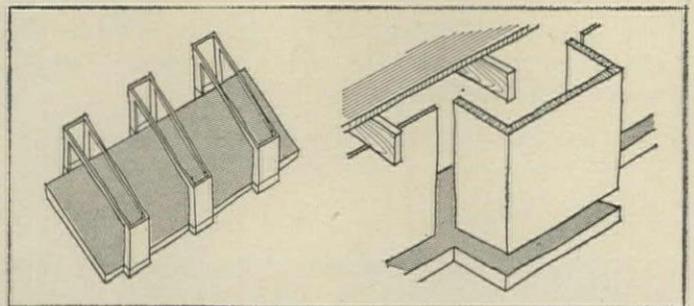
The drawings show some of the shapes (all "naturals" for plastics) that a team of architects at Massachusetts Institute of Technology singled out for further research. The captions (quotes from the group's 116-page report) tell why. But, says

the team, before real progress can be made, the building industry must press for fair performance standards in codes (and plastic structural sandwiches must come down in cost).

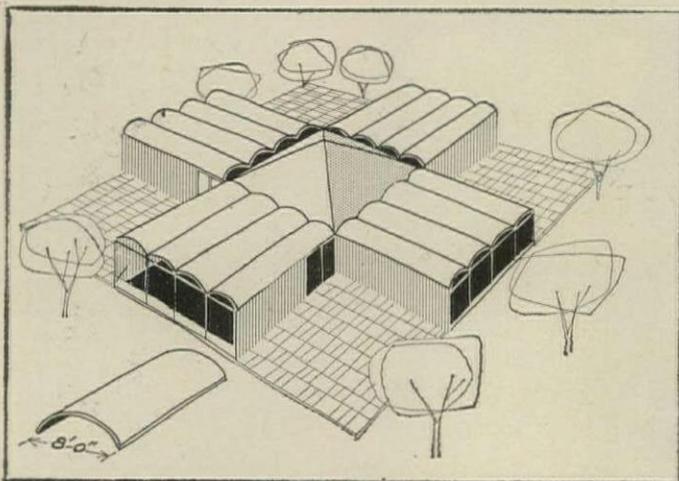
The MIT study was made possible by a grant-in-aid from Monsanto. Copies of the report are available for \$3 from Monsanto Chemical Co, Plastics Division, Springfield 2, Mass.



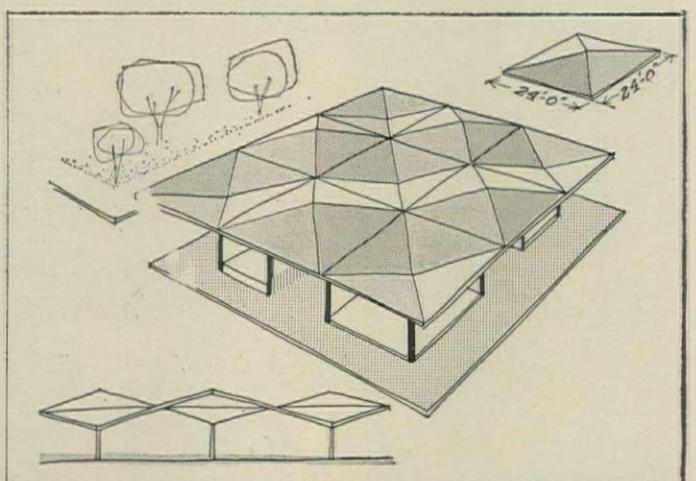
**FOLDED PLATE:** "If an easy way could be found to adjust joints along the folds to suit roof angles, flat sandwich panels for folded plates could be stocked and sold in the same way as flat panels [of any kind]."



**FOLDED C-COLUMN:** "This is a variation on post-and-beam, but here posts are made of plastic sandwiches that serve as shear walls. If sides were flared, 'Cs' could be stacked for shipping."

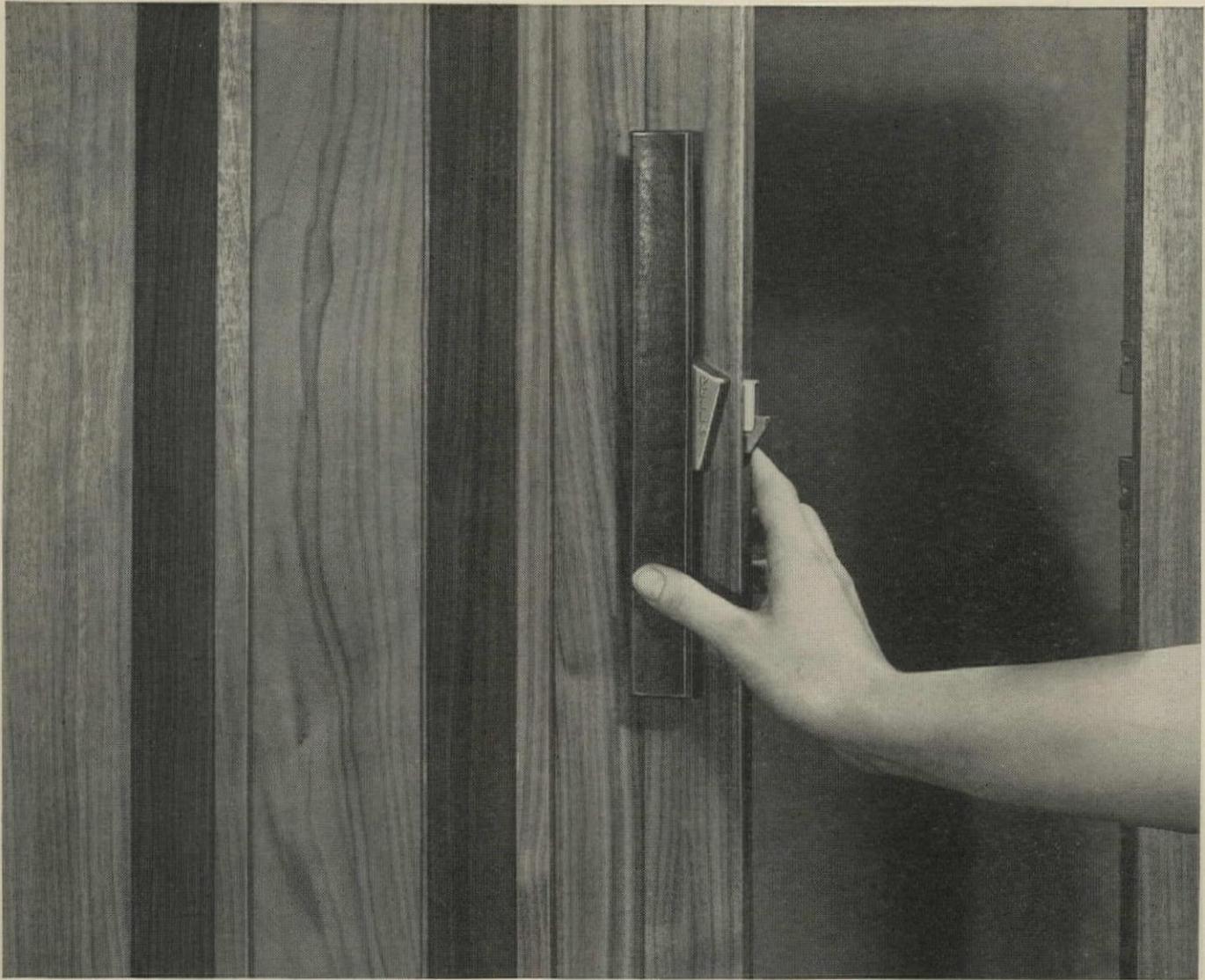


**CYLINDRICAL SHELL:** "This is actually a long beam, curved to get more strength. Supports are needed only at ends of bays. New machinery would be required for quantity production."



**FOLDED RECTANGULAR PYRAMID:** "The whole structure would be bounded by a deep edge beam. The pyramid form adds strength, makes this system another relatively economical way to use flat sandwiches."

continued on p 148



## HOME BUYERS FEEL THE APPEAL OF THIS NAME

The warm, inviting texture of natural wood tells home buyers that you have added a genuine Mark of Quality to the house you are showing. The rich-grained wood veneers of PELLA WOOD FOLDING DOORS harmonize with both modern and traditional interiors. To insure lasting beauty, Lamcor solid wood panels keep patented PELLA WOOD FOLDING DOORS from warping and enable them to withstand repeated hard usage. Steel spring

hinging maintains vertical alignment and assures even spacing between panels. In stock and custom sizes, these fine doors arrive factory-assembled and with all hardware furnished for easy, quick installation. Find out today how PELLA WOOD FOLDING DOORS can help sell the homes you build. Distributors throughout the United States and Canada. Consult your classified telephone directory . . . or mail coupon for free information.



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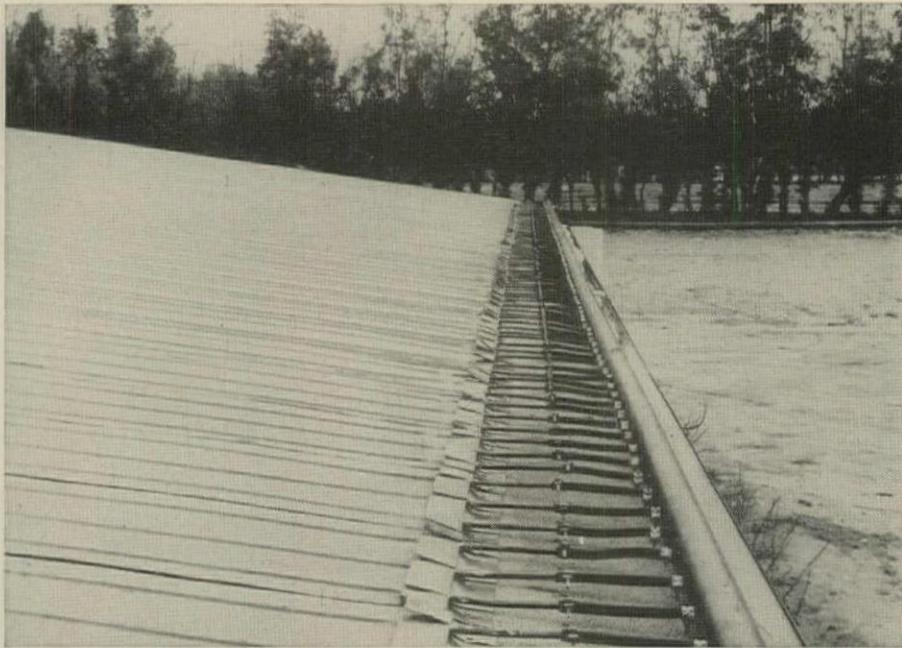
NAME \_\_\_\_\_

FIRM NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY & ZONE \_\_\_\_\_

STATE \_\_\_\_\_



**COPPER ROOF** has integral water tubes connected to main at right.

## New solar collecting system not only heats, but cools

The new system, designed by University of Arizona engineers, is of particular interest because:

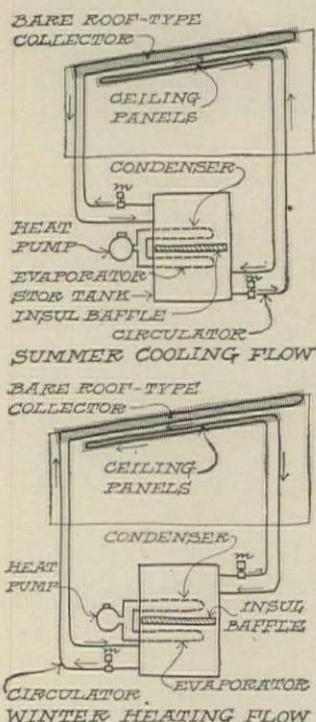
1. It uses the roof collector (a corner of which is shown above) not only to collect heat, but to dissipate heat when cooling is required.

2. It uses a water-to-water heat pump to provide the supplementary heating or cooling needed.

The system would be practical for use in half of the country, would heat and cool a 1,450 sq ft house for \$200 a year or less, according to Raymond Bliss Jr, project director.

But, like most solar systems, its big bugaboo is initial cost. Installed cost of this experimental system was about \$7,500.

The diagrams at left show how the flow of water through the roof collector, storage tank, and ceiling heating/cooling panels is reversed for summer and winter operation.



### Here is how the system works

In winter, on sunny days, water is circulated through the roof panels (a series of copper panels with integral circulating tubes) to pick up heat. In summer, water is circulated through the roof panels at night to lose heat.

But, often, the heat gained and the heat lost in the roof is not enough to heat or cool the house. So to make the water hotter in winter and colder in summer, a two-section storage tank with a heat pump is used.

One section of the tank is the cold or evaporator side and one section is the hot or condenser side. An evaporator takes in heat and carries it away leaving its immediate surroundings cold, a condenser gives off the heat leaving its surroundings hot.

In winter, warmed water from the roof enters the evaporator (cold) side of tank, where its heat is picked up by the evaporator and "pumped" to the condenser side of the tank. This makes hot water on the hot side even hotter—hot enough to heat the house when circulated through the ceiling panels.

In summer, cold water from the cold side of the tank is circulated through the ceiling panels to cool the house. When it is returned to evaporator side of the tank, the heat it picked up in the house is carried away by the evaporator and transferred to the hot side of the tank by the condenser. Then, at night, hot water from the condenser side is circulated through the roof to cool off. If water from the hot side were not cooled, efficiency would drop sharply.

## The building industry gets its first handbook

At last, the building industry has its own handbook\*—devoted solely to technical data on buildings.

The big new *Building Construction Handbook* is a work that will be useful to architects, engineers, and builders. Content of the book runs from "architects, responsibilities of" to "workmen's compensation"; from the mechanical properties of every building material to the mechanics of soils; from structural design to choice of doors; from windows to waste disposal.

### Here is a sampling of assists you can get from the handbook:

1. If you want to design your own trusses and check out the size of members, you'll find a section for non-engineers on simple graphic analysis.

2. If you want to work in lightweight steel construction, you'll find a complete section on design and the use of light steel with other materials.

### How to build floors of 2x4's

3. If you have ever thought of using a floor deck of laminated 2x4's, you'll find that they will span 18 ft with a safe load of 70 lbs per sq ft. This exceeds MPS requirements. Such a floor is laminated with 20d or 30d nails at 18" centers, needs no other framing and no other finish but the 2x4's themselves.

4. If you want the most waterproof slab possible, you will learn that more cement and less water in the concrete mix will cut capillary action. (If your vapor barrier gets punctured, you will have capillary action.)

### How to avoid roof leaks

5. If you are troubled with leaks at eaves, where snow and ice in gutters can back up water, you can learn about cementing starter material to the roof deck with neoprene compound. The best starter material for a roof, says the handbook, is not asphalt shingle, but asphalt roll roofing. Water can travel up shingles from the gutter by capillary action and then get down through nail holes in the roof deck. Gluing a starter of roll roofing eliminates leaks.

6. If you want to lay out a hot water heating system, you will learn how to avoid air pockets or loops in your lines. The handbook explains: pipe should be pitched to collect air in the line at points easily vented automatically or manually. Pipe coils embedded in concrete floor slabs, plaster ceilings or walls should not be threaded; iron or steel pipe should be welded, copper sweated. (Under restrained expansion and contraction, threaded joints may spring leaks.)

\**Building Construction Handbook*, Frederick S. Merritt, Editor, McGraw-Hill Book Co, N.Y., 1958. \$15.



## LET ROLSCREENS SELL "THE LIVING DIFFERENCE" IN YOUR HOMES

These roll-up, roll-down screens tell prospective homeowners you have built something *special* into the home you are showing.

Exclusive ROLSCREEN time-saving, work-saving advantages demonstrate themselves at a touch of the operator bar.

Besides screens that roll up and down like window shades, PELLA WOOD CASEMENT WINDOWS offer self-storing "storms" to put a final end to seasonal window chores.

Those who already know PELLA advantages

are more easily sold on the quality of the entire house.

Those who are introduced to PELLA WOOD CASEMENT WINDOWS for the first time recognize the permanent value of "The Living Difference."

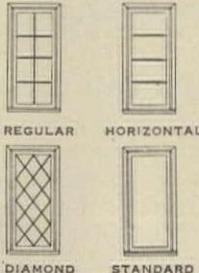
Find out today how nationally advertised PELLA WOOD CASEMENT WINDOWS can make home sales easier for you. For nearest PELLA distributor, see the classified telephone directory . . . or mail coupon.



### REMOVABLE MUNTIN BARS

Cut Painting Time,  
End Washing Troubles  
for Homeowners

ONE WINDOW . . . FOUR  
DIFFERENT APPEARANCES



.....

• **ROLSCREEN COMPANY**, Dept. KB-9, Pella, Iowa

• Please send literature on PELLA WOOD CASEMENT

• WINDOWS.

• \_\_\_\_\_

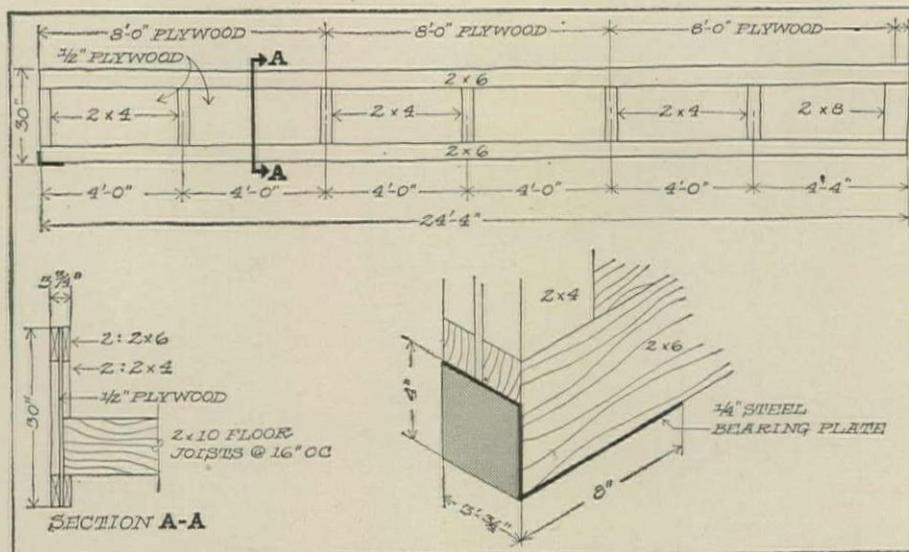
• NAME \_\_\_\_\_

• FIRM NAME \_\_\_\_\_

• ADDRESS \_\_\_\_\_

• CITY & ZONE \_\_\_\_\_ STATE \_\_\_\_\_

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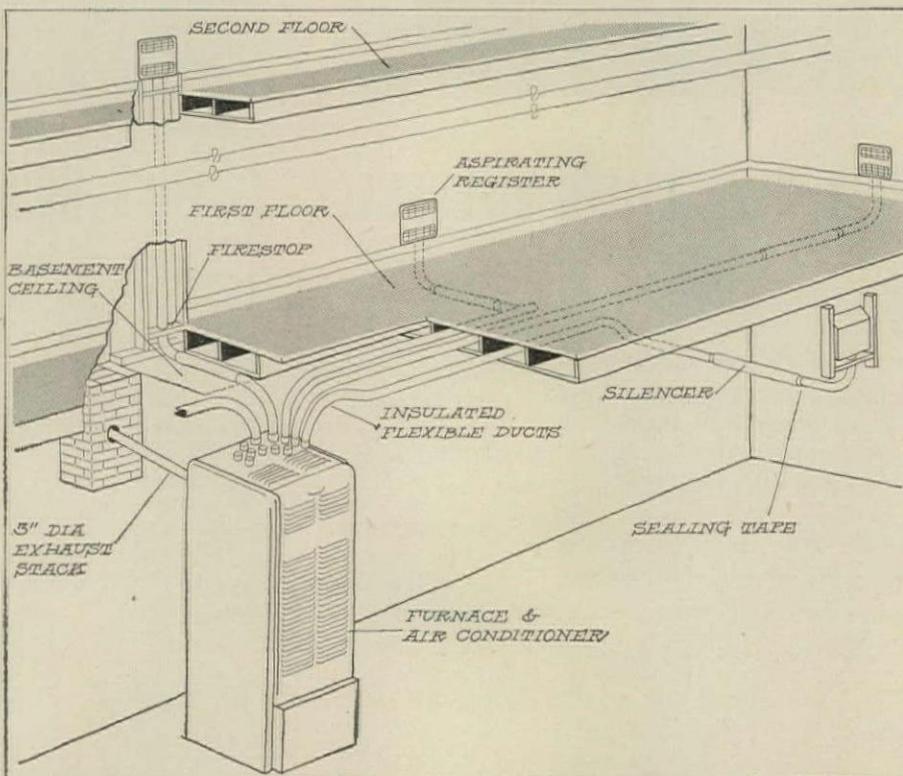


DETAIL shows how beam is formed, and how floor joists frame into lower flange.

### Built-up beam saves Andy Place \$45 a house

It is used to make a clear 24' span over a two-car garage entrance in the lower-level of a hillside house. Andy Place's engineer, Bruce Fast, designed the glue-nail beam to support floor joists, exterior wall, and roof load above it. In-

stalled cost of a steel beam that would do the same job would be about \$80, according to Fast. Plywood, select structural Douglas fir, glue and nails for the beam cost about \$20; labor (for fabrication and erection) about \$15.



TUBULAR DUCTS snake out from bonnet of furnace and a/c unit to room registers.

### Revolutionary idea aims to cut heating costs

Flexible 2" diameter ducts that can be installed almost as fast as BX cable carry jets of very hot air to mixing registers in this new heating system.

The furnace pushes out only one quarter the normal volume of air, but at four times—about 350 F—the normal temperature rise and at consider-

ably higher pressure. Registers mix enough room air with the hot blast to furnish the right volume of air at the right temperature. The flexible ducts have built-in silencers to cut out noise at the register. BTU Industries, Englewood, N.J. developed the system, already okayed by UL and AGA.

### Technology briefs

**A new insulating foam concrete** is "so light it floats, so fireproof an acetylene torch can't hurt it" says the manufacturer. In Pacific, Mo., three men built a model house in three days by precasting panels with the new foam concrete. It is claimed that construction costs were cut 20%. Precast panels used in walls and roof are joined by aluminum T's and rest in channels at the sill. Wiring is cast right in the panel. Called *Calsi-Crete*, the material is made by Continental Materials Corp, Chicago.

**New plastic foaming method** promises to make it much easier to foam urethane at the site. There is still no really easy way to foam insulation at the site, but the Mobay Chemical Co of Pittsburgh has developed a one-step system that eliminates most of the pre-mixing and curing period that urethane foam has required. A new combination of catalysts, using metallic compounds as key ingredients makes the one-step process possible. Initial use will be by the furniture industry.

**Heat gain (or loss)** through your windows is easy to calculate with a new slide rule just issued by Libby-Owens-Ford Glass Co, Toledo. One slide gives heat gain values for certain latitudes, dates, hours of the day, and six different types of glazing. Another slide gives factors for conducted and convected heat gain from temperature differentials. For copy send 50¢ to LOF, 608 Madison Ave, Toledo.

**More swimming pool ideas** and engineering details for many of the most modern swimming pools in many countries are given in a new book, *Modern Swimming Pools of the World*, by Dr Dietrich Fabian of Bremen, Germany. There are 181 pool pictures, 22 of them in color. \$10. For copy write to National Pool Equipment Co, Lee Hwy, Florence, Ala.

**The "Privazoning" idea**—combining bedroom and bath space—is explained in detail for builders and architects in a new 64-page manual. A dozen sample floor plans are shown. \$3 a copy or \$2 each in lots of 25 or more. Privazone Council of America, Associations Bldg, Washington 6, D.C.

**If you use water base paints**, here is a new technique to restore nylon brushes hardened with either polystyrene-butadiene or polyvinyl acetate paints. First, soak the brush in a commercial cleaner. Work off softened paint with a wire brush. Then mix up a 15% solution of trisodium phosphate (you can get it in most paint stores.) Suspend the brush in it up to the ferrule, bring solution to a boil, and boil until paint softens. Brush out paint and wash brush. /END

A SPECIAL MESSAGE FOR HOUSE & HOME ADVERTISERS

Start planning now for HOUSE & HOME'S  
Fifth Annual Home Merchandising Reference Issue

# HOW TO SELL QUALITY IN THE MODEL HOME

May 1959

If you are promoting the quality or design or long life or consumer acceptance of your product, you will find this issue right down your alley.

If you are selling quality as well as price, you will find the editorial environment of this issue perfect for your selling message.

If you are interested in selling the upgraded housing market now swelling to enormous size, you will find this issue a powerful support for your selling aids and your total selling efforts in this market.

Reservation dates:

|                  |               |
|------------------|---------------|
| 4-color & covers | Mar. 12, 1959 |
| 2-color & B&W    | Mar. 19, 1959 |

Closing dates:

|                  |               |
|------------------|---------------|
| 4-color & covers | Mar. 19, 1959 |
| 2-color & B&W    | Mar. 26, 1959 |

## House & Home

housing's only industry magazine  
Time-Life Building New York 20, N.Y.

## What the leaders are doing



**COMPONENT PLUMBING WALL** shows quality of workmanship so prospect can't miss it.



**FOUR HOSE BIBS** are attached to lawn sprinklers to show ease of sprinkling.



**DOUBLE-GLAZED WINDOW** "has four panes, ma'am, but only two to wipe in one sweep."

## An 'open' house opens eyes wide to quality

The prospect who visits this Place Homes model, which is left unfinished for demonstration purposes, cannot miss the quality products and work-

manship. Here you see what happens when a housewife steps into the South Bend model and gets the sales message with her own eyes.



**IN-THE-WALL PRODUCTS**, unseen in most models, are important sales points here.



**SCRATCH-PROOF COUNTERTOP** is a bigger hit when prospect gets a chance to test it.



**MOOD MUSIC** is provided from the intercom when the time comes for closing the sale.

## Here are five ways to save on paper work

**"Make your customers happy** by giving them detailed electrical plans. We make quarter-inch scale plans showing all electrical outlets in our basic house. We send two copies to the buyer, who makes any changes and returns one copy. This avoids all disagreement over costs for changes or mislocation of outlets and frees our electrician from time-consuming contact with buyers."—*Robert A. Fox, Plymouth Meeting, Pa.*

**"Stock control** with a color-coded card system saves us money many ways. Our perpetual inventory cards give us a complete picture of our materials in a few minutes. It prevents unneeded orders, tells us when to make group purchases for quantity discounts, lets us maintain inventory at a minimum, and suggests a time to move 'dead' items that often can accumulate at a fast rate."—*Bill Beck, Odessa, Tex.*

**"Eliminate lien waver costs** by using a rubber stamp on the back of checks to subcontractors and employees. We use the first of these two stamps on checks to subs, the second to employees.

"BY ENDORSEMENT, THE UNDERSIGNED HEREBY WAIVES AND RELINQUISHES ALL LIENS AND CLAIMS OF LIENS WHICH HE HAS OR MAY HAVE AS A RESULT OF MATERIALS FURNISHED AND/OR LABOR PERFORMED UNDER SUB-CONTRACT PRIOR TO THE BILLING ATTACHED AND AS TO PROPERTY AND BUILDINGS DESCRIBED ON SAID BILLING, AND HEREBY CERTIFIES THAT THERE ARE NO BILLS FOR LABOR OR MATERIAL UNDER SAID SUB-CONTRACT UNPAID AS OF THE DATE OF SAID BILLING."

"BY ENDORSEMENT, THE UNDERSIGNED HEREBY WAIVES AND RELINQUISHES ALL LIENS AND CLAIMS OF LIENS WHICH HE HAS OR MAY HAVE AS A RESULT OF LABOR PERFORMED PRIOR TO THE END OF THE PAY PERIOD COVERED BY THIS CHECK AND AS TO PROPERTY AND BUILDINGS DESCRIBED ON TIME CARDS RECEIPTED SIMULTANEOUSLY WITH THE DELIVERY OF THIS CHECK."

Since our lenders do not ask us now for lien wavers or paid bills before giving us our construction money, this system saves us time and trouble."—*Ralph O. Taylor, Kansas City, Mo.*

**"FHA and VA specifications** can be prepared easier by putting the information on specially printed tracing paper. We reproduce the government spec forms on the paper, including everything except US printing and form numbers. As we decide on materials, we merely fill in the blanks, then send this tracing out with drawing for blue-printing. This is an easy way to keep track of specifications as you go along, gives you readable specs at low cost, and cuts secretarial work in preparing specs for FHA and VA.

"We also use tracing paper to sketch plans fast and accurately. We buy cross-ruled paper with 12 lines per inch. Each 1/12 inch equals 4", on a quarter-scale drawing. The width between two lines equals 4", just the amount needed for walls. This saves time making changes buyers want."—*J. S. Norman, Houston.*

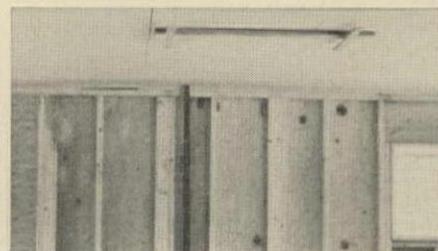
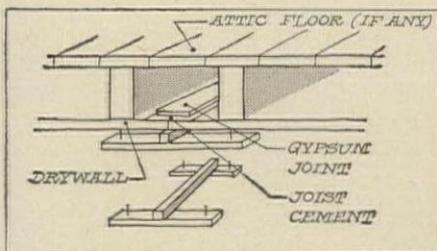


## Recessed doorway and shutters style a brick house

Three smart low-cost details lend strength to the looks of brick houses built by Modular Homes in St. Louis.

Shutters are nailed direct to sheathing instead of fastened over brick. Thus they look integral with the window (and

will weather better recessed 4"). The wide front door is also recessed about 2', making the brick look even more substantial. Plywood used over window and door openings cuts costs of needless masonry work.



## Drywall need not be cut if ends don't meet at joists

The drawing and photo above show how to save labor and material costs putting up drywall on ceiling joists.

Bob Schmitt of Berea, Ohio, NAHB Research Institute chairman, explains: "Don't cut the drywall when it does not end at a joist. You don't need to

nail its edge to the joist. Butt two sheets and block above them with a piece of gypsum and joint cement. Nail the arms of the device to the joists. This depresses the butted ends. When the cement hardens, the depression finishes off to a flush surface."



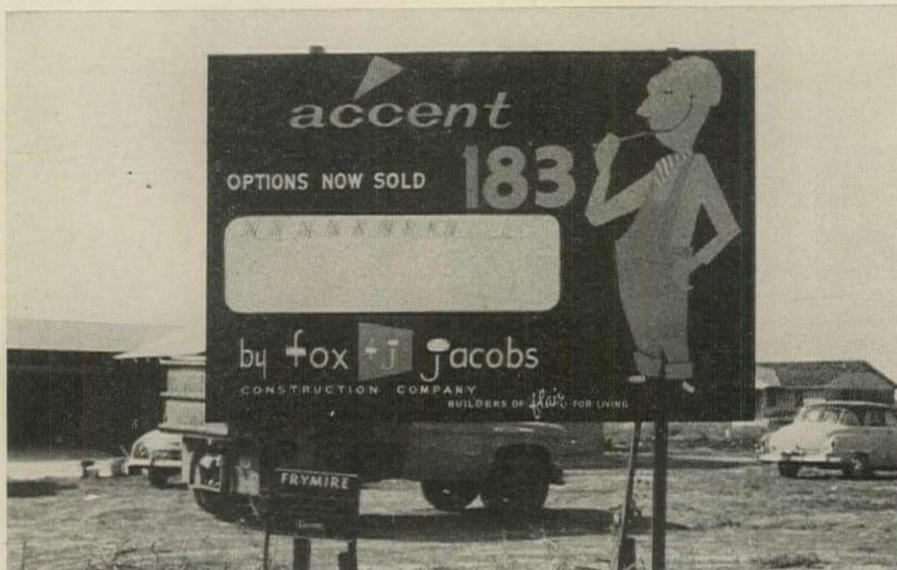
## Carnival brings out crowds to builder's model homes

This fairground was set up by Streamwood Home Builders on its big parking lot opposite six furnished models in Streamwood, Ill. Proceeds went to the local fire department.

Other builders who have taken part in charity drives include Charles Cheez-

en, who brought Miss America to St. Petersburg, Fla., to promote Easter Seals at his tract, and Dave Edmunds of Clearwater, Fla., who aided the March of Dimes by having visitors to his model houses pitch dimes into a pool and then matching their donations.

continued on p 154

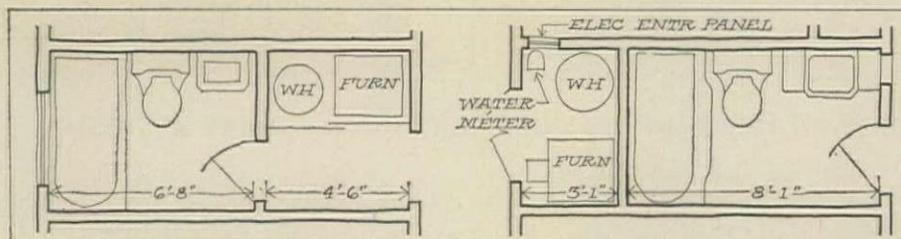


**Options to buy led to \$8 million in sales in 21 days**

If you doubt the value of a reputation for quality building, note this fact: 285 Dallas families paid \$25 each just to get in line to buy houses in Fox & Jacobs' latest development.

Buyers showed up long before these leading quality builders were ready to build their new lower-price \$14,000 to \$18,000 houses. So F&J told the eager

prospects they could pay \$25 for the right to buy when designs were ready. The number of options sold was posted on the sign weekly. Result: F&J took in \$6,675 in non-refundable advance option fees. Four out of five option holders bought houses. On opening day 350 houses were sold, and the 500-house tract sold out in three weeks.



**An outside utility room can give you six advantages**

The two drawings above show how Fort Wayne Builder John Worthman improved his old bath plan (left) by putting the water heater and furnace in an outside closet.

New plan (1) adds space in the

bath, (2) saves cost of venting through the roof, (3) lets heater draw air from outside, (4) cuts down on heater noise inside house, (5) provides more safety in the unlikely case of explosion, and (6) makes servicing easier.

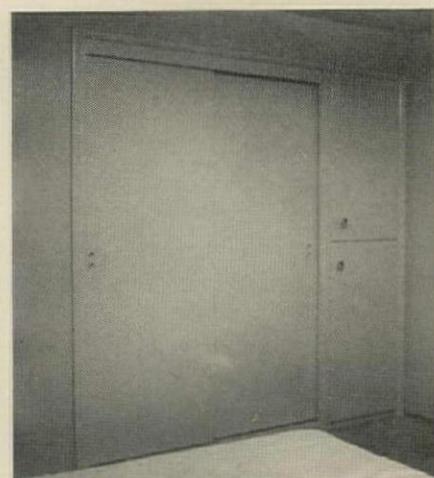
**ATTENTION  
BUILDING TRADES**

**This House Which You Are Building  
Will Soon Become Someone's Home**

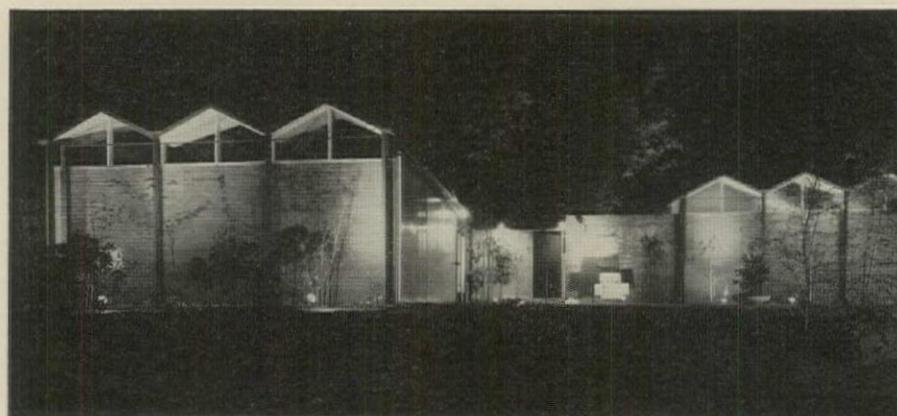
To the best of our ability we have procured good materials of specified grade for this home.  
Our entire organization, we believe, makes a sincere effort to produce a good product.  
The putting together of these materials and the execution of the architect's plans is in your hands.  
The responsibility for doing a good job rests with you.  
The extent to which you meet this responsibility determines to a large degree the satisfaction and enjoyment which some family will find in making this house their home.  
Careless work or damaged materials (even though minor and not actually constituting a structural defect) may cause unhappiness to the man and woman who will be the future owner.  
Home owners like to take pride in their home and we know that you like to take pride in your work.  
In the interest of these future home owners and in the interest of the trade to which you belong and in the interest of helping us build a product with which families will be happy, we ask your co-operation.

**American Housing Guild**

**Quality workmanship** is encouraged by American Housing Guild in San Diego with this sign posted in every one of its houses under construction.



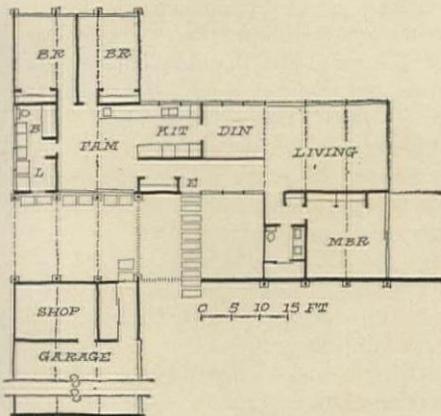
**Two-door cabinet** next to big bedroom closet adds a lot of appeal "to women who like to be well organized," says Builder Herman Sarkowsky, Tacoma, Wash. He puts them in bedrooms in all \$16,000-and-up houses.



**House of many gables draws 50,000 to builder's development**

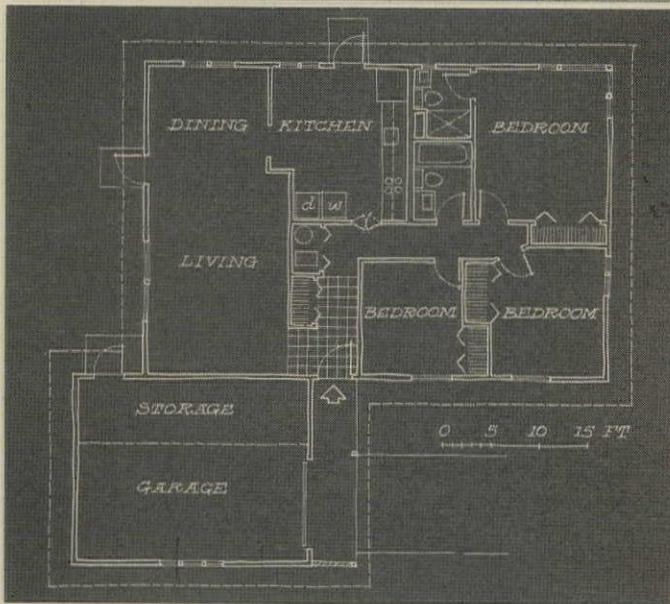
This night-lighted model designed by Architects Donald Blair and William L. Fletcher was built by Dwight Haugen to help promote his Portland,

Ore., development. Newspaper publicity and tie-in ads by materials suppliers helped draw 50,000 visitors to Haugen's big planned community, Os-

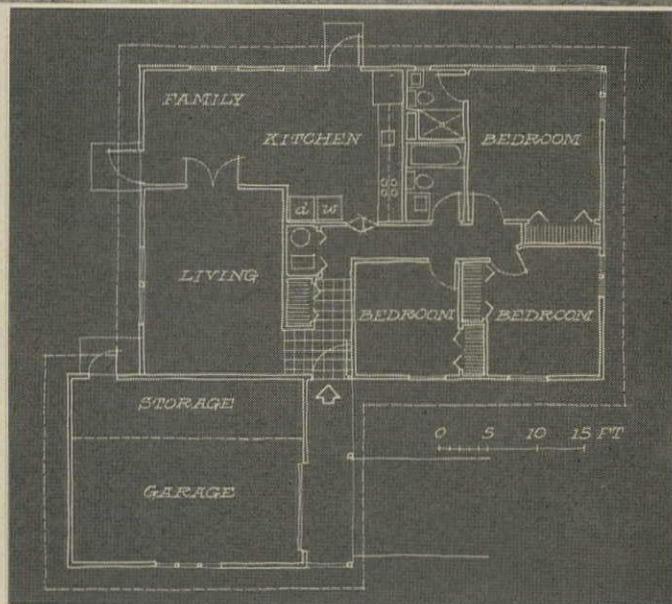


wego Heights. The 7'3"-wide gables can be glazed because they are not load-bearing. Landscaper: William Teuffel; decorator: George M. Schwartz.

continued on p 157



OPTION 1 has long living-dining room, smaller kitchen.



OPTION 2 has big family-kitchen area, smaller living room.

## Which plan for this best seller is more popular?

Answer: Option 1 is outselling Option 2 four-to-one because it has two separate dining areas.

The house is the best-selling model of Fischer & Frichtel in St. Louis. Says

Sales Manager Jack Brizius: "People almost always prefer a house that has two dining areas, each with space for a full table.

"They also like the L-shape plan

of this model. People are tired of a rectangular box. They like the long sweep of space of the living-dining area from front to back. And they like the central entry and oversized garage."/>



LIVING-DINING AREA in the most popular model is 30' long.

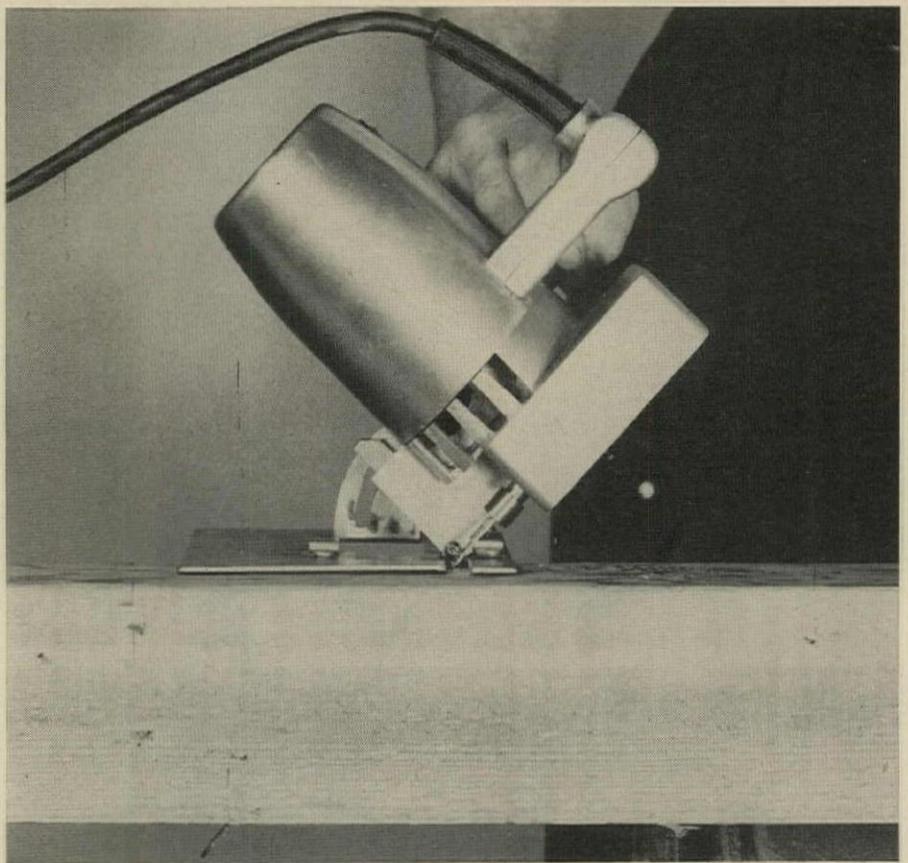


SECOND DINING AREA is in kitchen, just opposite dining room.

## POWER TOOLS

### Sabre-jig saws

This is the newest and most versatile saw type. With the right blade, heavy-duty production models can cut up to 4" lumber or 1/4" steel sheet, as well as plastics, rubber, asbestos board, non-ferrous metals, etc. They can make blind plunge cuts, can cut curves or corners, perfect circles or miters. They cut with a 1/2" to 1 1/4" reciprocating or orbital stroke at about 3000 strokes per minute. Heavy-duty models tend to run slower, have all ball, needle, or roller bearings, more powerful motors.

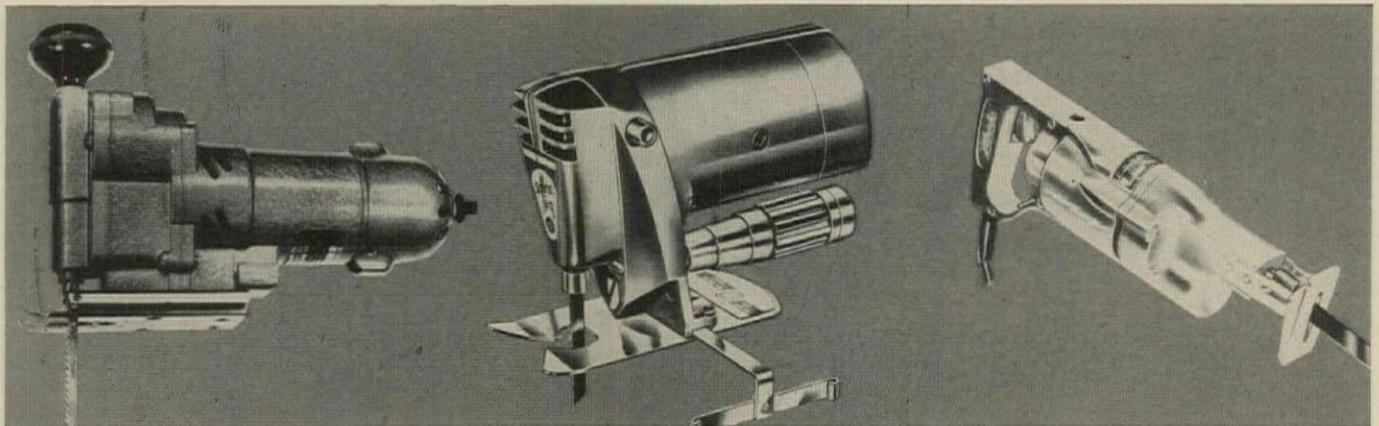


**WEN MODEL 909** will cut a 45° miter in a 4x4, cut through a 6" log, cut sheet metal, pipe, or bar stock. Seven blade types avail-

able. Price: \$44.95.

Wen Products, Chicago.

For details, check No. 5 on coupon, p 186



**FORSBERG NO. 2 WHIZ-SAW** is new heavy-duty model with 3-amp, 1/6-hp motor, gives 2200 1 1/4" strokes per minute. Unit cuts wood, plastics, etc. to 2 1/2" thick. Price: \$130.

Forsberg Mfg Co, Bridgeport, Conn.

For details, check No. 6 on coupon, p 186

**MANNING BOWMAN** jig saw has a 2-amp motor, makes 2800 5/8"-strokes per minute. Orbital action. Sole plate allows cutting flush to wall. Price: \$29.95.

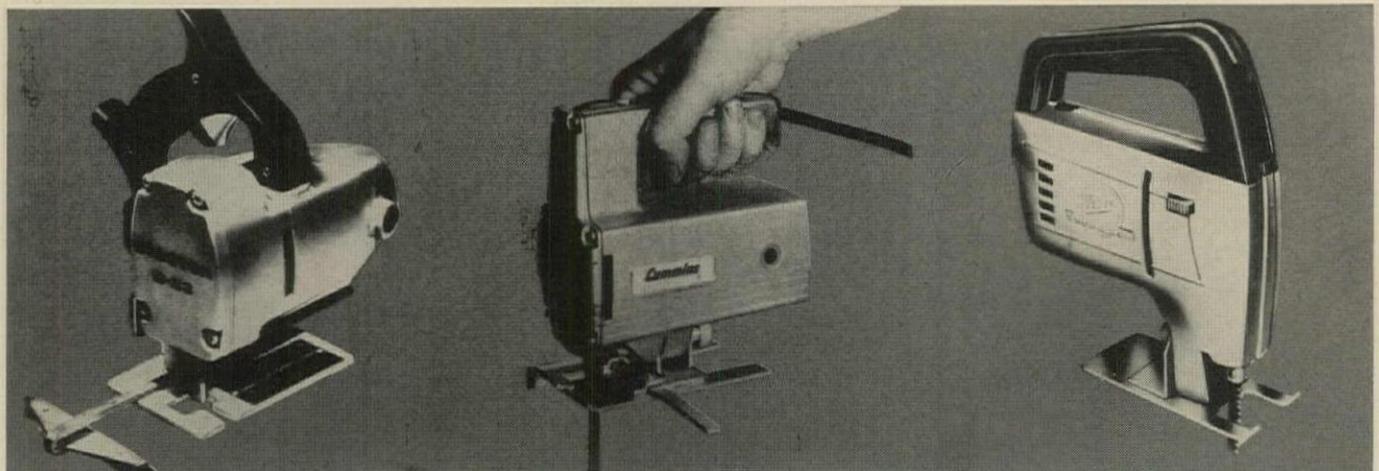
Manning Bowman, Boonville, Mo.

For details, check No. 7 on coupon, p 186

**MILWAUKEE SAWZALL** is an extra heavy-duty (1/3 hp) hacksaw, makes 2250 3/4"-strokes per minute. Cuts wood, metal, plaster, pipe, transite, etc. Price: \$94.50 with case.

Milwaukee Electric Tool Corp, Milwaukee.

For details, check No. 8 on coupon, p 186



**DISSTON D-23 SAW** cuts 1/4" steel plate, 1/2" aluminum. 3-amp motor gives 3800 orbital strokes per minute. 9 needle and 3 ball bearings. 9 blade types. Price: \$98.50.

H. K. Porter Co, Philadelphia

For details, check No. 9 on coupon, p 186

**CUMMINS SABRE-JIG SAW** cuts up to 2" lumber at 3500 1/2"-strokes per minute, has calibrated bevel quadrant and rip guide. Weight: 5 lb. Introductory price: \$39.95.

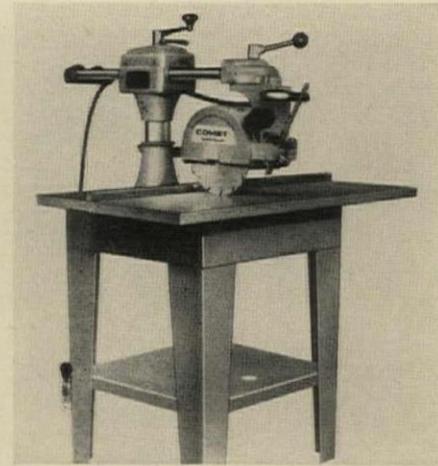
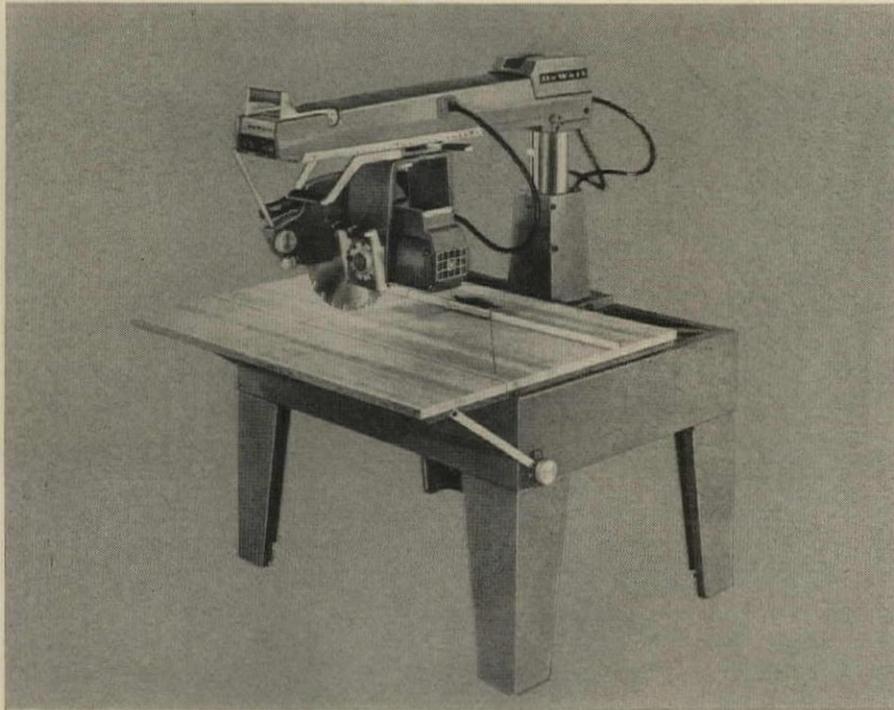
John Oster Mfg Co, Milwaukee.

For details, check No. 10 on coupon, p 186

**THOR NO. 441 JIG SAW** has ball and needle bearings, 3.1-amp motor, 3400 1/2"-strokes per minute. Tilting base indexed to 45°. Fan vent is chip blower. Price: \$39.95.

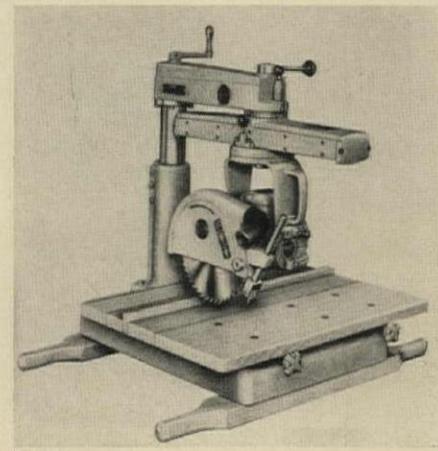
Thor Power Tool Co, Chicago.

For details, check No. 11 on coupon, p 186



**NEWEST COMET MODEL** is 1-hp, 9" saw, uses two round arms. Double spindle takes tools at either end. Unit will cross cut 1"x12", rip to center of 50" panel. \$239. Comet Mfg Co, Los Angeles.

For details, check No. 13 on coupon, p 186



### Radial-arm saws

This type has become the major in-shop cutting tool for the housing industry since Raymond DeWalt invented it in 1922. Radial-arm saws are precise, versatile, and work above the stock where all cuts are in sight. These saws can cross cut, rip, miter, bevel, dado, plough, rabbet, tenon, shape, or rout, and can switch readily from one to the other.

**DEWALT'S NEW IMPERIAL** has pushbutton operation, power feed, power elevation, in 5-, 7½-, and 10-hp sizes with medium and long arms, 16" and 20" blades. \$1200 to \$1700.

AMF-DeWalt, Lancaster, Pa.

For details, check No. 12 on coupon, p 186

**DELTA 10" UNIT** can be carried about site. Models range from 1 to 7½ hp, with blades of 9" to 20". All have double over-arm to keep blade centered. Price of saw shown: \$398.

Rockwell Mfg Co, Pittsburgh.

For details, check No. 14 on coupon, p 186



**MODEL 858 SKILSAW** has handle on top for swing-through cuts, floating blade guard, fast blade changing. Price of 8" 858: \$120. Other models in sizes from 4¼" to 8¼".

Skil Corp, Chicago.

For details, check No. 15 on coupon, p 186

**DISSTON DISCUS** is one of two new 6½" saws with 6700-rpm motors, helical gears. Defender model has antifriction bearings. Prices: Discus, \$54.50; Defender, \$69.50.

H. K. Porter Co, Philadelphia.

For details, check No. 16 on coupon, p 186

**PORTER-CABLE MODEL 146A** is a heavy-duty 6½" saw. 10-amp motor gives 4000 rpm under load. Helical gears, self-adjusting brushes. Weight: 12 lb. Price: \$69.50.

Porter-Cable, Syracuse, N. Y.

For details, check No. 17 on coupon, p 186

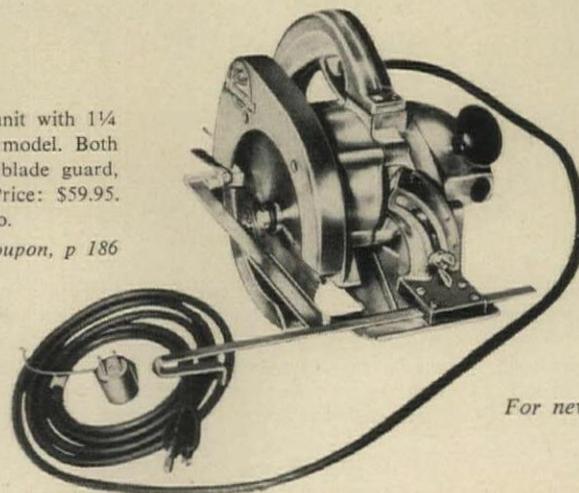
### Portable circular saws

This saw type has in the last ten years become the standard on-the-job cutting tool. The news for 1959 is improvements: lighter but more powerful motors, more versatility, kickproof clutches, etc. Usual job sizes are built to miter 2" lumber but larger or smaller saws are available.

**THOR MODEL C6B** is a 6½" unit with 1¼ hp, 5500 rpm motor. C8 is 8" model. Both have safety clutches, rip guide, blade guard, easy depth and angle setting. Price: \$59.95.

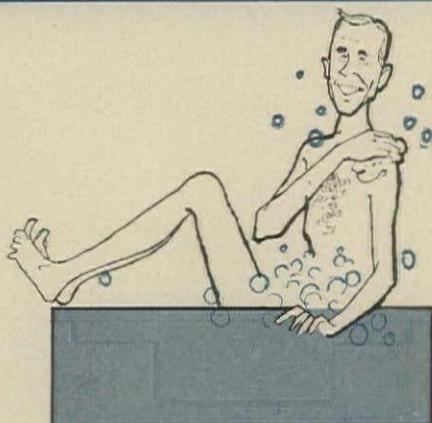
Thor Power Tool Co, Chicago.

For details, check No. 18 on coupon, p 186



For new drills see p 162

there's  
an **AllianceWare**<sup>®</sup>



**DADDY-LONGLEGS**

The man who rides tall in the tub needs leg room . . . AllianceWare design means more bathing area, thanks to deeper, straighter draw.



**BROTHER-IN-LAW**

Squeeze in an extra bathroom for the guest who came to dinner and stayed. AllianceWare double apron tub permits two baths in the space of one!



**M-M-M-MOMMY!**

No one deserves AllianceWare more than she . . . so permanently smooth and beautiful . . . easy to clean, acid and stain resistant.

Now . . . AllianceWare offers you fast-selling,  
*Slip proof! 100% Safer*

An exclusive process makes AllianceWare tub bottoms twice as safe! AllianceWare's high-fired floor finish not only reduces the danger of bathtub accidents, but is just as comfortable and easy to clean as regular porcelain enamel surfaces. Tested and approved for superior performance by York Research Corporation, Stamford, Conn.

HERE'S PROOF THAT ALLIANCEWARE CUTS INSTALLATION MAN HOURS BY 50%



1. One man can install instead of two. Reason: AllianceWare bathtubs are fashioned from durable steel . . . stronger than cast iron but easier to handle. This better product weighs but a third as much as cast iron!

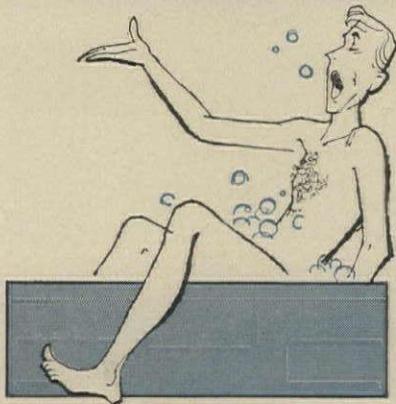


2. Four simple supports to put in . . . no special flooring required. Porcelain-on-steel construction eliminates the need for elaborate, costly construction required with other type tubs. Meets all FHA specifications.



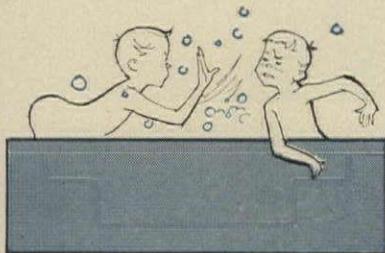
3. Patented wall-hung installation. Exclusive anchor lugs hold the tub firmly in position, absolutely eliminating separation of bathtub from wall after it is installed. 1" wall flange eliminates seepage into wall.

# bath tub for every requirement



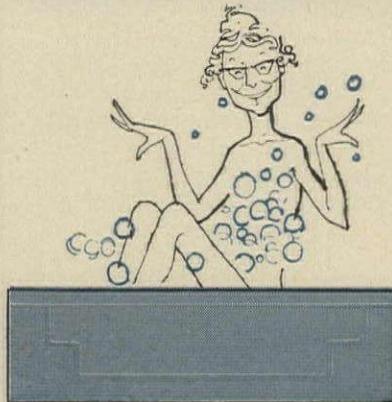
#### BARE-A-TONE

Save that note!—bank note that is! The pocketbook choir always sings praises of AllianceWare's low, low prices.



#### DEAD-END KIDS

Saturday night used to be fight night until their own 42" long tub put them into the splash of things . . . good for Rover, too!



#### GRANDMA BRITTLE

A lady can fall down and break her harrumpty-rumpty unless she's stepping into an AllianceWare tub with slip-proof bottom.

## quick-to-install luxury bathtubs!

ALLIANCEWARE BATHTUBS MAKE COMPLETE BATHROOM INSTALLATIONS FASTER, EASIER, MORE PROFITABLE THAN EVER!

AllianceWare offers you a complete range of bathroom fixtures in a wide variety of styles and colors . . . all priced to suit any budget, satisfy any taste. Porcelain-on-steel and vitreous china lavatories plus water closets spark your complete bathroom sales . . . make your home selling fast, easy and more profitable. AllianceWare fixtures are distributed by plumbing wholesalers, installed by plumbing contractors.

AllianceWare Inc.  
for fast deliveries 3 modern plants strategically located  
Alliance, Ohio • Kilgore, Texas  
Colton, California  
an amp subsidiary



#### AllianceWare is advertised BIG for you!

Home-builders and homemakers will be seeing and reading about AllianceWare in full color, full-page advertisements appearing in leading consumer shelter publications.

# AllianceWare®

## New products

starts on p 158

### DRILLS

Portable drills have been in use longer than any other portable power tool, but each year there are new models and new refinements. Major developments have been more power, lower weight, easier maintenance, more versatility. Chief sizes in common use (based on capacity in steel) are 1/4", 3/8", 1/2", 3/4". Smaller sizes have pistol grip (for better balance), larger ones have saw or spade grip (for greater pressure).

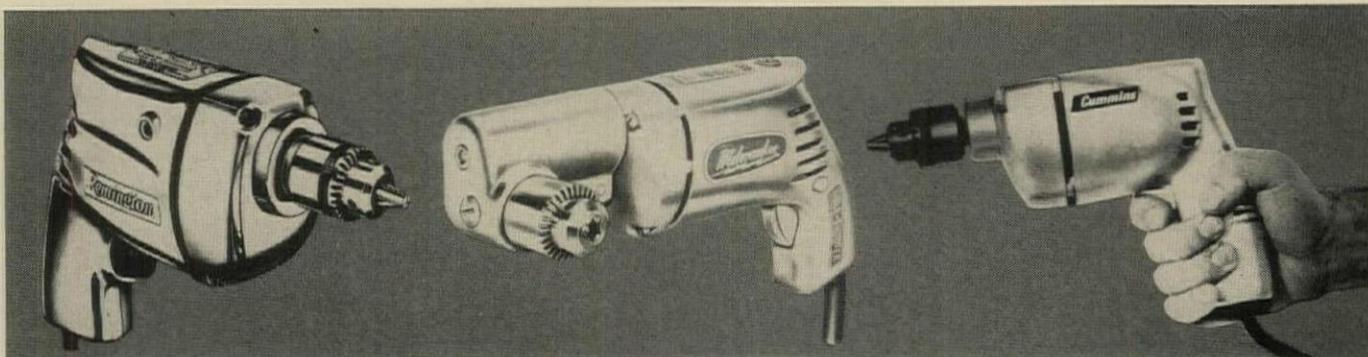


**BLACK & DECKER'S U-21-A** will drill 1/2" holes in steel, 3/4" in masonry, 1" in wood, or hole-saw 2". Geared chuck takes 1/2" shank.

New drill weighs 7 1/2 lb, costs \$49.95. Black & Decker, Towson, Md.

For details, check No. 19 on coupon, p 186

### Seven new tools handle 1/4" to 3/4" bits



**REMINGTON 149DL DRILL** is new 1/4" model rated at 2.7 amps. Ball and self-lubricating bearings. Geared key chuck. Load speed: 1500 rpm. Weight: 3 lb. Price: \$29.95.

Remington Arms Co, Bridgeport, Conn.

For details, check No. 20 on coupon, p 186

**MILWAUKEE ALL-ANGLE DRILL** has a 3-amp, 1/4-hp motor with 1/4", 5/16", and 3/8" chucks. Angle unit swivels 360°. Weight: 4 1/2 to 5 lb. Price: \$67 to \$72.

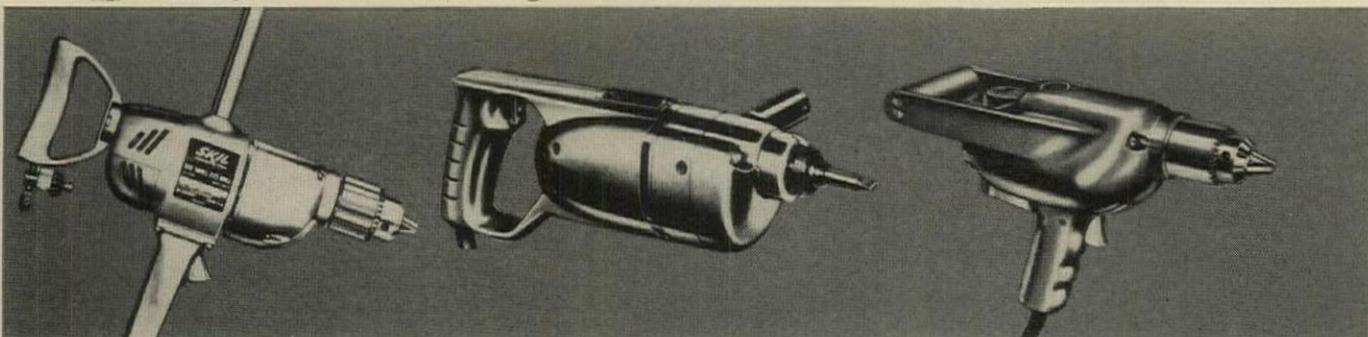
Milwaukee Electric Tool Corp.

For details, check No. 21 on coupon, p 186

**CUMMINS BALL-RITE 3/8" DRILL** will handle carbide-tipped bits in concrete, will drill 3/8" in steel, 1" in wood. No-load speed: 1000 rpm. Weight: 3 3/4 lb. \$39.95.

John Oster Mfg Co, Milwaukee.

For details, check No. 22 on coupon, p 186



**SKIL MODEL 2123** is a heavy-duty 3/4" drill capable of deep boring in timbers with wood augers. Geared key chuck. Motor is 9-amp. Unit weighs 16 1/4 lb. Price: \$125.

Skil Corp, Chicago.

For details, check No. 23 on coupon, p 186

**MILLERS FALLS DRIVER-DRILL** works as 3/8" drill or power screwdriver. 2-amp motor. No-load speed: 275 rpm. Quick-change chuck takes bits or geared key chuck. \$39.95.

Millers Falls Tools, Greenfield, Mass.

For details, check No. 24 on coupon, p 186

**THOR 430 1/2" DRILL** has a 5.5-amp motor, all ball bearing, that gives 650-rpm no-load speed, 425 rpm full-load speed. Unit weighs 8 3/4 lb, lists at \$46.50.

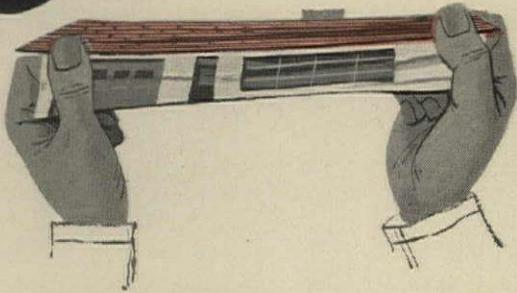
Thor Power Tool Co, Chicago.

For details, check No. 25 on coupon, p 186

For new sanders see p 164

# BARRETT

## RANCHLINE<sup>†</sup> SHINGLES



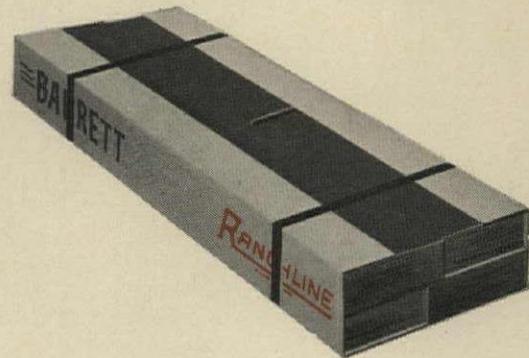
**1** STRETCH THE APPEARANCE OF THE HOMES YOU BUILD. Your ranch and split-level homes look longer and lower because a Barrett "Ranchline" Shingle Roof has 50% fewer vertical lines. The accent is on the horizontal—two 18" tabs on a 36" strip-shingle, instead of three 12" tabs.



**2** THEY GIVE YOU A STRONG SELLING POINT. Your salesmen want talking points, and "Ranchline" Shingles give them a plus at no extra cost. These are the only extra-long shingles made with double-coatings of asphalt and mineral surfacing for longer life.



**3** FASTER APPLICATION MEANS COST SAVINGS FOR YOU. Because of their two-tab construction, "Ranchline" Shingles can be nailed on faster, lowering the applied cost to the roofing contractor—and to you.

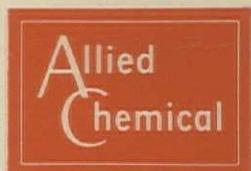


**4** THEY'RE BACKED BY THE FAMOUS BARRETT NAME. You and your customers know Barrett as "the greatest name in roofing." Take advantage of this reputation by putting Barrett Roofs on the homes you build.

THE SHINGLES THAT MAKE ROOFS LOOK LONGER AND LOWER!

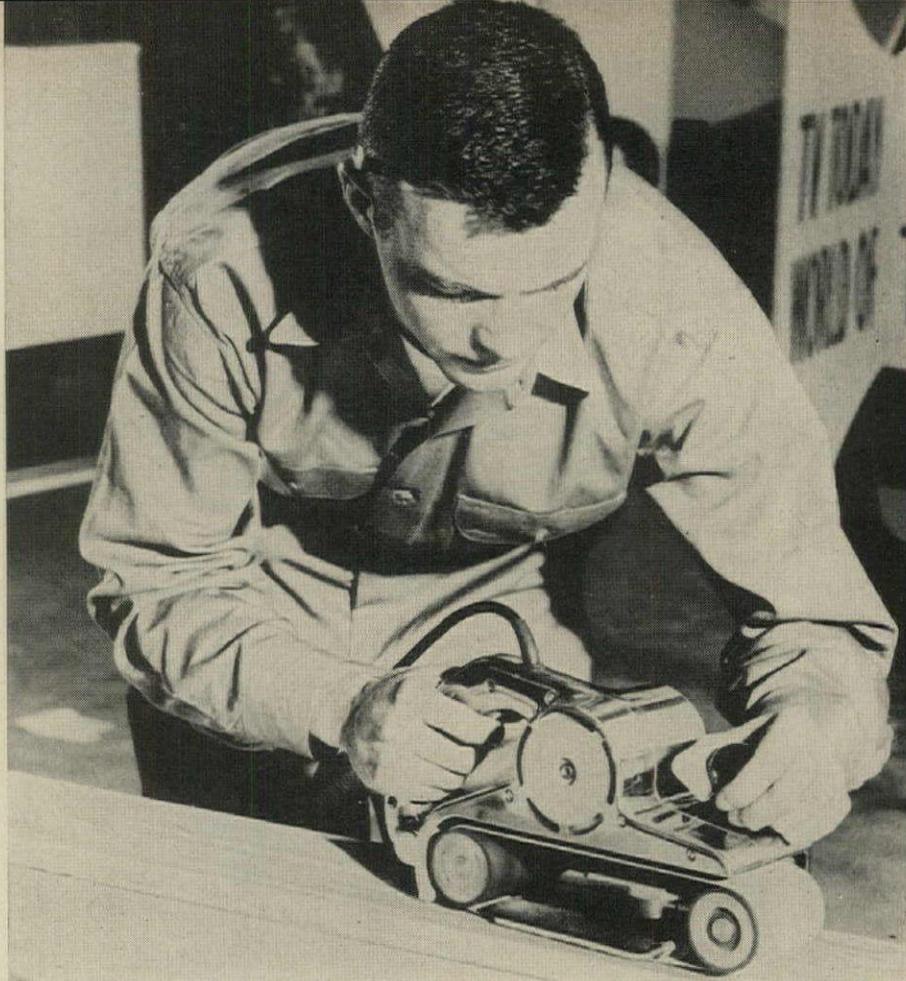
<sup>†</sup>Trade Mark of Allied Chemical

**BARRETT DIVISION**  
40 Rector Street, New York 6, N. Y.



## BELT SANDERS

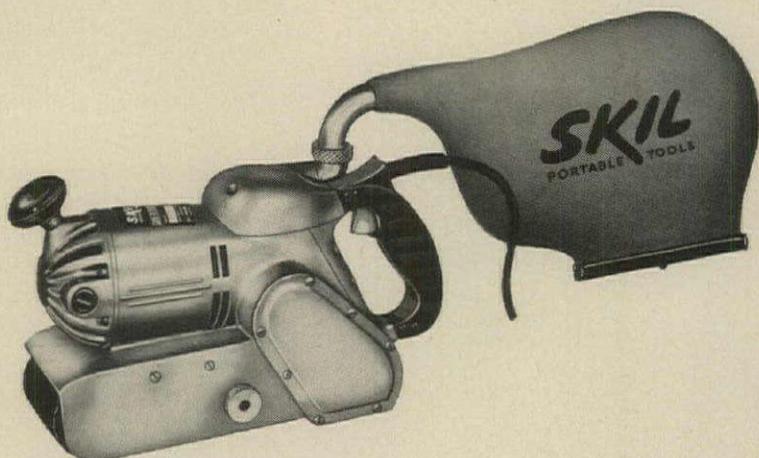
These are of most service in production when they give good wood removal and fine finish. They should also stay cool during long runs. These are basic requirements for portable finishing equipment. The three models shown here are all brand new. Also shown: a precision heavy-duty router and a brand new idea in tools—a mechanical paint remover.



**BLACK & DECKER DUSTLESS** belt sander attaches to any industrial or domestic vacuum-cleaner. Flush side permits sanding up to

vertical surface. 3" belt. Price: \$98 to \$103. Black & Decker, Towson, Md.

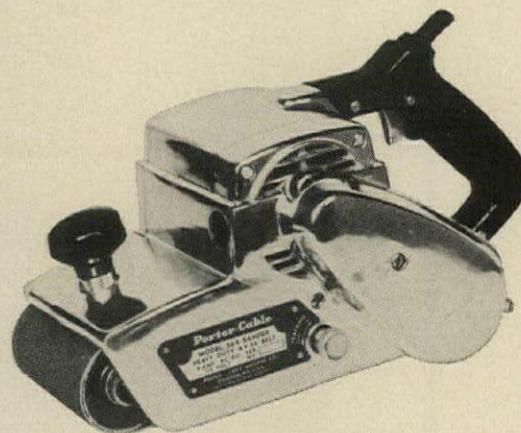
For details, check No. 26 on coupon, p 186



**SKIL MODEL 324** heavy-duty unit takes a 4½" belt, is equipped with a dust collector. Clean sanding area is claimed to give finer finish, faster cutting. Also available as Model 320 without dust bag. Price: \$195.

Skil Corp, Chicago.

For details, check No. 27 on coupon, p 186



**PORTER-CABLE MODEL 564** offers more power and sanding surface than others at its price, makers claim. 9-amp motor, 4"x24" belt, 22 sq in. surface. Speed: 1250 fpm. Weight: 14 lb. Price: \$99.50.

Porter-Cable, Syracuse, N.Y.

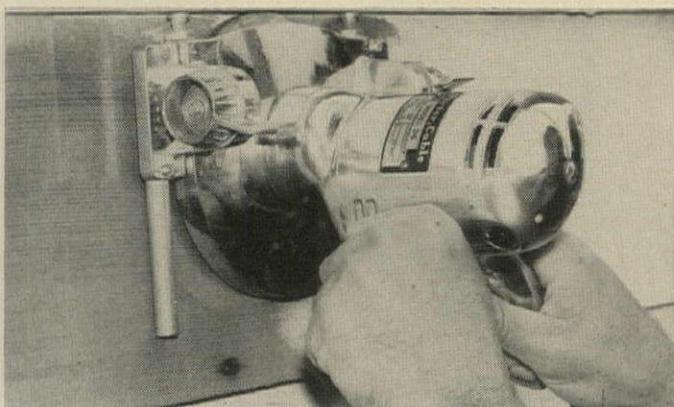
For details, check No. 28 on coupon, p 186



**STANLEY ROUTER** has new spotlight, chip blower, micrometer depth gauge, clamping lever, 3-grip handles to assure high precision, good visibility. ¾-hp model costs \$62.50; 1¼-hp model costs \$82.50.

Stanley Electric Tools, New Britain, Conn.

For details, check No. 29 on coupon, p 186



**PORTER-CABLE PAINT REMOVER** uses tungsten carbide discs and accurate depth gauge to give clean, controlled removal in one pass, will sand flush to vertical surface. 3.5-amp motor. Price: \$69.95.

Porter-Cable, Syracuse, N.Y.

For details, check No. 30 on coupon, p 186

For new generators see p 166

# Wood-Mosaic Laminated Hardwood Block Floors with new

## "DIAMOND LUSTRE" FINISH

*Baked on at factory  
under infra-red lamps*



405,000 sq. ft. of Wood-Mosaic Laminated Block floors, with the new "Diamond Lustre" finish, were laid in these two beautiful apartment buildings. The Dominion Plaza Apartments (above) and the Dominion Towers Apartments (below) Arlington, Va.



**"Now that's what I call a tough  
finish that can really take it!"**

**—George A. Snell**

"As a builder-owner of apartment buildings, I've always attached great importance to the one feature of the building that gets the greatest wear—the floor.

"Last year we built the Dominion Plaza Apartments. Laid 190,000 sq. ft. of Wood-Mosaic Laminated Block floors with the new "Diamond Lustre" finish. Today the finish on these floors is like new. No scratches, no chipping, not a sign of wear. Now that's what I call a tough finish that can really take it.

"We have just completed the building of Dominion Towers Apartments. Laid 215,000 sq. ft. of Wood-Mosaic block. I'm sold on Wood-Mosaic "Diamond Lustre" finish block floors. One of the best investments we ever made."

George A. Snell, President  
Snell Construction Corp.  
Arlington, Virginia



Wood-Mosaic Block Floors installed by Southeastern Floor Co., Bethesda, Md.

**Pay no more  
for the finest floor!**



## **Wood-Mosaic**

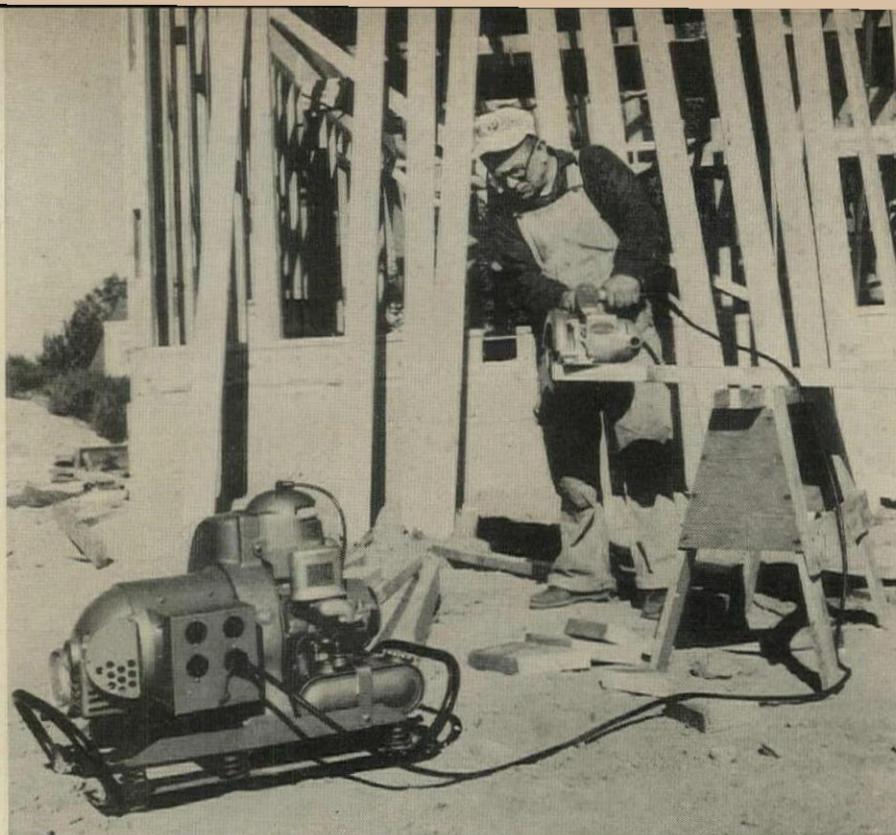
WOOD-MOSAIC CORPORATION, LOUISVILLE 9, KY.

WOOD-MOSAIC CORPORATION OF CANADA LTD., WOODSTOCK, ONTARIO

*Maker of the World's Finest Hardwood Floors since 1883*

## GENERATORS

These four tools give you power on the job before utility lines are in. Generators of all sizes are available from the industry, but units in the 1.5 to 10 kw range, preferably 115/230v, cover most housing industry needs. These units can be carried, moved on skids or wheels, or mounted in a truck, and will supply power for drills, saws, lights, heaters, etc.

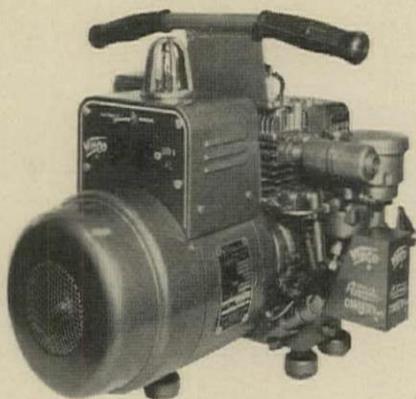


**NEW HOMELITE 3 KW UNIT** delivers 60 cycle, 115/230-v. current. 2-cycle gasoline engine. 4% voltage regulation, generous over-

load capacity. Weight: 140 lb. Price: \$555. Homelite, Port Chester, N.Y.

For details, check No. 31 on coupon, p 186

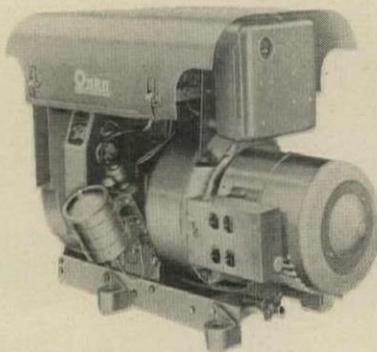
## Four ways to carry power to the job



**WINCO MITE** puts out 1.5 kw of ac power. Engine is 4-cycle Briggs & Stratton with recoil starter. Idling control saves fuel and wear. Weight: 89 lb. Price: \$343.

Wincharger Corp, Sioux City, Iowa.

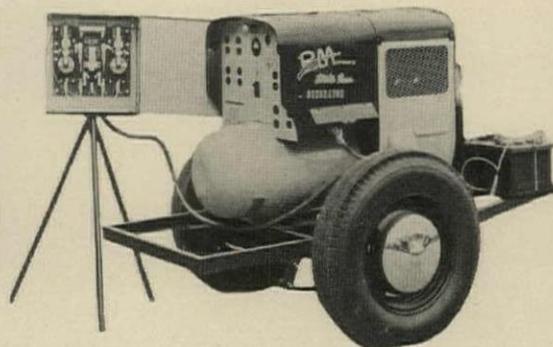
For details, check No. 32 on coupon, p 186



**ONAN 3 KW DIESEL UNIT** is air cooled. Engine is 4-cycle, 1-cyl. Generators come in 32, 115, 230 and 115/230 volt types. Weight: 470 lb. Price: \$1,075.

D. W. Onan & Sons, Minneapolis.

For details, check No. 33 on coupon, p 186

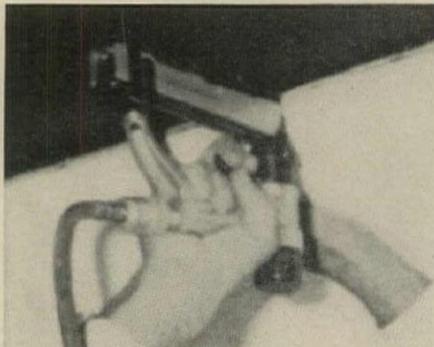


**PACIFIC MERCURY 10 KW UNIT** is mounted on a PM highway trailer, has automatic control to start and stop generator as tool is switched on or off. Price: \$1,974.50.

Pacific Mercury, Van Nuys, Calif.

For details, check No. 34 on coupon, p 186

## Air powers these fastening tools



**DUO-FAST AIR TACKER** is driven by a small air compressor, can be used to put up ceiling tile, insulation, building papers, etc. Takes various staple lengths. Price: about \$12.50.

Fastener Corp, Franklin Park, Ill.

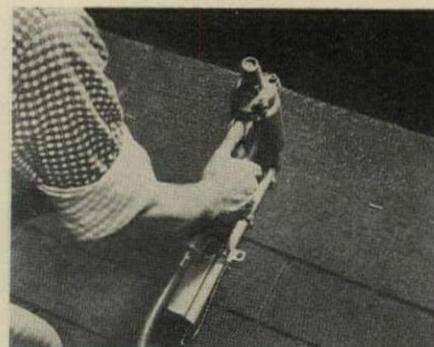
For details, check No. 35 on coupon, p 186



**BOSTITCH AIR TACKER** takes 3/16" to 9/16" staples in 105 to 210 staple loads. New model is latest in wide line of power and hand stapling equipment. Price: about \$70.

Bostitch, East Greenwich, R.I.

For details, check No. 36 on coupon, p 186

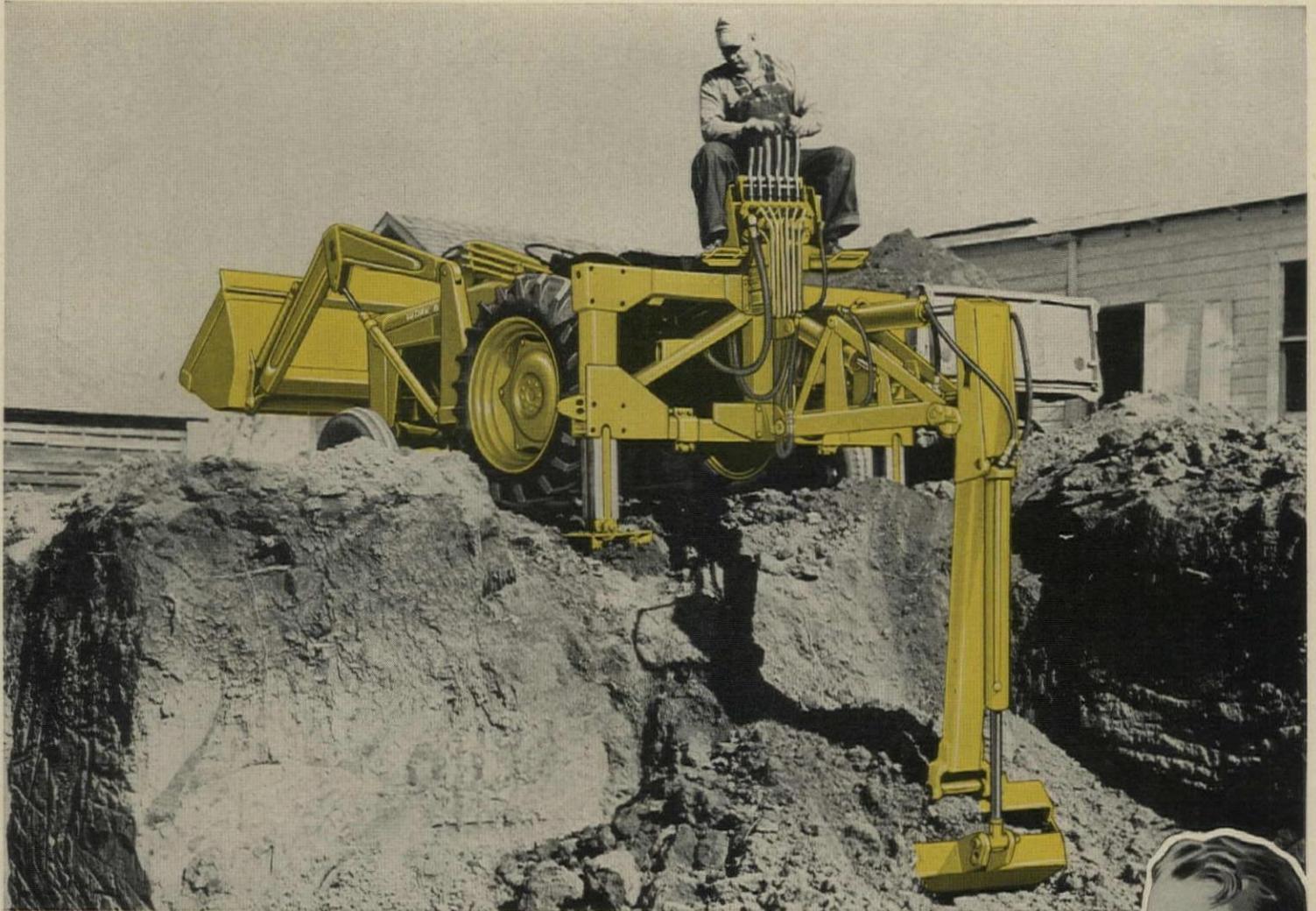


**SPOTNAILER MODEL OW** drives heavy-duty staples 1" wide that meet FHA standards for roofing, handles staples 1/2" to 7/8" long. Needs 100 psi air pressure. Price: about \$190.

Spotnails, Inc, Evanston, Ill.

For details, check No. 37 on coupon, p 186

New products continued on p 170



**M-F HAS THE Right Approach to EQUIPMENT FOR THE HOME BUILDER**



The Work Bull 202 with the Backhoe detached (you take it off or put it on in five minutes) and the M-F Scarifier-Scraper hooked up will scarify, level, back-fill, or scarify and level at the same time.



The Davis Backhoe is the only machine that will dig flush. 200° continuous operating arc lets you dig or dump to either side and never get cornered.

The jobs it does — and does so well on a home building site is why customer-proven Massey-Ferguson Industrial equipment turns so many marginal builders into profitable ones.

This Work Bull 202 (the only industrial tractor with a Ferguson system) and design-matched Davis Loader-Backhoe work together as a team, busy from start to finish — digging footings, gas, water, and sewer lines, yes, even basements — or leveling, stockpiling, lifting, loading, spotting material, and landscaping.

Only one machine, one man can do all these jobs and more, and when you own it yourself, you never have to hold up a project for lack of equipment.

M-F has four basic Work Bulls — all with Davis-engineered attachments. Your Massey-Ferguson Industrial Dealer will help you select just the outfit for your job.



**MASSEY-FERGUSON INDUSTRIAL DIVISION**

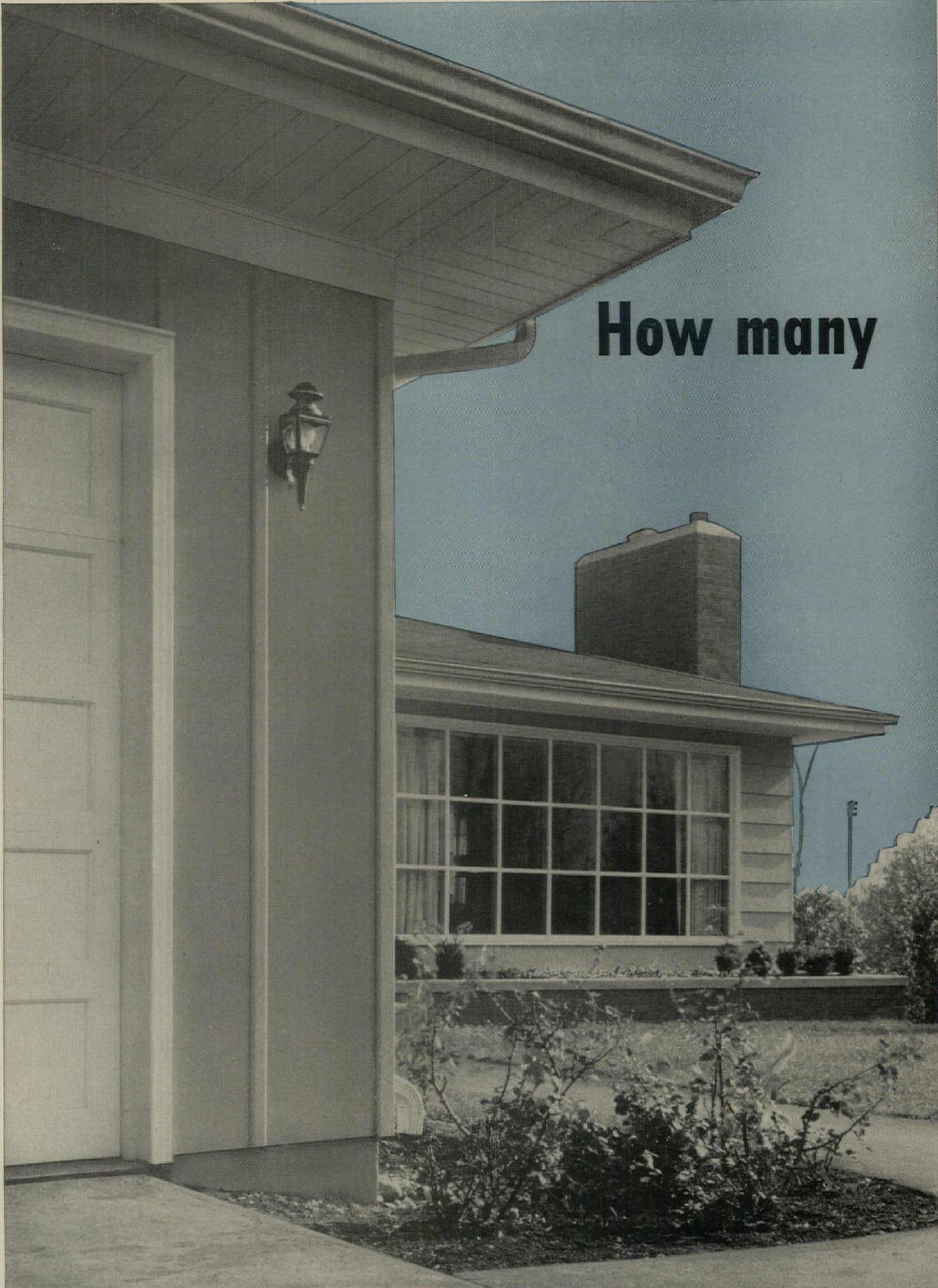
1009 SOUTH WEST STREET • WICHITA 13N, KANSAS

Send me literature on the Work Bull 202 with Davis Loader-Backhoe, Scarifier-Scraper and tell me the name of my nearest M-F dealer.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

TOWN \_\_\_\_\_ STATE \_\_\_\_\_



**How many**

# of these MASONITE PANELS have you used

...to save time and money?

...to create more attractive exteriors?

There's a double reward for you when you specify Masonite® panels for exteriors.

First, you'll find you can put up these tough hard-board weather-fighters in less time; the painters will finish them faster and easier. These rugged panels resist dents, scratches and blemishes.

Second, they'll really help you sell. With such a broad variety of handsome designs, exteriors can be made distinctive and *different* even in a large project.

Run your eye down the list of Masonite exterior panels below. Select those you want for your next job—now.

1. **Shadowvent® siding.** The revolutionary application method with no visible nails. A real cost-cutter.
2. **Tempered Presdwood®** panels with battens. Cover big areas fast. Popular on gable ends.
3. **Panelgroove®.** Has broad grooves every 4", 8" or random grooved. Shiplapped joints create an unbroken pattern.
4. **Ridgegroove®.** (not illustrated). Panelgroove with a Ridgeline texture. Attractive at any distance.
5. **Ridgeline®.** (not illustrated). Continuous shallow ridges for design interest. In panels, shingles or siding. Takes paint or stain.
6. **Panelwood®** (not illustrated). Smooth, durable surface for low-cost applications on protected exteriors, such as soffits, carport ceilings, etc.

Ask your Masonite representative or lumber dealer about these increasingly popular panels. Chances are they'll give you the location of a recent nearby installation. Or mail the coupon for full details.



®Masonite Corporation—manufacturer of quality panel products.

MASONITE CORPORATION  
Dept. HH-2, Box 777, Chicago 90, Ill.  
Please send me your illustrated brochure  
on Masonite exterior panels.

Name.....  
Firm.....  
Address.....  
City..... State.....  
Zone..... County.....



## Here is parquet that costs little more than asphalt tile

When Higgins Industries' new 1/8" hardwood tile was first shown to the trade last month (H&H, Jan, p 130), it was experimental. Now—just a month later—any builder can buy it at 22¢ a sq ft in carload lots FOB New Orleans.

Resilient floorings range in price from 8¢ (for dark asphalts) to 80¢ (for heavy gauge rubber and pure vinyls) but they can be laid in mastic directly on the sub-floor and need no further finishing. Regular wood flooring will swell or shrink 10% or more across the grain, must be laminated or be laid on screeds. It is rigid and will not fol-

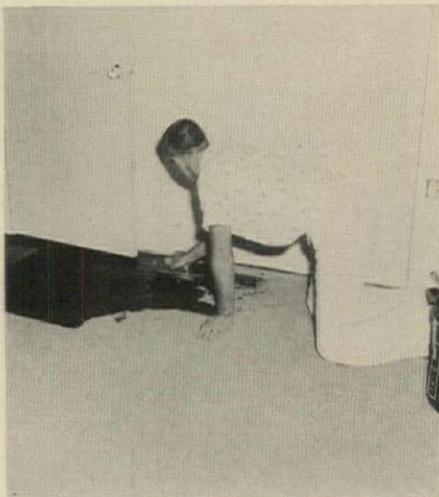
low the slab's contour.

The new Higgins tile is made from a single thickness of African hardwood that has been stretched until the tile is stable in size (opposite). It is flexible and can be laid in mastic right on the slab just as resilient floorings are. It is prefinished with a special baked-on finish. Higgins claims the stretched wood will absorb the finish better, last longer.

The new flooring got its first use test in the 1958 NAHB Research Houses. At first there were bugs. The flooring failed to bond and buckled. But on November 14 the South Bend floor was

relaid with a special adhesive. In the cold house, the tiles adhered perfectly except for the row around the perimeter of each room. As soon as the heat was turned on, these tiles were rerolled and are now firmly bonded.

The successful adhesive will be packaged under Higgins' label. It is a water-emulsion that is troweled on the dry level slab and allowed to dry for the hour or so it takes to change in color from milky white to amber. It is then workable for several hours. Although it is a water-dispersed adhesive, it is water resistant when dry.



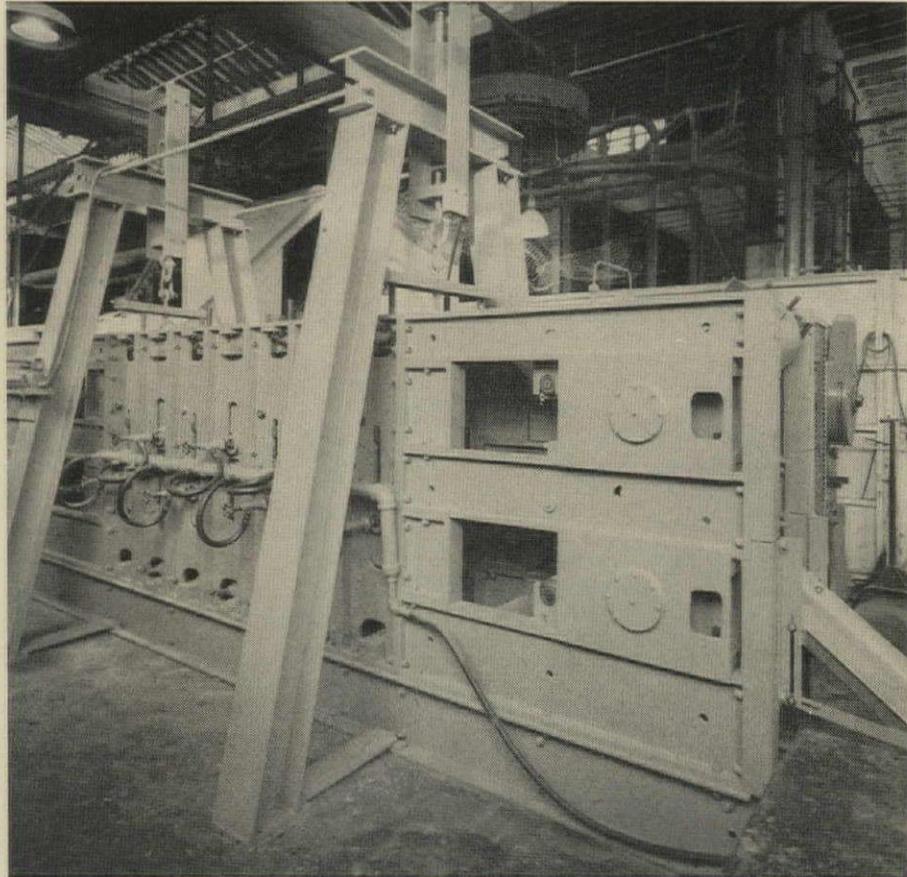
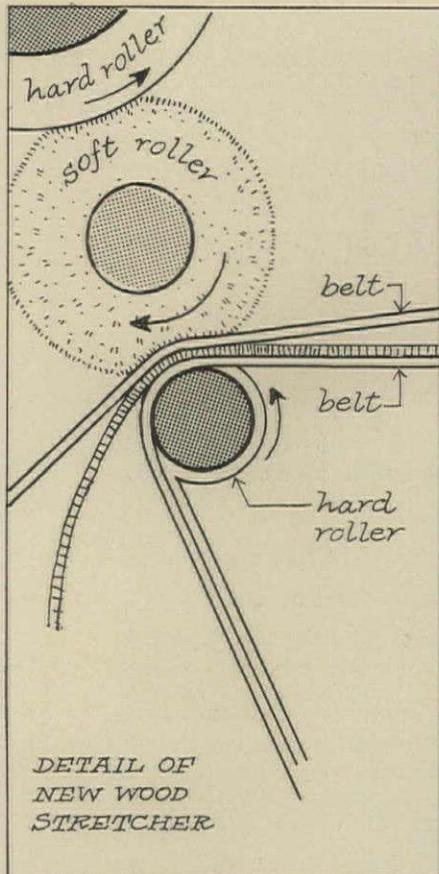
MASTIC IS SPREAD and allowed to set . . .



tiles are laid in desired pattern . . .



and are rolled firmly in place.



"LUMBER STRETCHER" will turn out 200,000 sq ft of tile a day. Tile is carried

through a series of rollers (left) which bend it first in one direction, then the other. As

it bends, it stretches across the grain. Tile is stretched wet, shrinks a bit on drying.

## ... and here is what makes it possible

Higgins has found a way to make wood dimensionally stable and a wood that will give nearly 100% "firsts," without voids or knotholes.

In the Higgins "lumber stretcher," above, the tile is placed so the grain runs across the belt. As the tile is bent over the hard roller, it is held in place by a soft roller. This allows the outer surface to stretch without breaking. The tile is bent three times in one direction, four times in the other. In the machine, the tile grows across the grain about

1½", will still be 1¼" larger when thoroughly dry. The finished tile is trimmed to 9"x9".\* In the stretching process, millions of tiny air spaces are opened up. These, says Inventor Frank Higgins, provide thousands of microscopic expansion joints, so there is space in the 9"x9" to let the tile add width as it takes on moisture.

Because the tile is solid wood, Higgins cannot use "seconds." He found the answer to this problem in a tree native to the Belgian Congo that grows

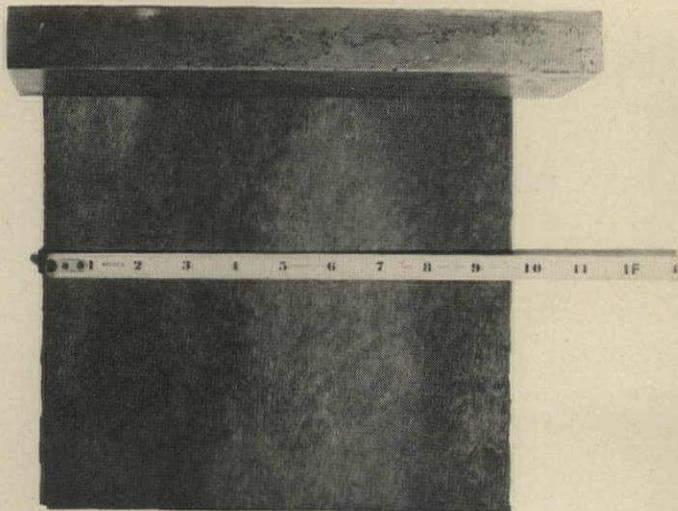
boles 6' thick and 120' high, unbroken by branches. This wood will be supplied by Higgins—trade-named African Oak—to licensees of the process.

The tile is thoroughly dried before being packaged, 24 to a lot, in foil-backed moistureproof packages.

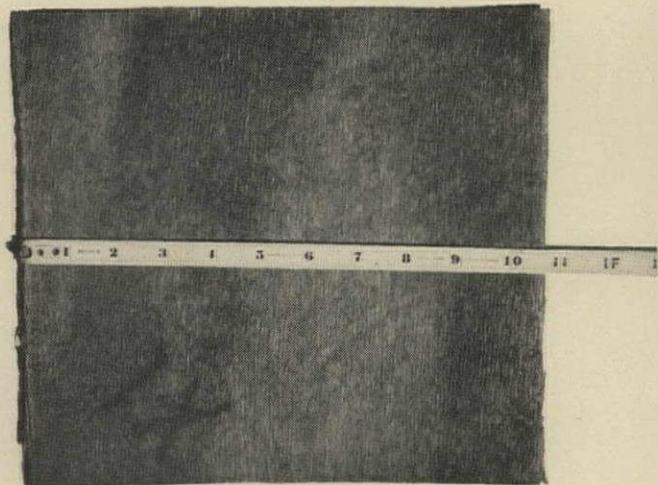
Higgins Industries, New Orleans.

For details, check No. 38 on coupon, p 186

\* Forest Products Laboratory gets a somewhat similar stretch by holding wet wood under tension while it is heat dried. This process was used to make the strip flooring in the 1957 NAHB Research House.

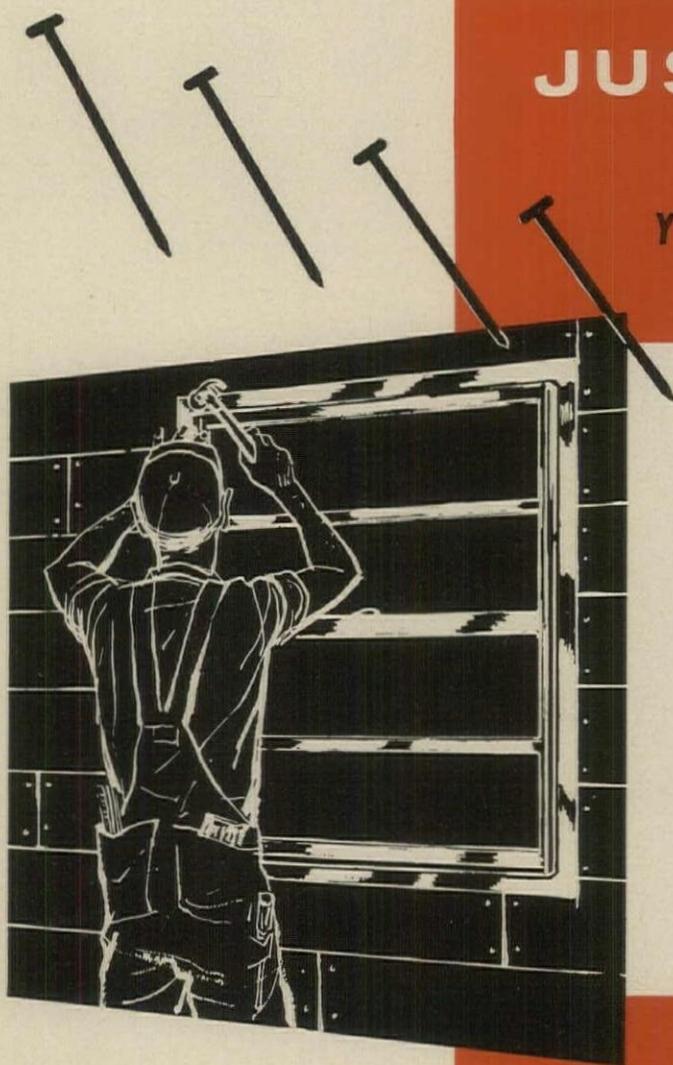


BEFORE STRETCHING, test tile was 9½" wide, slightly cupped.



AFTER STRETCHING, test tile is 10¾" wide, perfectly flat.

continued on p 176



# JUST 4 NAILS

TO INSTALL

YOU SAVE TIME...  
MAKE MORE MONEY



New top-quality, low-cost, single-hung

## ALUMINUM WINDOWS

with Integral Fin Trim

Now you can cut building costs and give your customers finest quality trouble-free windows, besides.

Designed by one of the nation's foremost fabricators of commercial and residential windows—a company in service to homemakers for more than 100 years—Cupples new single-hung aluminum windows answer the growing need for low-cost windows with high standards of design and construction.

It will pay you in increased profits and customer satisfaction to install Cupples new single-hung aluminum windows. Write for name of nearest Cupples distributor.

here's why  
Cupples  
single-hung  
windows save  
time and money  
—please your  
customers!

### INSTALL IN MINUTES

One carpenter drives four nails. Window is in quickly—snugly—permanently. No fitting, no adjusting, no call-backs. Fin-trim is integral. Comes completely assembled, installation hardware attached.

### PRECISION DESIGN

Cupples Single-Hung Aluminum Windows are stronger, more rigid. Silent, finger-tip operation. Weatherstripped, like the finest Cupples windows, with Schlegel Cloth (high pile fabric in metal binder). Dust and draft-free. Never bind or stick. Never need painting.

### FOR ANY STYLE OF ARCHITECTURE

Perfect for new homes, remodeled older homes, light commercial buildings. Endorsed by architects and builders.

### WIDE SELECTION

Available in all popular sizes and styles, including picture windows.



PRODUCTS CORPORATION

2664 South Hanley Road • St. Louis 17, Missouri



This is the American-Olean bathroom displayed at the NAHB Show. Note the repetition of the floor motif on the vanity wall in Tile Gems; 52 Daffodil, 97 Gardenia, 34 Berry Brown. Side walls: 64 Lobelia. Counter top: 335 Cr. Aqua in Scored Tile Design SD-1. Floor: 1 1/4" squares; Yellow, Rust Brown, White. Color Plate 78.

A beautiful tile bathroom can be the best sales feature of a home. In addition to its colorful eye appeal, American-Olean Tile adds solid value which home buyers recognize... truly the mark of a quality home.

For more tile ideas

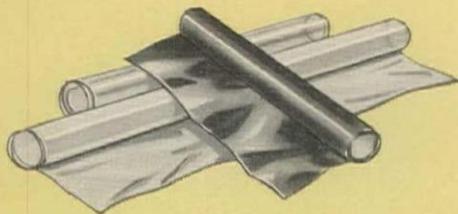


clip and mail for free copy of full color booklets, "New Ideas in Tile" and "Crystalline Glazes & Scored Tile."

# American-Olean CERAMIC TILE

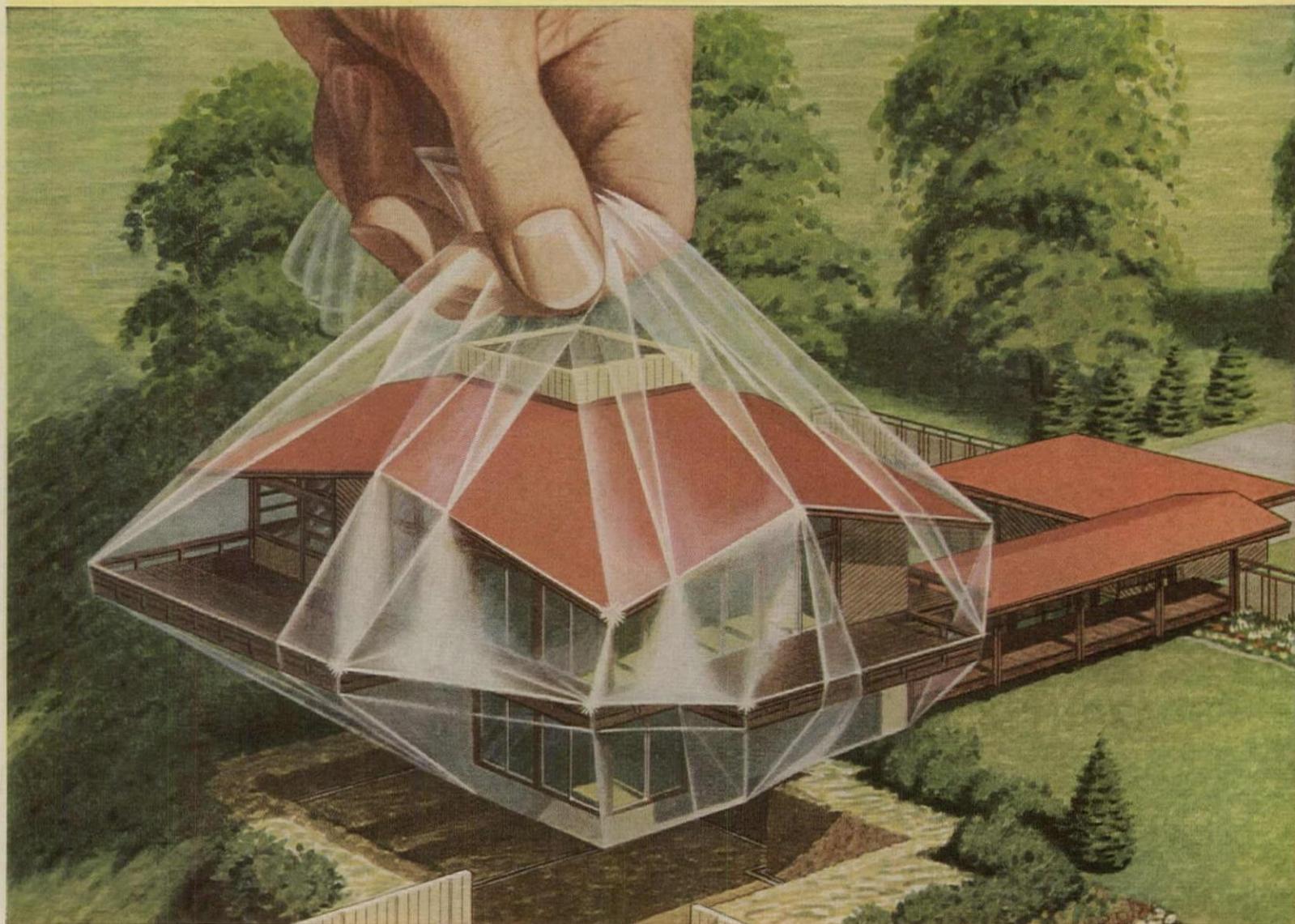
AMERICAN-OLEAN TILE COMPANY, INC. EXECUTIVE OFFICES: 1408 CANNON AVE., LANSDALE, PA.  
 FACTORIES IN LANSDALE, PA. • OLEAN, N.Y. • MEMBER: TILE COUNCIL OF AMERICA, PRODUCERS' COUNCIL

NAME
  ADDRESS
  CITY, ZONE
  STATE



LOW-COST WATER-VAPOR CONTROL

hand-locked into every home for a lifetime



ARCHITECT: ELEANORE PETERSEN, A. I. A.

SPECIFY

Ger-Pak® Virgin Polyethylene

# BARRIER FILM

Plan it, build it as though *you* were going to live in it. Naturally that means superior protection against water-vapor damage.

This kind of protection plus versatility unlimited is yours with GER-PAK virgin polyethylene film. As a membrane under concrete slabs or as blanket for concrete curing . . . as a liner over sub-flooring or as cover for materials, GER-PAK film is the on-the-job favorite.

Tough, lightweight and inexpensive, GER-PAK film comes in sizes from 10 in. for flashing up to 40 ft. wide. Choice of BLACK, NATURAL and OPAQUE white.

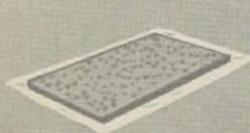
Specify satisfaction for you and the homeowner . . . specify GER-PAK film at your dealer's.

FREE samples and informative brochure yours for the writing.

DESIGNED TO MEET FHA REQUIREMENTS



GER-PAK—the short way to say superior polyethylene film



Under Concrete Slabs



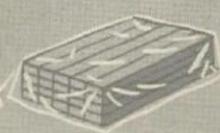
Over Studding



Lining Crawl Spaces



Concealed Flashing



Material Protection

**GER-PAK®**

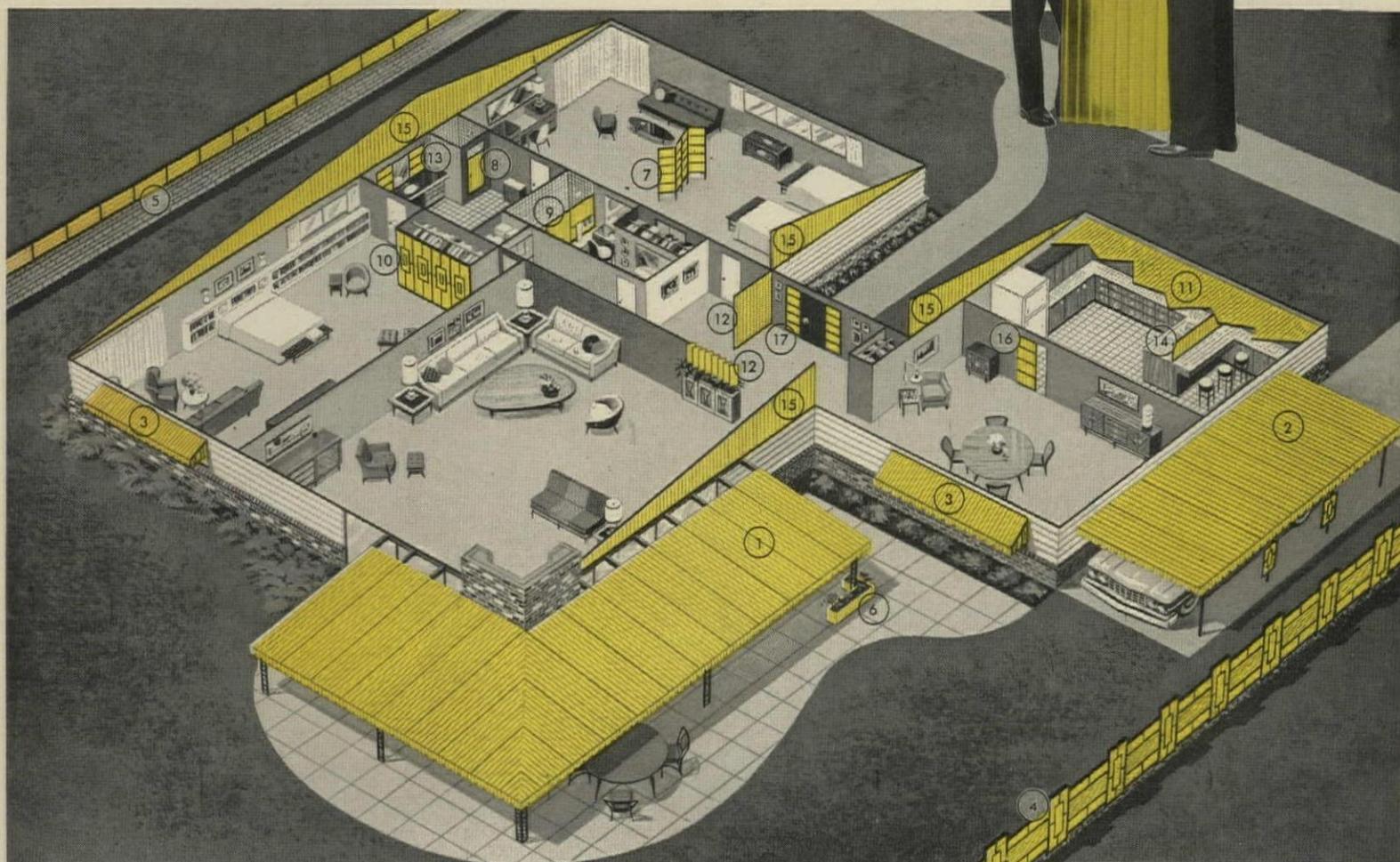
Virgin Polyethylene Film

GERING PRODUCTS INC., Kenilworth, New Jersey

# Distinctive home ideas

with **FILON**<sup>®</sup>

GUARANTEED TRANSLUCENT FIBERGLASS PANELS



**INDOOR-OUTDOOR FUNCTIONAL BEAUTY**—FILON is the exciting material that inspires distinctive new ideas in building and decorating, all easy to build at low cost. FILON opens a whole new world of color and light, introduces a fresh, new scheme of living. Countless design possibilities, indoors and out.

**FOR BETTER LIVING—EASIER SELLING**—Translucent FILON panels convert harsh glare into softly diffused light without darkening adjacent areas, assure glare-free comfort in any exposure. FILON is the only plastic panel reinforced with Super-Fi Fibreglas-and-Nylon for greater strength. Shatterproof, weatherproof. Super-smooth surface on both sides does not hold dust and dirt. Never needs painting.

Insist on the FILON label with the

**EXCLUSIVE FILON 5-WAY GUARANTEE**

- 1 Superior Fibreglas-and-Nylon reinforced strength
- 2 Uniform thickness for easier installation, better diffusion of light and color
- 3 Shatterproof for absolute safety
- 4 Weatherproof for maximum durability
- 5 Exceeds standards published by U.S. Bureau of Standards

Approved under the "Uniform Building Code".

Buy FILON at leading lumber, building material and glass dealers.

**SWEEPING ARRAY OF DECORATOR COLORS**—The panels come in a wide range of decorator colors to match or complement any decorating scheme. Amber, Aquamarine, Clear, Coral, Dusty Peach, Emerald, Forest, Frost, Green, Jade, Nile Green, Old Rose, Snow, Turquoise, Yellow, Flesh, Lite Yellow, Powder Blue. Select from many convenient stock sizes for economical construction, various corrugations, flat or shiplap.

**KEY TO FILON INSTALLATIONS PICTURED ABOVE**

- |                             |                                  |
|-----------------------------|----------------------------------|
| 1. Patio Roof               | 9. Shatterproof Tub Enclosure    |
| 2. Carport                  | 10. Shoji Closet Doors           |
| 3. Awnings                  | 11. Luminous Drop Ceiling        |
| 4. Shoji Fence              | 12. Room Dividers                |
| 5. Combination Wall-Fence   | 13. Shatterproof Frosted Windows |
| 6. Outdoor Planter          | 14. Counter Partition            |
| 7. Shoji Screen             | 15. Sidelighting                 |
| 8. Shatterproof Shower Door | 16. Pocket Door                  |
|                             | 17. Translucent Entrance Panels  |



FILON Technical Services Department  
125 Lomita St., El Segundo 15, California  
Send **FREE FILON A.I.A. FOLDER** to:

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_  
FIRM \_\_\_\_\_

Also consult A.I.A. File No. 26-A-9 or Sweet's Architectural Catalog 7d/2d/FI, — Light Construction or contact FILON Technical Services Department for additional information.

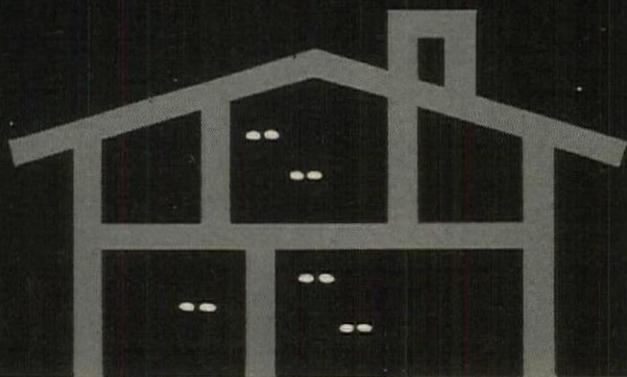


**FILON PLASTICS CORP.**

Los Angeles • San Francisco • Chicago  
Atlanta • New York • Dallas • Denver



**SOME PEOPLE  
ARE IN THE DARK  
MORE THAN THEY  
SHOULD BE\***



**\*  
their new house  
wasn't wired the modern  
TOUCH-PLATE way**

...but today builders and architects can provide for more convenient use of light by specifying a TOUCH-PLATE system with its

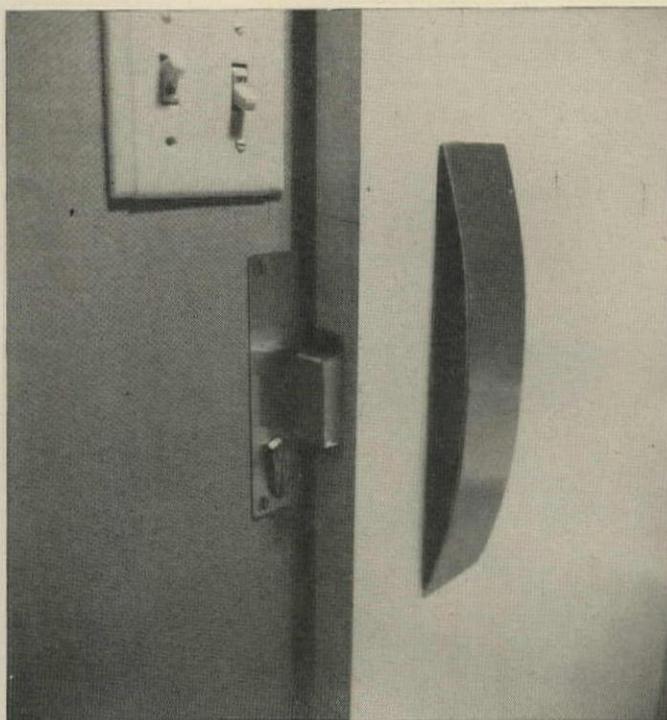
- Remote control of electrical circuits
- Silent switches at every entry to each room
- Safe low voltage with no danger of shock
- Touch switch operation

NEW Catalog and Instruction Book Available. Write to Dept. 15.

**TOUCH-PLATE** MFG. CORP.  
P.O. BOX 1970 • LONG BEACH, CALIFORNIA

**New products**

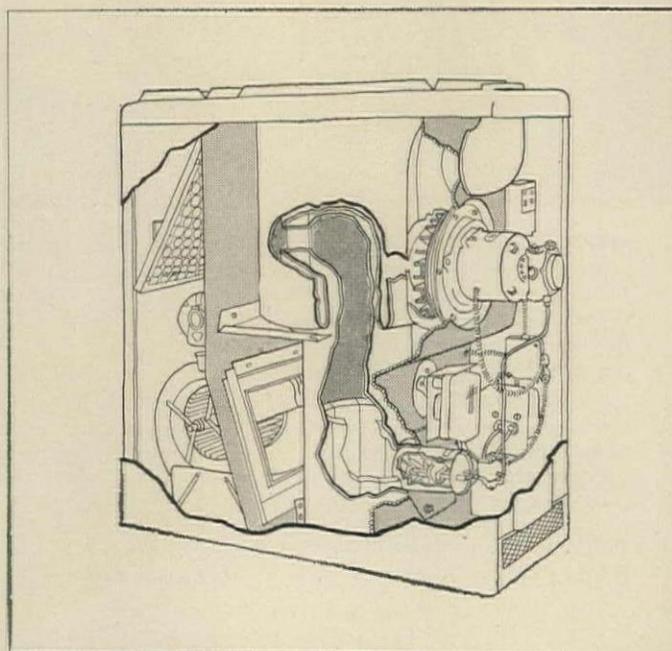
starts on p 158



**Hardware for surface-mounted doors**, introduced last month in the South Bend Research House, is now available from Stanley. Set includes wall-mounted latch, door-mounted strike, pull, and hinges. Among the features of surface-mounted doors: no mortising, no fitting, no face trim, no stops, no warp, no sticking; door swings 100% clear; latch pressure prevents rattling; door opens and closes with straight push-pull.

Stanley Hardware, New Britain, Conn.

For details, check No. 39 on coupon, p 186



**Smokeless-odorless burning** is claimed for the new Iron Fireman oil furnace. This new unit does not use a gun-type burner. Instead fuel is injected into a combustion chamber where a large air flow has been induced by a powered draft fan. Fuel burns quietly but efficiently. In new construction only a small exhaust vent is needed. The new unit works within closer temperature limits than conventional furnaces, is claimed to save up to 33% in fuel. Four vertical models give 85,000 to 160,000 Btuh; six horizontal types give 84,000 to 250,000 Btuh.

Iron Fireman Mfg Co, Cleveland.

For details, check No. 40 on coupon, p 186

continued on p 178

HOUSE & HOME

# **"Color-Tuned" Roofing Systems Will HELP YOU SELL YOUR HOMES**

Certain-teed's new "Color-Tuned" Roofing Systems provide a modern, practical approach to exterior home beauty. And because home beauty is one of the top factors influencing people when they purchase their house, "Color-Tuned" roofs will give you an extra sales edge.

Certain-teed's "Color-Tuned" Roofing Systems are the result of thorough research and testing in all parts of the country under the direction of Beatrice West, noted home color authority. The ten colors in the "Color-Tuned" line are the colors people *want* and are actually *buying*.

Also available to Certain-teed's builder customers are the services of Miss West and her staff who will assist builders in color harmonizing their homes at no charge. Details of this new service can be obtained from any Certain-teed salesman.

Exterior beauty sells homes. Be certain you have this extra sales edge by using Certain-teed "Color-Tuned" Roofing Systems with your homes.

**Certain-teed**<sup>®</sup>... *Superior Products through Creative Research*



CERTAIN-TEED PRODUCTS CORPORATION • Ardmore • Pennsylvania • Plants and offices throughout the United States



**m-day<sup>\*</sup>**  
**plus 4**

*...four shining smiles that is!*

This gay quartet liked their new home the first minute they moved in. But when they discovered the true "shade-tree" comfort you'd built in they loved it.

Full o' joy? OH BOY! They're sold on *you* because you built the house. So give thanks to your heating contractor... he specified White-Rodgers controls.

We make temperature controls. It's our business to manufacture controls for heating, air conditioning and refrigeration equipment. They provide that intangible extra... that certain quality it takes when it comes to selling your house and keeping it sold. White-Rodgers controls help you build your business through customer satisfaction.

\*Moving day

For a lifetime of good building...  
specify White-Rodgers temperature controls  
... with a lifetime of solid comfort

**WHITE-RODGERS**

St. Louis 6, Missouri  
Toronto 8, Canada

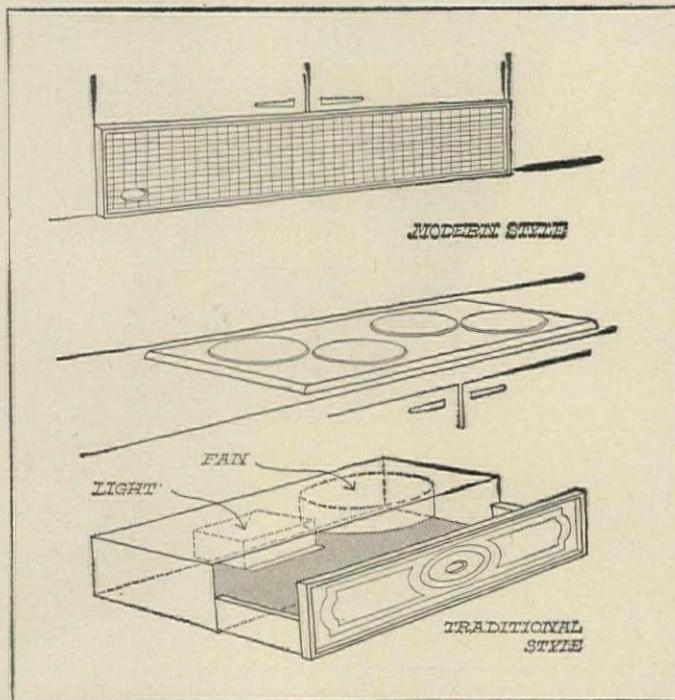
Makers of FASHION and PUSHBUTTON... World's Most Modern Thermostats



**New Foodarama**, Kelvinator's big upright refrigerator-freezer combination, offers 2 cu ft more storage space in 1959 than in earlier models, yet is 7" narrower. The new unit has 11.7 cu ft of refrigerated storage, 5.9 cu ft of freezer storage (207 lb), in a space 41" wide, 25" deep, 63" high. Square lines and fan cooling allow the Foodarama to be completely built in. Each upright compartment has its own door, each has a variety of specialized storage including a humidified salad compartment, a refrigerated vegetable bin, slide-out shelves, full door shelves, and cheese, butter, and frozen juice dispensers. Foodarama has baked enamel exterior in pink, yellow, turquoise and white; white porcelain interior. Unit is priced for middle-income market, the maker says; 80% of 1957-1958 models were bought by persons in under-\$10,000 bracket.

Kelvinator, Detroit.

For details, check No. 41 on coupon, p 186



**New retractable range hood** from Emerson-Pryne eliminates usual projection, is designed to be pushed in flush with wall cabinets when the range is not in use. The hood includes a two-speed blower fan and a concealed 100-w lamp which turn on automatically when the hood is pulled out, turn off when it is pushed back. The hood is geared and runs on nylon rollers so it will not bind or stick, is self-contained so it does not extend up into the cabinet. A variety of front panels are available to fit traditional or modern kitchens.

Emerson-Pryne, St Louis.

For details, check No. 42 on coupon, p 186



**Tappan built-ins** will have 20 oven models in the 1959 line of gas and electric appliances. Both single and double oven models are available. Control panel above oven has automatic clock, roast control, temperature control, and burner control. Ovens are chromium lined, vents are concealed. Wide-view doors are removable, as are the oven bottoms. Gas and electric models take the same cutout, fit standard 24" cabinet. Tappan surface units come in 24" and 33" sizes: gas and electric models fit the same cutout for drop-in installation. Ovens and surface units come in six colors: pink, yellow, turquoise, white, stainless, and copper.

Tappan Co, Mansfield, Ohio.

For details, check No. 43 on coupon, p 186



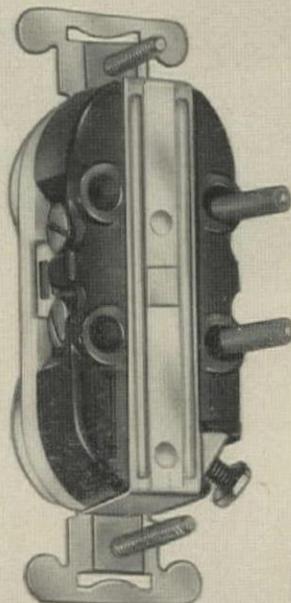
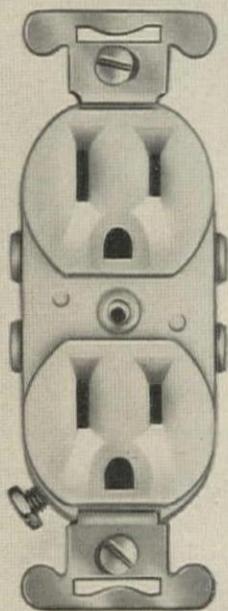
**Admiral kitchen units** for 1959 include nine built-in ovens and six built-in surface units. Ovens have eye-level controls out of children's reach, all have automatic timer and clock and drop-down doors for easier cleaning. Five of the ovens have non-fogging glass windows. Rotary roasters are optional. The surface units all are built for drop-in installation without a sealing rim. Both ovens and surface units are available in stainless chrome or in porcelain enamel in four colors: copper, turquoise, primrose yellow, shell pink.

Admiral Corp, Chicago.

For details, check No. 44 on coupon, p 186

continued on p 180

## NOW! Leviton adds back and side wired devices to the specification (5000) grade line!



No. 5096  
Duplex U-Ground  
Parallel receptacle

### LOOP IT OR DO IT THE EASY WAY!

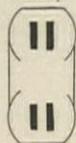
LEVITON back-and-side wired devices offer two types of connections. Loop it the standard way, or clamp it for back-wiring—the new simple and modern way that gives you a connection that is electrically right and

mechanically tight. Either way you are assured the right kind of power to carry heavy duty loads. Here is the maximum in performance at minimum cost... with absolutely no compromise in quality!

**Back-and-Side Wired  
Devices Now Available:**  
Rated 15A.—125V.  
(No. 5089 15A.—250V.)



No. 5062



No. 5074



No. 5088



No. 5089

### Just Check These Features:

- All devices have double-wiping phosphor bronze contacts.
- Plaster ears—wide and break-off types.
- Grounding Screws on all U-Ground devices.
- Entire assembly solid-riveted for permanence.
- Heavily sectioned molded phenolic bases.
- Full underslung straps, completely rust-proofed.
- Easy back-wired installation for up to No. 10 wire.
- Strip gauge for obtaining maximum clamping.
- Individually packed with mounting screws attached to straps.

Meet U. L., C. S. A., and Federal Specifications

All back-and-side wired devices in brown and ivory.

Your best jobs are done with...

LEVITON MANUFACTURING COMPANY, INC.  
Brooklyn 22, New York

Listed by Underwriters' Laboratories

**LEVITON**

Chicago • Los Angeles • Leviton (Canada) Limited, Montreal

For your wire needs, contact our subsidiary AMERICAN INSULATED WIRE CORP.

# PAYLOADER® does everything



## with versatile 4-in-1 bucket

Saul Winnick, Supt. on Kaye Builders' 39-acre, 82-home development says, "the versatility of the 'PAYLOADER' with Drott 4-in-1 bucket pays off every day on this job. It's our all-purpose machine which handles everything from tree stumps to concrete pouring."

### It's a bulldozer

Open the clam lip full and you have a sturdy bulldozer with finger-tip control of dozing depth.

### It's a clamshell

Powerful grip picks up materials from streets, stockpiles or windrows without tractor travel . . . handles stumps, trees, boulders.

### It's a scraper

With slight clam lip opening, it's a handy scraper to strip sod or top soil and grade accurately.

### It's a shovel

The 4-in-1 bucket can always be used as a regular tractor-shovel bucket to dig, carry and dump in the regular manner.

No other rubber-tired tractor-shovel gives you "PAYLOADER" versatility



because no other can give you the 4-in-1 bucket, black-top spreader, side-boom and many other attachments. See your "PAYLOADER" distributor today, or send for complete details.

# HOUGH®

THE FRANK G. HOUGH CO.  
LIBERTYVILLE, ILLINOIS  
SUBSIDIARY — INTERNATIONAL HARVESTER COMPANY

#### THE FRANK G. HOUGH CO.

839 Sunnyside Ave., Libertyville, Ill.

Send data on all 4-wheel-drive "PAYLOADER" models and attachments to:

Name \_\_\_\_\_

Title \_\_\_\_\_

Company \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

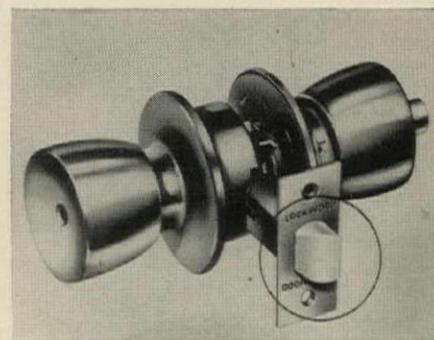
2-B-4



**Varied grain paneling** is actually ¼" plywood in standard 4'x7', 4'x8', 4'x10' sizes. Choice wood grains are photographed and transferred to the plywood sheet in nine-plank patterns, with or without V-grooves. Various finishes are available (above, colonial oak). The paneling is guaranteed against fading, structural defect, or delamination for the life of the installation.

Plywall Prods, Fort Wayne, Ind.

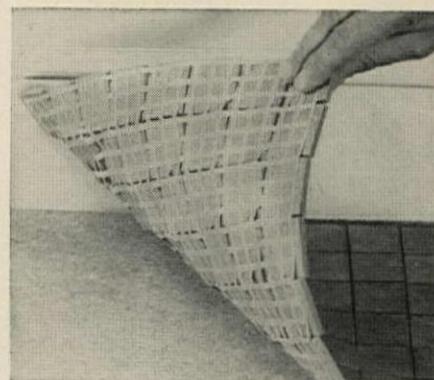
For details, check No. 45 on coupon, p 186



**Nylon latch bolts** are a new option on Lockwood R Series interior lock sets. The new bolts have been thoroughly tested in laboratory and field, are claimed to outlive the building. The plastic material will give quiet latching with less friction than metal bolts. Nylon bolts are also corrosion proof.

Lockwood Hardware, Fitchburg, Mass.

For details, check No. 46 on coupon, p 186



**Sure-Set tile backing** is new from Stylon, is available for all floor tile on request. The new backing eliminates paper facing, allows tile to be set with the pattern showing. Waterproof polyethylene backing allows 50% bonding contact of tile surface, 70% of linear edges. It can be used on walls without danger of sheets shifting.

Stylon Corp, Milford, Mass.

For details, check No. 47 on coupon, p 186

continued on p 182

HOUSE & HOME

New 1959  
Economy **Horizon**  
By  
WADSWORTH HOMES, INC.



**Now... capture the Under \$10,000 Market**  
with the All New 1959 Wadsworth Horizon House — *Packed with Profit!*

**CHECK THESE OUTSTANDING SELLING FEATURES:**

- ✓ Selling price, including your lot, under \$10,000
- ✓ All elevations available with or without carport
- ✓ Designed for quick, low-cost field erection
- ✓ Complete package quickly delivered to you
- ✓ Meets all new FHA requirements
- ✓ Choice of 3 handsome exterior designs
- ✓ 26 x 36 feet of efficient design

**FIND OUT HOW WE CAN HELP YOU WITH  
A COMPLETE FINANCING PROGRAM**

**WADSWORTH HOMES, INC.**  
2949 Chrysler Road  
Kansas City 15, Kansas



SEND TODAY FOR COMPLETE INFORMATION

**WADSWORTH HOMES INC.** Dept. C  
2949 Chrysler Road, Kansas City 15, Kansas

Please send complete information on the  
new 1959 Economy Horizon.

Name \_\_\_\_\_  
Company \_\_\_\_\_  
Street Address \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

# VISION...

homes deserve the best, too!

## PENGUIN

ALUMINUM ROLLING WINDOWS

give home buyers the brightest outlook

Your customers will have a clear view of the values they get when you feature the Penguin. It's a horizontal rolling window that combines Peterson quality and features with a price that assures profits on every sale. Just look at what the Penguin offers:

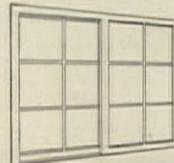
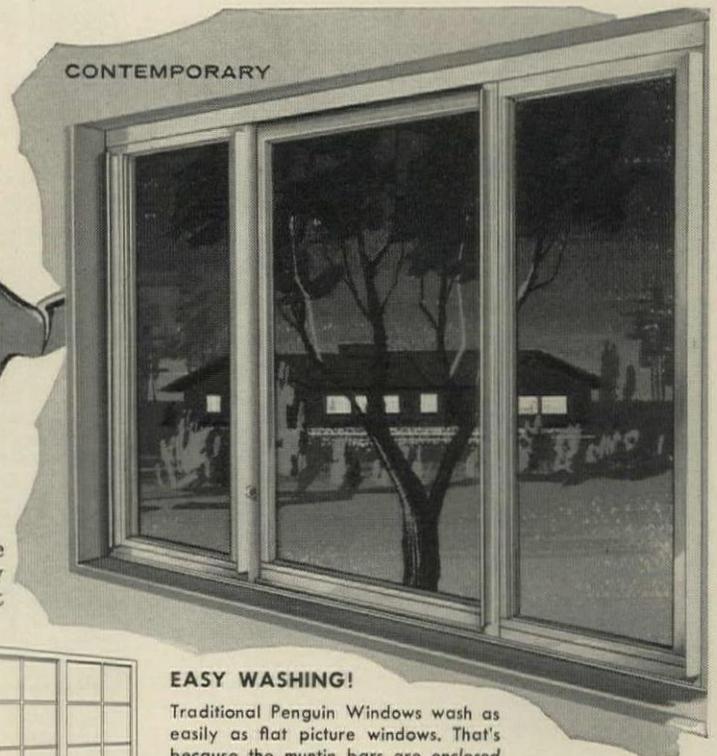
- Trim lines in contemporary or traditional styles.
- Sturdy, maintenance-free aluminum construction.
- Self-storing aluminum screens.
- Double glazing so there's no need for storms.
- Traditional style has muntin bars within the double glazing.
- The Penguin glides on quiet rollers, for finger-touch operation.
- The Penguin track assures positive weather seal.
- Widths 2 to 9 ft., vent heights 2 to 5 ft.
- Inspected, assembled, cartoned; shipped ready-to-install.

**AND PROWLER-PROOF VENTILATION, TOO**

A very important selling point. Because the Penguin window locks firmly and solidly in "closed" and two "open" positions and cannot be opened from the outside.

Send coupon for complete details and price lists on the Penguin window by Peterson.

IN SWEET'S LC FILE **6A**  
**PET**



**EASY WASHING!**

Traditional Penguin Windows wash as easily as flat picture windows. That's because the muntin bars are enclosed within the double glazing.

**A PRODUCT OF  
Peterson Window Corporation**

720-B LIVERNOIS FERNDALE 20, MICH.

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

Also makers of the new DAISY DOOR and SAPPHIRE and PARAGON WINDOWS

inside ...



House in San Diego.  
Architect: Mosher & Drew, La Jolla, Calif.  
Finished with Cabot's Stain Wax

outside ...



House in Carmel, Calif.  
Designer: Gordon Drake, San Francisco  
Stained with Cabot's Creosote Stain

... enhance  
natural beauty  
of redwood

Cabot's Stain Finishes maintain the rich coloring of redwood . . . accent the lovely natural texture and grain . . . provide any desired effect. So, to beautify, preserve, maintain or restore redwood . . . specify

**Cabot's**  
Finishes for  
**REDWOOD**

*They are so easy to apply...  
economical, too.*

**For exteriors:**

- California Redwood Stain (#325)
- Sequoia Red Stain (RH #25)
- Mariposa Redwood Stain (RH #80)
- Redwood Gloss Finish (#880)
- Creosote Stains, Ranch House Hues

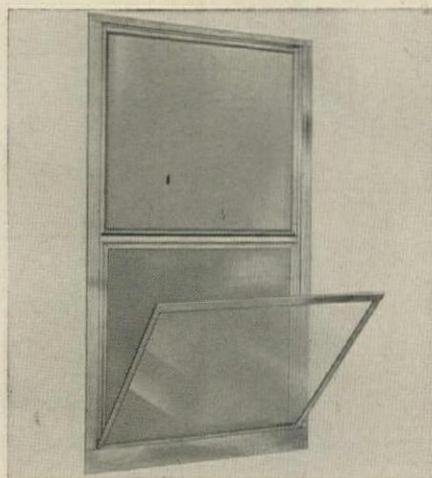
**For interior:**

- Stain Wax, Interior Stains

Quality products from Cabot Laboratories  
...manufacturing chemists since 1877

*Samuel Cabot*

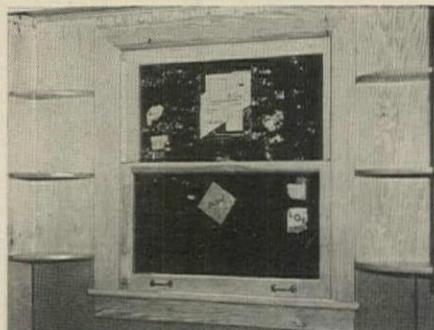
**SAMUEL CABOT INC.**  
230 Oliver Building, Boston 9, Mass.  
*Please send your "Redwood Staining" Folder*



**Low-price aluminum window** is self-storing combination screen and storm unit, is designed primarily for new construction market. Retail price of \$11.95 is claimed to make the window cheaper than wood. Both sides of sash can be cleaned from inside the house.

Aluminum Industries, Milwaukee.

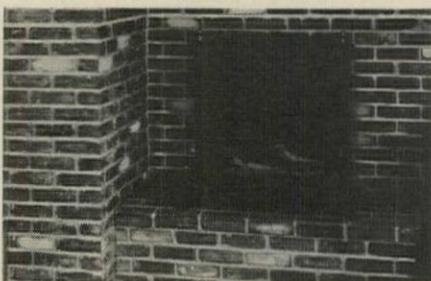
For details, check No. 48 on coupon, p 186



**Insulating windows** eliminate the need for storm sash, cut heating and cooling bills. Thermo-Air Seal units are framed in ponderosa pine, have full aluminum weather-stripping, Thermopane double glazing. Double-hung units have four sash balances, are glazed with DSA-type Thermopane. Picture windows are glazed with 1" polished-plate Thermopane.

Binswanger & Co, Richmond, Va.

For details, check No. 49 on coupon, p 186



**Simulated brick** and stone panels are made from ground minerals bonded with glass fiber and polyester resin, give a realistic three-dimensional effect. PanelStone is not affected by exposure to sun, rain, heat, or freezing; is fireproof to 850F. Panels are 4'x8', from 5/8" to 3/4" thick. They are nailed in place with cement-coated nails concealed in grout lines. Effects: Palos Verdes stone, Arizona cut stone, split Roman brick, used brick. /END PanelStone, Van Nuys, Calif.

For details, check No. 50 on coupon, p 186

HOW TO SELL

QUALITY IN THE MODEL HOME

will be the subject of

**HOUSE & HOME'S ANNUAL  
MERCHANDISING DIRECTORY  
MAY 1959**

Reservation dates

4/c & Cover Mar. 12

B & W & 2/c Mar. 19

# Looming *BIG* in the National Homes Picture!



Behind the Permanent Beauty of  
National Homes' New "Fairwood"

This Advertisement  
appears in FULL COLOR in Feb.

"Living for Young  
Home Makers"

and March

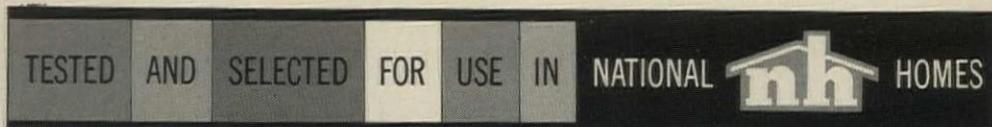
"American Home"

Behind the beautiful baked-on color of the walls and roof you see here . . . is Reynolds Aluminum. Aluminum roof shingles that defy weather, rust corrosion . . . handsome and permanent. And aluminum clapboard siding that can never rust, rot or warp, that washes clean-like-new—never needs protective painting! It's an all-around shield, resistant to fire . . . and adding important heat-reflective insulation! Naturally the windows of this modern house are also aluminum . . . and the gutters and downspouts, soffits, fascia strip, thresholds, exterior trim. So the result is a completely maintenance-free exterior.

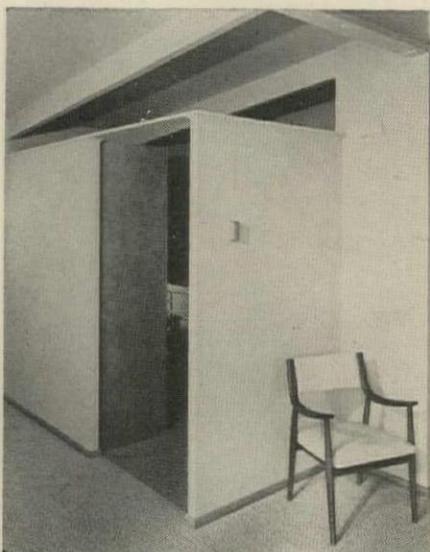
On painting and repairs alone it can save you as much as \$4,000 over a 20-year mortgage. Plus substantial savings on heating and air-conditioning. Plus the peace of mind, the worry-free leisure, that are beyond price. Look for National Homes models in your area . . . the "Living Designs for '59." Check builders' names under "National Homes" in your telephone directory. And remember, behind this sensational advance in housing is . . . Reynolds Aluminum!



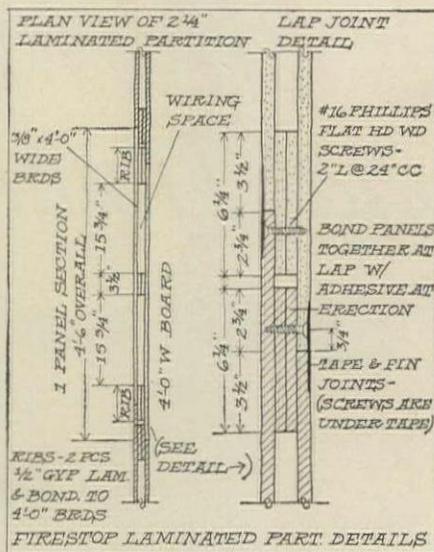
Watch Reynolds new TV shows "Walt Disney Presents" and "All Star Golf" every week on ABC-TV.



# REYNOLDS ALUMINUM



**NON-LOADBEARING PARTITIONS** are only 2 1/4" wide, add more living space to house.



**DETAILS** show how glued ribs of drywall eliminate framing and most nails.

## New gypsum partition needs no framing . . .



**FIRST DRYWALL FACE** is nailed to 1" sill and plate. Then drywall ribs go in.



**OTHER DRYWALL FACE** is glued up to ribs, nailed top and bottom to complete job.

## . . . cuts installation and finishing costs

You can get detail sheets and descriptive booklets on how to build this money-saving partition (and others like it) from Bestwall Gypsum Co.

Called the Hummer System B Modified, the partition has five advantages:

- 1) It is generally cheaper than framed partitions, primarily because it cuts labor time. At Tampa's 6,000 house Clair-Mel City project (H&H, Nov '58, p 60) the builder, by using "B Modified," completes interior partitions for a whole house in half the time it would take to build frame partitions.

- 2) There are virtually no nail pops because there are no studs (and so no nails except at plate and sill). Wall-board is glued to gypsum ribs. Sills

and plates must be milled to thickness (1" or 1 1/4") of laminated drywall ribs.

- 3) The wall is easier to finish because there are many less nail heads to finish, so only joints need finishing.

- 4) The system adds as much as 250 sq ft more living space to the average house because walls are only half as wide as conventional framed partitions.
- 5) It is more sound proof than the usual partition because with this system 5/8" thick gypsum can be used for less than the total cost of 3/8" gypsum on a framed partition.

The system has FHA okay for non-loadbearing partitions only.

Bestwall Gypsum Co, Ardmore, Pa.  
For copy, check No. 51 on coupon, p 186

## Keep up to date on aluminum

Olin Mathieson's new 12-page booklet is a summary of the latest design information about aluminum. It includes: tables of properties of alloys, uses of popular alloys, architectural finishes, anodizing guides. Other sections describe the general and particular characteristics of the modern metal.

Olin Mathieson, New York City.

For copy, check No. 52 on coupon, p 186

## How to use plastic flashing

An 8-page bulletin from Rubber & Plastics Compound Co describes Nervastral Rigid, a new corrosion-proof, impermeable, formable plastic flashing, tells how to preform it, how to install it, how to seal and adhere it. There are four pages of specifications for a wide range of applications.

Rubber & Plastics Compound Co, New York City.

For copy, check No. 53 on coupon, p 186

## Red cedar shake manual

Donald H. Clark, asst director, Institute of Forest Products (Wash.), has written a 32-page guide to using red cedar shakes. The booklet describes the characteristics of the wood, gives the history of their use, shows modern practice. It tells how they are made, how they are graded and packaged. Over half the booklet consists of data on how to apply them for strength, coverage, and esthetic effect.

Red Cedar Shingle Bureau, Seattle.

For copy, check No. 54 on coupon, p 186

## Swimming pool construction

This 8-page brochure tells how to construct small swimming pools by each of four methods—shotcrete, cast-in-place concrete, precast concrete, and concrete block. Several sizes and shapes are illustrated.

Portland Cement Assn, Chicago.

For copy, check No. 55 on coupon, p 186

## Catalogs

### Simpson issues seven catalogs

Seven colorful catalogs, all containing detailed specifications on the products covered and some with considerable reference material, have been published by Simpson. They are: "Insulating Board and Hardboard Products," 32 pages; "Acoustical Products," 32 pages; "Plywood Catalog," 16 pages; "Flush Door Catalog," 4 pages; "Stile and Rail Doors," 4 pages; "High Density Overlaid Plywood," 4 pages, and "Medium Density Overlaid Plywood Catalog," 4 pages.

Simpson Logging Co, Shelton, Wash.

For copy, check No. 56 through No. 62 on coupon, p 186.

### Fasco ventilator catalog

This 12-page, 4-color brochure covers Fasco's series of range hoods—for exhaust through-the-wall, through-the-eave, or through-the-roof. Also included: bath and utility room ventilators, ventilator-lights and ventilator-light-heaters, wall and ceiling ventilators, utility exhaust fans, and accessories to fit the full line.

Fasco Industries, Rochester, N.Y.

For copy, check No. 63 on coupon, p 186

continued on p 186

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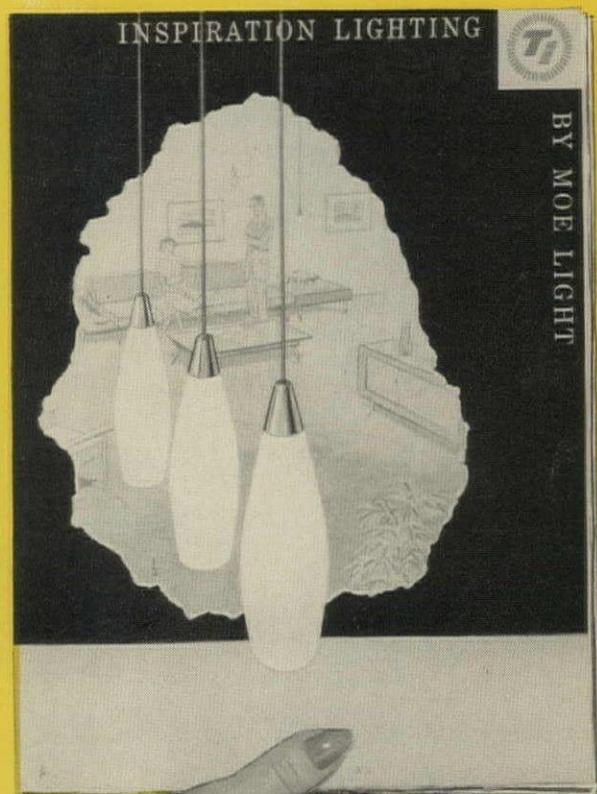


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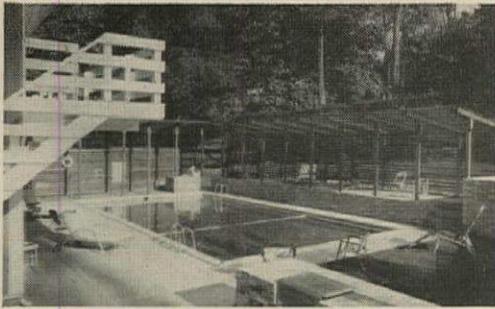
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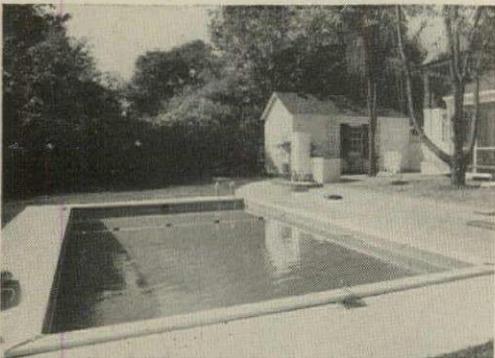
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**Flexible metal couplings**

The full line of Cobra flexible connectors for wet heat, gas, water, etc. is now included in a 16-page catalog. You will also find typical piping layouts, basic installation data and photos.

Cobra Metal Hose, Chicago.

For copy, check No. 64 on coupon below

**New light-control units**

Luxtrol's new 20-page catalog introduces the larger capacity models. These models extend the Luxtrol range to include 450-w, 800-w, and 1800-w for incandescent or fluorescent installation. You will also find data on how to use, how to wire, and how to install sections.

Superior Electric Co, Bristol, Conn.

For copy, check No. 65 on coupon below

**Electric raceway catalog**

National Electric Products have just issued a 52-page catalog giving full data on underfloor distribution systems, including a full line of service fittings, boxes, and saddle supports.

National Electric Prods, Pittsburgh.

For copy, check No. 66 on coupon below

**Ualco window line**

More than 20 types of aluminum windows are included in the new 40-page Ualco catalog. Specifications and features, sectional details, standard and modular sizes are given for all types. Also covered: hardware, curtain walls, glass block, and ranch window wall.

Southern Sash, Sheffield, Ala.

For copy, check No. 67 on coupon below

**Want more information?**

The numbers below are keyed to the items described on the New Products and Publications pages. Check the ones that interest you and mail the coupon to:

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- 4.  Teak flooring from Thailand
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- 6.  Forsberg sabre saw
- 7.  Manning Bowman jig saw
- 8.  Milwaukee Sawzall
- 9.  Disston sabre saw
- 10.  Cummins sabre saw
- 11.  Thor sabre saw
- 12.  De Walt Imperial radial arm saw
- 13.  Comet radial arm saw
- 14.  Delta radial arm saw
- 15.  Skil model 858 saw
- 16.  Disston circular saw
- 17.  Porter-Cable circular saw
- 18.  Thor C6B saw
- 19.  Black & Decker 1/2" drill
- 20.  Remington model 149DL
- 21.  Milwaukee angle-drive drill
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- 40.  Iron Fireman smokeless burner
- 41.  Kelvinator Foodarama
- 42.  Emerson-Pryne retractable hood
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- 44.  Admiral kitchen built-ins
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- 46.  Lockwood nylon latch bolt
- 47.  Stylon tile backing
- 48.  Aluminum Industries window
- 49.  Binswanger insulating window
- 50.  PanelStone simulated brick

**PUBLICATIONS**

- 51.  Bestwall Hummer systems
- 52.  Olin Mathieson on aluminum
- 53.  Nervastral Rigid flashing guide
- 54.  Red Cedar shake manual
- 55.  Concrete swimming pool guide
- 56.  Simpson insulating and hardboard
- 57.  Simpson acoustical products
- 58.  Simpson plywood catalog
- 59.  Simpson flush door catalog
- 60.  Simpson stile and rail doors
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- 62.  Simpson medium-density overlaid plywood
- 63.  Pasco ventilator catalog
- 64.  Cobra flexible connectors
- 65.  Luxtrol light-control units
- 66.  National Electric raceways
- 67.  Southern Sash windows

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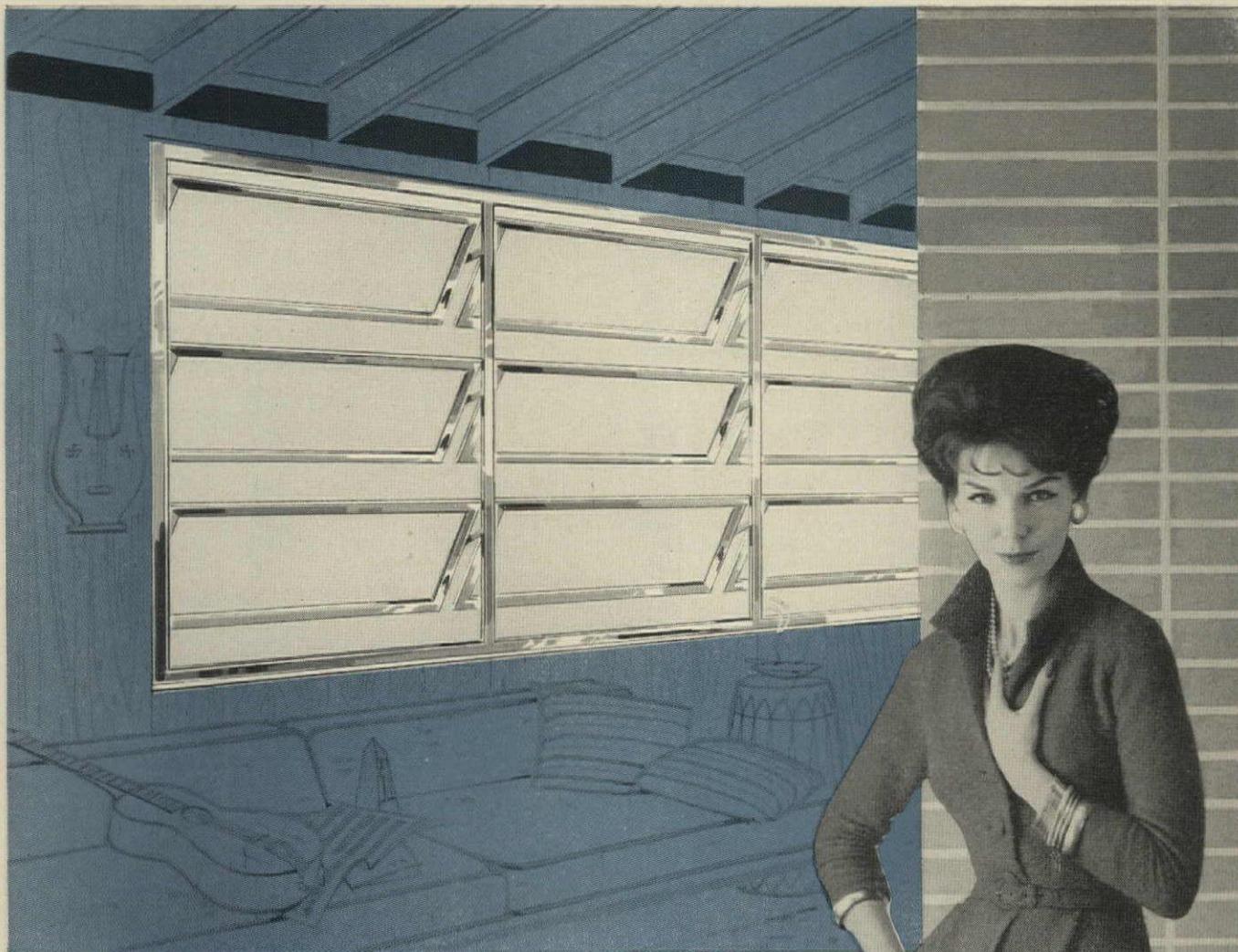
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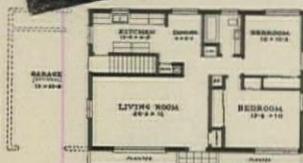
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| Page:     |   |
|-----------|---|
| 188       | Arkla Air Conditioning Corp.                        |
| 62        | Admiral Corp.                                       |
| 160, 161  | Alliance Ware, Inc.                                 |
| 163       | Allied Chemical & Dye Corp. (The Barrett Div.)      |
| 32        | American Gas Association                            |
| Cover III | American Hardware Corp., The (Russell & Erwin Div.) |
| 40        | American Motor Corp. (Kelvinator Div.)              |
| 173       | American-Olean Tile Co.                             |
| 82, 82A   | Andersen Corp.                                      |
| 56, 56A   | Armstrong Cork Co.                                  |
| 163       | Barrett Division, The (Allied Chemical & Dye Corp.) |
| 20C       | Bell & Gossett Co.                                  |
| 2         | Best Homes, W. G.                                   |
| 188       | Brikrete Associates, Inc.                           |
| 23, 56B   | Bulldog Electric Products Co.                       |
| 182       | Cabot, Inc., Samuel                                 |
| 5         | California Redwood Assn.                            |
| 142D      | CARADCO, Inc.                                       |
| 10, 11    | Cast Iron Pipe Research Assn.                       |
| 144       | Ceco Steel Products Corp.                           |
| 80, 81    | Celotex Corp., The                                  |
| 177       | Certain-Teed Products Corp.                         |
| 3         | Colorado Fuel & Iron Corp.                          |
| 83, 84    | Consoweld Corp.                                     |
| 172       | Cupples Products Corp.                              |
| 76, 77    | Curtis Companies Service Bureau                     |
| 1B        | Donley Brothers Co., The                            |
| 26        | Dwyer Products Corp.                                |
| 6         | Edison Electric Institute                           |
| 16        | Edwards Engineering Co.                             |
| 72        | Fedders-Quigan Corp.                                |
| 175       | Filon Plastics Corp.                                |
| 22        | Follansbee Steel Corp.                              |
| 74, 75    | Ford Motor Co.                                      |
| 9         | Frigidaire Division (General Motors Corp.)          |
| 190       | Fuel Econ-O-Mizer of the United States, Inc.        |
| 187       | General Bronze Corp.                                |
| 34, 35    | General Electric Co.                                |
| 9         | General Motors Corp. (Frigidaire Div.)              |
| 30        | General Tire & Rubber Co., The (Bolta-Floor Div.)   |
| 27        | Georgia-Pacific Corp.                               |
| 174       | Gering Products, Inc.                               |
| Cover II  | Gold Seal Division (Congoleum-Nairn, Inc.)          |
| 180       | Hough Co., The Frank G.                             |
| 182       | HOUSE & HOME  |
| 20A       | Inland Homes Corp.                                  |
| 72B, 73   | Insulite Division (Minnesota & Ontario Paper Co.)   |
| 21        | International Harvester Co.                         |
| 40        | Kelvinator Division (American Motor Corp.)          |
| 36        | Kentile, Inc.                                       |
| 68, 69    | Keystone Steel & Wire Company                       |