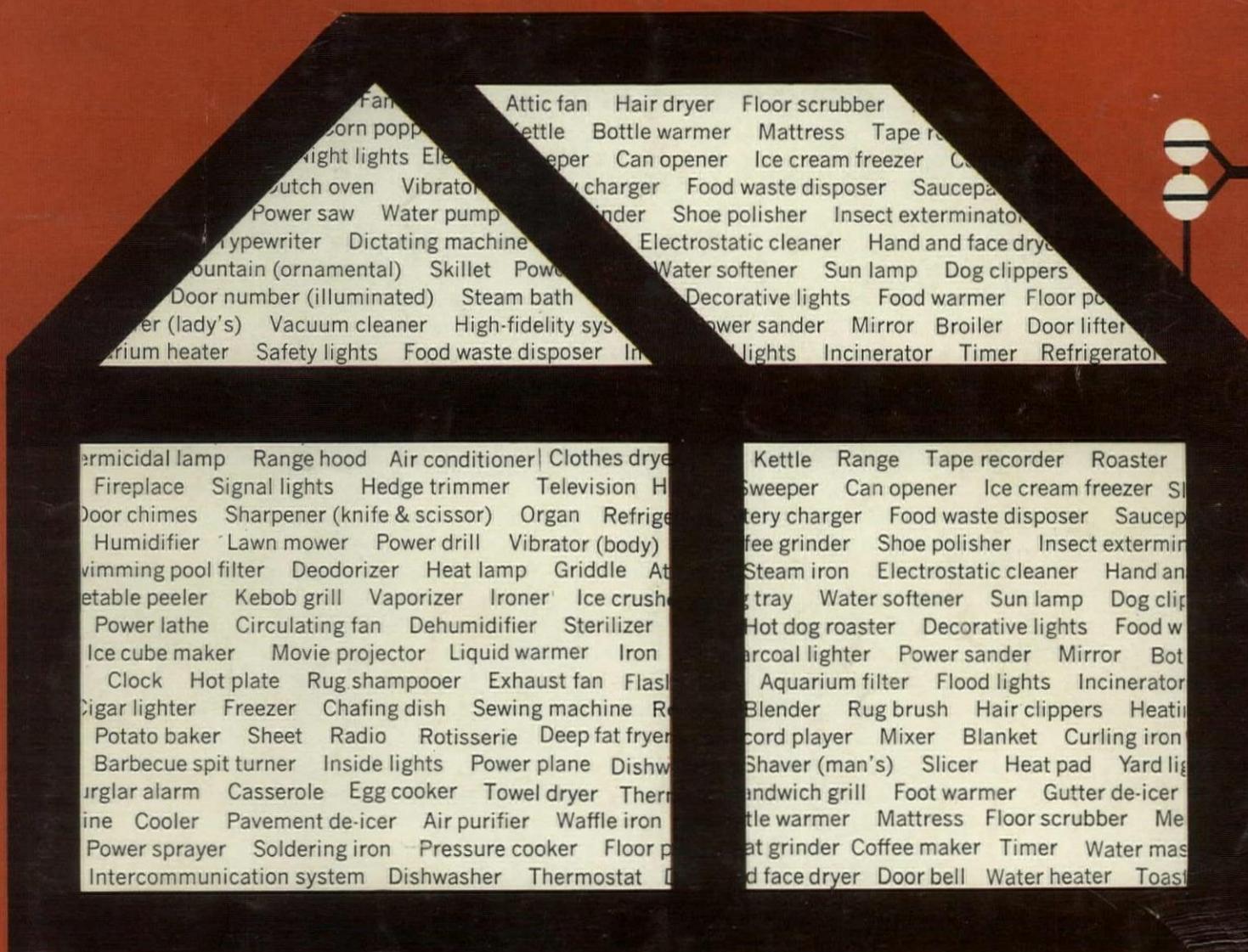


APRIL 1961 SIX DOLLARS A YEAR—ONE DOLLAR A COPY

# House & Home



Fan Attic fan Hair dryer Floor scrubber  
 Corn popper Kettle Bottle warmer Mattress Tape recorder  
 Night lights Electric shaver Can opener Ice cream freezer  
 Dutch oven Vibrator Battery charger Food waste disposer Saucepan  
 Power saw Water pump Grinder Shoe polisher Insect exterminator  
 Typewriter Dictating machine Electrostatic cleaner Hand and face dryer  
 Mountain (ornamental) Skillet Power Water softener Sun lamp Dog clippers  
 Door number (illuminated) Steam bath Decorative lights Food warmer Floor polisher  
 (lady's) Vacuum cleaner High-fidelity system Power sander Mirror Broiler Door lifter  
 Aquarium heater Safety lights Food waste disposer Incinerator Flood lights Incinerator Timer Refrigerator

germicidal lamp Range hood Air conditioner Clothes dryer  
 Fireplace Signal lights Hedge trimmer Television  
 Door chimes Sharpener (knife & scissor) Organ Refrigerator  
 Humidifier Lawn mower Power drill Vibrator (body)  
 Swimming pool filter Deodorizer Heat lamp Griddle  
 Vegetable peeler Kebob grill Vaporizer Ironer Ice crusher  
 Power lathe Circulating fan Dehumidifier Sterilizer  
 Ice cube maker Movie projector Liquid warmer Iron  
 Clock Hot plate Rug shampooer Exhaust fan Flashlight  
 Cigar lighter Freezer Chafing dish Sewing machine  
 Potato baker Sheet Radio Rotisserie Deep fat fryer  
 Barbecue spit turner Inside lights Power plane Dishwasher  
 Burglar alarm Casserole Egg cooker Towel dryer Thermostat  
 Air conditioner Cooler Pavement de-icer Air purifier Waffle iron  
 Power sprayer Soldering iron Pressure cooker Floor polisher  
 Intercommunication system Dishwasher Thermostat

Kettle Range Tape recorder Roaster  
 Sweeper Can opener Ice cream freezer  
 Battery charger Food waste disposer Saucepan  
 Coffee grinder Shoe polisher Insect exterminator  
 Steam iron Electrostatic cleaner Hand and face dryer  
 Dish tray Water softener Sun lamp Dog clipper  
 Hot dog roaster Decorative lights Food warmer  
 Charcoal lighter Power sander Mirror Broiler  
 Aquarium filter Flood lights Incinerator  
 Blender Rug brush Hair clippers Heating  
 record player Mixer Blanket Curling iron  
 Shaver (man's) Slicer Heat pad Yard light  
 Sandwich grill Foot warmer Gutter de-icer  
 Bottle warmer Mattress Floor scrubber  
 Meat grinder Coffee maker Timer Water massager  
 Hand face dryer Door bell Water heater Toaster

**HOW ELECTRICAL LIVING CAN HELP  
 SELL MORE HOUSES THIS YEAR**



## *You get more with a Congoleum-Nairn floor*

You get more *every* way... a floor for *every* room at any price. You get a sure fire C-N selling program that will *merchandise* your homes... C-N's famous Home Builders Specials, selling aids, important color coordination plans... *everything* you want! Send for free samples of this new Congoleum-Nairn *Westernaire*<sup>™</sup> Vinyl. See for yourself... then ask the price! That's the clincher! Write Home-Builder Service Dept., Congoleum-Nairn Inc., 195 Belgrove Drive, Kearny, N. J

Congoleum-Nairn  
FINE FLOORS

You Save TWICE with these NuTone Products for...

# Apartments *and* Remodeling

*\* Low Initial Cost \* Low Installation Cost*



## NUTONE NON-DUCT RANGE HOOD-FAN



If your home, or apartment has no provision for ducted kitchen ventilation, this is for you . . . It's NuTone's Non-Ducted Hood-Fan . . . the sensational #3400 Series . . . a new, self-contained ventilating system that attaches easily under the range cabinet or to the wall in only a matter of minutes! 30"-36"-42" sizes in Antique Copper, Stainless Steel, Silver or Copper Anodized, White or Copper Enamel. Priced as low as \$84.95 List.

## NUTONE NON-ELECTRIC DOOR CHIME & VIEWER



NEW Non-Electric Door Chime with Optical Lens Viewer. Wide angle lens offers clear view of entire doorway area. Complete privacy for viewer. Gold Anodized window nameplate. List Price \$7.95. Chime also available without viewer \$4.95 List.



Model MC-309

## NUTONE WALL HEATER & FAN



Heat PLUS Ventilation combined in one fixture. Saves installation cost, avoids double cutouts and double wiring. The Heater and Fan operate separately or at SAME TIME. Connects to standard house wire. \$56.95 list . . . Other Heaters \$18.95 and up.



Model  
9300



*New NuTone Catalogs*

WRITE TO NUTONE, INC.  
Dept. A, Cincinnati 27, Ohio

— See Next Page —>

A Cheerful Earful  
FOR YOUR HOMES

# NuTone Door Chimes

NEW Styling  
Trouble-Free  
Performance

L-31 "Pacesetter"  
Chord Tone Chime  
\$13.95 List

L-16 "Futura"  
\$7.95 List

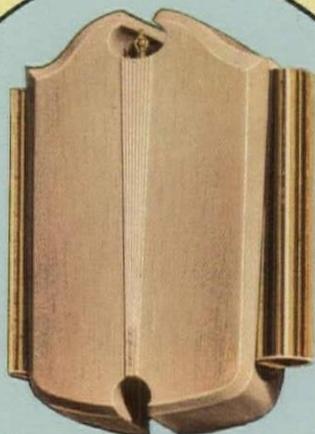


2 notes

## A Musical Welcome

Any home is more inviting with a friendly musical "hello" at its doorway! Here's elegant charm for your hallways . . . living rooms or kitchens. Attractive to the eye . . . soothing to the ear.

SEE OTHER SIDE



2 notes

L-22 "Jewel." Traditional design in Walnut or Lime Oak. \$9.95 List

L-37 "Built-In" Door Chime and Clock  
Simplified installation. No clock outlet needed. \$22.50 List  
Silver, Gold or Copper Anodized.

Chord Tones



Fits Flush with Wall

Chime Housing Recessed

25 Chime Models . . . PLUS a complete line of Pushbuttons and Transformers



**DRAMATIC  
SHELL  
ROOFS  
OF  
CONCRETE**

*Newest thing in home building!* Builders can find in concrete shell roofs plenty to stimulate sales interest. The variety of shapes is almost limitless—from angular folded plate to sweeping arcs. Many shell roof homes already have been built. Precasting of roofs, and reusable forms, are making shells even more practical. Concrete shells have much to offer in economy, in spanning ability—and in the fresh beauty that excites buyer interest. A big appeal is the fire-safety and low upkeep only concrete offers. Concrete is the material of modern living. From new-look walls to “pebbled” patios, concrete is helping to create sales!

*For the newest in homes . . .*

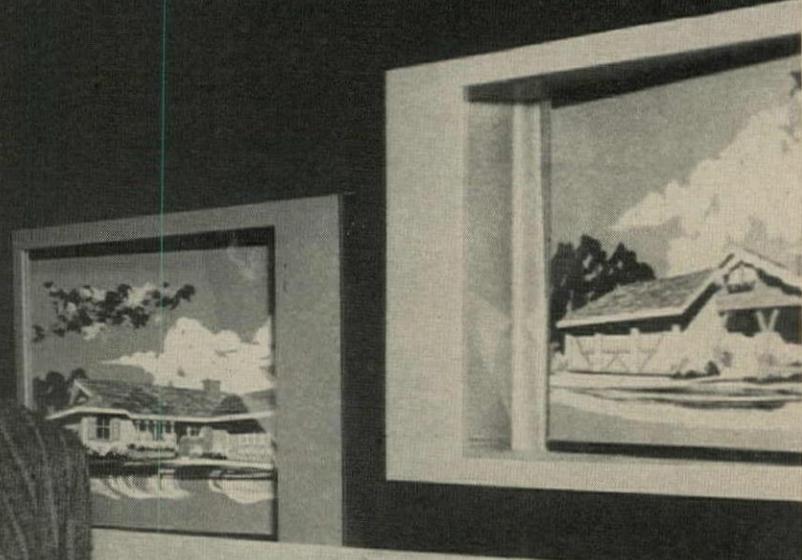
**LIVING  
CONCRETE**

**PORTLAND CEMENT ASSOCIATION**

*. . . A national organization to improve and  
extend the uses of concrete*

We think  
the Post's Blue  
Ribbon Home program  
is an outstanding  
way of promoting  
sales.

Discerning  
home buyers  
really respond to  
national products  
backed by the  
Post.

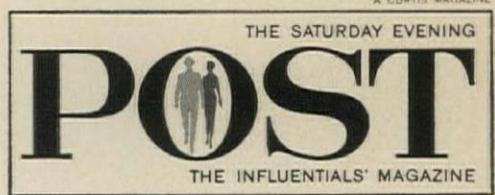


SATURDAY EVENING POST ADVERTISED PRODUCTS  
TO BE INCORPORATED IN THE  
INFLUENTIAL HOME TRACT - EAST ANAHEIM

American Gas Association Approved Products  
 American Standard Bathroom Fixtures  
 American "Skyline" and "Interiors" Co.  
 Armstrong Floor Covering  
 Chrysler's Plymouth Dodge-Plywood Selections  
 General Electric Appliances  
 General Electric Washers  
 General Electric Stoves  
 General Electric Dishwashers  
 General Electric Freezers  
 General Electric Washers  
 General Electric Stoves  
 General Electric Dishwashers  
 General Electric Freezers

John Deere Tractors  
 John Deere Lawn Mowers  
 John Deere Riding Lawn Mowers  
 John Deere Tractors  
 John Deere Lawn Mowers  
 John Deere Riding Lawn Mowers  
 John Deere Tractors  
 John Deere Lawn Mowers  
 John Deere Riding Lawn Mowers


**Meet Merrill Butler and L. B. Harbour**—of the Butler-Harbour Construction Company in Los Angeles, California. They're two of the biggest, busiest boosters of The Saturday Evening Post's Blue Ribbon Home Award Program. Since tying in with the Blue Ribbon promotion, their firm built and sold 887 homes—for a hefty total of \$14,500,000. And last year all Blue Ribbon builders sold homes to the tune of \$400 million. They did it this way: A special ad in the Post featured their names during National Home Week. Model home displays tied in with the promotion. Soon thousands of Post readers came calling—and sales started climbing. ■ So this year, let the Post's Blue Ribbon promotion do big things for you. Get all the details now. Write to Jack Pontius, Building Products Manager, The Saturday Evening Post, Independence Square, Philadelphia 5, Penna.





It's  
Almost  
Like  
Offering  
Home  
Buyers  
A Free  
Freezer!

# Fabulous **FOODARAMA** by Kelvinator



**12 Cu. Ft. "No-Frost" Refrigerator and 6 Cu. Ft. "No-Frost" Upright Freezer All in One Cabinet Only 41" Wide**

With Foodarama you can offer the extra sales appeal of true frozen food living—at little or no extra cost!

A Dallas builder\* reported this extra appeal helped him sell 11 houses in the \$16,000 to \$19,000 price bracket *in one week*—out of a group of only 30 to be built!

A top California builder\* gave Foodarama major credit for helping him sell a tract of 95 homes in the \$12,950 to \$15,000 bracket *in just seven weeks!*

All across the country builders are reporting exciting sales results with the extra appeal of Foodarama's upright refrigerator and freezer combination. *Yet it costs no more than many conventional refrigerator-freezers!*

Only 41" wide, 63" high and 25" deep, Foodarama can be built in or left free-standing. It fits flat against the wall and flush with cabinets.

Sell your houses faster with Fabulous Foodarama by Kelvinator . . . send for the special builder plan today.

\*Name on request

## **Kelvinator Appliances**

Kelvinator Division, American Motors Corporation, Detroit 32, Michigan  
Refrigerators • Ranges • Automatic Washers • Clothes Dryers • Food Freezers  
Room Air Conditioners • Dishwashers • Disposers • Water Heaters • Dehumidifiers

# Doesn't every manufacturer claim to produce a "quality" window?

We've never heard of a manufacturer who didn't claim his windows were "as good as" or better than his competitors. Have you?

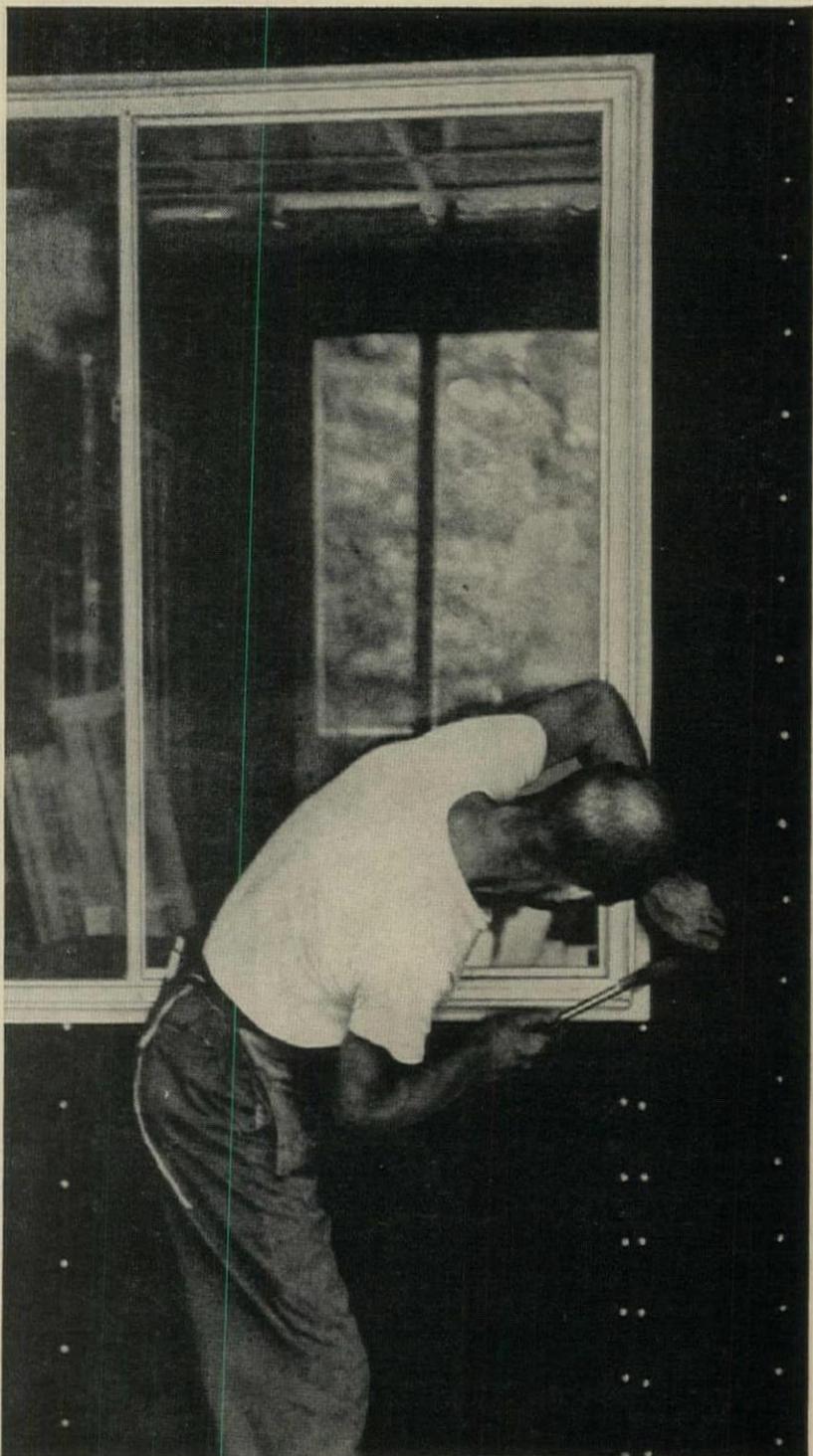
Why then, doesn't every aluminum window manufacturer carry the AWMA "Quality-Approved" seal on his windows?

A good question... and the truth is, some manufacturers who glibly claim that their windows meet or even exceed the AWMA specifications actually couldn't pass *all* the tests when administered by an independent testing laboratory. You see, AWMA quality window specifications cover not just one but many factors including the metal alloy, wall thickness, strength of sections, size limitations, hardware, protective coating, as well as performance tests that cover air infiltration, deflection and other physical load tests.

The AWMA "Quality-Approved" seal on the window together with the official AWMA Conformance Test Report by a recognized, independent laboratory are your assurance of windows that satisfy FHA Minimum Property Standards in every respect.

Why take chances and waste time with aluminum windows of questionable quality when it's so easy to get windows that not only satisfy FHA requirements but will satisfy your most discerning buyers, — windows that are designed and built to eliminate time-wasting, costly call backs. For your own protection insist on "Quality-Approved" aluminum windows.

For a copy of the latest AWMA window specifications with the names of approved manufacturers and the types of windows they produce, write to the Aluminum Window Manufacturers Assn., 630 Third Ave., New York 17, N. Y. Attention Dept. H-614.

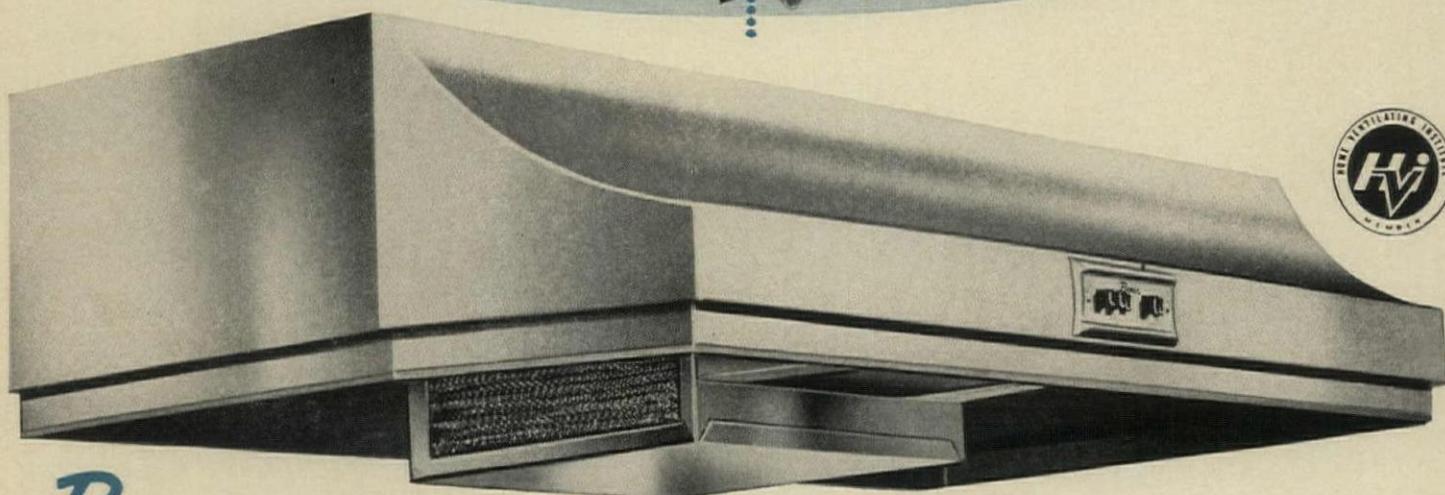


**MEMBERS:** Adams Engineering Co., Inc., Ojus, Fla.; Albritton Engineering Corp., Bryan, Texas; American Duralite Corp., Loudon, Tenn.; American Metal Window Co., Inc., Shreveport, La.; Amco Aluminum Corp., Philadelphia, Pa.; Arnold Altex Aluminum Co., Miami, Fla.; The William Bayley Co., Springfield, Ohio; Capitol Products Corp., Mechanicsburg, Pa.; Ceco Steel Products Corp., Chicago, Ill.; Crossly Window Corp., Miami, Fla.; Dunaway Manufacturing Co., Longview, Texas; Fenestra Inc., Philadelphia, Pa.; Michael Flynn Mfg., Co., Philadelphia, Pa.; Kesko Products Co., Bristol, Ind.; Likit Windows, Inc., Hayward, Calif.; Mayfair Industries, Inc., Lafayette, La.; Miami Window Corp., Miami, Fla.; S. H. Pomeroy Co., Stamford, Conn.; Porterfield Industries, Inc., Miami, Fla.; Porter-Lite Products Corp., Houston, Texas; Reynolds Metals Co., Richmond, Va.; Rogers Industries, Inc., Detroit, Mich.; The F. C. Russell Co., Columbiana, Ohio; Southwest Aluminum Products, Inc., Dallas, Texas; Stanley Building Specialties, North Miami, Fla.; Truscon Division, Republic Steel Corp., Youngstown, Ohio; Valley Metal Products Co., Plainwell, Mich.; Weather-Tite Mfg. Corp., Baltimore, Md.; Windalume Corp., Kenil, N. J.; Wisco Inc., Detroit, Mich.

looks perfect in the kitchen



... is perfect in performance



## Broan Dual Blower Range Hood

Under the surface of this hood you find one of the best engineered blowers available. A genuine four pole motor — not a noisy two pole — drives two large 5½ inch "squirrel cage" wheels for high performance against high duct pressures. Quietness is inherent in every centrifugal blower of this type, but Broan goes a step further by mounting the motor on neoprene to eliminate vibration noise.

Installation is fast and easy. If range is on an outside wall, you discharge straight out the back of the hood without even cutting a hole in the cabinet. Vertical discharge is also possible.

Other features are lifetime aluminum filters, recessed light, built in damper, push button controls, 5 year guarantee and "HELIARC" welded construction that leaves no seams to collect grease.

For full details, specifications and colors, please write



DUAL-BLOWER  
ISLAND HOOD

Has the same engineering features and advantages as the regular Dual-Blower Hood.



DUCT-FREE HOOD  
COMBINATION  
with Air Refreshing  
Charcoal Converter

A slim line converter that mounts atop any Dual-Blower or Mixed-Flo Hood for Duct-Free service.

**Broan**

Manufacturing Company, Inc.

924 West State Street, Hartford, Wisconsin

Specialists in Quality Ventilating Equipment for Over 30 Years  
In Canada - Manufactured by Superior Electric, Ltd., Pembroke, Ontario

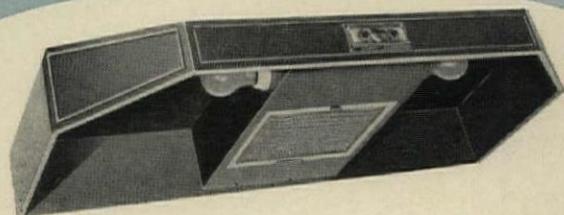
BROAN MIXED-FLO HOOD —  
Winner of the "American Builder"  
Quality Builders' Product Award



## Broan Mixed-Flo Range Hood

a great performer in saving space and money

Here is the greatest value leader in a low priced range hood, fully assembled, ready to install from the carton and sales packed with every major feature wanted by knowledgeable housewives. Exclusive Broan Mixed-Flo fan blade delivers blower-like air stream with whisper-quiet action. Horizontal or vertical discharge, no lost cabinet space, push button controls, twin lights, removable aluminum filter, etc. Write for full information.



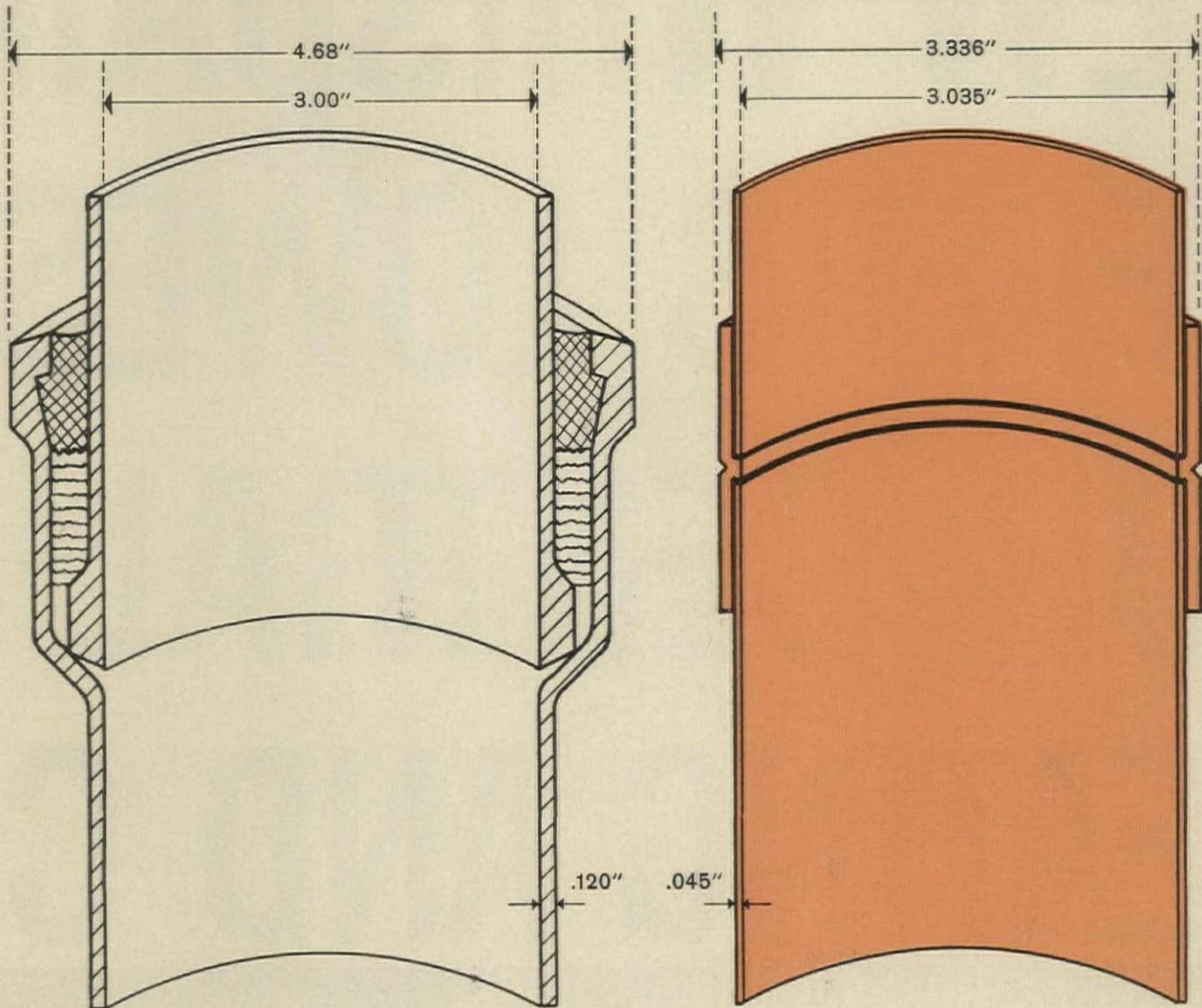


**CEILINGS UNLIMITED...with Bestwall Lite Acoustic Plaster. Any ceiling shape, of intricate contours or free-flowing lines, can be machine sprayed to create beautiful and decorative effects. The bedroom ceiling in the beautiful home of Carl J. Kahlmeyer, of Kahlmeyer Brothers, St. Louis, illustrates well the striking effect Bestwall Lite Acoustic can achieve. This high quality and fire resistant plaster can be applied quickly and easily to any clean, firm surface. It has a noise reduction coefficient of .55-.60 and provides light reflection up to 74% without glare. A variety of textures and a range of fire ratings may be obtained. Bestwall Gypsum Co., Ardmore / Pa.**



Plants and offices throughout the United States

# IT JUST DOESN'T MAKE SENSE!



Take a good look at this dimensional comparison of service-weight cast iron drainage pipe and Type DWV copper tube. You'll see why it makes good sense to use Anaconda Copper Drainage Tube Type DWV, and Anaconda Solder-joint Fittings for soil, waste and vent lines. You can do a better job, easier, faster and at less cost. **BETTER**, because rust-caused troubles such as reduced flow or stoppages just don't occur in copper plumbing. Also, the builder is saved the extra cost of wide plumbing walls—a 3" copper tube stack fits within a partition of standard 2 x 4's—whereas, in ferrous piping, a 4" cast iron soil stack is generally used, requiring 2 x 6" studs. **AT LESS COST** because installation time is cut one-third to one-half, and here's why. Longer copper tube lengths mean fewer joints, and the lighter weight (about ¼ the weight of a ferrous pipe installation) permits cost-saving assemblies of rough-in units in the shop. Solder-joint fittings are connected quickly. Take a look at a plumbing contractor's estimated cost comparison for a typical, back-to-back bathroom—kitchen—laundry drainage system.

## USING COPPER

Anaconda Copper Drainage Tube, Type DWV* (93 ft. of various sizes) .....	\$ 72.74
Anaconda Cast Brass Solder-joint Fittings .....	67.97
Solder, Flux, Sand Cloth .....	2.00
Materials cost .....	\$142.71
12 Hours Labor .....	60.00
Installed cost .....	\$202.71

\*Copper tube marked DWV (*Drainage, Waste, Vent*) identifies tube used only for sanitary drainage lines.

## USING FERROUS PIPE AND FITTINGS

Cast Iron and Steel Pipe (93 ft. of various sizes) ...	\$ 60.71
Fittings .....	58.10
Caulking, Lead and Oakum .....	21.88
Materials cost .....	\$140.69
22 Hours Labor .....	110.00
Installed cost .....	\$250.69

Anaconda American Brass Company, Waterbury 20, Connecticut. In Canada: Anaconda American Brass Ltd., New Toronto, Ontario.

6101

**ANACONDA**® COPPER TUBE AND FITTINGS for soil, waste and vent lines  
Available through plumbing wholesalers. Anaconda American Brass Company.



# NEW WhispAir\*

## OFFERS LOWEST FOR CENTRAL-S HEATING AND CO

**WhispAir is designed and priced for small, low-cost homes...It has the quietness and dependability of Deluxe Central Systems.**

Include central-system air conditioning in your lowest priced homes. Quiet, high quality cooling plus mild weather heating. Consider the unique sales appeal of such a luxury item in your home . . . at a cost low enough to make buyers out of shoppers. The new WhispAir is only a foot deep, hangs on the outside wall snugly, unobtrusively. Requires no inside space. Quickly applied without duct work . . . or with duct work for multi-room distribution. 18,000 BTU cooling, 17,000 BTU heating.

WhispAir is a true heat pump, not just a reverse cycle unit. Completely prewired including factory installed thermostat. Built with the same full-sized components as de luxe central system equipment. Backed by Westinghouse and installed by a professional air conditioning specialist . . . the Westinghouse PRO.

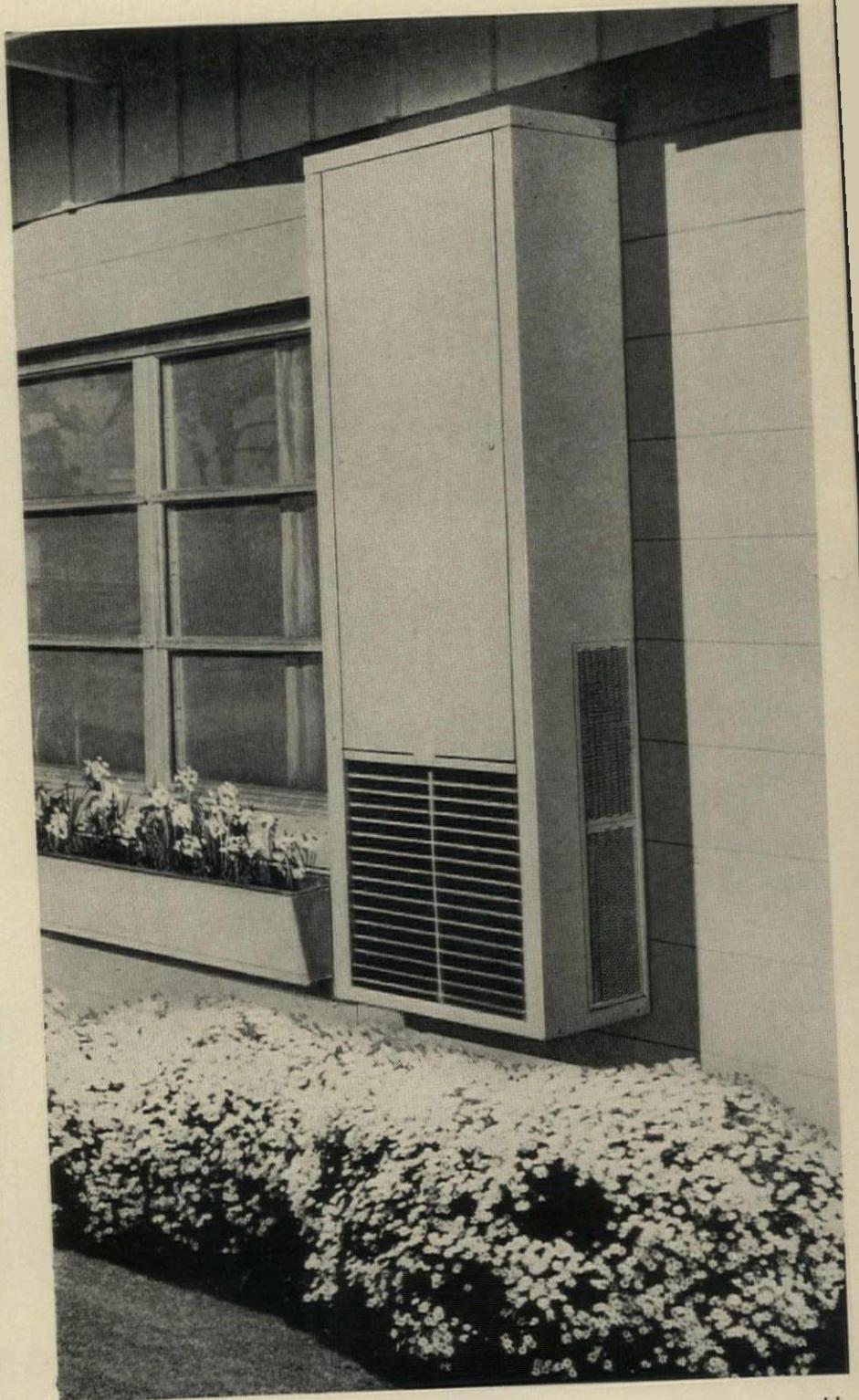
Get on the bandwagon . . . join the rush to WhispAir. Call your Westinghouse PRO. Or write: Air Conditioning Division, Box 510, Staunton, Virginia. \*Trade Mark

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by **Westinghouse**  
**INSTALLED COST**

**SYSTEM**  
**COOLING!**

---



**WhispAir**



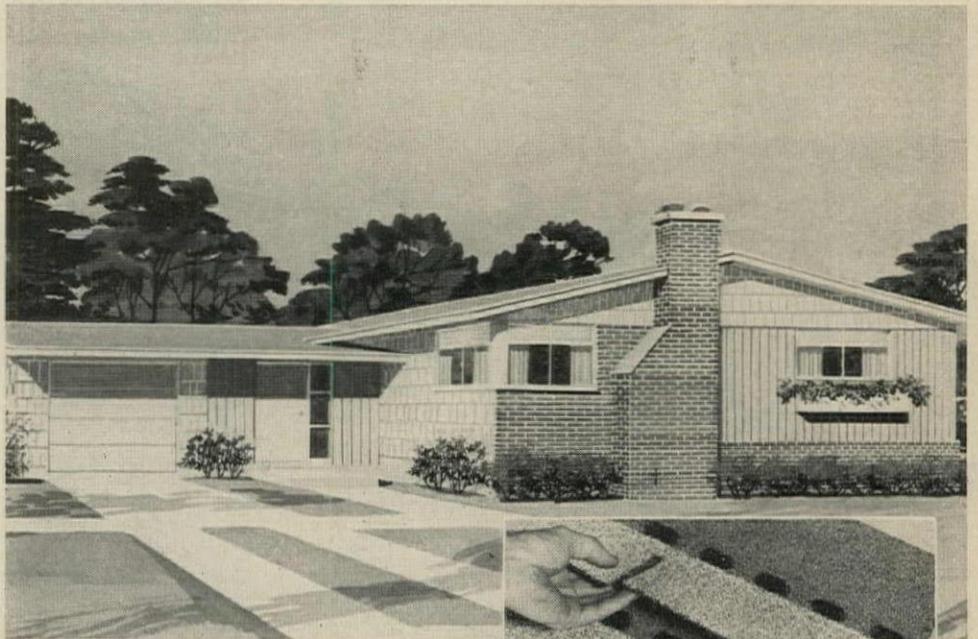
by **Westinghouse**



*“Thank you for a product that is such a help to the builder”*

Richard A. Osias of the Osias Organization of Williston Park, L. I., whose North-Point-in-Huntington is one of the outstanding Model Homes developments in the country.

The project comprises 2400 one-family homes, priced from \$16,990 to \$18,490. The Osias Organization has an additional development, The Village on the Hill, comprising 800 fine homes priced from \$23,990 to \$25,990.

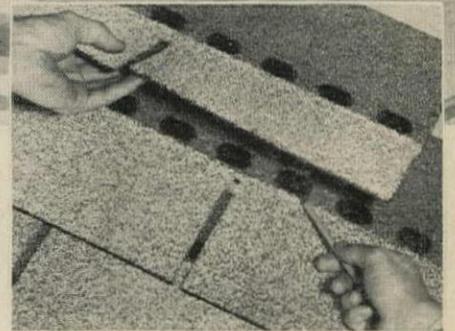


**“The Bird Wind Seal Shingle is absolutely hurricane-proof”** Mr. Osias makes this all-out statement. His letter says in part:

“Hurricane Donna devastated this section. The center of the hurricane passed directly over our development of about 100 houses. Our Bird Wind Seal Shingles did not alter their position regardless of the intensity or direction of the wind force.”

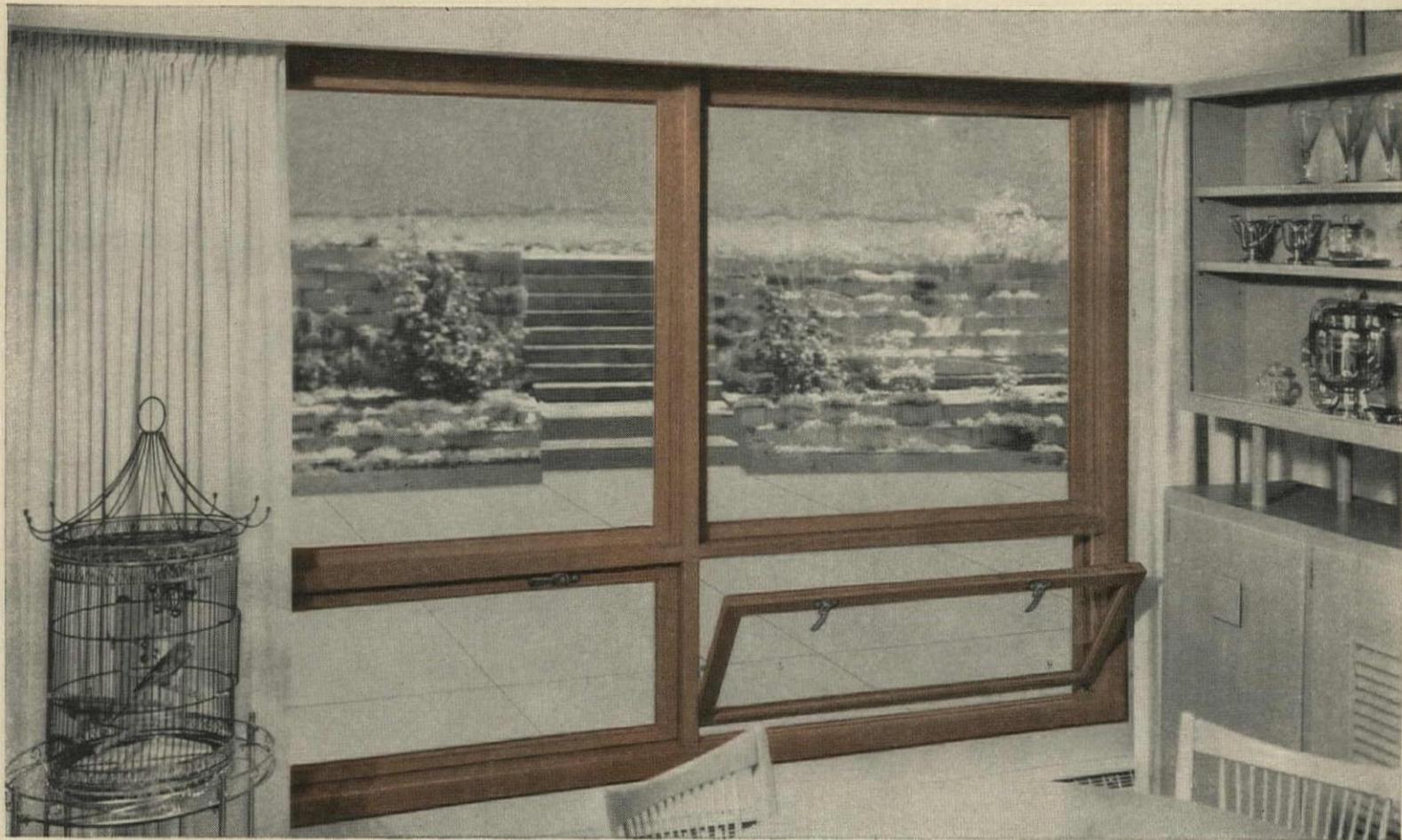
“In the adjacent area great interior losses resulted from water entering the houses through damaged roofs *not Bird Wind Seal roofs.*”

Here's why the Bird Wind Seal Shingle is absolutely hurricane-proof. These dots of adhesive are activated by the sun, cementing every shingle down in a mighty grip that does not let go.



BIRD & SON, INC., EAST WALPOLE, MASS.  
CHARLESTON, S. C.; SHREVEPORT, LA.; CHICAGO, ILL.

CONTACT YOUR BIRD REPRESENTATIVE . . . FOR QUICK DELIVERY OF BIRD WIND SEAL SHINGLES AND SALES AIDS OF ALL KINDS



# WHATEVER YOUR BUILDING METHOD

**RIMCO®**

**WOOD WINDOW UNITS**

**COMPLETE**

**YOUR PROFIT PICTURE**

Whether you use component parts or build conventionally, your profit margin can be increased through the use of "Rimco" Wood Window Units. Here's why: "Rimco" Units install easier, trim out and finish faster . . . all saving time, your number one cost factor. Here's a *complete line* of competitively priced Wood Window Units that should be included in your 61 plans. By "Unit" we mean sash installed in frame, hardware, outside trim applied . . . all ready to set in place. All you do is trim out the interior and finish. *All* "Rimco" Wood Window Units are preservative treated with deep-penetrating Woodlife applied by the Dri-Vac *controlled* process. Ask your Lumber Dealer or write Rock Island Millwork Company, Factory Division, Rock Island, Illinois.

**RIMCO®**

ROCK ISLAND MILLWORK COMPANY  
FACTORY DIVISION, P. O. BOX 97  
Rock Island, Illinois  
(SEE OUR CATALOG IN SWEET'S FILE)

DESIGNED AND ENGINEERED BY ROCK ISLAND MILLWORK COMPANY

HELPING BUILD AMERICA FOR OVER 90 YEARS

NEW FROM CELOTEX!

# SHADOWCAST<sup>\*</sup> SIDING

NEW BEAUTY...NEW ECONOMY...NEW BUYER APPEAL!

# SHADOWCAST<sup>\*</sup> SIDING

**Shadowcast** Hardboard Siding is handsome. Extra-thick ( $\frac{7}{16}$ "") for deep, sharp shadow lines . . . Tough, hard-to-dent surface resists bumps, scuffs, hail . . . Smooth, knot-free, grain-free surface; prime coated face and all edges; finish coat can be applied as much as 60 days later . . . Back-sealed for moisture resistance . . . Special Stormguard nails drive flush; no surface dimpling or fracturing.

**Shadowcast** Siding is easy to nail . . . Cuts like wood, nails like wood, but doesn't splinter, split, or crack.

**Shadowcast** Siding comes in long (80% 16') lengths, for rapid coverage and fewer joints . . . Wide (12") panels for modern appearance . . . Double guide lines on both long edges permit 10½" or 11" exposure, speed installations, minimize waste.

\*TRADE MARK

CLIP AND SEND NOW!

THE CELOTEX CORPORATION  
120 S. La Salle St., Chicago 3, Ill.

Gentlemen: I'm interested in cost-saving advantages of your new Shadowcast siding. Please have a representative show me samples.

Name.....

Firm.....

Address.....

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

**CELOTEX**  
REG. U. S. PAT. OFF.  
BUILDING PRODUCTS

THE CELOTEX CORPORATION  
120 S. LA SALLE STREET  
CHICAGO 3, ILLINOIS

*If it's by **CELOTEX**,  
you get **QUALITY...plus!***

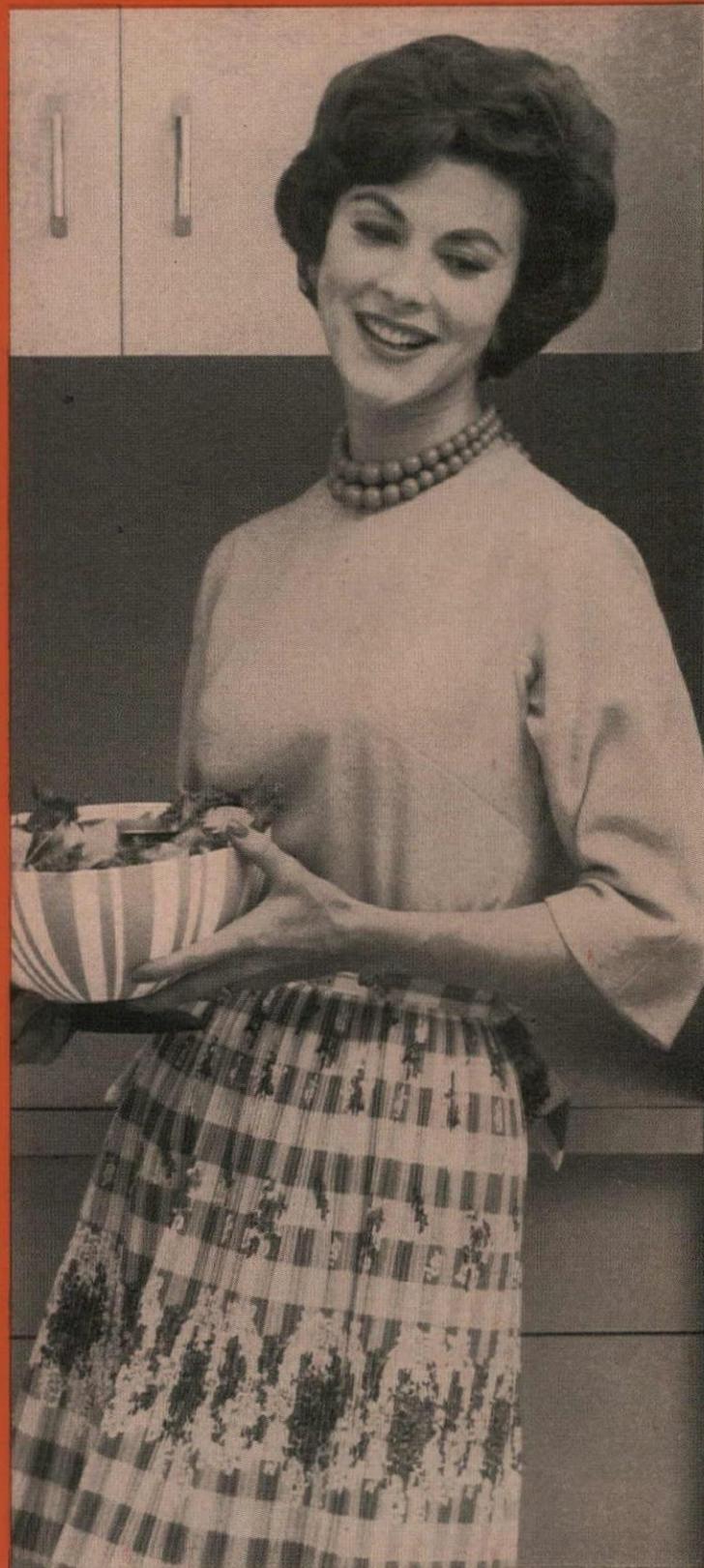


# NEW HOME-SELLING IDEA FROM **TAPPAN**

Offer a custom choice  
of Tappan electric or  
gas built-ins with no  
custom carpentry

Save time! Save trouble! Save money!

A custom kitchen — at no extra cost! Use the same rough framing in every house, because all Tappan units are standard size. Give your prospect her choice of gas or electricity, choice of color, choice of surface unit arrangement. No fitting problems. No special cut-outs. Just set Tappan in, hook it up. That's all.



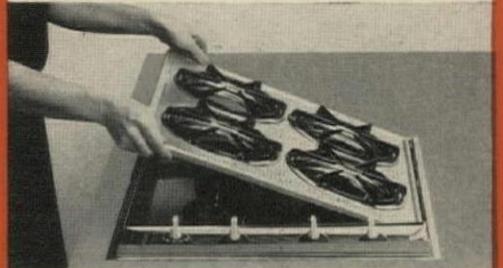
## Women want these features backed by Tappan quality



**Completely automatic:** in the oven—automatic time and heat control. Roastmeter. Automatic rotisserie. On the surface units: Set-'n-Forget burner. Automatic griddle. Foods can't burn!



**Choice of color:** Tappan gas and electric built-ins come in six smart new colors and finishes. Also a choice of 14 surface unit arrangements, all standard size, all installed *from the top*.



**Easy cleaning:** All Tappan built-ins have lift-up or lift-off cook tops. Simple to clean over, under. Ovens are chrome-lined—wipe clean with damp cloth. Oven door lifts off for greater accessibility.

**CUSTOM CHOICE OF TAPPAN BUILT-INS: GAS OR ELECTRIC CHOICE OF 6 COLORS**

**Display this sign!** It tells every prospect she will enjoy Tappan dependability . . . gas or electric—in the color she prefers. It pays off Tappan's advertising right at your place of business. And it says you know and offer *quality*.

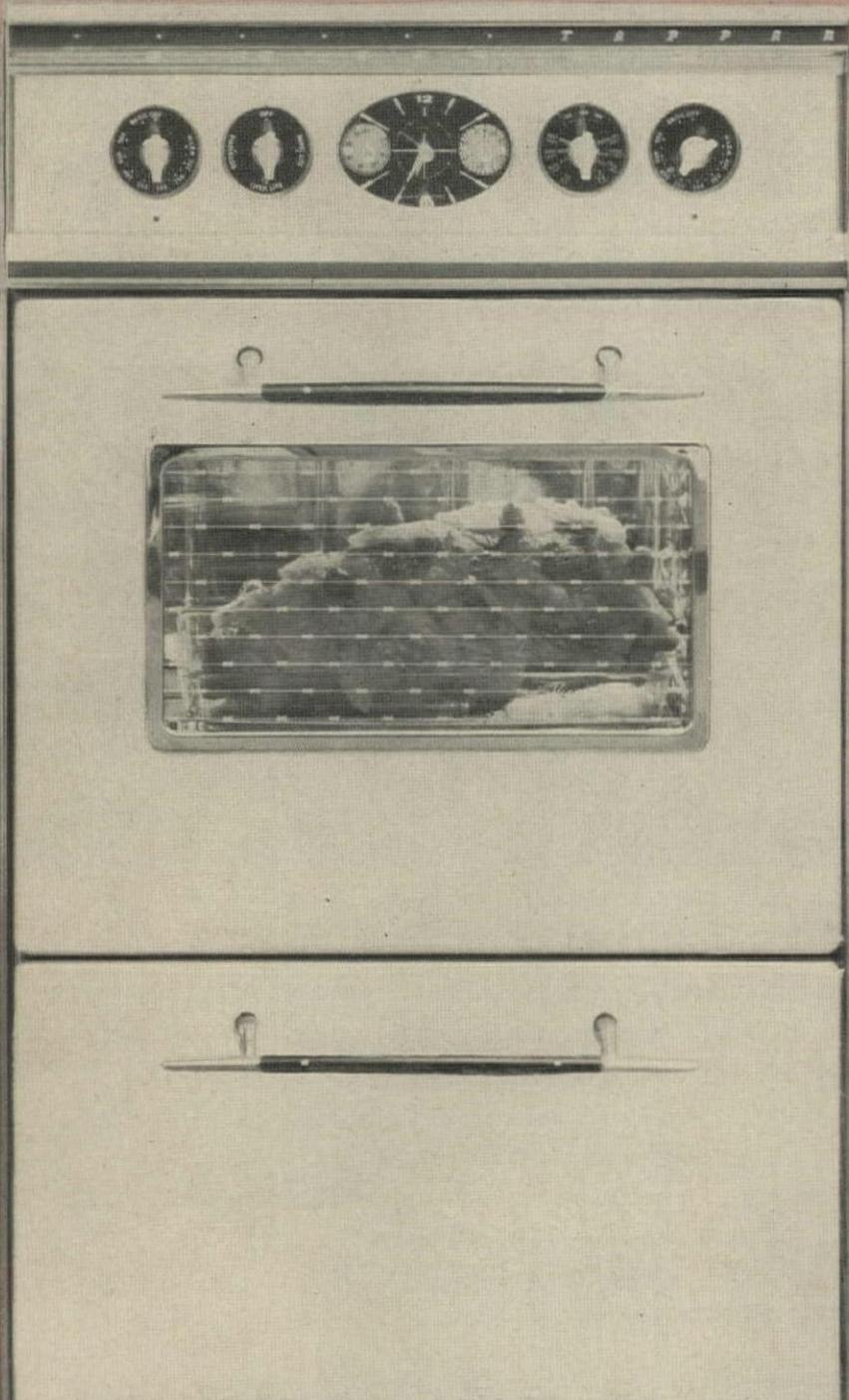
The Tappan Company  
Department HH 4-1, Mansfield, Ohio  
Please supply me with complete specifications, installation and model information on Tappan: Built-In Gas Ranges , Tappan's 'Fabulous 400' Electric Range , Built-In Refrigerators .

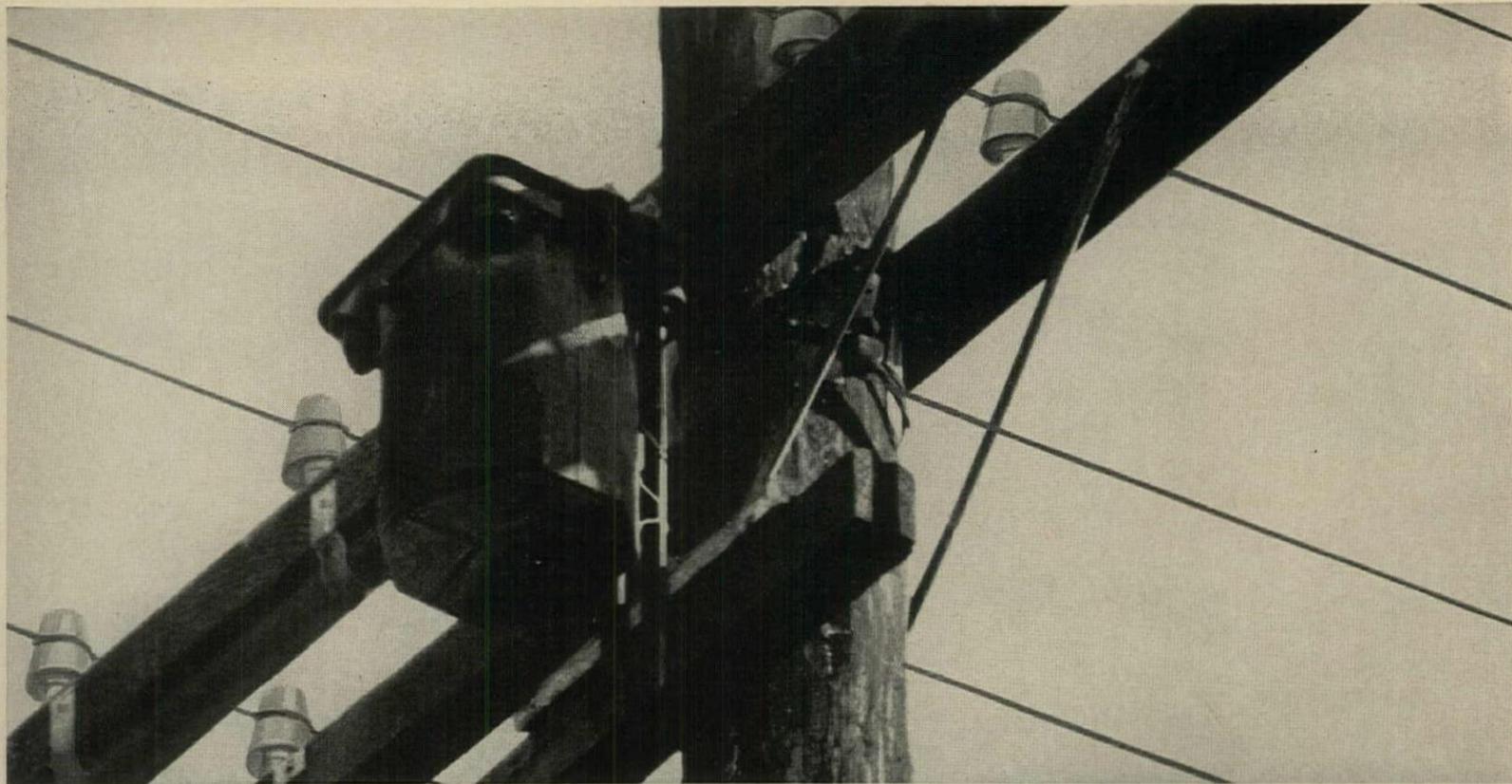
Name

Address

City  Zone  State

The Tappan Company, Mansfield, Ohio  
Tappan-Gurney Limited, Montreal





## When poles and palms don't mix...

No poles or overhead wires will mar the beauty of Arvida's Royal Palm Yacht & Country Club residential community! With 742 homesites, this distinguished Boca Raton, Florida community is putting *all utilities underground*. For the job Arvida selected Orangeburg Fibre Conduit—the best known, best-selling Brand in America. And for good reasons: Orangeburg Conduit is lightweight, easy to install. Its self-sealing joints and impermeable walls keep water out for good. Its 100% smooth fibre raceway adds years to cable life. Get all the facts on Orangeburg Fibre Conduit. Write Dept. HH-41 for Catalog 52.

**ORANGEBURG**® **FLINTKOTE**®  
**BRAND Fibre Conduit**



Architect's drawing—Arvida home of Dr. and Mrs. John F. Pearl. Architect: Arthur H. Rude, of Ft. Lauderdale.

Orangeburg Fibre Conduit is distributed by Graybar Electric Co. and General Electric Supply Company with branches and stocks in principal cities. ORANGEBURG MANUFACTURING CO., Orangeburg, New York. Division of The Flintkote Company, Manufacturer of America's Broadest Line of Building Materials.

YOUR GREATEST ASSET IS OUR QUALITY PERFORMANCE!

# THIS IS A 6,000,000 DOLLAR SMILE

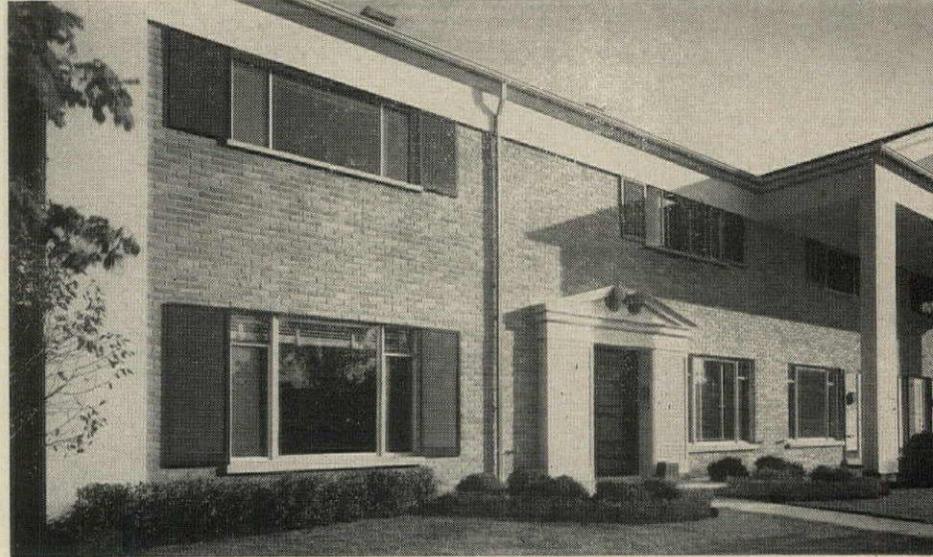
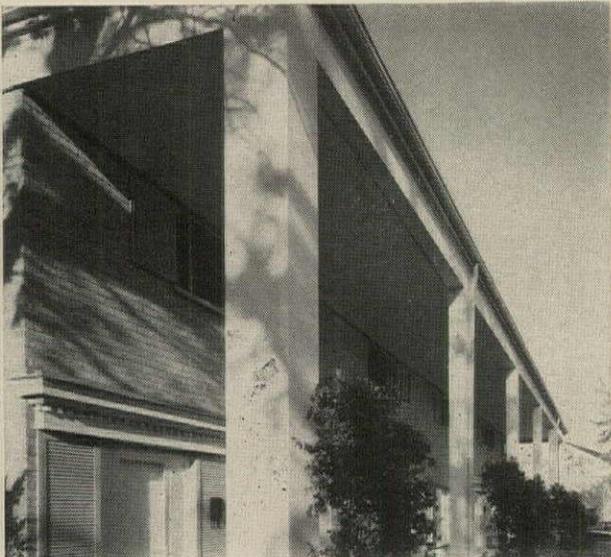
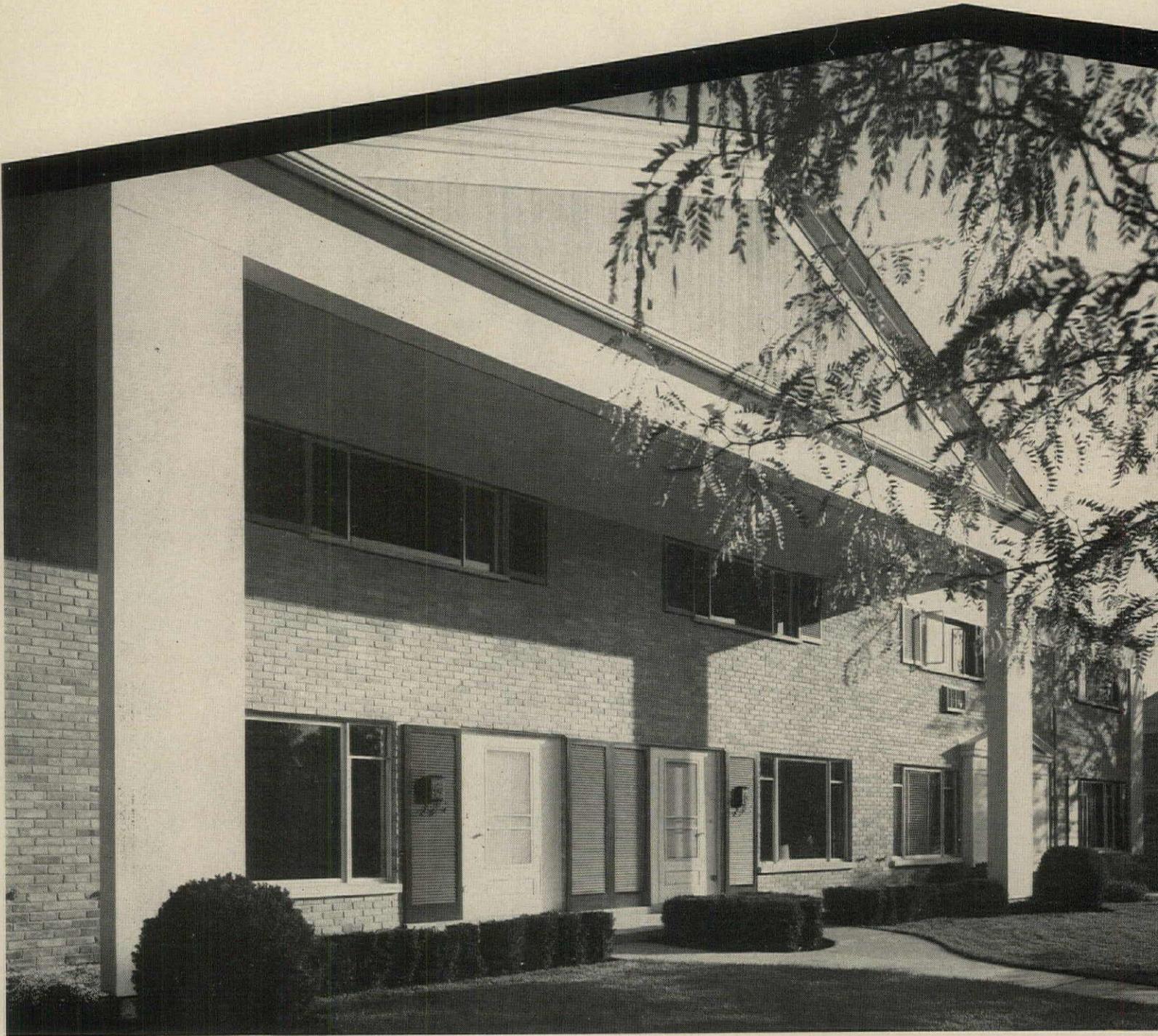
It belongs to the boss . . . your boss and ours, the customer. When she's satisfied, things are rosy; when she's not, it shows in the profit column. The best way we know to keep her happy is to make sure the RCA WHIRLPOOL appliance she buys works right and keeps on working for a long time. That's why we invest more than \$6,000,000 a year in quality control operations. We want to make sure she's satisfied with the styling, design and, above all, the performance of the RCA WHIRLPOOL appliance you sell her. That satisfaction puts a smile on her face . . . a smile that looks like six million dollars . . . and it builds a steady upward movement into your sales curve and ours. That's why we say, "Your greatest asset is our quality performance!"



Manufacturer of RCA WHIRLPOOL Automatic Washers • Wringer Washers • Dryers • Washer-Dryers • Refrigerators • Freezers  
Ice Cube Makers • Ranges • Air Conditioners • Dishwashers • Food Waste Disposers • Dehumidifiers • Vacuum Cleaners.

Use of trademarks and RCA authorized by trademark owner Radio Corporation of America

# HINES



# WIDEWOOD

## THE BIG MATERIAL FOR THE BIG IMPRESSION

Hines Widewood is bigger than the logs it's made from. It consists of selected pieces of kiln-dried Ponderosa Pine precision joined and electronically glue-set to give you what you want in wood—all in one piece.

In the Irvin A. Blietz "Carriage Hill" development in Glenview, Illinois, Widewood was used for pillars and fascia in 24" to 32" widths, creating massive wood trim elements to relieve the expanses of brick in large town houses and enhance their architectural beauty.

In this application, Widewood cost the builder about \$500 less per thousand feet than custom-glued panels. It was easier to work with than plywood because its solid wood edges eliminated the problem of finishing plywood edges in the pillars and its long lengths required fewer end joints.

The built-up structure of Widewood resists the warping and cracking sometimes experienced with large pieces of ordinary lumber. It's the ideal material for fascia, counter tops, shelving, cabinets, platforms, soffits, cornices—any use where a warp-resistant, extra wide board is desirable.

Available in three grades: Common, Selected and 100% Clear. Standard sizes (4" to 12" and 18" to 24" widths) in stock in many lumber yards. Other sizes available on special order. Lengths to 24'. Widths to 52".

*"We used several sizes of Widewood for fascia and decorative columns... We couldn't have achieved the same results with any other material."*

**Bruce Blietz, vice-president of the  
Irvin A. Blietz company**

# HINES

Edward Hines Lumber Co.  
Sawmills at Hines, Westfir,  
Dee and Bates, Oregon.  
Other plants: Plywood, Westfir;  
Hardbord, Dee; Millwork, Baker  
and Hines, Oregon.  
Engineering and  
Development Division:  
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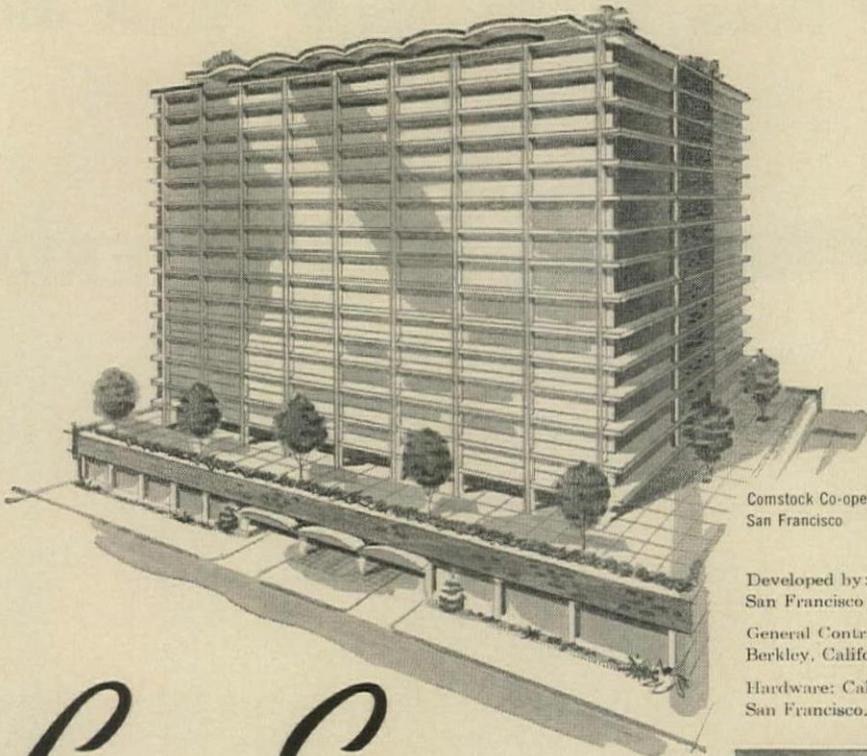
**Edward Hines Lumber Co.**  
200 S. Michigan Ave., Chicago 4, Illinois

Dept. 6101

Please send me free samples and information about Hines Widewood.

Name.....

Just clip this coupon, sign your name, attach to your letterhead and send to the address above.



Comstock Co-operative Apartment  
San Francisco

Developed by: ALBERT-LOVETT CO.,  
San Francisco

General Contractor: The Pacific Co.,  
Berkeley, California.

Hardware: California Builders Hdwe Co.,  
San Francisco.

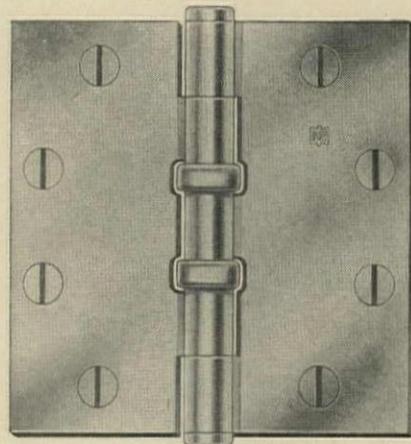
HAGER *Luma-Sheen* FINISH  
T. M. REG.

SELECTED FOR NOB HILL  
\$8,000,000 APARTMENT

- largest, most lavish co-operative apartment west of Chicago
- occupying an entire square block on plush San Francisco Nob Hill
- LUMA-SHEEN will add the finishing touch of refinement to the Comstock's elegant decor.

Initiated with the largest loan in San Francisco building history . . . 16 levels . . . 193 apartments, almost all of them balconied with panoramic vistas to the Golden Gate, San Francisco Bay and wooded hills beyond . . . a garden-lobby with porte-cochere . . . a tree-shaded garden sundeck high above city streets . . . all possible mechanical and personal conveniences . . . five penthouses surrounded by five tree-shaded terraces. This is luxury where EVERYTHING HINGES ON HAGER!

Hager LUMA-SHEEN hinges are specified. The original *permanized* aluminum-colored finish, that matches perfectly the modern aluminum door hardware and trim.



*Luma-Sheen* finish  
Available...on Brass or  
Steel Butts—Specify LS

Comstock recognition of the beauty and permanence of LUMA-SHEEN finish, caps the climax of 6 years of nation-wide acceptance.

Its electrolytic finish has the true aluminum color . . . *permanized*. It's been proved in practically every conceivable situation.

When you want it to stand up to the test of time—specify Hager LUMA-SHEEN (symbol LS) on that next job!



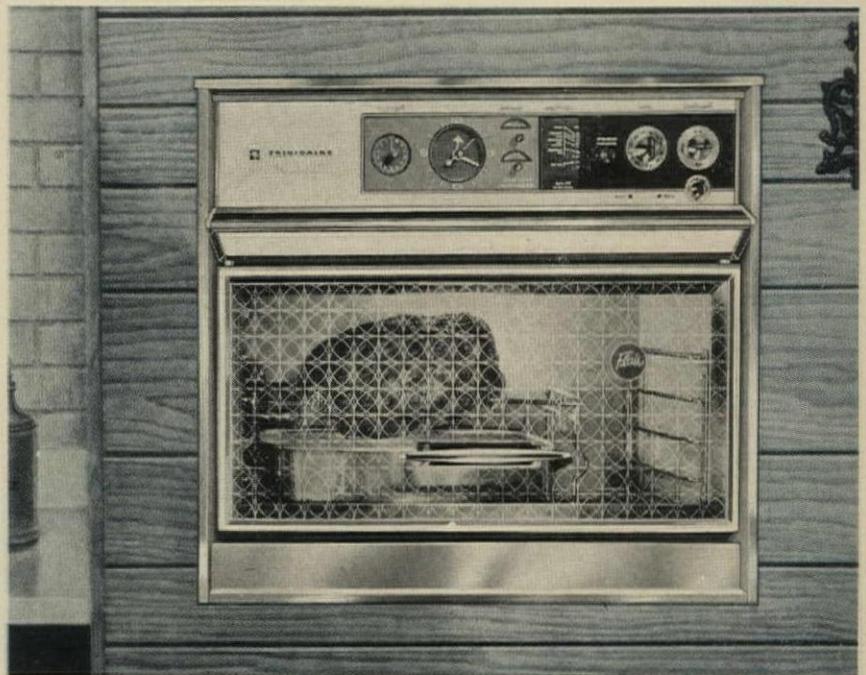
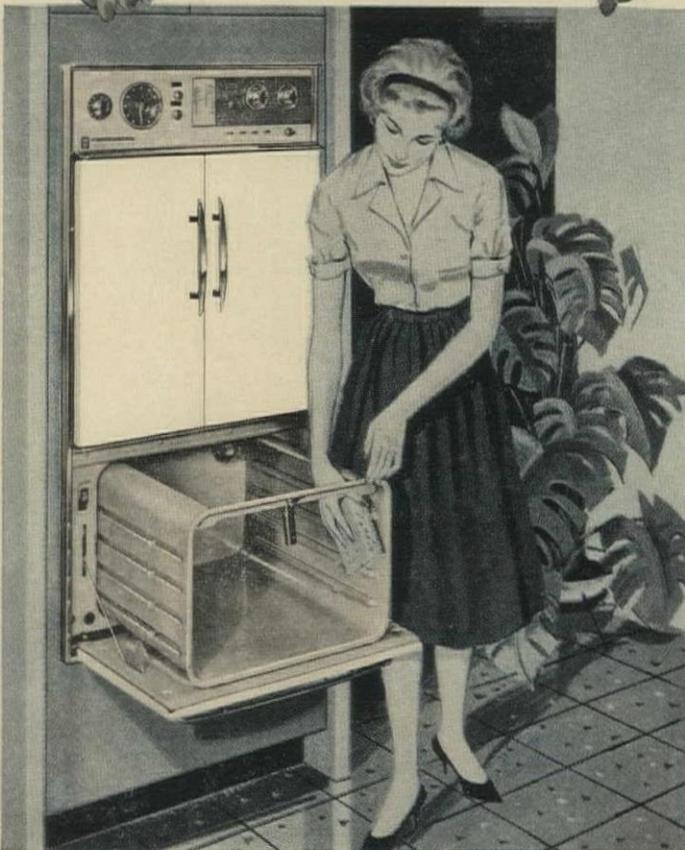
C. HAGER & SONS HINGE MANUFACTURING COMPANY, ST. LOUIS 4, MO.  
IN CANADA • HAGER HINGE CANADA LIMITED, KITCHENER, ONTARIO.

When she can see herself in your kitchen—  
she can see herself in your home

# FRIGIDAIRE APPLIANCES

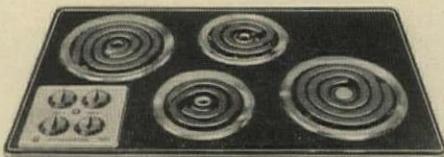
... the respected line that gives  
every home a **SELLING EXTRA**

When you put Frigidaire Appliances in your kitchens, you automatically "build-in" the immense popularity and the great respect that the Frigidaire name has earned with America's millions. It's a mighty sales EXTRA that requires only your signature on an order for the Frigidaire Appliances shown on this page. Frigidaire Division, General Motors Corporation, Dayton 1, Ohio



Dazzling, new-fashioned Frigidaire FLAIR WALL OVEN. Looks, cooks, and cleans like no wall oven you've ever seen. Exclusive Glide-Up door. Eye-High controls and See-In oven. Every advanced Frigidaire feature. 2 models for 33" cabinets. Frigidaire "minute man" installation.

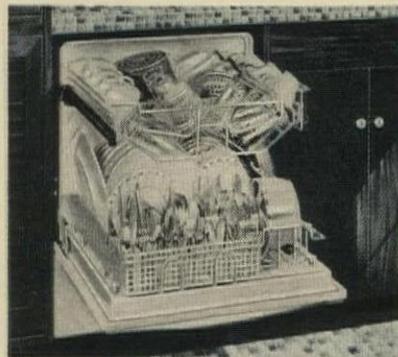
**Easy-Cleaning FRIGIDAIRE WALL OVENS.** Choice of French-Door and Drop-Leaf Door for up-close cooking and cleaning. Exclusive Pull 'N Clean lower ovens. Single and double oven models. Many exclusive work-saving features.



**Matching style FRIGIDAIRE COOKING TOPS.** Models for every budget in porcelain enamel colors and Satin Chrome. Also Fold-Back Surface Cooking Units. Choose from most-wanted Frigidaire features. Easy installation.



Complete your "packaged" kitchen with the swift, efficient **FRIGIDAIRE FOOD WASTE DISPOSERS.**



**Big capacity FRIGIDAIRE DISHWASHERS.** Easy under-counter installation. All models front-loading, Roll-To-You Racks, Swirling Water Washing Action. Once-a-day dishwashing for an average family of four.

Many Frigidaire Appliances available in Sunny Yellow, Mayfair Pink, Turquoise, Aztec Copper, Charcoal Gray—plus Snowcrest White and Satin Chrome.

in 1961, put a

*Flair*

in your kitchen



FRIGIDAIRE FACTORY-TRAINED SERVICE DEALERS EVERYWHERE

**FRIGIDAIRE**  
PRODUCT OF GENERAL MOTORS

*Advanced Appliances designed with you in mind*

**KNOW YOUR SYMBOLS**



This symbol stands for circuit breaker



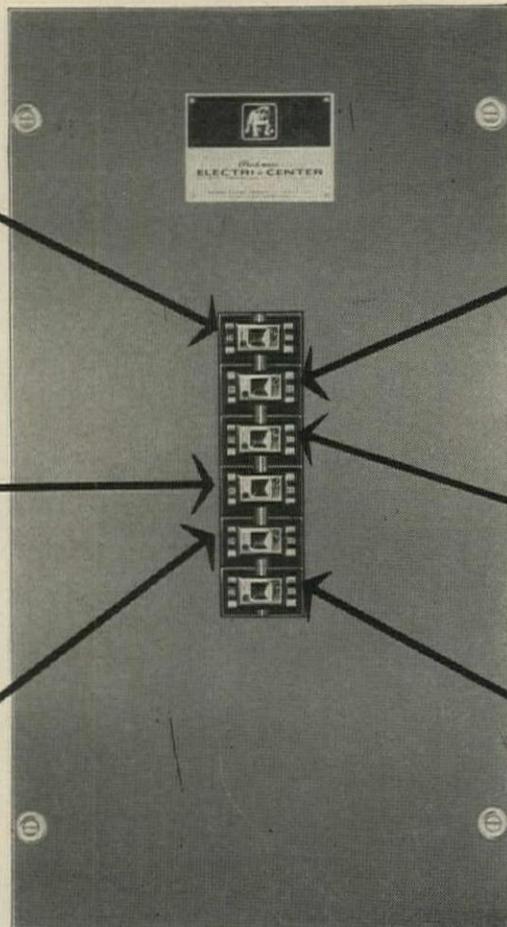
This symbol stands for QUALITY

**BULLDOG 200-AMP SERVICE DISTRIBUTION PANELS**

**"Power pack" all-electric homes with maximum home-buyer convenience!**

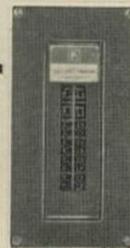
Here's Pushmatic flexibility aplenty for electric heating, lighting, appliances . . .

100-amp submain feeds conveniently located electric heat panel (10 two-pole circuits).



**PL12A**

100-amp submain feeds conveniently located lighting panel (12 to 20 single-pole circuits).



Your home-buyers receive maximum residential circuit flexibility—and push-button convenience—with this Pushmatic® 200-amp PL12A Electri-Center®, which fulfills every service center need for all-electric homes. Plus—the famous Pushmatic circuit breakers protect two ways: (1) against harmful overloads, (2) against

dangerous short circuits. Pushmatic breakers as well as 100- and 200-amp Electri-Center panels are available in a full range of sizes to meet every residential wiring need. For details, write for your "Pushmatic Pocket Guide"—it's free!



Bulldog Electric Products Division, I-T-E Circuit Breaker Company, Box 177, Detroit 32, Mich. In Canada: 80 Clayson Rd., Toronto, Ont. Export Division: 13 East 40th St., New York 16, N.Y.



**I-T-E CIRCUIT BREAKER COMPANY**  
BULLDOG ELECTRIC PRODUCTS DIVISION

Let **MOE** Light

give your homes that  
*Glamour Glow*

for as little as

**\$44.90\*** RETAIL



Wall lantern  
for doorways  
or garages.  
M-811  
\$15.50\* retail.



"Magic Eye" post  
and lantern.  
M-923 post \$26.95.  
M-844 lantern \$17.95.  
Total retail price  
\$44.90\*.

\*Prices slightly higher Denver and West.

Homes that sparkle with the glamorous glow of high-style outdoor lighting (post lights and wall lanterns) also glow with the charm that SELLS. Many builders have increased the SELL in their homes with this simple formula . . . why don't you? Of course, only MOE Light can give true GLAMOR GLOW because only MOE Light has such a lustrous line of lighting that decorates, illuminates, and sells. Write now for lighting guide catalog that can put lighting flair and fashion into *your* homes . . . at such happy budget prices.

**BUILDERS: use this Sales Idea.**

Install "Magic Eye" post lanterns as a "Sales feature" in all your homes. They can be used as street lighting in outlying areas. Many Public Utilities will cooperate in promoting this feature with you. For complete help and information write to MOE Light.

Clip  
and  
Mail  
now



**THOMAS**  
INDUSTRIES INC.  
MOE LIGHT DIVISION

207 E. Broadway, Louisville 2, Kentucky  
The World's Largest Single Source of Lighting for Home, Industry and Commerce.



**THOMAS INDUSTRIES INC.**  
MOE Light Division, Dept. MHH-4  
207 E. Broadway, Louisville 2, Kentucky

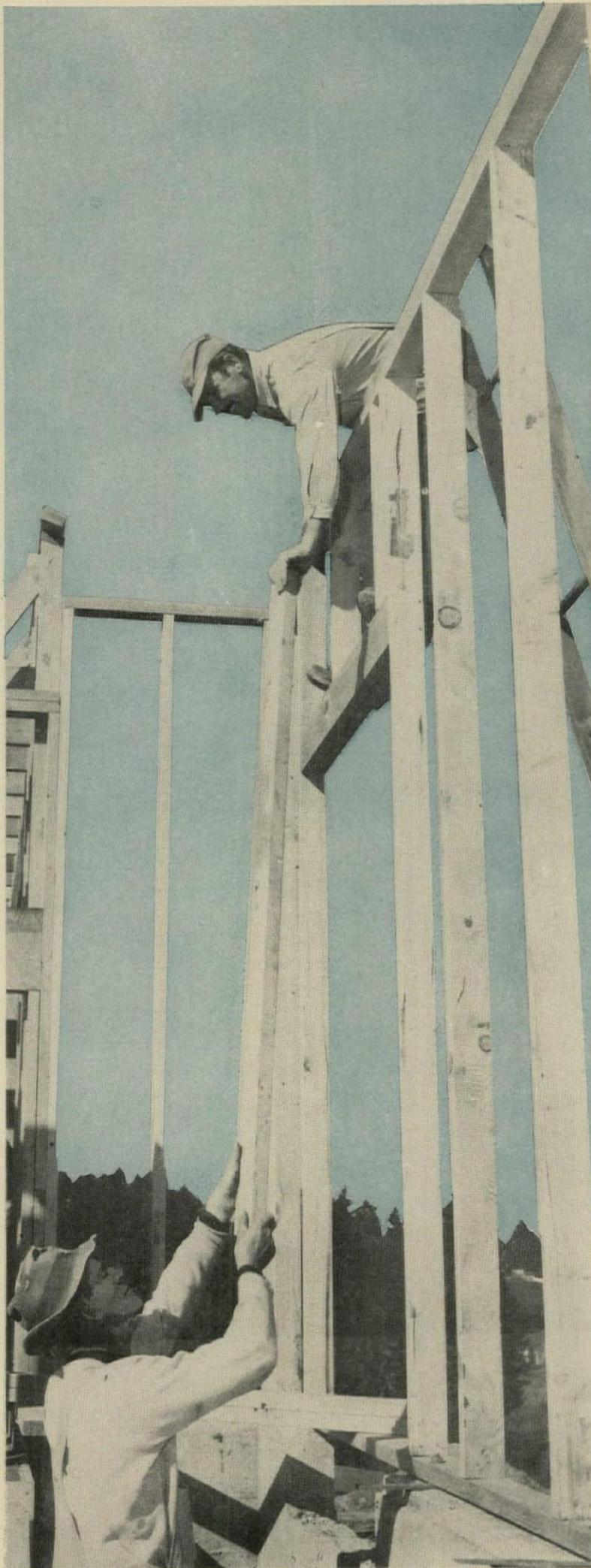
- Please send me FREE catalog, Inspiration Lighting.
- Please have your Lighting Specialist contact me.

Name \_\_\_\_\_

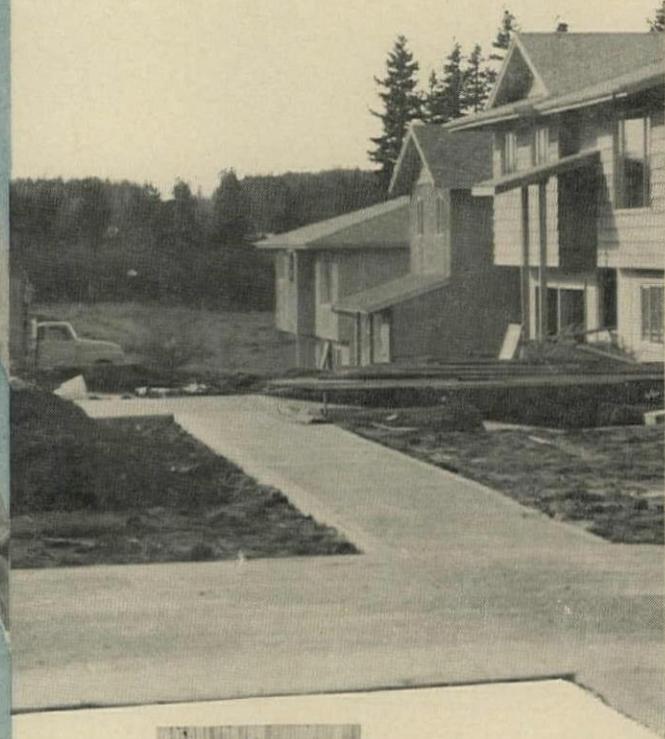
Company \_\_\_\_\_

Address \_\_\_\_\_

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



GRADE WISE  
IS PROFIT WISE

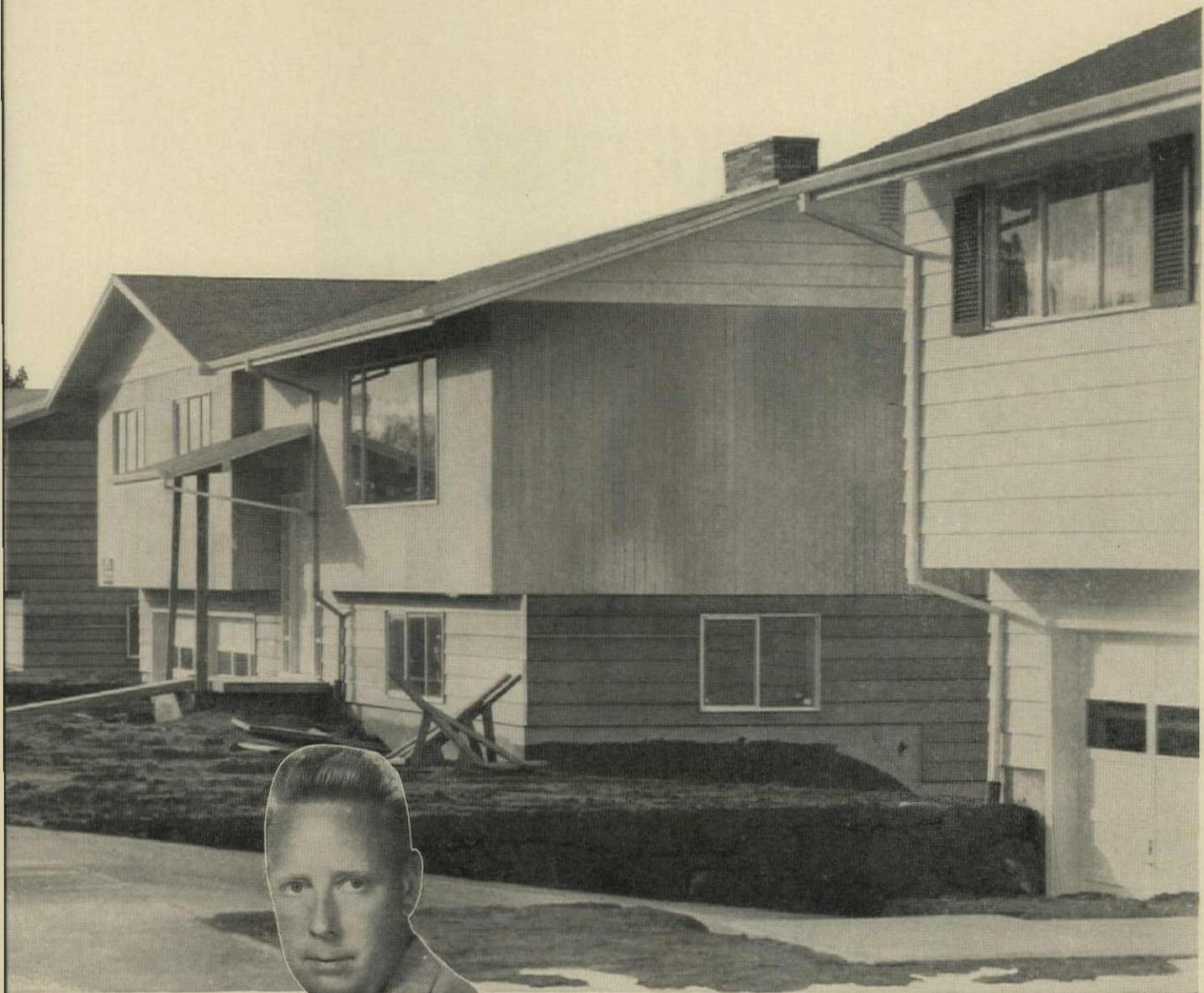


**FREE  
TECHNICAL  
FACTS**

about UTILITY grade  
West Coast Lumber.  
Contains span tables for  
joists and rafters.\*



*When used in accordance with  
FHA Minimum Property Stand-  
ards for One and Two Living  
Units, FHA Bulletin No. 300.*



"MY PROFIT GOES UP  
WITH **UTILITY** GRADE  
**WEST COAST**  
LUMBER"

Says **ROY BROWN,**  
BUILDER AND DEVELOPER  
OF FINE HOMES  
IN BEAVERTON, OREGON

"Our framing lumber savings are at least 30%. We also use Utility grade shiplap for wall and roof sheathing and subflooring. This saving gives us a profit margin and maintains our quality at the same time," Builder Brown explained.

Profit starts at the saw table and carries through to the completed building, according to builders who have taken advantage of the money-making ability of Utility grade West Coast Lumber. It's a grade that can be used for all types of framing—studs, plates, joists, rafters, headers and bracing\*

Your profit can go up, too, with the proper use of consistent-quality West Coast Lumber. Your lumber dealer is your closest source of information and supply. Ask him...he'll be happy to serve you.

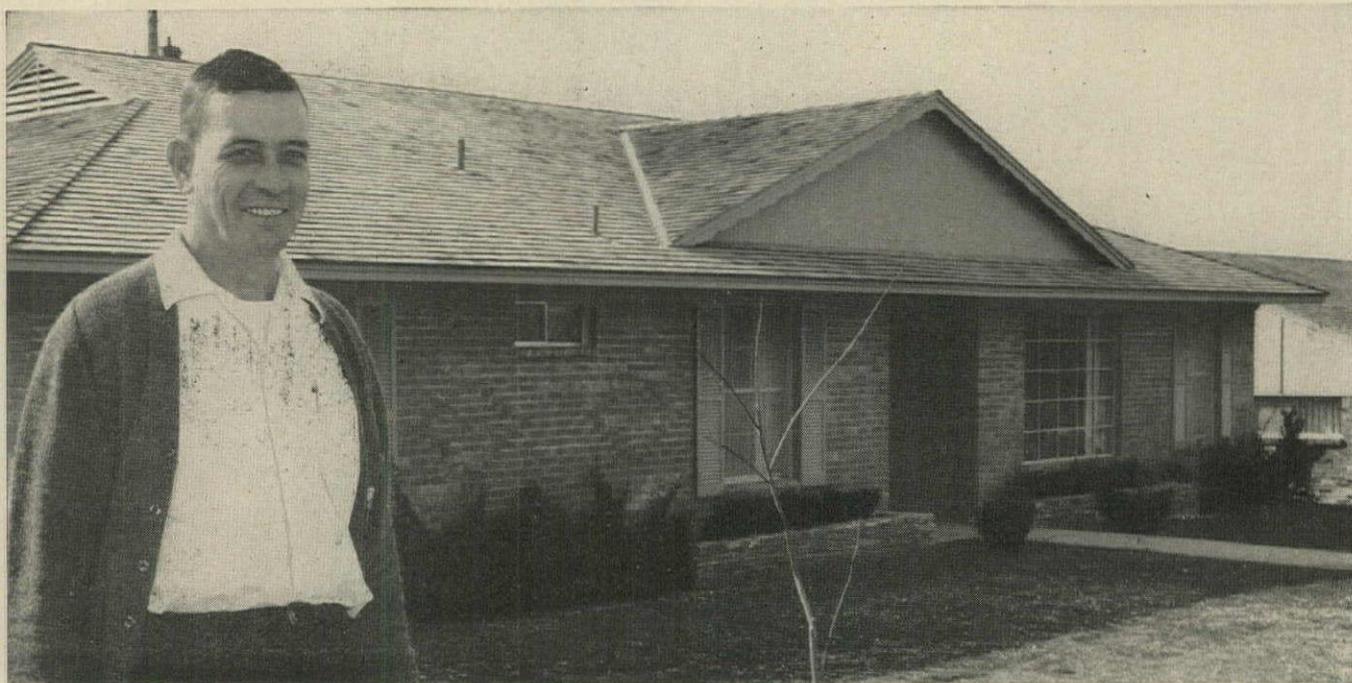
## WEST COAST LUMBER

West Coast Douglas Fir • West Coast Hemlock • Western Red Cedar • Sitka Spruce • White Fir

West Coast Lumbermen's Association, 1410 S. W. Morrison Street  
Portland 5, Oregon



# SUCCESS #7 STORY



“We sold our Medallion Homes 4 to 1 over competitive houses in our area,” says Eric Eriksson, Builder of Oak Park Estates, Dallas, Texas. “I give full credit to the safety, convenience and beauty of the General Electric features. People love home heating and cooling in *one* unit and they like getting kitchen appliances included in the price. We’re glad we built these homes to the Gold Medallion standards set by the Dallas Power & Light Company.”

**Homebuilders:** Medallion Homes equipped by General Electric are easier to build and *sell*. Here’s why: 1. *One source* saves you time. 2. You get expert assistance in all your electrical planning. 3. General Electric stands for quality. 4. A new local plan helps you sell your homes!

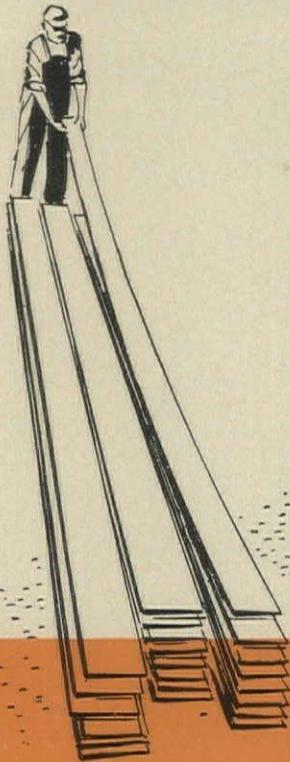
Call your General Electric Major Appliance Distributor, *today*.

*Progress Is Our Most Important Product*

**GENERAL  ELECTRIC**

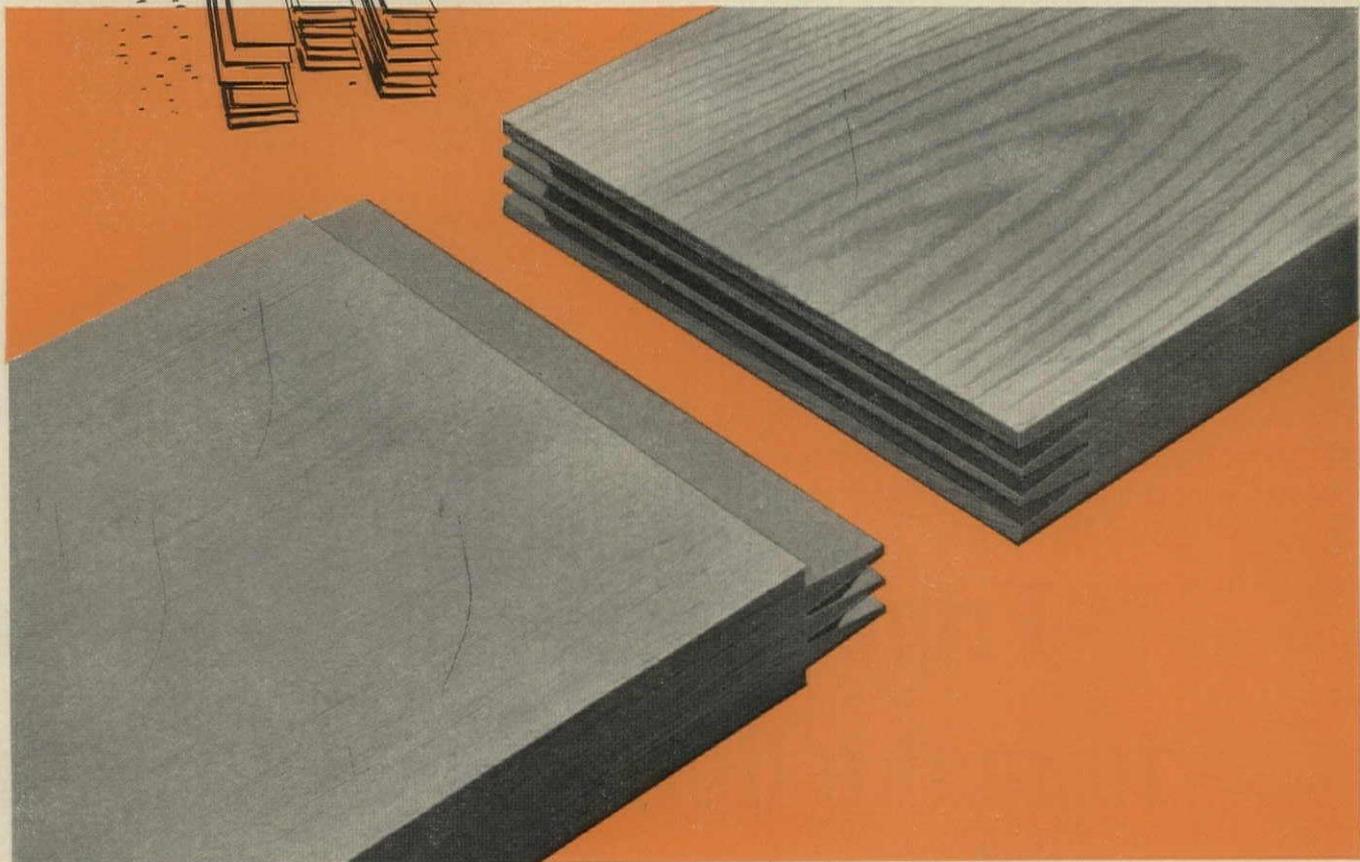


now . . . **PALCO-LOC** . . . tailor-made  
lumber in custom lengths to fit  
builder requirements, exactly.



Our finest Architectural Quality, certified kiln-dried redwood — finger-jointed and electronically glued to produce permanently strong, long pieces — for exterior or interior use. All specified, or any combination of lengths, at no extra cost!

Available in boards or worked patterns . . . also factory paint-primed if desired. Buy PALCO — standard of comparison since 1869.

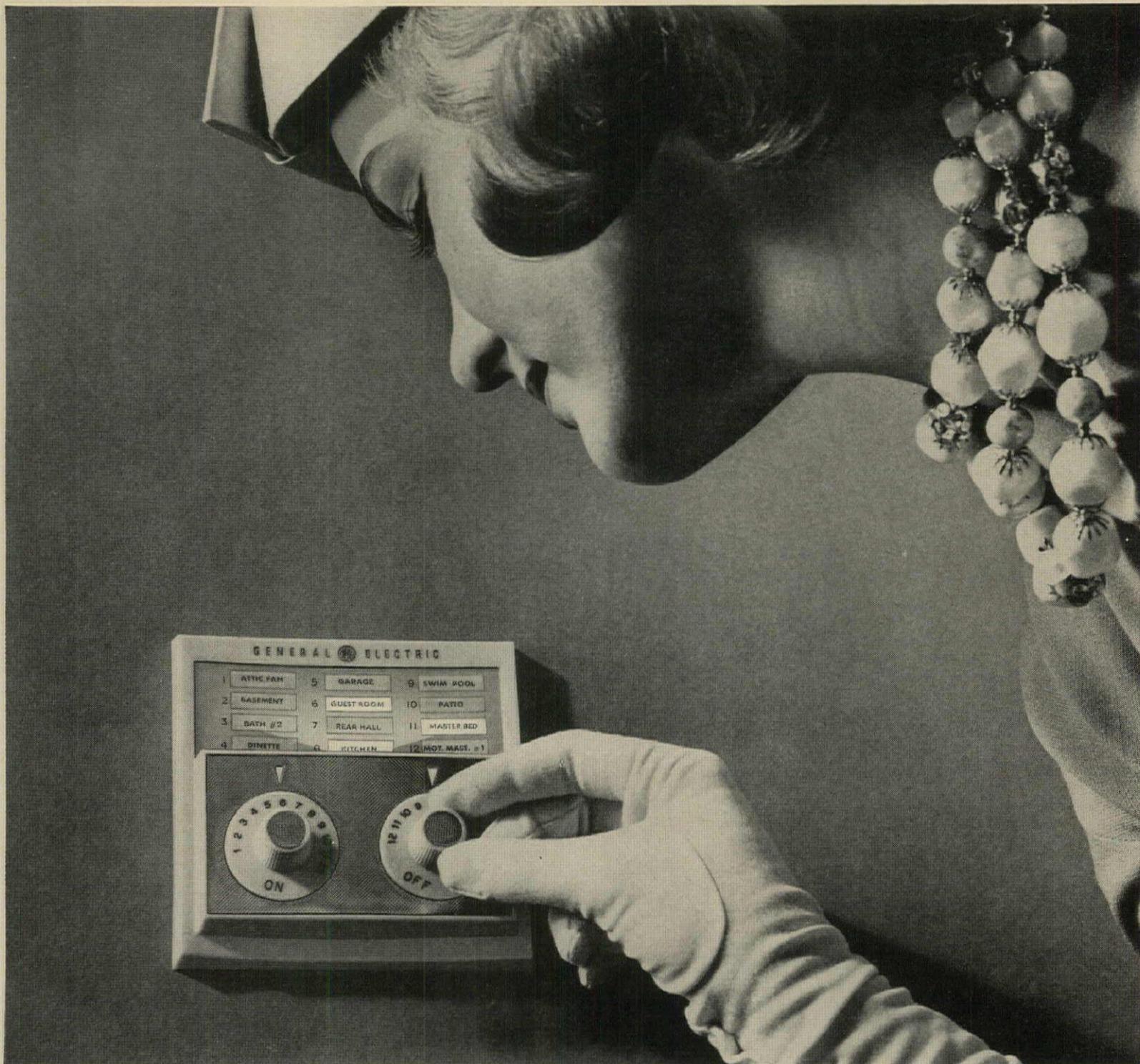


## THE PACIFIC LUMBER COMPANY

100 Bush Street, San Francisco 4, California  
35 East Wacker Drive, Chicago 1, Illinois  
2185 Huntington Drive, San Marino 9, California

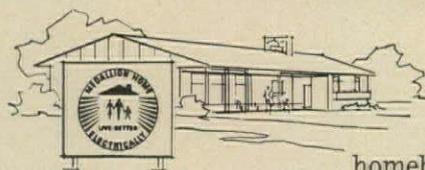


PROFIT WITH  
**PALCO**®



**NEW!** Pilot-lighted directory on a new style G-E Master Selector Switch shows instantly which of 12 circuits are ON. Also has tiny locator light (permanently ON) that permits reading the directory and operating the switch in the dark.

## From General Electric—new to make lighting convenience



Looking for a bright new idea that homebuyers will notice in your houses the minute they come in the door?

Look no farther than this page . . . G-E Remote-Control Wiring is for you!

You offer the step-saving convenience of modern

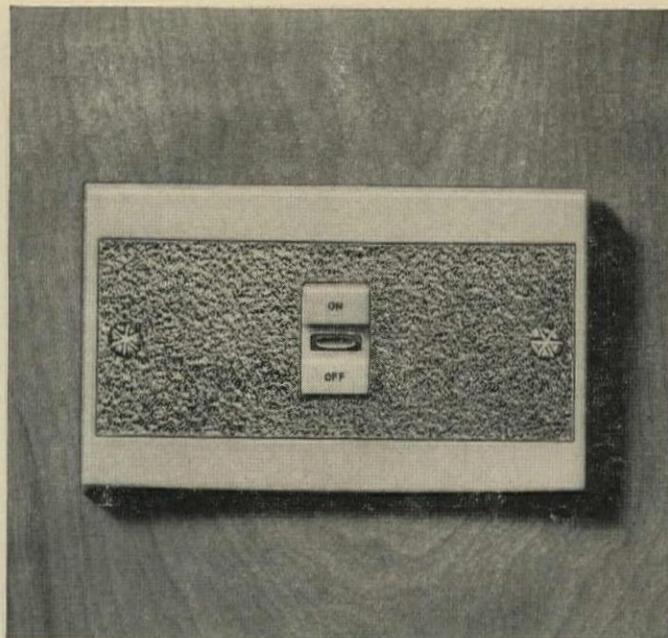
multi-point switching (like having plenty of 3-way and 4-way switches for each important light) . . .

You bring this convenience to your prospect's attention — in every room — with these handsomely "different," newly styled, G-E Remote-Control Switches.

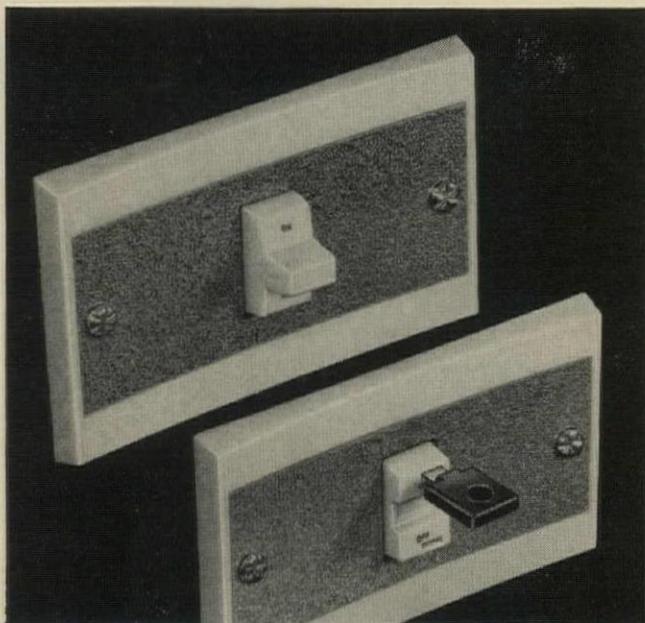
Finally, in one room, usually the master bedroom, you present the impressive G-E Master Selector Switch. It



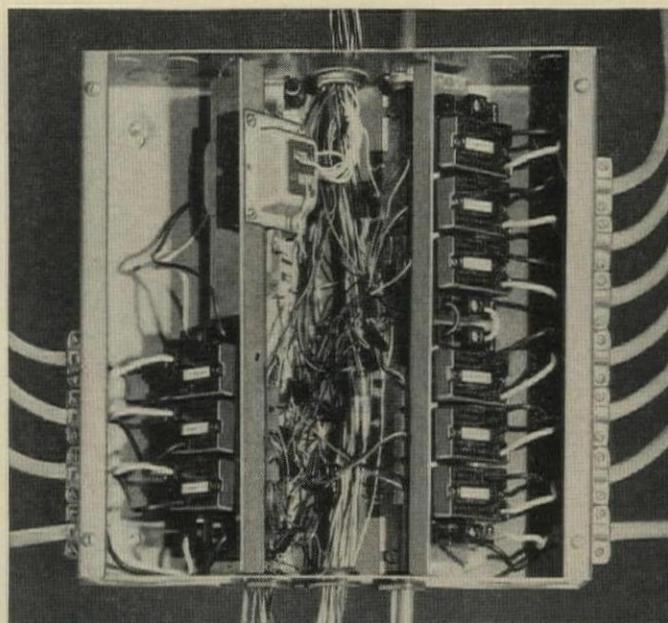
**NEW! Switches that are easy to find in the dark.** Now G-E Remote-Control wall switches are available with or without built-in locator lights..



**NEW! Switches with built-in red pilot light.** This new type of G-E Remote-Control switch is just the thing for controlling "hidden" lights.



**NEW! Choice of trigger and locking types** (locks ON or OFF with a key), as well as standard push button. Interchangeable Line G-E Remote-Control switches are also available, ivory or brown (non-lighted, trigger type).



**NEW! Plug-in relay box** - Provides quiet operation, simplified tracing and changing of circuits. It impresses homebuyers, saves installation costs. Relays connect automatically to line voltage through a bus bar, when plugged in.

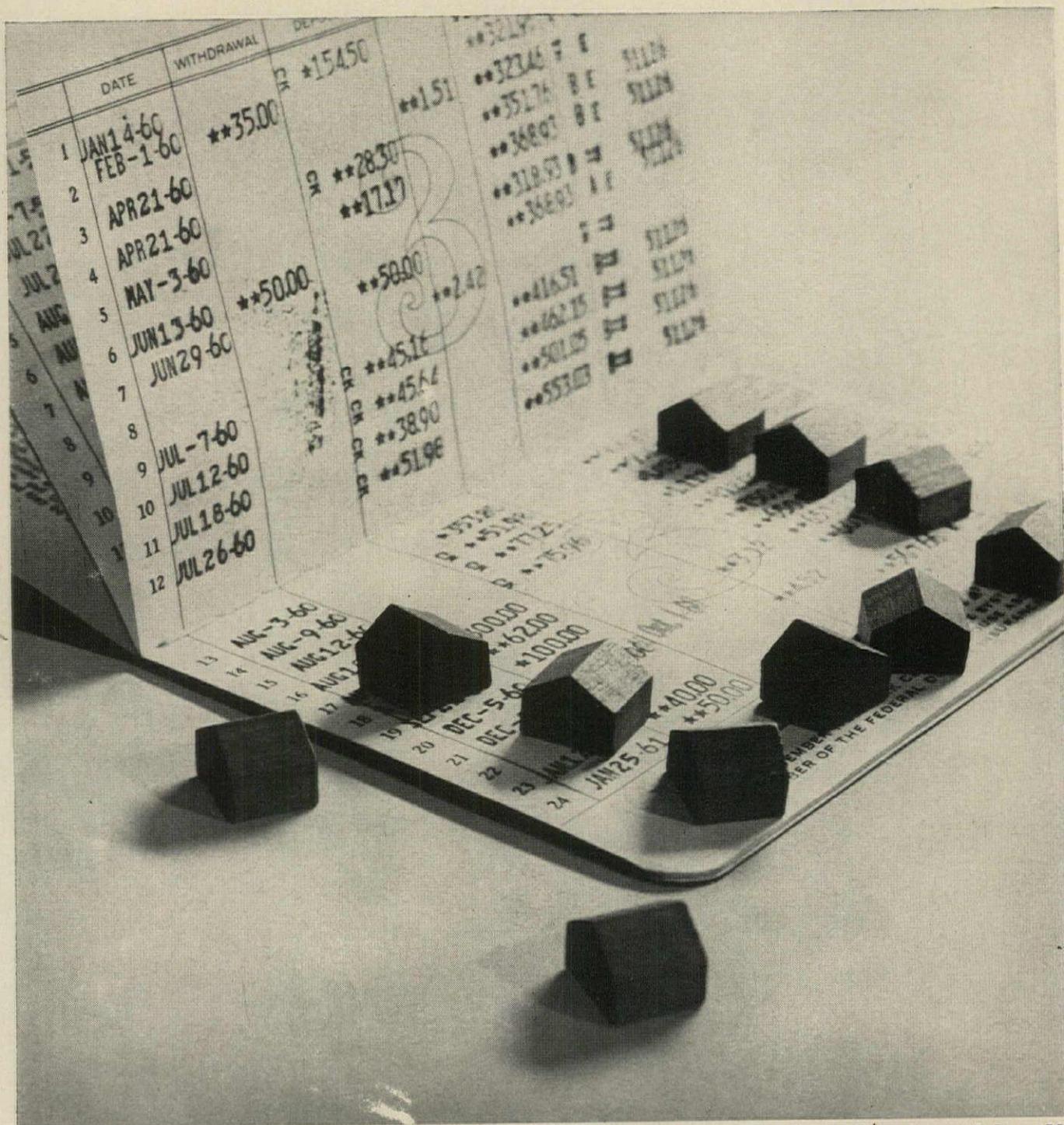
# Remote-Control Wiring Switches a sales feature in every room!

turns *twelve* lights ON or OFF as fast as you can twist the dials!

Write to us for details on G-E Remote-Control Wiring. Progressive builders have put it in thousands of houses because it's the low-cost way to offer convenient multi-point switching. General Electric Company, Wiring Device Department, Providence 7, Rhode Island.

*Progress Is Our Most Important Product*

**GENERAL  ELECTRIC**



**"I saved \$70 to \$80 a house with BARRETT 'Rigidwall'† sheathing!"**

...says Mike Pashcow, President, #1 Nassau County Homes, Inc., Plainview, Long Island, N. Y. "We've been building homes for 13 years and were pleased when 'Rigidwall' helped save us \$70 to \$80 a house over the standard 1/2" plywood sheathing we'd been using. We're also impressed with its ease of handling, scoring, snapping; its strength, resistance to dampness and warping; and its ability to hold firmly asbestos shingle nailing." RIGIDWALL requires no corner bracing. Shingles apply directly (no furring strips needed)—saving more time. And Barrett's exclusive CHEM-FI process preserves original strength of wood fibers. See us soon and save!

Offices in: Birmingham, Boston, Charlotte, Chicago, Cleveland, Houston, New York, Philadelphia, St. Paul

†Trade Mark Allied Chemical Corporation

**BARRETT DIVISION**  
40 Rector Street, New York 6, N. Y.



To help sell your quality House, ask your prospects this question

wouldn't you want  
an "automatic  
housekeeper"<sup>®</sup>  
for only  
5¢ a  
day?

Now you can offer true electronic air cleaning in every home you build at prices never before possible. Without appreciably raising the cost of the home, you can tell buyers, "This home will stay new because it has an automatic housekeeper on the job twenty-four hours a day . . . developed by Trion, Inc., the company that supplies electrostatic precipitators for the atomic submarine fleet and the world's largest office buildings." Walls, drapes and ceilings stay clean for years . . . even cigarette smoke and allergens are removed to keep new homes hospital-clean. These are real selling pluses to make your homes stand out.



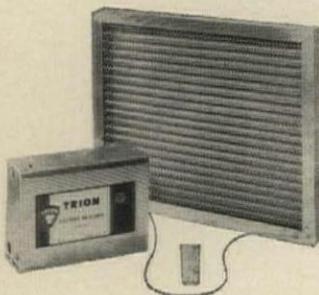
**TRION, INC.**  
McKEES ROCKS, PA.



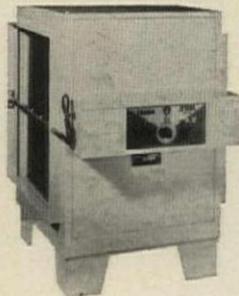
FREEDOM FROM DAILY HOUSECLEANING • REMOVES AIRBORNE ALLERGENS • REMOVES SMOKE  
• CREATES A HOSPITAL-CLEAN ATMOSPHERE • MORE EFFICIENT HEATING AND COOLING

In the words of  
Perry  
Prentice,  
publisher of  
**HOUSE & HOME**

"The cost of electrostatic air cleaning has now been brought down to a point where it is high time more builders began cashing in on the bargain price of having a dust-free home."



**Model TPF** . . . a true electronic air cleaner. Only 2" thick. Easy installation—simply replaces ordinary filters. From \$189.00 to \$205.00 suggested retail.



**Model UMT** . . . Lowest cost deluxe equipment with built-in water wash system. Fits any forced air heating or cooling system. Wide range of capacities—fits 2 to 5 tons cooling unit and/or 80,000 to 200,000 BTU heating unit. \$275.00 suggested retail price.



**TRION, INC.**, McKees Rocks, Pa.

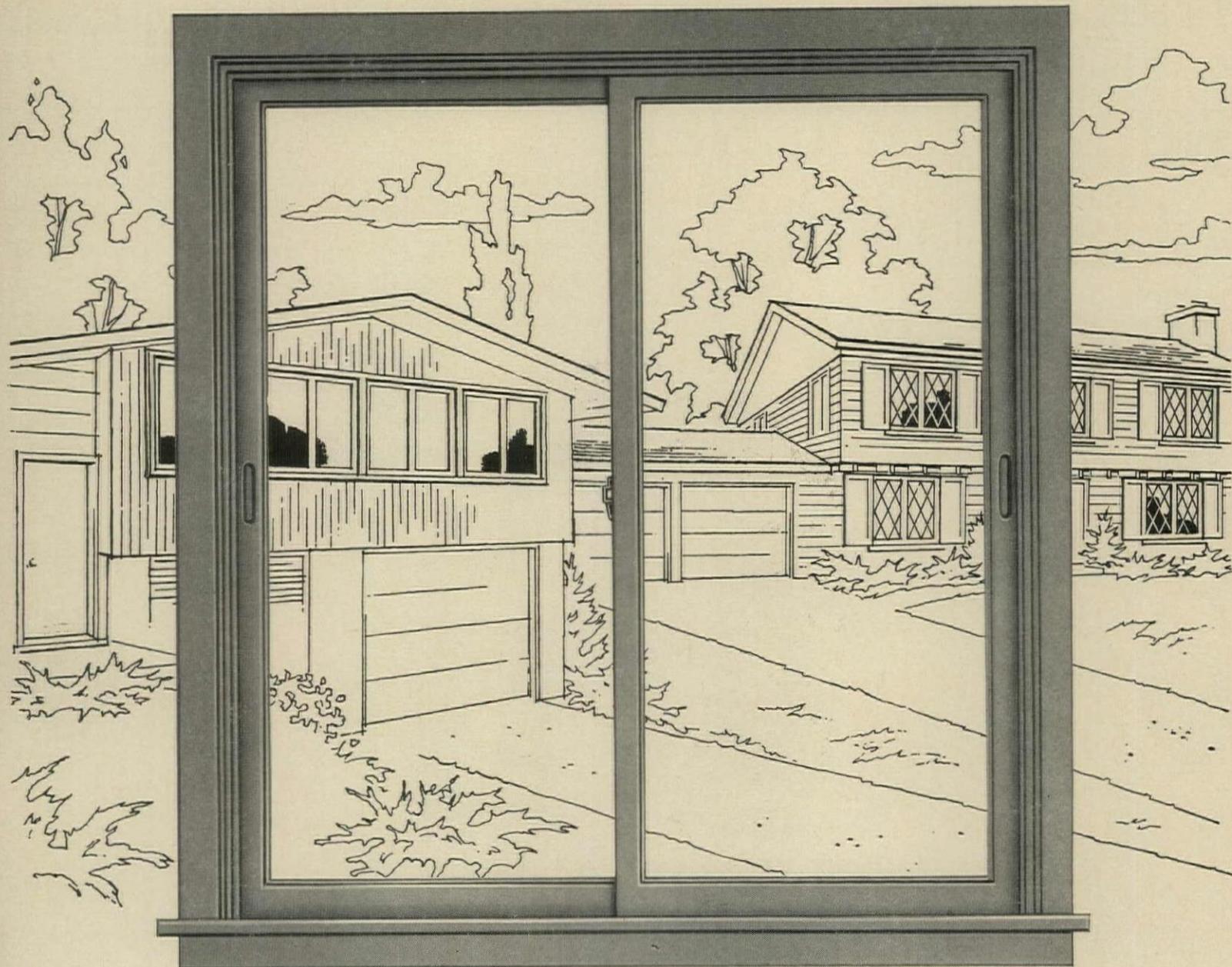
- Please send me special introductory offer for my model home.
- Please send me general information.
- Please have a salesman call.

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

Company \_\_\_\_\_

Street \_\_\_\_\_

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



FOR CONTEMPORARY OR TRADITIONAL HOMES...

## Here's the versatile Styletite slider—by **CURTIS**®

Consider this Styletite sliding window, designed to blend with both contemporary and traditional architectural styles. Beautiful, slim, trim lines...easy to install...trouble-free performance...extremely weather-tight...removable, of course.

Curtis engineered this new horizontal slider to meet builders' needs for a low-priced sliding window that is still tops in quality. Superior Curtis materials and construction make this sliding window practically call-back-proof.

The Styletite slider is part of a complete line of Curtis wood windows that includes *four* new double-hungs as well as casement, fixed sash, awning, hopper and basement styles—all designed to fit modular component panel construction.

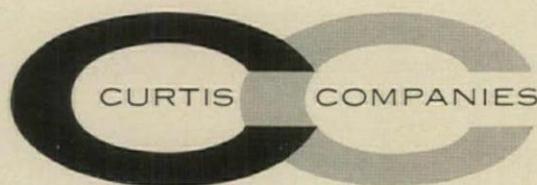
Insulating glass installed in sash. Store in position on sash year round. Offers noise, heat and cold insulation. Aluminum framed. Fiberglas or aluminum screens.

*Curtis and Styletite are trade-marks of Curtis Companies Incorporated*



Ask your Curtis representative how you may qualify for this famous I-Q award, part of Curtis' I-Q merchandising program.

Look to Curtis for the finest in wood windows.



CURTIS COMPANIES INCORPORATED / CLINTON, IOWA

For complete details, contact your Curtis dealer or write to:

**Individuality and Quality in windows, doors, cabinets and fixtures.**

**NEW ENGLAND**

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 Brattleboro, Vt. Alpine 4-9242  
 Coventry, R. I. Express 7-3311  
 Derby, Conn. Regent 4-2503  
 Hermon Center, Me. Hermon 8-3786  
 Littleton, N. H. Littleton 4-2212  
 Niantic, Conn. Pershing 9-5418  
 Portland, Me. Spruce 2-8307  
 Presque Isle, Me. Pres. Isle 9-0121  
 Sagamore, Mass. Sagamore 319  
 So. Sudbury, Mass. Hilltop 3-8833  
 Westville, N. H. Plainstow 2-8301  
 White River Jct., Vt. Wh. River Jct. 465  
 Windsor, Conn. Murdock 8-3623

**NEW YORK**

Albany Ivanhoe 9-3271  
 Brewster Brewster 9-3736  
 Hicksville Wells 1-0140  
 Horseheads Regent 9-4141  
 Ithaca Ithaca 9079  
 Millerton Millerton 1  
 Mt. Kisco Mt. Kisco 6-5174  
 Richfield Springs Rich. Spgs. 137  
 Rochester Beverly 5-8497  
 Shirley Atlantic 1-8383  
 Syracuse Oldfield 2-3747

**NEW JERSEY**

Belvidere 475-2101  
 Bound Brook Elliott 6-1111  
 Bridgeton Glenview 1-3150  
 Freehold Hopkins 2-1776  
 Hammonton Logan 1-0820  
 Mahwah Lafayette 9-3500  
 Robbinsville Juniper 7-8150  
 Whippany Tucker 7-0500

**DELAWARE**

Dover Redfield 4-4748  
 Rehoboth Beach Rehoboth 3331

**MARYLAND**

Baltimore Belmont 5-8529  
 Easton Talbot 2-0525  
 Fruitland Pioneer 9-7141  
 Reisterstown Tennyson 3-1400  
 Rockville Hazelwood 7-7047

**VIRGINIA**

Gainesville Plaza 4-2655  
 Newport News Chestnut 4-8465  
 Onley Sunset 7-1567  
 Portsmouth Export 7-5896  
 Williamsburg Capitol 9-5777

**PENNSYLVANIA**

Burnham Lewistown 248-5476  
 Chambersburg Colony 4-7184  
 Exton Foxcroft 3-6565  
 Lancaster Landisville Tw 8-3371  
 Lenhartsville Jordan 2-2600  
 McKee Holidaysburg Owen 5-1034  
 Montgomeryville Ulysses 5-6891  
 Pittston Olympic 4-4624  
 West Grove Underhill 9-2500

**OHIO**

Cincinnati Jefferson 1-3500  
 Dayton Axminster 2-4197  
 Eaton Gladstone 6-3252  
 Greenville Lincoln 8-5525  
 Grove City Trinity 5-6351  
 Leesburg Leesburg 780-4261

**KENTUCKY**

Monticello Filmore 8-3161  
 Nicholasville Tuxedo 5-4157

**NORTH CAROLINA**

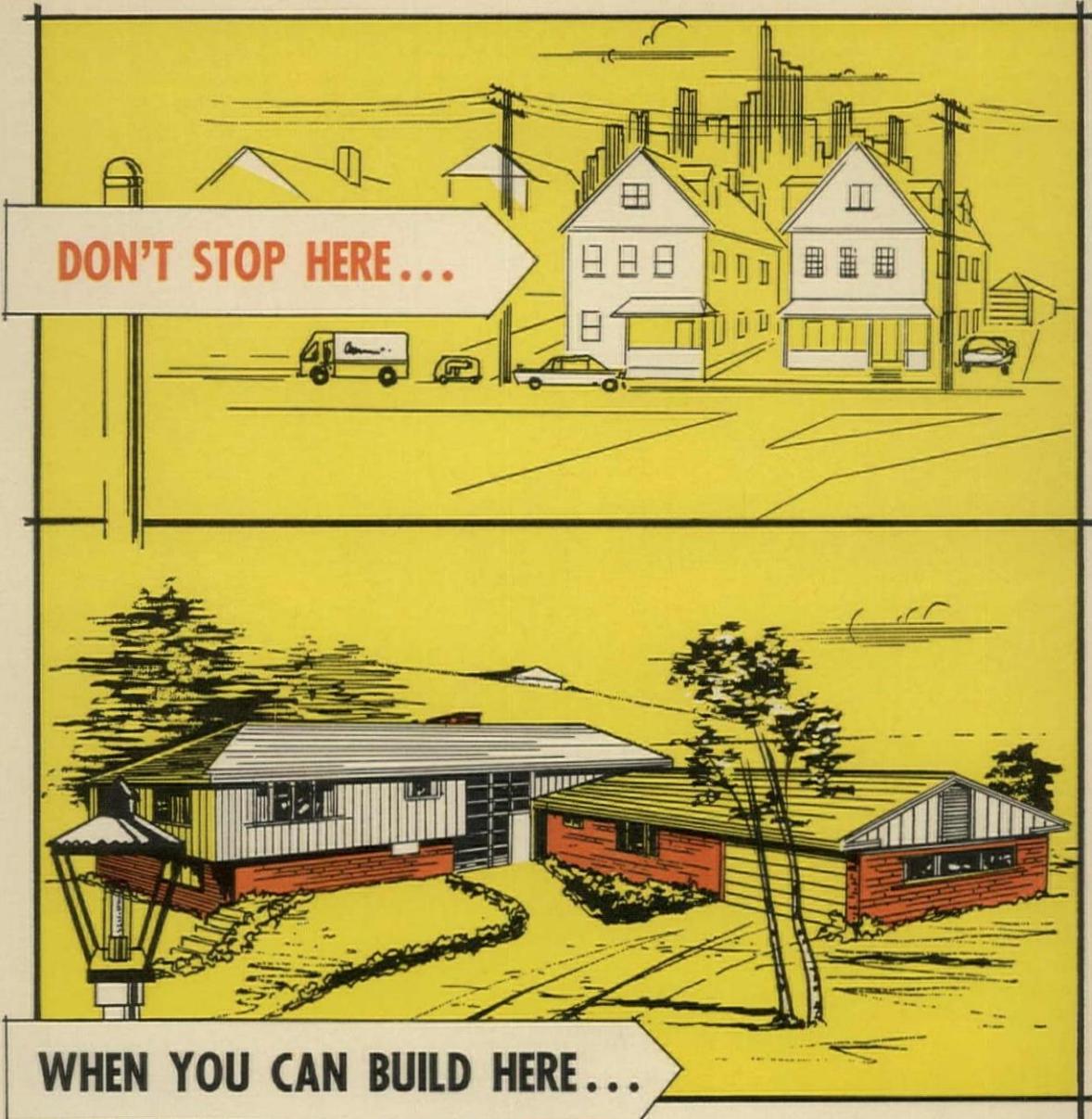
Albermarle Yukon 2-1129  
 Asheville Alpine 3-6391  
 Charlotte Franklin 5-1721  
 Clinton Lynwood 2757  
 Elizabethtown Union 2-3471  
 Greenville Plaza 2-2527  
 Hickory Davis 3-6863  
 Lumberton Redfield 9-5234  
 Marion Marion 2154  
 Murfreesboro Murfreesboro 3191  
 New Bern Melrose 7-2175  
 Oxford Oxford 3753  
 Shelby Huxley 7-5581  
 Smithfield Webster 4-4242  
 Waynesville Glendale 6-5071  
 Whiteville Midway 2-2428  
 Wilmington Roger 3-5101  
 Wilson 243-5134  
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**SOUTH CAROLINA**

Bennettsville Granite 9-4061  
 Greenville Cedar 2-4531  
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 Rock Hill Rock Hill 327-3200

**FLORIDA**

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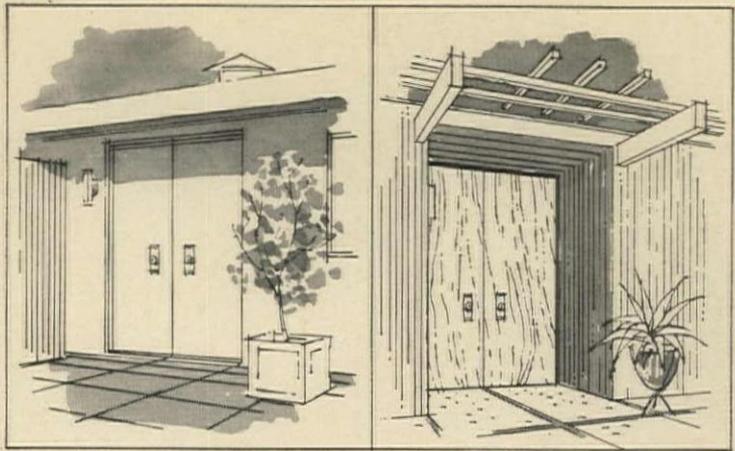
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## How Schlage helps you sell homes with "the quality look" in doorways

Today, America is doorway-conscious as never before. To encourage this interest, Schlage has worked closely with *trendmakers*—magazine editors, designers, and architects.

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• • •

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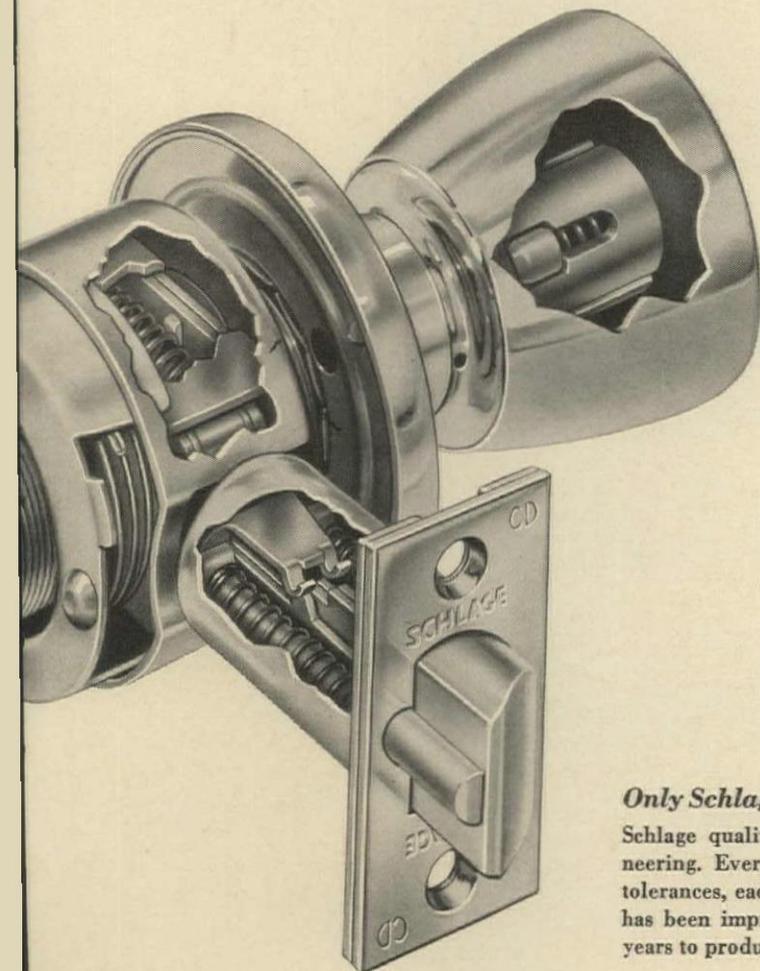
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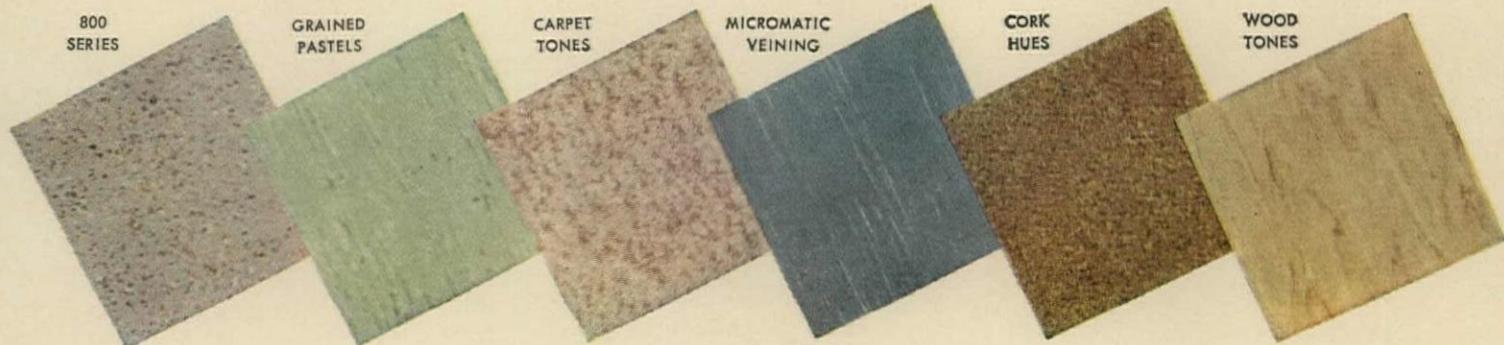
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# Roundup:

## Census reports big gains in US housing quality

Despite President Kennedy's assertion (*see p 44*) that 14 million American families "currently live in substandard or deteriorating homes," the Census Bureau's own figures show that the US has gained dramatically in its fight against slum housing in the last ten years. Today, only 18% of US families live in housing that is dilapidated or lacks some or all plumbing facilities (toilet, bath or hot water). This compares with 38% so housed a decade ago (*see p 53*). This is about the only overall comparison that can be made, but even here doubts creep in.

What confuses the question is that Census changed its housing classifications between the two censuses, introducing an entirely new category of "deteriorating" units. The net effect is to raise the national standard for what constitutes decent housing. And it makes the comparative statistics so complex that even the experts can be expected to quarrel a little over what they really mean.

## Renewal critics complain it enriches slumlords

Complaints grow that today's form of federally-subsidized urban renewal can't ever do the job cities need. It isn't carping at bureaucrats, or political sniping at lawmakers. It looks more like the first stirrings of a fundamental re-examination of what makes slums grow—and ultimately what might make them wither.

Right now, most critics focus on the cry that US-subsidized land write downs for slum clearance seems to enrich slumlords much more than they improve housing for slum dwellers. "These property owners are getting rich at the cost of human life," complains Councilman David Olbum of Pittsburgh. Says President Arthur H. (Red) Motley of the US Chamber of Commerce: "The central government [urban renewal] program, after years of operation and billions of dollars in commitments, not only has failed to achieve its stated objectives but has developed weaknesses which clearly show it is inadequate for doing the job. The subsidies were designed to give slum dwellers better homes. In many cases they have been used to make slum owners richer."

Some Chamber staffers are more explicit. In public talks, Howard Evans, community development specialist and former HHFA renewal expert, has attacked the "federal pattern" of subsidizing two-thirds of the land write down in redevelopment as an "inherent" weakness in renewal law which leads to "windfall profits for slum landlords." In New York City's first ten redevelopment projects, says Evans, the cleared land was

written down 77% at a cost of \$84 million—partly because condemnation court awards were 155% above true market value for the properties thus acquired. Says Evans: "Windfalls are made possible by failure to enact and enforce adequate housing codes, by cumbersome provisions in the law authorizing eminent domain under special renewal conditions, and by loose proceedings in condemnation courts."

So far, then, public understanding has progressed to the point where the unfortunate side effects of a program with a notable social aim are widely seen. What isn't seen so well—yet—is that some of the social aims of urban renewal (like rehousing low- and middle-income families in center cities) are in conflict with the economics of keeping cities solvent. For cities depend chiefly on realty taxes to meet their expenses. The higher the quality of redevelopment the higher the tax return. Moreover, rebuilding a costly center-city site with low-rent housing (either public or private) is the *least* likely way to upgrade the status of the neighborhood enough to induce privately financed redevelopment alongside it. Take a ride along the sterile wall of public housing fringing Manhattan's lower East Side to see the proof.

## Can public housing win acceptance in its new mantle?

You can see by the figures how hard public housers are pushing their self-appointed new role as housers of the elderly: 482 of the 829 federally-subsidized public housing units put under contract last month were for the aged (which usually means 62 or over). It isn't hard to see why. Public housing has been in deep trouble, in many cities, for several years. City councils, responding to pressure from neighborhoods which don't relish accommodating public housing projects because most of their occupants will be Negroes (or problem families, unwed mothers, or other troubled and troubling people), balk at site approvals. Often this masquerades as objection to rezoning as in Cleveland (*see p 71*). By shifting the emphasis from house-the-poor to house-the-aged, public housers can hope to remold their public image.

Toward this end, they are getting a big helping hand from the Kennedy Administration. First, the President suggested that Congress earmark half of the 100,000 more public housing units he wants built for the elderly. The same week, he nominated silver-haired Mrs. Marie McGuire, whom admirers credit for putting unique beauty and quality into San Antonio's first public housing project for the aged, as public housing commissioner (*see p 75*). Gene Rossman, executive director of the Portland (Ore.) Housing Authority, is being mentioned as her deputy.

Housing the aged, as every Congressman knows, has political sex appeal. So the new line is a smart move for public housing.

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# Kennedy's housing plans

More money for old subsidy programs; 40-year, no-down FHA loans for everybody; new finance tools to let FHA spur rehabilitation

President Kennedy's plans for reshaping federal aids to housing, as might have been expected, focus on the needs of cities and lean on subsidies to meet political demand for better homes for special groups. But they also promise federal incentives (at relatively small cost) to help private industry and localities attack some of housing's hardest problems (eg costs, planning, land prices).

The President's housing philosophy was spelled out in his March 9 message to Congress—a message notable for its scope and its eloquence, but a message controversial enough to promise a lively fight (and probably some amendments) in Congress before most of its proposals become law some time this summer.

**To the housing industry, Kennedy's most controversial idea is 40-year, no-down FHA loans for low priced new homes for all families, on a 24-month experimental basis.**

This is an effort to satisfy the rising cry for more aid to house "middle-income" families. The near give-away terms are already available to displacees under FHA Sec 221 on homes priced up to \$12,000 (in high cost areas). The Administration would boost the cost limit to \$14,500 (in high cost areas). But except inside designated renewal projects, it would not subsidize the mortgage loans, too, by making them eligible for Fanny May special assistance purchase.

This would make it a qualified bonanza. Builders would have to find a lender willing to make loans, or, presumably, sell them to Fanny May secondary market portfolio at several points more discount than for 30-year loans.

The industry itself divides sharply on the merits of the idea. "This would be the greatest boon to housing that has ever come. We might double our sales," forecasts Builder Robert Schmertz of Toms River, N.J. A 40-year instead of a 30-year loan would cut monthly payments on a \$10,000 mortgage from \$56.78 to \$51.58. This \$5.20 difference "would be a big help" qualifying buyers, predicts National Homes. But many builders say

land prices are too high to put up a good house so cheaply. And lenders object—correctly—that 40-year amortization means a new house will depreciate faster than its owner acquires an equity in it, perhaps paving the way for widespread defaults in a future recession (see table). It takes 29 years to pay off half of a 40-year loan. "Basically unsound," cries Senior Vice President Clair Sutherland of the Bank of America.

To critics, HHF Administrator Robert C. Weaver replies softly: "As an economist, 40-year mortgages give me pause, but from the viewpoint of mores, they make sense. This is not a program to encourage home ownership, but to provide housing for people at a price they can afford." Adds HHFA General Counsel Milt Semer: "People in cities are paying unconscionable rents. They come to us. We can say, 'go back; you have a roof over your head.' Or we can have another Section 10 and Fanny May support of a submarket interest rate. We are not going to either extreme."

**The biggest push in Kennedy's plans is a \$2½ billion shot in the arm for urban renewal, but this is accompanied by plans to make FHA take real risks to spur rehabilitation.**

FHA's proposed new tack for home modernization may turn out to be the most significant new market opportunity in the 1961 housing law. For the Administration would act to close the hard-to-finance gap in fixup from \$3,500 to \$10,000 by letting FHA insure second mortgages—or even unsecured liens—provided the total debt on the house doesn't exceed Sec 220 limits in renewal areas, or Sec 203 limits elsewhere. And even before Congress had the President's formal legislative blueprint, FHA was moving to speed up urban renewal loan processing (a sore subject with the industry) by reassigning personal and stretching its underwriting rules (see p 68). It did not go as far as some critics want, and set up separate processing inside FHA for renewal loans. "We've got one bureaucracy," says Weaver. "Let's try to adapt it."

**Biggest sleeper in the Kennedy proposals is his land-bank idea.**

It won't move fast, because localities must have comprehensive development plans to qualify for the proposed federal aid. But ultimately, this might put cities into the business of controlling urban sprawl by controlling the open land builders need and reselling it to them.

## 30-YEAR VS 40-YEAR LOANS

(\$10,000 loan at 5½% interest rate)

Year	40 YEARS		30 YEARS	
	Principal payment during year	Cumulative principal payments	Principal payment during year	Cumulative principal payments
1	\$70.97	\$70.97	\$135.00	\$135.00
2	74.98	145.95	142.60	277.60
3	79.20	225.15	150.70	428.30
4	83.67	308.82	159.00	587.30
5	88.38	397.20	168.10	755.40
6	93.38	490.58	177.60	933.00
7	98.65	589.23	187.60	1,120.60
8	104.19	693.42	198.30	1,318.90
9	110.09	803.51	209.30	1,528.20
10	116.30	919.81	221.20	1,749.40
11	122.85	1,042.66	233.70	1,983.10
12	129.79	1,172.45	246.70	2,229.80
13	137.11	1,309.56	261.00	2,490.80
14	144.85	1,454.41	275.40	2,766.20
15	153.01	1,607.42	291.10	3,057.30
16	161.64	1,769.06	307.40	3,364.70
17	170.76	1,939.82	324.70	3,689.40
18	180.38	2,120.20	343.10	4,032.50
19	190.56	2,310.76	362.40	4,394.90
20	201.31	2,512.07	382.90	4,777.80
21	212.67	2,724.74	404.50	5,182.30
22	224.68	2,949.42	427.20	5,609.50
23	237.32	3,186.74	451.40	6,060.90
24	250.73	3,437.47	476.80	6,537.70
25	264.87	3,702.34	503.80	7,041.50
26	279.82	3,982.16	531.90	7,573.40
27	295.60	4,277.76	562.10	8,135.50
28	312.27	4,590.03	593.90	8,729.40
29	329.88	4,919.91	627.40	9,356.80
30	348.51	5,268.42	643.20	10,000.00
31	368.17	5,636.59		
32	388.92	6,025.51		
33	410.87	6,436.38		
34	434.04	6,870.42		
35	458.52	7,328.94		
36	484.38	7,813.32		
37	511.70	8,325.02		
38	540.56	8,865.58		
39	571.05	9,436.63		
40	563.37	10,000.00		

## KENNEDY'S PLANS IN BRIEF

(Based on his March 9 message to Congress and interviews with housing agency officials. Quotes are from the President's message.)

### FEDERAL HOUSING ADMINISTRATION

**Low-priced private housing:** Provide FHA 40-year, no-down-payment mortgages (now available only to families displaced by government action) to any family—on a 24 month "experimental basis." Maximum mortgage under Sec 221 would be boosted to \$11,500 for normal areas, and up to as much as \$14,500 in high cost areas, but Fanny May special assistance (ie federally subsidized prices for the loans) would continue to be reserved for homes sold to displacees. Lenders would be wooed by shifting payoff on foreclosure from debentures to cash.

**Subsidized middle-income housing:** Set up a new program of long-term, submarket-interest rate loans under FHA, financed by \$500 million of Fanny May special assistance, available to co-ops, nonprofit associations, limited dividend corporations, and local public housing authorities. "Occupancy would be strictly limited to individuals and families whose incomes exclude them from standard housing in the private market." How? FHA would have discretion to waive or reduce its insurance premium, Fanny May to lend at subsidized interest rate. Where either occurs, FHA would set income limits.

**Rehabilitation and home modernization:** Extend FHA Title I repair loan program to October 1, 1962 without change. Set up new subsection of FHA Sec 220 to encourage modernization inside renewal areas: 25-year, \$10,000 loans at going FHA rate, with authority for FHA to accept junior or even unsecured liens provided the total debt on the property remains inside regular Sec 220 limits (97% up to \$13,500). Fanny May special assistance would be available. Outside renewal areas, offer the same new principles but without Fanny May special assistance and subject to Sec 203 loan limits instead of Sec 220 limits. For both, payoff would be cash instead of debentures and insured advances would be available during construction.

**FHA research to promote cost cutting:** Set up a new FHA Sec 233 to insure up to \$1 million of loans on homes using new materials, design, or construction methods "which give promise of producing substantial savings in cost." Instead of appraisal based on economic soundness, FHA would be told to appraise such housing on the basis of its replacement cost if built conventionally.

**Condominium co-operatives:** Create a new FHA Sec 234 to insure mortgages on individual units and commonly used facilities owned in fee or under long-term lease. Mortgage amounts would be the same as Sec 207 rentals; other items would be the same as under FHA's main program, Sec 203. (For more details on condominium, see p 55).

**FHA insuring authorization:** Remove dollar limitations on FHA insurance, instead give FHA power to operate until Oct '62.

FEDERAL NATIONAL MORTGAGE ASSN.

**Secondary market operations:** Boost Fanny May's power to borrow on the private market to raise mortgage funds by \$350 million by letting the Treasury buy another \$35 million of FNMA preferred stock.

**Special assistance:** Add another \$750 million to the existing authority (ie to borrow \$750 million more from the Treasury to make social purpose loans at submarket rates). Some of this would go for new home improvement loans under Sec 220, some for new Sec 221's by co-ops, nonprofit associations.

URBAN RENEWAL ADMINISTRATION

**Capital grants:** Authorize \$2.5 billion more for the next four years (only \$38 million now remains unobligated of \$2 billion authorized in subsidies since 1949).

**Rehabilitation:** Extend land write-downs to rehabilitation of homes in blighted areas to prevent breakup of neighborhoods. Let local renewal agencies acquire existing properties under eminent domain, get federal write-down subsidy, improve them and resell them to private owners (limited to 50 units per project). "Some types of rehabilitation, while socially desirable, cannot succeed on a voluntary, self-financing basis."

**Non-residential renewal:** Boost from 20% to 30% the share of total grants for projects not predominantly residential either before or after redevelopment.

**Relocation allowances:** Give displaced

businessmen more than the present \$3,000 allowance, but make localities share the increase on the same basis as land write-downs (two-thirds federal, one-third local).

**Renewal planning:** Give localities more freedom in determining renewal areas. Promote, via HHFA, community- and area-wide renewal planning. "This program, if it is to be truly effective, must go beyond the project-by-project approach." Boost the federal share of aid to metropolitan planning from half to two-thirds. Increase the present authorization of \$20 million to \$100 million (for localities up to 50,000 population). Mesh highway and renewal planning better, and give families displaced by highway construction the same relocation help as families displaced by renewal, with the cost borne by highway funds.

PUBLIC HOUSING ADMINISTRATION

**New construction:** Authorize about 100,000 more units, without time limit, by removing existing restrictions on use of the 810,000-unit program set up in 1949.

**Over-income tenants:** Let them remain in public housing, paying full economic (ie not subsidized) rents until they can find adequate private housing.

**More local control:** Give local housing authorities power to set priorities for tenant admission (it is now spelled out in federal law). Give localities more freedom to determine design. Authorize \$10 million for demonstration grants for research and experiment in new forms of housing for low-income families. "Our program should have maximum flexibility so it can best be adapted by local communities to their particular needs."

HOUSING FOR THE ELDERLY

**Public housing:** Increase the cost limitation \$500/rm in units designed for the aged. Boost subsidies up to \$120 per unit per year if needed to keep projects solvent. "More than half the families headed by a person over 65 have annual incomes below \$3,000 and four-fifths of all people of this age living alone must subsist on less than \$2,000 a year."

**Direct HHFA loans:** Authorize appropriation of another \$50 million, swelling the total to \$100 million. Make local public agencies eligible to get such loans.

**Permanent open land:** Authorize \$100 million for a new program of 20% grants to let localities "finance the reservation of land—by acquisition or other means—as permanent urban open space in the form of parks and other facilities." A comprehensive community plan would be required after three years. "Open space must be reserved to provide parks and recreation, conserve water and other natural resources, prevent building in undesirable locations, prevent erosion and floods, and avoid the wasteful extension of public services."

**Land banks for private development:** Authorize \$100 million for loans to localities to acquire open space for future public or private development. A federally approved area plan would be prerequisite. "Open land is needed to provide reserves for future residential development, to protect against undue speculation, and to make it possible for state and regional bodies to control the rate and character of community development."

COMMUNITY FACILITIES ADMINISTRATION

**Public facilities loans:** Authorize another \$50 million for subsidized loans to localities to build items like sewers, water plants. Let communities burdened by rapid growth postpone interest on up to 50% of outstanding federal facilities loans for up to 10 years.

MISCELLANEOUS

**Veterans Administration:** Extend both VA's direct loan and loan guaranty programs (now due to expire in 1962 for World War 2 veterans), and expand VA's \$150 million direct loan authority by an unspecified amount.

**Rural housing:** Extend another three years the Agriculture Secretary's power to make 4% farm home loans (only 41,000 have been made since 1950, and \$257 million of the originally authorized \$450 million kitty is left). Let farm-home improvement loans be secured either by mortgages "or other forms of acceptable security."

**Research:** Appropriate "sufficient" funds so the housing agencies can actually carry out market research, statistical surveys and research into housing and urban problems already authorized by law.

DEPARTMENT OF HOUSING & URBAN AFFAIRS  
Set one up with cabinet-rank.



### Vehicle for Kennedy plans: Fanny May

The Treasury is keeping its hand in FNMA's business—just as it did under the Eisenhower Administration. Treasury Undersecretary Robert V. Roosa (2d from l), who handles monetary affairs, has been named a member of FNMA's board of directors, as have FHA Commissioner Neal Hardy (l) and HHFA General Counsel Milt Semer (r). The law designates HHF Administrator Weaver (c) as board chairman. Fifth member: FNMA President Stan Baughman (2d from l). FNMA officials concede they have finally priced themselves, at 103, out of the mortgage market. They doubt that more than 4% of the \$100 million of reservations by buy loans out of FNMA's secondary market portfolio will actually be taken up by lenders.

NEWS continued on p 46

For editorial comment on President Kennedy's housing message, see p 146.

# How FHA hopes to put new life into urban renewal

The No. 1 aim of FHA Commissioner Neal J. Hardy is to transform his agency into an engine instead of a brake for urban renewal. The first step will be to devise easier and cheaper ways to finance major home modernization.

Up to now, the available financing tools leave a gap in fixup job prices between \$5,000 and \$9,000. FHA's Title 1 repair loan program stops at \$3,500 (and few lenders will go that far). But it costs borrowers 9.7% interest. Mortgage loans are cheaper, but few lenders will write one for less than \$8,000 or \$9,000 on the ground that it costs too much to put it on the books for the yield. So Hardy is studying whether reasonably simple changes in legislation would let FHA insure medium term loans for rehabilitating older housing.

Says Hardy: "We might simply agree to rewrite old loans for modernization. Perhaps we should insure credits of various kinds—not necessarily just mortgage loans. Or perhaps

we should insure second mortgages for rehabilitation. The important thing is not whether the loan is a first or second mortgage, but that we are insuring debt where the total debt on the property is related to its

economic value. In some jurisdictions you are better off with a personal note than with a second mortgage. You'll find every kind of financing there is on older homes. There is no reason why FHA should offer insurance on only two kinds of modernization loans."

**Borrowed brains.** To help draft plans for better fixup financing, one of Hardy's first acts—before he took office officially—was to borrow Economist Saul Klamman of the National Assn of Mutual Savings Banks for a month's temporary duty in Washington. Klamman's plans are embodied in the Administration's revamp of rehab financing (see p 45).

It's time to take another look at the loan limits under FHA Title I, Hardy says. They have been boosted only once in the last 25 years—from \$2,500 to \$3,500 in 1956.

**Separate renewal processing?** Hardy, former assistant HHF Administrator and a federal housing official since the depression, is cognizant of rising demands to strip FHA's regular underwriters of jurisdiction over FHA urban renewal and rehabilitation programs, notably Secs 220 and 221.

Most FHA field men, say critics, just aren't interested in getting urban renewal done, so push renewal projects and problems to the bottom of their in-baskets. "I agree that this is 90% of the problem," says Hardy, with disarming candor. But he is still mulling over what steps to take to end FHA's foot dragging. He does not rule out setting up separate processing teams, but he points out there is no money in FHA's budget through June 30 to do so—though he agrees that Congress would probably vote it if the Administration asks.

"Urban renewal is going to be a very important part of the housing market for the next four years," Hardy predicts. "It looks as though there will be only fair production of new homes. It will be a buyer's, not a seller's market. For the first time in a generation we have a great opportunity to do something about our existing stock of housing. If we don't do it now, I don't know when we will."

Hardy makes it clear that he has no idea of barging into the FHA with a series of moves that would alienate its long entrenched

civil servants. "You have to rely on persuasion to convince people something is right. This means changes can't happen overnight."

One change he does intend to institute promptly is a reorganization to cut down the number of people reporting directly to the commissioner. "It's 32 now," says Hardy. "It should not be more than 10 or 11."

**Push for open-end.** If more lenders would agree to make open-end mortgage advances to home owners who want to modernize their homes, modernization would get a major shot in the arm, contends Hardy. But his own experience, he says sadly, illustrates what happens when home owners try. Hardy wanted to spend about \$5,000 to overhaul his 40-year-old home on which he had a 4½% mortgage, now paid down to about 30% of the value of the house. Would his mortgage lender advance the money by increasing the existing mortgage loan? Not at all, unless Hardy would rewrite the whole mortgage at today's prevailing 6% interest rate. "We sold some stocks and paid cash for the job," says Hardy.

In Hardy's 24 years in housing, the "only true open ending" he can recall on a large scale has been done by the government itself. The Home Owners Loan Corporation, a New Deal creation to rescue owners from threatened foreclosures, originally put out some \$3 billion worth of 5% loans. Later, HOLC advanced \$1 billion more for home improvements without new closings.

One administrative maneuver which many experts think would encourage much wider use of open-end mortgages is for FHA to collect its insurance premium as a single, non-refundable advance payment of somewhere between 1% and 2% added to the appraisal and the mortgage as in England (instead of collecting ½% a year in up to 360 microscopic installments). "That's probably a good idea," says Hardy. But he adds: "It would have to be thoroughly researched first."

## FHA acts to finish stalled Hal Hayes military housing

FHA has finally decided to take over the job of completing Builder Hal Hayes' half-finished, weather-wracked \$47 million empire of military housing.

The decision ends a sorry tale of fumbling that began last May 20 when Hayes, in a flurry of lawsuits, pulled out of jobs involving some 3,400 units at five military bases across the country. While FHA, lenders, and Hayes' bonding company wrangled all winter over who should step in and how, the houses stood empty and mouldering in rain and snow.

At Camp Lejeune, N. C., Marine families crowded in trailers wistfully eyed 800 units they had hoped to occupy. Hayes himself, snugly safe in Mexico from winter weather and lawsuits alike, threw a glittering New Year's party at his new 24-story "guest house" overlooking Acapulco Bay, and announced plans to raise Mexico City 100 ft above its swampland surroundings. "I have found it necessary to work out of the country," he said. Hayes—and everyone else's—troubles began last spring when FHA discovered there were nearly \$500,000 in subcontractors' liens against a Hayes job at Beale AFB, Calif., instead of the \$59,000 Hayes claimed. FHA demanded he put up cash to guarantee the

liens. Hayes refused, claiming the agency would probably ask the same on his other jobs at Camp Lejeune, Ft Bliss, Tex.; Ellsworth AFB, S. D.; and Grand Forks AFB, N. D., thus tying up millions in capital.

What followed was a withering crossfire in which Hayes sued his bonding company, charging he had been duped into bidding on the jobs with assurances of a 10% profit; the bonding company sued Hayes; and somewhere in the litigation of subcontractors against Hayes' 83 corporate entities, Hayes even sued Hayes.

The rhubarb was no surprise to those who knew Hayes well. Self-styled "world's biggest individual builder," the 50-year-old North Carolina country boy once built a house in 34 minutes, presented a 45-karat diamond ring to Actress Zsa Zsa Gabor, and presided over lavish parties for the international set at his six-level "house of tomorrow" in the Hollywood hills. Whatever Hayes did, he was sure to do big.

But the blowup came as a distinctly unpleasant surprise to FHA and the Dept of Defense who knew Hayes mainly as the contractor who did a "very satisfactory" job on a Capehart contract at Mather AFB. "There was no indication," complained a Defense

Dept lawyer at a Senate hearing last month. "that the contractor would not be capable of performing the contracts he had been awarded."

How unprepared the government was—through 547 other Capehart projects it had suffered only minor litigation—to handle the crisis was detailed by Deputy FHA Commissioner James B. Cash to the Senate preparedness subcommittee. Cash, who inherited the Hayes mess when he became deputy commissioner Feb. 3, took the history of the Grand Forks job as typical, listed a 9-month series of 45 communications among FHA, other agencies, the banks and the bonding company. Their sum: nobody wanted to take the first step into the mess, for fear of legal complications and possible loss of money later.

The problem, said Cash, was that there was no clearly established way, under existing rules, for FHA to step in and get work on the jobs going again. Since then, he said, the barn door had been belatedly locked. The means: a simple change in FHA's agreement with the mortgagor corporation set up to build a project, which gives FHA power to step in and take over in case of a work stoppage. A crisis like the Hayes troubles can never happen again, Cash said. Then, in an



understatement more notable for what it did not say than what it did, he added: "This program and its operating procedures are being reviewed. It seems probable that the experience in these cases may lead to further changes."

But if the senators, who were showing signs of balking at more military requests for Capehart Act military housing this year, were satisfied with that, they still had some questions. One was how Hayes had obtained so many contracts at once. Chairman John C. Stennis (D, Miss.) of the preparedness sub-

committee wired an invitation to Hayes himself to shed some light on the question.

Some observers, mindful of an \$11 million lawsuit pending against him in Los Angeles, the efforts of Justice Dept lawyers (thus far fruitless) to find some way of holding him responsible for the estimated \$4 million that FHA may be stuck for in added costs, wondered if he would.

But Hayes turned up March 21, accompanied by the inevitable lovely woman (in this case, Raili Hanninen, 26, former UN guide from Finland, who told reporters she

and Hayes would be wed in a month or so.)

Hayes blamed FHA and the Pentagon for his troubles. Officials checking his work "put the screws on us," he testified, after he refused to apply new shades of paint to satisfy officers' wives or let officers make a "board by board" selection of lumber going into their quarters.

Hayes also tossed a new legal bomb into the tangle. He asserted his corporations hold valid 55-year leases on the sites of the 2,500 unfinished houses. This, he insisted, would subject the government to damage claims if other contractors finish them.

## MATERIALS & PRICES:

### J-M, Certain-teed, Bestwall pact gives them 'biggest product line'

The three-way sales-and-distribution deal between giant Johns-Manville, Certain-teed Products, and Bestwall Gypsum got only routine attention in the nation's press when the companies announced it last month. But it is anything but routine in scope and in its potential impact on 1) the marketing of building products and 2) the accelerating industrial revolution in housing itself.

In essence, the three companies (whose combined 1960 sales totaled \$498 million) have agreed to produce products for each other. Johns Manville will market gypsum products made by Bestwall—its first entry into this line of building materials. Bestwall and Certain-teed will sell J-M insulation board on the West Coast, instead of making it in Texas and shipping it 2,000 miles to market—a significant saving in distribution costs. And as Value Line, the stock analysis service, noted, the pact gives Bestwall "selling capacity that would take years and millions of dollars to develop independently."

The tieup gives all three companies the broadest product line of any US materials' manufacturer, says President Malcolm Meyer of Certain-teed. So the deal, as he sees it, is "one of the most significant developments in building materials production and distribution in years."

Onlookers figure the pact may be as significant for what it foreshadows as what it involves. For one thing, the three concerns say their agreement may be broadened to

hand that feeds him financing for his low-price house market?

*Here are more details of the three-way pact:*

Bestwall-Certain-teed will distribute in 11 Western States† insulation sheathing, shingle backer, building board, and fiberboard roof insulation, insulation tile and insulation plank made by the Johns-Manville plant at Klamath Falls, Ore. These Certain-teed products were formerly shipped from the Diboll, Tex., fiberboard plant. The same pattern will be followed for other products. On 210# roofing, for example, there is little difference between competing Johns-Manville and Certain-teed products so plants owned by each outfit will make the same product for both companies and label it differently.

The jointly-owned Bestwall-Certain-teed Sales Corp will offer non-duplicating products of Johns-Manville.

The agreement is akin to the occasional practice of two newspapers in the same city cutting costs by using the same composing room and presses.

**Background of flirtation.** The three firms are no strangers. Bestwall Gypsum was originally the gypsum-paper division of Certain-teed. It was spun off into a separate company in 1956. The spin-off came after the US Treasury ruled that Bestwall shares could be distributed tax-free to Certain-teed stockholders on a three-for-one basis. Subsequent trading of the two stocks—both listed on the New York Stock Exchange—has taken away common ownership of the two companies.

† Washington, Oregon, California, Nevada, Idaho, Montana, Wyoming, Utah, Colorado, Arizona, New Mexico.



BURNETT



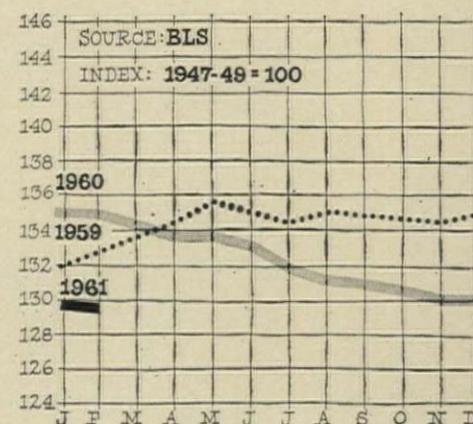
MEYER

other products in the future. For another, if J-M follows Certain-teed into the manufacture of prefab or shell homes\*, it would give the three companies a potent lever to persuade local dealers to push not only semi-finished homes but also their entire line of products. Certain-teed's new Institute for Essential Housing (H&H, Mar) operates on a franchised dealer plan. Retail lumber dealers are not required to sell Certain-teed or Bestwall brands, but why would a dealer bite the

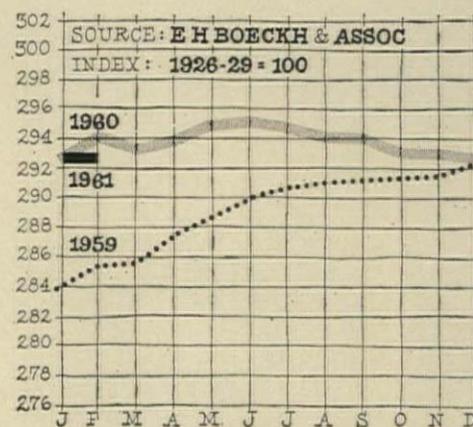
\*J-M is considering doing just this, President Clinton B. Burnett told newsmen at J-M's annual meeting last month in Chicago. He explained that J-M's new component wall panels (see p 152) "do not preclude the possibility" of producing complete housing units. "We are taking a very close look at what [Certain-teed] as well as others are doing," he added.

Despite the spin-off the two concerns share top management. Board Chairman Rawson G. Lizars of Certain-teed is president of Bestwall. President Meyer of Certain-teed is executive vice president of Bestwall. Bestwall and Certain-teed each own 50% of their sales outlet, Bestwall-Certain-teed Sales Corp.

Shortly after Bestwall's spin-off from Certain-teed, Johns-Manville flirted with a proposed merger. The deal was called off late in 1957.

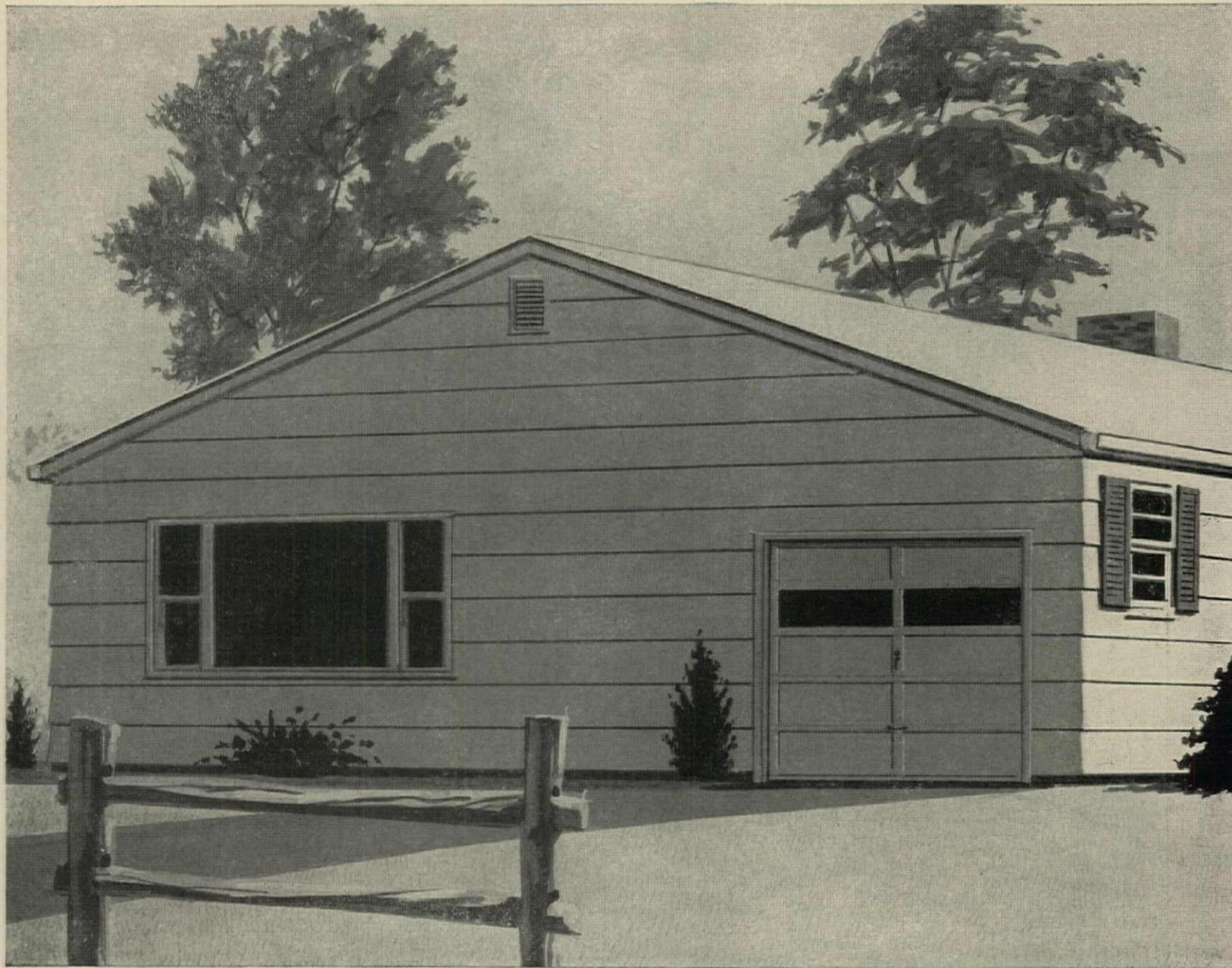


MATERIALS PRICES dipped for the 13th straight month in February, declining 0.2 point to 129.7 in the BLS index. The price index is now 3.9% below last year. Lumber continued to lead the downturn, with plywood falling 0.8%, lumber 0.7% and millwork 0.6% in month-to-month comparisons. Paint also declined 0.5%, concrete products 0.3%, and building paper and board 0.2%. None of the 17 indexed items advanced in price.



HOUSING CONSTRUCTION COSTS for February equaled January's 292.3 on Boeckh's index—still 0.6% above the year-earlier level. Automatic wage increases in four cities and a 5% to 7% hike in asphalt roofing prices offset continued easing of lumber prices. Mill prices for West Coast plywood increased but Col E. H. Boeckh says local materials dealers "are not rushing to buy just because the price goes up." By mid-March fir plywood was firming at \$64 (up \$4) for 1/4" AD and \$85 (up \$2) for 5/8" CD sheathing.

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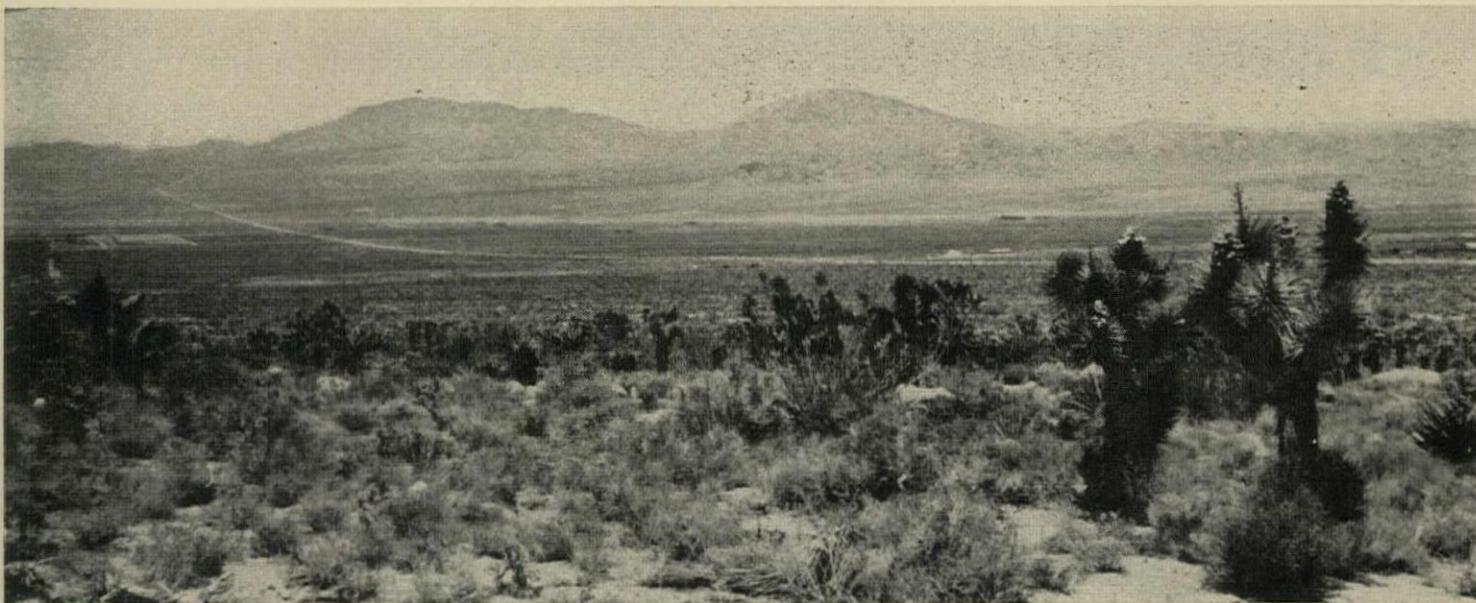
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**FOR ONE DOLLAR DOWN**, a developer will give you title to two acres of California desert in what is enthusiastically described as beautiful booming

Lucerne Valley. The total price is \$1,490. There are strong hints that speculators in land like this are coming into an arid spell in sales.

## Squall signals are up for speculators

Recession, overpricing crimp sales. Promoters eye amenities as big hope to lure back buyers

Has the bloom faded from those \$10 down/\$10 a month land promotions? Is the public wary now of those vast developments of Florida palmetto land, California and New Mexico desert—miles from any urban area?

It's too early to judge for sure yet. But a six-state HOUSE & HOME survey shows sales slowing, finds some outside experts frankly predicting even worse days ahead for speculative land promoters.

The survey also shows that the developers themselves are putting new emphasis on improvements and amenities on their land as they try to 1) shore up sales and 2) hold on to some of the most recent buyers who tend to forfeit their small equities and save their \$10 a month.

Immediate and obvious reason for slower sales is a slower economy. Says Housing Expert James Gillies, assistant dean of the UCLA graduate school of business: "The boom is off. Land promotions prosper in a booming economy when people have a little

money they don't have anything else to do with. Now if they have the money they are putting it in liquid assets like S&L and bank accounts."

Miami Realtor J.A. Cantor, a 40-year veteran of the Florida land-go-round, warns: "I think most of the development firms are in shaky condition. They have been depending on their sales to carry heavy overhead but today there isn't enough turnover of real estate."

Few developers admit anything more serious than a winter lull. But optimism has always been the most essential ingredient of their business. The state-by-state picture:

**CALIFORNIA:** Developers admit sales are slower. They blame the recession and second California Real Estate Commissioner W.A. Savage. He stopped sales at one of the first big desert land promotions, Hesperia, last summer contending there was not enough water to service the land being sold.\* His move has apparently hurt all desert developers.

**FLORIDA:** General Development Co, which has eight developments throughout Florida, says lot sales are holding up despite the company's new emphasis on house selling (see below). But Miami Realtor Lamar Mitchell, an acreage specialist, says big speculators are having trouble meeting their note payments. To this Realtor Cantor adds: "The man who loses his job isn't going to keep sending in that \$10 every month."

**NEW MEXICO:** Lot sales last fall were spectacular in this area, where the cheap land promotion is still new. But sales slipped this winter. Promoters blame it on the weather, though much of the land is sold by mail in the Midwest and East.

**NEVADA:** Realtors blame the obvious drop in lot sales on the recession plus a growing consumer awareness that the land is overpriced.

**ARIZONA:** Biggest promotional sales of Arizona desert are actually being made in Cali-

\* Savage lifted the ban early in February, gave Hesperia developers permission to start selling lots again. One reason: veteran Developer M. Penn Phillips is no longer connected with the project. He sold his interest in both Hesperia and Salton Sea in January. Meanwhile, other land developers, alarmed at the effect that state's action had on business, have organized the California Land Developers Assn to represent their interests with the realty commission and the legislature.

fornia and they have slowed. But sales controlled out of Phoenix have slipped also.

**COLORADO:** Promotions lacked some of the known-how of California and Florida developers, have never done too well here. Now, the state is considering legislation to impose rigid control over land promotions (just as Florida and California have done already).

**Improved desert.** From Florida to California—and especially in these two states—the emphasis on "improvements" is most evident. The improvement may be do-it-yourself shacks or a clubhouse. But as President H.E. (Gene) Vogt of Lake Mohave Ranches in northwest Arizona explains: "We've got to show progress to keep the deal on the books."

And for developers who sell on contract, keeping the deal on the books is critical. Explains Vogt: "We have to make the \$10 deal stick or we've lost money. Out of the first \$10 we get down, \$6 goes for commission and \$2.50 to set up the account. Through the first 11 months \$4 of the \$10 goes for sales commission and \$1 for overhead." So the longer the deal is on the books, the bigger the equity and the better the chance of holding on to the buyer.

Vogt has put in a swimming pool to complete a temporary clubhouse, which is in fact the old ranchhouse that came with the land. California City in the Mojave desert is building a 700,000 sq ft lake with a polyethylene bottom, first phase of a "Wonderland Park" in this 83,000-acre development. (The lake is being financed by a \$1 million revenue bond issue approved by the few voters in the area. They voted themselves an improvement district, took the park as a gift from California City, leased it back to the developers for enough money to pay principal and interest on the bonds.)

General Development, which sets the pace for other Florida developers, has completed a golf course and swimming pool for its big project at Port St Lucie on the Florida east coast.

President N.J. Mendelsohn of California City, a onetime Columbia University sociology instructor, sums up: "Where a land developer does not produce something, there will be a

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tapering off in sales. And this is why we are putting so much emphasis on getting something done. A land development must convert itself into a community if it is to succeed. And if it does, then, and only then, will the original investment of the thousands of buyers be justified."

President Richard Walker of California Valley (unconnected with California City) agrees: "Right now we are selling land—period. It is not necessary for us to offer anything else. At this point all we need are terms. [But] we can't afford to sell this and walk away. It would discourage the buyer too much. We've got to show him what we plan to do. After all we're into this buyer for better than four years."

California Valley is selling 2½-acre parcels for \$995, 60 miles east of San Luis Obispo. It advertised first in November, has taken 3,100 mail deposits—one of the few promotions to do particularly well this winter. But its price is among the lowest now advertised. Included in its plans: a 2,300-acre town and industrial site.

The newest improvement gimmick is freshly-planted orange groves. Near Ft Myers, Fla., two firms are offering 10-acre groves which promoters say can yield buyers a profitable harvest over the years. Jones and Frederick, Inc, offers \$9,995 tracts with \$1,500 down in its Orange River Groves and South Florida Citrus Industries gets \$11,500 with \$2,500 down. Co-ops maintain the groves and re-plant dying trees. A third promoter varies the idea into a "money making homesite," for \$995 (\$5 down, \$15 month) Orange Grove Park will sell one acre lots with 30 orange trees.

**Bait for building.** Above all the big land promoters want more houses—more people living on the land. This, they have found, is the biggest aid to sales.

General Development is opening 150 houses in its developments aimed at promoting construction of "vacation houses." Buyers would use them for their own vacations two to four weeks a year, then turn them over to General Development to be rented to others the rest of the year.

California City actually offers a lot buyer a 30% discount on his unpaid balance if he builds on his lot. The developer is also trying to persuade FHA to okay the area for all FHA programs. FHA now takes only individual applications there under 203(i).

Outside of Florida, financing is a real headache for nearly all far-out developers—and

for just that reason: their remote locations. California City lost several sales last year because it could not get mortgage money. Vogt of Lake Mohave Ranches has about given up. He hopes now that he will get retirees who have all cash. (Yet Vogt also says he thinks his development is a good opportunity for builders.)

No developer has been nearly as successful promoting house sales as in selling lots. General Development has only 5,000 homes to show for 140,000 lot sales. Only 70 to 80 houses have been built in Moon Lakes Estates in Florida's Pasco County where 12,000 lots have been sold.

Lake Mohave Ranches has only 24 or 25 houses on 10,000 parcels and Vogt admits only a couple of these are substantial houses. California City has about 175 houses on 16,000 sold lots. And the record is even poorer in New Mexico, Nevada, and Colorado.

One Los Angeles title company executive insists this record is not likely to improve. "This land is actually valueless. It's bought by people who let their emotions overcome their good sense. They are lured by the combined appeal of Gunsmoke and Wagon Train."

One fact tends to support his appraisal of the land's real value: sophisticated land speculators seldom, if ever, buy cut-up rural lots. They are aware, as individual buyers apparently are not, how much was paid for such land.

For example the ranch which is Lake Mohave Ranches was bought for around \$10 acre, Vogt reports. Its first resale price was \$595 for five acres; then \$495 for 2½ acres; then \$395 for 1¼ acre and now \$495 for 1¼ acre. For his money the buyer gets an unpaved road by his land, but no water or other improvement. Nearest town is Kingman, Ariz. (pop. 4,525), 30 miles away.

**Market for builders?** The remoteness of developments like these is one reason UCLA's Gillies doubts there will be any real opportunity there for builders in the foreseeable future. "There may be a small market for second homes but I don't see how a builder would ever make any money at it," he explains. "It's no market for a tract builder in any case. I don't see any chance for a big program of housing in the areas or in any area unconnected with industrial expansion. There is no real inclination for this far out land to be developed."

And as for the value of the land, itself, he adds: "The only value any land has is in relation to the type of improvement it will have. When its price goes beyond any reasonable use value, then it's overpriced." His conclusion: most of the land being sold in remote locations is grossly overpriced. "But prices will remain where they are as long as people will pay."

**Pattern for tomorrow?** If one desert land development in California proves well founded, it would logically be California City. Developer Mendelsohn envisions his development as a true city with its own industry, not one based on a demand for second homes by city dwellers.

"We feel California City is a community development as well as a land development," he says. "We accumulated as much land as we did by spending three years putting it together in an area where ecologically a new community would be necessary."

Sheer size of his holdings demands a thoughtful approach. "We are going to have something to show prospective buyers. We have the need to stay with our merchandise. We have to do a good job or make valueless everything we own."

That's why he hired one of the most capable teams of planners he could find to produce a most remarkable concept of a city. On the team: Architects Smith & Williams, AIA; Landscape Architect Garret Eckbo, AIA; and City Planner Simon Eisner.

They mapped a plan for a city with almost total design control. Every tree will have its place. No building can be built without design approval of the controlling architects. Commercial signs are regulated. Even street signs have been redesigned.

Their plan proposes not one but seven cities with vast open areas running in and around the cities. Some land would be left as desert. Some would be cultivated, some parkland.

Only a small part of the city would have conventional block-and-lot residential areas. Most houses will be built in clusters, off the streets. Some will be inward oriented atrium houses (no alternatives allowed) while some will be outward-oriented park homes. The plan also provides row and high-rise housing.

The plan obviously is very long range. It's labeled California City, 1980. But even Mendelsohn admits it goes well beyond this.

Realizing he must have industry, Mendelsohn has also helped the nearby town of Mojave form an industrial development board. First notable success: a Texas company agreed to build a plant there to employ 250 persons eventually. But Mendelsohn contributed \$25,000 to help build the plant—and it won't even be on his land.

Now Mendelsohn, whose company has sold \$16 million in land since 1958, is planning to spread out. Next step: a national campaign to sell by mail.

## LABOR:

### Realtors vs. Teamsters

The National Labor Relations Board has squashed Teamsters Union efforts to organize Seattle real estate salesmen. In November 1957, unionists picketed one real estate office in drive to organize salesmen.

The Seattle Real Estate Board challenged union jurisdiction by saying salesmen were independent contractors but the Teamsters replied with an unfair labor practices charge. NLRB has upheld a trial examiner's finding that real estate brokerage "has only a remote relationship to interstate commerce."

### CIO-AFL rift on picketing

The CIO threw a bomb into its relations with the AFL last month. It wrote President C. J. Haggerty of the Building & Construction Trades Dept pouring cold water on the CIO's agreement to help construction unions put over the controversial situs picketing bill.

The bill—now before Congress for the second year—would let building trades picket construction sites if they have a dispute with even one subcontractor there. Builders contend it would give unions "almost unrestricted power to engage in boycott strikes" (now banned by the Taft-Hartley Act) and so cripple efforts to use new techniques to cut costs.

CIO leaders have never been more than lukewarm about the legislation. But this was the first public opposition. The dispute has its roots in the squabble between the building trades and CIO industrial unions over who gets maintenance and new construction work in auto and steel plants. Now, with many plants on short shifts, the CIO wants these jobs to keep its members working. CIO opposition will make it harder than ever to get Congress to adopt the legislation.

NEWS continued on p 54

## BOOM HITS TROUBLE

Here and there, the boom in land is running into stiffer regulation and the old laws of supply and demand.

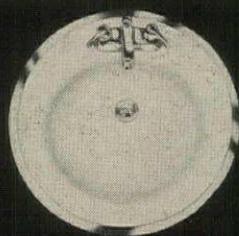
- In Florida, land prices are weakening, in line with predictions (H&H, Aug.) that "suburban land will sell for much less before it sells for much more." Near St. Petersburg, the \$5,000 lot of three years ago is being dumped for \$3,500; Miami area owners who demanded \$6,000 for one dry acre are getting from 10% to 20% less. The drop holds for the entire state and economist Prof Reinhold Wolf of the University of Miami predicts prices may slump another 8% to 10%.

- In Arizona, Gov Paul Fannin signed a new law to outlaw false real estate advertisements after real estate boards in Phoenix and other cities condemned unethical sales practices.

- In Washington, Interior Secretary Stewart L. Udall froze public land transfers for 18 months on the ground that unethical promoters had abused the privilege of filing for land in Arizona, Nevada, and California.

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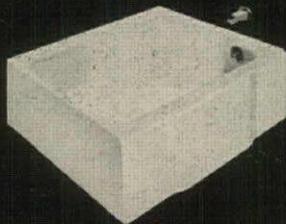


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## HOUSING MARKET:

## Rental boom suggests housing has split into diverse markets

More diversified markets. That is the big news in the housing industry this year.

The conventional single-family house in the suburbs will still be the builder's staple. But prefabs and shells, home modernization, and rental housing will grab bigger shares of the market—especially rental housing. Says Economist George Cline Smith, of F. W. Dodge Corp: "Single family units must compete against apartments—with apartment currently gaining."

In 1955, three-family-or-more structures accounted for only 6.6% of the private residential building. By last year, they grew to 17.1% (see graph). The percentage will go still higher in 1961. Predicts FORTUNE this month: "On the basis of contracts already awarded, more apartments will be started in the second quarter of this year than at any time since the 1920's."

The apartment boom began in some areas last year. In Denver and Cleveland, multiple dwellings zoomed to push total starts above 1959's even though one-family starts fell. In nine major midwestern cities, reports President Irving Rose of Detroit's Advance Mortgage Co, apartment construction has gone up from 5% to 332%. Predicts Rose: "The current boom will be of considerable duration. There is no longer one housing market but two—a one-family market and an apartment market."

### Another trend: more builders will aim at the market for lower-price houses.

The big postwar demand for shelter is over. Says Kingsport, Tenn., Builder Harry L. Miller: "The \$10,000 to \$12,000 market is where the big demand is now." Says Tulsa Builder Burl Johnson: "The biggest untapped market here is in houses selling between \$8,000 and \$12,000." NAHB President E. J. (Jim) Burke says: "Every time you lower the price of the average house by \$1,000 you can get an increase of 100,000 units a year." But Burke warns: "It doesn't just mean lowering the price of today's houses by \$1,000. It means a completely new house."

In NAHB's annual survey of 75 leading members, 59% see a trend to low priced housing. Builders of houses selling for under \$10,000 expect to boost their volume this year over last year by 130%. Builders in the \$10,000-\$11,999 range look for a 69% increase. The median sales price of \$14,800 will drop 4% to \$14,200.

FORTUNE predicts private housing starts will jump to an annual rate of 1,450,000 by the second half of 1961. Single-family-house volume will rise to a rate of 940,000, 13% over last year. Adds FORTUNE: "Builders of conventional homes in the \$12,000-to-\$15,000 price range are shifting their attention to those in the \$7,000-to-\$12,000 range, which should expand their unit sales. Adding to this the increased sales of prefabricated and shell homes and an increase in apartment building, the industry as a whole appears to be reaching lower down the price scale than before, thus opening up new layers of demand."

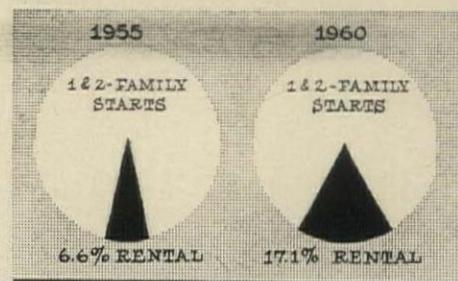
### Most experts look for housing to bounce back in the second half of the year. But there are hints that sales are picking up already.

Mortgage men in some cities report a turnabout in the sales market, as unsold inventory is worked off. FHA applications for existing houses in the first two months were 32% over the same '60 months. Says NAHB Economist Nat Rogg: "I look for a great upturn in the next 30 to 90 days as the general tone of the economy strengthens." The Federal Reserve is less optimistic. The Fed's annual survey of buyers' intentions found that fewer people in January planned to buy houses this year than said they planned to in last year's survey.

### Industry reaction to Administration moves to galvanize housing by giving it away on no-down, 40-year terms is one of hope, but not conviction.

In the first place, housing priced at \$13,500 or \$14,500 is available in most metropolitan areas now. And buyers aren't forming a line to grab it, even with no-down VA terms and FHA down payments as low as \$500. On the other hand, some builders figure the lower monthly payments will make a big difference in qualifying buyers. And lenders may be enticed by the cash-instead-of-debenture pay-off the Administration contemplates on foreclosure.

Builders and lenders alike generally shrug off the President's contention that one big answer to reviving housing is getting mortgage interest rates down to VA's 5¼% level again. A typical reaction comes from Walter Ehrke of Detroit's First Federal S&L: "Even a substantial change in rates is unlikely to call forth significant gains in housebuilding. Most markets now favor buyers. Significant expansion will depend on cost reductions and improved designs."



SOURCE: CENSUS BLS

FIVE YEAR GROWTH of rental housing shows how apartments are giving single-family homes more and more competition.

## Census reports big drop in unfit US housing

First returns from the 1960 Census on the conditions of the nation's housing indicate the building boom of the last decade has wiped out slums at an unprecedented rate.

The figures cast much doubt on the accuracy of the shibboleth that urban blight is still spreading faster than renewal can erase it.

Even so, Census says about one out of every six US households still dwells in a unit that is dilapidated or lacks some or all plumbing facilities (private toilet, bath, or hot water). But this 18% of the nation's ill-housed compares with 38% ten years earlier.

Occupied housing with all plumbing facilities (some in need of repairs, but none dilapidated) soared from 64 to 83% of the national total in 10 years, says Census. The figures: 27.7 million units in 1950, 44.2 million units in 1960. The biggest gain (78%), as expected, was in owner-occupied homes. Nearly 90% are now completely equipped by Census standards and not dilapidated—vs about 70% a decade ago.

And the number of housing units that are dilapidated or lack at least some plumbing fell a whopping 40% (to 8.8 million). As has been true for years, rundown housing is concentrated in the South (30% of occupied units but half the nation's dilapidated or plumbing-shy housing).

President Kennedy's comment, in his housing message to Congress (see p 44) that 14 million American families still live in "substandard or deteriorating homes" is only approximately right, according to Census. "Deteriorating" is a new classification in the nation's decennial housing count, so it can't be used for comparison with where we stood ten years ago. Census classified 8.3 million units as deteriorating "because of deficiencies which will require repairs if the units are to continue to provide adequate shelter." It classified 3 million more as dilapidated. It found 4.3 million otherwise sound units lacking in some or all plumbing. This adds up to 15.6 million, or 26% of US housing. Is a "deteriorating" unit adequate shelter? Census seems to try to avoid an answer. Kennedy calls it substandard.

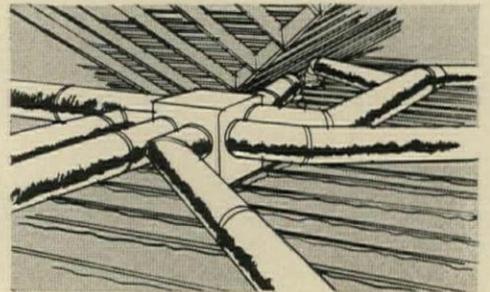
But most of this apparent market for home improvement does not lie where the urban housing industry can tap it. Only 6.8 million of the units the President implies need replacement or upgrading lie in metropolitan areas. So the slum problem—statistically, though certainly not socially or politically—remains chiefly on the farm and in rural hamlets. Indeed, in metropolitan areas, Census figures show only 11% of US housing stock is substandard, by the 1950 yardstick, and only 19% is substandard by the President's higher sights for today. Outside metropolitan areas, 12% of otherwise sound housing lacks at least some plumbing. A hefty 20% is deteriorating (including 11% that is both deteriorating and



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plumbing-shy). And 8.2% is so far gone Census calls it dilapidated. The official—but preliminary—figures:

**CONDITION OF US HOUSING, 1960**

(in thousands of units)

	US	%	INSIDE SMA'S	%	OUTSIDE SMA'S	%
All housing						
Units ..	58,323	..	36,384	..	21,939	..
Sound ....	46,914	80	31,122	85	15,792	72
With all plumbing	42,605	73	29,476	81	13,129	59
Lacking some or all plumbing	4,309	7.3	1,646	4.5	2,663	12
Deteriorating .	8,384	14	4,043	11	4,341	19.8
With all plumbing	4,766	8.1	2,875	7.9	1,891	8.6
Lacking some or all plumbing	3,618	6.2	1,168	3.2	2,450	11.1
Dilapidated .	3,025	5.1	1,219	3.3	1,806	8.2

Source: Census Bureau.

\* All percentages are percent of total housing units in US, metropolitan, or non-metropolitan areas, not percentages of sub-classes.

**Condominium gets its first trial by FHA**

FHA has given its first blessing in the US to the condominium principle of cooperative housing, which has been a smash hit in Puerto Rico for six years.

After months of talk, FHA has approved condominium-style financing for a 98-unit Sec 220 renewal project for Negroes in Richmond, Va. Reynolds Aluminum Service Corp headed by ex-HHFA Administrator Albert M. Cole and William E. Witt's Viking Development Co of Virginia Beach are co-sponsors.

**How it works.** For \$300 down, \$95 closing costs, and \$72.50 a month, buyers will get 3-bedroom, 1½-bath townhouses worth \$10,000 on lots averaging 20' x 60'. The condominium principle will give buyers a bonus ownership of a three-acre play area and swimming pool. At first, families will pay \$2.50 to \$3 monthly assessments (as part of the \$72.50 mortgage payment) with which Viking will operate the pool and recreation area. When all homes are sold, a residents' association will take over. Buyers must agree to join.

FHA has hitherto turned thumbs down on such arrangements and the Richmond project will be experimental. But VA has guaranteed a smattering of similar projects in Washington, New York and Stamford, Conn., since 1947.

**Legal differences.** Richmond-style condominium differs from true condominium in two ways: 1) Richmond owners will have title to land while all land stays in common ownership in Puerto Rico; 2) Richmond buyers will own foundations, roofs, stairs and items which are common property in Puerto Rico.

Condominium backers also claim significant advantages over Sec 213 co-op financing (NEWS, July). Under condominium, apartment dwellers own fee-simple title to their units while multi-family co-op buyers own only shares in a co-operative association, which in turn holds a blanket mortgage. When a co-op buyer defaults, it's everybody's worry; when a condominium buyer defaults, it's his worry.

**Lesson from Latins.** Condominium, an adaptation of Roman law dating from the 6th Century BC, is popular in many Latin American countries. Puerto Rico legalized the principle

continued on p 58

**NAHB, Negro realty brokers confer**

NAHB is flirting with a closer tie with Negro real estate operators to solve minority housing problems.

Nothing has been announced but NAHB brass has held two unpublicized pow-wows with top men of the Natl Assn of Real Estate Brokers. They were first-ever between two groups. More are to come.

The parleys are the brain child of Charles L. Warden, 43, Harlem-born president of the Negro brokers group. Although its NAREB initials are the same as the 53-year-old,



WARDEN

68,500-member Natl Assn of Real Estate Boards, the Negro group was formed only in 1947, numbers 1,200 members who call themselves Realists instead of Realtors. Warden, head of the 15-salesman Warden Realty Corp in Brooklyn, won his presidency on a pledge to promote closer ties with other real estate and housing groups. He recently appointed a home builders committee headed by Andrew Muse, Danville, Va., and that group sat down with six NAHB staffers led by Executive Vice President John Dickerman Feb 23.

Discussions were general: Realists wanted to find out where NAHB stands on open occupancy, how NAHB regards the Negro organization. The Realists also wanted to learn tricks of running a successful trade association.

Next came a luncheon March 3 introducing Warden to new NAHB President James Burke of San Antonio. Only top-level NAHB brass attended: Housing Center Chairman Edward W. Pratt, Royal Oak, Mich.; Trustees Thomas Coogan, New York City; R. G. Hughes, Pampa, Tex.; Carl T. Mitnick, Merchantville, N. J.; Vondal S. Gravlee, Birmingham, and Melvin E. Kimmey, Convention Committee chairman, Dayton. Hughes led NAHB's last big push to promote minority housing (on segregated basis) during his presidency in 1954. Dr George W. Snowden, top FHA inter-

group relations aide, sat in, Warden says the talks were merely exploratory.

He urged builders to develop more homes in \$12,000-\$13,000 range—prices he said Negroes can afford. Homebuilders have been saying much the same thing.

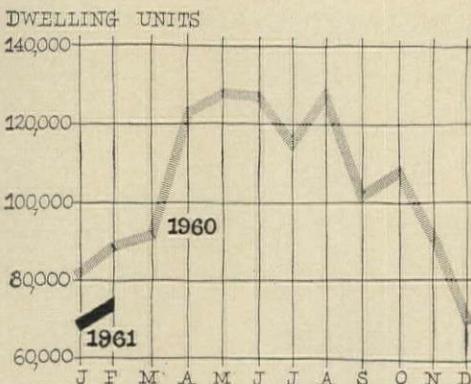
Burke said homebuilders were very interested in housing needs of minority groups. He wanted to know what Warden thought about an old bugaboo: Negroes refuse to move from center-city neighborhoods even when new home are open to them in suburbs.

Dr Snowden said he is convinced Negroes won't move to far-out locations. He cited a Sandy Springs builder who waited two years before selling his second home to a Negro 18 miles from downtown Washington, D.C. And the builder lived in the first home himself.

Warden replied that a few scattered homes in a few cities open to Negroes are not enough to prove the point. Offer new suburban homes to Negroes generally and the mass Negro movement to suburbs will follow, he forecast. Homebuilders will thus tap a new market.

For future meetings, Warden's Realists want to talk about.

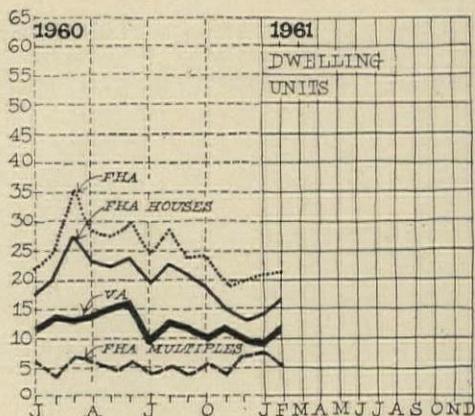
1. *How to begin open occupancy.* Realists believe homebuilders should first try to provide homes for upper middle income group—those able to buy \$25,000 and up homes. Negroes in this income category often find it hard to buy the 3-bedroom, 2-bath houses they want.
2. *How to help displaced families more.* Most displaced are Negro; Realists want "direct loans or some form of effective subsidy" for these families in addition to Sec 221.
3. *How to get closer homebuilder-Negro effort on open occupancy.* Realists urge builders "obtain the services and thinking of cognizant members of the Negro community in their various areas in order to find effective ways of achieving open occupancy."
4. *How to get cheaper loans for Negroes.* Warden says it is common for Negroes to pay 5 points more than whites for mortgages.
5. *How to lower closing costs.* Warden says high closing costs keep many minority families who have down payments from buying.



SOURCE: CENSUS BUREAU

**HOUSING STARTS** showed a modest improvement in February, totaling 74,200 for both public and private units. Private starts reached 70,400, a gain of 5.9% over January but 19% below February 1960. The seasonally adjusted annual rate in February was 1.1 million (vs January's almost 1.05 million) only a hint so far that housing may be headed up.

Public starts in February were 3,800, up 46% from January's 2,600, a gain of 46% and 65% above February 1960.



**FHA APPLICATIONS** show no marked trend one way or another. February applications for new units were up 3.9% from January to 22,361 (16,839 homes, 5,522 rental projects). The total was a disappointing 9.1% behind February 1960. New home applications were up 17%—the usual seasonal upturn—but 23.1% below year-earlier levels. Rental projects were ahead of 1960. VA appraisal requests on new and proposed homes rose to 11,983—27.3% above January but 6.9% below February 1960.

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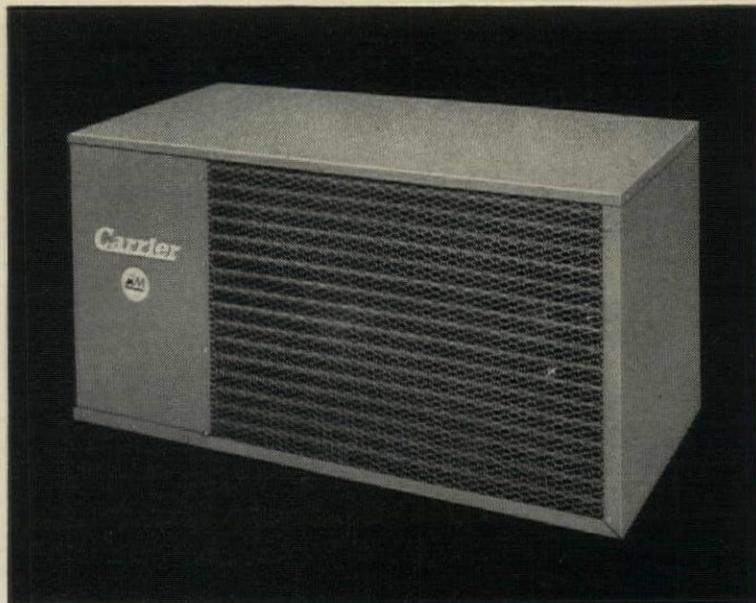
Capacities: 2, 2½ and 3 tons

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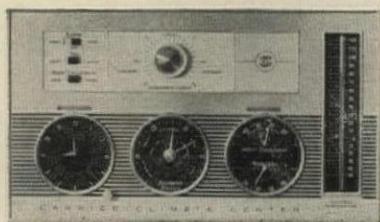
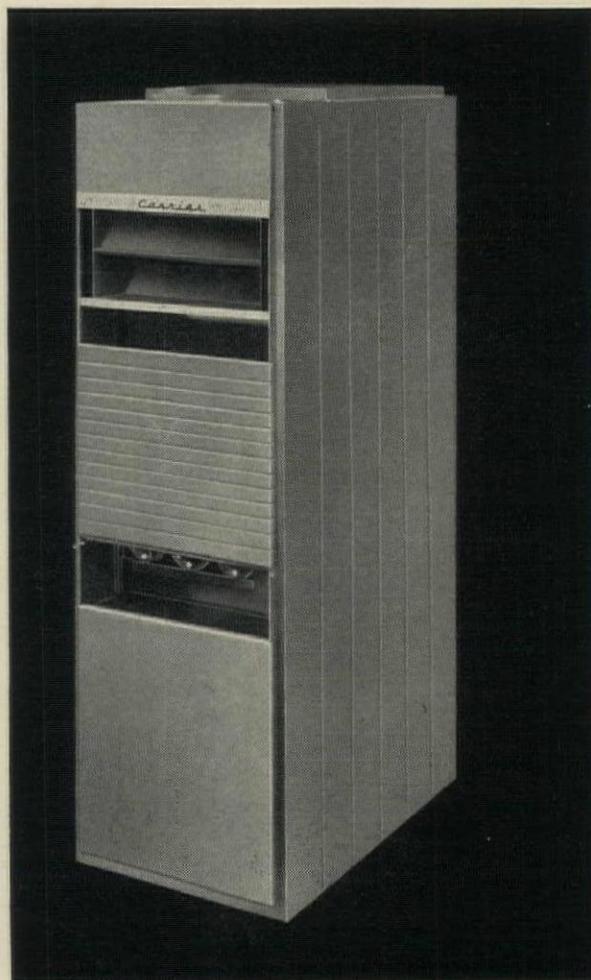


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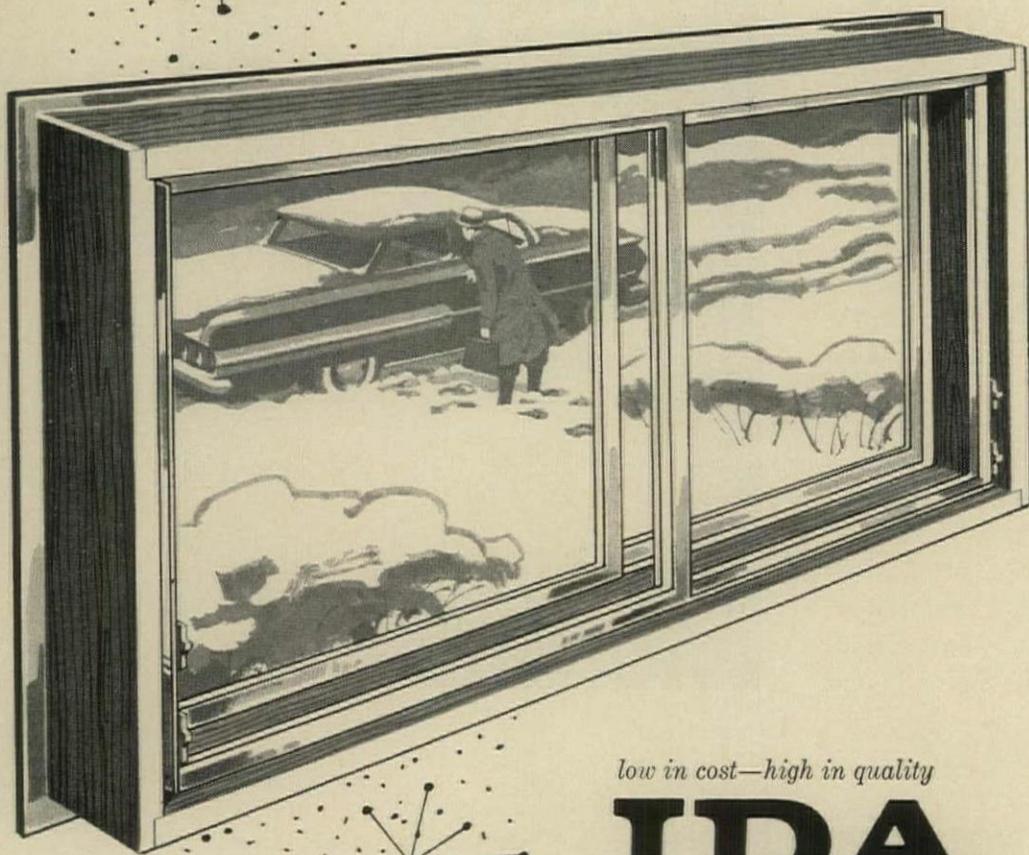


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ple in 1955 under its territorial laws. Over 400 condominium units are presently under construction, most in the \$20,000-to-\$50,000 range. They are sold under conventional financing with 30% down and 20-year, 7% mortgages.

To expand condominium to moderate income families, the City of San Juan has just issued \$10 million of municipal bonds to build 1,000 units.

Congress leans toward approving true condominium financing under FHA. Enabling clauses were included in both Senate and House versions of 1960's ill-fated housing law. NAHB and public housers are still plugging for the idea.

## LOCAL MARKETS:

**Albuquerque:** Homebuilding in this fast growing area began to tail off in late 1959 and kept skidding in 1960. Starts last year were off 33%, to 2,330, compared to 1959's 3,230 and 1958's 4,332.

Still, 1960 was the third best year in the city's history. Says City Building Supervisor A. P. Garland "In 1960 it looked more like healthy business and not boomtime business." Big reason for the building slowdown: the phenomenal growth of the city (which saw the population more than double to 201,189 in a decade) has leveled off. Sandia Corp, the city's largest employer, has stabilized its payroll after adding 1,000 workers annually for seven years, and there have been cutbacks at Kirtland Air Force Base. Many servicemen and their families who might ordinarily have bought or rented houses moved into 703 Capehart homes opened at two military bases early last year.

Rental vacancies which had hovered around 5% at the end of 1959, more than doubled during 1960 (estimates ranges from 11% to 20%). Most vacancies are in single-family homes which make up the vast bulk of housing in Albuquerque. Luxury apartments which opened last year are renting well and more are planned for this year.

Builders and realtors are optimistic. The unsold inventory is modest (less than 300). The potential market is strong for more expensive homes as young couples who moved in several years ago now want bigger houses. Builders in the over-\$20,000 bracket did well last year (hardest hit by the slump were \$12,000-\$15,000 houses). Dale Bellamah, biggest builder in the state, is developing a second subdivision of homes over \$20,000.

In the first two months of 1961, sales were erratic but kept about even with last year's levels. Builders reported sales spurted at inauguration time, but declined on cold, dusty weekends, of which there have been too many. Buyers seem to be shopping more, confident of stable prices and wondering about lower mortgage rates. Builders expect sales to rise if the economy settles down into some kind of a pattern.

**Monterey, Calif.:** Peninsula builders, confronted with a high inventory of unsold new houses and sluggish sales, are dragging their heels on starts—by as much as 15% behind last year, say realty men. In January, building permits totalled 162, vs 173 for the same month in 1960. But builders look for a pickup in sales during the year and a number of apartment projects are on the drawing boards. Realty men report a brisker interest now in higher-priced housing (\$25,000 and up).



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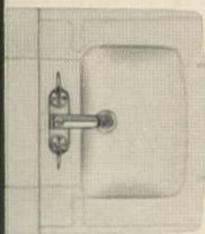
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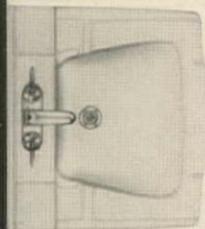
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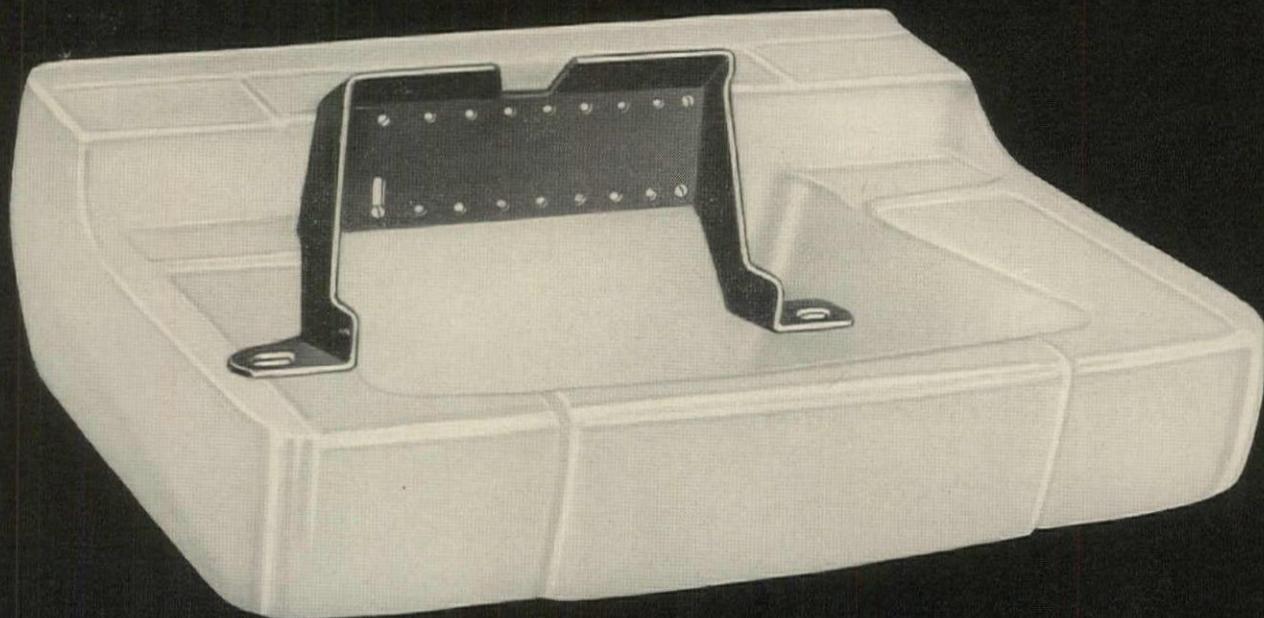
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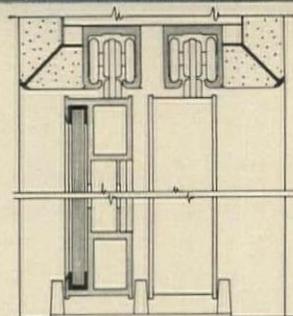
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## MIRRORS OF PARALLEL-O-PLATE

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LIBBEY • OWENS • FORD • TOLEDO 1, OHIO



THE QUALITY MARK  
TO LOOK FOR

## MORTGAGE MONEY:

## Discounts and loan rates tumble; S&Ls face pressure on dividends

The cost of mortgage money is dropping abruptly. It is under two pressures—jawbone and economic. Investor demand for loan paper continues to outrun the supply of immediates, at least in the national FHA-VA market. At the same time, the Kennedy Administration is pressuring lenders—notably savings & loans—to trim their mortgage interest charges. Whichever should get chief credit (or blame), mid-February to mid-March saw mortgage rates undergo one of the most rapid and widespread declines of recent years.

HOUSE & HOME's monthly survey of 16 cities showed this picture:

● FHA 5¾% mortgages (where they are available at all) have moved up to a price range of 99-par in most sections of the nation.

● FHA 5½s gained ½ to 1 point, are now selling in a 97-99 price range in most areas. It's symptomatic of investor hunger for loans that the new, lower-rate paper is priced to yield less.

● VA mortgage discounts fell ½ to 1½ points—and many mortgage bankers report builders are getting much more interested in building VA now that prices are generally in the 95-97 area.

● Conventional mortgage rates slipped as much as ½% below year-end levels in many cities.

The outlook? Most mortgage men foresee shrinking discounts and interest rates for the next few months. A typical view comes from Economist Jules Bogen of New York University: "Nothing in the demand and supply figures would indicate a renewed upturn of interest rates during the year." But some insurance companies are stalling on future commitments, figuring mortgage yields may now be at their bottom for 1961.

**Fanny May is doing all it can to push mortgage rates down by boosting its purchase prices and its resale prices.**

The latter had the most significant effect on the market. In January and February, Fanny May became (for the first time since 1958) a net seller of mortgages. For the year ended March 2, the agency sold \$99 million in mortgages as against purchases of \$80 million. To try to drive this money back into the financing of new construction instead of the refinancing of old, the Administration ordered three quick price hikes (½ point on Feb 3, ½ on Feb 16 and a whopping 2 points on Feb 23). At 103, investors lost interest in buying out of Fanny May's portfolio. Sales fell dramatically in March. Says one mortgage banker: "Fanny May is priced out of the market."

Fanny May shoved its secondary-market purchase prices up another ½ point, second boost in a month (for new Fanny May prices, see table, p 65). But in many areas, the increase only reflected what the private market had done.

**The Administration's campaign to talk S&Ls into lower interest rates is producing some results on loans but none so far on dividends.**

In the long run, the dividend rate must govern what S&Ls charge borrowers—especially now that the Home Loan Bank Board makes federal S&Ls amortize their income from fees over seven years. "Privately," says one of the federal government's topmost housing officials, "S&L men tell me 95% of them are watering at the mouth to cut dividend rates. But they are locked to the present rates until June 30." The big problem is what S&L will make the first move. "Dividend rates do not seem to affect very much the total flow of savings into the S&L industry," the official notes, "but they do affect very seriously the flow of savings into one S&L against another."

Treasury Secretary Dillon's well publicized huddle with three southern California S&L leaders, Charles Wellman, J. Howard Edgerton and John F. Marten, must be read in this light, that is, as a carefully contrived maneuver to nudge the whole industry into slicing rates to depositors in concert. California has the highest (generally 4½%) rates in the nation. So President Kennedy had hardly nominated Joseph P. McMurray to be chairman of the Home Loan Bank Board before he sent him off to the West Coast to talk lower rates. The San Francisco HLB quickly responded by cutting the rate on advances to members from 4¼% to 3¾% for 2½-year loans and from 4¾% to 4¼% for 5-year loans. But not dividend rates. For one thing some California S&Ls depend heavily on out-of-state money. Says Bart Lytton of Lytton Financial, No. 2 S&L holding company: "Some 40% of our money comes from the East. We can't afford losing it. A reduction must come elsewhere first." And he snorts: "The government can no more jawbone interest rates down than it can jawbone jobs into being."

## MORTGAGE BRIEFS

### S&L crackdown in Maryland

The legislature—after a long, bitter fight—passed and sent to Gov J. Millard Tawes a bill to:

● Set up a seven-member commission to supervise S&Ls in the state.

● Bar multi-stock organizations (ie, those which funnel off profits to a small group of special-class shareholders) from using the word "association" in their business.

But still stymied in the legislature at mid-month was another hotly-fought measure to limit S&L deposit insurance by private insurance companies. The target: Security Financial Insurance Corp, Baltimore, which is insuring \$38 million in deposits with little more than \$1 million assets. Among Security's clients are the controversial S&Ls whose operations inspired the new curbs. Likely reason for the snag: top officers and directors of Security include prominent Baltimore county politicians and state legislators.

Maryland has become a king-sized thorn in the side of the S&L industry. Because it was one of only two states with no regulation of state-chartered associations (other: Alaska), some S&L operators set up shop at the cost of a rented room and an easy-to-get \$30 charter, went after gullible depositors by advertising sky-high (up to 6¼%) dividends. Last year, 174 associations—most of them multi-stock—were chartered in the state, compared to an increase of only 32 in the previous nine years. S&L men across the nation feared that a major blowup would give the entire industry an unwarranted smear. Several state-chartered S&Ls were indicted and a couple were hit by injunctions for violating Federal securities and anti-fraud laws.

### Ten Percenters (contd.)

California's crackdown on secondary mortgage financing, which began as an effort to protect the public against hazardous investment in heavily discounted second trust deeds, has now led state officials to impose far-reaching restrictions on real-estate loan and mortgage brokers.

Governor Edmund G. Brown has ordered these drastic moves:

● The real estate commissioner will audit all trust deed sales and servicing firms now operating.

● The corporation commissioner will investigate and audit all companies selling securities which take public money to invest in trust deeds.

● From now on, all land developers must furnish the real estate commissioner with a statement of their financing and a description of their sales methods to get approval of a subdivision. If securities are involved, the corporation commissioner must issue a permit.

● Mortgage brokers are prohibited from selling notes on land which has not been approved for subdivision by the real estate commission.

● Mortgage and realty brokers must post bonds (\$25,000 for companies, \$5,000 for individuals or partnerships) or cease the mortgage loan business.

● S&Ls must report any proposed secondary financing they know of in tracts where they make senior loans.

continued on p 64

Carrying out the governor's orders, the real estate commission has imposed these new rules on the state's 130,000 real estate loan brokers (who will have a chance to voice objections and seek modifications at a hearing to be held before mid-June):

- All loan, escrow, and deed assignment transactions must be openly recorded.

- Ethical advertising practices become mandatory. Unjustified superlatives like "lowest," "highest," "oldest," "largest," "guaranteed," "assured," and "secured" are prohibited.

- Broker actions classified as "dishonest dealing" are enumerated and banned. Among them: misrepresenting a property's market value, failing to tell a buyer that the property

is or may be subject to prior loans or liens such as a blanket first trust deed covering an entire subdivision.

- New subdivisions must be recorded before trust deeds on them can be offered for sale.
- Discount brokers must file quarterly transaction reports with the commissioner.

The governor estimates Californians have

## MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee who retains servicing.) As reported to HOUSE & HOME the week ending Mar 10, 1961.

### FHA 5 3/4s (Sec 203) (b)

FNMA Scdry Mkt <sup>xy</sup>	New Construction Only				Existing <sup>z</sup> Min Down 25 year Immed	City
	Minimum Down* 30 year Immed	Fut	10% or more down 20-25 year Immed	Fut		
98 1/2	98 1/2-99	a	99 1/2	a	a	Atlanta
99	a	a	a	a	a	Boston local
—	98 1/2-99	a	98 1/2-99	a	—	out-of-st.
98 1/2	99	a	99	a	99	Chicago
98 1/2	99 <sup>b</sup>	a	99 <sup>b</sup>	a	99 <sup>b</sup>	Cleveland
98	99-par	a	99-par	a	99-par	Denver
98	98 1/2-99	a	98 1/2-99	a	98 1/2-99	Detroit
98	98-98 1/2	a	98-98 1/2	a	98-98 1/2	Honolulu
98 1/2	99	a	par	a	99	Houston
98	99-par	a	99-par	a	99-par	Los Angeles
99	99 1/2-par	a	99 1/2-par	a	par	Newark
99	par <sup>b</sup>	par <sup>b</sup>	par <sup>b</sup>	par <sup>b</sup>	par <sup>b</sup>	New York
98	98-99	a	99-99 1/2	a	98-99	Okla. City
99	par	a	par	a	a	Philadelphia
98	99 1/2	a	99 1/2	a	98 1/2	San Fran.
98 1/2	95-99	94 1/2-99	96-99	95 1/2-99	96-98	St. Louis
99	99 1/2	a	par	a	par	Wash., D.C.

### FHA 5 1/2s (Sec 203) (b)

FNMA Scdry Mkt <sup>xy</sup>	New Construction Only				Existing <sup>z</sup> Min Down 25 year Immed	City
	Minimum Down* 30 year Immed	Fut	10% or more down 20-25 year Immed	Fut		
96 1/2	97	97	97 1/2	97 1/2	96 1/2-97	Atlanta
97 1/2	par-101	par-101	par-101	par-101	par-101	Boston local
—	96 1/2-97	96 1/2-97	96 1/2-97	96 1/2-97	—	out-of-st.
96 1/2	97-98	97-97 1/2	97-98	97-97 1/2	97-98	Chicago
96 1/2	97-97 1/2	96 1/2-98	97-98	97-97 1/2	97-97 1/2	Cleveland
96	96-98	96-97 1/2	96 1/2-98	a	96-98	Denver
96	96 1/2-97	96 1/2-97	96 1/2-97	96 1/2-97	96 1/2-97	Detroit
96	96-96 1/2	96-96 1/2	96-96 1/2	96-96 1/2	96-96 1/2	Honolulu
96 1/2	97-97 1/2 <sup>a</sup>	97-97 1/2	98-98 1/2	98-98 1/2	97 1/2	Houston
96	96-97	96-96 1/2	97 1/2	a	96-97	Los Angeles
97	98-99	97 1/2-98 1/2	99	98 1/2	99	Newark
97 1/2	98-99	98-99	98-99	98-99	98-99	New York
96	96-97	96	96-97	96	96-97	Okla. City
97	99 <sup>f</sup>	99	99-par	99	99 <sup>f</sup>	Philadelphia
96	98	98 <sup>b</sup>	98	98 <sup>b</sup>	97	San Fran.
96 1/2	95 1/2-97 <sup>b</sup>	95 1/2-97 <sup>b</sup>	96 1/2-98 <sup>b</sup>	96-98 <sup>b</sup>	95-98 <sup>b</sup>	St. Louis
97	97 1/2	97	98	97 1/2	97-97 1/2	Wash., D.C.

### VA 5 1/4s

FNMA Scdry Mkt <sup>xy</sup>	New Construction Only		Conventional Loans		Construction Loans <sup>z</sup>	
	No down 30 year Immed	Fut	Comm. banks, Insurance Cos.	Savings banks, S & Ls	Banks, Ins Cos. & Mtge Cos.	Interest + fees Savings banks S & Ls
94 1/2	95-95 1/2	95-95 1/2	5 3/4-6	6-6 1/4	6-6 1/2+2	6-6 1/2+2
95 1/2	98-par	98-par	5 1/2*	5 1/2*	5 1/2	5 1/2
—	94-95	94-95	—	—	—	—
94 1/2	95-96 <sup>b</sup>	94 1/2 <sup>b</sup>	5 1/2-6	5 1/2-6 1/4	5 3/4-6 1/4+1 1/2	5 3/4-6 1/4+1 1/2
94 1/2	94-95 <sup>b</sup>	94-95 <sup>b</sup>	5 3/4-6	5 3/4-6	6+1	6-6 1/2+1-1 1/2
94	94-96	94-95 1/2	5 3/4-6	6-6 1/2	6+1 1/2-2 1/2	6+1 1/2-2 1/2
94	94 1/2-95	94 1/2-95 <sup>b</sup>	5 3/4-6	5 3/4-6	6+1 1/2	6+1 1/2
94	92 1/2 <sup>b</sup>	a	6 1/4-7	6 1/2-7 1/2	6 1/2+1 1/2	6 1/2+1 1/2
94 1/2	95	95	5 3/4-6 <sup>d</sup>	5 3/4-6	6+1-2	6+1-2
94	95	94-94 1/2	6	6 1/4-6 1/2	6+1 1/2	6 1/2+2-4
95	95	94-95 <sup>b</sup>	5 3/4-6	5 3/4-6	6+1	6+1
95 1/2	94-95	94-95	5 3/4-6	5 3/4-6	6+1 1/2-1	6+0-1 <sup>e</sup>
94	95	94	6-6 1/4 <sup>b</sup>	6-6 1/2	6-6 1/2+1-2	6-6 1/2+1-2
95	97	a	5 1/2-5 3/4	5 1/2-6	6+1	6+1
94	95 1/2	95 1/2	5 3/4-6	6-6 3/4	6-6 1/2+1 1/2	6-6 1/2+1 1/2-2
94 1/2	a	a	5 1/2-6 1/2	5 3/4-6.6	6-6.6+1-2	6-6.6+1-2
95	95 1/2	95	5 3/4-6	5 3/4-6	6+1-1 1/2	6+1-1 1/2

\* 3% down of first \$15,500; 10% of next \$4,500; 30% of balance.

▶ 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 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 activity, c—occasional loans at 5 3/4%, d—commercial banks do little mortgage lending in Texas, e—occasional sales at 98, f—occasional sales at par, g—some mutual savings banks charge no fees, h—some conservative loans at 5 3/4%, w—six-month construction loans unless otherwise noted, x—FNMA pays 1/2 point more for loans with 10% or more down, y—FNMA net price after 1/2 point purchase and marketing fee plus 1% stock purchase figured at sale for 50¢ on \$1, z—on houses no more than 30 years old of average quality in good neighborhood.

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 Investment Co; Detroit, Harold Finney, exec vice pres, Citizens Mortgage Corp; Honolulu, Gordon Pattison, vice pres, Bank of Hawaii; Houston, Donald McGregor, exec vice pres, T. J. Bettes Co; Los Angeles, Robert E. Morgan, exec 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, vice pres, First Pennsylvania Banking & Trust Co; St. Louis, Sidney L. Aubrey, vice pres, Mercantile Mortgage Co; San Francisco, Raymond H. Lapin, vice pres, Bankers Mortgage Co of Calif; Washington, D. C., Hector Hollister, exec vice pres, Frederick W. Berens Inc.

## FNMA PRICES

effective Mar 2, 1961

For immediate purchase subject to 1/2 point purchasing and marketing fee and 1% stock purchase. Mortgage ratios involve outstanding balance of loan to 1) purchase price (excluding closing costs) or 2) FHA or VA valuation—whichever is less. FHA prices cover Secs. 203b, 222 and 213 individual mortgages.

NOTE: If remaining term of an FHA Sec. 213 individual mortgage exceeds 30 years, the price shown is reduced by 1/2% for each 5-year period (or part thereof) above 30 years.

States	Loan to value ratios.	FHA 5 3/4s		FHA 5 1/2s		VA 5 1/4s	
		90% or less	over 90%	90% or less	over 90%	90% or less	over 90%
Conn., Me., Mass., N.H., N.Y., R.I., Vt. ....		100	100	99	98 1/2	97	96 1/2
Del., D.C., Md., N.J., Penna. ....		100	100	98 1/2	98	96 1/2	96
Ala., Ark., Fla., Ga., Ill., Ind., Iowa, Ky., Minn., Miss., Mo., Neb., N.C., N. Dak., Ohio, Ore., S.C., S. Dak., Tenn., Tex., Va., Wash., Wisc., Puerto Rico ....		100	99 1/2	98	97 1/2	96	95 1/2
Ariz., Calif., Col., Hawaii, Ida., Kan., La., Mich., Mont., Nev., N.M., Okla., Utah, W. Va., Wyo., Virgin Is. ....		99 1/2	99	97 1/2	97	95 1/2	95

## NEW YORK WHOLESALE MORTGAGE MARKET

FHA 5 3/4s	FHA 5 1/2s	VA 5 1/4s	FHA 5 1/2 spot loans
Immediates: 99-100	Immediates 97 1/2-98 1/2	Immediates: 95-96	(On homes of varying age and condition)
Futures: none	Futures: 98-99	Futures: 95-96	Immediates: 96 1/2-97 1/2

Prices for out-of-state loans, as reported the week ending Mar 2 1/2 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			
	Feb 14	Mar 22	low	high
Bid .....	68 3/4	76 1/2	68 3/4	82 1/2
Asked .....	70 3/4	78 1/2	70 3/4	84 1/2

Quotations supplied by C. F. Childs & Co.

invested some \$240 million in trust deed companies. He says some experts believe as much as \$50 million of this has been lost to the public.

A bankruptcy specialist, David M. Richman of Los Angeles, has been appointed special assistant attorney general to unscramble the books of Ten Percenters who have foundered. At least nine have gone under so far.

While the state locks up the barn door, the federal government is chasing the horses. Items:

- Three officers of the bankrupt Los Angeles Trust Deed and Mortgage Exchange, whose operations touched off the whole investigation, were indicted on 34 counts of violating federal securities and anti-fraud laws. They are: David Farrell, Oliver Farrell and Stanley Marks.

- The Securities and Exchange Commission won a federal district court injunction against Beverly Hills Securities Investments for violating securities registration and anti-fraud laws. One SEC target: a series of radio commercials by Comedian George Jessel in which he advised "Aunt Gussie to invest Uncle Phil's insurance" in the company. The ads have been banned.

When the troubles were first aired last year, State Corporation Commissioner John Sobieski came up with a plan to protect investors in junior mortgage loans by pooling risks. Last month, two of the first companies licensed under his controversial scheme ran onto the shoals. Western Certificate Fund Inc, Los Angeles, was hit with an involuntary bankruptcy action by creditors. Diversified Mortgages of California, San Francisco, was closed by the state for failing to raise the \$150,000 capital required by law to open its doors to investors.

## Ten Percenter comes east

A California Ten Percenter is invading the eastern savings market.

The company—Trustors' Corp, Los Angeles—has opened an office in Philadelphia, has plans to open others in Boston and Washington. Explains Nat'l Sales Director John Briscoe: "Our newspaper ads pulled in a lot of money from eastern investors. It was evident that interest in the East in our 10% plan warranted our opening an office. Now we can service our eastern clients better. Also, the bad publicity in California over the industry's troubles hasn't affected people in the East."

Switching from California to Delaware incorporation, Trustors' also has expanded its types of offerings. Besides the usual 10% investment plan based on second trust deeds on houses\*, the company is selling:

- 7% guaranteed participation certificates secured by first trust deeds on commercial and industrial properties and apartment buildings, or by construction loans on these properties. The certificates, sold in multiples of \$100 with a \$1,000 minimum, represent an undivided interest in the deed.

- 10% participation certificates secured by second liens on the same kind of properties or by construction loans. The certificates are sold in the same multiples but are not guaranteed.

The bulk of Trustors' current offerings are 7% certificates. Trustors' has registered with

\*The company buys the deeds at big (up to 45%) discounts, resells them to investors at smaller discounts so the yield (including interest on the deed) adds up to 10%.

SEC and as a securities broker in 20 states, adds Briscoe. The company plans to invest its money now in California realty because of the state's high interest rates and fast foreclosure laws. Construction loans will be for two years or less at 7½% to 8½% rates.

Trustors' president, Denny Dennison, was a leader last spring in urging California

officials to crack down on the shoddy practices in the Ten Percenter industry. Dennison is president of California's Independent Mortgage Bankers Assn.

In the six months ended last June, Trustors' sold some \$2.2 million in trust deed notes compared to some \$2.3 million in the same 1959 period.

## Why Mortgage Banker Bill Clarke sold his company to commercial banks

"Mortgage bankers will think I'm letting the industry down—a past president of the Mortgage Bankers Assn rolling into the camp of the enemy. It's heresy. But you have to be a realist. What is the future of the mortgage business?"

The speaker: William A. Clarke, tall, spare president of W.A. Clarke Mortgage Co, Philadelphia. The subject: the sale—for a reported \$3¼ million—of his extensive mortgage business (\$40 million a year in originations, \$250 million servicing portfolio) to two commercial banks, First Pennsylvania Banking & Trust Co, Philadelphia, and Western Pennsylvania National Bank, Pittsburgh (NEWS, Sept.).

The transaction is stirring wide interest in mortgage and banking circles. It is being scanned closely not only because of its size (the Clarke company is probably among the nation's ten largest mortgage companies) and complexity, but even more because it could be a major portent of how mortgage banking is headed.

Clarke, a 39-year veteran in the field, has long been regarded as one of the shrewdest market analysts around. His reasons for sell-

money to buy them for its own portfolio, and if it decides to sell them it doesn't have to worry about a point or two loss as a mortgage banker does."

Banks also offered a ready solution to other Clarke worries: giving his employees long-term jobs, assuring his investors of servicing stability, promoting continued production of a large volume of business.

**Stiff competition.** "There have been rumblings that commercial banks are becoming more interested in mortgage business," says Clarke. "Mortgage bankers never would have existed in the first place if banks had been on their toes." If banks do decide to invade the mortgage field in force, which Clarke predicts will happen, mortgage men will be up against stiff competition. Why? Says Clarke:

- "A bank can operate a mortgage department at no profit at all—and still make a profit. How? From sidelines." Mortgages become prime prospects for deposit accounts, auto loans, home improvement loans, safety deposit business.

- To assure itself a supply of mortgages, a bank can offer builders construction loans at rates so low no mortgage banker or S&L can afford to match them, thus capturing the cream of the business.

- Banks have many branches to help generate business and so have the firmest image of any lender in the public eye.

But, adds Clarke, commercial banks pondering a plunge into mortgages have a problem, too. "No bank can really start a mortgage department from scratch. They don't know enough about the highly specialized field. They don't have the trained personnel." Best solution, as Clarke sees it: buy an established mortgage firm. "It's about the only way," he contends.

Clarke heard that First Pennsylvania was looking for a mortgage company. In two luncheons with Bank President William Kelly and a subsequent luncheon with President M. A. Cancelliere of Western Pennsylvania Clarke's company was sold. But ironing out legal and tax wrinkles took more than six months.

**Three-way deal.** One major problem in the sale is that Pennsylvania law limits where banks may operate branches. Clarke's offices in central Pennsylvania and southern New Jersey were outside the bailiwick of either bank. The solution was this: a three-way split of the Clarke company:

1. First Pennsylvania took the lion's share (\$190 million) of the servicing portfolio.

*continued on p 66*



MORTGAGE BANKER CLARKE  
Split three ways

ing to commercial banks will arouse controversy—and not a little dissent—but they will be listened to with respect.

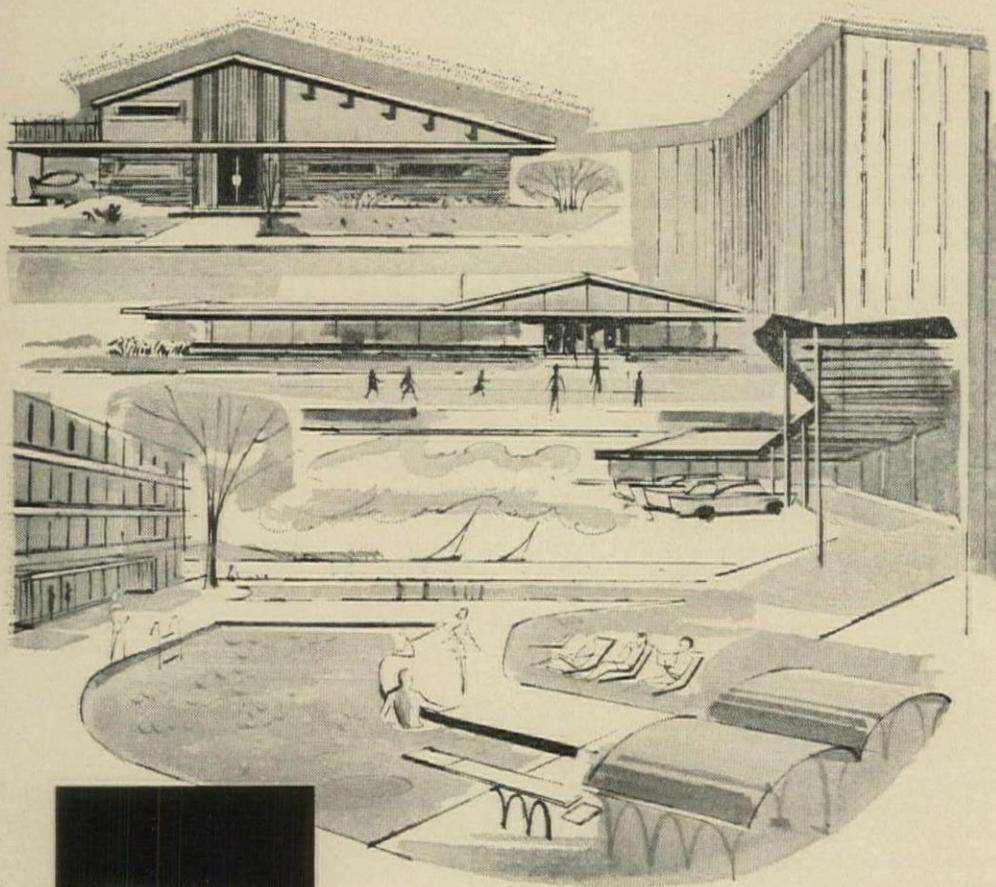
For Clarke, who turned 65 on January 31, the problem was one which will plague many a mortgage man in the coming years: how to handle succession? As Clarke puts it: "How should I pass on my responsibilities? Who should I sell to? Where was the mortgage business apt to be going?"

Clarke rejected the alternatives of creating a publicly held company or selling to another mortgage banker. He explains:

"I have long felt that the mortgage banking business, particularly in the East, would have a hard time existing if commercial banks ever attempted to get into the mortgage business.

"No mortgage company has the capital to acquire and warehouse large amounts of uncommitted mortgages. But a bank has the

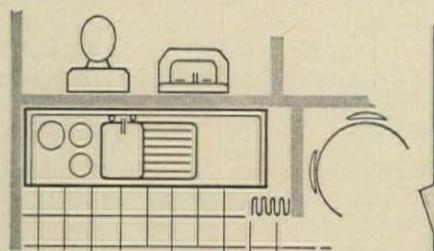
resorts to rec rooms...schools to skyscrapers...



# Dwyer compact kitchens and snack bars belong

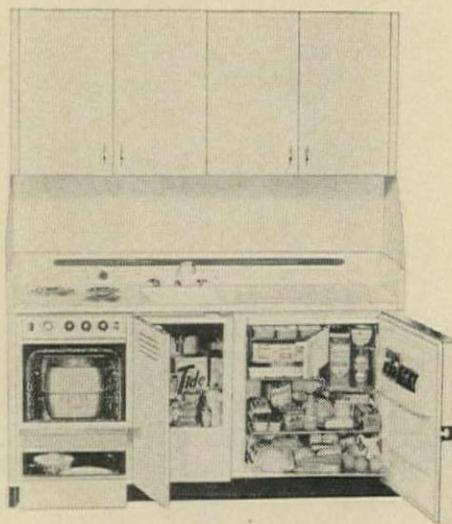
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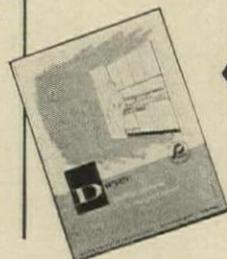
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COMPACT KITCHENS  
AND SNACK BARS

DWYER PRODUCTS CORPORATION, MICHIGAN CITY, INDIANA

covering eastern and central Pennsylvania and Jersey. Clarke's Philadelphia employees are staffing the bank's new mortgage department which is headed by Robert Irving, former Clarke executive vice president and now a bank vice president. Irving, a graduate of Williams College, is president of the Philadelphia MBA. First Pennsylvania is originating mortgages in its four-county Philadelphia area and is taking over Clarke's job as correspondent for Metropolitan Life.

2. Western Pennsylvania acquired the western balance (\$60 million) of the portfolio. Last year the bank bought the servicing portfolio of Cole-Knox Mortgage Co, Pittsburgh, and now has a servicing volume of more than \$135 million for itself and other investors. The bank will also correspond for Met.

3. The W.A. Clarke Mortgage Co of New Jersey, a wholly owned subsidiary, has been renamed the Clarke Mortgage Co and recast to include the offices in Camden, N.J. and York, Lancaster, Harrisburg, and Williamsport, Pa. The new company was purchased by the managers of the offices and will now operate as a mortgage originating firm only. Servicing is being handled by First Pennsylvania. Clarke is serving as president of the company until a replacement can be found.

Board Chairman William Day of First Pennsylvania predicts that earnings from his new mortgage department will offset the purchase price in five years.

Pointing out that First Pennsylvania has 42 branch offices and a big advertising budget no mortgage banker could come close to, Clarke observes: "I wouldn't want to be in the shoes of a competitor when this operation gets going."

The sale has created considerable interest, Clarke adds—"particularly among banks. Four have already called me to find out how it was handled."

**From test tubes.** For Bill Clarke, the much-talked-about deal caps a distinguished career in mortgage banking. A graduate chemical engineer (Swarthmore), he went to work for DuPont in 1917, soon chucked chemistry for selling, first for Congoleum and then as Met's group-life supervisor in Philadelphia. In 1922, a theater owner offered Clarke a 2% commission if he could negotiate a \$150,000 loan for him. "I didn't know a mortgagee from mortgagor," recalls Clarke, but he found a taker. With the resulting stake of \$3,000, he chucked insurance and went into mortgage banking. Within five years he had sold \$100 million of mortgages to Met.

As president of the Mortgage Bankers' Assn in 1953, Clarke is credited with pumping needed life into the organization. An influential figure in mortgage finance, he served as Federal Reserve consultant on Regulation X credit controls during the Korean fighting and frequently appeared before congressional committees as MBA's chief spokesman. He has been a vocal and unswerving advocate of free interest rates.

Clarke, who is married and has three children, is fond of gardening ("I'll have a chance to do a lot of it now") and collecting early American things ("I don't think anything in our house dates after 1800"). A prized possession: a mortgage for \$150,000 given by Robert Morris, a principal financier of the Revolutionary War and bigtime land speculator, to buy 600,000 acres in South Carolina. Morris defaulted and was ruined. Observes Clarke: "He had good ideas, but like many in this business, his timing was bad."

## STOCK MARKET:

## Shell house companies go to public to finance their booming business

Shells are hot. The demand for low-priced, finish-it-yourself houses and vacation cottages is booming. More builders are out to tap this growing market, and a growing number of companies are going to the stock market for money to expand their operations and provide financing for buyers. Items:

• Crumpton Builders, Inc, Tampa, Fla. has sold \$1.5 million in 9% convertible subordinated debentures and 750,000 shares of common stock.

The securities were sold in 150,000 units of five shares of stock, one \$10 debenture, and a warrant to buy two shares of stock and a \$10 debenture for \$14. The units were offered at \$20 each. At midmonth the stock was quoted at 4½ bid, the debentures at 110 and the warrants at 8.

Of the \$2.7 million net proceeds (after underwriting commissions of \$300,000) \$2 million is being allocated to Crumpton's wholly owned subsidiary, Surety Mortgage Investment Co, to provide financing for customers. The balance adds to working capital.

Crumpton builds and sells shells (prices: \$1,800 to \$5,000) in Florida, Georgia, Alabama, and Mississippi. In the year ended last June, Crumpton sold 673 houses totalling \$2,804,830. Net income was \$189,416 (\$.43 a share). Before the stock sale, President Russell B. Crumpton and his wife, Dolores, owned all of the then outstanding 500,000 shares.

• Federal Shell Homes, Inc, Tallahassee, Fla. is seeking SEC registration of 135,000 units of common stock and 9% convertible subordinated debentures, each unit consisting of five shares of stock, one \$10 debenture, and one warrant to buy two shares of stock and a \$10 debenture. The unit price is \$20.

Federal was incorporated in February. The company later acquired two companies building shells in Mississippi, Alabama, Georgia, and Florida, a subsidiary offering shells in Puerto Rico, and a mortgage financing subsidiary, Colonial Enterprises Inc. Federal sells its houses for \$1,195 to \$3,345.

The \$2.5 million net from the securities sale (after underwriting fees and expenses of \$200,000) will be used for working capital and to beef up Colonial's financing capacity.

In the year ended last May 31, companies acquired by Federal put up 466 houses totalling \$1,330,337. President and board chairman of Federal is Fred E. Deeb. Jack D. Roberts is executive vice president. Deeb, who owned 59.1% of Federal stock before the new issue, gets a \$25,000-a-year salary, according to the prospectus; Roberts is paid \$12,000.

• Standard & Shell Homes Corp, Miami Beach, Fla. sold 210,000 shares of common stock and \$350,000 of 9% subordinated sinking-fund debentures. The issue was 45,000 units (at \$17.50 a unit) each consisting of six shares of stock, a \$10 debenture and two warrants to buy similar units at the unit price. At midmonth the units were up to \$21 bid and the stock was \$2 a share bid.

The company, which has been building houses (\$7,950 to \$12,500) on lots owned by customers in southern Florida, will use most of the proceeds to add a shell line. After underwriting fees of \$95,625 and expenses of \$11,000, S&S netted \$680,875 which the prospectus says will be used as follows: \$40,000 to build model shell houses, \$15,000 to expand sales offices for finished homes to more areas in Florida, \$100,000 for additional construc-

tion capital, and the balance to supply first mortgage money for shell customers and second-mortgage money for finished homes. S&S will build its shells (\$900 to \$4,500) through subcontractors.

The company formerly was the Guaranty Mortgage Co of Miami Inc, formed in 1957 to engage in the loan business. In 1959, Guaranty bought Standard Homes Inc, now a wholly owned subsidiary, and building became the company's main business. The name was changed to Standard & Shell last October. In the last four months of 1960, S&S reported total sales of \$209,456 and net earnings of \$27,657.

President and board chairman is Milton J. Saffir. After the securities sale, S&S had outstanding 704,962 shares of common stock, 64% held by "officers, directors, promoters, and other insiders," according to the prospectus.

• Steel Crest Homes Inc, Center Square, Pa. has sold 45,000 units (at \$18 a unit) of common stock and 8% subordinated sinking-fund debentures, each unit consisting of four shares of common stock, a \$10 debenture, and a warrant to buy a similar debenture and three shares of stock. At midmonth, the units soared to 27½ bid. The stock was 3¾ bid.

After underwriting fees of \$81,000 and expenses of \$67,500, Steel Crest netted \$661,500 to be used thus: \$500,000 to finance homes through its mortgage subsidiary, North American Bond & Mortgage Co; \$100,000 for

### PREFABS PACE STOCK RISE

Housing stocks are showing strength across the board with prefab issues setting the pace.

In HOUSE & HOME's monthly tabulation of housing industry stocks traded sufficiently to create a market, prefabs shot up 21.2%. Leading the pack: Inland Homes, with a jump from 13¾ to 19½ at midmonth.

Financial issues continued February's strong showing with an 18.7% jump. California Financial rose from 33½ to 38 bid. Financial Federation from 69½ to 76 bid, and Great Western, from 34 to 44½.

Overall, HOUSE & HOME's monthly index went up from 13.83 to 15.19, a gain of 9.8%. All categories improved, but shell issues lagged with a modest 1.1% increase despite Jim Walter's jump from 52½ to 56½ bid.

For comparison, Dow-Jones industrials gained 3.3% and the Natl Quotation Bureau's industrials, 5.3%.

Here are HOUSE & HOME averages combining closing prices for listed stocks with bid prices for over-the-counter issues:

	Jan	Feb	Mar
	11	10	14
Buildings .....	6.00	6.44	7.29
Land development ...	6.08	6.78	7.52
Finance .....	20.25	24.39	28.79
Realty investment ....	8.22	8.67	9.59
Prefabrication .....	7.92	9.17	10.12
Shell homes .....	22.71	27.54	27.87
TOTAL .....	11.86	13.83	15.19

development and promotion; the balance for added working capital.

Steel Crest says its products differ from regular shells in that 1) the company supplies all materials for completion except electric wire, pipe, and paint and 2) construction is carried further before the buyer takes over.

In the year ended last Aug 31, Steel Crest

continued on p 71

### HOUSING'S STOCK PRICES

Company	Offering Price	Jan 11 Bid Ask	Feb 10 Bid Ask	Mar 14 Bid Ask
<b>BUILDING</b>				
Eichler Homes...	e	5% 6	6% 7	9% 10
First Natl Rlty & Const (pfd)	8	10¼ 10¾	10% <sup>b</sup>	11 <sup>b</sup>
First Natl Rlty & Const (com)	2	3% <sup>b</sup>	3% <sup>b</sup>	3% <sup>b</sup>
General Bldrs...	e	4% <sup>b</sup>	5 <sup>b</sup>	5 <sup>b</sup>
Hawaiian Pac Ind	10	14½ 15	15% 16% <sup>b</sup>	15% 16½
Kavanagh-Smith...	5	7% 8¼	10	10% 10% 11
Levitt .....	10	4% 4% 4%	4% 4%	6% 7
US Home & Dev.	e	1% 2¼	1	1% 3 3% <sup>b</sup>
Wenwood .....	e	1% 1% 1%	1% 1%	1% 1%
<b>LAND DEVELOPMENT</b>				
All-State Prop ..	e	5% <sup>b</sup>	6% <sup>b</sup>	7 <sup>b</sup>
Arvida .....	e	9% 10% 10% 10%	10% 10%	8% 9% 9% 9%
Cons Dev (Fla)...	5	6% 7	7% 8% 8% 9%	
Coral Ridge Prop.	e	1% 1% 1%	2% 2% 7% 7%	
Fla Palm-Aire...	e	1% 2	2% 2%	2 2% <sup>b</sup>
Forest City Ent...	10	11 <sup>b</sup>	13% <sup>b</sup>	12% <sup>b</sup>
Garden Land ...	6¼	4% 5	4% 5	5 5% <sup>b</sup>
Gen Dev .....	e	12% <sup>b</sup>	11 <sup>b</sup>	12% <sup>b</sup>
Grt Southwest ...	18	10% 11	13% 14% 15% 16% <sup>b</sup>	
Laguna Niguel ...	e	10 10% 9% 10% 10	10 10% <sup>b</sup>	
Lefcourt .....	e	2% <sup>b</sup>	2% <sup>b</sup>	2% <sup>b</sup>
Major Rlty .....	e	1% 2	3% 3% 3% 3% <sup>b</sup>	
Pac Cst Prop ...	10	7 7% 8% 9	9% 9%	
Realsite Inc .....	e	1% 1% 1%	2 1% 2% <sup>b</sup>	
United Imp & Inv	e	5% <sup>b</sup>	5 <sup>b</sup>	6% <sup>b</sup>
<b>FINANCE</b>				
Calif Fin .....	e	25% 26	33% 34% 38	39% <sup>b</sup>
Emp Fin .....	e	10% 11% 18% 18%	20% 21% <sup>b</sup>	
Fla Fed .....	e	60% 61% 69% 71	76 77	
First Chrtr Fin.	e	30% <sup>c</sup>	34% <sup>c</sup>	37% <sup>c</sup>
First Fin West ..	e	11% 11% 15% 15%	16 16% <sup>b</sup>	
Gibraltar Fin ...	e	27% 28	30 31 34% 35% <sup>b</sup>	
Grt Wstrn Fin ...	e	34% <sup>c</sup>	34% <sup>c</sup>	44% <sup>c</sup>
Hawthorne Fin ...	e	8% 8% 10	10% 11% 12% <sup>b</sup>	
Lytton Fin .....	e	15% 15% 18	18% 22% 23% <sup>b</sup>	
Mdwstrn Fin ...	8% 13	13% 22% 23% 25	26	
San Diego Imp.	e	8% <sup>c</sup>	8% <sup>c</sup>	11% <sup>c</sup>
Trans Cst Inv ...	15	11% 12% 17	17% 21% 22	
Trans World Fin.	8% 11% 12	13% 13% 16	16% <sup>b</sup>	
Union Fin .....	15	12% 13% 12% 13	15 15% <sup>b</sup>	

Company	Offering Price	Jan 11 Bid Ask	Feb 10 Bid Ask	Mar 14 Bid Ask
<b>UNITED FIN OF</b>				
Cal .....	10	21 21% 28	28% 30% 31%	
Wesco Fin .....	e	23 23% 26	27 29% 30% <sup>b</sup>	
<b>MORTGAGE BANKING</b>				
Colwell .....	10	" " " "	" 15 15% <sup>b</sup>	
Palomar .....	e	7% 7% 7% 8	9 9% <sup>b</sup>	
<b>REALTY INVESTMENT</b>				
Gt Amer Rlty ...	e	5% 7% 13% 11	1 1% 1% <sup>b</sup>	
Kratter A .....	e	18% <sup>b</sup>	18% <sup>b</sup>	20% <sup>b</sup>
Rlty Equities ..	5% <sup>b</sup>	4% <sup>b</sup>	4% <sup>b</sup>	6% <sup>b</sup>
Wallace Prop ...	6	8% 9% 10% 11	10% 11	
<b>PREFABRICATION</b>				
Admiral Homes ..	e	2 2% 2% 2% 2	2 2% <sup>b</sup>	
Crawford .....	13	9 9% 10% 11% 11% 12% <sup>b</sup>		
Harnischfeger ...	e	23% <sup>b</sup>	22 <sup>b</sup>	25% <sup>b</sup>
Inland Homes ...	e	8% 9% 13% <sup>b</sup>	19% <sup>b</sup>	
Natl Homes A ...	e	11% 12 14% 14% 15% 16		
Natl Homes B ...	e	11% 11% 13% 14% 15% 15%		
Richmond Homes.	e	1% 1% 1% 1%	2% 2% <sup>b</sup>	
Scholz Homes ...	e	3% 4% 4% 5% 4% 4%		
Seaboard Homes.	3	" " " "	6% 7% 5% 5%	
Techbilt Homes...	e	¾ ¾ ¾ ¾	¾ ¾	
<b>SHELL HOMES</b>				
Bevis .....	d	4% 4% 6% 6%	6% 6% 7	
US Shell .....	e	" " " "	" 20 22	
Jim Walter .....	e	46% 47	52% 53% 56% 57%	
Wise Homes ...	e	17% 18% 23% 24% 20% 21%		

<sup>a</sup> stock not yet marketed

<sup>b</sup> closing price (American)

<sup>c</sup> closing price (New York)

<sup>d</sup> issued in units, each consisting of five 50¢ par common shares, one \$8 par 9% subordinated sinking fund debenture, due Feb 1, 1985, and warrants for purchase of one common share and one \$8 debenture at \$9.50 per unit, expiring Dec 31, 1962 and 1964, respectively, at \$15.50 per unit. Prices quoted are for common stock.

<sup>e</sup> stock issued before Jan 1, 1960

<sup>f</sup> not available.

Sources: New York Hanseatic Corp; American Stock Exchange; New York Stock Exchange.

## US Chamber urges broader, stiffer workable program to meet city needs

The US Chamber of Commerce, which is critical of the massive federal subsidies being poured into urban renewal, has come up with a detailed blueprint for getting more mileage out of US aid.

One big trouble, contends the chamber, is that renewal's workable program—the requirement that cities mobilize their own resources to fight blight to qualify for help from Washington via public housing and land write down subsidy—is too narrowly drawn to cover the whole problem.\* Moreover, its enforcement has been lax.

The chamber's views are set forth in a 16-page policy statement, issued last month. They rate more than ordinary attention because, among other reasons, they were drafted by S. Howard Evans. He is the chamber's community development specialist. He is also a 20-year veteran of redevelopment work—six of them as a top staffer of HHFA and URA where he helped write the specific contents of today's workable program when the idea was incorporated into the Housing Act of 1954.

*The problems—and solutions—as the US Chamber sees them:*

**Problem No. 1: "The program has been frozen in its original form" and no longer deals effectively with new community needs.**

Many communities are failing to create new jobs, a basic requirement for community development and growth, says the chamber. The troubles of depressed areas demonstrate this failing.

Solution: to goad cities to work out truly comprehensive development plans, add four new elements to the workable program. Require communities to show progress in: 1) adjustment to location and natural resources; 2) industrial development; 3) commercial development; 4) modernizing of local government. The HHFA administrator could expand the workable program to include these elements without going to Congress for new laws, the chamber contends.

**Problem No. 2: Local tax systems often encourage the growth of slums.**

Many cities pledge in their workable programs they have proper financing for renewal when in fact local tax systems militate against good housing, says the chamber. It cites Tampa, Fla., where 70% of families pay no real estate taxes. Reason: Florida gives every owner-occupant a \$5,000 homestead exemption; so assessments at 50% of market price let many homes worth \$10,000 escape taxes entirely. "This discourages the maintenance and improvement of properties," says the chamber. "As soon as a person improves his property, his assessment is increased. This creates a positive motivation against rehabilitation and conservation. It encourages a positive drift toward blight and obsolescence."

Should HHFA cut Florida off from public housing and renewal subsidies because of its tax laws? The chamber says only: "This particular aspect of the federal program must be given very careful attention."

**Problem No. 3: Most cities fail to enforce housing codes.**

This lets slumlords make scandalous profits, which in turn drives land prices needlessly high and forces many families to continue living in squalor, the chamber asserts.



EVANS

The chamber blames organizations, public and private, which demand tough housing code enforcement but do little about it. These groups should produce a citizen pamphlet telling cities how to adopt a housing code and, more importantly, build the public support needed to back up good enforcement.

**Problem No. 4: The comprehensive planning now required is being done with 30- and 40-year old techniques and ignores a community's economic base.**

The federal government is requiring communities to spend millions of dollars for comprehensive planning. Yet the workable program does not demand an economic base study be made by cities, although experience in depressed areas proves such studies are essential for healthy cities. By using mass production techniques on such planning, the costs of an economic base study can be cut from \$100,000 to \$15,000, says the chamber.

**Problem No. 5: The federal government has encouraged special agencies thus adding to renewal's ungainliness and slowness.**

Having spawned these agencies, the workable program requires only that local governments "establish some means of coordinating

## Sec 220 stretched to speed renewal

FHA has stretched its underwriting rules for Sec 220 in response to President Kennedy's order to speed urban renewal.

The effect of half a dozen technical changes in FHA's much criticized main vehicle for urban renewal housing will be to permit bigger-ratio mortgages or lower rents.

The best news for builders-in-search-of-new-markets is that the new rules apply both to new housing and remodeled structures. Up to now, FHA has been so chary of 220 rehabilitation loans that only 93 have been insured in the seven years the law has been on the books.

The changes were disclosed by C. Franklin Daniels, FHA urban renewal assistant, before a crowded roomful of mayors and their urban renewal aides from 58 Northeastern cities. They were meeting in New York at HHFA's invitation to discuss ways to speed up renewal.

The mayors came loaded with gripes about FHA footdragging. Mayor Robert F. Wagner of New York named a 220 Rehabilitation project where owners are still waiting—four months after their application was filed—for

### KENNEDY'S RENEWAL PHILOSOPHY

"Urban renewal programs to date have been too narrow to cope with the basic problems facing older cities . . . Our efforts must be substantially reoriented from slum clearance and slum prevention into positive programs for economic and social regeneration."—from the President's housing message to Congress.

these diversified and disjointed efforts." The chamber proposes a Housing Act change making all renewal operations subject to city or county governments. This "would work for the establishment of the right kind of unified administration in the first place." An eligible city could contract with independent authorities (which run most renewal projects now) to execute projects, but would retain full control. The amendment would not stall going projects and would not take effect until 1963.

**Problem No. 6: HHFA administers the workable program so it defeats its own purpose.**

Federal representatives "seem to be more interested in getting cities qualified for federal financial aid than in using the workable program to bring about continuous improvement in the development of a community," cries the chamber. In certifying cities HHFA fails to distinguish between hard working cities and lax cities. And HHFA is recertifying cities year after year when they "are failing to carry out the promises officially made in order to receive initial certification."

The chamber wants HHFA field men to visit each city before recertifying a workable program and detail specific points city leaders must correct to qualify for continued federal funds. Cities which are weak should be certified "with reservations," i.e., shape up or face a cut off on federal handouts.

The chamber also argues that the federal government should pull out of neighborhood rehabilitation programs. When the federal government "helps," it only slows the process.

a commitment. Mayor Richard E. Lee of New Haven agreed with Wagner and urged a speedup in Sec 220 processing. Renewal Director Edward Logue of Boston said his city's mutual savings banks had pledged \$20 million in rehab loans but the money couldn't be used until Congress made Sec 220 available citywide.

**Technical changes.** But Daniels' announcement stilled most of the complaints. Daniels said local insuring offices can now make these changes on a case-by-case basis: 1) drop the vacancy rate from 7% to 5%, and 2) reduce the initial curtail of a loan from 2% to 1%. In critical cases Washington can also allow mortgages based on 95% (instead of 90%) of net project income.

Existing rules applied to a \$100 monthly rental apartment would produce a \$7,385 mortgage. But stretching the new rules to the limit could increase this by 25.9% to \$9,296.

Here's how it works: a 5% vacancy applied to the \$100 rent leaves \$95 income; operating costs estimated at \$40 reduce this to \$55 net; 95% of net leaves \$52.25 monthly and \$627.50 annually for debt service; the 1% initial curtail plus 5¼%

interest and ½% MMIF fee (a combined 6¾% rate) yields a total mortgage of \$9,296.

These same rules can be applied in reverse (working back from a desired mortgage) to cut monthly payments, "whichever happens to be the problem," says Daniels. The stretched Sec 220 terms are already being tested in Chicago's Kenwood-Hyde Park and South Shores projects.

**Bigger thinking.** Daniels (who two weeks later took over a bigger job as head of all FHA multi-family housing operations), also disclosed these changes:

- FHA is beginning to edge away from its insistence that redevelopment housing in cleared slum neighborhoods be built piecemeal—which often leads to high vacancies as prospective tenants shy away from a lone apartment amid acres of cleared rubble. "If the insuring office insists on stages and you are convinced the whole job is better built all at one time let us know. We'll be receptive," said Daniels.

- FHA is thinking of recommending 50-year loans for some kinds of renewal projects. "With replacement reserve provisions, I don't think we'll have much trouble selling the mortgages," he forecast.

- Under Sec 220, owner-occupied 2-, 3-, and 4-family structures may now be appraised as resident-owner units instead of rental property, for both new and used property.

- FHA has dropped its requirement that rehabilitators must incorporate to renovate 5- to 11-unit structures. Moreover, the units need not be contiguous.

The incorporation rules were stumbling blocks in Baltimore where Sec 220 is getting a tryout in Harlem Park. So far, not one of 16 rehab jobs has gone ahead under Sec 220, although FHA has issued 11 conditional commitments. Why? Two rehabilitators have lost interest, says Assistant Director Edgar Ewing of Baltimore's Urban Renewal and Housing Authority. For others, FHA is requiring new home standards (new hot water heaters, heating units) or installations exceeding Baltimore's building code (FHA wants heaters vented outside while code allows interior venting for smaller units). Since the commitments were issued before the Sec 220 liberalization, Ewing now hopes these jobs will go ahead quickly.

The mayors' meeting applauded HHFA Regional Administrator Lester Eisner when he announced he was setting up a traveling task force which will, in effect, disregard the urban renewal manual. The task force will have power to decide appraisal values and technicalities for disposition, demolition and site improvement contracts in the field. Up to now, regional offices had to approve such items.

**Who's to blame?** Brickbats for slowing down renewal were not all tossed at FHA. URA came in for complaints. And James W. Gaynor, New York state housing commissioner, insisted local city councils are the worst sluggards of all. He specifically accused New York City's governing Board of Estimate of "apathy and lethargy" in dawdling over approval of 18 state-aided middle-income projects which would re-house 15,000 families displaced by slum clearance and public construction, provide \$250 million worth of building for construction workers.

As a result, Gaynor announced, New York State from now on will withhold housing subsidies from "communities we think are dragging." He dared the Kennedy Administration to do likewise.

## Cleveland aims for bribe-proof code enforcement but top slum-buster quits

Can a big city devise a bribe-proof housing inspection setup and keep it operating amid the inevitable pressures on housing officials to overlook infractions by politicians' pals?

Cleveland, after a shakeup in its housing department that began three years ago, thought it was on the track. But last month slumlords and renewal promoters alike were stunned when slum busting Robert C. Greenhalgh, 36, resigned as \$12,858 housing commissioner to rejoin the FBI at a \$4,966 salary cut.

Why he did it was a puzzle to which Greenhalgh (pronounced Green-hall) contributed only a statement saying he wanted to devote his life to FBI work. But behind him he left a remarkable revamping of Cleveland's once flabby housing code enforcement.

For years, Mayor Anthony Celebrezze had been urged to replace Building Commissioner William D. Guion. Guion was respected as an engineer and construction expert. But he had no stomach for housing code enforcement and made no bones about it.

**How it began.** In December 1957, an irate property owner phoned Reporter Bob Siegel of The Cleveland Press and said housing inspector Max Lukas was shaking her down for \$50 to overlook numerous code violations in her rooming house. Siegel learned Lukas was living high at the race track and various bistros, boasted openly of getting bribes.

He advised Safety Director John McCormick (former Kefauver investigator), who set a trap. Lukas wound up in the Ohio State Penitentiary for a one-to-seven year term.

The Lukas disclosure reinforced pressure for code reform. So Mayor Celebrezze assigned Greenhalgh, who was McCormick's assistant, to investigate the private lives of all building inspectors. Greenhalgh, onetime New York Giants pro football player, and two detectives probed their work habits and bank accounts for nine months. The investigation results were never made public, but soon afterward Celebrezze named Greenhalgh (a reluctant candidate) as commissioner of a new housing department, which the city council agreed to split off from the oft-criticized building and housing department. Guion remained as building chief (he's due to retire this year, at 71, after 50 years with the city). The council also gave Greenhalgh a new housing code to work with.

**Gradual shakeup.** Greenhalgh took over Jan 1, 1959. That same day, he called in the 19 inspectors and two chief inspectors he inherited—the same men he had investigated. He warned them they faced eight hour work-days, no cheating, and no bribes. He invited anyone who wanted out to leave then. No one did. But two years later only one of the 21 men remained. Some transferred back to Guion's department. Some retired. A couple died. Others quit under fire and some just quit.

Greenhalgh made it clear from the start he wanted to build a new team and install a new system. He hired as his assistant another ex-FBI man, Charley Sheboy. No new employe had less than a high school diploma and more than half were college graduates.

He created a training school. That ended the old "buddy" system where a new man was put under the wing of an old timer for instruction, often of the wrong kind. He cracked down hard on minor infractions of work rules. Time cards were rigorously inspected. Mileage records for men with autos were checked and

double checked. Telephone conversations were the subject of disciplinary action when they became "too frivolous."

In the end Greenhalgh got what he wanted: a tough crew of men willing to work hard. They were no longer ashamed of being city housing inspectors, as many had been during the Lukas bribe trial. And the deadwood, protected by civil service, had quit or transferred out of the department voluntarily.

**Tickets for top pols.** Councilmen soon learned Greenhalgh took unkindly to pressures that others traditionally responded to. He wouldn't "overlook" infractions or "forget" about citations issued to influential friends of friends. He even cited Charles Carr, Negro Democratic majority leader in the city council, for violations in a couple of Carr's tenements that had gone "unnoticed" for years.

Such performances had recently embroiled Greenhalgh with councilmen. The 1959 housing code substitutes certificates of occupancy (issued only after a rigid code inspection) for Cleveland's old tenement license, which had been issued indiscriminately without city inspection to anyone paying a \$2 fee. Greenhalgh aimed his first occupancy certificate drive at these 12,000 license holders.

Councilmen complained Greenhalgh should have moved first against some 24,000 multiple dwelling landlords who operate without even the \$2 tenement license. Greenhalgh insisted he would get to them in good time, when 1960 census information became available. Meanwhile, he moved against the registered owners no matter who complained.

He also began setting up an intricately detailed inspection system he hoped would be as bribe proof as he could make it.

Constant checking formed the system's backbone. Inspectors were on non-permanent assignments. They didn't get time to build up relationships with property owners. They couldn't be sure of remaining on assignments long enough to protect a briber.

Greenhalgh himself checked up on inspectors. After following through on "closed" files to see if work was done as reported, Greenhalgh suspended several men without pay for reporting adequate siding and stairs on houses that he discovered lacked these amenities.

**How to do it.** He built his force to 50 inspectors and one chief inspector and hoped to get 100 inspectors and 7 chiefs by 1962. Greenhalgh eventually wanted to have a trusted chief examine every report made by an inspector. He often had an inspector brought from one district to another to check another man's "closed" reports. Ultimately, an ever-changing roving squad would have rechecked and followed up all reports.

"Keep them off balance and worried" was his theory. Greenhalgh insisted he trusted his men but felt they must know they were being checked regularly.

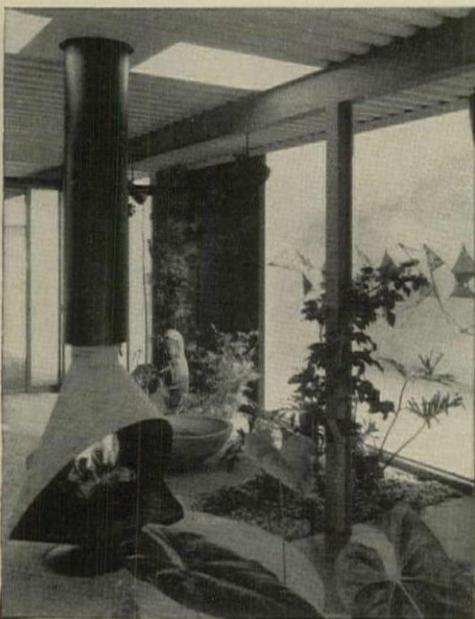
*continued on p 70*

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"The temptations and opportunities to go wrong are too tremendous otherwise," he explained. "We intend to see that it is easier to stay honest than it is to take a dishonest dollar." His assistant, Charles Sheboy, will now try to finish the job Greenhalgh started.

## RENEWAL BRIEFS

### Left hand meets right

URA and the Bureau of Public Roads have acted to mesh urban renewal and highway planning. Planners have long complained that the two programs often cross each other up. In many cities BPR-backed interstate expressways have split urban renewal tracts or located high volume interchanges next to costly redevelopment housing.

Now, an eight-man committee—four from each agency—will ride herd on renewal and highway plans, push for more local co-ordination between state highway departments, local housing officials and private experts.

### Federal aid spurned

Phoenix has disbanded its 10-man urban renewal department so the city can clean up slums on its own.

The action climaxes a long debate over federal aid. In 1957, the city hired Renewal Director Arthur Merkle. He drew plans for two redevelopment areas. But the city council balked, asked a citizens' committee to study alternatives. The committee reported renewal was possible without federal aid (and control) and Developer David Murdock and Home-builder Ralph Staggs submitted plans based on tax allocation bonds. Staggs also plans houses in blighted areas without city aid. Says Merkle: "I hope those who say it can be done through private initiative can prove it."

## ZONING:

### Westchester unions call upzoning 'morally wrong'

Builders fighting big-lot zoning have found an ally in a 25,000-member building trades council which labels upzoning "a most potent weapon for social and economic good or evil."

And the Building & Construction Trades Council of Westchester County, N.Y. believes the "excessive" zoning practiced in the New York suburban is "wrong . . . morally wrong. It is denying the use of land for the largest portion of our population—when there is a strong need and demand for housing today."

Westchester County has 157,591 acres zoned for  $\frac{3}{4}$  acre and larger lots—or 56.6% of its 435 square miles. Such upzonings "in effect have thrown our men out of work," complain council President Charles Carino and Secretary-Treasurer George C. Grimm in letters to officials of Westchester's 46 cities, towns and villages. "It is no secret—some of you have openly stated it—that you want to stop building."

They claim upzoning has achieved this purpose so well that:

- Fully 35% of the council's unionists are unemployed.
- Another 60% are working short weeks.
- The building industry is so demoralized that workmen seek jobs 75 miles from home.
- Only luxury-priced homes and apartments are being built.

## PUBLIC HOUSING:

## 'Your aims and mine are the same,' HHFA chief tells public housers

The National Housing Conference, meeting in Washington's excited atmosphere last month, responded to the new frontier housing message to Congress (p 44) from a new Democratic President with an old familiar cry: "more money."

During the Truman administration, NHC—the nation's public housing lobby—pared down its sessions so delegates (local housing authority members, labor leaders, welfare officials) could buttonhole Congressmen in support of HST's public housing plans. Under Eisenhower, NHC beat its drums for bigger public housing allocations, but dispirited delegates knew it was only a holding action.

This year, the mood was different. Instead of perfunctory Presidential greetings, the conference got a warm letter from John F. Kennedy: "I have met twice with your president. . . . We share the desire for vigorous action in meeting the housing and urban renewal needs of our country. . . ." Instead of politely hearing a monologue from an unsympathetic HHFA Administrator, delegates engaged in a friendly dialogue of sorts with HHFA Administrator Robert C. Weaver (see below), who has for years been a board member of NHC. Acting Deputy PHA Commissioner Abner Silverman, who took refuge from former PHA Commissioner Charles Slusser by wangling a study fellowship in England, probably summed up the feelings of most conference-goers when he said: "The years of uncertainty and frustration are over."

**Where NHC stands.** In subsidized housing, NHC's influence bulks much larger than its size or shoestring budget (heavily met by union contributions). No longer on the defensive—at least with the executive branch—NHC this year plumped for bigger-than-ever spending on housing. Warren Jay Vinton, former deputy public housing commissioner, summarized the policy resolutions this way:

"FNMA provision of mortgage funds—we ask more money. College housing—more money. Rural housing and housing for migratory workers—the conference endorses the proposals of the President—and asks for more money."

Thus Vinton—who in 20 years with PHA single-handedly made public housing work by convincing Wall Street financiers to buy public housing bonds—won the rubber-stamp approval of 250 delegates resolutions urging that the US spend next year \$1.37 billion more on housing and renewal than President Kennedy asks. Authorizations for continuing programs could run the cost up another \$13 billion.

The resolution made no secret of NHC's politics. "Once again," it said, "we can count on the White House for courageous and intelligent leadership." But NHC attacked Kennedy's housing plans on two counts:

1. By reserving half of 100,000 new public housing units for the elderly, the President would hitch local public housing to "arbitrary quotas" which would not fit local needs. And "we believe 50% is far too high a figure," since many towns have many families displaced by urban renewal and highway projects.

2. By aiding middle income families through FHA and FNMA, the President picked an "inflexible and restricted" method. Instead, NHC plumped for what it called "housing for

unmet needs." It wants the US to lend \$1 billion on 50-year terms to non-profit corporations, private developers, and public corporations (including local housing authorities) to build middle income dwellings. The money would come from the Treasury. But if reduced rents or mortgage payments were desired, repayments could be lowered, in effect subsidizing the loans "without the necessity of obtaining annual federal contributions."

NHC also urged that workable programs be required before FHA insures mortgage or home improvement loans in any locality. It called for 400,000 public housing units (vs Kennedy's 100,000) and \$255 million annual hike in PHA contributions.

**Where HHFA stands.** The resolutions were barely adopted when HHFA Administrator Weaver greeted the Statler Hotel session by defending the Administration. "I think there's no question but that your objectives and my objectives are primarily 99.44/100% the same," he beamed. But direct federal loans for middle-income housing would mean "another bureaucracy," he argued. "We will then have two agencies dealing with some of the same customers about somewhat similar problems. And we will have to find people to man this."

"By working through FHA with a FNMA takeout we can have the same flexibility in interest rates and we think we can achieve some of the objectives."

**Where Congress stands.** NHC's friends in Congress arrived with their annual predictions on a housing bill. Sen Paul Douglas (D, Ill.) counted 20 less Democrats in the House, volunteered: "I think we're behind the eight ball on this issue."

Rep Albert Rains (D, Ala.), chairman of the House housing subcommittee, counted only a five to nine vote margin for public housing. "If we pass a bill, you're going to have to help us do it," he advised. "Only that way can we get an extensive, expensive bill."

Rains admitted disappointment that Kennedy had not sought more community development money. "You cannot pass a housing bill with the votes of the big cities. You can't even come close," he drawled. "The housing bill has to have a little bit of sugar in it for Congressmen whose towns don't have renewal and not even public housing. We're going to have to have \$500 million for small cities and communities."

Other noteworthy conference comment:

• "Urban renewal and public housing—with the present programs—will never get rid of the problem of blight in our communities," counseled former NAHRO President Charles L. Farris, executive director of the giant (5,574 units) St. Louis Housing Authority. "There's an urgent need for something that goes much further." Precisely what it should be, Farris did not venture. But he surprised some listeners by calling for income tax write-offs for home owners who repair their property. He also urged beefing up workable programs, making community renewal plans "mandatory" as soon as a city puts its first renewal project on the books.

• "We don't need any more pilot projects [in rehabilitation, renewal, or middle-income housing]," declared Ben Fischer of the United Steelworkers. "We need great mass programs. If we don't do them now, I don't know when we will."

Delegates learned \$5,894 in bills outstanding last December had been paid and NHC had \$9,038 in the bank—enough to consider hiring

an executive vice president to replace Francis X. Servaites. Top candidate: Larry Henderson, one-time assistant and housing adviser to the late Sen Ralph Flanders.

## Neighborhood resistance slows Cleveland plans

Public housing is running into trouble in Cleveland.

Proposals for rezoning a large tract overlooking the west bank of the Cuyahoga River have aroused bitter reaction from the west side and its councilmen. Chief fear is that Negroes will infiltrate this almost pure-white area. Secondary problem: public housing attracts fatherless families, reliefers, other unattractive white families, too.

Land has already been bought and cleared by the public-housing authority. Plans call for 800-unit high-rise development.

Cleveland's public-housing picture is unique because Ernie Bohn, chief public houser, also is plan commission chairman and a tremendous power at city hall. In the past, he easily rammed through the city council anything he wanted. But recent years have seen inroads in his ability to jam public-housing through either the city council or state legislature. One massive tract of land lies idle because he cannot get it rezoned for multi-family use.

So Bohn has switched the emphasis in new public housing from house-the-poor to house-the-aged. All his projects emphasize Golden Age apartments for couples and single elderly persons. They have clubrooms, clinics, special recreation facilities.

One 16-story unit is going up overlooking an east side park. It's across the street from Mt Sinai Hospital and will include a diagnostic-center-clinic. Mt Sinai will provide medical staff free in exchange for 1) a ready supply of aged guinea pigs and 2) housing for its internes and their families.

Bohn's thinking probably foreshadows the trend for other public housers.

## Shell house companies rush to sell stock

continued from p 67

sold 82 houses totalling \$873,475 for a net income of \$110,035. As of Jan 16, the company said it had 96 contracts for houses.

• United States Shell Homes, Jacksonville, Fla. has sold \$2.5 million in 8% capital debentures and 100,000 shares of common stock.

The securities were offered in 25,000 units of \$100 debentures with warrants to buy two shares of common stock (at \$7.50 a share) and four shares of stock. The units sold for \$130. By midmonth the units were going for \$190 bid and the stock at \$20 a share bid.

The company builds, sells and finances shell houses (prices: \$2,134 to \$4,491 if bought on credit) in Florida, Mississippi, North Carolina, Tennessee, and Louisiana. In six months ended last Aug 31, US Shell sold 456 houses totalling \$1,325,212. Net income was \$100,042 (\$.59 a share on the then outstanding 170,000 shares of common stock).

The bulk of the proceeds are going to a subsidiary, Dixie Acceptance Corp. The issue netted \$2,910,000 (after underwriting commissions of \$250,000 and expenses of \$90,000) which are being used as follows: \$1,125,000 to Dixie to retire outstanding loans and \$1,375,000 to finance installment purchases, \$62,500 to buy 20,000 shares of common stock from certain stockholders and the balance to working capital. NEWS continued on p 73



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## PEOPLE:

## Reuther aide named HHFA deputy

HHFA's new deputy administrator, **Jack T. (for Thomas) Conway**, 43, is a 6', 195 pounder who could pass for a gridiron pro but whose quarterbacking has been in the far more subtle field of labor politics.

As top aide to UAW President **Walter Reuther** since 1946, Conway has made himself a reputation for toughminded intelligence and adroit persuasiveness at the bargaining table and in union councils alike. As a housing amateur—he says it is the only hobby his job with Reuther left time for—he has been a board member of the public-housing National Housing Conference (from 1952 to 1959 as Reuther's alternate; since then in

Married and the father of three, Conway has been a soft-spoken, self-effacing specialist in backstage operation. Because of his brief stint as a worker and his academic background, he has faced a problem in common with labor's growing ranks of "intellectuals": valued for brainpower and ability, they have little political potential with the rank-and-file, face dead-end jobs on the staff level in labor.

If Jack Conway has found a way out of the dead end, it is one that hints at new potency in the nation's No. 2 housing job.

## McMurray, task force head, gets HLBB post

President Kennedy has picked **Joseph P. McMurray**, former New York State housing commissioner, who headed the Kennedy task force on housing problems, to become chairman of the Federal Home Loan Bank Board.

McMurray, 48, succeeds **Albert J. Robertson**, 67, former senior vice president of Iowa-Des Moines Natl Bank and later assistant postmaster general in charge of finance. Robertson, HLBB chairman since September 1956, resigned as the Eisenhower Administration left office although his four-year term ran until June 30.

McMurray's appointment proved so popular with the Senate banking committee (where he was staff director from 1948 to 1954) that the committee voted to confirm him without even bothering to hold a hearing. Under both Democratic and Republican chairmen, McMurray won a reputation as a man who



Reni

HHFA's CONWAY

Housing amateur, political pro

his own right) and a trustee of Detroit's Citizens' Redevelopment Committee.

"The whole subject of renewal and blight of cities," he says, "is a real challenge. It is a very complex task, renovating older cities, and we're losing ground doing it. We have to step up our activities."

It was as a specialist in stepping up activities that the affable, grey-eyed Detroit first caught Reuther's attention. A scholarship student and major in sociology at the University of Chicago in the late '30s, Conway had done graduate work and taught a little at the University of Washington in Seattle until World War 2 began. Then he returned to Chicago, went to work as a pipefitter in GM's big Buick plant in Melrose Park and joined the UAW. He quickly became chairman of the local bargaining committee and a leader of the local Reuther caucus. When the war ended, Conway began law studies at the University of Chicago and worked as assistant director of the University's famed Round Table and Human Adventure radio programs. But Reuther, locked in a struggle with the union's Communist faction, interrupted these plans by summoning Conway to Detroit as an administrative aide in 1946.

Conway helped organize Reuther's successful push against the Communists, and in 1948 when a shotgun blast hospitalized the union leader, Conway ran the office. Since then, he has spoken with Reuther's authority in top negotiations, helped father the guaranteed annual wage idea.

H&amp;H staff



HLBB's McMURRAY

Confirmed without a hearing

could produce legislative reports reflecting compromise views with rare speed and great objectivity. In 1954, he returned to his native New York City to become executive director of the public housing authority. Six months later, he was named housing commissioner by Gov. **Averell Harriman**. For the last two years, McMurray has been president of Queensborough Community College.

It's noteworthy that McMurray, in his task force report, urged the HLBB stay independent of HHFA and the proposed Dept of Housing & Urban Affairs.

NEWS continued on p 75

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## JOHNS-MANVILLE



## Marie McGuire, expert on aged, is PHA chief

In the pleasant person of Mrs. Marie C. (for Collins) McGuire, a professional public houser for the last 19 years, the Public Housing Administration acquires its first woman commissioner.

It is also noteworthy, at a time when public housing is laying heavy stress on its new role of serving the elderly, that Mrs. McGuire's principal renown in

H&amp;H staff



PHA's McGuire

For the aged, beauty and quality

housing circles is for the pace-setting high-rise project for the elderly she completed last year in San Antonio.

A vigorous and articulate woman of 56 with waving gray hair and a rivet-gun approach to conversation, Mrs. McGuire steps from the \$13,800 San Antonio Housing Authority directorship into the \$20,000 vacancy created by Republican Bruce Savage's ouster.

For Mrs. McGuire the move means a return to her native Washington, which she left 32 years ago after majoring in journalism at George Washington University and marrying an oil exploration engineer. At the start of World War 2, she studied community planning in university extension courses in Houston, joined the Houston Housing Authority in 1942 as a project manager.

By 1949 she had advanced to assistant executive director and accepted when San Antonio HA asked her to become executive director. Less than two months after she arrived, San Antonio's city council approved 3,000 new units for her agency.

Mrs. McGuire stiffened a sagging organization with new faces, orders, procedures, got 2,145 of the units opened in five years.

The remaining 455 include the 185-unit project for the elderly, Victoria Plaza. With architect Thomas B. Thompson, Marie McGuire spent three years studying the subject of aging. They found that understanding the relatively-unexplored housing needs of the elderly required knowledge of the medical and psychological needs of aging persons. Mrs. McGuire emerged from Victoria Plaza's construction such an expert that she was picked to keynote the housing section of last January's White House Conference on Aging.

Victoria Plaza is such a hit locally that its architecture is be-

ing copied by a San Antonio luxury high rise apartment.

Among its design features: all apartments are cross-ventilated; doors have levers instead of knobs and are wheelchair-width; apartments can be separated or become one room by movable closets; laundry rooms are on each floor.

When PHA balked at paying extra for decorative art Mrs. McGuire felt the project needed, she secured gifts of outstanding art works from San Antonio's artists. Thus Victoria Plaza abounds with mosaic abstract murals, sand sculptures, tapestry, and whimsically sculpted fountains. The art and design features have landed Victoria Plaza in *Look* magazine and other national publications will soon follow.

In Washington Mrs. McGuire will be near her twin sister, Mrs. Margaret Schweinhaut. So powerful is the resemblance that Mrs. Schweinhaut (a Maryland legislator and Maryland Council on Aging chairman) once substituted for Marie at a party. It took an hour to uncover the masquerade.

## Veteran careerists named to key FHA jobs

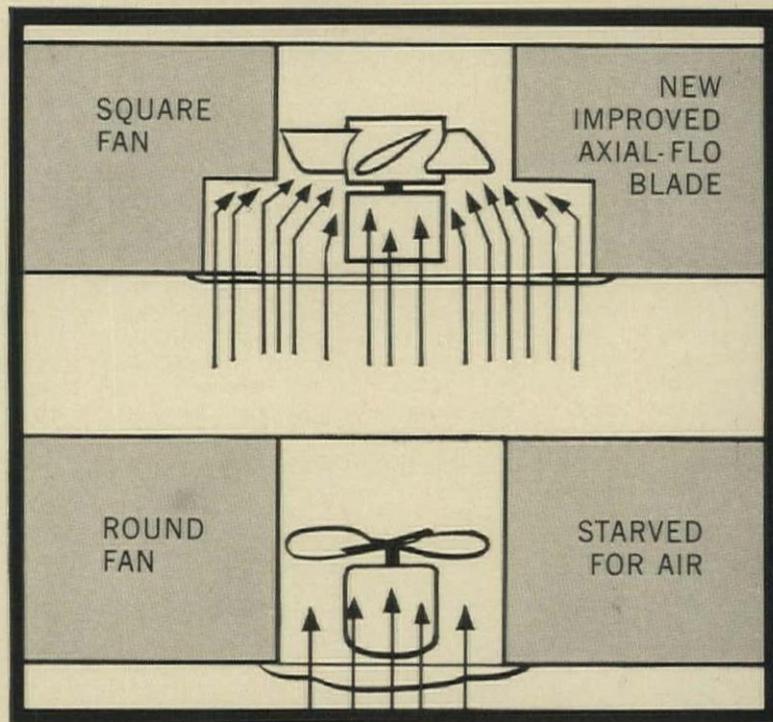
As expected, the new Administration has swept FHA's command almost clean of Eisenhower appointees in jobs exempt from civil service. Top survivor is Careerist Lester P. Condon, whom former FHA Commissioner Julian Zimmerman borrowed from HHFA to become deputy commissioner last April. Condon has been demoted to acting assistant commissioner for audit and examination, succeeding Robert W. Jefferson. Departing are Deputy Commissioner Cyrus B. Sweet, General Counsel Graham W. McGowan, and Assistant Commissioners W. Beverley Mason, Roy F. Cooke, and Robert M. Farr, plus Bernard L. Flanagan, assistant to the commissioner. Edward J. Dee was demoted from assistant commissioner for operations to zone commissioner.

It seemed clear that a much more sweeping reorganization is in the works, but when Commissioner Neal J. Hardy last month named a new lineup, he filled most of his key staff positions on an interim basis with FHA veterans. Adolphus M. Prothro, top career man in the legal division, became acting general counsel. Alfred W. Jarchow, for years FHA's chief underwriting expert, became acting assistant commissioner for technical standards, succeeding Bev Mason. Ralph L. Vitale, a careerist who is assistant to Comptroller Lester Thompson, took over as acting assistant commissioner for Title I repair loans, succeeding Cooke. Horace B. Bazan, demoted by outgoing FHA boss Norman Mason, from assistant commissioner to budget officer, got his old title back as assistant commissioner for administration. Carlos B. Starr was named acting assistant commissioner for operations, replacing Dee.

Across the nation, the new Ad-

continued on p 76

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ministration began replacing directors of FHA's 75 field offices—jobs which the Eisenhower Administration two years ago shifted from political to civil service status. It would be no great trick for the Kennedy Administration to reclassify FHA local directors as political appointees, but insiders hinted the new command might prefer the subtler process of weeding out GOP stalwarts one by one. First to go was Chicago's **John L. Waner**, an electrical contractor who had boosted FHA's popularity with builders in his year on the job. His successor: **Joseph T. Lyons**, vice president of Land Title Company in Chicago, who was the last Democratic FHA director there.

New FHA information director is **Ray Niblack**, 35, news director for radio station WINA in Charlottesville, Va. He was executive secretary of the Virginia Straight Democratic Ticket Committee during the 1960 campaign.

### AIA names 46 as new fellows

The American Institute of Architects has named 46 more of its members to the rank of Fellow. Among them are such celebrated designers of housing as **Donn Emmons**, **Carl Koch**, **Eliot Noyes**, **Harry Weese** and **Worley K. Wong**.

The new Fellows and the achievement for which they were honored:

For DESIGN: Richard L. Aeck, Atlanta; Arthur T. Brown, Tucson; Richard D. Butterfield, West Hartford; Thomas F. Ellerbe, St. Paul; Carney Goldberg, Boston; Bernard J. Grad, Newark; Eliot F. Noyes, New Canaan, Conn.; Ladislav Rado, New York; Eleanor Raymond, Boston; Moreland G. Smith, Montgomery, Ala.; William B. Tabler, New York; Harry M. Weese, Chicago; William B. Wiener, Shreveport, La.; Worley K. Wong, San Francisco.

For SERVICE TO AIA & PUBLIC SERVICE: Franklin S. Bunch, Jacksonville; Robert F. Hastings, Detroit.

For EDUCATION: Arcangelo Cascieri, Boston; Olindo Grossi, Brooklyn; Sidney L. Katz, New York; Russell S. Potter, Cincinnati.

For SERVICE TO AIA: Bartlett Cocks, San Antonio; Cornelius M. Deasy, Los Angeles; Alonzo J. Harriman, Auburn, Me.; Richard J. Heidelberg, Hempstead, N.Y.; Edward D. James, Indianapolis; Roland L. Linder, Denver; William Mooser, Sr., San Francisco; Samuel Z. Moskowitz, Wilkes-Barre; George F. Pierce, Houston; Frederic H. Porter, Sr., Cheyenne; Beryl Price, Philadelphia; Herbert H. Swinburne, Philadelphia.

For DESIGN AND SERVICE TO AIA: Donn Emmons, San Francisco.

For DESIGN AND PUBLIC SERVICE: Victor D. Gruen, New York; John L. King, San Francisco.

For DESIGN AND SCIENCE OF CONSTRUCTION: Carl Koch, Cambridge.

For PUBLIC SERVICE: John P. Macelwane, Toledo; Edwin T. Reeder, Miami; Thomas C. Vint, Washington, D.C.

For EDUCATION AND PUBLIC SERVICE: Richard W. Perrin, Milwaukee.

For EDUCATION AND LITERATURE: Charles E. Peterson, Philadelphia.

For DESIGN, SCIENCE OF CONSTRUCTION AND SERVICE TO THE INSTITUTE: Eberle M. Smith, Detroit.

For LITERATURE: Joseph Watterson, For EDUCATION, LITERATURE AND

SCIENCE OF CONSTRUCTION: Philip N. Youtz, Ann Arbor.

**BUILDERS:** NAHB has formed a new remodeling and modernizing department and assigned **Dennis L. Garrehy** to push its program of assisting homebuilders in home improving activities. For the past three years Garrehy has directed remodeling activities for the Associated Home Builders of Greater East Bay, Berkeley, Calif. Garrehy's department will hold a school for remodelers at the National Housing Center, follow with distribution of handbooks and kits to remodelers and possible regional meetings.

**Edward W. (Ted) Pratt**, 52-year-old Royal Oak, Mich. builder who's most at ease with a slide rule, has been elected chairman of the National Housing Center's Board of Trustees. A University of Michigan civil engineering graduate, Pratt has long been a leader in lowering building costs and improving methods. He was chairman of NAHB's Research Institute in 1956.

After a clash with directors of the Associated Home Builders of the Greater East Bay (Oakland, Calif.), Executive Vice President **John I. (Jack) Hennessy** turned down a request that he resign, promptly was fired. Hennessy's acting replacement: **R.J. Marengo**, his administrative assistant.

Hennessy, former (1955) president of NAHB's executive officers council, disclosed that he is forming a public relations and consulting company with **Robert (Bob) Loftus**, former NAHB public relations chief who resigned last year to set up his own public relations firm in Washington. Hennessy-Loftus plans to offer counsel to builders on management, investments, and public relations.

### Shakeup at Arvida; Weir quits as boss

In a top echelon shakeup in Arvida Corp. giant (assets: \$104 million) Florida real estate and land development company, **Milton N. Weir** quit as vice president. Aging (93) tive and his son, **John H. Weir**, quit as vice president. Aging (93) multimillionaire **Arthur Vining Davis** moved from chairman to honorary chairman. Named to the posts of chairman and acting president: Miami Banker **Comer J. Kimball**, 58.



**ARVIDA'S KIMBALL**  
From banker to developer

In taking the reins at Arvida, Kimball has his work cut out for him. Formed in 1958 by ex-aluminum tycoon Davis and the Weirs, Arvida reported property sale income of some \$11.4 million and net income of \$3.5 million in fiscal 1959 but in fiscal 1960, while sales totalled some \$17.7 million, net income dropped to \$1.7 million. Some directors felt the company was going ahead too fast with land development. Weir (who made it plain that he and son John, not Davis, were the Arvida show: "We run the company. Period.") was asked pointed questions at last fall's stockholders' meeting about the high salaries for the Weirs compared to the lower executive payroll at General Development Corp. No. 1 Florida land developer.

Kimball, Atlanta-born son of a Methodist minister, started his banking career in 1927 with Bankers Trust Co in New York, moved to Florida in 1940. He engineered the mergers that resulted in the present First National Bank of Miami, the state's largest, and has been its chairman for 10 years.

**DIED:** **John C. Taylor Jr.**, 67, a leading figure in the prefab housing industry during its formative years, March 6 at Clearwater, Fla.

A Phi Beta Kappa graduate of Princeton (1918), Taylor once said of himself: "I started my career selling from a huckster's wagon (as a boy he peddled groceries to the farms around his home at Shade Gap, Pa.). I've always been a



**PREFABBER TAYLOR (1954)**  
Always a salesman

salesman, not an engineer."

Taylor was vice president in charge of sales for the Taylor-Wharton Iron & Steel Co, Easton, Pa., when he decided to enter the budding prefab business in the late 1930's. He founded Century Houses Inc. at Fort Worth, as a licensee of American Houses Inc, New York, one of the pioneer prefab companies. In 1939, American bought Century and Taylor moved to the presidency of the parent company. He was president of the Prefabricated Home Manufacturers' Institute in 1951-52. In 1954, he resigned as American's president and chief executive officer because of failing health.

**DIED:** **George W. Miller**, 67, who built 15,000 homes in the Detroit area with his Miller Homes, Inc. once Michigan's largest home builder, Feb. 26 in Daytona Beach.

## CANADA:

### Builders press for mortgage probe

Builders are prodding the government to make a major investigation of mortgage finance.

They contend the housing industry's troubles—notably a bad sales slump last year—begin with the failure of the 1954 National Housing Act to "broaden the supply of mortgage money by making that form of investment more attractive, increasing the number of lenders, and making more money available for mortgage lending."

Canadian mortgage lending is concentrated in the hands of five or ten of the nation's 50 life insurance companies, plus direct loans from Central Mortgage & Housing Corp, Canada's HHFA-plus-FHA. The dominion has no S&Ls. Currently, the chartered banks are shying away from mortgages because the law limits them to a 6% interest charge.

The Natl House Builders Assn has suggested Royal Commissions to look into the problem before (they are akin to a Congressional investigating committee). This time, they got a committee of big-name materials manufacturers to join in the plea.

### Builders step up plans

Canada's inventory of completed but unsold houses is 29% above year-ago levels (4,710 in 36 major

centers vs 3,649 in January '60). But builders are so confident of a sales upturn they are flooding CMHC and lenders with loan applications.

In the first eight weeks of the year requests for loans totalled 7,381 compared with 650 in the same period last year. Of these, 6,011 have been approved (526 a year ago).

### Decade's housing needs

Canada will need to build 125,000 to 130,000 new dwelling units a year during the first half of the 1960's and up to 150,000 a year in the second half.

These are estimates by President Stewart Bates of Central Mortgage & Housing Corp. He calls them the "minimum objective" to cover population growth and movement plus units lost via abandonment, condemnation, accident, or demolition. He suggests this division of needs:

NEED	UNITS	1960-1964	1965-69
Family growth .....	450,000	450,000	550,000
Non-family households	100,000	100,000	
Shift from farms.....	50,000	50,000	
Replacements .....	50,000	50,000	
TOTAL .....	650,000	650,000	750,000

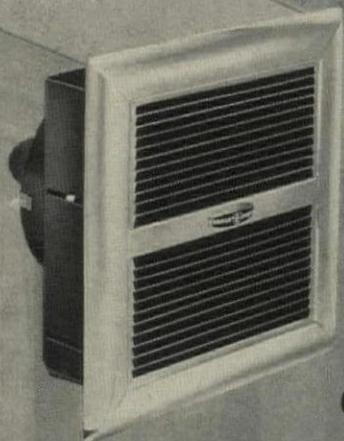
NOW... A fan  
designed for

# SQUARE

framing

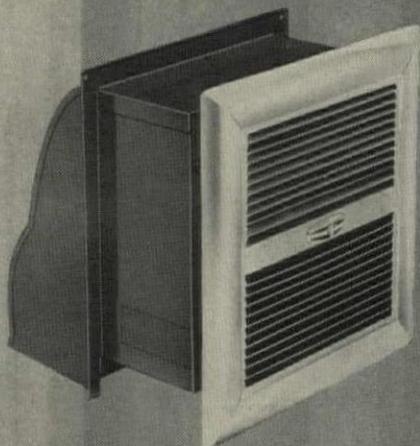
**NEW EMERSON-PRYNE  
SQUARE Fans**

cut installation costs 30%



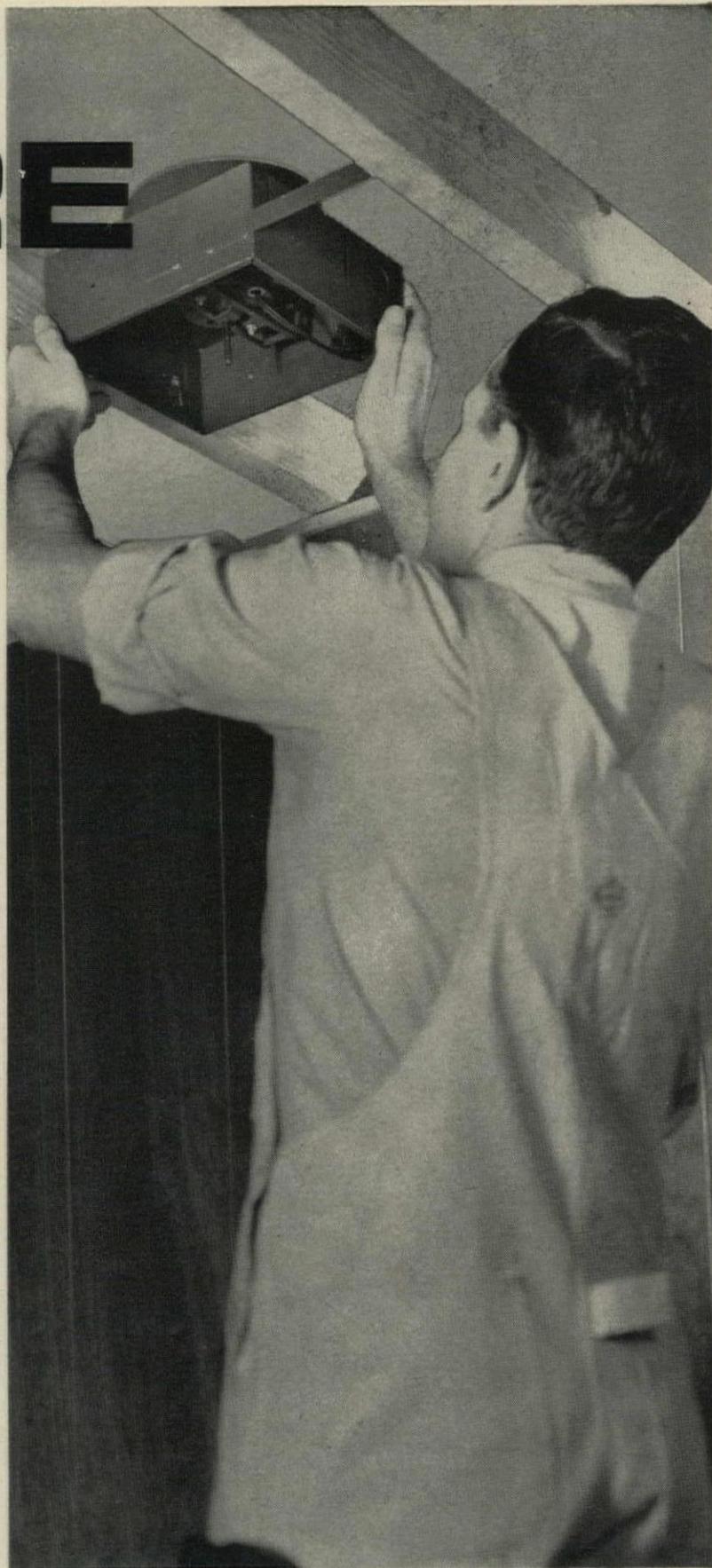
**CEILING  
MODEL**

**252** SQUARE for easy installation... greater efficiency. True air-foil styrene blade driven by a super-powered motor provides maximum CFM with minimum noise. Will connect directly to standard 8" duct. Beautifully designed, square chrome-plated louvered grille included.



**WALL  
MODEL**

**253** SQUARE for easy installation... greater efficiency. Deluxe, super-powered motor and air-foil styrene blade. Maximum air delivery and low, low noise factor. Side-wall housing with NEW patented Tenso-Matic Shutter that eliminates flutter. Square, louvered, chrome-plated grille.



## NEW EMERSON-PRYNE **SQUARE** FANS

NEW EMERSON-PRYNE SQUARE FANS cut your installation cost, offer home buyers a better looking product that does a more efficient job. It is easier to mount a square object against a stud or joist than it is a round one... and it is easier to cut the hole. Integral nail prongs and adjustable mounting brackets further speed installation. More than that... new Emerson-Pryne Square Fans do a better job of air removal because there is a much larger opening area and a natural venturi not normally found in round fans. There is less resistance to air movement so that they move more CFM with less wattage. The chrome-plated, square, louvered grilles are constructed to conceal the mechanical parts of the fan. This provides extra safety and a handsome appearance. ASK YOUR WHOLESALER for EMERSON-PRYNE SQUARE FANS.

**EMERSON ELECTRIC**  
BUILDER PRODUCTS GROUP

EMERSON  
ST. LOUIS, MO.



PRYNE  
POMONA, CAL.  
KEYSER, W. VA.

IMPERIAL  
LATROBE, PENN.

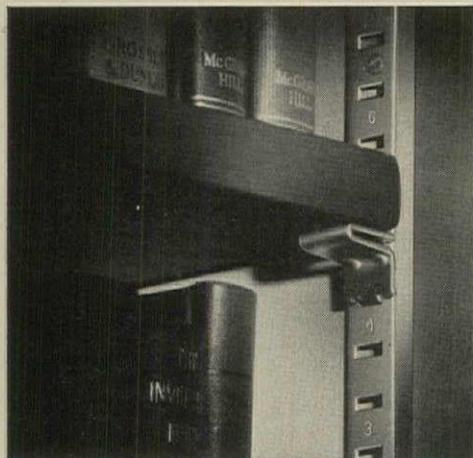
RITTENHOUSE  
HONEOYE FALLS, N. Y.

WRITE DEPT. B84, EMERSON ELECTRIC • 8100 FLORISSANT • ST. LOUIS 36

For Open Wall Shelving. No. 80 Standard (18" to 144" lengths, 1" adjustment). No. 180 Brackets (4" to 20" lengths). Satin anochrome, brass or ebony black finish.



For Built-in Shelving. No. 255 Standard (24" to 144" lengths, 1/2" adjustment). No. 256 Support (3/4" long, 3/8" wide). Nickel, zinc or bronze finish.



## K-V SHELF HARDWARE

*easily installed, easily adjusted, lasts a lifetime!*

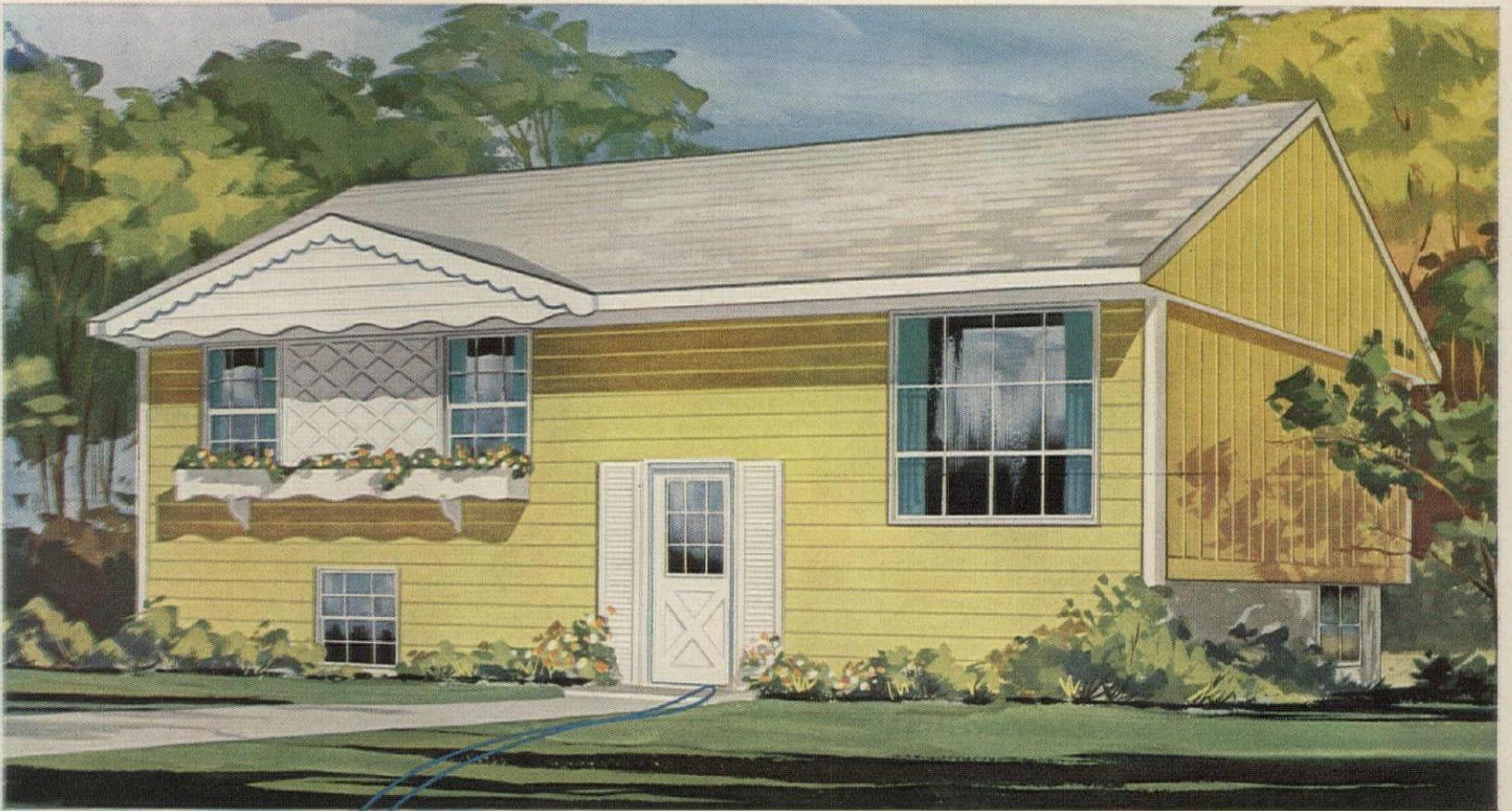
The modern, convenient way to add needed shelving or desirable decorative effects. Handsome and sturdy, remarkably low-cost. Easy to install and adjust, lasts the lifetime of the house. Always keeps shelves straight, strong, sag-free. Available in a range of sizes to meet most specifications. Ask your K-V sales representative about K-V hardware and fixtures — or send for our catalog.

**KNAPE & VOGT  
MANUFACTURING CO.**  
Grand Rapids, Michigan



Manufacturers of a complete line of quality drawer slides, sliding and folding door hardware, closet and kitchen fixtures and Handy Hooks for perforated board.

8 rooms **\$12,950** 1860 square ft.  
*including lot*



**sales sensation wherever shown**

***Our market research gives you a parade of best sellers***

• Follow one winner with another, month after month. Let our continuing market research pinpoint local buying trends as they develop . . . provide exactly the right models to meet those trends from our tremendous selection of two stories, split foyers, split levels and ranches. Each is a sales-proven house, fully market tested. You're spared the gamble of trial and error model selection. Instead, you're handed the key to the ever-changing demands of home-buying families . . . months ahead of your competition. You offer the price, style and size people want . . . *when* they want it.

*Lafayette Series*  
**HOMES**

Manufactured by

**AMERICAN HOUSES, INC.**

Allentown, Pennsylvania • Lumberton, North Carolina

**NATIONAL HOMES CORP. OF CALIFORNIA**

Newark, California

**W. G. BEST HOMES CORPORATION**

Effingham, Illinois

**KNOX HOMES CORPORATION**

Thomson, Georgia

**THYER MANUFACTURING CORPORATION**

Toledo, Ohio • Collins, Mississippi

**LESTER BROTHERS, INC.**

Martinsville, Virginia

**FAIRHILL, INC.**

Memphis, Tennessee

Write your nearest Lafayette Series Homes manufacturer for details

## February H&H

Many thanks for your comprehensive coverage of Robert Weaver. The entire nation owes you a debt of thanks for your sound and mature thoughts on undertaxation of land and desegregation in housing. Your leadership is doing more to further the progress of the housing industry than any other periodical.

JOSEPH KRAKOWER, AIA  
Houston.

Congratulations for the fine condensation of President Kennedy's task-force report on housing and urban renewal legislation. It makes possible a quick understanding of the many proposals under consideration. Since the subject is so important to planning, we would like to distribute the article to our Planning Commission and to those who work closely with us.

LAWRENCE M. IRVIN, *planning director*  
Minneapolis Planning Commission

Congratulations on a masterful presentation of the challenge of the retirement market.

GILBERT WATERS, *builder*  
Saratoga, Fla.

It looks as if your February issue will serve as reference material for some time to come. We will all have to read and reread it to understand events as they develop.

ROBERT THARPE, *president*  
Mortgage Bankers Assn

## New market trends

I just read your January report "From coast to coast, some builders have found the answer to today's market" for the third time. Each time I get something new out of it.

J. E. LIEK, *director of merchandising*  
Harnischfeger Homes  
Port Washington, Wis.

Your January "New look at the golden 60s" was excellent and indicative of the future for building and real estate activities.

GLENN E. LYER, *realtor*  
Spring Valley, Calif.

## Housing & Codes

Now that President Kennedy, Senator Sparkman, NAHB-in-convention, and others are rising to get federal financial assistance for the housing industry, why not now, simultaneously, a loud, vociferous, noisy demand that any such federal financial assistance shall pertain only to structures built under one, modern, newly compiled, single-purpose federal code.

H. S. BOWSER  
Santa Barbara, Calif.

## Correction

Your article [News, Feb] about mortgage banking companies that have gone public was most interesting.

The article lists our total servicing as of Aug 31, 1960 as \$45,329,175. The figure quoted was our servicing volume as of Aug 31, 1956. The correct volume for Aug 31, 1960 was \$165,106,619 and to bring the figure up to date, as of Jan 31, 1961, our total servicing volume was \$187,661,791.

ROBERT L. BLACK, *vice president*  
Palomar Mortgage Co  
San Diego.

To: Apartment Builders

Architects

Owners

Apartment Financing Institutions

Managers

## How Can Improved Closet Design Help Keep Apartments Rented?

Current studies show that one of the basic factors determining an apartment's rentability is closets. The more closets—the bigger and more convenient they are—the greater the chances of keeping the apartment occupied.

1) **Competition for tenants is reaching an all-time high as more and more apartments are built—a trend expected to continue.**

2) **The danger point is approached when vacancy rates reach 5% and any feature in the apartment design which could reduce vacancy rates by 1% could solve 20% of this problem.**

3) **Rapid turnover results in an increasing vacancy rate which is invariably accompanied by rising costs.**

4) **The two most often given reasons for wanting to move is inadequate kitchens and lack of adequate storage and closet space.**

The Float-Away closet door concept is an ideal solution to this demand for bigger closets. Float-Away metal closet doors actually **increase** usable closet space, provide easier access, and cost less to install, all vitally important to you.

Because of the importance of closets to tenants, Float-Away doors may well provide the vacancy-reducing feature you're looking for.

**Added space:** Because Float-Away doors can run from floor to ceiling, they permit all shelves to be full-depth. By adding an extra full-depth

shelf in the top area, usable closet space is increased by as much as 1/3.

**Convenience:** Float-Away bifold doors can extend from wall to wall, floor to ceiling, and fold all the way back to provide complete access to any part of the closet.

**Lower costs:** The Float-Away closet concept eliminates the framing, plastering, and labor necessary to cover conventional closet fronts. The average apartment partition wall costs over \$1 per square foot. Float-Away doors are installed at approximately 75¢ a square foot; thus, the fewer unnecessary walls and the more closet door areas, the greater the saving.

**Flexibility:** Float-Away doors fit all standard openings and also can be used in a combination of sizes to fit a wide range of non-modular openings, thereby providing maximum versatility of architectural design.

.....

## Free Closet-Planning Service

Let us prove the advantages of the Float-Away closet door concept. Send us typical floor plans of one of your apartments, and we will return a tracing showing use of Float-Away doors and a detailed estimate of the resultant savings. This service entails no cost or obligation to you, and your plans will be returned promptly.

Send plans to:

Float-Away Door Company



Interiors by Charles Anna Marsh

For above doors specify four 3' 0" x 8' 0" Colonial

## Float-Away Closet Systems Help Rent Apartments Faster

... Help Keep Them Rented!

Float-Away metal closet doors are engineered for permanent, maintenance-free service to rental property owners.

Heavy, zinc coated, bonderized 24-gauge metal assures rugged stability, won't warp, bind, swell or crack. Doors float open and closed on nylon pivots and guide rollers. Panels are sound deadened.

Prime coated in neutral driftwood white, smooth-surface doors are easily painted, can be left as is until apartment is redecorated at the end of the second or third year.

Doors are shipped pre-cartoned with all hardware, oak threshold, side trim, simple installation instructions. Available in flush, full louver, half louver Colonial designs. Flush doors also in pre-finished lauan mahogany and birch.

Read the important message on the opposite page. Then, for proof of the advantages you gain with the Float-Away closet system write, wire or phone.



For above door specify 6' 0" x 8' 0" Flush

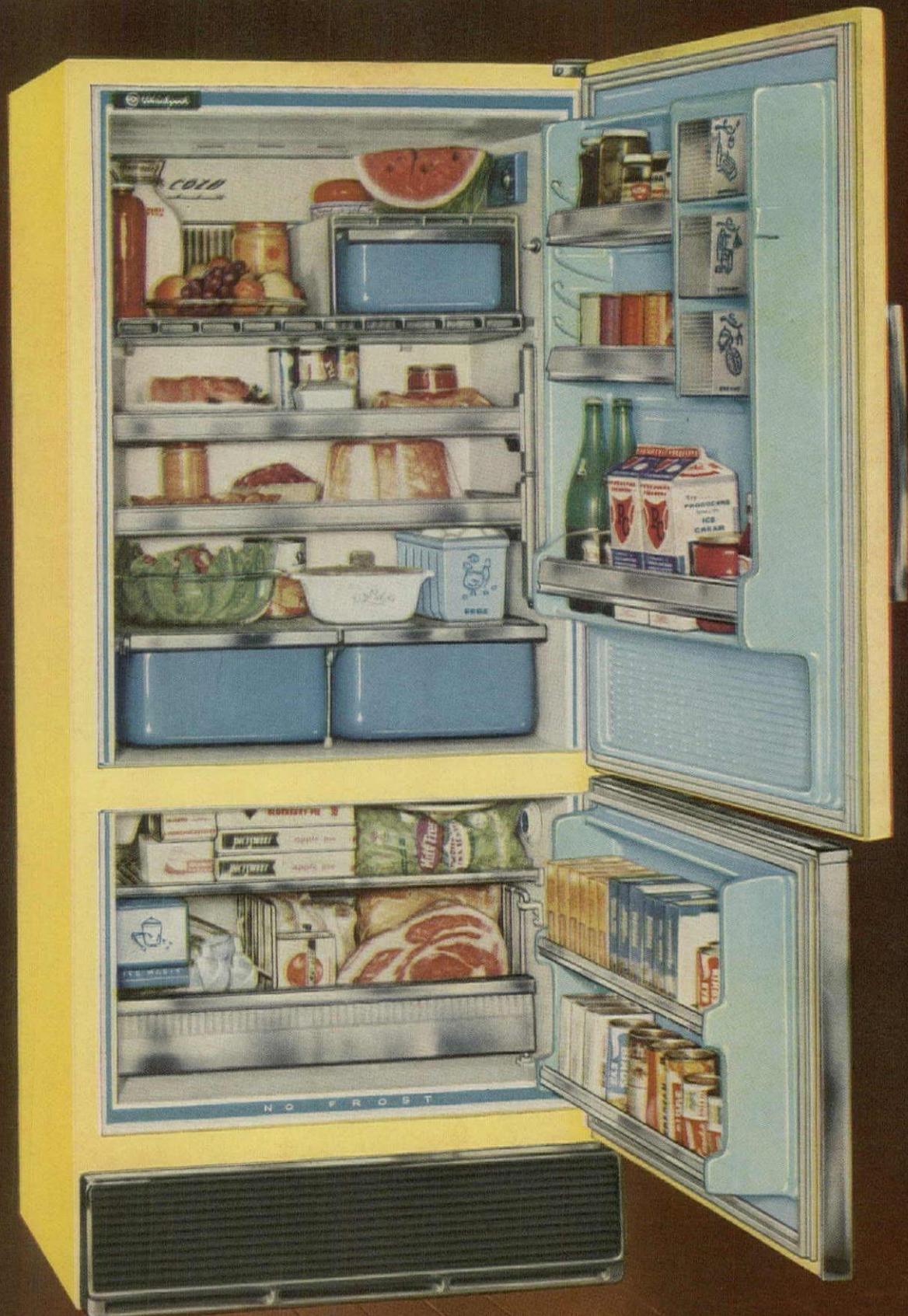
**FLOAT-AWAY**  
1173 Zonolite Road, N. E.



**DOOR COMPANY**  
Dept. H-461 Atlanta 6, Georgia

YOUR GREATEST ASSET IS OUR QUALITY PERFORMANCE!

# IT'S NEW! IT'S



Mark 61 model refrigerator-freezer

# NO-FROST! IT'S AN RCA WHIRLPOOL

refrigerator-freezer with the features women understand and want

Look what you can offer the home buyer in one beautiful, convenient unit! It's a refrigerator, a "zero-degree" freezer, and an automatic ice maker . . . all combined. There's no frost build-up in either refrigerator or freezer. Its slim, trim, squared-up design assures flush, built-in look; fits anywhere . . . in a corner, flush-to-wall or flush-to-cabinets. Superior insulation permits thinner walls and doors, much more food storage in the same floor space. And look at all the exclusive features women really want! There's the IceMagic® automatic ice maker, Jet-Cold\* Shelf, Jet-Cold\* Meat Chest, swing-out shelves, Million-Magnet\* doors, even a swing-out basket in the freezer . . . and more. But this Mark 61 model is only one. In the complete RCA WHIRLPOOL line there are many other refrigerator-freezers, many other built-in and free-standing appliances for most every kitchen and laundry need. All models of all lines are available from one source . . . with emphasis on *delivery as needed!* Get the complete story from Contract Sales Division, Whirlpool Corporation, St. Joseph, Michigan.

\*Tmk.



Manufacturer of RCA WHIRLPOOL Automatic Washers • Wringer Washers • Dryers • Washer-Dryers • Refrigerators • Freezers  
Ice Cube Makers • Ranges • Air Conditioners • Dishwashers • Food Waste Disposers • Dehumidifiers • Vacuum Cleaners.



Automatic washers and matching dryers, available singly or in pairs . . . in various models to meet individual needs. Also Ultimatic washer-dryers; two appliances in one compact cabinet only 29" wide that fits flush with cabinetry.



Undercounter dishwasher . . . slim and trim, but has big capacity. Offers famous Filter-Stream\* dishwashing system. Select-A-Door\* trim permits panels to be faced with material of purchaser's choice.



Built-in ovens and surface units . . . easy and economical to install. A big selection with new architectural styling, up-to-the-minute features, plus the last word in convenience and performance.



Imperial food waste disposer . . . with exclusive automatic reverse system that helps prevent jamming, even at the start. Batch feed. Can be connected to any standard 1½" trap.

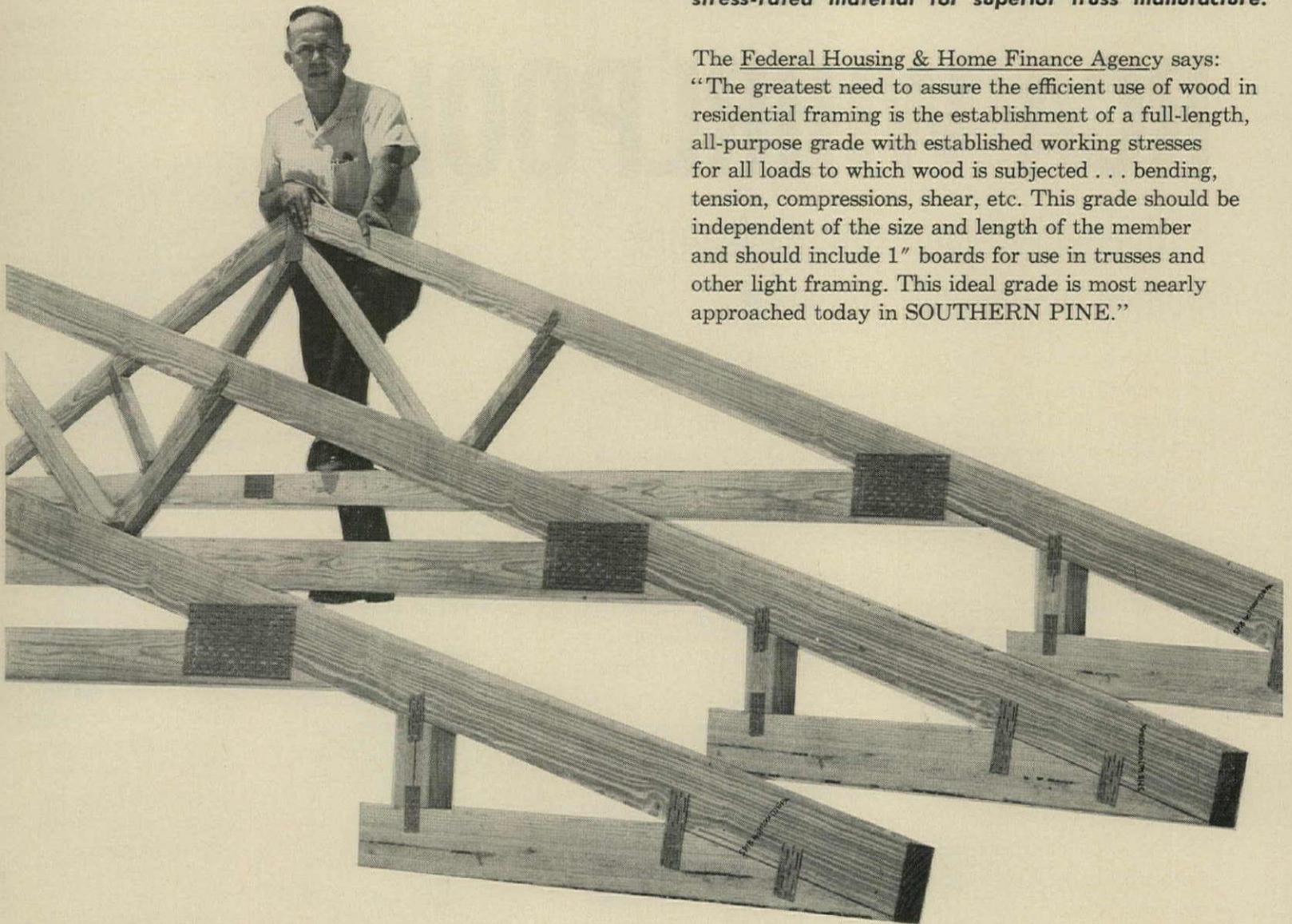
Use of trademarks ® and RCA authorized by trademark owner Radio Corporation of America

**"SOUTHERN PINE** meets  
the exacting requirements for  
**TRUSSED RAFTERS** —  
That's why I use it exclusively."

**SAYS HERBERT O. ROOT, President,**  
Dade Truss and Manufacturing Co., Inc.  
Leading Florida Truss Manufacturer

**"Southern Pine's grading features, including proper  
seasoning, plus its ready availability, make it the ideal  
stress-rated material for superior truss manufacture."**

The Federal Housing & Home Finance Agency says:  
"The greatest need to assure the efficient use of wood in  
residential framing is the establishment of a full-length,  
all-purpose grade with established working stresses  
for all loads to which wood is subjected . . . bending,  
tension, compressions, shear, etc. This grade should be  
independent of the size and length of the member  
and should include 1" boards for use in trusses and  
other light framing. This ideal grade is most nearly  
approached today in SOUTHERN PINE."



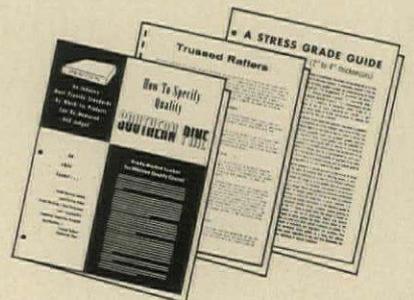
**DRY SOUTHERN PINE OFFERS THESE ADVANTAGES:**

- Uniform grading throughout its length permitting simple beam, cantilever, continuous or tension-loading design.
- Uniform size because it's properly seasoned.
- Superior gripping power for nails and other fasteners.

Write today for these **FREE** bulletins!

- Stress Grade Guide
- Trussed Rafter Data
- How to Specify Quality Southern Pine

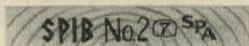
SOUTHERN PINE ASSOCIATION  
P.O. Box 1170—New Orleans 4, La.



The same superior qualities that make Southern Pine "the ideal stress-rated material" for trussed rafters are yours for any other structural use when you insist upon grade-marked, trade-marked

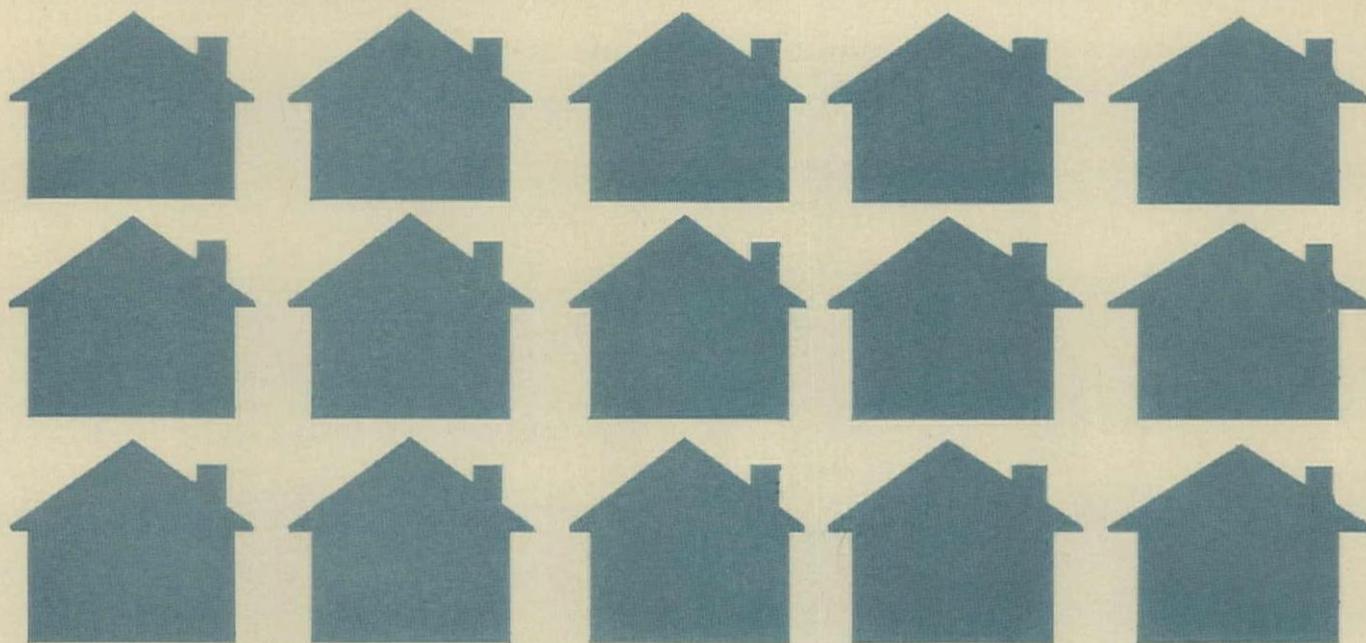
**SOUTHERN PINE**

FROM THE MILLS OF THE SOUTHERN PINE ASSOCIATION . . . IT'S DRY





**SELL MORE HOMES THIS YEAR WITH**



# GM-DELCO'S TRIPLE SALES OFFENSIVE

## **1 A HOT, NEW GAS-FURNACE LINE**

The new 1961 GM-Delco upflow models for perimeter, basement or closet applications come in units up to 190,000 BTU input capacity. For homes without basements, the GM-Delco Counterflow Model is ideal. And for compact situations, you can't top the GM-Delco Slim, Horizontal Gas Furnace. They all have the stamp of GM Reliability—your assurance of better performance and fewer "call-backs."

## **2 SOLID NATIONAL ADVERTISING THAT PRE-SELLS THE GM-DELCO NAME**

Your prime home-buying prospects will be exposed to a broad schedule of national GM-Delco advertising, carefully designed to promote the GM-Delco brand name. This advertising makes the most of the inherent value in the General Motors name—and helps you sell homes. Buyers identify your GM-Delco installation in a model with quality.

## **3 A FLEXIBLE, LOCAL MERCHANDISING PACKAGE TO FIT YOUR MARKET**

GM-Delco brings you a hot new merchandising package for maximum impact on your individual market. You can pick and choose from the best in billboard signs, local radio and TV scripts, 1000 and 500-line newspaper ads, brochures and tack-up signs for models. Pinpoint and apply features of this flexible GM-Delco program to your local sales objectives.

*The brand name  
that identifies your  
homes with Quality*

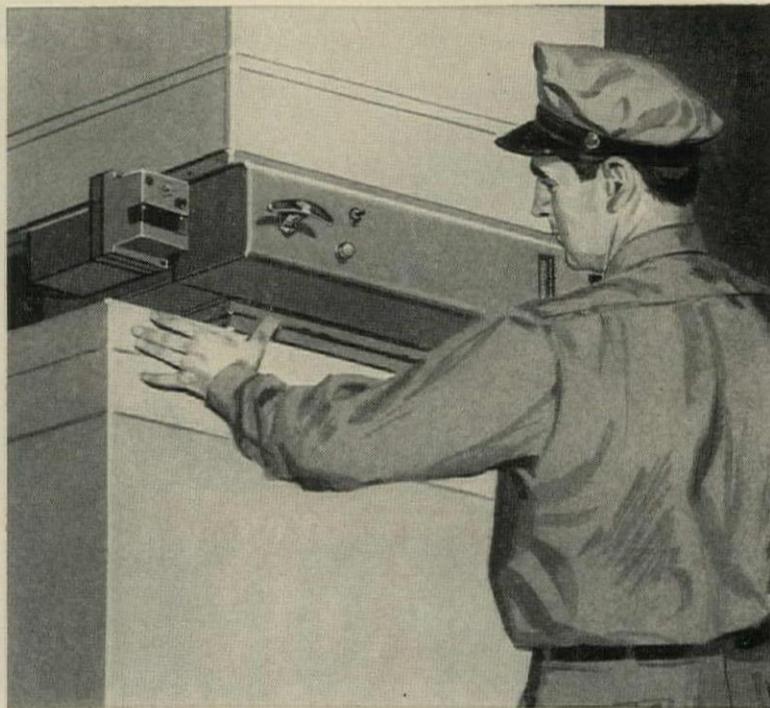
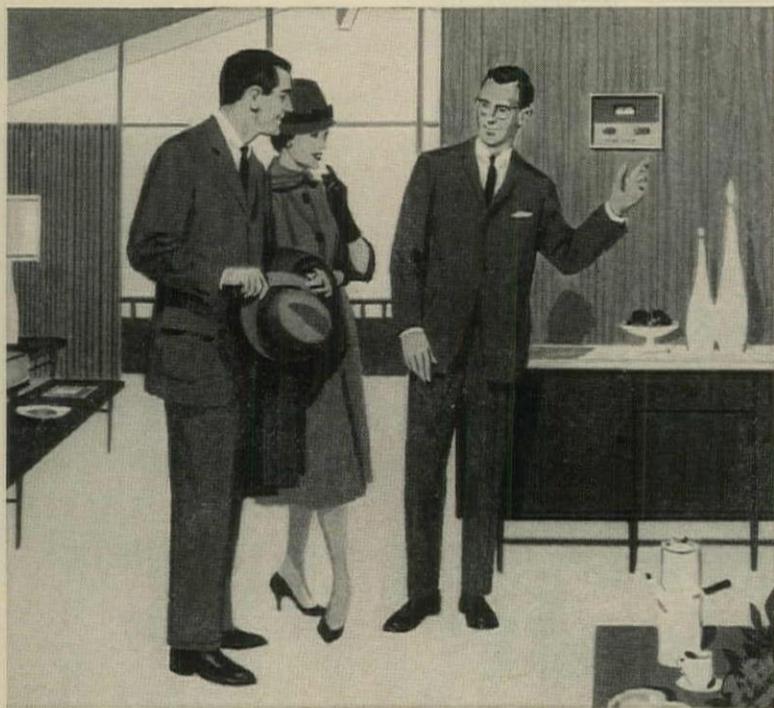
**GM Delco 365**  
**CONDITIONAIR**

DELCO APPLIANCE DIVISION, GENERAL MOTORS CORPORATION, ROCHESTER 1, N.Y.

**Now! Sell**

# The Self-Cleaning Home!

Honeywell announces an electronic air cleaner  
designed exclusively for the home!



**Less housework sells the woman**—The Honeywell Electronic Air Cleaner gives every homemaker a headstart on cleaning chores, because most of the dust and dirt has already been removed from the air. Endless tasks like dusting, cleaning, window washing and wall washing are all cut to a fraction. With a home that never really gets dirty, the homemaker can enjoy hours of new leisure and family fun.

**Reduced decorating costs sell the man**—For the most part, re-decorating is necessary only when a change in colors or atmosphere is wanted. Walls, drapes, wallpaper stay clean and fresh looking much longer when whole-house air cleaning is on the job.

**Benefits for the entire family**—The Electronic Air Cleaner is no cure for allergies, but it does remove up to 90% of the irritating airborne pollen and dust in the home—including many of the odors that cling to these airborne particles. A high percentage of airborne bacteria is electronically trapped, as well.

**Handsome Living Area Panel**—The Living Area Control Center is your merchandisable symbol of whole-house air cleaning. The Honeywell Electronic Air Cleaner is one of those standout features that brings your prospects back for that all-important second look.

**A new sales extra—easy to install**—The Honeywell Electronic Air Cleaner is the most modern advance in environmental control since air conditioning. Here is a truly modern feature to help sell today's modern homes. And the Electronic Air Cleaner is compact (only seven inches thick, installed) to fit standard forced air ducts.

**Costs no more than a good refrigerator**—The price of Honeywell's Electronic Air Cleaner is right where everyone can afford it. A price that lets you make a substantial profit, too! And the Electronic Air Cleaner is designed and built to require the very minimum of service—and most of that the homeowner performs himself.

**Backed by Honeywell**—The Electronic Air Cleaner is backed by famous Honeywell quality design and manufacturing. This new residential unit is a compact design of the Honeywell Electronic Air Cleaners used in hospitals, factories and office buildings for years.

**Additional support**—Currently featured in national consumer advertising, the Electronic Air Cleaner is backed by a full promotion program, with many elements designed for the model home. Call your nearest Honeywell office, or write Honeywell, Minneapolis 8, Minn.

## Honeywell

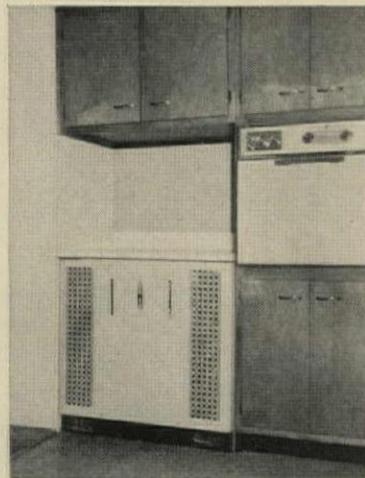
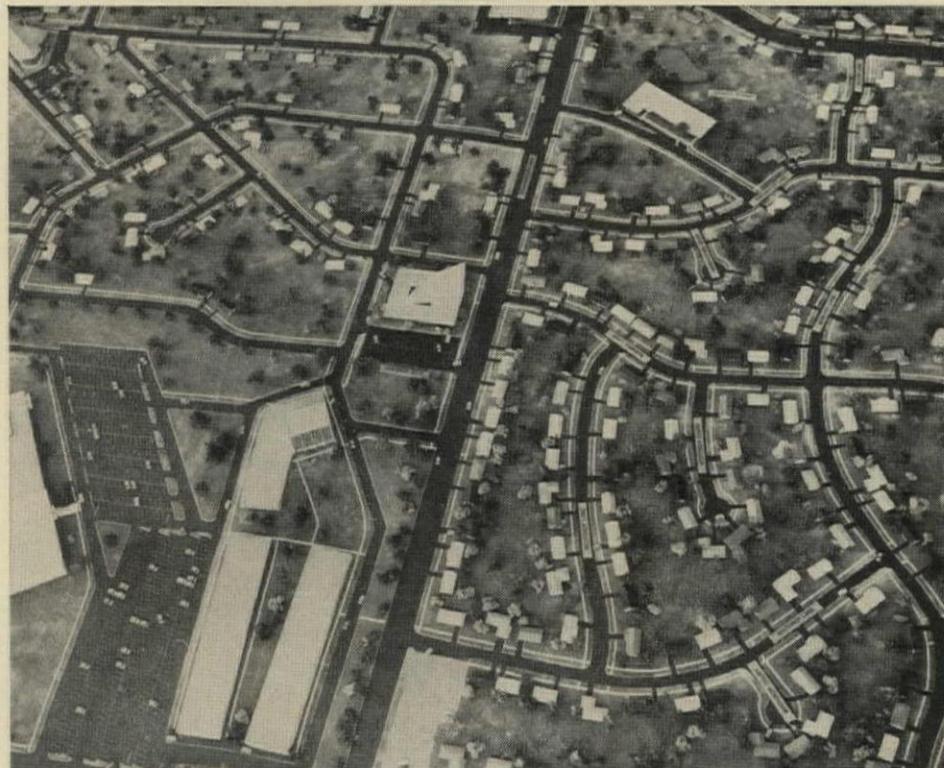


*First in Control*  
SINCE 1885

HONEYWELL INTERNATIONAL  
Sales and Service offices in all principal cities of the world.  
Manufacturing in the United States, United Kingdom,  
Canada, Netherlands, Germany, France, Japan.



Typical homes in Campanelli Brothers' Weathersfield development in Schaumburg, Ill., a suburb of Chicago.



The amazingly compact house heating boiler is concealed behind the grille work of this countertop cabinet, providing added working space in the kitchen. View at left shows a section of development.

## B & G *Hydro-Flo*<sup>®</sup> HEATING HELPS SELL THREE HOMES A DAY!



### B & G BOOSTER

The key unit of a B & G *Hydro-Flo* System—a quiet, automatically controlled electric pump which circulates hot water through the heating system.

The outstanding sales power of *Hydro-Flo* hydronic heating helps account for the remarkable sales performance of Campanelli Brothers' Weathersfield homes in suburban Schaumburg, Ill.

The homes in this huge development, priced at \$15,590 to \$21,500, are selling at the rate of *three per day*.

The sound judgment of the builders in choosing radiant hydronic heating is obviously paying off. "Radiant heating with its sunlike warmth," said Mr. Al Campanelli, one of the builders, "can't be equalled for genuine comfort and cleaner, quieter operation."

The B & G *Hydro-Flo* system operates with unrivalled economy—and further offers the optional advantages of plentiful, low-cost year 'round hot faucet water and snow-melting. These are the reasons why progressive builders are finding *Hydro-Flo* Heating a clinching sales feature.



***Hydro-Flo*<sup>®</sup> SYSTEM**  
**BELL & GOSSETT**

C O M P A N Y

Dept. GP-10, Morton Grove, Illinois

Canadian Licensee: S. A. Armstrong, Ltd., 1400 O'Connor Drive, Toronto 16, Ontario

LOOK TO  
**Leigh**  
FOR THE  
QUALITY

**Leigh**  
BUILDING  
PRODUCTS

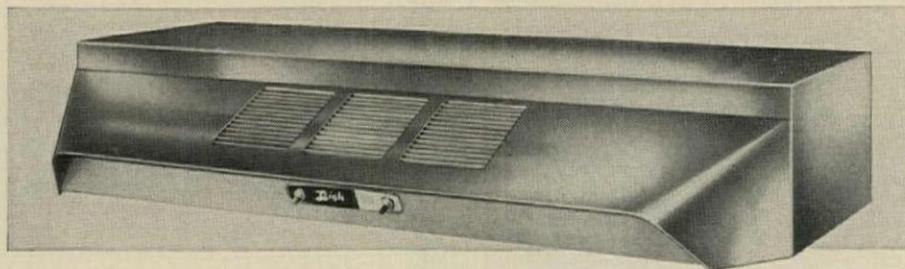
# Leigh NEWSLETTER

NEW PRODUCT NEWS ON THE EVER-GROWING LEIGH PRODUCT LINE

April, 1961

## TWO NEW LOW-COST HOODS ADDED TO LEIGH LINE!

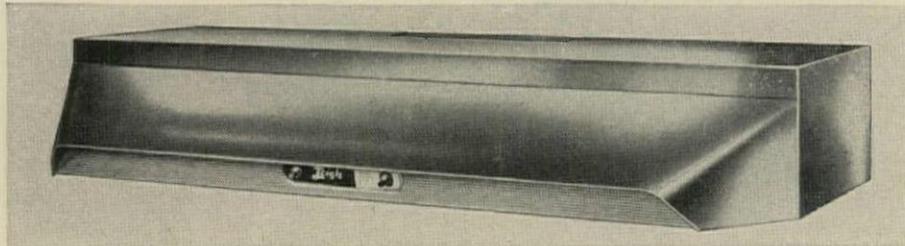
Duct-Free and Versa-Duct Hoods Feature Top Performance, Added Sales Appeal



### DUCT-FREE HOOD PRICED TO COMPETE WITH DUCTED HOODS

Besides offering all the built-in extras of more expensive models, the new Leigh Duct-Free Range Hood offers built-in savings to the builder. Equipped with a hi-pressure two-speed fan, two giant size filters and electric lighting, the Leigh Duct-Free hood is priced low enough to compete with ducted hoods in new construction or remodeling.

The new hi-pressure fan provides ample air movement. A two-speed switch on the attractive control panel actuates the fan for fast or whisper-quiet, normal removal of cooking vapors. At either speed, the vapors are drawn up through aluminum-mesh and activated charcoal filters to elimi-

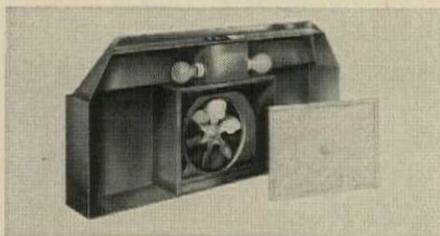
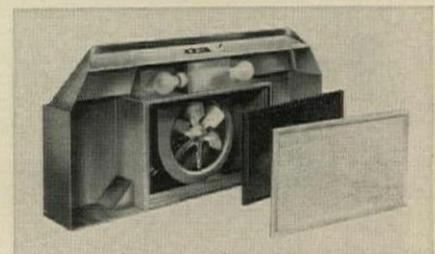


### VERSA-DUCT HOOD USES NEW HI-PRESSURE FAN

The Leigh Versa-Duct Range Hood features a new 2-speed, high pressure fan with extra power to overcome the static resistance of space-saving 3 $\frac{3}{4}$  x 10-in. duct. Designed for either vertical or horizontal exhaust (top and back knockouts are provided) the Versa-Duct permits a variety of duct installations to avoid wasted cabinet space in new home and remodeling work. Air delivery is guaranteed to exceed the requirements of the new F.H.A. Minimum Property Standards.

The attractive styling of the Versa-Duct catches the prospect's eye when on display in your model kitchen. Available in a choice of three finishes: stainless steel, coppertone and the new Leigh Tripl-Cote Chrometone—an acrylic finish resembling stainless steel but priced 42% to 46% lower. An attractive control panel contains fan and light switches.

Four sizes are available: 24, 30, 36 and 42 in. wide. Write for Bulletin 292-L containing complete information on the new Leigh Versa-Duct High Pressure Range Hoods.



### OTHER LEIGH HOODS COMPLETE THE LINE

Leigh Economy Range Hoods are recognized by builders for low initial cost and years ahead styling. All hoods in the Leigh line are shipped ready to install. The complete line of Leigh Range Hoods and Ventilating Fans is described in Bulletin 268-L. Write for a copy today!

### LEIGH WALL-CLOCKS STRESS EASE OF INSTALLATION

Leigh Built-In Electric Wall Clocks feature quality styling, surprisingly low prices and simple installation. Each clock comes packaged in a carton which acts as a template for either 9" or 11" installation. Write today for Bulletin 277-L giving full details on the complete line of Leigh clocks!

nate odors, grease and sooty smoke. The refreshed, clean air is then recirculated into the kitchen. A second switch on the panel controls lighting.

The Leigh Duct-Free hood is UL and CSA approved, and is available in four sizes—24, 30, 36 and 42 inches wide—with a choice of three finishes—stainless steel, coppertone, and exclusive Leigh Tripl-Cote Chrometone. Bulletin No. 292-L contains complete details. Write for a copy today!

### LEIGH BUILDING PRODUCTS 2561 Lee St., Coopersville, Michigan

Please send me data on the products checked below:

- Leigh Duct-Free and Versa-Duct Range Hoods
- Leigh Built-In Electric Wall Clocks
- Other Leigh Range Hoods

Name \_\_\_\_\_

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**LEIGH BUILDING PRODUCTS**, Division of Air Control Products, Inc., 2561 Lee Street, Coopersville, Michigan  
West Coast Warehouse: Leigh Industries (California), Inc., 649 S. Anderson, Los Angeles, California; Made in Canada by: Leigh Metal Products Ltd., 72 York Street, London, Ontario; Prairie Provinces Affiliate: Leigh-Tornel Distributors Ltd., 549 Archibald Street, St. Boniface, Manitoba.



“We proved to ourselves . . .  
Aluminum wire screening sells best!”

VIC ANDERSON, *President, V. E. Anderson Mfg. Co.*

“We tried insect screening made with plastic coated glass fiber in our aluminum jalousie doors and found that they did not have consumer, builder or dealer acceptance. We immediately switched back to the standard of the jalousie door industry—aluminum insect wire screening. We proved to ourselves that it sells best.”

**Aluminum wire screening is  
a Value Improving Product**

Aluminum wire screening used on aluminum windows and jalousie doors improves the value of every home on which it is installed. That's why we call it a Value Improving Product.

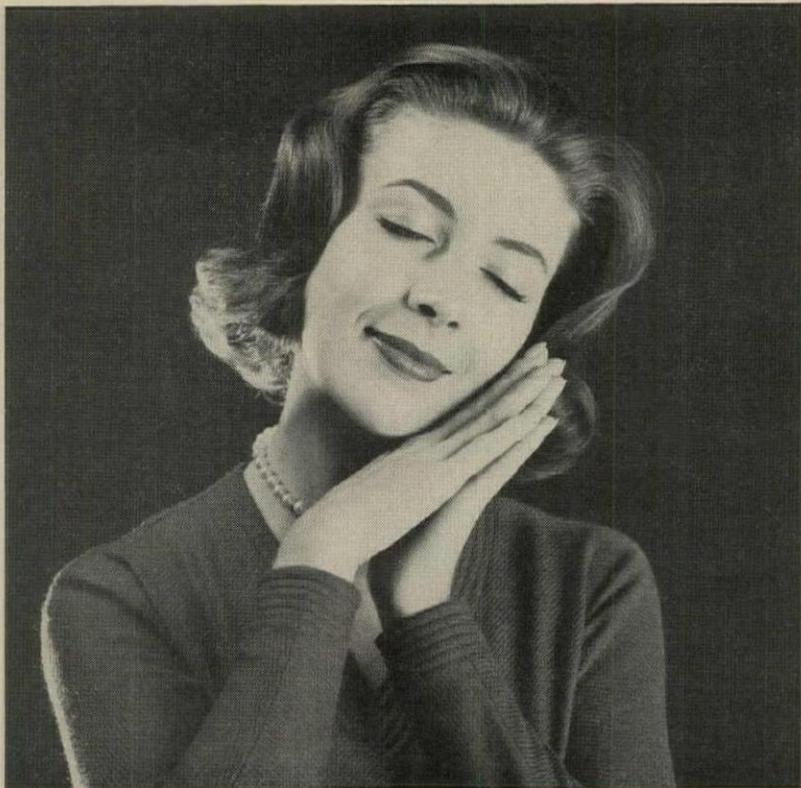
Value Improving Products made by customers of Kaiser Aluminum are part of an entire new program for select home builders based on the concept of added home value through the use of aluminum. Called the V. I. P. Home program, it offers everything you need to help you sell more homes—from national TV advertising support on “*Maverick*” and “*Hong Kong*” to a complete local merchandising package.

For full details on Kaiser Aluminum's V.I.P. Home program, write: Manager, Residential Business Development, Kaiser Center, Oakland, California. See HONG KONG and MAVERICK weekly on the ABC-TV Network.



\*Trademark Kaiser Aluminum & Chemical Corp.

**ALL ALUMINUM WIRE SCREENING . . . BEST OF ALL!**



## How to make a lady fall in love with a house . . .



1

**UNPLUG A RANGE UNIT.** Westinghouse Plug-Out design assures fast, easy cleaning. Then tell her the Safety-Matic unit won't let her foods burn, even if the pan boils dry. And fine-tuning controls let her dial the exact temperature she wants.



4

**OPEN A CABINET.** Westinghouse Heirloom maple finish wood cabinets add valuable storage space . . . as well as warmth and beauty . . . to any kitchen. And like all Westinghouse built-ins, they carry the famous Good Housekeeping Seal of Approval.



5

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2

**PULL OUT THE CENTER DRAWER.** It's so easy to use... see into... reach into. It keeps 21 lbs. of meat fresh 7 days without freezing... keeps vegetables crisp and store-fresh. And the new Westinghouse Center Drawer Refrigerator is Frost-Free throughout.



3

**ROLL OUT THE DISHWASHER.** Only Westinghouse has the Hot Water Booster to assure 140° water... and the hotter the water, the cleaner the dishes. She'll love the idea that "Power Soaking" means no scraping or rinsing... and that fan-forced hot air dries without streaking or spotting.



6

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... and what happens to her husband when she does!

*(You can be sure... if it's Westinghouse.)*

These appliances and Kitchen Cabinets, plus Heating & Air Conditioning, Wiring Devices, Micarta® Counter Tops, Apartment Elevators, are all available through one point of contact. See your Westinghouse residential sales manager or write Westinghouse Electric Corporation, Contract Sales Dept., Mansfield, Ohio.

**Westinghouse**

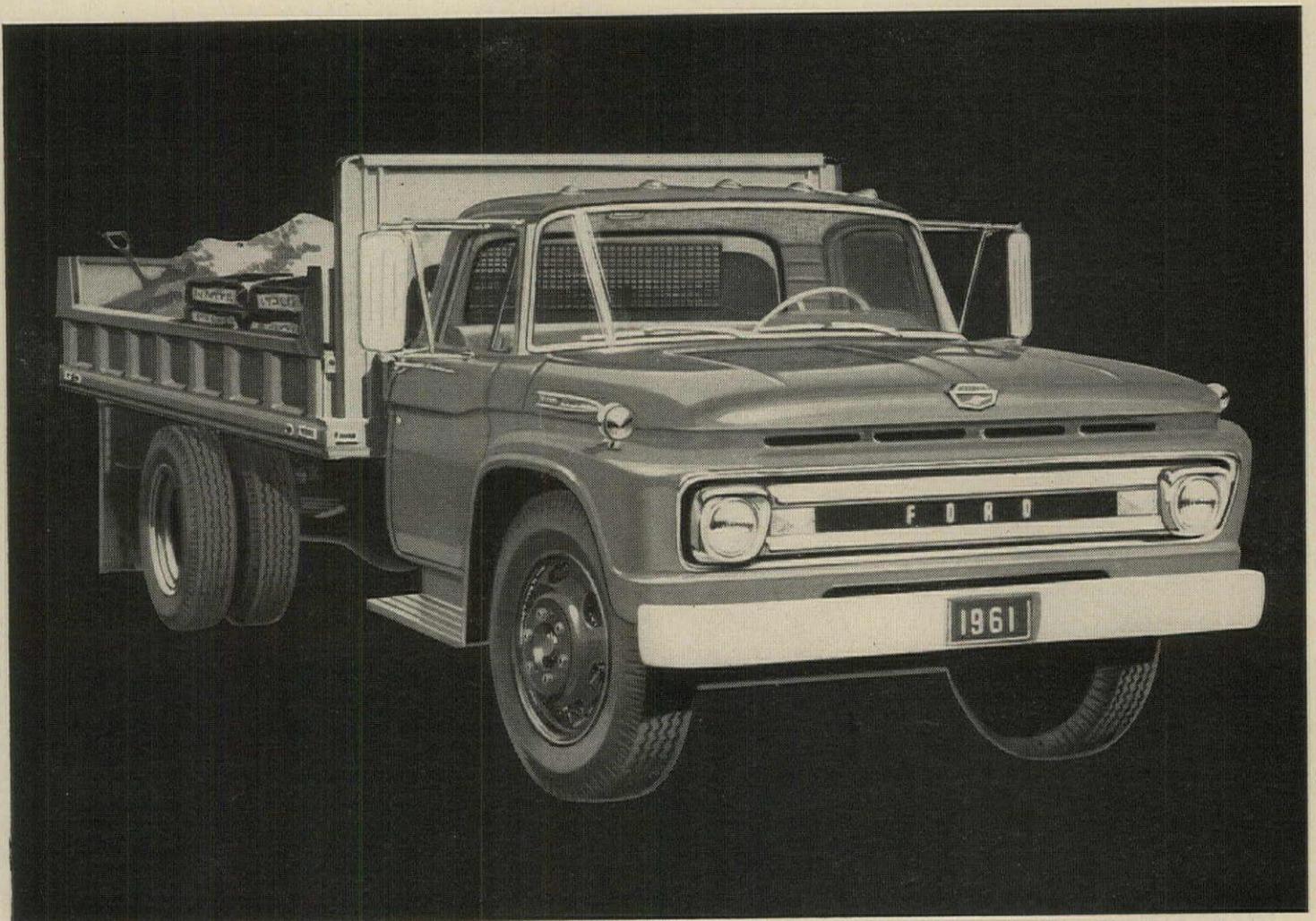


THE NEWEST REASON TO MAKE  
YOUR NEXT 2-TONNER A FORD

ALL-NEW FORD

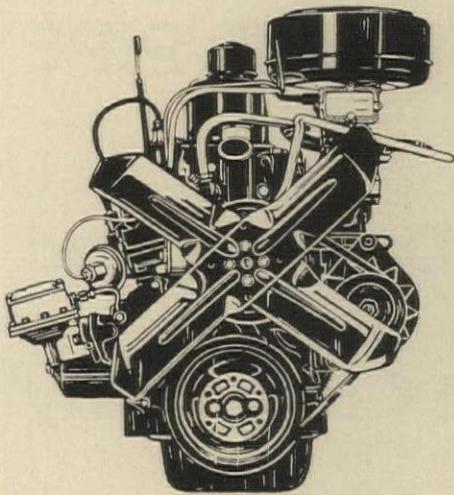
**BIG SIX**

262 <sup>CU.</sup> <sub>IN.</sub> TRUCK ENGINE



FORD DIVISION, *Ford Motor Company*,

New two-ton toughness! New stronger frame... huskier cab... rugged truck suspension that can give up to twice the tire life of other types!



Now, the rugged simplicity of a big 262-cubic-inch Six is combined with the dependability of heavy-duty, *exclusive-truck* engine design. In a grueling 40,000-mile test of reliability, Ford's new Big Six was pitted against its principal competitor in the 2-ton field. Result: Ford's new engine required fewer service adjustments. This means less time in the shop . . . more time on the job.

The new Big Six is one of *four* engine choices in Ford two-tonners for '61—including America's most popular truck V-8's. See your Ford Dealer. He will be glad to help you select the best engine for your job.

## SEVEN MORE REASONS

### WHY IT'S GOOD BUSINESS TO DO BUSINESS WITH FORD!

You save from the start with Ford's traditionally low prices! And your savings continue with lower operating and maintenance costs. These facts are documented by certified test reports from America's foremost independent automotive research firm. Ask to see these reports. They're on file at your Ford Dealer's.

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- 3. Exclusive 100,000-mile warranty** (or 24 months) on 401-, 477- and 534-cu. in. Super Duty V-8 engines. Each major engine part (including block, heads, crankshaft, valves, pistons, rings), when engine is used in normal service, is warranted by your dealer against

defects in material or workmanship for 100,000 miles or 24 months, whichever comes first. Warranty covers full cost of replacement parts . . . full labor costs for first year or 50,000 miles, sliding percentage scale thereafter.

- 4. Special fleet financing**, available for owners of two or more trucks, provides the opportunity to precisely tailor payments to your income patterns or depreciation schedules. Let your Ford Dealer explain how this fleet truck finance plan offers substantial savings and frees your working capital.
  - 5. 36 district offices** staffed with sales engineers and service specialists are on call for special truck problems. Working with both dealers and customers, these experienced truck men represent another extra step Ford takes to provide your continued satisfaction.
  - 6. Replacement parts depots** at 26 strategic locations across the country quickly supply needed parts from ample stocks. Ford's entire supply system is geared to give you faster service and reduce costly downtime . . . *wherever* you are.
  - 7. 6,800 Ford Dealers**, including 273 specialized Heavy Duty truck dealers, can keep your trucks ready to go wherever they go. From coast to coast, fast Ford service—gas and Diesel—is always close at hand.
- From Super Economy pickups to Diesel-powered tractors, you can now fill every truck need up to 76,800 pounds GCW with a modern, money-saving Ford Truck.

FORD  
TRUCKS  
COST LESS



SEE YOUR FORD DEALER'S "CERTIFIED ECONOMY BOOK" FOR PROOF!



*In service 4½ years and still going strong...*  
**QUALITY POLYETHYLENE PIPE**

## Helps Develop and Maintain a Community

In 1956, this rugged mountainous terrain in Calaveras County, Calif. was developed into a 225-lot resort community . . . with the help of quality pipe made of BAKELITE polyethylene. Four men required only four days to install the seven miles of polyethylene pipe that serves as the complete water system for Lilac Park—water mains as well as take-offs to every home.

Not only did the flexibility, light weight and ease of joining of polyethylene pipe provide a reduction in installation costs, but the exceptional toughness and corrosion resistance of pipe made of BAKELITE polyethylene have provided 4½ years of continuous, trouble-free water service . . . at working pressures as high as 80 psi and air temperatures as low as 8 deg. F.

This is typical of the long-term satisfactory performance you can expect from pipe made of BAKELITE Brand polyethylene. There are two reliable ways of recognizing and identifying quality pipe:

- This Trefoil Tag found on coils or lengths of flexible polyethylene pipe indicates that the manufacturer has used a 100% virgin material developed by Union Carbide Plastics Company specifically for use in making flexible pipe of the highest quality.

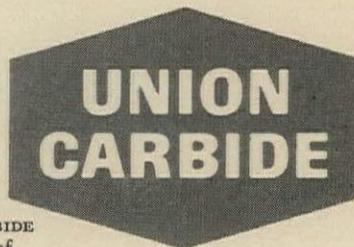


Pipe made from quality polyethylene bears the National Sanitation Foundation Seal of Approval which can be used only on pipe made of virgin polyethylene as tested and approved in conformance with commercial standard CS 197-60.



Specify pipe made of BAKELITE Brand polyethylene and be sure it bears these two sound guides to reliability. For the names of manufacturers who supply it, write Dept. HP-68D, Union Carbide Plastics Company, Division of Union Carbide Corporation, 270 Park Avenue, New York 17, New York.

Polyethylene pipe installed in Lilac Park manufactured by Amco Plastic Pipe Co., San Leandro, Calif.



BAKELITE and UNION CARBIDE are registered trade marks of Union Carbide Corporation.

Newest in **electric** heating and cooling

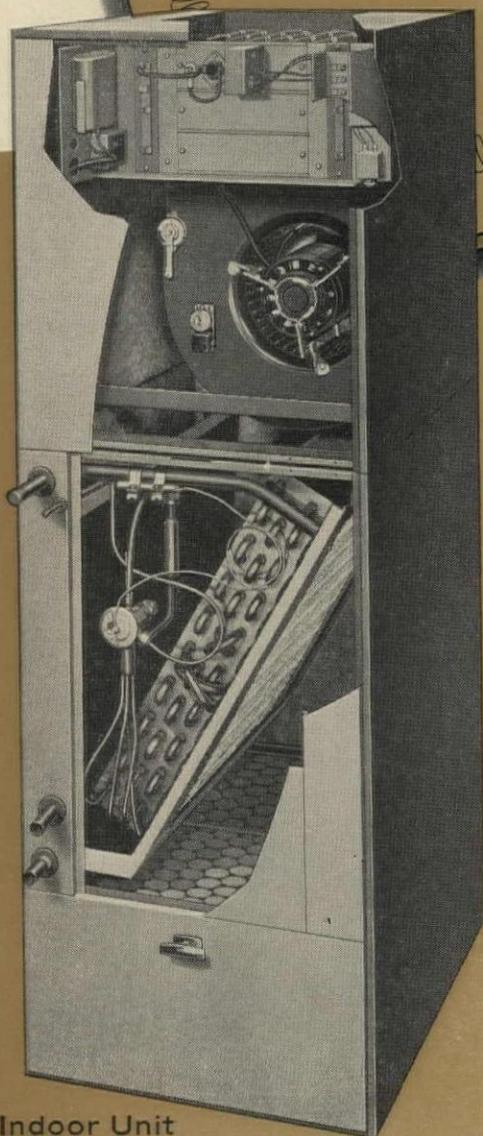
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ISSUED BY  
TRAVELERS  
INDEMNITY CO.  
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CONN.

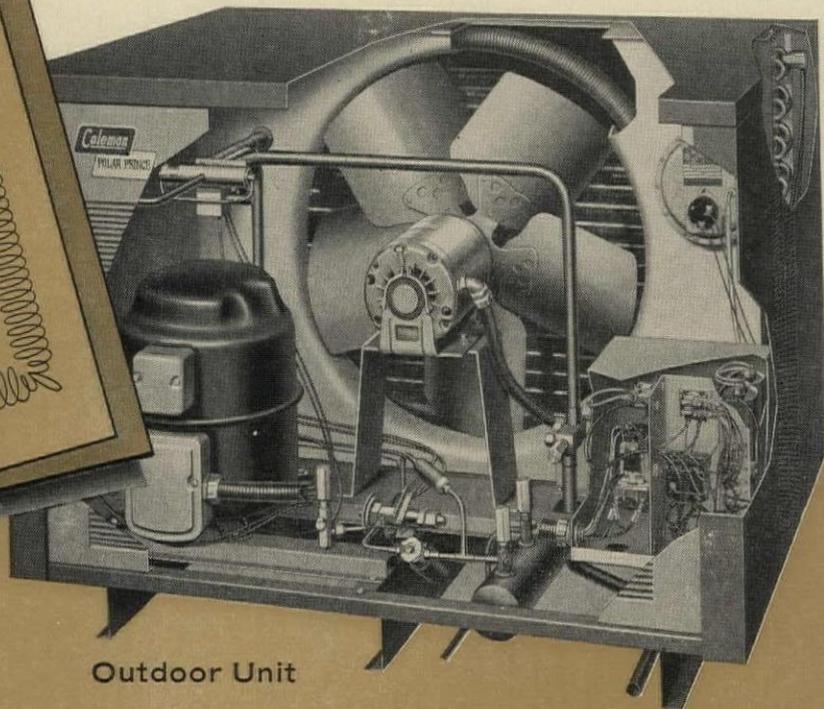
Exclusive  
**\$500**

**Coleman**

**WARRANTY  
BOND**



Indoor Unit



Outdoor Unit

*Engineered with Precision  
in the Coleman Tradition*

Now, Coleman takes the proved principle of air-to-air heating and cooling and expresses it in a compact, all-electric Heat Pump. COOLS in summer. HEATS in winter. In all seasons it assures maximum performance and economy... using only electricity and air.

Twin components are pre-engineered for simple, low-cost installation. Indoor unit is "multi-positional"—fits any type of air delivery system.

It's America's most advanced, most dependable Heat Pump! And as a sales clincher, you have the Coleman warranty bond—the industry's **ONLY** bond-backed guarantee. Ask your Coleman distributor or write—

**The Coleman Company, Inc. / Wichita 1, Kansas**

*Coleman builds the most complete and only bonded line of heating and air conditioning. Investigate!*



"NO  
QUESTION  
ABOUT IT..."

# THE ANDERSEN LABEL ON THE WINDOWS IS HELPING SELL OUR HOMES"

*"The Andersen name is visible proof of the high quality in our homes...and customers recognize it"*

One of the Chicago area's leading builders, Laurance Mills Jr., of Laurance H. Mills and Sons Inc., started promoting quality features long ago. Mr. Mills says, "Home buyers today look for quality more than ever before. Andersen Windows are one of the ways we give quality."

"Many prospects have already heard of Andersen Windows and it is easy to demonstrate to them the quality of this fine product. I like the new Andersen program of featuring the name because it helps me show my

customers we are giving them more for their money. I can say definitely that Andersen Windows are helping us sell our homes."

Isn't it time you put America's best known, most wanted window to work for you in your homes? In the home buyer's mind, the Andersen name is one good sign of high quality throughout the house. And we're stressing this fact in big full-color, advertisements in *Life* and *Better Homes & Gardens* magazines all through the year.

Make a note to ask your lumber and

millwork dealer for more information about the new Andersen Window merchandising program.



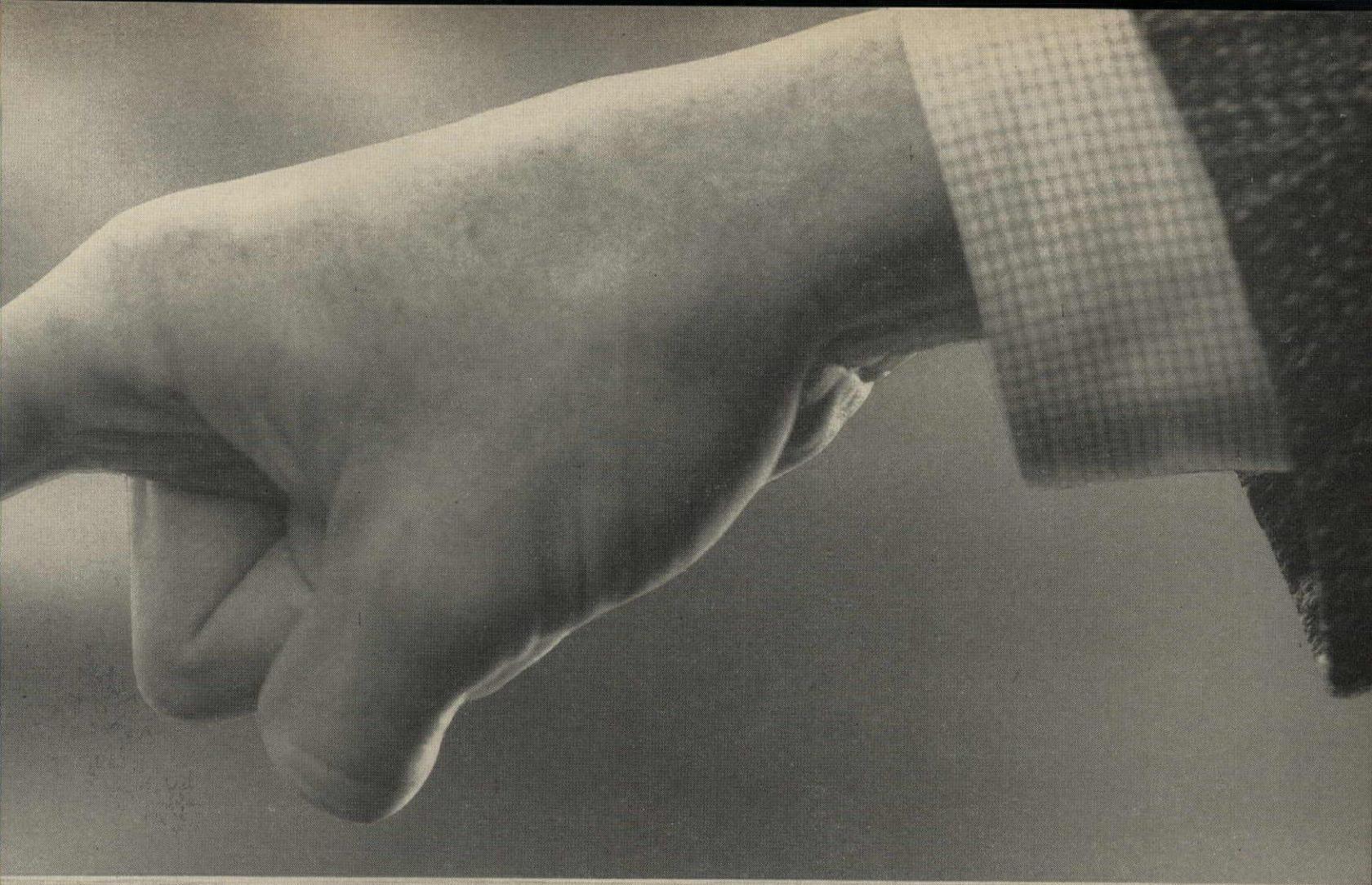
## **FREE NEW 1961 HOME PROMOTION KIT**

Includes newspaper ad mats, counter cards, promotional literature, maintenance manuals, and many other helpful selling tools.

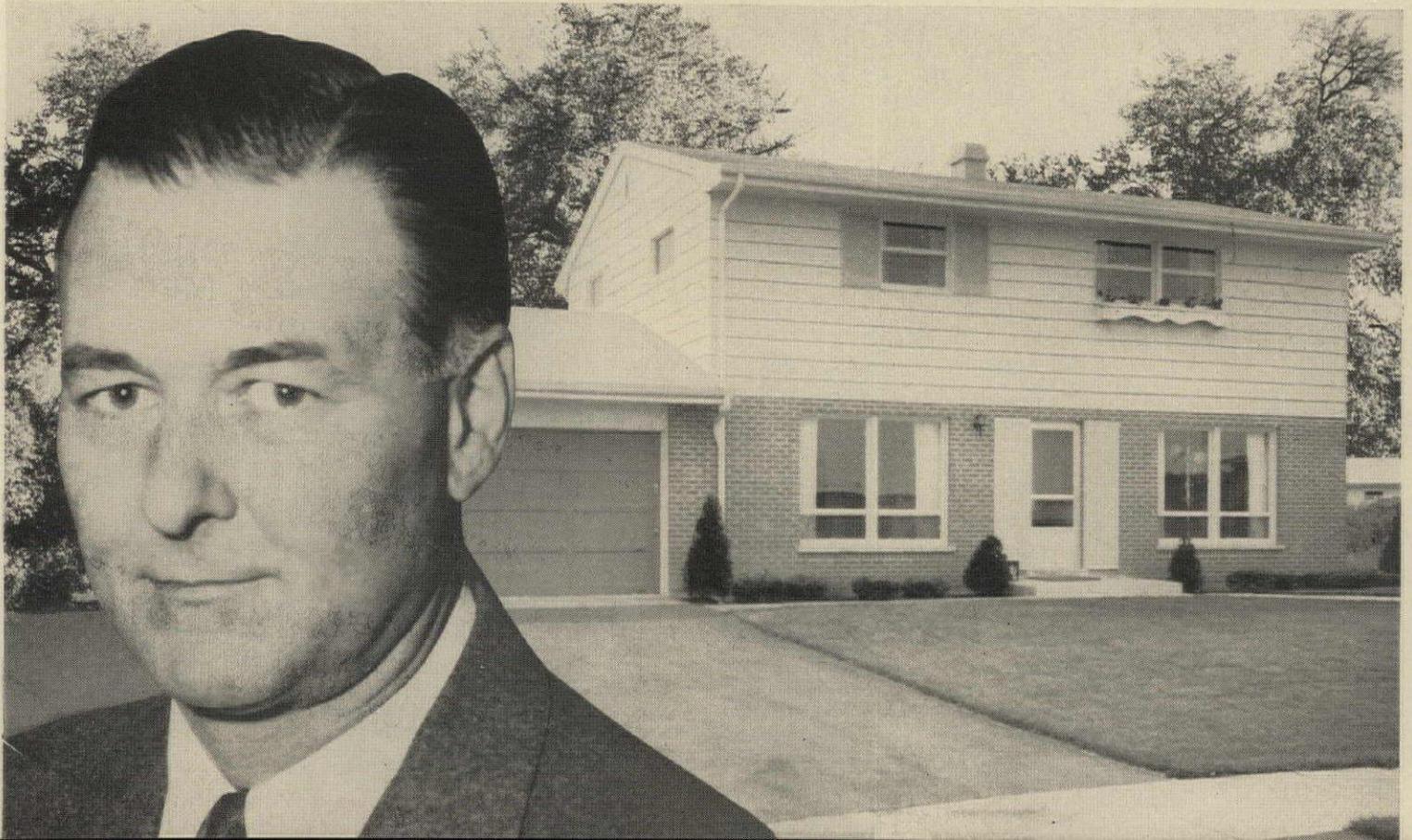
NEW ANDERSEN LABELS ALSO INCLUDED.

# Andersen Windows

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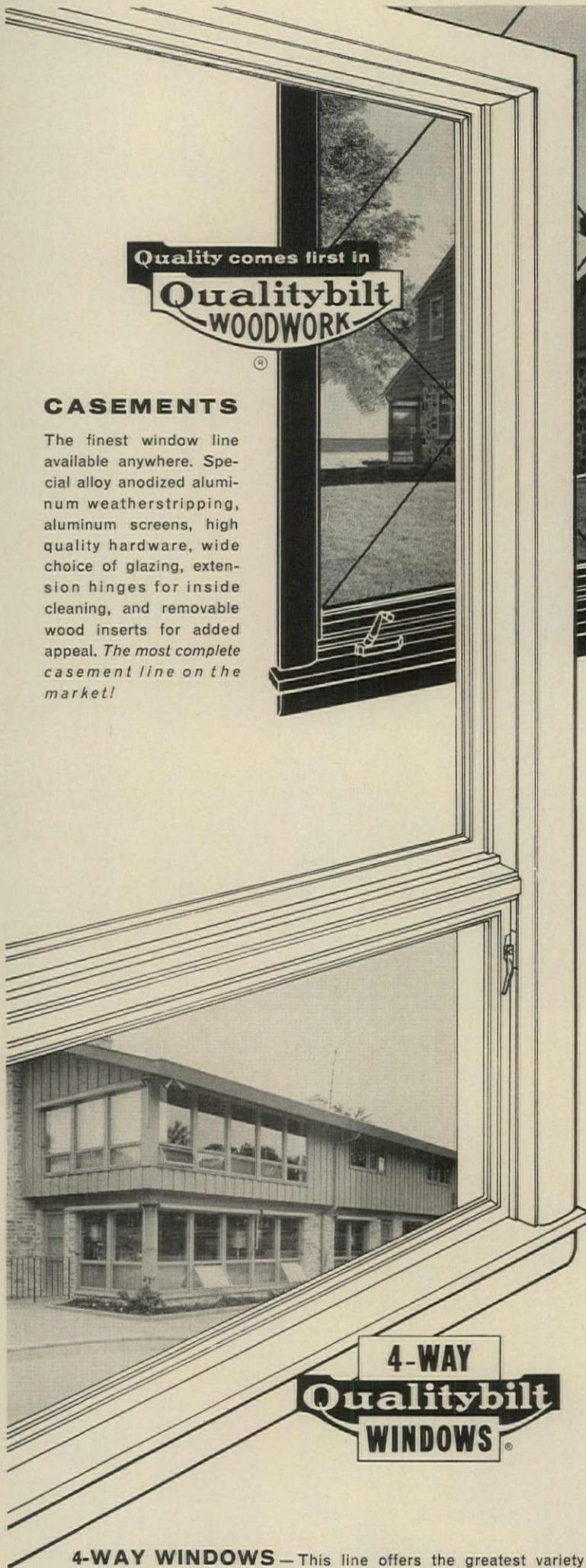
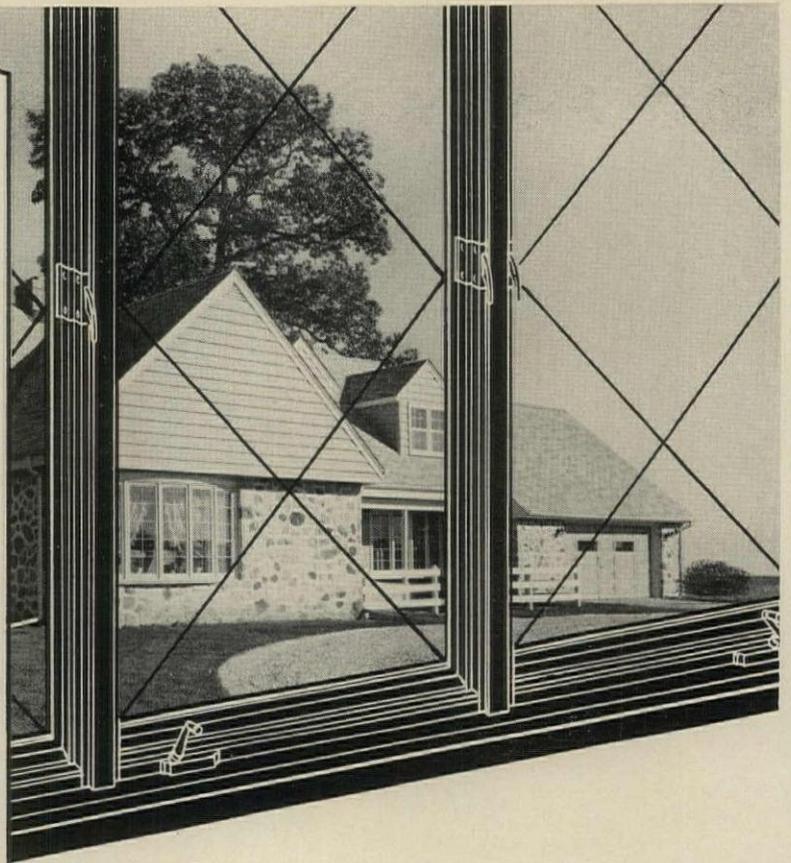
Mr. Laurance H. Mills Jr., of Laurance H. Mills and Sons Inc., one of the Chicago area's leading builders standing in front of one of the quality homes in a new Mills development. This home is in Waycinden Park West, northwest of Chicago.



Quality comes first in  
**Qualitybilt**  
 WOODWORK

**CASEMENTS**

The finest window line available anywhere. Special alloy anodized aluminum weatherstripping, aluminum screens, high quality hardware, wide choice of glazing, extension hinges for inside cleaning, and removable wood inserts for added appeal. *The most complete casement line on the market!*



**PICK A PLAN — ANY PLAN!**

***Then make it look best with Qualitybilt Wood Windows***

We invite you to compare Qualitybilt windows, feature by feature, with any other window line on the market. We're sure you'll agree that you can't do better quality-wise or price-wise. Then note the completeness of the line! The right style . . . in the right size . . . is there to make yours the best-looking, easiest-selling home on the market. Don't settle for less. Your future plans need the advantages Qualitybilt windows can offer.

**FARLEY & LOETSCHER MFG. CO.**  
 DUBUQUE, IOWA

**4-WAY WINDOWS** — This line offers the greatest variety of window treatment. Units can be used separately, or combined for an infinite variety of distinctive effects. Use them as Awning, Hopper, Fixed, or Casements. Wide choice of glazing and hardware to fit any price home. Divided light inserts add to their flexibility! Full 1-3/4" thick sash for added rigidity!



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APRIL 1961

# House & Home

Published by TIME Incorporated

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**P. I. Prentice**, editor & publisher  
House & Home



**The big news from this Round Table on Electrical Living is:**

## **1 | A breakthrough for the conditioned house and 2 | half a dozen other major advances**

So much has happened in the electrical industry in the last 12 months—and so much is happening right now—that you would be way behind the times if you based your thinking on last year's state of the art.

Here is the gist of what the panel of experts (left) said in their two day meeting: The cost of cooling has been cut drastically (details *p 106*) . . . all types of electric heating have been improved (*p 110*) . . . more utilities are offering preferential rates (*p 108*) . . . the change in kitchen appliances is more than skin deep (*p 118*) . . . lighting is better—in several ways (*p 124*) . . . new wiring devices save the time of high-priced electricians (*p 130*) . . . and at last technical and psychological progress is being made on underground wiring (*p 138*) . . . all this and much, much more.

*So much has happened—and so much is happening—that more than ever the house that takes advantage of today's new technical advances is a house that takes advantage of today's best sales appeals.*



## PART I

# THE CONDITIONED HOUSE

**The No. 1 news about the conditioned house is:**

### **Cooling now costs so little you can hardly afford not to sell it**

New factory-assembled cooling units, plus keen competition for business, are making central air conditioning for new houses a bargain wherever competent installers are available.

Equipment prices for improved equipment have been cut an average of 15% or more. Necessary installation time has been cut still harder, so installation costs should have dropped even more than equipment prices unless local codes, utility requirements, or union restrictions interfere.

Four years ago (Sept '57) a HOUSE & HOME Round Table agreed that adding cooling to a good forced-air heating system during construction should not cost a merchant builder more than \$600 extra for two tons or \$900 extra for three tons. Today even one-at-a-time builders can sometimes get bids close to these figures, and many merchant builders are doing much better.

*Specifically, where adequate ducts, adequate blowers, and adequate controls are already provided for heating, many merchant builders are adding two tons of cooling for less than \$500 and big or big-name builders are doing a lot better than that.* Except in Florida and the Gulf states, two tons (24,000 Btuh) is usually enough cooling for a 1,400 sq ft house provided it is well oriented, well overhung, and well insulated up to the standard recommended by the industry (see p 114). Three tons should cost from \$100 to \$200 more than two tons.

"At these prices I don't see how I can afford not to air condition my houses this year," says Berea (Ohio) Builder Bob Schmitt, past chairman of the NAHB Research Institute. "Two years ago I was quoted as high as \$1,100 installed for two tons in my smaller houses, \$1,500 for four tons in my two-furnace 2,500-sq-ft houses. But now my heating contractor has bid only \$325 for adding two tons of cooling in my smaller houses, which would mean only \$650 extra for my biggest models!"

At prices like these, cost becomes much less important than the quality of the equipment, the competence of the installation, and the assurance of good prompt service and maintenance when, as, and if service or maintenance is needed. The shortage of competent installers and servicemen is now the No. 1 problem and builders are finding it well worth while to pay a little more to play safe on satisfaction.

The big cut in cost followed the introduction of factory prewired and precharged (with refrigerant gas) air-cooled units, like the slip-in package featured in NAHB's Washington research house in 1958. Says Ralph Johnson, research director of NAHB: "I don't see why installation should cost even \$50 for adding on these package units." Compare this with installation costs ranging from \$138 to \$453 in NAHB's Air Conditioned Village in 1953.

All today's good cooling units are not only lower priced

but quieter and sturdier, partly because most good compressors now have better controls to protect them against overloads, partly because they have been redesigned to minimize the danger of forcing a non-compressible liquid against a valve designed to take only the pressure of compressible gas. Add-on units require no additional floor space.

The under-\$500-extra installed price for adding two tons of cooling to the forced-warm-air systems of volume-built homes was confirmed to HOUSE & HOME by 16 leading manufacturers—Airtemp, American-Standard, Armstrong, Carrier, Coleman, Delco, Fedders, GE Janitrol, Lennox, Majestic, Mueller Climatrol, Trane, Westinghouse, Williamson, and York.

Lowest prices quoted were for self-contained package units slipped into the ducts just over or under a furnace located

on the outside wall (so the heat can be exhausted right outdoors) or with the condensing unit in an open attic (which can be noisy and shake the house unless it is well installed). Says Ralph Johnson: "These self-contained add-on installations can be just as satisfactory—but not all of them are." Remote systems with the condensing unit outside the house cost \$50 to \$75 extra.

Some manufacturers put the breakpoint for getting prices under \$500 at 50 houses a year; a few said these prices could hold for builders of as few as 20 houses, provided the houses were all roughly the same. Builders of less than 20 almost-identical houses should figure on paying at least \$100 more; one-at-a-time builders and all builders whose houses are so different that each system must be engineered separately should budget up to twice as much.

### At prices like these manufacturers hope for a real breakthrough in new houses soon

Last year less than 200,000 homes, new and old combined, got central air conditioning—perhaps as few as 150,000. If half these 200,000 were new and half were old, that means not more than one new home in twelve put in central cooling; not more than one existing home in 400!

Nine years ago HOUSE & HOME joined Builder Dick Hughes (later president of NAHB) in predicting that by 1960 almost all new homes would be air conditioned. "Your prophecy was true enough, but your timing was too optimistic," says one big manufacturer. "We needed more time to get our costs down; we needed more time to train installers; we needed more time to improve our product to make it more nearly trouble-free." He might have added: "It took time to sell air conditioning to FHA and the lenders, for there is not much use trying to sell anything to builders that FHA and the lenders won't finance, and there was no chance of selling air conditioning to many builders until FHA stopped requiring \$1,000 more after-tax income to cover the estimated \$100-a-year operating cost of cooling." (See H&H, Jan '58.)

But now most manufacturers think their prices are so low and their product so improved and so easy to install that a real breakthrough in sales is near, *provided the builders pass their new low costs on to homebuyers*. All of them expect the breakthrough to come first in built-for-sale new houses, because:

1. Central cooling costs less than half as much to include in a new house along with the heating system as it costs to add to an existing house.

2. Central cooling costs much less to include in a volume-built house than it costs to add one-at-a-time—and most new houses are volume-built.

3. Air conditioning costs for new houses can be cut still

lower by designing and orienting them for cooling economy, and new houses cost much less to insulate (for details on orientation and insulation, see p 114).

4. Air cooling in a new house can be financed under the mortgage over 25 years at low interest, whereas air conditioning in an existing house must either be paid for in cash or financed with short-term high-interest consumer credit.

5. Air cooling is more important for new houses, because it may take years for trees to grow up around them to help keep them cool.

6. The shortage of competent installers is a built-in limitation on how many homes can get central air conditioning in any given year. Cooling takes much less time to install in a new house along with the heating, so installers would have time to install many more units in new homes.

7. FHA recognizes, in the words of Commissioner Mason, Commissioner Zimmerman, and now Commissioner Hardy, that "most houses built without air conditioning will soon be obsolescent."

8. FHA district offices are now under instructions from Washington that they need require only \$250 additional income to buy a house air conditioned for \$500 (whereas three years ago FHA was requiring \$2,000 more after-tax income to buy a house air conditioned at a cost of \$1,000).

9. (And this may be the most important reason of all:) Now that the shelter shortage is over and used homes cost less to buy, builders are running scared and looking for new sales appeals to meet old-house competition. Air conditioning is the most important new feature to dramatize the claim that "yesterday's house is as obsolete as yesterday's car."

*When housing sales fell off 18% last year, residential air conditioning sales climbed 12%!*

### Good installation is critical: here are some pointers for getting it done right

The best insurance is to pick a competent installer who 1) uses only equipment with the Certification Seal of the Air Conditioning & Refrigeration Institute (now required by the FHA-MPS) and 2) is willing to back up his installation by giving owners a service and maintenance contract.

The design of the duct system and equipment placement of course depends a great deal on the house size and plan, but here are some of the basic rules (from manufacturers' manuals) to assure quiet, low-cost, and trouble-free operation:

1. Supply and return ducts should be insulated and separated.

2. Ducts should be sized for the cooling air, not the heating air; be big enough to move 350 cfm of air per hp of condenser capacity at an air velocity not to exceed 500 fpm at the register (higher velocities are too noisy).

3. Return air grilles for a 2-ton unit should be at least 330 sq in; for a 3-ton unit, at least 500 sq in.

4. To insure minimum noise, a return air duct should

have at least one elbow, be about 10' long.

5. There should be dampers in the ducts to each room to balance the cooling system. They should not have sharp edges which create noise.

6. The condenser unit outside the house should be located away from bedroom windows, mounted on vibration-absorbing mounts, on a concrete slab pitched slightly for drainage.

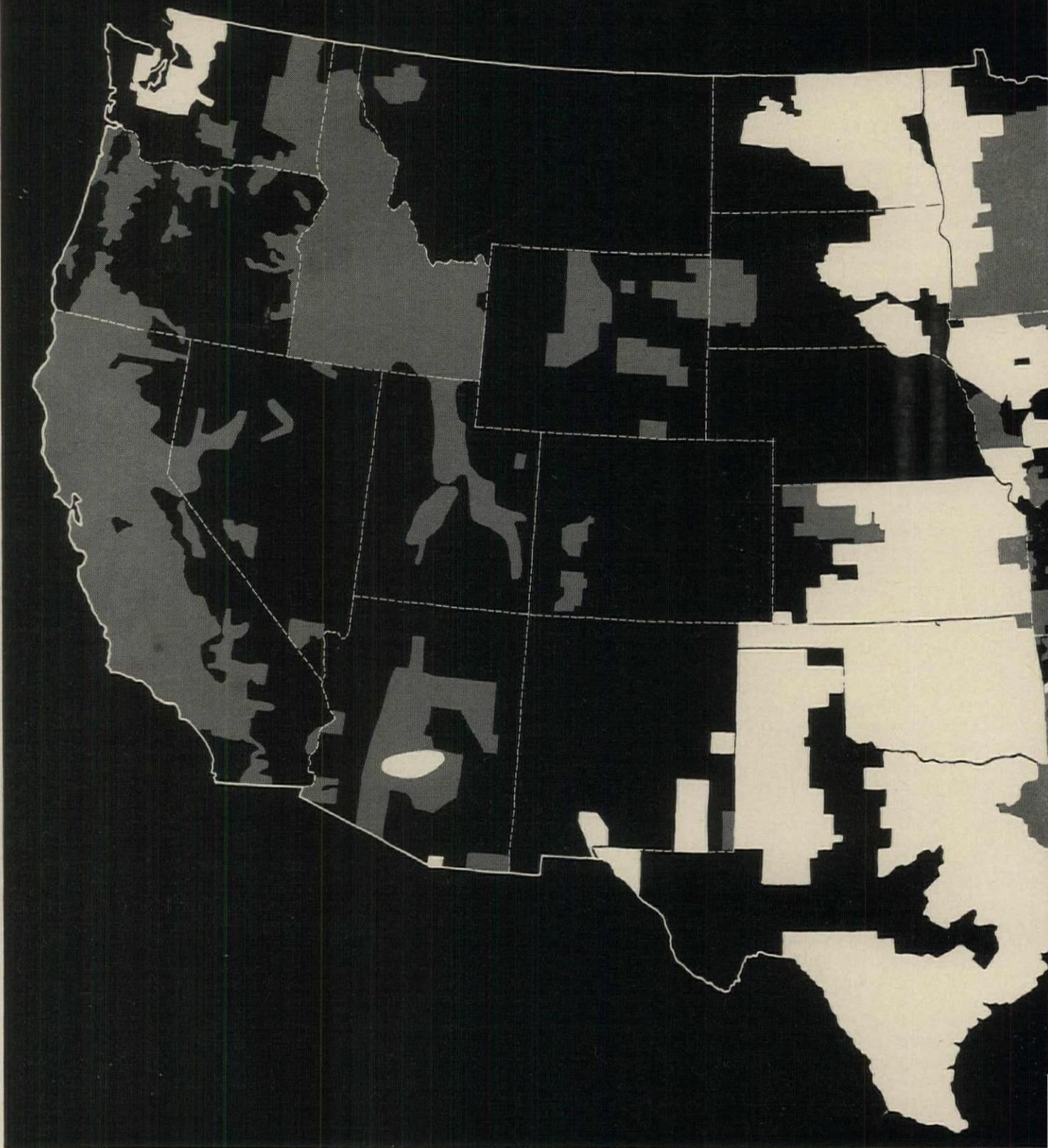
7. For most efficient operation, the cooling thermostat should be located for greatest exposure to outside conditions.

8. Refrigerant lines connecting the condenser and the indoor coil should be wrapped in 1" insulation and vapor sealed. When they run outdoors, they should be wrapped in weather-proofing material and coated with asphaltic paint.

9. Refrigerant piping should be isolated from supporting structures and walls by vibration-absorbing material, to prevent noise transmission and damage to piping.

10. A condensate drain should run from the front of the evaporator coil to a floor drain. This drain should never connect directly to the sewer, to prevent gas back-up.

*continued*



**The No. 2 news about the conditioned house is:**

### **The number of utilities quoting inducement rates is growing fast**

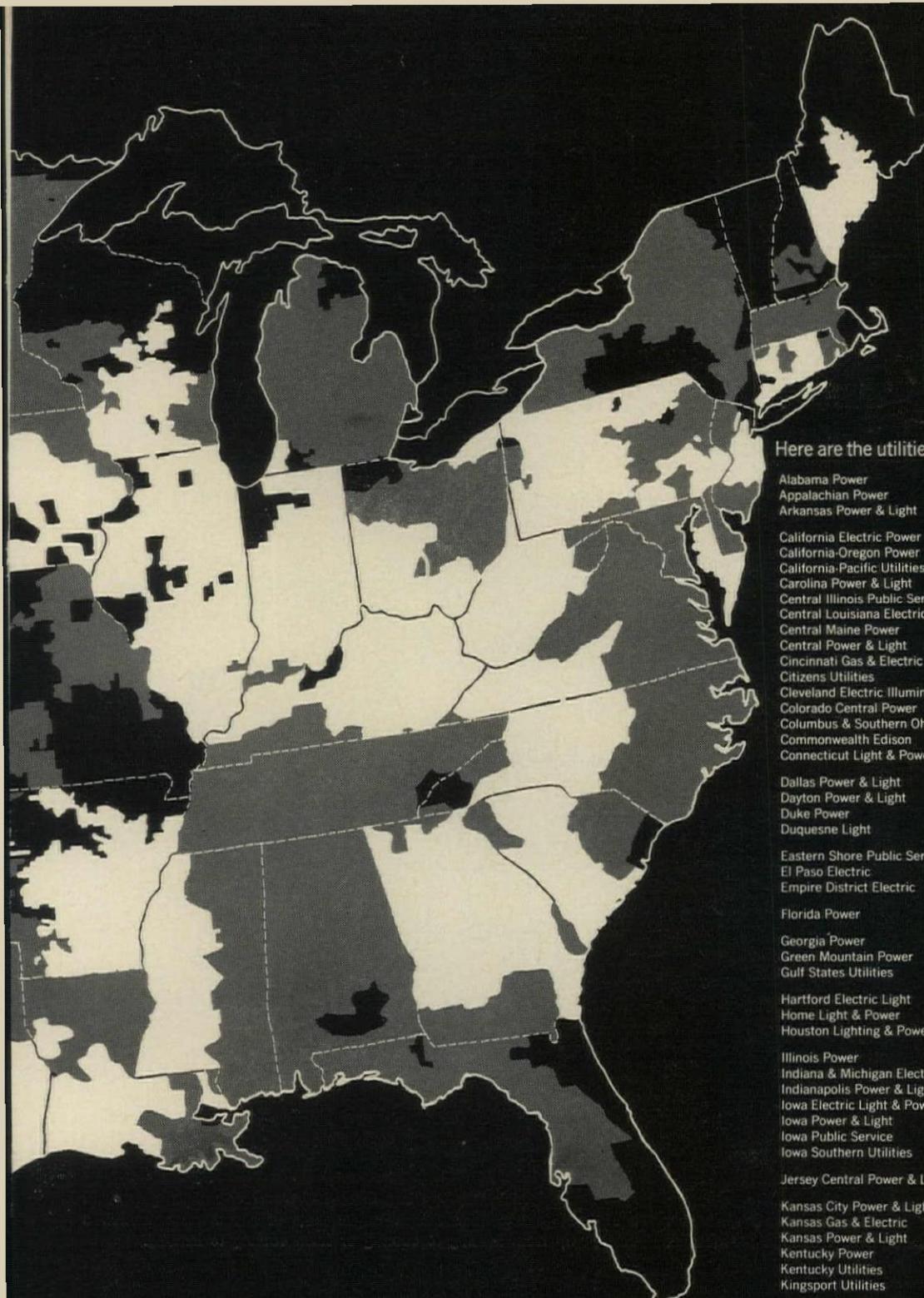
Compared with only two years ago, four or five times as many utilities are offering preferential rates to encourage electric heating and cooling. So reported the utility experts.

The areas in white on the map above are the areas served by the nearly 100 utilities with such inducement rates.

The form of this "discount rate" varies widely among utilities. But the rate structures are generally set up to charge the "normal" rate for the first, say, 200 or 300 kwh per month—enough power to serve the usual lighting, appliance, and general-purpose loads; then charge the lower preferential rate for any additional power—the power used by heating and cooling equipment.

The preferential rate utilities charge varies widely across the country—from about .7¢ in TVA areas to about 2¢ in high fuel-cost areas like New England. Average: about 1.5¢.

Many other utilities—while they don't offer preferential rates—are now actively promoting electric heating. The areas these utilities serve are shown on the map in grey. Said Bill Loeber of Westinghouse: "When I started out, in January of 1959, to push our Total Electric Home Program, I thought we might be lucky to find 20 or 25 utility companies to work with. But it wasn't long before we were working—as we are today—with 90 utility companies, all actively promoting electric living."



Here are the utilities that offer preferential rates:

- |                                   |                                     |
|-----------------------------------|-------------------------------------|
| Alabama Power                     | Madison Gas & Electric              |
| Appalachian Power                 | Metropolitan Edison                 |
| Arkansas Power & Light            | Minnesota Power & Light             |
| California Electric Power         | Mississippi Power                   |
| California-Oregon Power           | Mississippi Power & Light           |
| California-Pacific Utilities      | Missouri Power & Light              |
| Carolina Power & Light            | Monongahela Power                   |
| Central Illinois Public Service   | Montana Power                       |
| Central Louisiana Electric        | New England Electric System         |
| Central Maine Power               | New Jersey Power & Light            |
| Central Power & Light             | New Orleans Public Service          |
| Cincinnati Gas & Electric         | Niagara-Mohawk Power                |
| Citizens Utilities                | Northern Indiana Public Service     |
| Cleveland Electric Illuminating   | Northern States Power               |
| Colorado Central Power            | Northwestern Public Services        |
| Columbus & Southern Ohio Electric | Ohio Power                          |
| Commonwealth Edison               | Oklahoma Gas & Electric             |
| Connecticut Light & Power         | Orange & Rockland Utilities         |
| Dallas Power & Light              | Otter Tail Power                    |
| Dayton Power & Light              | Pacific Gas & Electric              |
| Duke Power                        | Pacific Power & Light               |
| Duquesne Light                    | Pennsylvania Electric               |
| Eastern Shore Public Service      | Philadelphia Electric               |
| El Paso Electric                  | Public Services Electric & Gas      |
| Empire District Electric          | Public Services of Indiana          |
| Florida Power                     | Public Services of Oklahoma         |
| Georgia Power                     | Puget Sound Power & Light           |
| Green Mountain Power              | St. Joseph Power & Light            |
| Gulf States Utilities             | Salt River Project                  |
| Hartford Electric Light           | San Diego Gas & Electric            |
| Home Light & Power                | Savannah Electric & Power           |
| Houston Lighting & Power          | South Carolina Gas & Electric       |
| Illinois Power                    | Southern California Edison          |
| Indiana & Michigan Electric       | Southern Nevada Power               |
| Indianapolis Power & Light        | South Indiana Gas & Electric        |
| Iowa Electric Light & Power       | Southwestern Electric Power         |
| Iowa Power & Light                | Southwestern Public Service         |
| Iowa Public Service               | Tampa Electric                      |
| Iowa Southern Utilities           | Texas Electric Services             |
| Jersey Central Power & Light      | Texas Power & Light                 |
| Kansas City Power & Light         | Tucson Gas, Electric, Light & Power |
| Kansas Gas & Electric             | Union Electric                      |
| Kansas Power & Light              | Union Light, Heat & Power           |
| Kentucky Power                    | United Illuminating                 |
| Kentucky Utilities                | Utah Power & Light                  |
| Kingsport Utilities               | Washington Water Power              |
| Louisiana Power & Light           | Western Light & Telephone           |
| Louisville Gas & Electric         | Western Massachusetts Electric      |
|                                   | West Penn Power                     |
|                                   | Wheeling Electric                   |
|                                   | Wisconsin Power & Light             |

**UTILITIES OFFERING INDUCEMENT RATES** for electric heating and cooling serve all the areas shown here in white. The areas in grey are

served by utilities which—while they do not offer preferential rates—are active in promoting the all-electric house.

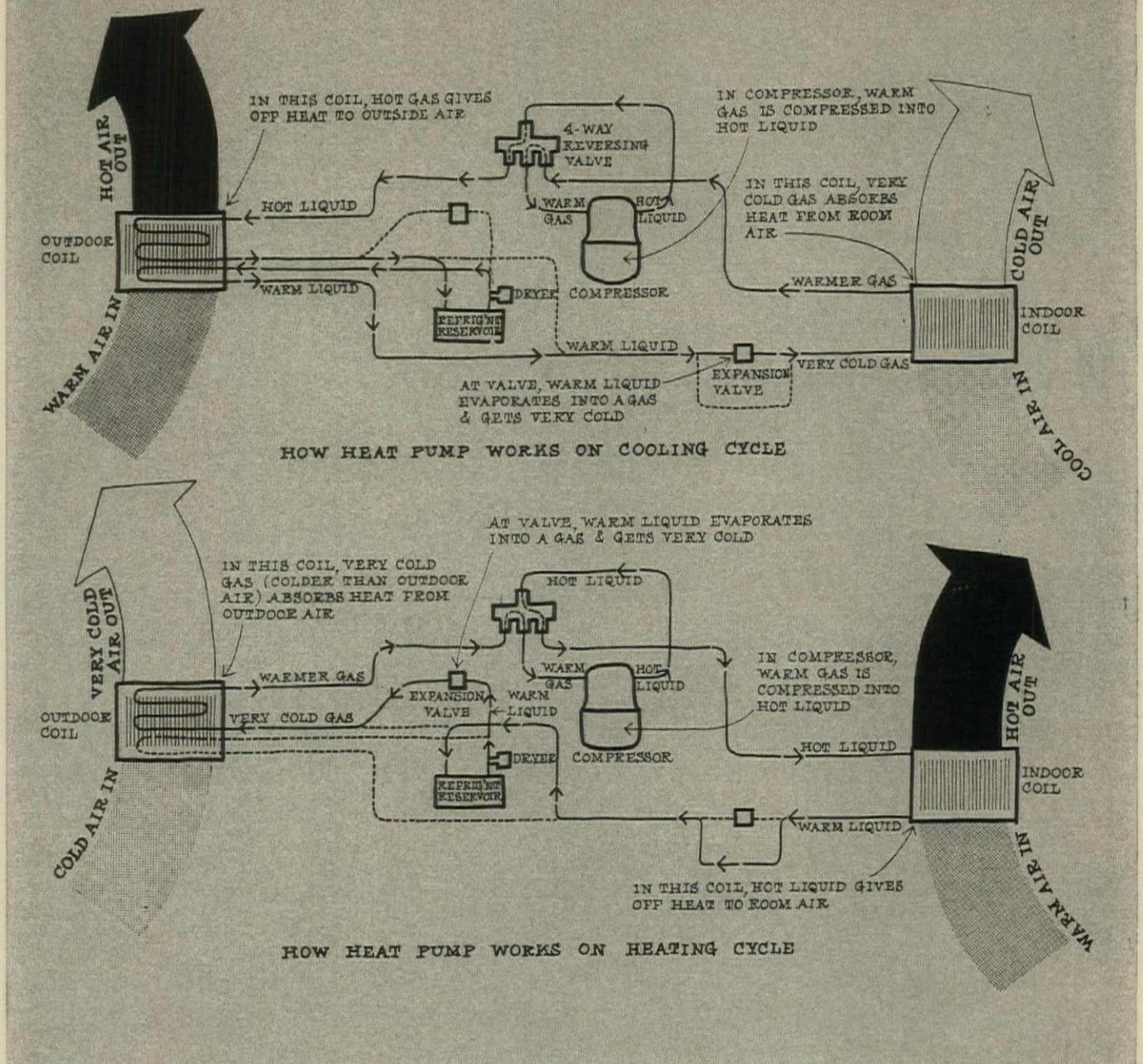
The utilities' inducement rates and promotional work have spurred the building of electrically heated houses. Said Philip Sporn of American Electric Power Service Corp: "There are 850,000 electrically heated homes today, and 250,000 of them have been added to the inventory since January 1960. In many parts of the country, four of every ten new homes are electric. We expect to make that figure much higher."

Do the new inducement rates mean electric heating is now cheaper than competitive systems? The answer is still no. Said one panelist: "As far as the consumer is concerned, I think all of us have to face up to the cost problem and not pussyfoot. If it costs a little bit more to heat and cool elec-

trically, we ought to admit it costs a little bit more. We can sell the benefits of electric heating . . ."

But the high electric rate in many high-fuel-cost areas doesn't mean electric heating and air cooling are less competitive than in areas with low electric rates. For almost everywhere electricity is expensive, so are other fuels. Explained Howard Cadwell of Western Massachusetts Electric: "In our area, gas companies have to bring their product several thousand miles. Therefore it sells for about \$1.65 per 1,000 cu ft. So, while our electric rates are 20% to 30% higher than Midwest rates, they are more competitive than in any area except TVA territory or the Northwest."

continued



**HOW A HEAT PUMP WORKS** is shown in this drawing. Heat pumps can be either split or self-contained units. A split unit has a fan and a coil inside the house; a fan, a compressor, and a coil on the outside.

A self-contained heat pump is a through-the-wall or attic unit with all equipment in one box. Simple adjustments of a few valves switch a heat pump from heating to cooling or from cooling to heating.

### The No. 3 news about the conditioned house is:

## Heat pumps are the cheapest way to heat and cool electrically

"For heating, the heat pump has an important advantage over other forms of electric heat: depending on outdoor temperature, it delivers up to three times as much heat per unit of electrical energy as a furnace or baseboard system. Cooling costs are the same as with any good air conditioner."

So said Carrier Corp's Bill McGrath. He added: "Because the installed cost of a heat pump is now roughly comparable to the cost of a furnace plus air conditioning, it's no wonder the heat pump is becoming so popular in warmer climates where winter temperatures usually stay above 32F. You can now install a two-ton heat-pump system in Tampa for as little as \$700. In cooler areas—say, from North Carolina north—a two-ton unit will cost you around \$1,000. Three-ton units cost about \$200 more. And split-system heat pumps range from \$1,500 to \$1,700 for three-ton units, from \$2,000 to \$2,500 for four tons."

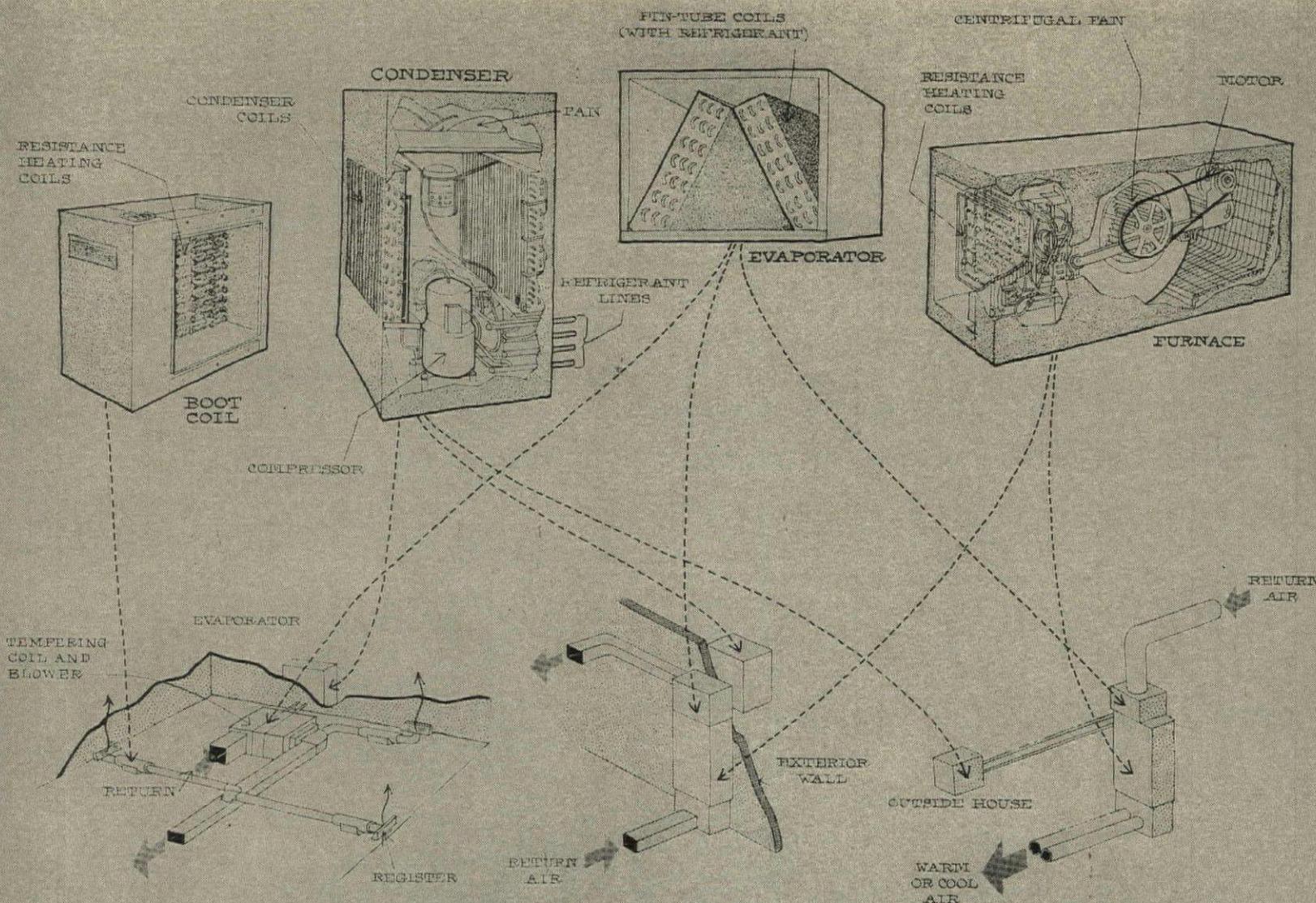
Average heat-pump prices (fob factory) are dropping

fast. The drop from 1953 to 1960: from about \$1,600 to about \$700 per unit. Reasons: partly the economies stemming from mass production, partly a big increase in small units for residential use. Last year 30,000 heat pumps were installed in new houses, compared with 500 in 1953. This year the total may top 45,000.

The growing trend to heat pumps is evident all over the country. For example: In Houston, builders installed 744 heat pumps in 1959—almost seven times as many as in all the previous years. The sudden increase was spurred by Houston Power & Light's decision to promote heat pumps.

In Tampa, heat pumps are installed in 85% of new homes equipped with central air conditioning. Five years ago only 11% of Tampa's new air-conditioned homes had heat pumps.

In Haddonfield, N. J., a ten-unit apartment is being heated and cooled by ten two-ton heat pumps. Heating costs for a typical winter month average \$10 per apartment.



**YEAR-ROUND CONDITIONING SYSTEMS** can be designed around central electric furnaces or boot coils and tempering heaters. You can add the evaporator and condenser in the form of through-the-wall units,

above center, or split systems, above right. Furnace blowers, which circulate both heated and cooled air, should be 10" for units up to 3 hp and 12" for larger units.

**The No. 4 news about the conditioned house is:**

## You can now get electric heat in a ducted system with add-on cooling

An electric forced-air system usually costs no more to buy and install than any other forced-air system. As with the others, you can include cooling if you size your ducts slightly larger and install an evaporator and a condenser.

And compared with other year-round electric systems, electric forced-air is often cheaper to operate. Here is why:

1. The constant circulation of air (inherent in a forced-air system) reduces heat loss because it minimizes the temperature differential between floor and ceiling.

2. Sun-warmed air from big window areas facing south helps heat the whole house; it is drawn back to the central unit through return ducts, mixed with air from cooler areas, and recirculated.

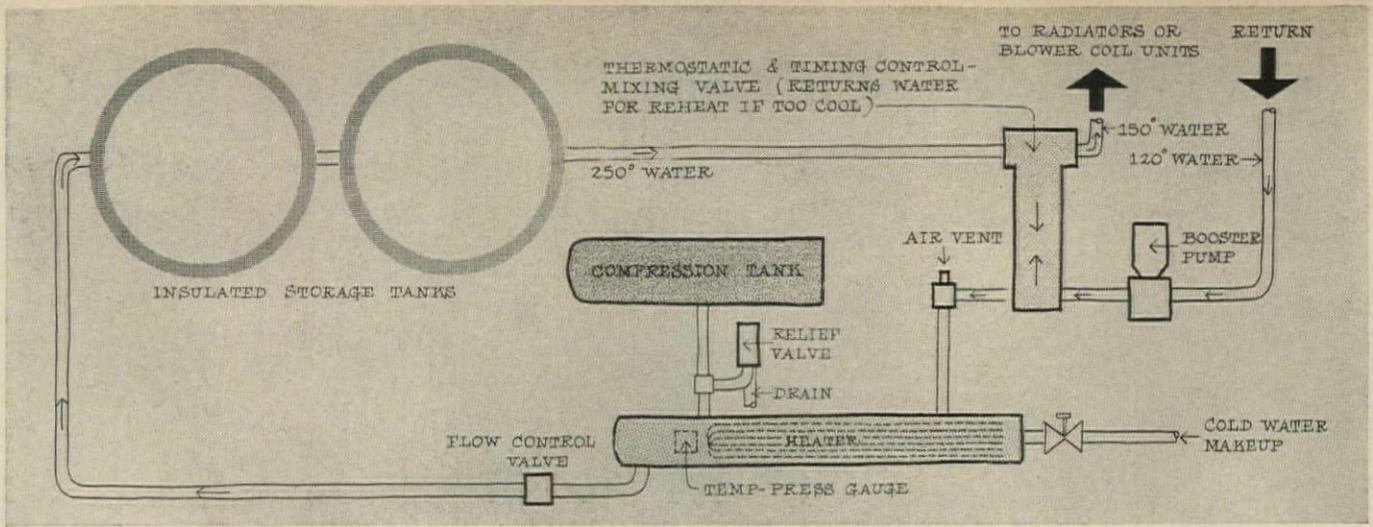
When you add cooling to a forced-air system, it is better to undersize your equipment slightly than to oversize it. This way, your equipment will operate more or less continuously,

capitalize on the flywheel effect of night-time cooling. At night the equipment will keep working to reduce the temperature of walls and furnishings, which hold more heat than the air itself. This way much of the next day's external heat gain can be absorbed to prevent sudden demands on the equipment. (If a house is allowed to heat up, you can't expect air conditioning to cool it off fast.)

Continuous operation of the equipment also prevents excess humidity. Even when the indoor temperature has been lowered to the desired point, slightly undersized equipment will operate steadily to hold it there—and thus prevent the atmosphere from getting clammy.

Outside the heating season, excess moisture is a problem on three days for every one day that excess heat is a problem. On days when it is too humid but not too hot, the cooling system is turned on to squeeze out moisture. Then the heat is turned on to bring the temperature back up.

*continued*



**STORED HOT-WATER SYSTEM** uses insulated tanks to hold 300 to 400 gallons of 250F to 300F water heated at night. Water is circulated through coils in forced warm-air heaters or run through radiators

or baseboard panels. The system can also be used for cooling. In summer the evaporator would also operate on night rates, producing chilled water which would be stored in the tanks.

**The No. 5 news about the conditioned house is:**

**You can now get electric heat in a hydronic system**

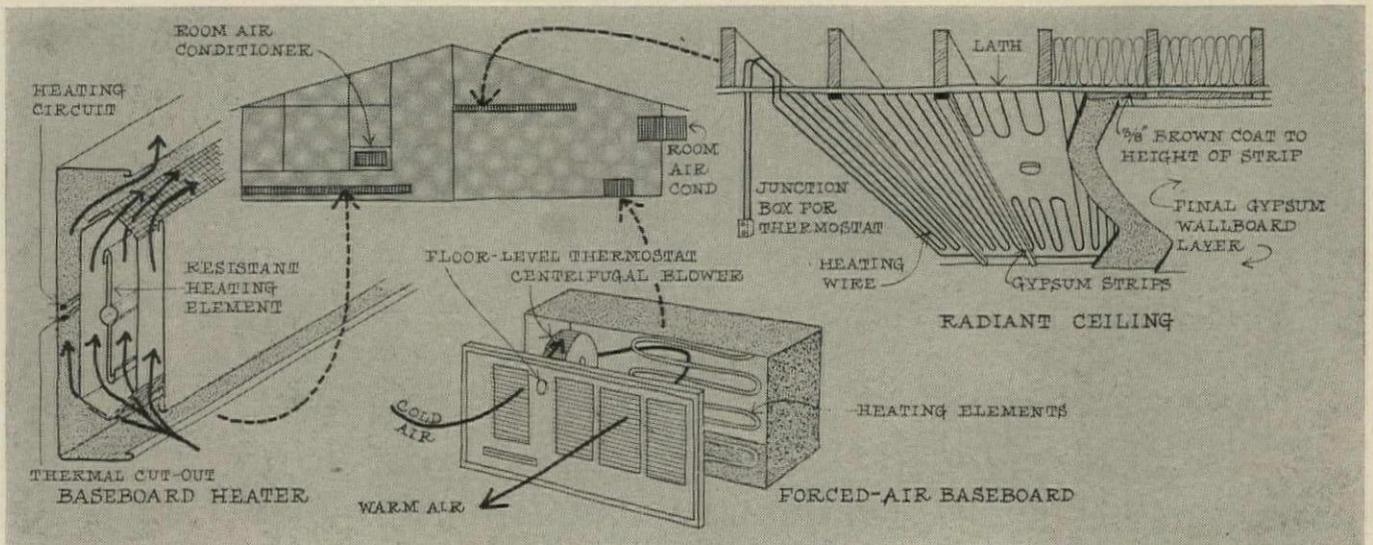
And the biggest selling point to homeowners is lower electric heating bills. Bills are lower because water is heated at night but circulated through the house around the clock.

At night utilities have unused capacity, so they can sell this power at a lower price. For instance, Commonwealth Edison's experimental off-peak rate is 1.05¢ per kwh—compared with its regular heating rate of 1.6¢; Detroit Edison's off-peak rate is 1.1¢, its regular rate of 1.75¢.

During peak daytime load periods, a time clock prevents

control circuits from turning on the heater elements. At night, the time clock closes heating circuits, brings water in storage tanks up to temperature, then turns off the heater.

Since most heat gain occurs during the day, stored heat does not have to equal the calculated heat loss. Only a little over half the heat loss must be made up in storage tank capacity. Reason: at night heating is instantaneous (no storage needed) and during the day, heat losses are less than at night.



**RADIANT SYSTEMS** are coupled with through-the-wall or window air conditioners to get year-round heating-cooling. The baseboard at left couples gravity convection with radiation. The forced-air baseboard at

center moves air around the room to assure freshness, prevents stratification of warm air at ceiling. Ceiling cable right makes the ceiling a radiant panel, is the lowest priced of the three.

**The No. 6 news about the conditioned house is:**

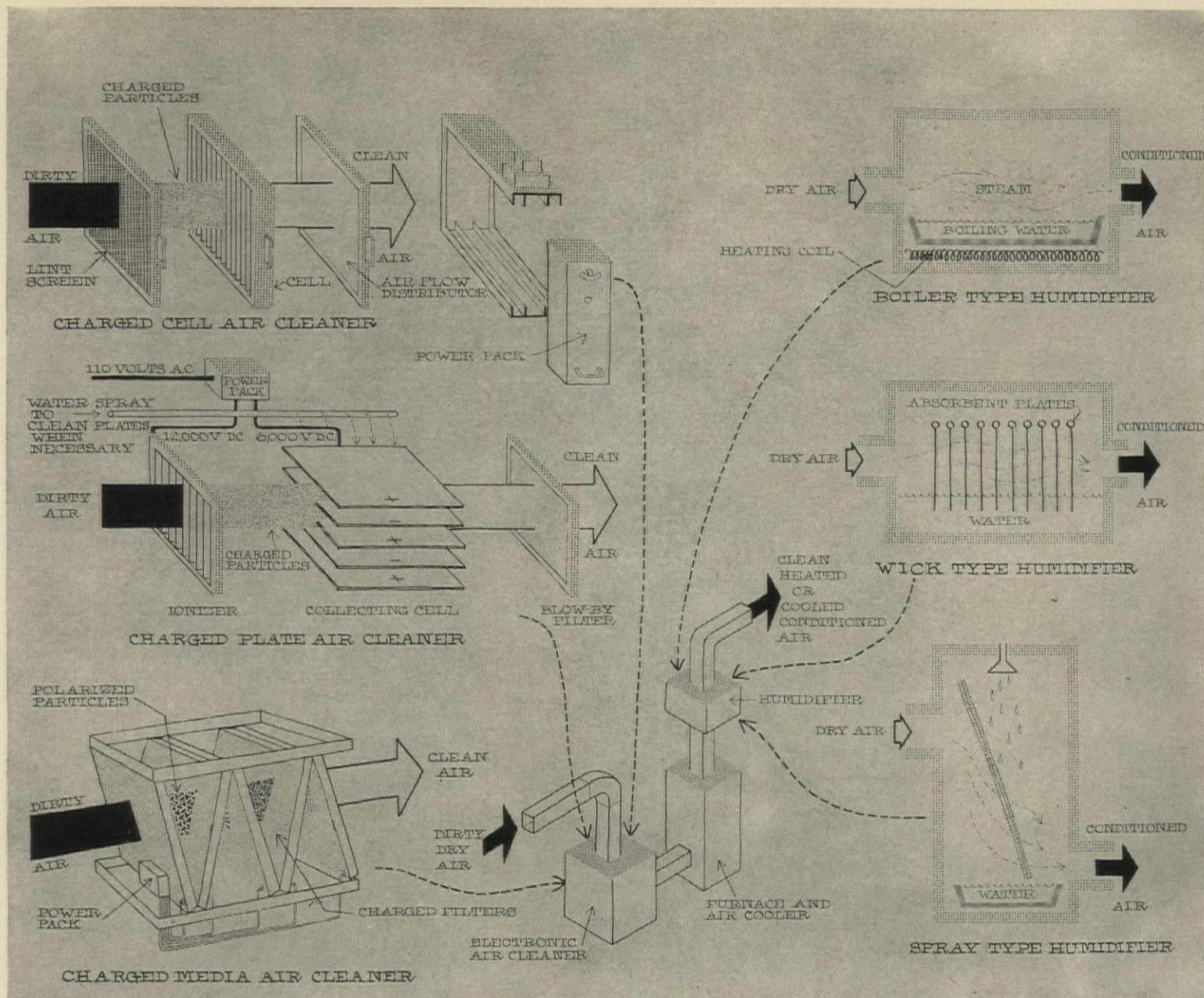
**Radiant electric heat is still the most-used system**

And for good reason. Radiant systems are the cheapest and simplest electric heating system to install. All they require is a 240-v lead from the distribution panel to 1) a radiant or convection baseboard, or 2) ceiling cables or panels that heat by direct radiation.

A big advantage of these systems is that temperatures can be controlled easily and inexpensively room-by-room. (Ducted heating systems can also have this kind of control, but it

usually costs more because extra wiring and damper equipment is needed.) Radiantly heated houses can be cooled with through-the-wall or window units.

The biggest problem still facing electric radiant heating: the lack of a meaningful standard. Said R.E. Pequignot of Commercial Controls Corp: "All FHA requires is so many Btu per sq ft. The baseboard manufacturers need to agree on a good standard and then get FHA to adopt it."



**ELECTRONIC CLEANERS** go upstream of heat exchanger. The two types at top charge air particles as they pass ionizing grid, draw charged dust out of air onto collecting element. The charged media type, bottom,

polarizes particles, attracts them to replaceable charged flat-pack filters. Automatic humidifiers, right, add moisture from reservoirs or sprays on the downstream side of the package.

**The No. 7 news about the conditioned house is:**

## Electronic air cleaning for dust-free houses now costs only \$175

And electrical humidification can be added to this package for very little more.

Between them these two conditioning devices add two big selling points to the comfort of controlled heating and cooling:

1. A good electronic cleaner can cut dusting from a once-a-day to a once-a-week chore, can all but eliminate wall washing and drapery cleaning. Said Charles Stock of American Air Filter: "In an electronically cleaned home, after a year's time, you can take a picture off the wall and find no mark there." In fact, the only reason to redecorate an electronically cleaned house is boredom.

2. Evidence is piling up that cleaning and humidification can markedly reduce the incidence of airborne diseases. The electronic cleaner pulls bacteria, pollen, smoke, and other irritants out of the air; proper humidification prevents the skin and nasal passages from drying, prevents chilling, and reduces the virulence of airborne germs.

The electronic air cleaner—or electrostatic precipitator—has been a major air cleaning device in industry for some

years but as a residential device it is only about ten years old. Early models—direct adaptations of the Westinghouse commercial Precipitron—were bulky, expensive (about \$1,000), and full of quirks. Today's reliable units come in different types in a \$175 to \$300 price range at the builder level:

At the low end of the price range are charged-media non-ionizing types like American Air Filter's ElectroKlean.

In the middle are charged-cell types like Trion's DFL and Honeywell's compact new unit.

Most expensive (\$225 to \$300) and most efficient (98% by NBS dust-spot test) are charged-plate units made by Westinghouse, Trion, Electro-air, and York.

What you pay for is efficiency. The plate types clean the air completely (96%+) on a single pass. But in a closed house, with no dirt being brought in, the other types will clean almost as effectively. The charged-cell type has the advantage of compactness (it takes up little more room than a flat-pack glass filter). The charged-media type does not produce ozone (which in the amounts produced freshens the air, in large amounts could irritate mucous membranes).

*continued*

## FHA will now give credit for the good insulation electric heat requires

To work economically, an electrically heated and cooled house must be well insulated, well ventilated, and sensibly oriented. This costs money—but it is money saved many times over during the life of the house.

FHA has now recognized this fact in establishing its new income standards—its field offices can now lower the income requirement for buyers of well insulated houses. This effectively broadens the market for builders who do a better job of insulating their houses.

FHA's move results from a study by NAHB and the National Mineral Wool Assn, a study prompted by FHA's Letter No. 1789, which allowed field offices to require less income to buy more expensive houses if calculations show that higher mortgage cost is more than offset by lower operating and maintenance costs. For complete details (and possible income reductions for some 44 cities) see H&H Mar, p 55.

### Here are industry recommendations for insulation in the fully conditioned house

*In walls*—The ideal U factor is .07. The best insulation: either full-thick batts of mineral wool, fiberglass or wood fiber; or aluminum foil blankets with three reflective spaces.

Insulation should be tucked behind pipes and around electrical outlet boxes. (The effectiveness of insulation cut too loosely around boxes in the wall can be reduced as much as 50%). Batt flanges should overlap, and be fastened to the face of studs to form a good vapor barrier.

The top plate should be drilled with a 1" hole for every stud space to ventilate the wall itself and so evaporate any moisture that might get through the vapor barrier. If a double 2x6 header is used, the 3/8" spacers between the 2x6s will provide enough ventilation.

Vapor barriers are critical in walls. Moisture—if it gets through the barrier—is much harder to dry out in the cramped space of the wall than in any other part of the house shell. Some experts recommend a second barrier, a polyethylene sheet, placed over insulation before drywall goes up. This assures dry insulation for the life of the house.

*Around wall openings*—Door and windows must be carefully weatherstripped to reduce infiltration and drafts. Insulation must be tucked into cracks between the casings and the rough framing. Double glazing and storm doors are a must.

If possible, window areas should be kept to less than 15% of wall area. Here's why: when the temperature outside is 0F, and the room temperature is 72F, the surface temperature of a well insulated wall is at least 68F. But the surface temperature of a single-glazed window is only 17F. The surface temperature of a double-glazed window with a 1/4" air space is 42F, of a double-glazed window with a 1/2" air space is 45F, of a triple-glazed window with 1/4" air spaces is 52F.

*In ceilings*—The ideal U factor is .05.

In areas where heating is more critical than cooling, the best insulation is 5" to 6" thick batts. Insulation should be cut and fitted around cross-bracing. Vapor barriers should be unpunctured, and it's worthwhile to use foil-backed drywall on ceiling to get a second unbroken barrier.

In areas where cooling is more critical than heating, the best insulation is aluminum foil blankets with four reflective air spaces. This type of insulation is excellent in stopping downward heat flow, which is all radiant heat. Four reflective-foil air spaces reflect back almost all radiant heat—from no matter what angle it strikes—before it reaches inside the house.

*In floors*—Over crawl spaces and unheated basements U factor should be .09. The best insulation is the reflective type (two reflective spaces provide a U factor of .06) or batt

insulation with reflective surfaces. Foil face must be up, towards the floor, to serve as a vapor barrier. Insulation must be cut and fitted around bridging, along the box sill, and between ends of floor joists. In crawl spaces place a vapor barrier over the ground.

For slab floors, the best insulation is at least 2" of rigid foam, placed around the perimeter and extended back under the slab for at least 24".

### Here are industry recommendations for ventilating the fully conditioned house

Both the conditioned and unconditioned areas of tightly constructed all-electric houses must have adequate ventilation to prevent build-up of moisture in bathrooms, kitchens, and crawlspaces and to remove excess heat from kitchens and attics. For kitchens and baths FHA now specifies that venting equipment comply with the standards set up by the Home Ventilating Institute.

Said Charles Kenney of Nutone: "The new HVI standard is actually a labeling program. Each fan must be labeled so builders will know how much area the equipment will ventilate. The HVI label assures that the motor does not make too much noise, that it can do the job, that duct sizes and duct runs are designed properly, and that exhaust air is properly vented to the outside.

"According to the standard, air in a kitchen should be changed 15 times an hour, air in the bathroom about eight times, and air in the family, laundry, or recreation room six times."

Attics must be ventilated 1) to prevent moisture build-up and 2) to cut down cooling loads. In summer an attic space can heat up to 150F if it is not vented properly. Attic fans can lower this temperature to only a few degrees above outdoor temperatures. For instance, a 16" automatic exhaust fan will make a complete air change every five minutes in a 8,500 cu ft space. Fans like this can be thermostat controlled, are powered by a 1/12-hp motor that will use as little as \$1.50 of power per cooling season.

Cross ventilation from protected openings can also keep attic temperatures down. Vent openings should not be less than 1/150 the ceiling area. If half of the venting area is provided by eave and cornice vents, the balance higher up in the attic—as in a ridge vent, a forced draft is produced and vent areas can be smaller.

Crawl spaces should be ventilated with at least one ventilator in each wall with a net free area 1/150 of the crawl space.

### Here are the newest recommendations for money-saving orientation and design

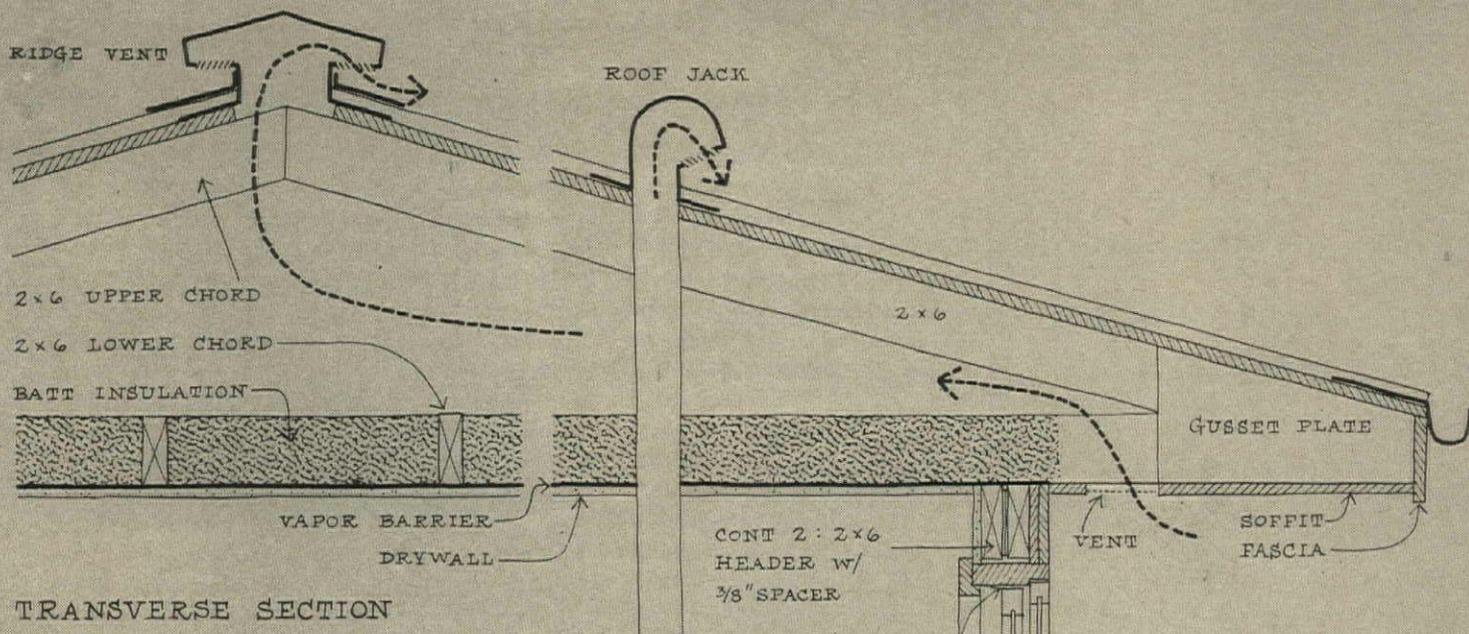
Careful orientation and design which lets a house work with, instead of against, nature can cut heating and cooling costs in half.

If the land permits, houses should be placed on south slopes to cut winter heat loss. Houses built in cold, damp hollows, on hilltops or on cold north slopes will cost more to heat. A house set partly into the ground (eg. a hillside house) can take advantage of the relative warmth (45F to 50F) of the earth during the winter.

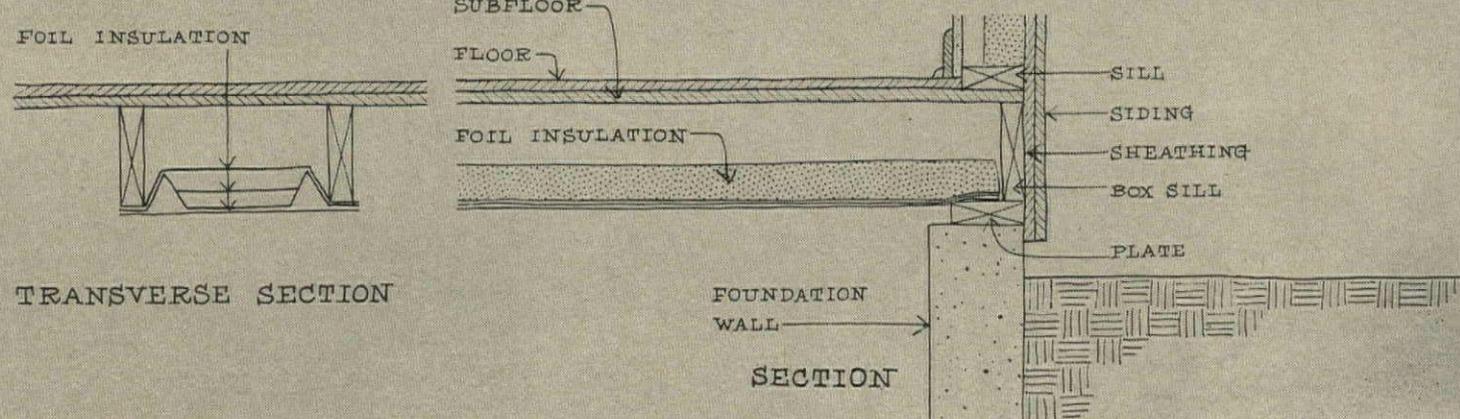
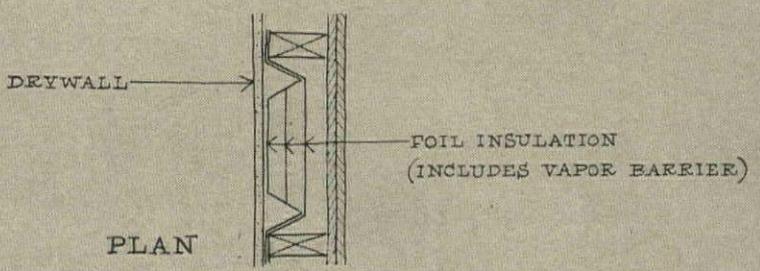
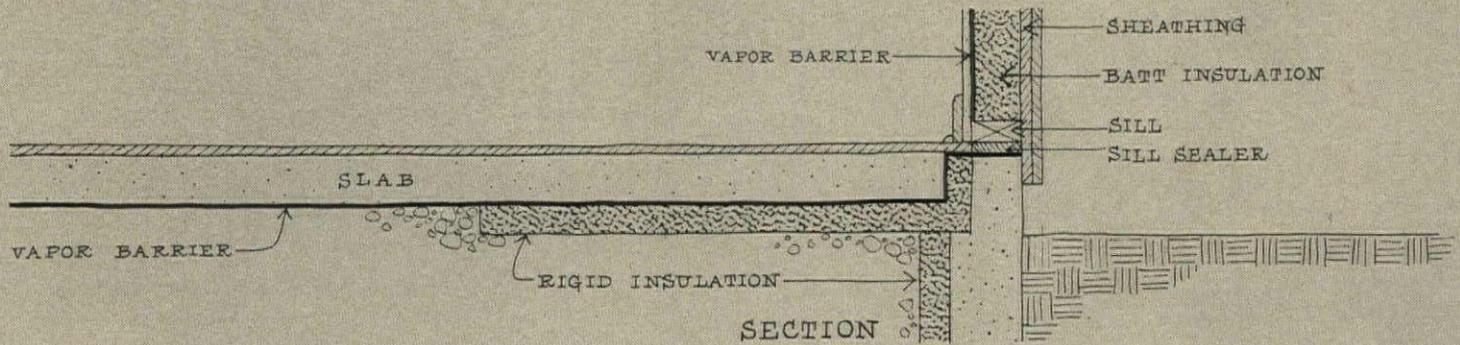
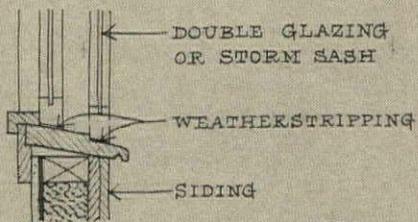
Roof overhangs, especially on the south side, can cut cooling costs sharply. Overhangs can be designed to shade big window areas from the high summer sun, but admit the rays of the low winter sun (for design details, see H&H, Apr '60).

To minimize heat loss in the winter, any big window areas should face south. To minimize heat gain during the summer, windows on the west wall should be kept to a minimum.

The roof should be white to reflect summer sun.



KITCHEN OR BATH VENT



TYPICAL CROSS SECTIONS of roof, wall, floor, and slab show insulation and ventilation practices recommended by housing experts.



**The No. 9 news about the conditioned house is:**

## More builders than ever are profiting from Medallion Home promotion

The evidence: Medallion-Home starts climbed 8% in 1960 despite a 17% drop in overall starts. And in the first two months of 1961, twice as many Medallion houses were started as in the same period in 1960.

The reason: Medallion-Home builders are getting more help than ever from the electrical industry.

For example:

*They are getting more help at the national level.* Electrical manufacturers, stepping up their promotion of the Live Better Electrically Medallion program, are pushing the program in \$20 million worth of equipment advertising. And the program itself is spending \$2.2 million—10% more than last year—on advertising in four top magazines: *LIFE*, *Saturday Evening Post*, *Better Homes & Gardens*, and *Readers' Digest*.

*They are getting more direct help at the local level.* Utilities that keep separate budgets for Medallion promotion are increasing these budgets by an average of 14% this year—and some companies will boost their budgets by as much as 30%. So reports Ebasco Services, a consulting firm which recently surveyed utilities serving 58% of the country's houses. The utilities' assistance to builders includes cooperative advertising, promotion material, sales help at model houses, and discounts and allowances on electrical wiring, equipment, and installation.

*And they are getting more help with special problems.* For example: NEMA—which for the first time has set up a promotion budget (\$113,000)—has earmarked part of the budget to sell the idea of preferential mortgage treatment for all-electric houses. NEMA ads in financial and banking magazines will stress the attractiveness of the all-electric house as a long-term investment and will cite the electrical industry's program to sell all-electric houses to homebuyers.

### Here is how you can capitalize on the Medallion Home program:

Your houses will qualify for a Bronze Medallion if they have 100-amp service, adequate wiring, an electric range and oven, and at least three other major electric appliances (refrigerator, freezer, washer, dryer, dishwasher, garbage disposer, water heater, room air conditioner, room heat pump, central cooling).

Your houses will qualify for a Gold Medallion if they meet Bronze Medallion requirements and also get all their power from electricity. The big difference: Gold Medallion houses must be electrically heated.

*You will get about twice as much help from your utility if you build Gold Medallion houses.* Reports Ebasco:

For a single house, the average Gold Medallion builder gets \$150 to \$300 in help (some get more than \$600); the average Bronze Medallion builder gets \$50 to \$75.

For a development, the average Gold Medallion builder gets \$100 to \$200 a house in help (some get almost \$400); the average Bronze Medallion builder gets \$50 to \$75.

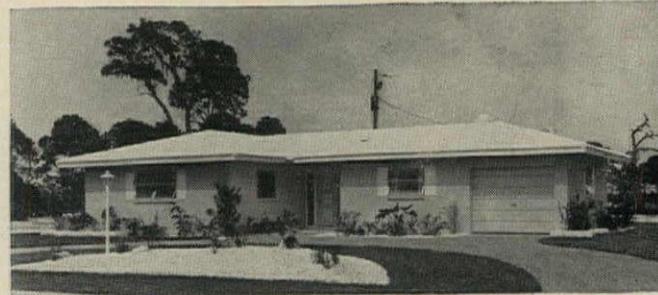


**IN WEST VIRGINIA** this Gold Medallion Home was built by Arlington Park Sales Co of Huntington.

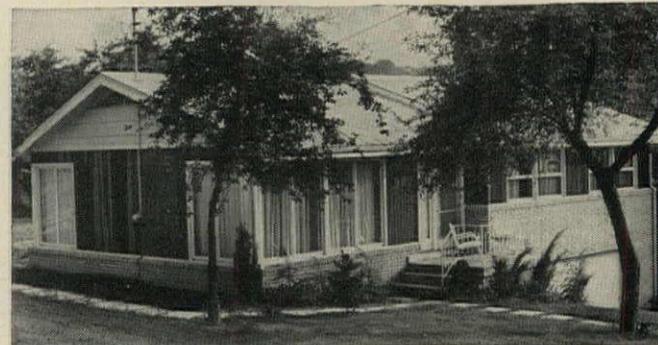
Matt Grimaldi



**IN MASSACHUSETTS** this Gold Medallion Home was custom built by Frederick C. Schmidt of Greenfield.



**IN FLORIDA** this Gold Medallion Home was built in Sherwood Manor by W. Stewart Bierbower of St Petersburg.



**IN PENNSYLVANIA** this Gold Medallion Home was built by Showcase Homes Inc, a Pittsburgh prefab company.



**IN VIRGINIA** this Gold Medallion Home was built by Westinghouse for its Total Electric Home promotion.

## **Electric heat is the greatest sell yet— but you have to know how to sell it**

That's what HOUSE & HOME's Round Table heard from an old hand at selling electric heat.

The speaker: Vice President William Shepherd of Arkansas Power & Light Co, which has sold electric-heat to more than 3,000 homes in the last two years.

Said Shepherd: "If there is one fish this Round Table ought to be frying, it is the comfort and benefits the customer gets from electric heat. I don't care whether it is ducted or non-ducted. . . . I think people are financially ready to be upgraded—if you can give them some reason to be upgraded. So the important thing is selling."

Shepherd asked a question: "Who has been doing the selling?" And answered it: "Up to now, it has not been the dealers. It has been the utility people. Mr Manufacturer, I believe you will find that an extremely high percentage of your electric-heat customers are sent by some utility company."

Selling, said Shepherd, is a big time-consuming job: "You can't go out and do it overnight. Even though we don't take orders or deliver merchandise, a large part of our \$2-million sales budget is used to sell electric heat. And our salesmen put most of their time on selling electric heat."

Shepherd told the Round Table:

### **Here are some of the things you have to do to sell electric heat in the new-house market:**

*You have to train your salesmen.* "We had 140 men who didn't know anything about figuring heat loss and heat gain—something they had to know in applying the home comfort standard. We had to train these men. This was a long and expensive process. Some men trained faster than others. Some men made mistakes—sometimes costly ones."

*You have to convince your salesmen.* "We have found that the satisfied user of electric heat is often a better salesman than the salesman who sold it to him. None of our salesmen were completely convinced until they had sold enough jobs so that the customers finally converted them to what we have been saying."

*You have to work with everyone involved in the job—customer, builder, electrical contractor, sheet-metal contractor (if the heat is ducted), and dealer.* "We go out with the electrical contractor and get two or three bids. We talk to installation contractors and dealers—take them by the hand to get them to submit bids. And we check every installation."

*You have to figure heating (and cooling) costs on every job.* "We figure costs month by month and then give an average billing. We base our figures on

a normal temperature year. We don't guarantee it down to the last cent. But I can say you better be pretty much on target."

*You have to make sure each system is installed right.* "Otherwise your cost estimates won't stand up. In the last six months we have spent about \$5,000 correcting faulty installations made in the last four years. We were under no obligation. But a bad installation means high heating costs, which, of course, are bad public relations for us. On one job—a split system—we found that the ducts weren't insulated; they were just wrapped with tape. What's more, the installation man (supposedly a top-notch dealer) had wrapped the hot and cold refrigerant lines together in the same insulation. We had to send out an engineer to solve the problem and help explain it to the customer."

"Another example was a small town postoffice where the system was going in all wrong. We caught it in time—and probably saved some future sales in the same community. In a town of 3,000 or 4,000, everybody is bound to know about a faulty heating system in a public building."

"How can you solve this problem? Here's what we do: Any time we see that a job isn't going in right, we send a letter to the customer and a copy to the contractor. We tell them the system is being installed wrong and that our estimates of operating costs will not hold. And we recommend they do something about it. Usually they do. When they don't—and when they then complain to us about high costs—we merely pull out a copy of the letter and tell them they can still go back and do what we suggested in the first place. These letters often save us the expense and inconvenience of going back and correcting the job."

*You have to make sure the system will get adequate service.* "Take heat pumps, for example. Manufacturers would sell a lot more of them if it were not for the sad experience some people have had with service. Servicing cost is like operating cost to the fellow who has to pay it. So when it comes to heat pumps, we have a rule: We don't recommend the purchase of one unless the customer lives within 40 miles of the dealer and unless the dealer is willing to provide 24-hour service, seven days a week."

*You have to get the builder to use enough insulation in his houses.* "In our area, one builder put 12" of insulation in the ceilings and 6" in the walls of 20 development houses (outside studs are 2x6s). His houses are all-electric Gold Medallion Homes with 1½ tons of cooling. They have about 1,600 sq ft. It will cost \$65 to heat the houses during the heating season. So in this case, electric heat has other fuels locked out. They're not even competitive on either owning or operating cost."

# ROUND TABLE REPORT

## PART 2

# KITCHENS

**The No. 1 news about kitchens is:**

### **More than ever, manufacturers are looking to the new-house market**

Listen to spokesmen for some of the major producers:

"Our 1961 line is designed basically to fit the new-house market," says Hotpoint General Sales Manager John F. McDaniel. Says Jack Sparks, sales vice president of Whirlpool: "Of course we're interested in the new-house market. It's the best chance we get to sell the whole appliance package." Adds GE's Ed Riley, "It's a top market for us for two reasons: First, it's there and we want to be in it. Second, it's one of the best showcases we can find for our line. It helps the replacement business as well as new business." Says Waste King's Bert Given: "The homebuilders helped build our company so we treat them like the manufacturers they are. If they are big enough to warehouse, we'll let them warehouse. But we prefer to sell through our distribution. That way we can give a fuller inventory and better service." Says Frigidaire's Herman Lehman: "Our line speaks for us. We're going after the builder business with the most varied line of built-ins in the industry."

If you examined the kitchen exhibits at the Builders Show,

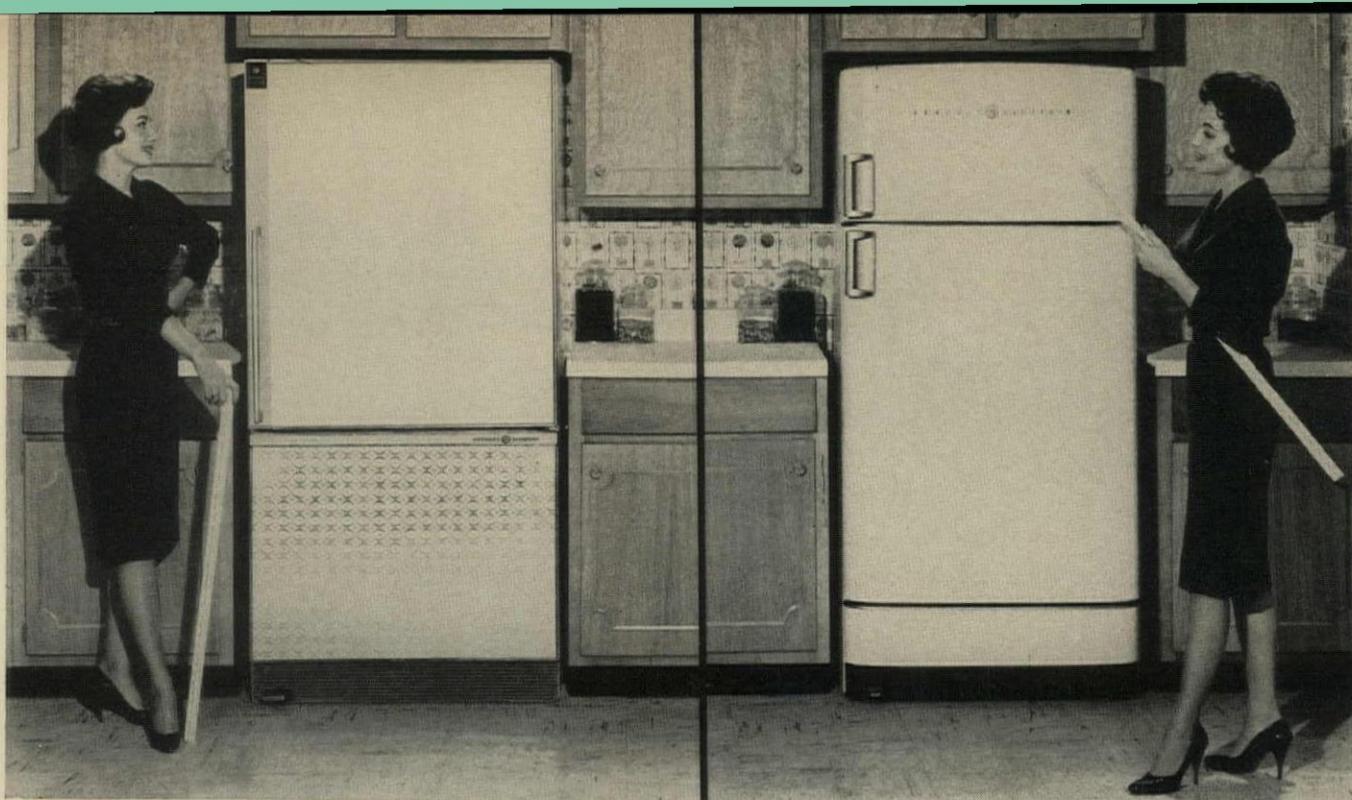
you saw what these men are talking about. Overriding all facets of design is a totally new look for 1961.

What is this totally new look? It is three things:

1. It is the built-in look. Almost every product shown today is made to build in or to look built-in. Freestanding ranges are made in sizes and styles that camouflage the fact (see p 120). Any 1961 freestanding refrigerator can be completely framed into the cabinetry (opposite). And laundries, at last, fit flush with the back wall.

2. It is the coordinated look. As more and more producers broaden their lines, more and more complete packages are available in matched styles and colors. And some styling innovations—like interchangeable panels—let you match appliances to your cabinets so the whole kitchen becomes an entity.

3. It is the new-house look. As the shoppers step into houses fitted with all the appliance industry has to give them, they know at once they are in this year's house and not in any house that was ever built before.



**NEW 18-CU-FT UNIT** by GE is almost the same external size as the ten-year-old ten footer, right, has bigger freezer, frost-free operation.

**The No. 2 news about kitchens is:**

**There's a revolution in refrigerators but nobody seems to know it**

The homebuyer is toting his 400-lb old refrigerator with him to his new house just because it still runs. And because nobody has sold him on all the new conveniences that the revolution in refrigerators now makes possible.

The builder is leaving a big hole in his chief sales asset—the kitchen—because he doesn't build-in his refrigerator.

All this, despite the fact that refrigerators (with ranges) were the first appliance included in the package kitchen under the package mortgage.

Today, 78% of HOUSE & HOME's "builders other builders follow" are including built-in cooking equipment, but only 12% (hardly more than the 10.7% that include intercoms) are including refrigerators, and less than half of these (5%) are making refrigerators standard equipment.

Yet last year, according to the magazine *Electrical Merchandising Week*, 3,475,000 refrigerators were sold as against 3,329,100 ranges.

Why has this happened?

One reason refrigerators have lost the new-house market is that refrigerators are so durable that most families have a usable one. (Incidentally the H&H panel reports that homebuyers who get new refrigerators with a new house keep their old ones for extra cold storage, plugging them into the garage, utility room, or basement.)

Another reason is that manufacturers are spending so little to promote refrigerator sales in the new-house, new-apartment market. Last year only \$30,000 was spent on advertis-

ing to sell refrigerators (and only refrigerators) for new residential construction.

Third reason: No one has successfully sold the "built-in" advantages. (The true built-ins offer high quality at high price and have been well accepted in custom houses, but every manufacturer now has in his line models that can be set flush against a back wall and closely framed in on sides and top.)

Next year should see a big change in selling policy. These eight improvements make most refrigerators homebuyers now own obsolescent (and new refrigerators highly desirable):

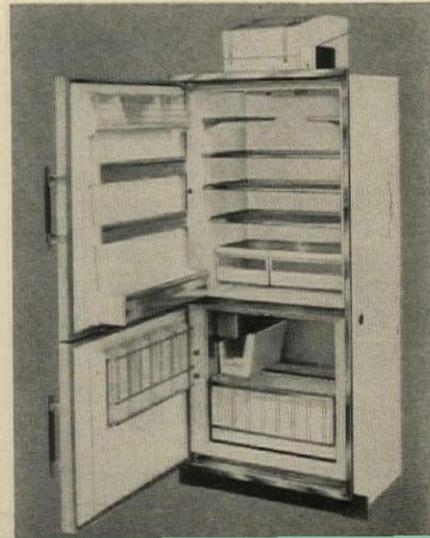
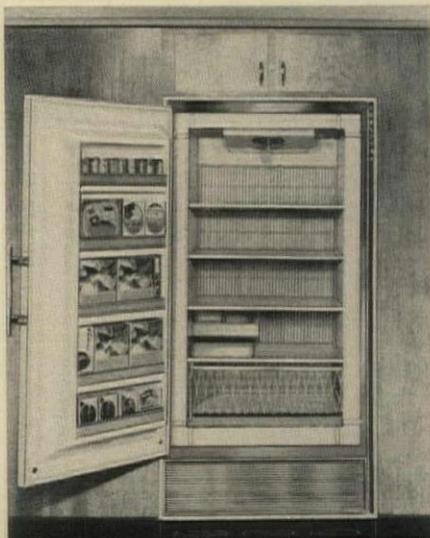
1. Frost-free cooling, in both cold storage and freezing compartments, has eliminated a messy scraping job.
2. Automatic ice making cuts out an annoying chore.
3. Magnetic door seals reduce heat leaks, increase safety.
4. Thin-wall insulation ups storage as much as 25% in the same total cubic space.
5. Separate freezer doors raise freezer efficiency.
6. Location of coils on the bottom rather than the back of the box makes flush installation possible.
7. Better planned storage with movable shelves has eliminated gadgets like the 11-egg storage tray.
8. In-set hinges let box be set flush against a side wall.

And there are more new ideas to come. At least five volume producers are planning new built-in models specially designed for the new-house package.

**BUILT-IN FREEZER** is all up to date: completely frost-free, automatic ice making, magnetic gasketed, swing-out storage. Sub-Zero.

**DOUBLE-DOOR COMBINATION** from Kelvinator offers more room for frozen foods in the built-in concept. Storage totals 18 cu ft.

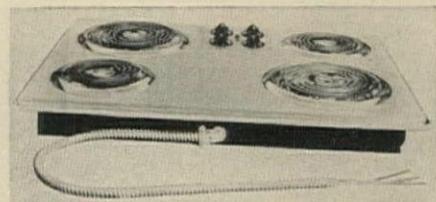
**BUILT-IN REFRIGERATOR** from Revco shows stripped case, built-in ventilation. Similar units are made by Chambers, Thermador, Sub-Zero.



continued



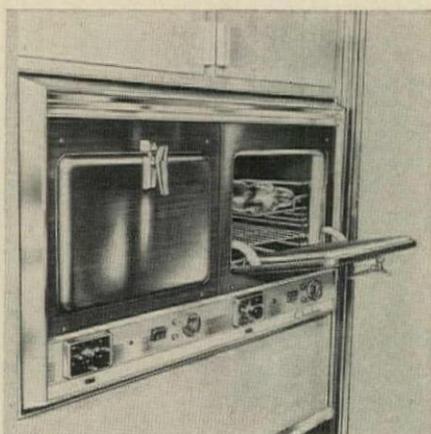
**KING OF THE BUILT-INS** is the paired oven and cooktop now offered by all manufacturers. These are by WasteKing.



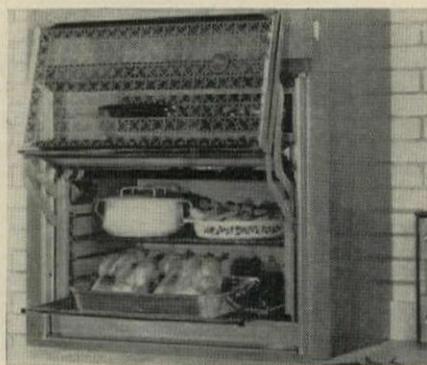
**DROP-IN COOKTOPS** take less space than ever. This one, by Thermador, is said to be shallowest made, extends only 2 5/16".



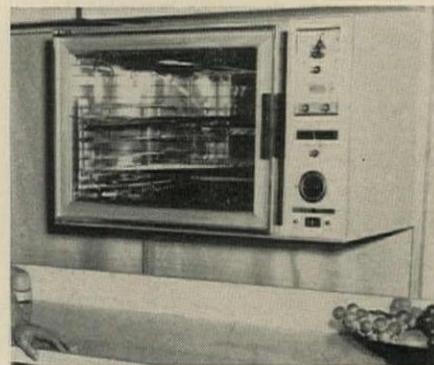
**STACKED OVENS** give big capacity in small space. Frigidaire's unit, above, has pull-out oven liner and French doors.



**SIDE-BY-SIDE OVENS** put both ovens at easy working height. This type is made by Chambers (above) and Thermador.



**BIGGER OVENS** are now being built in. Most producers have a 30" model. Lift-up door is new Frigidaire feature.



**WALL-HUNG OVEN** is brand new from Whirlpool. It can also sit on a counter or stack in pairs, is 30"x18"x16 3/4".

**The No. 3 news about kitchens is:**

**Everything to cook with can now be built in—or given a built-in look**

It took 15 years for the electrical appliance industry to sell its first million ranges. Last year it sold over a million and a half. One reason: The range is king of the built-ins.

Seventy-eight percent of N&H's panel of "builders other builders follow" report that they include built-in ovens and surface units as standard equipment in their houses. And, to judge from the manufacturers' 1961 lines, this percentage is still on its way up.

Manufacturers are pushing the built-in idea almost everywhere but nowhere more obviously than in range equipment. Take the separate oven and cooktop: Both are being made to take only one cut-out and one connection, and the cooktop is so thin it steals no space from cabinets beneath. Ovens are being made in unlimited variety: in 24" and 30" widths, single and double; paired side by side and stacked; to go in a cabinet, under a cabinet, or under a counter; with doors



**SLIDE-IN RANGE** looks built-in, is actually freestanding, needs no cabinetry, just single connection. Modern Maid.



**COMPACT PAIR** stacks slide-in undercounter oven and drop-in surface units. Made by Samuels (above) and Gaffers & Sattler.



**BIG SLIDE-IN** shows how even freestanding ranges are getting the built-in look. This is Whirlpool's top-line 40" model.



**DELUXE DROP-IN** from Hotpoint combines surface units, 30" oven, and automatic controls in an easily installed unit.



**STEPPED BURNERS** are unique to Westinghouse version of the drop-in. Controls are kept simple and on top.

**WALL-HUNG RANGE** started with Tappan 400 (shown) is now made by Frigidaire, Thermador, Sears Roebuck, O'Keefe & Merritt.

that drop down, lift up, lift off, or open butterfly fashion.

Latest of built-ins are the drop-ins, originated by GE with its Mark 27, now offered by almost all manufacturers. These units group oven and cooktop in a single box with a single electrical connection. They drop in a cabinet opening, are suspended from the counter. They are now available in 24" and 30" models in everything from a stripped-down economy model to a fully automatic deluxe version.

Slide-in models, the latest trend in freestanding ranges, make the best of two worlds: They are all-in-one self-supporting ranges that fit neatly into a counter to look fully built-in—but take only a single electrical connection.

Wall-hung ranges, first developed by Tappan, offer the most versatility. They can be suspended from a wall, supported on a counter, or, with optional base cabinets, stand on their own feet.

*continued*

**The No. 4 news about kitchens is:**

**You can now get water heaters with warranties up to 25 years**

That old bugaboo for the builder—the short-lived water heater—need not haunt him any longer. The responsible manufacturers in the industry now offer standard equipment with ten-year warranties that are well worth the \$15 extra price in the callbacks they eliminate. One manufacturer (Marathon) has a home water heater with a 25-year guarantee.

The glass-lined tank is standard in most quality heaters though deluxe equipment with copper or stone tanks is available for areas with extreme water conditions.

Greater economy is promised by the higher recovery of top-line equipment and by the preferential power rates available for water heating alone or the all-electric package.



**MATCHED TWINS**, like these from GE, have up to 12-lb capacity in counter-high, counter-deep space. Units fit flush at rear wall.



**COMBINATIONS** do a big job in small space. This Whirlpool model washes and dries 10-lb load in a space only 29"x36"x25".



**STACKED TWINS**, like these by Westinghouse, fit into a 25"-wide space. Dryer goes atop washer. Both are pushbutton operated.

**The No. 5 news in kitchens is:**

**New home laundries put more capacity and versatility in less space**

Yesterday's standard washer took an 8-lb load, had two (or at most three) cycles, bulked 36"x30"x36". Today's typical unit handles 10 lb and up to 11 cycles in counter-high space 30" wide, 25" deep. Yesterday's dryer could whistle "how dry I am" but had only two heats and a timer control. Today's dryer can match its heat to a wide variety of fabrics, limit drying time by measuring the load's moisture content.

The near-automation of today's home laundries offers some of the clearest benefits to sell the women who view your houses. And the compact modular boxes add to the built-in look of the kitchen area. Some manufacturers have recessed the back of the equipment to fit over plumbing and eliminate dust-catching space behind. And at least two makers are at the prototype stage on completely built-in laundries.

**The No. 6 news about kitchens is:**

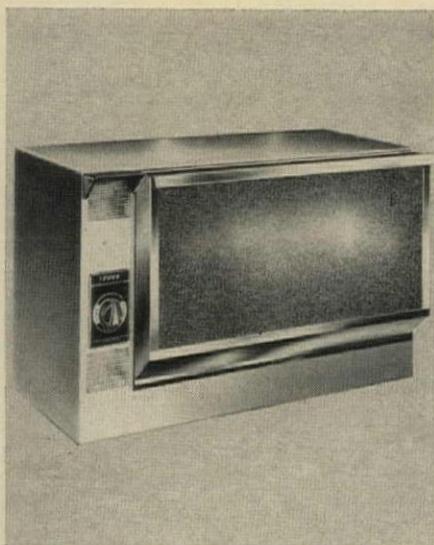
**New disposers are more powerful, more durable—and quieter**

Only a year or two ago, standard waste disposers were powered by ¼-hp motors. Now the standard is ½-hp, and most manufacturers top their lines with ¾-hp models. These more powerful motors drive cutters with larger, harder teeth at higher speeds that grind waste to smaller particles faster, reduce the possibility of jam-ups, and lower the noise pro-

duced. Two other developments are also making disposers quieter: 1) New absorbent mountings eliminate metal to metal contact, and 2) The fiber or foam insulation packed around the working mechanism is enclosed in plastic shells to damp grinding noise. Disposers are made by Insinkerator, Harvill, American Standard, and full-line appliance makers.



**THREE-CYCLE UNIT** handles small loads, heavy soils, or full job. KitchenAid takes 12 place settings or all-purpose load for eight.



**WALL-HUNG UNIT** (also sits on counter) was introduced at 1961 NAHB show. Three Temco models wash 6, 10, or 15 place settings.



**FOUR-CYCLE UNIT** by Hotpoint offers "rinse only," "pots and pans," "wash only," "wash and dry" in 7, 25, 30, and 60-min cycles.

### The No. 7 news in kitchens is:

## Dishwashers, builders say, offer the best appliance talking point

That's why they rival ranges in their popularity as built-ins—no one has to sell very hard to convince a woman to give up a three-times-a-day chore. Across the board, builders and manufacturers report a close-to-50% installation rate.

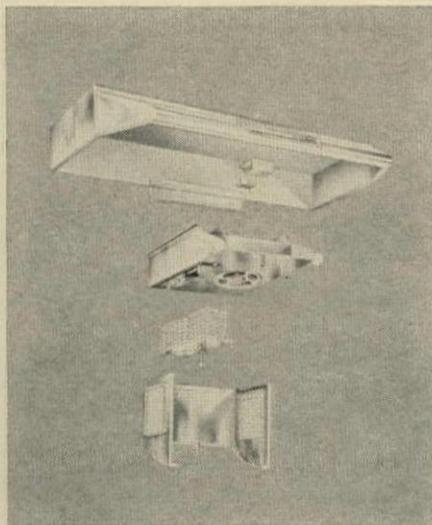
And only clothes washers rival dishwashers in new features. Today's units have special cycles for heavily soiled pots and

pans, steam rinses to shine the glassware, and wash routines for everything in between.

Also like clothes washers, dishwashers are getting more capacity into smaller compass. Where ten NEMA place settings is still standard, many top models offer 12, and one new wall-hung model claims up to 15-settings capacity.



**FOLDAWAY HOOD** matches cabinets, opens out over rangetop. This new one is by Nutone. Similar drawer-type is made by Emerson.



**ELECTROSTATIC HOOD** combines washable grease filters with permanent plate-type precipitator. Progress developed this model.



**CLEAN STYLED HOOD** is typical of top-line models built to match contemporary ranges. This satin finish model is by TradeWind.

### The No. 8 news in kitchens is:

## Today's high-styled range hoods are being built to a new standard

The standard—set up by the new Home Ventilating Institute and accepted by FHA—covers range hoods and exhaust fans, specifies them by a letter code that tells how big a kitchen, bathroom, or recreation room the equipment will handle.

Three of the new pieces of equipment so specified are illustrated. They show the industry's new concern for styling—

and some new mechanical ideas. Common to the industry are lines that can be vented in almost every way possible, that offer most capacity in least space, that have air handling equipment to give a capacity-price match for every job. Almost every maker now has a ductless model. Leading manufacturers include Broan, Ductless, Emerson, Fasco, Leigh, Major.

# ROUND TABLE REPORT

## PART 3

# LIGHTING

**The No. 1 news about lighting is:**

### **More builders are capitalizing on good lighting by selling at night**

Of the 400 "builders other builders follow" (see H&H Feb), 65% now keep their model houses open at night.

One reason: to give themselves more selling time. A second reason: These leading builders know that good lighting helps sales, so they stay open at night when the lighting lets them add extra glamor to their houses.

One of the easiest ways for a builder to give himself a competitive edge is to do a good job of lighting—for too many builders do much less with lighting than they should. Said William Byrne of Ebasco: "Most builders never go back to see how their houses look at night—and never see what a poor lighting job they did." Said John Beam of Moe Lighting: "Most builders . . . pick out a half dozen fixtures and think they will be adequate. They don't realize how lighting can help them in the sales of their houses."

While no one knows for sure the average amount spent by builders for lighting, Robert Minnett of Virden reported that "the figure I have heard quoted is about \$32 a house." "I can

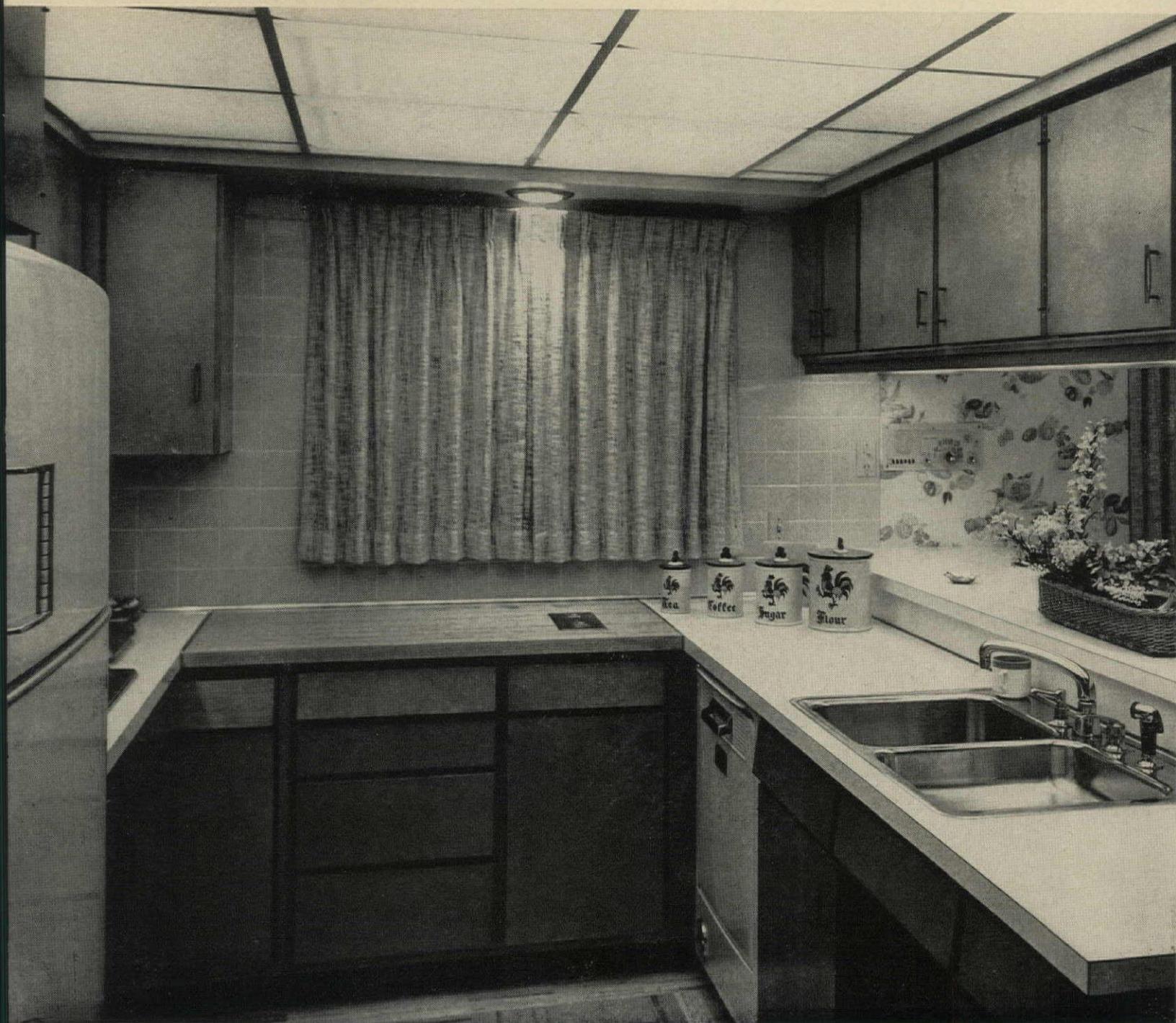
assure you that this figure is twice the actual average," said Maurice Rosen of Progress. Added Rosen: "There are still more light bulbs in an automobile than there are in a house."

*What can you expect to get by spending enough to do a good lighting job?*

Said Lighting Consultant Abe Feder: "Magic. Almost nobody has any idea of what light can do to people emotionally . . . Whenever light has been used as it should be used it has paid off."

Summed up Jim Coatsworth of EEI: "People instinctively like good lighting. When they have the opportunity to choose between [a house with] good lighting and poor lighting, they'll know the difference. Lighting is coming back in popularity and in importance."

*For some hints on the ways more and more builders are using lighting to help boost the sales appeal of their houses, see the next five pages.*



**KITCHEN CEILING** with molded diffusers (by Poly-Plastex United, is lighted by GE Home Line fluorescents. Note added counter lighting.

**The No. 2 news about lighting is:**

**Luminous ceilings are setting new standards for kitchen lighting**

Nothing in a model house gets more attention than the kitchen. And at night nothing in the kitchen gets more attention faster than a luminous ceiling.

That's why this year some 16.5% of the leading builders surveyed by H&H are including luminous ceilings in their houses. Luminous ceilings are one of the fastest spreading new sales features.

Lighting Consultant Abe Feder explained: "You've got to use big ideas to compete with all the other kinds of products that are fighting for what is left of the consumer dollar. . . . All you find in most kitchens (and bathrooms) is a couple of glaring lights. This is where the luminous ceiling belongs—a couple of tubes, some sheets of plastic, and you've changed the character of the room."

You can buy factory-made luminous ceilings. Most of the major fixture manufacturers offer "kits", consisting of 1) plastic diffusers in pans (see photo above), sheets, or rolls;

2) a suspension system with a gridwork of wood, metal, or plastic, and 3) fluorescent fixtures to mount above the suspended ceiling.

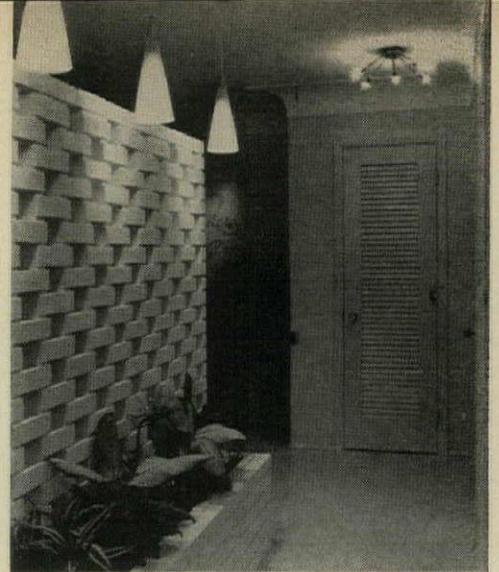
You can also build your own luminous ceiling. But you should get design help, which is available from any of the leading bulb manufacturers and some big distributors. For it is much easier to build a poor luminous ceiling than a good one. Critical factors include: spacing of the fluorescent bulbs, distance from the bulbs to the diffuser, the type of diffuser, and reflective surfaces in the ceiling cavity. (For details on one ingenious and low-cost design, see H&H March. Big Phoenix Builder John Long, who now includes luminous ceilings in all his kitchens, uses 12' fluorescents to cut down on wiring, foil-backed drywall nailed to trusses as a reflector.)

While a luminous ceiling gives excellent and shadowless general lighting, it is usually desirable to add additional recessed lighting (see photo) over important work counters.

*continued*



**FIREPLACE WALL** is dramatized with semi-recessed eyeball fixtures (by Virden) which can be swiveled to put light exactly where it is wanted. The reading light over the chair at far left is a built-in, recessed high-hat fixture.



**DECORATIVE BRICK SCREEN** gets strong texture at night from conical pendant fixtures (Moe Lighting) which also provide general lighting for the entry.

**The No. 3 news about lighting is:**

### Accent lighting is being used to highlight architectural features

Accent lighting is a silent salesman that, at night, can point up the design features of your houses much more effectively than any words.

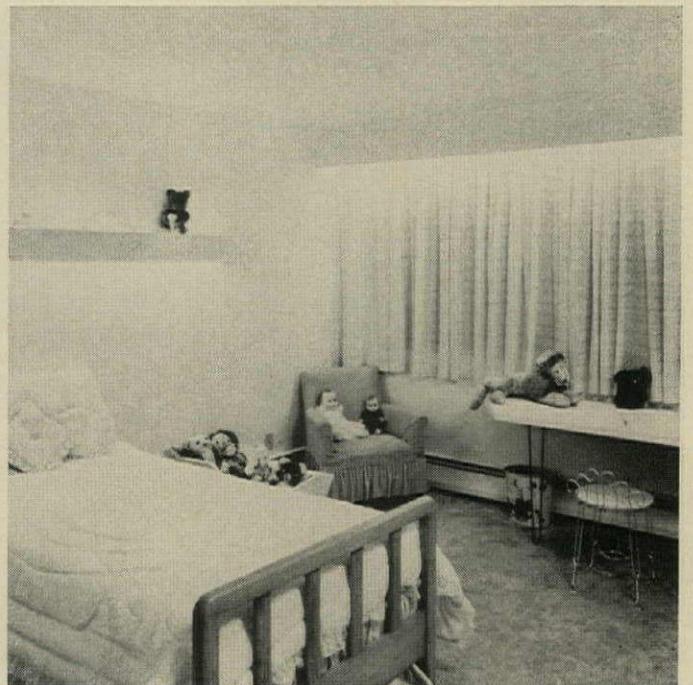
Accent lighting can come from almost any kind of source—unobtrusive recessed fixtures, left, or decorative fixtures that are part of the overall design, right.

Accent lighting is most often mounted in the ceiling, but it can even be pointed upwards (from the floor or from cove level) to emphasize an interesting ceiling or to bring out the texture in a masonry wall.

It is perhaps the most obvious way to create what Lighting Expert Feder calls "magic with lighting."



**IN DINING AREA**, light from wall bracket, rear, and cornice, right, eliminates dark corners and makes room seem larger. This lighting, plus pendant fixture, gives homeowner wide choice of light levels.



**IN BEDROOM**, wall bracket over bed provides general illumination as well as a good light for reading. Cornice at right lights draperies and provides shadowless light for desk work.

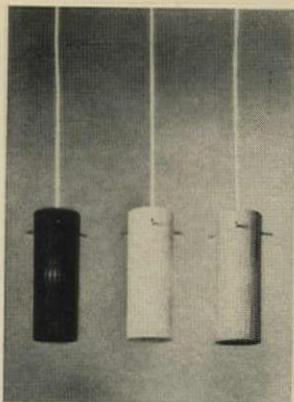
**The No. 4 news about lighting is:**

### Strip lighting is being used to give warmth to more rooms

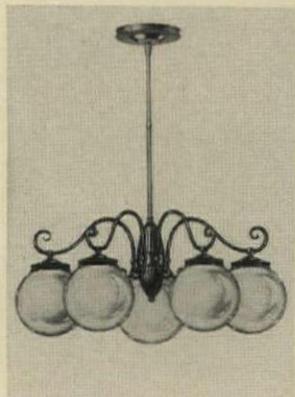
Valence, cornice, and wall-bracket lighting—which has long been used in many living rooms—is now spreading to almost every room. This form of lighting—in which the light source is shielded by a faceboard—is used to give a wash of light over the ceiling, walls, or draperies. It provides glareless general illumination and, especially when it is controlled by

dimmers and used in combination with decorative fixtures and lamps, is very effective in establishing mood.

Strip lighting is not difficult to build in. Fixtures are available from many manufacturers, or you can get detailed design advice from bulb manufacturers or from the American Home Lighting Institute, Chicago.



**CONTEMPORARY** pendants, made by Emerson, can be used singly or grouped on spreader.



**TRADITIONAL** fixture made by Progress diffuses light with translucent globes.

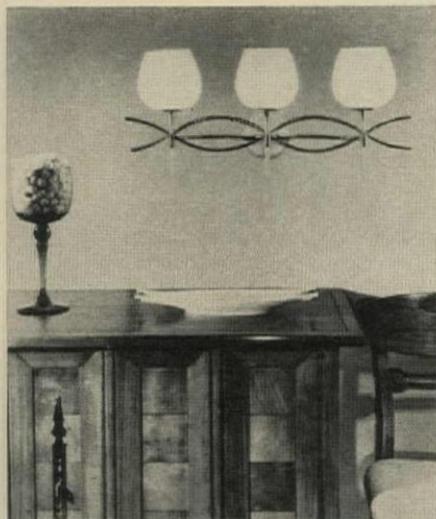


**CHANDELIER** adds nostalgia and elegance to this dining room. But room also has contemporary fixtures: Cornice at left shows off wall mural and provides

general illumination. Brass-trimmed recessed eye-ball fixtures focus attention on fireplace and paintings over mantel. These fixtures are by Moe Lighting.



**PULLDOWN FIXTURES** on both sides of bed provide good reading light without taking up space on bedside table. By Moe Lighting.



**WALL BRACKET**, with three opal glass goblets and brass frame, can be used in living areas, halls, or entries. By Lightolier.



**PENDANT CLUSTER** serves as reading light, typifies trend away from "dead center" location of ceiling fixtures.

**The No. 5 news about lighting is:**

## Decorative fixtures are coming back into popularity

The cycle turns: where not long ago (as one panelist put it) "most living rooms looked like a lamp department," there is a strong trend back to built-in decorative fixtures.

But this is not solely a nostalgic return. While there are many fixtures reminiscent of oil and gas lighting, there are also many fixtures based on contemporary design and modern

materials (especially opal glass, which now costs much less to produce in blown shapes than it did just a few years ago).

Another trend is toward off-center placement. Most fixtures are now going onto the perimeter, where they do a good job of general illumination, serve as reading or accent lighting, and—by lighting corners—make rooms seem bigger.

*continued*



**IN WIDE HALLWAY,** luminous soffit brightens entire area and supplies good working light for built-in desk. This unit was made on site, has ceiling-mounted fluorescents above plastic diffusing material.



**IN BEDROOM HALLWAY,** multiple wall fixtures by Lightolier provide good general lighting with no dark corners. Bracket at rear doubles as accent lighting for planter.



**OVER CLOSET DOORS,** fluorescent wall bracket serves to light the interior and to give general room illumination. Part of light is deflected upwards to the ceiling.



**IN LAUNDRY ROOM,** luminous ceiling by Virden supplies glare-free working light and gives a usually cheerless area a strong sales appeal. This ceiling has plastic diffusers supported on factory-made frame.

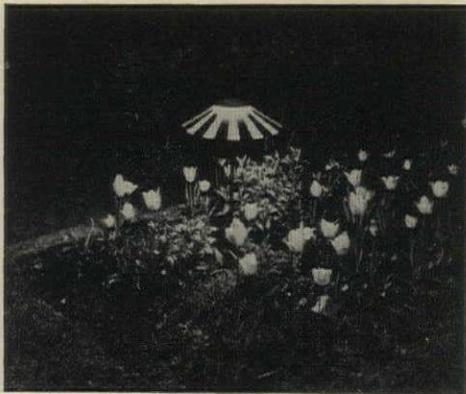
**The No. 6 news about lighting is:**

## Lighting is being used to upgrade often-overlooked areas

It is probably the least costly way to add new sales appeal to halls, laundries, utility rooms, and closets—by making these often-cramped spaces seem bigger and more cheerful.

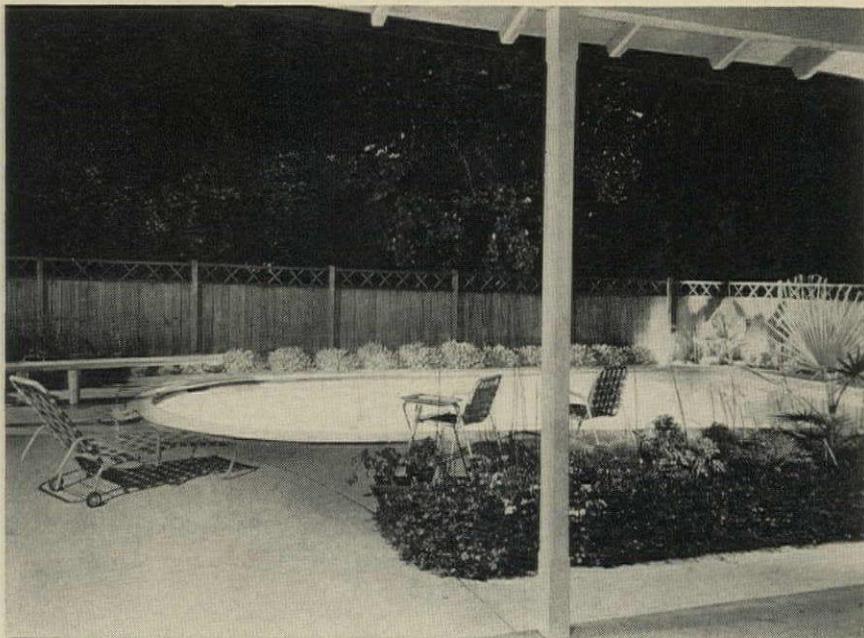
In pointing out this extra built-in lighting, salesmen have three good talking points: 1) It would cost the buyer three to six times as much to wire for the fixtures after the house

is built as it costs the builder to wire for it during construction, 2) The wiring and fixtures may be included in the mortgage, so it only costs the buyer pennies more per month for this added service, and 3) Good built-in fixtures usually do a lighting job better for less than the buyer could do it with pin-up or portable fixtures and lamps.



**DECORATIVE GARDEN FIXTURE**, 2' tall, high-lights flower bed at night and also provides safe, glare-free path lighting (Lightolier).

**FUNCTIONAL LIGHTING** from underwater pool lights and Westinghouse outdoor reflector floods makes this outdoor space safe and pleasant.



**The No. 7 news about lighting is:**

## Outdoor living is creating a trend to more outdoor lighting

Many builders make a strong sales feature of outdoor living. But good outdoor living needs good outdoor lighting.

Good outdoor lighting includes: 1) safety lighting of paths, drives, and walks; 2) security lighting to discourage trespassers, 3) activity lighting for dining, relaxation, and game areas, 4) accent lighting of landscape features, 5) view

lighting outside big areas of glass to prevent the "black mirror" effect at night, and 6) decorative lighting where the fixtures or lanterns are as important as the light they cast. Experts warn: Outdoor lighting is hard to do well. You can probably get extra help from your architect, your landscape architect, or your utility.



**STREET LIGHTING** with individual post lights (these by Line Materials) has a pleasant informal quality. With the big increase in night selling (see p 124), good street lighting is a crucial element in attracting and handling big crowds.



**ENTRANCE LIGHTING** adds strong curb appeal, but also serves the functional purposes of lighting the path to the door and discouraging prowlers.

**The No. 8 news about lighting is:**

## There is a new approach to street and entrance lighting

The big trend in street lighting is to standards and luminaries that are in character with the houses. That's why many builders are working with utility officials in selecting street lighting equipment for their subdivision, and why some builders are installing individual post lights (often with photo-electric-cell control that turns lights on at dusk and off at

dawn) at the driveway of each lot (see left photo).

The big trend in entrance lighting is more fixtures. Where a single fixture over or beside the front door was standard just a few years ago, leading builders are now dressing up their entrances with matching fixtures, and using recessed soffit lighting in the overhang (right photo).



## PART 4

# WIRING

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**The No. 1 news about wiring is:**

### **Now you can buy almost everything you need to wire better for less**

Your electrician may have to spend \$3 to \$5 a house more for 60 better outlets and switches than for the competitive-grade devices he now uses, he may have to spend \$5 to \$15 more for circuit-breakers instead of fuses, \$5 to \$10 more for No. 12 wire instead of No. 14 wire. It may cost him a few cents a foot more for surface-mounted wiring instead of the in-the-wall wiring he now feeds through 100 studs after he has drilled 100 holes in the studs. But . . .

The new and better devices should save enough of his 10¢-a-minute time to pay for themselves several times over. Any builder who insists that his electrician adopt today's new devices and methods will, at last, be able to get a really good wiring system at reasonable cost.

Today's new devices and methods let a builder offer his buyers an electrical system that:

1. Eliminates replacements (and costly callbacks);
2. Provides enough capacity for heavy electrical loads;
3. Provides enough wiring so that neither octopus exten-

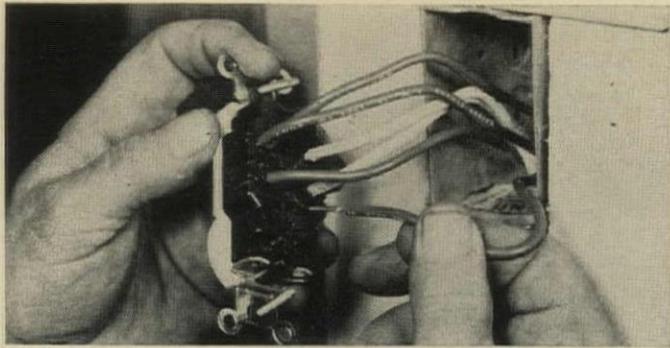
sion cords nor expensive rewiring will be necessary for the life of the house;

4. Eliminates the problem of voltage drop—and the annoyance of appliances and lighting that don't work at full efficiency;

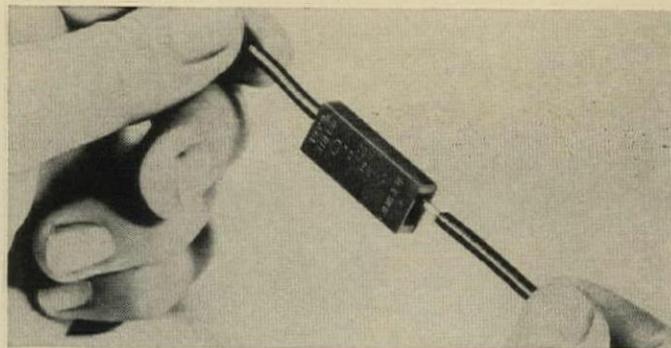
5. Provides the extra convenience of plenty of outlets and plenty of switch control throughout the house.

With all the new devices now available on the market, the manufacturers can no longer be blamed if today's new appliances and fixtures are still installed by methods almost as archaic and wasteful as those used for plumbing. Nor, in most places, can backward codes be blamed—for most electrical codes are as good as most plumbing codes are bad.

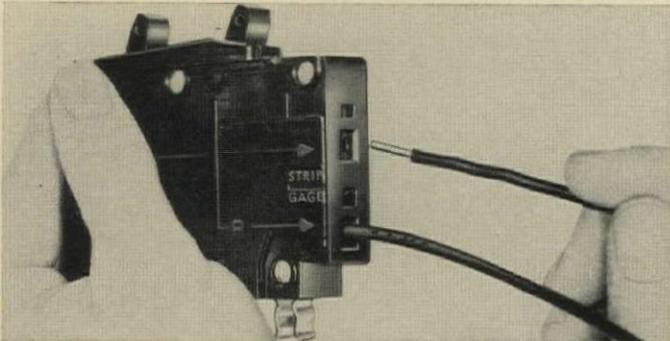
The blame, if 1961 appliances and fixtures are still installed by 1906 methods, now rests on the electrician who refuses to, or doesn't know enough to, use the new devices and new methods described on the next five pages. And on the builder who tolerates wiring costs far higher than they should be.



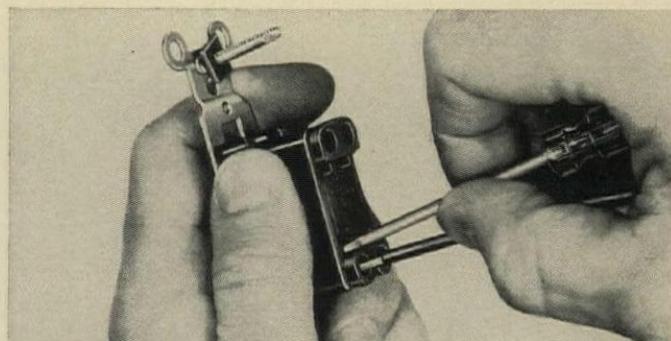
**DOUBLE GROUNDING RECEPTACLE** made by Slater Electric has break-off lugs for 3-wire split circuits, push-in connections for four ground and four hot wires, and costs about 24¢ in specification grade.



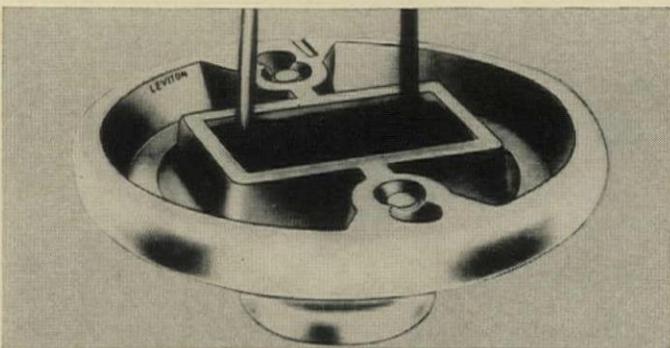
**WIRE CONNECTOR** replaces wire-nuts or twisted, soldered, and taped splices. It connects up to four No. 12 wires—which are simply pushed into the ends of the connector. Made by Wiremold.



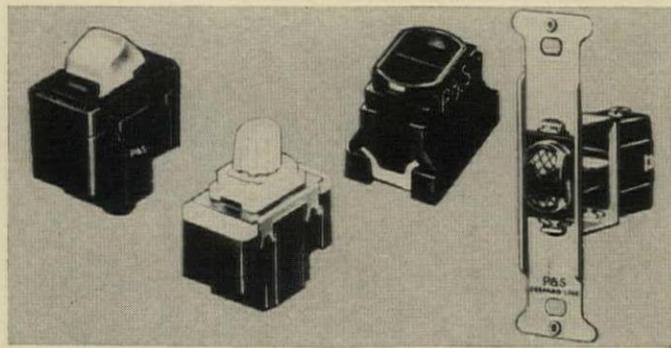
**TWO-CIRCUIT BREAKER** eliminates all screw connections. Line connections are made by snapping breaker onto bus bars (see clamp at bottom) and load wires are pressure connections. Made by Square D.



**SINGLE-POLE SWITCH**, with four push-in connections (see wiring diagram *p 132*) is made by GE, costs about 27¢, and is T-rated. Most manufacturers make similar single, 3- and 4-way switches.



**PORCELAIN CEILING RECEPTACLE** has four push-in connections for through-wiring both ground and line wires. This Leviton device costs about 28¢. Other manufacturers plan to market similar receptacles soon.



**STRAP-MOUNTED DEVICES** with push-in terminals are priced the same as similar screw-terminal units. Pass & Seymour, whose devices are shown, now make some switches *only* with push-in terminals.

### The No. 2 news about wiring is:

## Now you have to pay only pennies more for pressure-lock devices

This means that there is less excuse than ever for using obsolescent, time-wasting screw-terminal devices.

With the new pressure-lock devices (which are now available for 3-wire as well as 2-wire circuits), all the electrician has to do is strip the ends and shove them into holes in the back of the device. He no longer needs to 1) wrap the wire around a screw (an extra-slow job with the heavy No. 12 wire used in today's good wiring jobs) and then tighten down the screw, 2) repeat the same process as many as six times per device for 3) 60 devices per house.

Since better-grade pressure-lock and better-grade screw-terminal devices are priced the same, it is hard to see why, as Robert Graham of GE pointed out, "90% of wiring devices sold today for new-house installations have screw terminals and only 10% are of the pressure-terminal type."

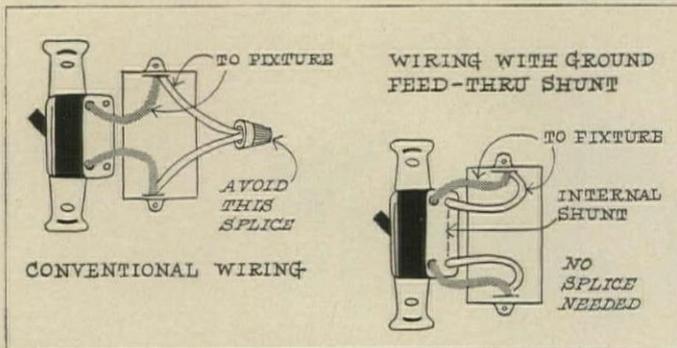
One possible reason: Some electricians argue that pressure terminals don't make as good contact with the wire as screw terminals. But Graham explained: "As you install a screw-

terminal device in the switch box or outlet box, you set up a strain on your connection. There is a definite tendency for the screw to back out—and you'll have less surface of contact than with a pressure-type connection."

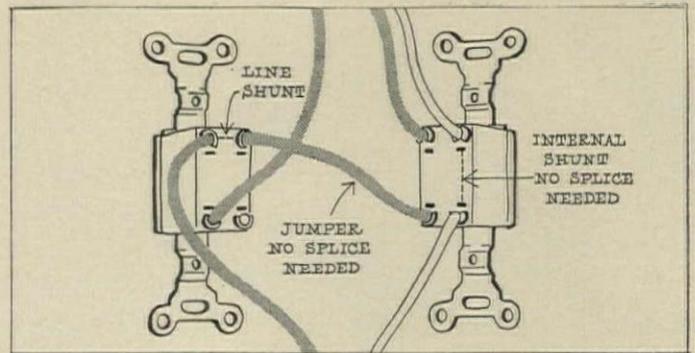
Conversely, it's virtually impossible to pull the wire out of a pressure-lock device without intentionally releasing the lock with a nail or screwdriver.

Another possible reason: since pressure-type devices are not available in the cheapest (ie, competitive) grade, they cost more than the cheapest screw-terminal devices. But . . . You can buy a pressure-lock double receptacle with double contacts for as little as 17¢—only 5¢ more than the cheapest screw-terminal double outlet with single contacts. You can buy a pressure-lock, 10-amp T-rated switch for 27¢, only 12¢ more than the cheapest 5-amp switch. You can buy better grade pressure-lock devices for a whole house for only \$5 more than the cheapest devices—and they will save much more than that in labor.

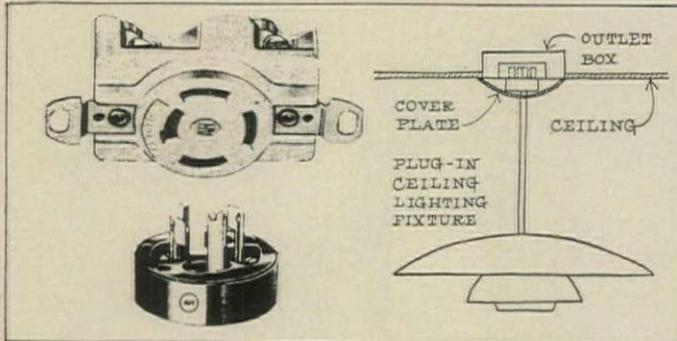
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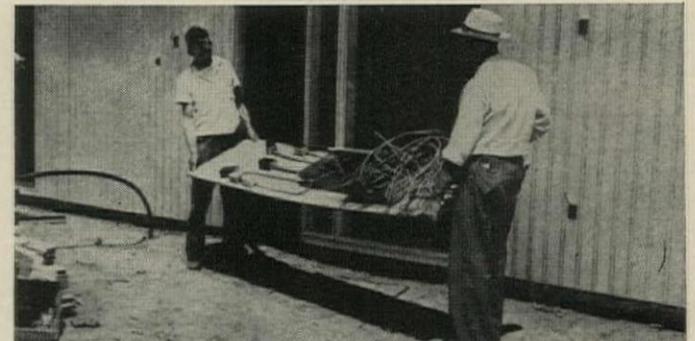
**1. INTERNAL GROUND SHUNT**, in the single-pole switch at right, eliminates the ground-wire splice shown at left. Switch shown is made by Arrow-Hart & Hegeman. Other manufacturers make similar switches.



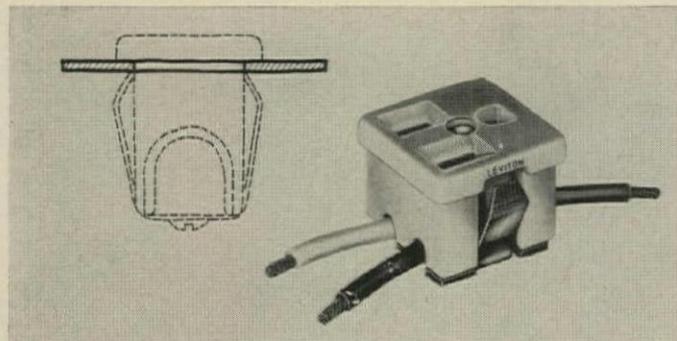
**2. INTERNAL LINE SHUNT**, built into switch at left, supplies power to this switch and permits running a jumper—with no splicing—to power a second switch in the same box. Made by Pass & Seymour.



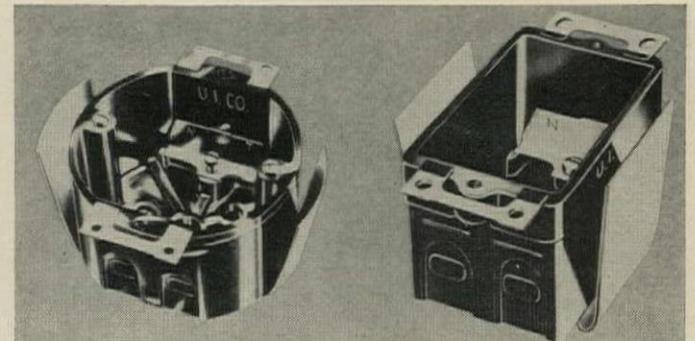
**3. LOCKING PLUGS AND RECEPTACLES**, made by Arrow, Hart & Hegeman, show a principle that could be used both to support and power interchangeable lighting fixtures—from prewired ceiling outlets.



**4. WIRING PACKAGE**, used in the NAHB Knoxville Research House, included 80% of the house wiring and cut site wiring to a day. But, says GE, this idea has not been developed further since then.



**5. SNAP-IN OUTLET**, made by Leviton for appliance manufacturers, shows a principle that could be adapted to residential wiring devices to eliminate two screws and save on-the-job time for the electrician.



**6. SNAP-IN BOXES**, by Union Insulating Co, show a timesaver now used only in rewiring. Boxes push into a hole in the wall, hold in place by tightening one screw which pulls flaps tight against back of wall.

**The No. 3 news about wiring is:**

**You can expect more new time- and money-saving devices**

The development of pressure-lock connectors for wiring devices (previous page) was described by Manufacturer Harold Leviton as "The biggest wiring advance in 25 years."

But there are lots of other advances—some already incorporated into today's devices, and others on the way.

*Item:* The two wiring devices in drawings 1 and 2—both now available on dealers' shelves—eliminate tedious splicing in switch boxes.

*Item:* At least one manufacturer (who prefers to remain anonymous) is known to be perfecting a prewired lighting fixture which will plug or snap into a prewired ceiling outlet box. It might work something like the locking plug and receptacle (shown in drawing 3) usually used with heavy-duty industrial power tools.

*Item:* The wiring harness (photo 4) developed for the NAHB research house in Knoxville promises enormous savings. Though this idea seems to have dropped from sight, it makes

so much sense that it will almost surely turn up again.

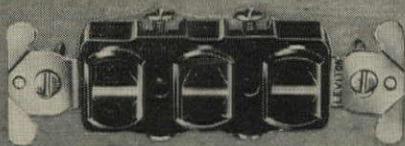
*Item:* Appliance manufacturers can now buy, for use in their units, snap-in outlets (photo 5). And you can now buy a snap-in outlet box (photo 6). But you still have to twist down a screw to clamp each cable to the outlet box, twist down two long screws to put each device into its box, and then twist down two more screws to put on the cover plate.

That's why some wiring experts are thinking of:

1. Integral box-device-cover assemblies (at least for simple devices like single-pole switches and convenience outlets) that could simply clamp onto uncut cable and snap into place. (For a big advance in this direction, see the drawing on p 134).

2. Push-in cable clamps, similar to pressure-lock wire connectors, that would lock the cable jacket into the box without screw clamps. These clamps would make possible . . .

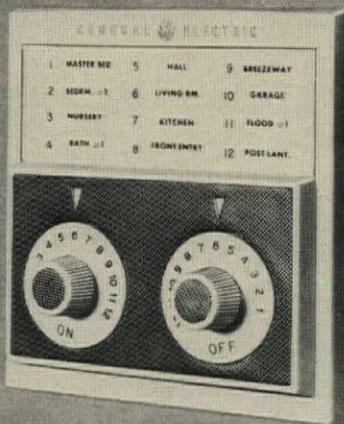
3. Prewired service entrance panels.



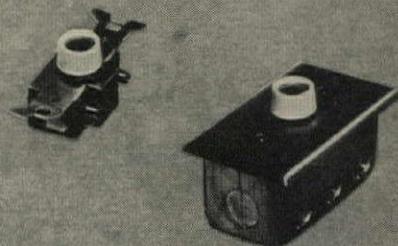
1. TRIPLE OUTLET



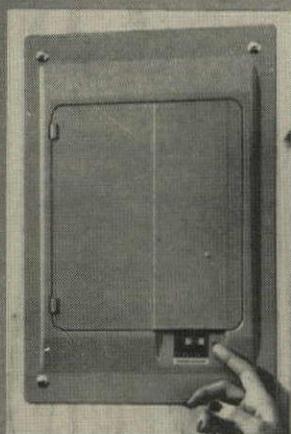
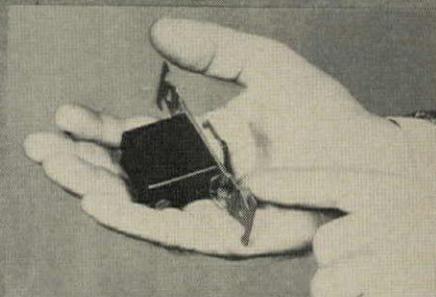
2. QUADRUPLE OUTLET



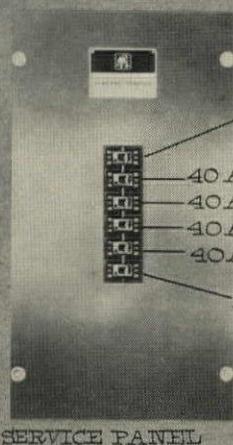
3. REMOTE-CONTROL MASTER SWITCH



4. VARIABLE DIMMERS

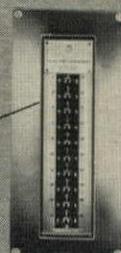


5. COLOR-COORDINATED SERVICE PANEL



SERVICE PANEL

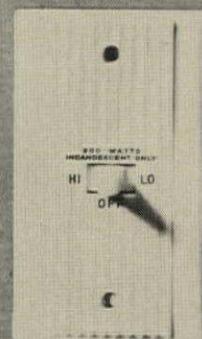
6. 200-AMP SERVICE PANEL



SUB-PANEL 10 CIRCUITS FOR HEATING/AC



SUB-PANEL 20 GENERAL PURPOSE AND LIGHTING CIRCUITS



7. HIGH-LOW DIMMER

**NEW WIRING DEVICES** with built-in talking points (see text) include: 1) triple outlet by Leviton, 2) quadruple outlet by GE, 3) remote-control master switch by GE, 4) 600-w continuous dimmers by General

Electronic Controls, top, and Slater, below, 5) color-coordinated service panel by Cutler-Hammer, 6) 200-amp service panel by Bulldog, and 7) 300-w high-low dimmer by Leviton.

**The No. 4 news about wiring is:**

**You can now buy new devices that give salesmen new talking points**

For example: The triple receptacle (photo 1) costs no more than a double receptacle from the same manufacturer. You could use these receptacles—or quadruple receptacles (photo 2)—to cut down the number of outlet boxes you put in your houses. But you will get far more benefit at no extra cost if you use the same number of outlet boxes and give your buyer the added convenience of plenty of receptacles. You can use the point made by NEMA's John Biggi: "Several years ago—when we stopped counting—we found there were 26 different uses of electricity in the bedroom alone."

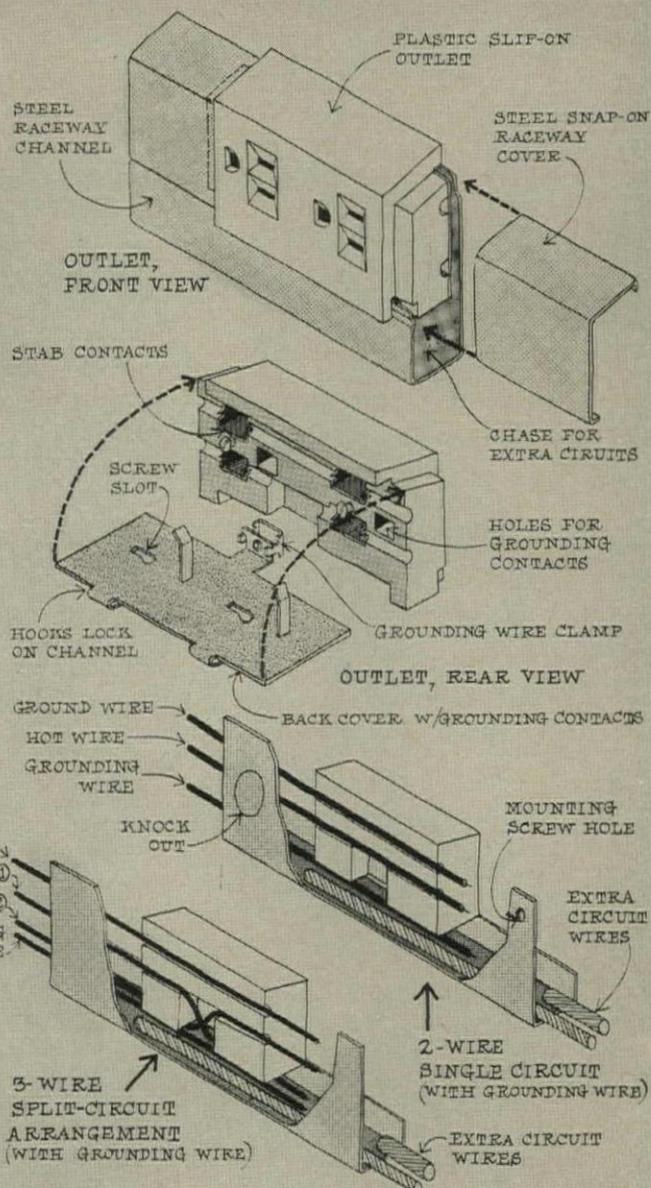
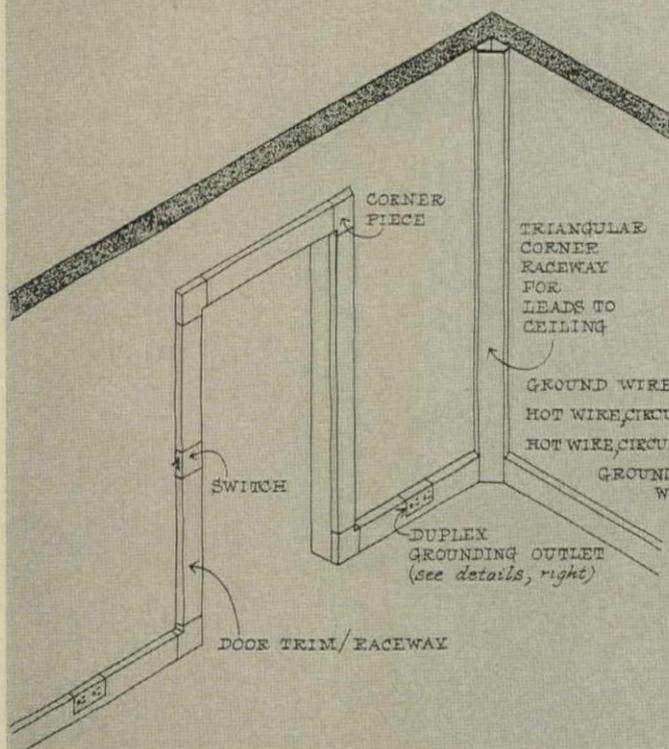
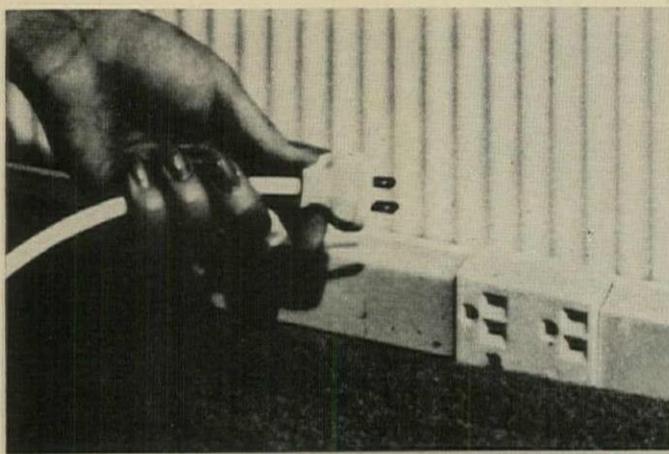
Remote-control switching (photo 3) is another good case in point. As Martin Schwartz of Remcon pointed out: "When competing builders have just as good houses, with just as good kitchens, built on just as good lots, and with just as good financing—then the small added cost of extras like remote control low-voltage wiring can give a builder new selling points. If he understands multi-point control, if he understands how such controls let users light rooms before they get

to them, how a master-control unit can turn all house lights on or off from bedroom, kitchen, or entry—then he has a built-in selling point in practically every room in the house."

You can use new incandescent dimming devices like the high-low switch (photo 7) which lists for only \$4.50, the continuous 600-w electronic dimmers (photo 4) which list for \$24 and \$35 but install in standard switch boxes, or bigger dimmers (not shown) made by Superior, Moe, Progress, and Minneapolis-Honeywell which can handle up to 1,800 w of incandescents or fluorescents. Any of them will let you sell buyers on the fact that they will be able to control the mood of the lighting in their rooms.

Even circuit breakers offer new selling points: eg, the unit shown in photo 5 comes in a variety of colors so it can be mounted, as is, in the kitchen where the housewife can restore service. The 200-amp unit shown in photo 6 offers the flexibility of separate subpanels that can be located anywhere they will be most convenient for the homeowner.

*continued*



**RACEWAY SYSTEM** now being field-tested by General Electric eliminates in-wall wiring by putting switch legs in door trim and supplying overhead lights through corner channels. Uncut lengths of wire are

dropped into the raceway channel. Receptacles are pushed onto the wire anywhere, and are powered by stabs that pierce the wire's insulation. The raceway cover is then cut to length and snapped onto channel.

**The No. 5 news about wiring is:**

**New surface raceways promise a better job at competitive prices**

At least five manufacturers are now pushing to get new surface-mounted raceways on the market.

Each of the new systems will offer some or all of these important advantages: 1) elimination of the need for drilling through studs and snaking wires through walls, 2) installation at the same time as finished wiring, eliminating the possible delay of two electrical inspections, 3) flexibility which will give the buyer a system that can be changed or added to at low cost. Further, all the new systems will solve the problem of wiring factory-made sandwich panels.

*Item:* General Electric has developed the raceway system shown and described in the drawing above. It estimates its new system will cost less than 40¢ a ft in place, including all switches and outlets. The system can be used as a 3-wire split-perimeter loop (see p 137) and can supply 240 v at any point. Status: in pilot production.

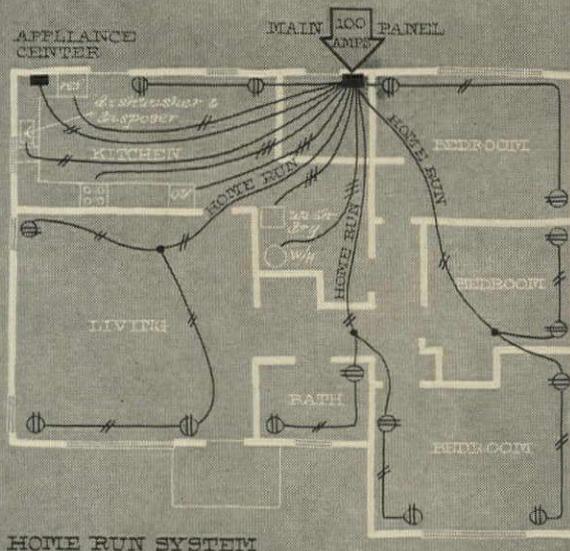
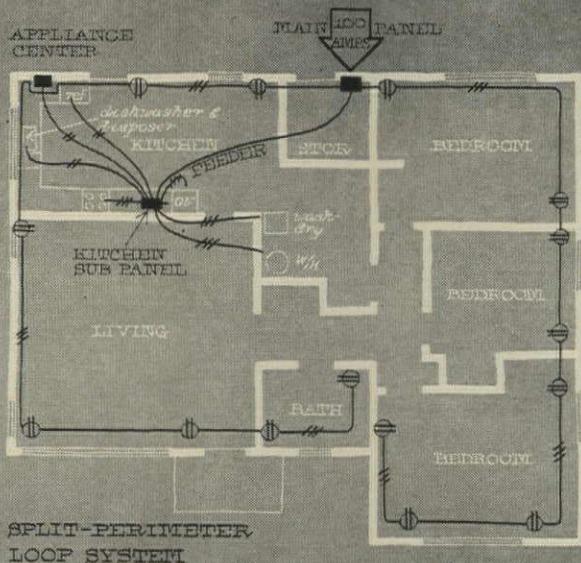
*Item:* US Steel is working with "a major manufacturer" on a steel baseboard system that forms an electrical ring around

the perimeter of the house. This is a 3-wire system that will supply both 120- and 240-v service through the house. Individually fused outlets can be installed anywhere. They have stab-contacts that grab onto special square conductors in the baseboard. Status: experimental.

*Item:* National Electric, which developed the plastic baseboard raceway used in the NAHB 1960 research house (H&H, Apr '60) is experimenting with slim plastic streamlined ducts to get around doors and windows, with different plastics for the raceway itself, and with foot-switches to eliminate switch legs. Status: will be on the market this year.

*Item:* Wiremold—another pioneer in surface-mounted wiring—is testing floor-level kick-switches, miniature raceways to serve as switchlegs, and raceways that are recessed into factory panels. Status: still experimental.

*Item:* Bulldog has added a split feed to its plastic Electro-strip, so that two surface-mounted circuits can be fed from a single 3-wire cable. Status: on the market.



**BEST WAY TO WIRE HOUSES** up to 2,000 sq ft is to use a split-perimeter loop system with two 3-wire No. 12 circuits and a kitchen subpanel, above. Compared with the usual 2-wire No. 14 "homerun"

method, right, the loop 1) increases capacity, 2) cuts material costs and 3) cuts job time (see below). For simplicity, schematic diagrams do not include switch legs or lighting circuits.

### The No. 6 news about wiring is (alas!):

## Money-saving systems are still being ignored by most electricians

Too many electricians—who have too little incentive to cut their job time or their bills—still use archaic wiring methods and still bid wiring jobs on a standard cost-per-outlet basis.

And too many builders and architects—who don't know enough, or don't care enough, about new engineered wiring systems and new cost-saving materials and devices—still accept the standard cost-per-outlet bidding method and so put no pressure on the electrician to improve methods or cut his costs.

It is possible of course to wire a house for modern electrical living using the archaic 2-wire No. 14 circuits that were first worked out in our grandfathers' time. All you need is a lot of them. (See right drawing, above.) As one panelist put it: "If you don't care how much money you waste on an inefficient system, there is practically nothing that you can't do with archaic methods of wiring."

But there are much better ways to get the capacity needed in modern houses:

*For example:* As long ago as November 1953, H&H showed how much South Bend Builder Andy Place gained by switching to a 3-wire split-perimeter loop for his general-purpose circuits from the 2-wire "homerun" system he had been using. Place found he could cut his electricians' time by 23% and the length of wiring runs by 21%.

*For example:* In February 1958, H&H reported that capacity for lighting and general-purpose circuits in a Detroit research house had been increased 180% for only 21% more wiring cost (\$262.12 to \$317.68)—including labor, devices, and wire. The basic change was from 2-wire No. 14 circuits to 3-wire No. 12 split-perimeter wiring.

*For example:* In England, a system essentially similar to the split-perimeter loop is code-enforced. The reason, says the Ministry of Works: "Copper is an expensive imported commodity and must be used as sparingly as possible. . . ."

The 3-wire split-perimeter system saves money mostly because it requires much shorter runs (and therefore less material and less labor) to provide a given number of outlets.

Each 3-wire No. 12 circuit (two "hot" wires and a ground wire) carries two 20-amp circuits: so there are two separate circuits totalling 40 amp (or 4,800 w) available at each

duplex receptacle. This is 2.67 times the 15 amp (1,800 w) provided by 2-wire No. 14 cable. Further, a 3-wire system provides 240 v for major appliances at any point—with conventional wiring, installing a 240-v appliance means a special wiring run. For more details on the 3-wire split-perimeter loop system, see H&H Feb '58, Sept '58, Apr '60.

### Here are 21 other good ways to cut wiring costs:

1. Use a kitchen subpanel, as shown in the drawing left above. A 3-wire No. 4 feeder connects it to the main—and short runs serve each appliance. This saves wire and labor.
2. Use nonmetallic-sheathed cable wherever the code allows—it is at least 15% cheaper than any other cable.
3. Use oversize (3½" x 2" x 3") outlet boxes.
4. Run general-purpose wiring in a baseboard raceway (opposite), or at least run it at baseplug height in walls—not in the ceiling. The average house has four times as many baseplugs as ceiling outlets.
5. If you must run wiring in the wall, have studs pre-drilled with 1" holes at baseplug height.
6. Use time-saving pressure-lock devices (see p 131).
7. Cut and strip wires with a combination tool.
8. Buy prewired appliances, lighting fixtures, etc.
9. Wire for kitchen appliances with a counter raceway.
10. Use only triple or quadruple outlets (see p 133).
11. Do not use competitive grade devices (see p 131).
12. Put the washer and dryer on the same circuit.
13. Put the dishwasher and disposer on the same circuit.
14. Put outlets near ends of wall space for convenience.
15. Use grounded outlets in kitchen, bath, laundry, basement, garage, and throughout slab houses.
16. Provide power source for electrician's power tools.
17. Leave a 2' loop of slack wire between outlets so homeowner can install future baseplugs economically.
18. Use circuit breakers instead of fuse boxes (see p 133).
19. Use at least 100-amp entrance cable and 100-amp entrance box (more if you plan for electric heat).
20. Use a split-bus distribution panel—which eliminates a \$10 to \$80 main disconnect switch.
21. Use remote-control switching for multipoint light control. (see p 133).



## PART 5

# UNDERGROUND WIRING

**The No. 1 news about underground wiring is:**

### **More and more utilities are offering buried cable at reasonable cost**

Today 78% of all major US utilities offer underground wiring in new subdivisions. Most have done so only within the last three years.

The authority for this statement is *Electrical World*, a leading publication serving the power industry.

In the last three years, the price to the builder for underground wiring has dropped—in some cases sharply. There are three big reasons why:

1. *Overhead wiring costs to the utility are increasing.* Today, about 60% of electrical utilities must use bigger, tougher, more expensive aerial cable to avoid tree trouble, storm damage, and the clutter of too many open wires. More and more subdivisions are laid out in curvilinear plats so poles must be guyed at extra cost. And with future telephone service going underground (see p 140) the power companies must carry pole charges alone. Under previous systems, the phone company either owned some poles or paid rent on them.

2. *Underground wiring costs to the utility are decreasing.* Direct burial of primary and secondary service cables at the same depth is now feasible in most soils and for most service—and this is cheaper than earlier burial methods (for details, see p 140). And the current trend toward the builder (instead of the utility) doing the trenching is saving money because the builder has trenchers on the job for his foundations and water and sewer lines, and he can lump all his earthmoving in one bid.

3. *The growth of electric heating (and, thus, the all-electric house) has given more builders a trading point with the utility.* As an incentive to the builder to include electric heating and other 240-v equipment, some utilities credit the all-electric-house builder with a rebate equivalent to, say, the heating and hot-water charge for a two-year period. This rebate is usually enough money to pay for underground service to the lot line.



P. S. Newsphoto

**UNDERGROUND SERVICE** in Bob Alexander's Las Palmas Estates, Palm Springs, preserves the resort quality of this luxury subdivision.



**OVERHEAD SERVICE** would look something like this. Poles and wires would detract from the landscape and, Alexander figured, his sales.

**The No. 2 news about underground wiring is:**

**More builders want to get rid of poles and overhead wires**

In the past year, hundreds of builders have asked their local utilities for underground wiring.

According to H&H's survey of "builders other builders follow," underground wiring is gaining acceptance faster than any other single sales feature, showing a percentage gain of nearly 20% from 1960 to 1961. Over 10% of respondents plan to use it.

In some areas underground service (at a reasonable price) has become an essential element in sales. For instance, the Portland (Ore.) General Electric Co says that builders are so insistent about underground service that within a few years it may be standard for all new subdivisions. Builders' cost in this area has averaged \$147 per lot and PGE may establish a front-foot rate.

North of Chicago, where Commonwealth Edison now serves about a third of all new houses underground at an average fee of less than \$50 a house, buyers are beginning to be highly critical of overhead wiring.

In Los Angeles, Realty Analyst Sandy Goodkin, who handles market research and analysis for 260 subdivisions on the West Coast, says:

"In areas where trees are sparse, customer reaction to a lot of poles and wires can kill a good sale. We feel putting in overhead service makes about as much sense as it would to put water mains on stilts down the back lot line.

"In new subdivisions with underground wiring, our builders and their salesmen are making a big point that poles and wires will probably be a sure mark of obsolescence 20 years from now and, on the other hand, underground service is already a sure status symbol in treeless areas, because most existing subdivisions with overhead service look hopelessly caught in a web of poles and wires.

"So we find more and more builders putting their wire underground even though it may cost them up to \$1,000 per house. Fortunately, most lenders will credit underground service so its cost can be covered in the evaluation."

*continued*



**TRENCHING** can usually be done cheaper by builder than utility—builders' costs run as low as 10¢ a foot if job is lumped in with other earthmoving work. Job shown is Centex Construction at Elk Grove, Ill.



**PLACING TRANSFORMERS** is a job easily handled by builders' crews using standard equipment, so there need be no special installation cost. Hook-up is made by utility. Note trench for secondary line to house.

**The No. 3 news about underground wiring is:**

## New techniques are cutting the cost of installation

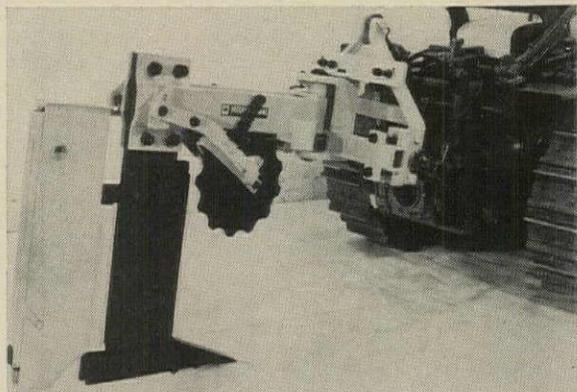
*Item:* Direct burial of cable eliminates the cost of ducts (now needed only under roadways) or other covering: mechanical protection is not needed in most soils, and future cable replacement (which ducts allow) is not a problem when cables are sized for all-electric houses.

*Item:* Placing primary and secondary cable in the same trench at the same level (photo above) eliminates partial

backfilling (once used to separate cables).

*Item:* Setting transformers on precast pads eliminates special equipment, costly vault construction.

*Item:* Higher voltages allow smaller cable. Studies by Wheeling Electric Co show raising secondary voltage from 120/240 to 240/480 and adding house transformers to drop voltage back to 120/240 cut underground costs over 50%.



**CABLE PLOW** for telephone distribution and service lines can bury cable at lower cost than trenching equipment. This type of unit is used by many telephone companies.



**CABLE-LAYING TRAILERS** are towed behind plow (left) which is pulled through earth by tractor. Cable is fed through the shoe of the plow to the correct depth, which is established by plow adjustments.

**The No. 4 news about underground wiring is:**

## Telephone lines are going underground and power lines will follow

New policy at AT&T instructs its 20 operating companies to install underground service lines in new subdivisions wherever practical. This will force more and more power lines underground because the power companies can no longer rely on the phone companies to help install or pay for poles used in overhead service.

The fact that it may soon be possible to lay telephone and power lines side-by-side in the same trench should also help cut underground costs. Utilities have already okayed such use and telephone companies should soon. Their fear that high-voltage power would jam telephone signals has apparently been proved unfounded.

## The No. 5 news about underground wiring is:

### Prices charged by utilities vary widely—and illogically

Here are some examples of the astounding variety in prices quoted to builders across the country for underground wiring:

*In Houston*, Builder Raleigh Smith says "for one of our subdivisions the local utility estimated cost of primary and secondary down the rear lot-line easement at \$25 per ft. or roughly \$2,000 per pair of back-to-back 70' lots, plus service drops to the house at \$3 or \$4 a ft."

*In St Louis*, Union Electric Co can get the builders' cost down to \$54 per 70' lot, plus service drop cost of \$1.50 per ft from lot line to house. For bigger subdivisions, with heavy loads per house and a tight, coordinated construction schedule (see optimum specifications below), even these costs can be cut.

*In Miami*, the local utility will not touch underground wiring. If a builder wants it, a qualified electrical contractor does the job to utility specifications, and charges the builder the full cost. The utility then credits the builder with the cost of overhead lines. Builder Perry Willits figures his cost for underground service would run from \$750 to \$1,000 per house.

*In Jackson*, the Mississippi Power & Light Co will provide primary and secondary underground service to the lot line free for a subdivision of Gold Medallion houses. Builders only cost is for underground service drop from lot line to house: \$50 to \$75.

*In Los Angeles*, Builder Tom Yedor was recently quoted a price of \$1,000 a lot by the local utility for underground service to 125' lots, plus the cost of the service drop.

*In Menlo Park, Calif.*, Builder John Mackay figures that underground service will cost \$750 per house to the lot line, plus service drop to the house.

*In Portland, Ore.*, the Portland General Electric Co now figures that the average cost difference between overhead and underground (the builder's cost) runs about \$1.60 per front foot. They are thinking of making this figure a fixed rate for underground work in any subdivision in their area.

*In South Bend*, Builder Andy Place's cost for underground to the house (600 lots) is \$75 per house if they are electrically heated, \$125 per house otherwise.

*In Albuquerque*, Builder Dale Bellamah says, "I have been quoted prices by the local utility up to \$10,000 per lot."

*In Chicago*, Commonwealth Edison will install underground service free if there are optimum working conditions (see below) and a minimum of three 240-v appliances.

#### The price differences reflect a difference in attitude much more than a difference in real costs

Under reasonable conditions (see below) utilities can put underground wiring into subdivisions at a reasonable price to the builder—if they really want to. But many want to stay with overhead distribution.

The real cost of underground wiring is the difference between the cost of an overhead distribution system (on which all electrical rates are based) and the cost of an underground system to do the same job.

Underground service can indeed cost the utility more: it takes 1) bigger, better insulated cable for direct burial (because lines run hotter underground than through the air), 2) enclosed (rather than open) transformers and pads to mount them on, and 3) secondary pedestals for hooking the house service drop to the secondary line.

But underground service can also save the utility money: it eliminates 1) poles, which cost from 20¢ to 40¢ a front foot including guying, 2) tree trimming, storm damage, and pole replacement, which may cost from \$3 to \$5 per year per pole, and 3) secondaries for big houses on big lots, where primary cable can run direct to a newly developed encapsulated transformer on the house itself. Further, and important: in an all-electric subdivision with underground wiring the utility need not figure in an allowance for future service expansion. It would be difficult to add capacity to an underground system (all it takes is extra wires on the poles in an overhead system). So the solution is to size the cable originally for the maximum expected use.

*Here are the optimum conditions for low-cost underground wiring:* 1) relatively flat land and rock-free soil; 2) at least 24 houses built side-by-side and back-to-back in progression so utility can work on cable laying and house hook-ups continuously; 3) at least 8 to 12 houses per transformer and at least two 240-v circuits per house—preferably electric heat and 150-amp service—so primary and secondary can be sized big enough at installation to avoid expanding the service in the future.

#### Here are further thought-provoking comments:

"With the telephone companies coming off the poles and going underground, it's imperative the power companies do the same. If we can work with the telephone company in laying cable, we can probably get the cost of underground vs overhead to the breakeven point. We will have to clear this with the Interstate Commerce Commission though before we can proceed."—L. E. Pierron, *Commonwealth Edison*.

"As it is now, our only important cost when we come into a subdivision is the cost of a pad-mounted transformer for each four houses. The builder takes care of the trenching, backfilling, and secondary cable at a cost of about \$90. With this arrangement our cost right now is only about 30% more for underground than overhead. If we can put our power cables side by side in the same trench with the telephone

cables—and an EEI committee is working on this now—we can cut the costs still further."—Ed George, *Detroit Edison*.

Summed up Moderator Prentice: "The time is long past since the need for underground wiring became apparent. The No. 1 eyesore in too many suburbs is not billboards along highways but power and light poles. Somebody once said if you look at a monstrosity long enough you get so you don't notice it. Maybe some people have been looking at the monstrosity of poles so long they don't realize how perfectly awful they look. Sometime, take a good look at what poles are doing to square miles of suburban countryside. When you have trees and live in a two-story house, you don't notice the telephone poles. But, sure as shooting, in most new tracts of one-story houses, the only thing you can see is the poles."

# ROUND TABLE REPORT

## PART 6

# THE ADDED SELL

***The No. 1 news about the added sell is:***

### **Electricity offers 170 different ways to dramatize ease of living**

"We can do things—exciting things—with electricity that we can't do with anything else. We can do them better, differently, not repeating what has been done before, not merely recreating the house grandfather lived in." So said Paul Emler of American Electric Power.

Added AEP's Phil Sporn: "The great mobility of electric energy makes it possible to combine all the elements of comfort and relaxation with imagination and taste."

Summed up Bill Loeber of Westinghouse: "The consumer loves total electric living."

Total electric living doesn't just mean the conditioned house, the fully equipped kitchen and laundry, and functional and decorative lighting. It also means preparing for all the other ways your buyer will want to use electricity (see opposite).

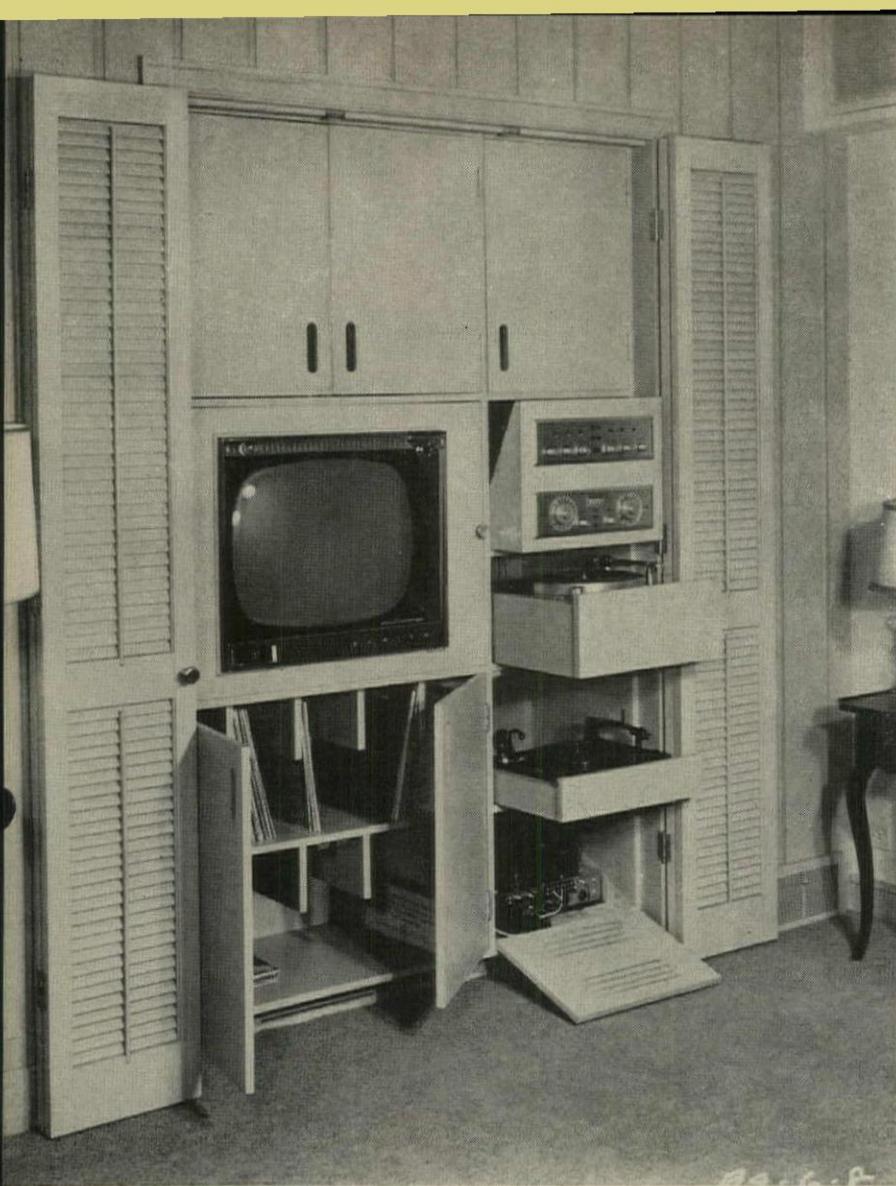
Part of this preparation is adequate wiring—adequate not only in capacity but in number of outlets. Be sure your buyers have enough receptacles in the bedrooms for a clock,

radio, TV set, reading lamps, electric blankets and sheets, coffee maker and toaster, hair dryer, shaver, etc. Make sure your outdoor wiring will handle not only lighting but hedge trimmers and lawn mowers, bug killers, barbecues and other cooking equipment, radios and phonographs. Make sure the garage and workshop area have outlets enough and power enough for all the tools your buyer wants. (For details on adequate wiring, see *p 130*.)

Part of the preparation is also building-in the many new attractions that make modern life easier and more enjoyable (see *p 144*). For example, you can back up electronic air cleaning with central wet-and-dry vacuuming. You can add high-fidelity music to your home communications system. You can hide a TV antenna in the attic and, with a booster, run several sets from it. You can assure the buyer clean dry driveways, walks, and gutters all winter.

In short, the things you can do and your buyer will want to do are limited only by your imaginations and pocketbooks.





**ENTERTAINMENT CENTERS** like this one by Shure lend themselves to built-ins, can include AM-FM radio, stereo, record players, tape decks, TV, movie projectors. Others are made by RCA, Nutone, Progress.



**TV AMPLIFIERS**, like this one by Winegard, make possible the use of hideaway antennae to serve several TV sets. Other makers: Mosley and Jerrold.



**DOOR OPERATORS** that work by remote control are now offered by most door makers. This one is Sedcon's Portomatic made for Frantz. Others are sold by Overhead, Barber-Colman, Berry, Raynor, Delco.



**INTERCOMS** tie into the phone system, like this one by AT&T, or into music systems, like units by Rittenhouse, Nutone, Progress, Talk-a-Phone, Talk-a-Radio, Roberts. Devices dramatize how steps are saved in up-to-date homes.



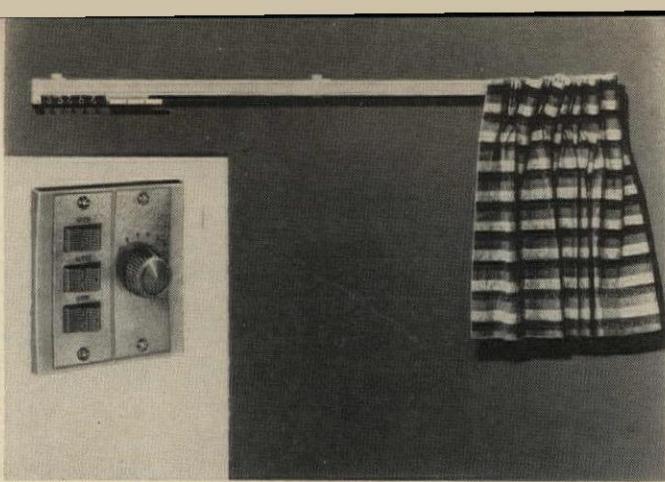
**KITCHEN-BAR** puts the food and drink where the party is. Units, with cooking, refrigeration, drink storage and service are made by Acme-National (above), Dwyer, General Chef.

**The No. 3 news about the added sell is:**

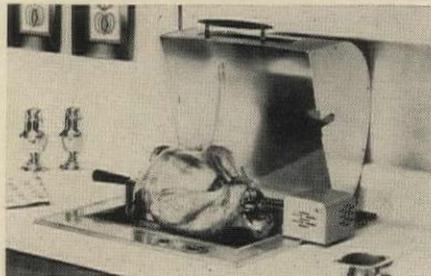
**New and novel electrical built-ins can get your house talked about**

The baker's dozen products shown above indicate some of the possibilities—and the possibilities in any one can be dramatic in terms of sales. You can dramatize house upkeep by showing how built-in devices can wash and dry floors and walls, by showing how snow melters can keep walks and driveways dry and clear, how door operators can cut weather-

ing of garage and car. Or you can show how handy power sources and handy communications make housekeeping easier and happier. Or you can even show how little things like timers can take over the programming of heating, cooling, cooking, gardening, lighting, entertainment, even getting the household started in the morning, closed up at night.



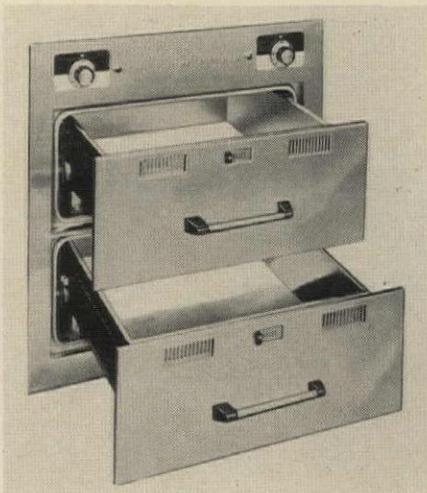
**ELECTRIC TRAVERSE ROD** operated from a remote wall-mounted switch gives smooth control over full-length drapes for big window walls. Device is exclusive with Kenney.



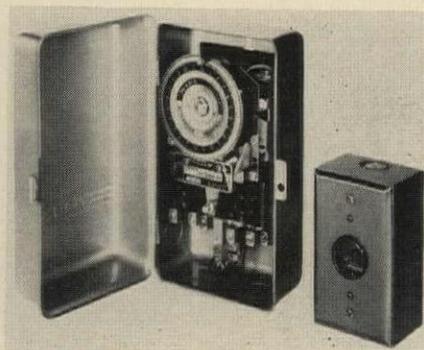
**BUILT-IN BARBECUE** brings outdoor cooking indoors. Rotisserie hood reflects heat from rod-type elements. By Nutone.



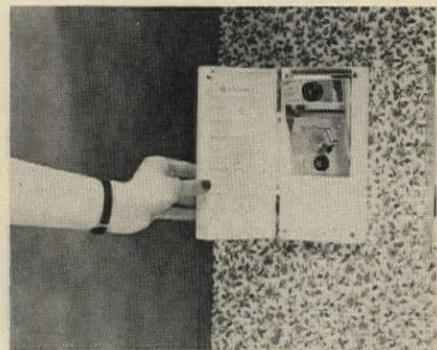
**APPLIANCE CENTER** may be located in kitchen, dining room, family room, patio, etc. It offers outlets for small appliances, includes one timed outlet. By Sunbeam. GE, Westinghouse, Hotpoint make others.



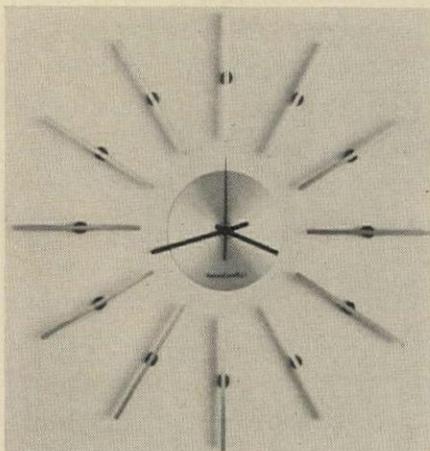
**WARMING DRAWER** is a built-in for prospects who do a lot of entertaining. It warms dishes, rolls, other foods. By Thermador.



**GENERAL TIMER** is a man-of-all-work for repetitive jobs like turning on floodlights, sprinkler systems, attic fans. By Tork.



**ELECTRIC CAN OPENER** can be built-in. This one is by Burgess. GE, TradeWind, Westinghouse and others make them.



**BUILT-IN CLOCK** can add a touch of decor as well as practicability. This is one of Howard Miller's contemporary models.

**BUILT-IN VACUUM CLEANER** is centrally located—only hose and nozzle are moved from room to room. Wet-and-dry model is by My Maid. Others are made by Vacu-Maid, Jetflo, Central Vacuum Corp.



/END

# AN OPEN LETTER TO THE PRESIDENT

*in response to his Housing Message*

*Dear Mr. President:*

HOUSE & HOME could not agree more wholeheartedly with all the objectives urged in your eloquent and moving housing message—the strongest, longest, and broadest message in many a year.

Like you, we find it shocking and shameful that in the richest nation on earth so many families are still ill housed. Like you, we want a good home for every American, poor or rich, city or farm, young or old. Like you, we deplore urban slums and suburban sprawl.

We agree that the federal housing program should put more emphasis on urban needs. We share your wish for better planning on an area scale. We share your desire and impatience to remodel our cities, to improve our patterns of community development, to provide for the housing needs of all segments of the population. Who could question your statement that “meeting these goals will contribute to the nation’s economic recovery and its long-term economic growth. . . . A nation ill housed is not as strong as a nation with adequate homes for every family. A nation with ugly, crime-infested cities and haphazard suburbs does not present the same image to the world as a nation characterized by bright and orderly urban development.”

And of course we welcome your concern for the depressed state of homebuilding (which is America’s biggest industry) and the effect of the depression on all the industries dependent on homebuilding. We welcome your concern for its high rate of unemployment—“the highest rate of unemployment in any major American industry.” We welcome your call for “a steady and progressive increase in the rate of homebuilding, beginning now.” And we are more than pleased that you believe a construction rate of at least two-million new homes a year will soon be required.

You first made manifest your deep concern for better homes and better communities by the high calibre of the public servants you chose to work and advise

with you on these needs. You made your concern manifest a second time by your prompt attack on mortgage interests costs, for last year's tight money hit housing first and worst of any industry. Now you have emphasized your concern by making housing needs the theme of your most far-reaching special message to Congress on any strictly domestic problem.

Because we share your housing hopes and purposes so deeply, because we welcome your concern for housing and homebuilding so gladly, and because we regard your housing advisers so highly—for these very reasons we are all the more disappointed to find that, although many suggestions in your message are indeed very important (like speeding up urban renewal processing, developing new tools to finance home improvement, providing better statistics on the market) . . .

## The multibillion dollar program you propose is far too small to cure the vast needs you state

If you, as you say, 14-million families (26% of the nation) are still ill housed, your plan to subsidize another 100,000 public housing units would meet just two-thirds of 1% of their needs; and giving Fanny May another \$500 million for special assistance loans to consumer coops, non-profit associations, and limited dividend corporations could barely re-house even one-third of 1%.

If, as you say, we must provide good homes for millions of elderly couples living on less than \$3,000 a year and for still more millions of widows living on less than \$2,000, your plan to earmark another \$50 million for direct loans to the aged and to reserve 50,000 of the added public housing units for their use would meet less than one-half of 1% of the old folks' need you dramatize.

If, as you say, "almost one-fifth of the occupied houses in rural areas (they totaled 14,300,000 in 1950) are so dilapidated they must be replaced" and if "hundreds of thousands of others are far below adequate standards," extending the \$200-million-plus unexpended balance of the 1956 farm housing credit as you suggest would meet hardly 2% of the need you state. It would provide less than a \$75 loan toward the cost of each needed replacement, even if nothing at all is spent on the other substandard homes!

And if, as you say, "we need a broader and more effective program to remove blight," your plan to spend another \$2.5 billion to buy up slums at prices three and four times their re-use value would not go very far. New York City alone might need every cent of that money to reclaim its 7,000 acres of blight and decay, for New York slum prices are so inflated by overcrowding and undertaxation that redevelopment purchases have averaged \$481,000 an acre!

As for your other two major proposals—selective credit controls to induce builders to build low-priced houses and federal funds to buy land reserves now for future suburban development—we are sorry to have to say we believe these two programs could do as much harm as good, because

*First effect of no-down 40-year financing for new homes priced under, say, \$13,500 might be to break the price or weaken the market for 22 million reasonably good existing non-farm homes now priced below this ceiling (not counting 6.7 million that are dilapidated or lack a private inside bath). This in turn would make it difficult or impossible for owner-occupants to sell their under-\$13,500 homes and so get their equity out to buy the better homes many of them can now afford. So the more cheap new homes are sold to first-time buyers by the no-down financing you propose, the fewer better homes can be sold to second-time buyers trading up.*

*continued*

As the shelter shortage disappears, used-house prices are falling, so lower-income buyers in more and more markets are finding they can get more for their money in existing houses than in new homes built at today's costs and today's wages. In these markets the No. 1 reason why lower-income families still buy new homes when they could get more house for the same money second-hand is that the new homes (which are financed wholesale) can be bought for \$300 or \$400 cash, whereas existing homes at the same price (which must be refinanced one at a time) are likely to require \$2,000 or \$3,000 cash.

Concluded Dr. Louis Winnick's excellent research report to ACTION on rental housing: "The problem is not likely to be solved with making the trade-up process work better." Your proposal would almost inevitably make it work worse.

*First effect of government spending to buy land reserves at today's sky-high prices might be to bid suburban land prices still higher, thereby driving builders further out into the orchards and corn fields to find land they could afford to build on. This would spread suburban sprawl and premature subdivision over added miles of open country.*

Stockholm's land-reserve plan worked so well mainly because the land was bought with pre-World War I kroner before the automobile started suburban land prices soaring. That is something quite different from starting to buy reserves at the peak of today's land inflation.

Combined cost of the programs you propose has been estimated at more than \$5 billion for open or concealed subsidies. If \$5 billion can meet only 2% or at most 3% of the need you dramatize so eloquently, what clearer demonstration could there be that America's need for better homes can never be satisfied by subsidies?

*This is a very tough problem, for which there is no quick or easy solution. It cannot be solved by a liberal program (meaning, by today's definition, liberal with the taxpayers' money). It can be solved only by a radical program (meaning, literally, a program that attacks the problem at its roots).*

## So we wish your message proposed to attack basic causes instead of relieving symptoms

We wish you had said even one word questioning *why* slums in so many places are still spreading faster than new homes can be built to replace them, *why* private enterprise cannot meet the need of better housing for low and middle-income families in big cities, *why* cities are disintegrating in suburban sprawl instead of expanding in a plannable way, *why* good new housing costs too much and *why* home improvement costs still more, *why* slums are the most profitable property anyone can buy, *why* urban expansion consumes four times as much land as it uses, *why* homes that cost \$12,000 around some cities cost \$18,000 to duplicate in others, *why* city planners and regional planners are so often helpless and frustrated, *why* the profit motive is harnessed backward to better land use in cities and suburbs alike, *why* cities subsidize slums by undertaxation and penalize improvements by overtaxation.

Or perhaps it would be better to combine all these questions into two:

1. What are the roadblocks and impediments that still make it impossible for the dynamics of private enterprise to meet all our needs for better housing (just as the dynamics of private enterprise meet our needs for almost everything else); and
2. What can and should be done to remove those roadblocks, so private enterprise can do the job.

We believe there are five major roadblocks. All of them are caused or perpetuated by some government failure at the federal, state, and/or local level. Your help is urgently needed to attack them. They cannot be removed by bigger subsidies or more liberal spending, but they can all be eliminated or minimized at no cost to the taxpayers by new fresh thinking and new vigorous leadership—the kind of new thinking and new leadership you promised us when you proclaimed the New Frontier.

## 1. The high cost of code chaos

Conflicting and archaic building codes add a thousand dollars to the cost of a small house, partly because so many of their requirements are as useless as they are costly, partly because their differences frustrate the vast economies offered by standardization and industrialization. Around Washington, for example, some builders have to build under 12 different local codes and find their costs varying from jurisdiction to jurisdiction by as much as \$1,000 per unit, with even the lowest cost inflated by the impossibility of standardizing their production.

Under our form of government, code responsibility is delegated to the local authorities, but it is wishful thinking and close-to-nonsense to expect local authorities to meet this responsibility without federal help. They cannot afford the testing needed to keep their codes abreast of new products and new technology. They are not strong enough or informed enough to stand up against the powerful interests—local and national—that profit by code confusion (including the sponsors of the proprietary “model” codes that have to be kept different to be salable). And how can any local government bring its code in line with national standards when there are no national standards to get in line with?

Canada has shown the way to solve this problem by buttressing local authority with federal assistance. Through the Canadian counterpart of FHA (the Central Mortgage & Housing Corp) Canada is preparing a dominion code for housing—a code all local governments will be urged to adopt by reference, a performance code that will meet every local requirement (just as the New York State code provides for tropical hurricanes on Long Island and Arctic snows in the Adirondacks).

*By instructing FHA to prepare, service, and promote a similar national code recommended for coast-to-coast adoption by reference in every US community, you could lay the foundation for cutting the cost of building better homes by more than a billion dollars a year—at a yearly cost to FHA of less than a million dollars!*

## 2. The high cost of real estate transfers

Archaic “closing costs” (not including prepayments) cost the buyers of new and existing houses more than a billion dollars a year. They discourage new-house sales by often taking more cash than the down payment. They choke used-house sales by almost doubling their selling cost (trade-ins usually mean accepting 15% less than the appraisal value of the house). They thereby create the illusion that lower-priced homes are in short supply, whereas the Census Bureau’s housing inventory indicated that there are far more reasonably good non-farm housing units priced under \$12,400 than there are non-farm families who could not qualify FHA to buy a more expensive home. The No. 1 reason more low-priced units seem to be needed is that so many millions of low-priced homes are still occupied by families who could afford to pay an average of 71% more.

Our whole system of real estate transfers and title searches is a hangover from the days when all land was royal (ie, “real”) property. The king has been gone for 185 years next July 4, but we still perpetuate the legal fictions of feudal tenure. This archaic system of real estate transfer may have been good enough in the days of the old homestead passed down from generation to generation. It is too costly an anachronism now that homes are resold once every seven or eight years.

What we need is a new legal fiction to make house transfers as quick and inexpensive as car transfers or security transfers. And the precedent of cooperative housing with proprietary leases backed by stock ownership or trust certificates of beneficial interest suggests how this need might be met if you provide the leadership and enlist the constructive cooperation of the American Bar Assn.

Cooperative housing units can be sold and resold without a penny wasted in legal fees, title searches, and closing costs because, like stocks and bonds, they are transferred as personal property instead of “real” property. Nominal ownership in the actual land and buildings remains unchanged in the proprietary corporation or trustee, so the real estate title and the all-important title insurance are not affected by the sale.

*Project homes are already being sold as cooperatives under FHA Sec 213. Next two steps to make a new legal fiction workable might be 1) a new FHA title to insure chattel mortgage loans backed, not by real estate, but by the security of stock ownership and proprietary leases, and 2) similar authorization from the Home Loan Bank Board to let Federal S&Ls lend on this type of security.*

*As you know NAREB has long advocated FHA insurance for individual mortgages inside cooperatives.*

*continued*

### 3. The high cost of undependable financing

Ever since 1951 homebuilding and homebuilders have been tossed from boom to bust and bust to boom by the alternation of too-easy and too-tight money (which inevitably hits homebuilding first and worst). This uncertainty about money makes it dangerous if not impossible for builders (and others) to make the long-range investment in equipment and personnel needed to rationalize homebuilding costs at a lower level.

The need for a bigger and better central mortgage facility to help stabilize the flow of mortgage money has been clear as far back as the presidency of Herbert Hoover, who sponsored the establishment of the Federal Home Loan Bank. *So here we will only say we were disappointed that your long message included no mention of this need and no proposal to meet it.*

### 4. The high cost of land in cities

This is the No. 1 reason (and perhaps the only reason) why private enterprise cannot meet the need for good low-income housing and good middle-income housing in big cities. A builder who pays too much for city land is then forced to compound his problem by building high-rise to spread his land costs—and building high-rise costs twice as much as building walkups or townhouses.

The No. 1 reason city land costs too much is that city land is so underassessed and undertaxed. So the owners (including, most notoriously, the slumlords) can capitalize the too-big spread between the rents they can collect and the taxes they must pay, translating the spread into too-high prices.

Said the 1960 report of the mayor's special advisor on housing in New York: . . . "The \$2-billion public housing program here has made no appreciable dent in the number of slum dwellings. No amount of code enforcement will be able to keep pace with slum formation until and unless the profit is taken out of slums by taxation."

### 5. The high cost of land in the suburbs

Since 1950 building material prices have risen 24%, building trades wages have risen 60%, but suburban land costs have risen an average of at least 300%. High land costs are now the No. 1 problem of the homebuilding industry, the No. 1 factor threatening to price new houses out of the market. Homebuyers balk at paying \$2,000 more and \$3,000 more when all they get for the higher price is a higher price tag on a further-out lot.

Once again the No. 1 cause is undertaxation, which makes it easy for land speculators to hold millions of acres off the market, including much of the close-in land that should be developed first. This creates an artificial shortage which sends prices skyrocketing and sprawls the suburbs further and further afield as builders move out to find land that is still cheap enough to build on.

Local governments subsidize land speculation by underassessing and undertaxing underused land; states encourage land speculation by setting low limits on land taxes; the federal government subsidizes land speculation by letting speculators deduct their costs from ordinary income taxes and then cash in their profits as capital gains.

Land-price inflation inside the cities and outside the cities is no longer a local problem. It is a nationwide and a national problem, for land prices are now swollen to the monstrous total of nearly half a trillion dollars (\$500,000,000,000.00), much more than the national debt, much more than the resources of all our financial institutions. They threaten not only the building industry, but the whole national economy as well.

*If local governments are powerless to meet the problem, it is high time the federal government took a hand. A stiff federal tax levied ad valorem on today's market price of land (like the land tax levied five times in the first 100 years of the republic) would almost certainly be constitutional if the receipts are prorated back to the states. This levy would offer the two-fold advantage of 1) deflating land prices before they are too deeply involved in the nation's credit structure and 2) providing more than enough money to minimize the need and pressure for further financial assistance to state and local governments.*

*A land tax is almost the only practical tax that can be counted on to lower prices and stimulate consumption instead of raising prices and inhibiting production.*

Whatever you may decide to do or not to do about the five basic impediments that make it hard for private enterprise to assure every American a much better home at a price he can afford . . .

## We wish your program for tomorrow's housing were aimed at tomorrow's needs—not yesterday's

We are disturbed that your message talks and plans so poor about housing when you talk and plan so rich for the economy.

You have criticized the Eisenhower administration again and again for not expanding the economy faster; you have undertaken to double this rate of growth. But if incomes rise throughout your administration no faster than they rose under your predecessor, the entire net increase in nonfarm population from now to 1965 or 1969 will be families who could qualify FHA to pay at least \$17,500 for a good house, and more than half the increase will be families who could pay at least \$23,000. Conversely, by 1969 there would be 4 million less nonfarm families than there were in 1957 who could not afford to pay more than \$13,500!

Why then do you say that the great need is for still more cheap houses? Why do you say "Selective credit devices must now be used to encourage private industry to build more housing in the lower price range"—a price range whose upper limit you set far lower than the new ceiling your administration has just set for subsidized public housing for the very poor?

You cannot raise the American standard of living by forcing more new housing into a low-price market that would already be oversupplied if so many millions of families were not under-living their incomes by staying on in homes much cheaper than they can now afford.

The New Frontier for housing is not the minimum house; we have already built too many minimum houses since the war.

The New Frontier for housing is the quality house—a house so much better than yesterday's best that yesterday's best is as obsolete as yesterday's car. The New Frontier for housing is a home that takes all the drudgery out of housework, a home that is cool in summer and warm in winter, a home that is well lighted day and night, a home with big enough rooms and ample storage, a home that costs much less to heat and much less to maintain, a home planned for more enjoyment of the land, a home in a better planned community.

And if you will help the housing industry save the money now wasted on the chaos of codes, the money now wasted on closing costs, the money now wasted on the discounts necessitated by uncertain financing, and the money now wasted on land-price inflation, the housing industry can build and sell those quality homes at prices so attractive that millions of families will want to buy them and housing can once again be a great growth factor in our expanding economy.

*The Editors of HOUSE & HOME*



## These new wall panels



H&H staff

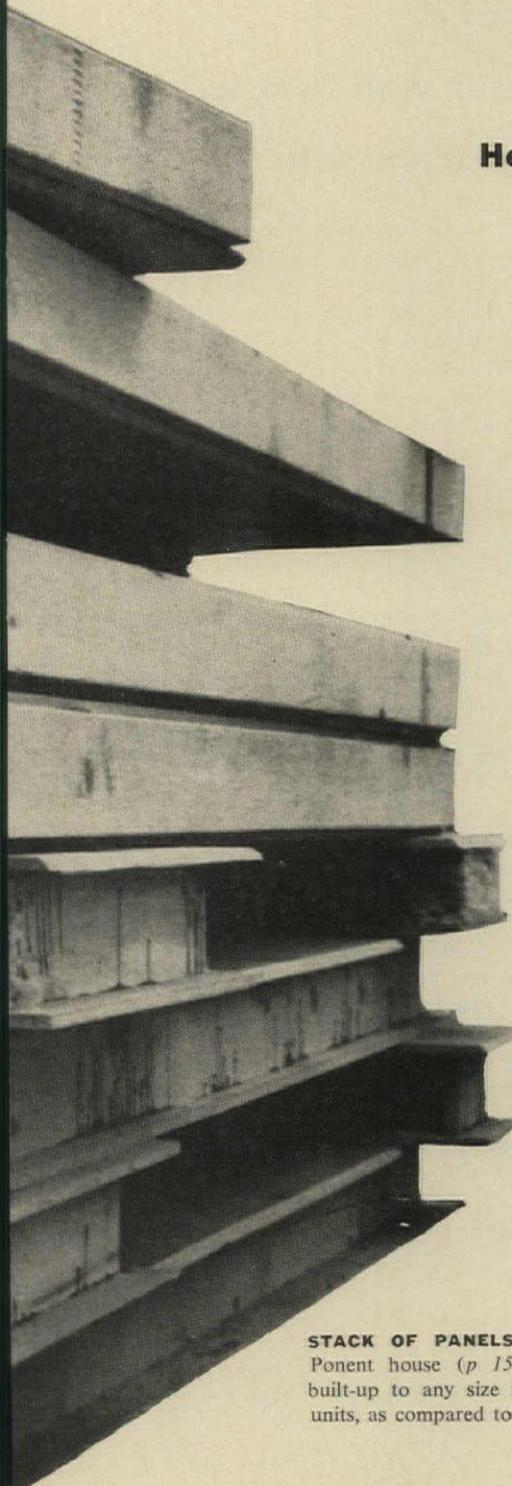
# may be the biggest news yet about building with components

## Here is why:

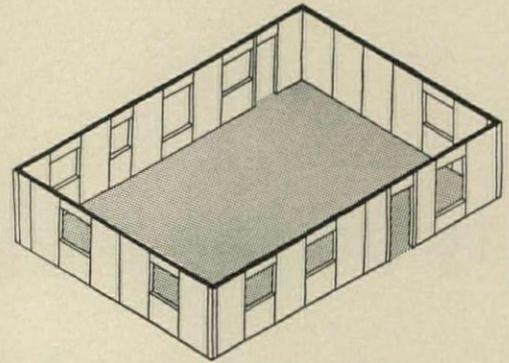
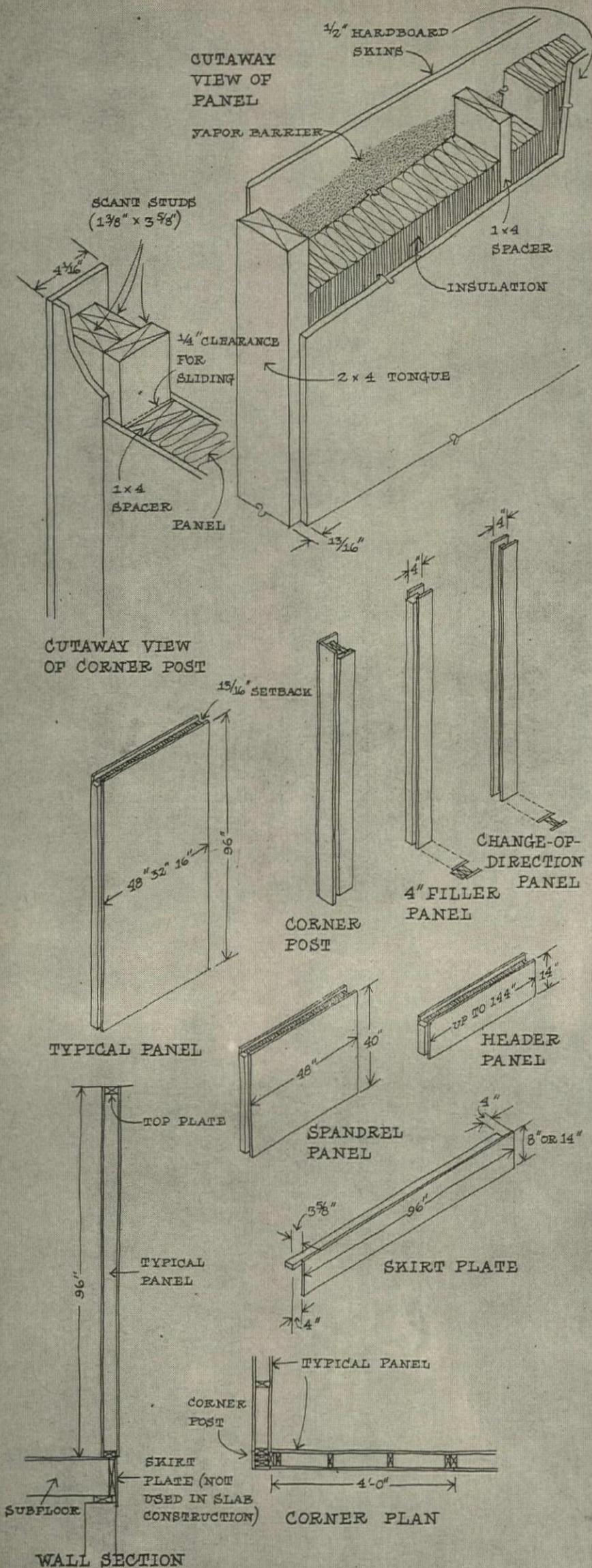
- 1 The panels—trade-named Flex-Ponent—were developed by one of America's largest makers of building products, the \$365-million Johns-Manville Corp.
- 2 They comprise a complete component system for exterior and interior walls, a system that is both modular and flexible and can be erected by any good carpenter crew.
- 3 They are designed for mass production by precision factory methods.
- 4 They are being sold (as yet only on a limited and selected test basis in the St Louis area) through Johns-Manville's regular jobbers, dealers, and fabricators. So, if and when distribution becomes general, builders everywhere will be able to buy the panels as easily as they can any other J-M product.

The distribution set-up makes the panels potentially available from more outlets than any other factory-made wall component yet marketed. This availability, plus the fact the new system can be used in any design, modular or non-modular, and that requires no new labor skills in the field, should give powerful impetus to the whole component idea.

*For details that show how the new panel system works, turn the page*



**STACK OF PANELS** photographed on site of first Flex-Ponent house (p 158) shows how panels can be cut or built-up to any size in the field. These are trial-production units, as compared to panels now in production (photo, top).



**These new components  
let you build  
an exterior wall that is  
complete from skin to skin**

Flex-Ponent panels need no finishing other than paint. On the outside surface you simply nail battens to cover the joints. (And by the same token, on the inside you need only finish the joints to be ready for paint or paper.)

Both the outer and inner skins are made of a new medium-density (about 35 lb) semi-hardboard, tempered on the surface for greater strength and moisture resistance. (J-M developed the board especially for the panels but may later market it separately.)

The panels themselves are 4 3/8" thick and have built-in, full-thick mineral wool insulating batts with integral vapor barriers. The hardboard skins are spaced with 1x4s, except at the male end of the panels where a 2x4 acts both as a spacer and as a tongue for the adjacent panel. The panels (and accessory components) are factory glued and have no nails or other mechanical fastenings.

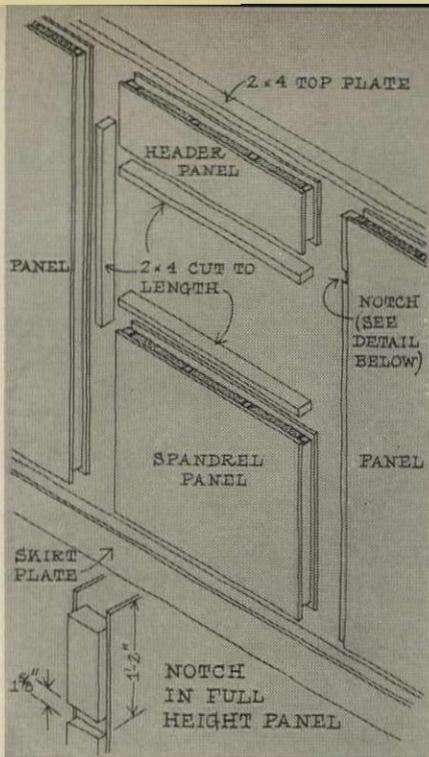
The basic panels are 8' high and come in three modular widths 48", 32", and 16" (drawing, left). Spandrels are now made in one size (J-M plans to add two more heights) and can be site-cut either vertically or horizontally to fit non-modular windows.

Headers are 14" deep and will carry roof loads over a 12' opening in a 28' wide truss-framed house.

Skirt plates (lower right in drawing) are used to cover joists and box headers in crawl-space or basement houses. Plates eliminate long (and easily damaged) skin overhang from one side of panel.

Although the outside surface of the panel is itself a siding you can cover it with shingles or other types of siding. And with brick veneer or bevel siding, where nailing into the board is unnecessary, a lower cost fiberboard can be used for the outer skin. (But this skin must be factory nailed as well as glued, because of its lower laminar strength.)

**EXTERIOR WALL SYSTEM** has only nine primary components and is based on 16" module. Corner post (upper left in drawing) uses scant studs to permit sliding last post down from the top.



1. SPANDREL PANEL is put in place.



2. HEADER drops between side panels.

**Here is how openings are framed in the exterior wall**

Windows are framed in four steps (photos, right) and need only three short 2x4s in addition to the basic panels (drawing, above).

Doors are framed the same way, except the spandrel panel is omitted and the vertical 2x4 runs to the floor.

For narrow windows, headers and spandrels are shortened (see bottom of page); and for deeper windows, spandrels are cut lower.



3. TOP 2x4 is set in notch, pushed up.

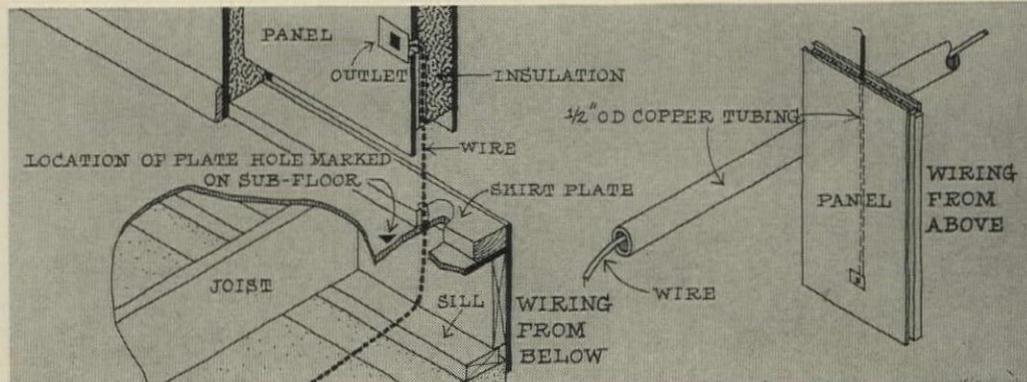


4. SIDE 2x4 goes in to hold top member.

**Here is how the wiring is run through the insulated panels**

In basement or crawl-space houses, plate is drilled and location of hole is marked on subfloor. Then panels are set and openings cut in the skin over the marks. Wires are easily fished up through the short piece of insulation.

In slab houses, where long drops are needed, a copper tube is pushed down through the insulation (right in drawing). Wires are fished through the tube, and the tube then withdrawn.



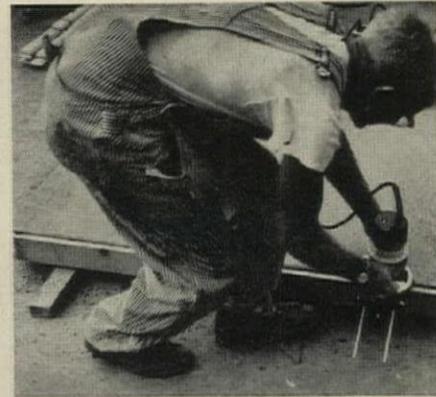
PANELS CAN BE WIRED from below in wood-floor houses and from above in slab models.

**If the module must be broken, here is how to cut the panels**

Guide strip is clamped to the panel and the cut made either with a large saw in one pass (as at right) or with a small saw in two passes, one on either side of the panel.

Router is then used to cut the special section for the interior joint (see box on p 157).

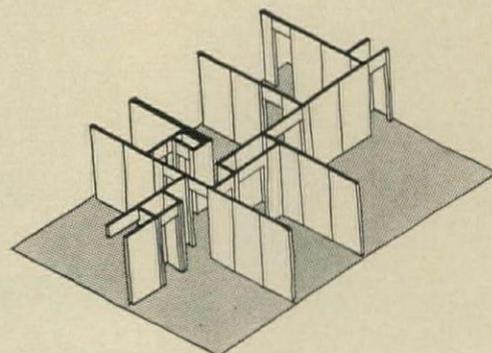
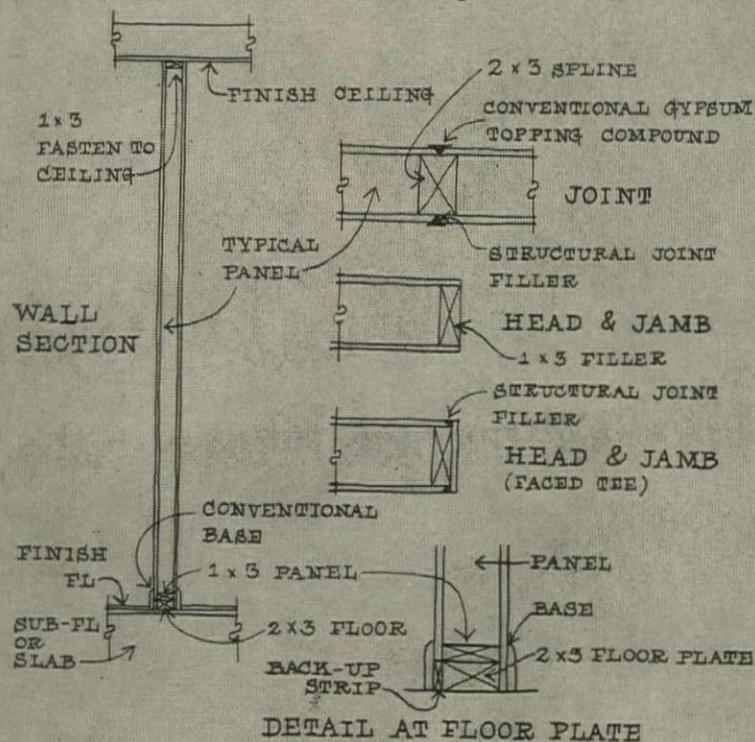
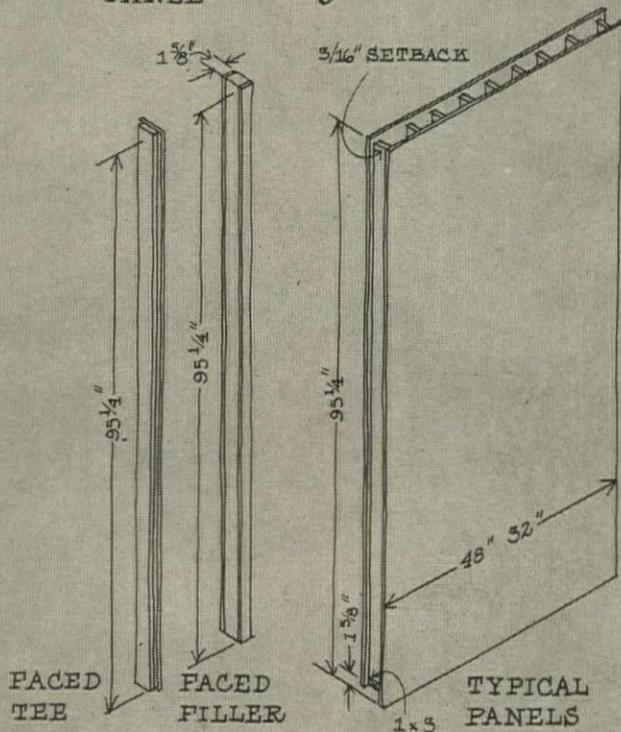
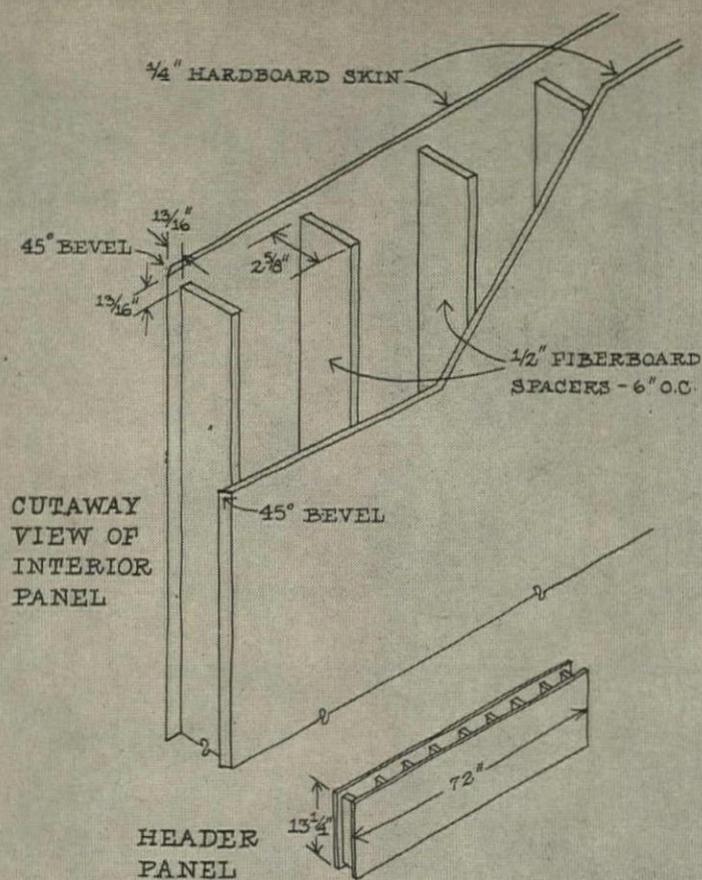
Panels are always cut back on the female edge, so it is never necessary to add framing members.



PANELS CAN BE SITE-CUT. Wood spline in panel (right) is temporary brace for routing.

Photos: H&H staff

continued



## These new components let you put up your interior partitions in three different ways

Specifically:

1. You can use the "one-big-room" method. The roof is truss-framed and the whole ceiling is installed before the partitions are set in place.

2. You can use a trussed roof but put up the partitions before the ceiling is installed. You will lose the economy of one big ceiling but—depending on circumstances—you may save even more on your wiring bill. The electrician can make his drops directly into the panels, instead of measuring and dropping through the finished ceiling.

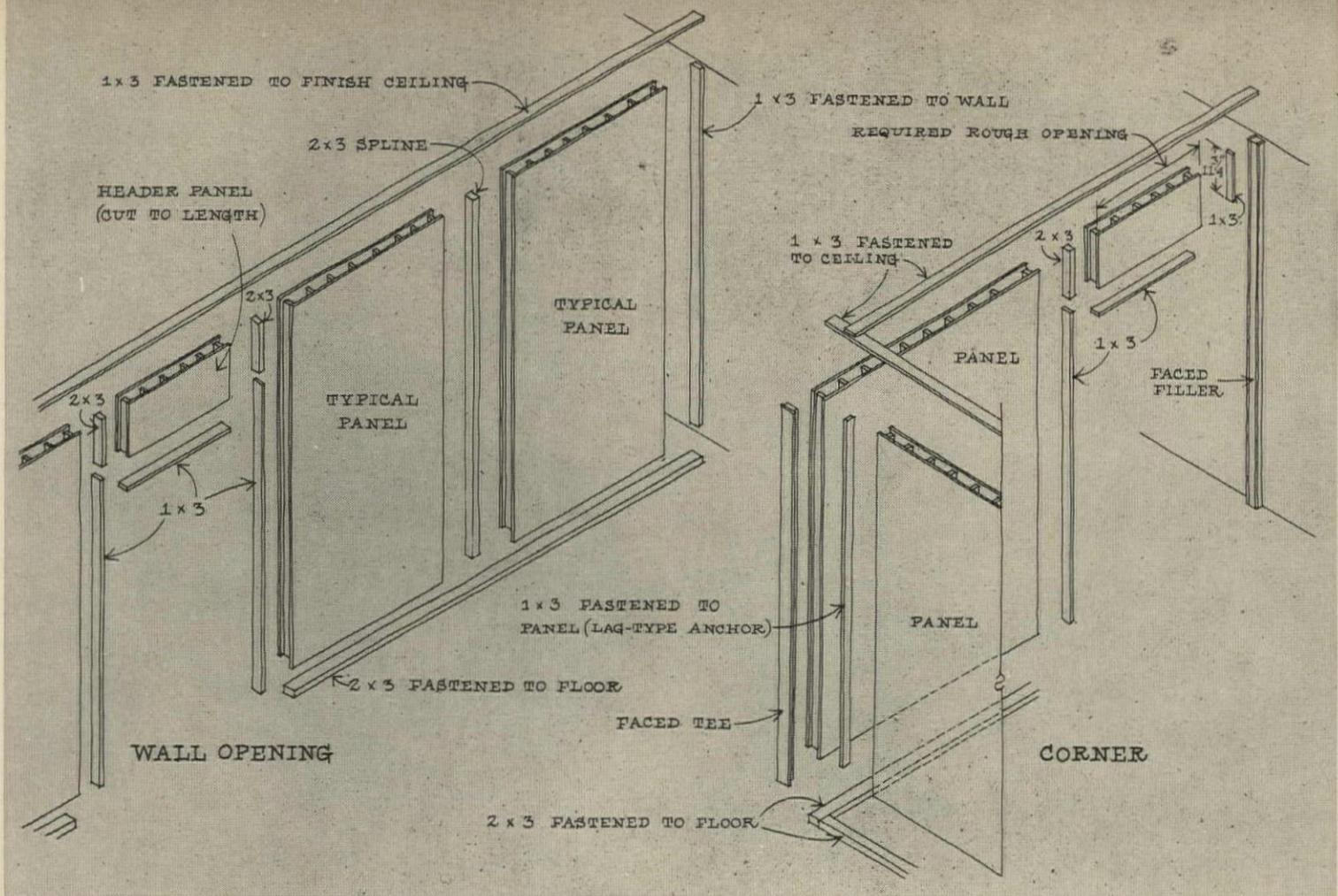
3. You can use joist-&-rafter framing. J-M's engineers have calculated that the interior panels can carry a load if both skins reach to the floor (normally one does not, as the bottom detail at left shows). If local codes will not allow this, exterior panels can be cut down 3/4" and used as loadbearing partitions.

Regular interior panels are made of two 1/4" untempered hardboard skins braced with 1/2" fiberboard spacers. Both ends of the panel are female so either one can be cut off. Factory-machined 2x3 splines are used to join panels. Headers are made in 6' lengths and are site-cut to fit the necessary openings.

The partitions go up in three simple steps:

1. Floor plates are laid out to plan and top plates are aligned from them and nailed to ceiling.
2. Next, panels are placed against top plate and swung onto bottom plate. (To make this possible, one skin is short to allow for bottom plate.)
3. Filler strips are nailed in place to fill the gap below the short side and base molding is then nailed to both sides.

**INTERIOR WALL SYSTEM** consists of four basic components, plus factory-machined pieces for splines and plates. Panel spacers (top drawing) are low-density fiberboard and reduce sound transmission.



**ASSEMBLY DETAILS** show simplicity of door openings and corners. All 1x3 and 2x3 members come in long lengths, are cut to size on the job. If ceiling-

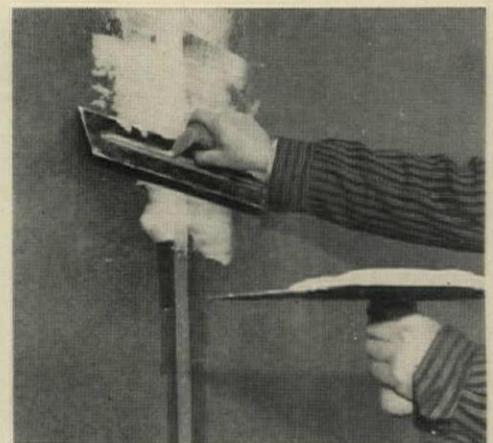
height doors are to be used, header panel and its cross-member are omitted, and the top plate stops at the side panels.



**EPOXY FILLER** is applied with caulking gun.

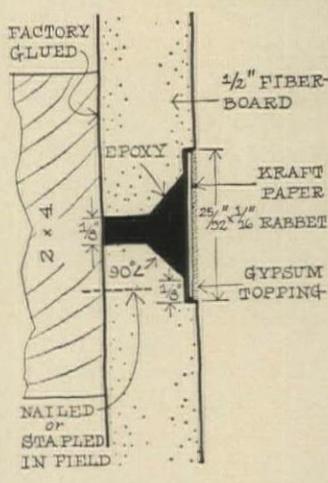


**KRAFT PAPER** is pressed in with knife.



**GYPNUM TOPPING** is spread with trowel.

## You can finish your interior panel joints in one day and paint or paper the next



Johns-Manville has developed for its Flex-Ponent system a modified epoxy joint compound that sets up within minutes, so a gypsum topping can be applied almost immediately. The joint itself is as strong as the board.

Here is how the joint on the inside of the exterior panels (drawing, left) is made and finished:

1. The bevel rabbet is factory cut, (or if panel is recut in the field, rabbet can be made with hand router, see p 155). Panels are nailed together in the field, nails being driven through the rabbet.

2. Epoxy compound is applied at the joint with a trowel or caulking gun, and wiped. The resulting surface is left slightly concave by the knife.

3. A strip of kraft paper is laid into the compound. It fills some of the concavity and absorbs

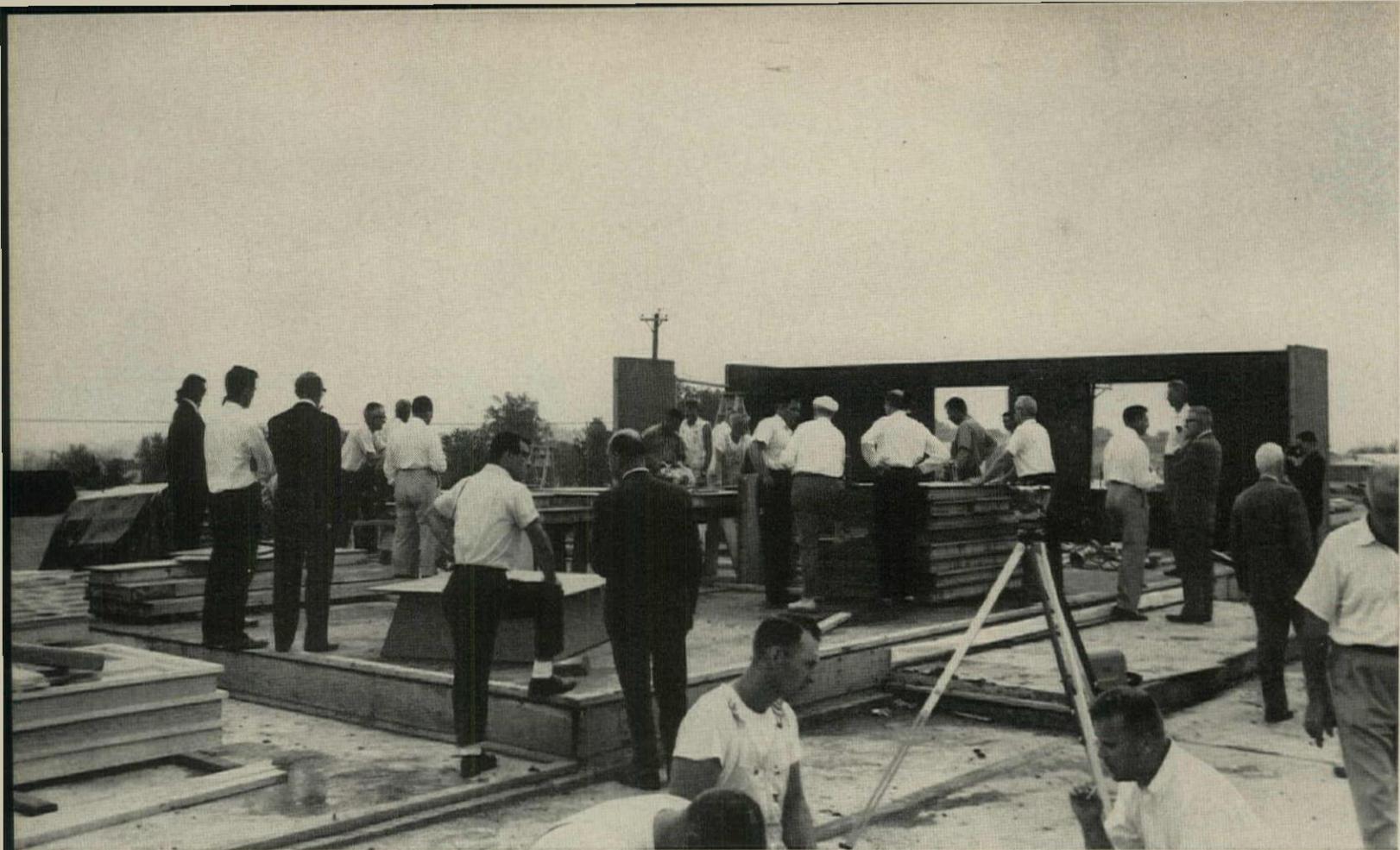
some of the bleed as the compound sets up.

4. Gypsum topping can be applied almost immediately. It is feathered out about 2" on either side. By the following day the joint will be ready for sanding and painting (unless a glossy paint is to be used, then one more gypsum coat may be added).

For interior panels, joints are the same with this exception: the thinner skins (1/4") have a V-joint with no rabbet, so no paper is used. The compound is allowed to set for about an hour before topping so compound will not bleed through the gypsum.

The epoxy compound itself is a two-part mixture with a pot life of about 1 1/2 hours at 70F. It should be mixed with a mechanical mixer. The mixer blades and all knives and trowels used, can be cleaned with soap and water.

*continued*



H&H staff

**EXTERIOR PANELS** of "proof house" in St Charles, Mo. are set in place as dealers, J-M salesmen and officials, and builders look on.

H&H staff



**ROOF TRUSSES** are put up on panel walls. End panels were left out until all trusses were up. Despite newness of the system, building crew closed in the house in one day.



**COMPLETED HOUSE** shows variation in siding treatment permitted by Flex-Ponent panels. Where brick veneer is not used, panel skin is batted and painted.



**MARKET-TEST HOUSES** were erected by builders with a minimum of J-M help. House at left is in Bunker Hill, Ill. and one at right is in Highland, Ill.

## The new panel system was field tested in a "proof house" and by builder try outs

The "proof house" (photos above and left) was put up by the manufacturer to show that an ordinary crew can build a house with the new panels faster than with conventional construction. In the test it took only one day to close the house, although the men had never seen the panels before. The completed house is now being used as a laboratory to check the panels for insulating quality (heating costs are below estimates) and for stability (well within tolerances under the most extreme moisture changes).

Johns-Manville then selected three builders in the St. Louis area to try the panels in built-for-sale houses. The builders bought the panels through their dealers and erected them under the supervision of a J-M field engineer. (This supervision will be standard for any Flex-Ponent builder on his first houses.)

The final test for the system is due to start early this month. A small but complete production plant is going into operation in St. Charles, Mo. It can produce panels for five houses a day, and J-M plans to sell them through a selected group of its regular dealers in the St. Louis area. "The distribution area will be expanded as rapidly as public acceptance dictates," says J-M President Clinton Burnett.

**"Proof house" tested walls for design appeal as well as for structural qualities**



**UNFINISHED PANEL** is set against exterior wall. Skin has no nail dimples, so only joints need finishing.



**FINISHED WALL** has wallpaper, left, and paint, right. Convecteur behind chest, right, is for electric heat.

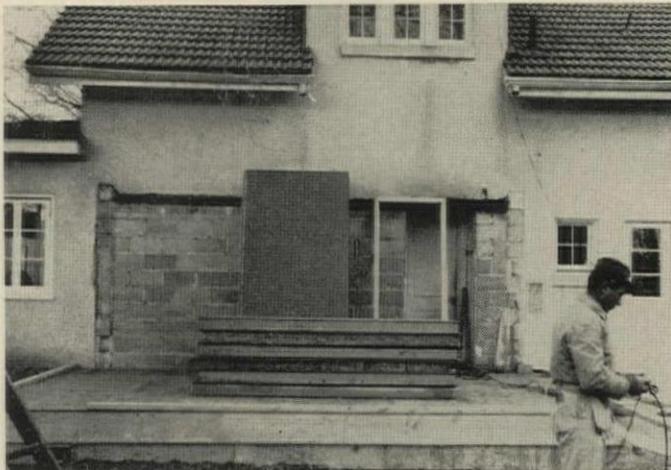


**TEMPERATURE** tests check efficiency of insulation.



**MOISTURE** tests check stability of panel skins.

**And here is how the panels can be used in a remodeling job**



**PANELS ARE STACKED** on deck of addition at start of day. Simplicity of few big parts was an important feature to the remodeler.



**FIRST WALL** goes up. These panels were "leftovers" from proof house, needed lots of site work. Regular panels would go up faster.



**KING-POST TRUSSES** are passed up through unfinished back wall. Two men, unfamiliar with panels, built the whole 16'x21' addition.



**ROOF IS SHEATHED** and picture-window frames set in place. Total time for the whole job, including trim and roofing: 7½ hours. /END

An aerial, black and white photograph of a dense suburban residential neighborhood. The houses are arranged in a grid-like pattern, with many trees interspersed between them. A large, white, rectangular stamp with a double border is overlaid on the center of the image. The word "OBSOLETE" is written in a bold, sans-serif font within the stamp, tilted slightly upwards from left to right.

**OBSOLETE**

# NEEDED:

## New ideas for high-density land use

If you have long since cast aside gridiron layouts and are now growing restless under today's ever more standardized, ever more costly curvilinear pattern, there is a bookfull of new possibilities waiting for you in the Urban Land Institute's just-published *Technical Bulletin No. 40*.\*

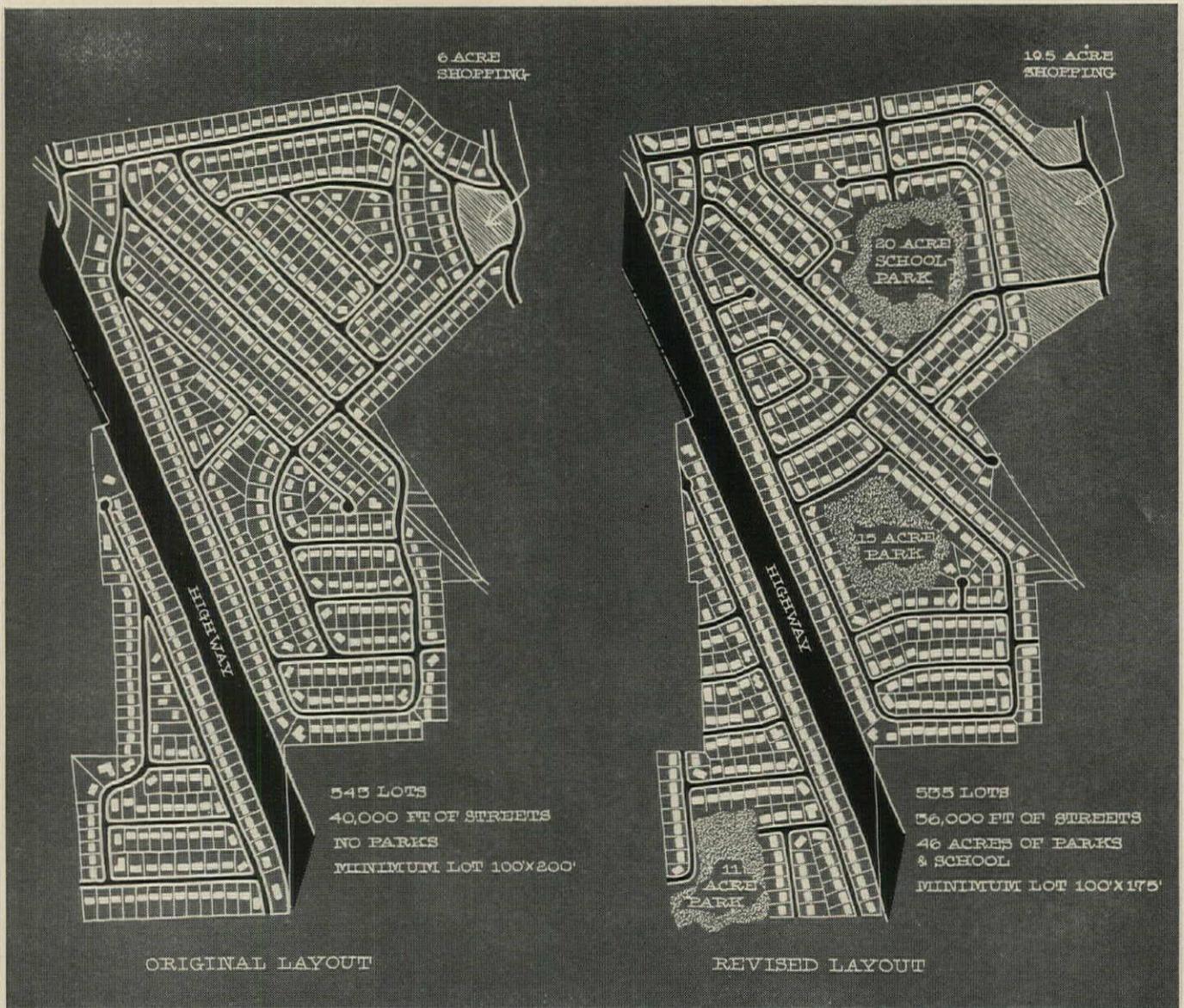
The *Bulletin* examines 50 different land plans in a round-up of new schemes for esthetically more satisfying and economically more efficient layouts. Some are plans for projects already proved successful, others are still only ideas on the drafting board.

The presentation aims 1) to increase understanding of basic problems—like the needs of the changing community, the nature of zoning legislation, and the reasons for the high cost of development work—and 2) to suggest a variety of different ways these problems can be attacked. You will not find ready-made solutions, but the *Bulletin* should help you get ideas for your own planning, and it should help you, too, in finding common ground for working with your local planning officials.

The study was co-sponsored by NAHB which contributed \$9,500 to the project (with matching funds put up by the Urban Land Institute). Planners Harman, O'Donnell & Henninger of Denver acted as technical consultants and prepared much of the text.

*On the following pages HOUSE & HOME shows you five new ideas selected from the Bulletin, each presented in drawing and text.*

\* Available at \$6 a copy from the Urban Land Institute, 1200 18th St NW Washington 6, D.C. Also just published by ULI is its revised edition of "The Community Builders Handbook," 476 pages, \$15, with chapters on all phases of land planning, shopping center design, layout, and operation.



THREE PARK SITES with a school area in the revised plan are principal benefits Rockaway Township got in exchange for smaller lots.

**NEW IDEA 1**

## Flexible zoning—density ordinances that allow smaller lots and shorter streets in exchange for parks

“Before” and “after” layouts (above) for a Rockaway Township, N.J. subdivision show how modification of a density-control zoning ordinance resulted in parks for the community and lower development costs for the builder.

The original plan for the 342-acre subdivision met zoning requirements for lots of 100' x 200', or 20,000 sq ft, and was tentatively approved by the planning board with only minor revisions. Nevertheless, reports the *Bulletin*, township authorities and their consultants later met with the developer to discuss the feasibility of revising the subdivision plan to gain these objectives:

1. Width of lot to stay the same;
2. Number of lots not to increase;
3. Street length to be reduced;
4. Lots no less than 17,500 sq ft;
5. Parks dedicated to township;
6. Business area enlarged to serve the whole area.

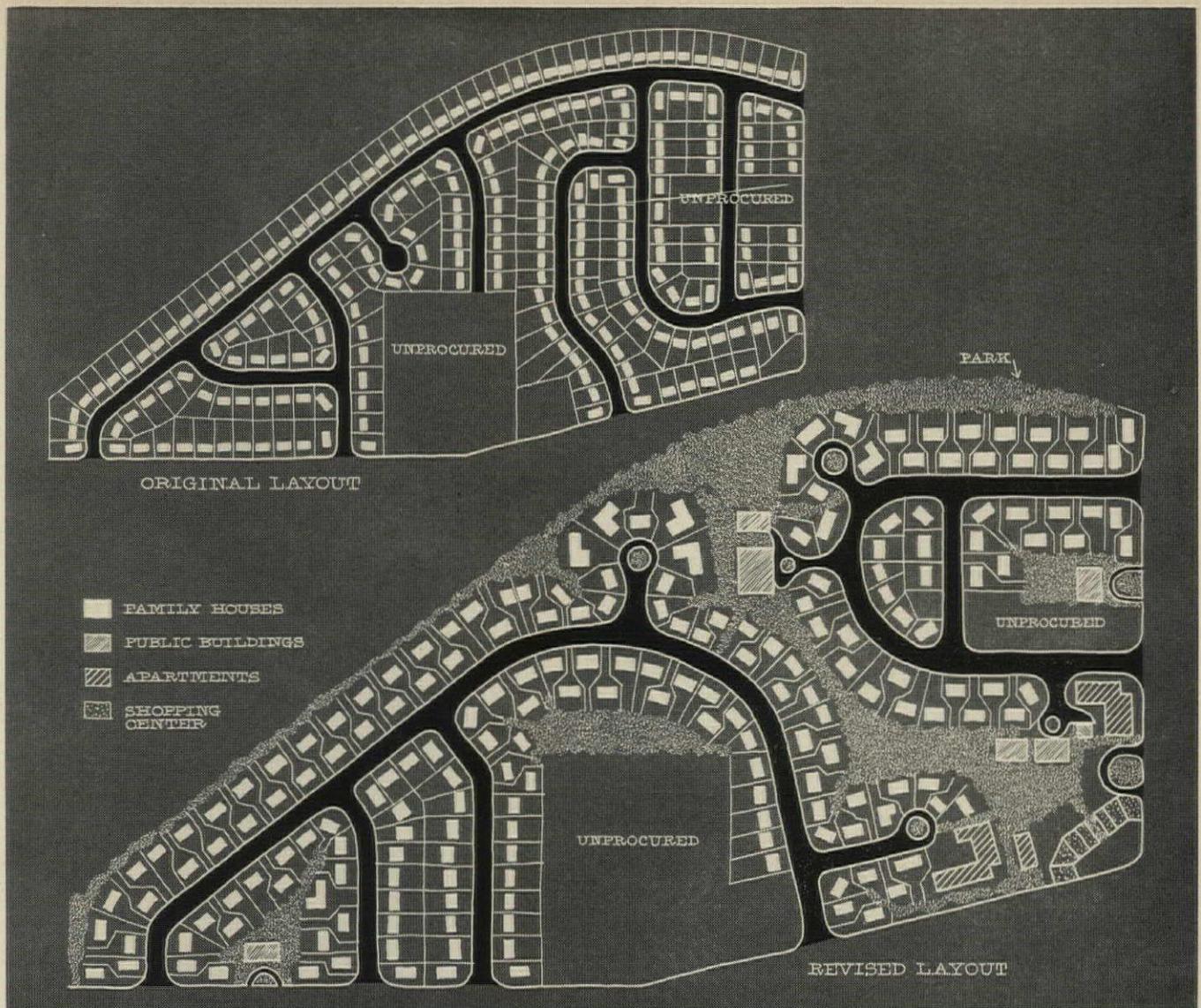
Revision along these lines depended, says the *Bulletin*, on proving to the developer that the new plan “would be more economical to develop than the one that had already received tentative approval.” The townspeople had to be convinced that “reducing the lot area as much as 12½% would result in a development that would be a greater asset to the township . . .”

The revised layout as finally agreed upon provides 535 lots, eight fewer than the first plan. “Each lot has a minimum frontage of 100' and a minimum depth of 175'. . . . Many lots, particularly corner lots, have a width much larger. . . . The new plan also has 4,000' fewer of streets . . . provides for a 20-acre school-park site . . . a 15-acre neighborhood park south of the new highway and an 11-acre neighborhood park north of the highway . . . a 19½-acre parcel on the edge of the tract to be reserved for a business area.”

To make the new plan possible the local zoning ordinance was amended. The *Bulletin* sums up the advantages of the new plan:

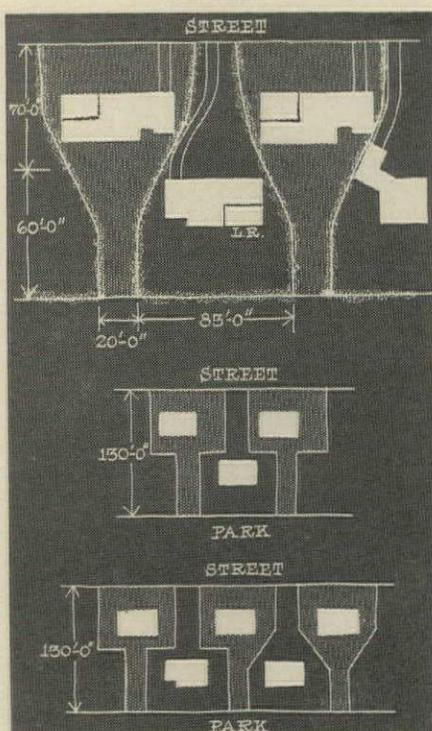
1. The parks increase the value of each lot.
2. There is less street footage for the developer to pay for and for the township to maintain.
3. At no expense, the township receives parks or school-parks in logical locations at a time when they will be needed most.
4. Other service costs—police, fire, school, trash, etc—will be no greater.

“But,” warns the township’s land planner, Robert Catlin: “Not all subdivisions should be reduced in lot depth in return for neighborhood parks. Does the proposed park fit into an overall park program? It may be better to have 20,000 sq ft lots without parks.”



**STAGGERED ARRANGEMENT** of double-frontage plan increases number of lots and puts many houses at rear of funnel-shaped sites.

## NEW IDEA 2 Double-frontage layout—a plan that adds 26% more lots and cuts street lengths 30%



**FUNNEL-SHAPED LOTS** allow more houses and more space between houses. Plan provides for both double-frontage and conventional lots.

The two sets of drawings, above, show the contrast between a typical land plan (at top) and the double-frontage system—a new type of layout developed by Community Planner M. Hover Curtis and named “Livability Planning.”

“Like the cluster method of land subdivision,” notes the *Bulletin*, “this scheme remains in the planning stage, having never received approval by local planning agencies and FHA.” But the *Bulletin’s* editors believe it is “an innovation which may materialize someday despite obstacles encountered to date,” and they summarize the advantages claimed for it as follows:

1. The plan reduces street lengths by as much as 30%.
2. It increases the number of lots by as much as 26%.
3. It locates the streets more economically.
4. It reduces clearing and grading to a minimum.
5. It uses each street to serve 10% to 25% more dwellings.
6. The distance between houses is doubled over conventional methods.

7. There is no waste space on lots, no oversize and no narrow lots.

8. Houses have light and space on all four sides.

9. Driveway entrances can be from either the front or the back street (as small drawing shows).

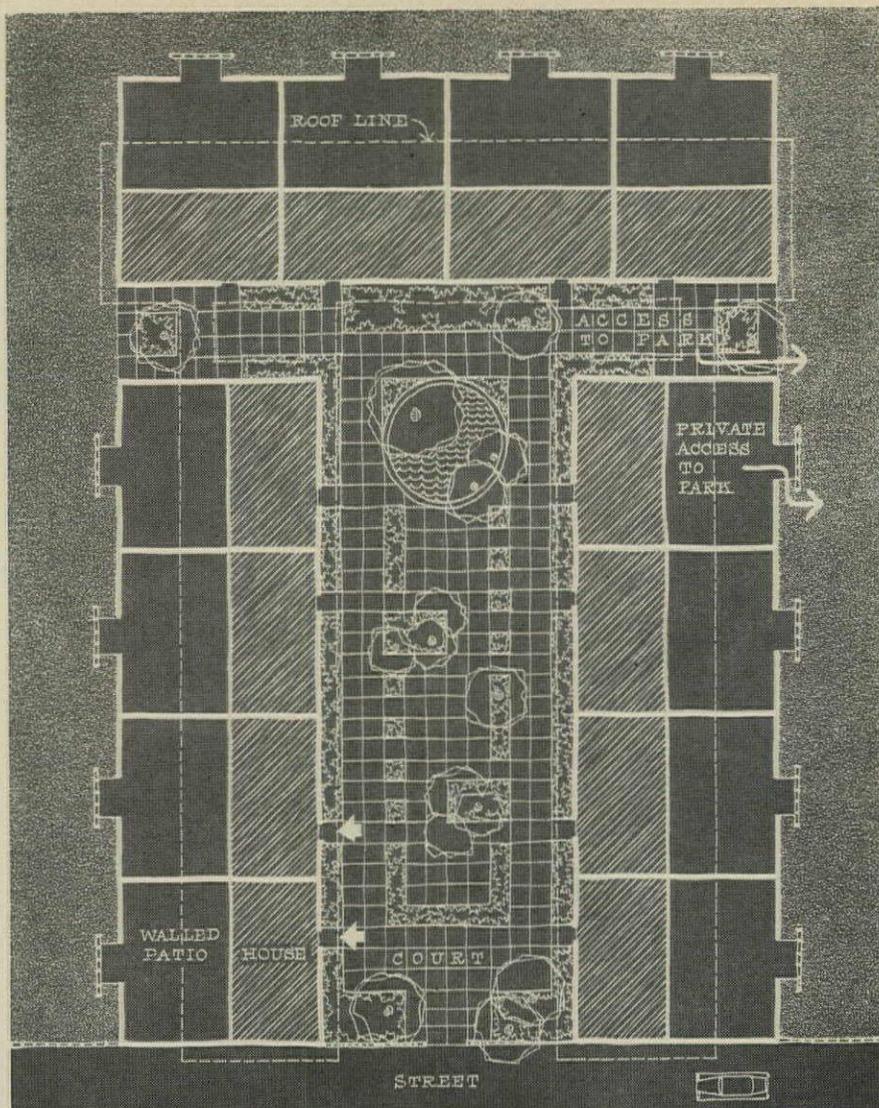
10. It protects children from auto traffic better than conventional plans.

The double-frontage layout, it is claimed, is flexible and can be combined with a conventional street plan (as indicated in large drawing above).

“Although this ‘Livability Plan’ has been long and industriously advocated by sponsors,” reports the *Bulletin*, “no outstanding example of its application has been found other than some half-dozen lots near Oak Ridge, Tenn. Attempts have been made to obtain approval and detailed plans prepared, only to be rejected and replaced with more conventional plans.”

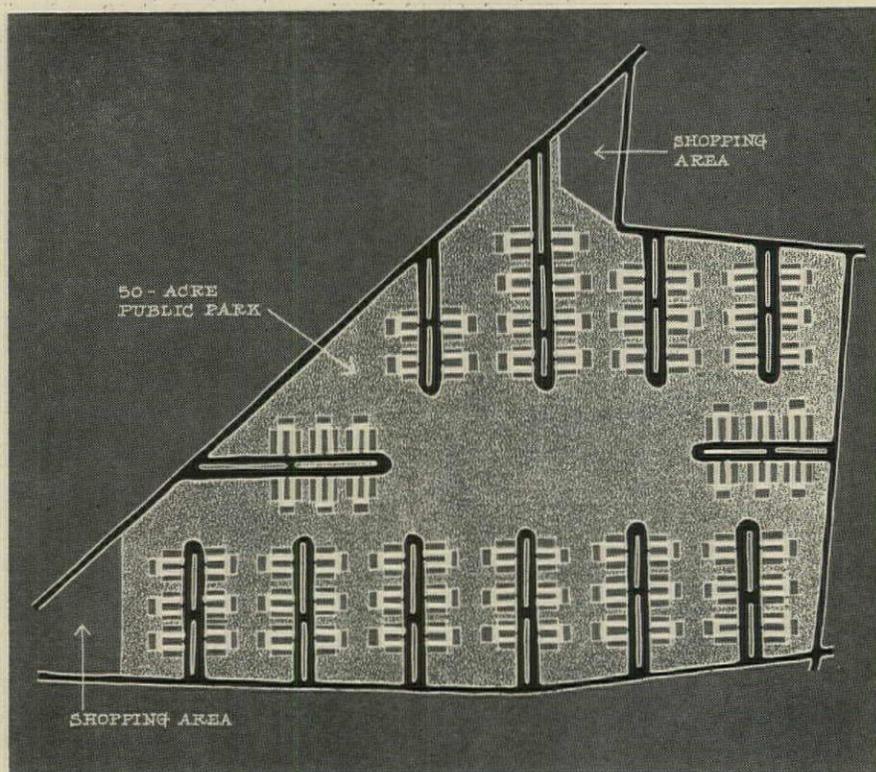
It should be added, however, that Eichler Homes, Palo Alto, Calif. built a few houses with a scheme somewhat like this. Houses are sited in pairs in the center of a block and share a long driveway to a double turn-around area.

*continued*



LANDSCAPED COURT has three rows of houses around it, each with a walled rear patio.

**NEW IDEA 3** The patio town house—a row-house scheme for indoor spaciousness and outdoor privacy



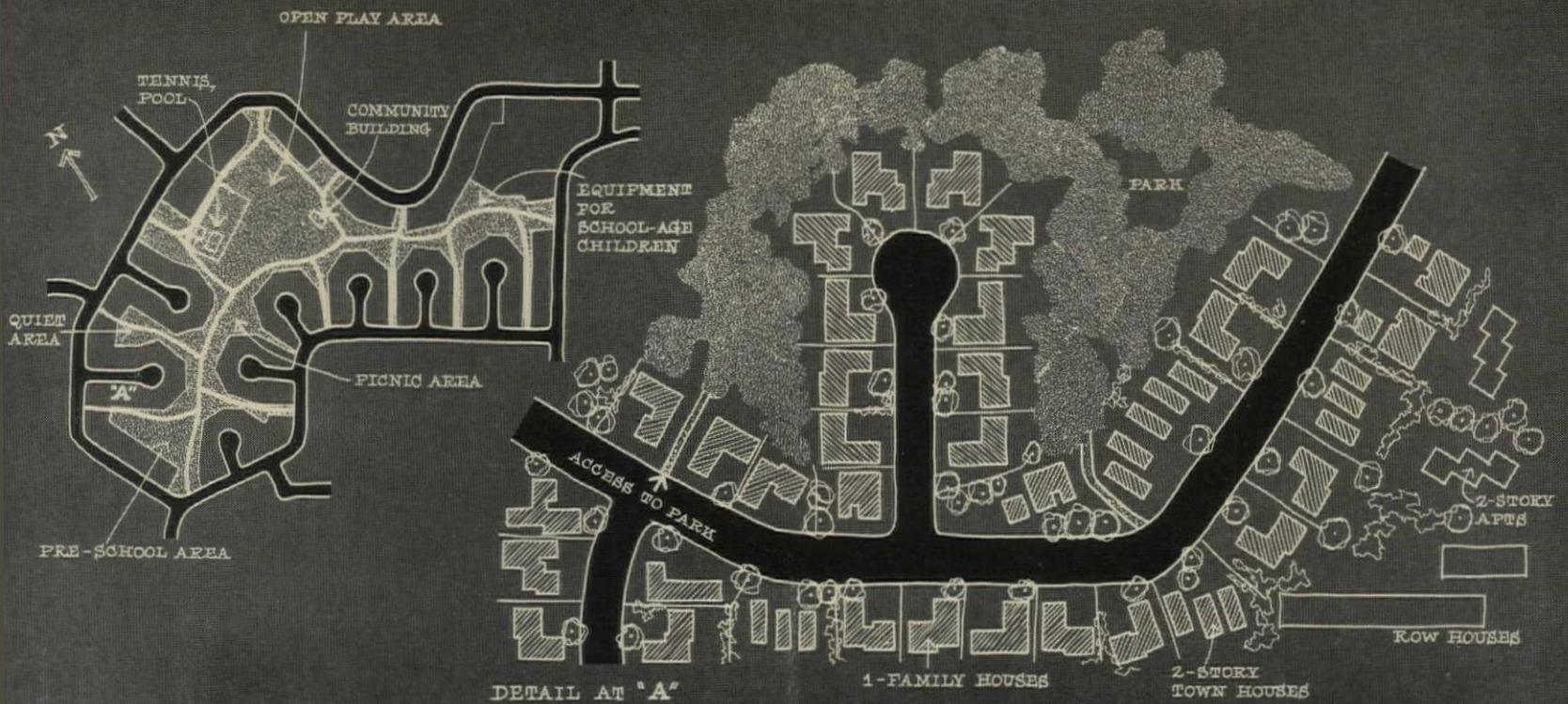
PLAN puts 50-acre park and 864 families on 250 acres, one less than conventional plan.

This is Architect Edward D. Stone's plan for high density land use. Designed for a theoretical 250 acres, it has a total of 864 two-story houses built in groups of 12, like the one above, around three sides of an open court.

A major feature of the plan, prepared originally for LIFE, is the amount of open space. Each group of 12 units has open, park-like space around it. The central court is landscaped and allows light, air, and breathing space at the front of the houses. In the rear, each house has its own walled-in patio which is 20x40. Then there is a 50-acre park in the center of the subdivision.

Cars are parked at the open end of each court, which means a 200' walk for families living at the opposite end. But for bringing home groceries, or for other deliveries, there is a 10' driveway around each building (which may not be used for parking.)

Says Architect Stone: "In these houses I designed for LIFE, the paved, enclosed backyards make it possible to enjoy the outdoors without becoming a slave to it. . . . Our row houses, while small, have a certain elegance."



MIXED HOUSING TYPES permitted in entire 65-acre development (left) are shown in detail in larger drawing of one section of Parkmont tract.

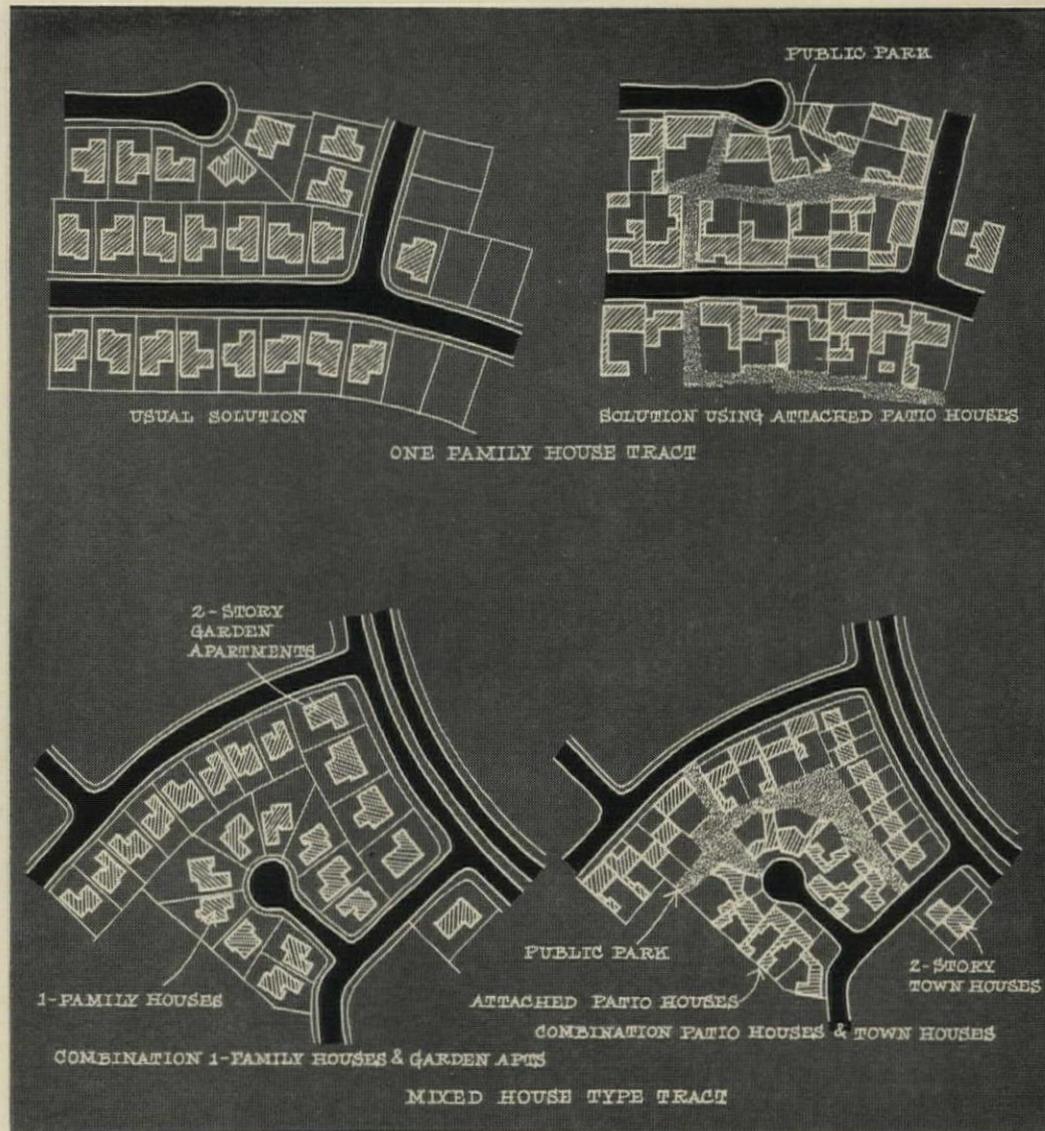
**NEW IDEA 4** Planned unit development—a zoning modification that creates varied lot sizes and mixed housing types

In Fremont, Calif., reports the *Bulletin*, the zoning ordinance has been amended to allow "a great deal of variety and flexibility . . . [in] development of residential, commercial, and industrial land. It requires that density remain the same but open space may be shifted to provide for a more desirable living environment." FHA has approved the new approach "on a trial basis" and several projects "have been completed while others are in the planning stage."

For example, the small plan, above, shows Parkmont, a 65-acre tract, part of which is being developed as shown in detail in the larger drawings. Here there is a mixture of single-family houses, row houses, two-story townhouses, and two-story garden apartments, all located near park areas and convenient to recreation facilities.

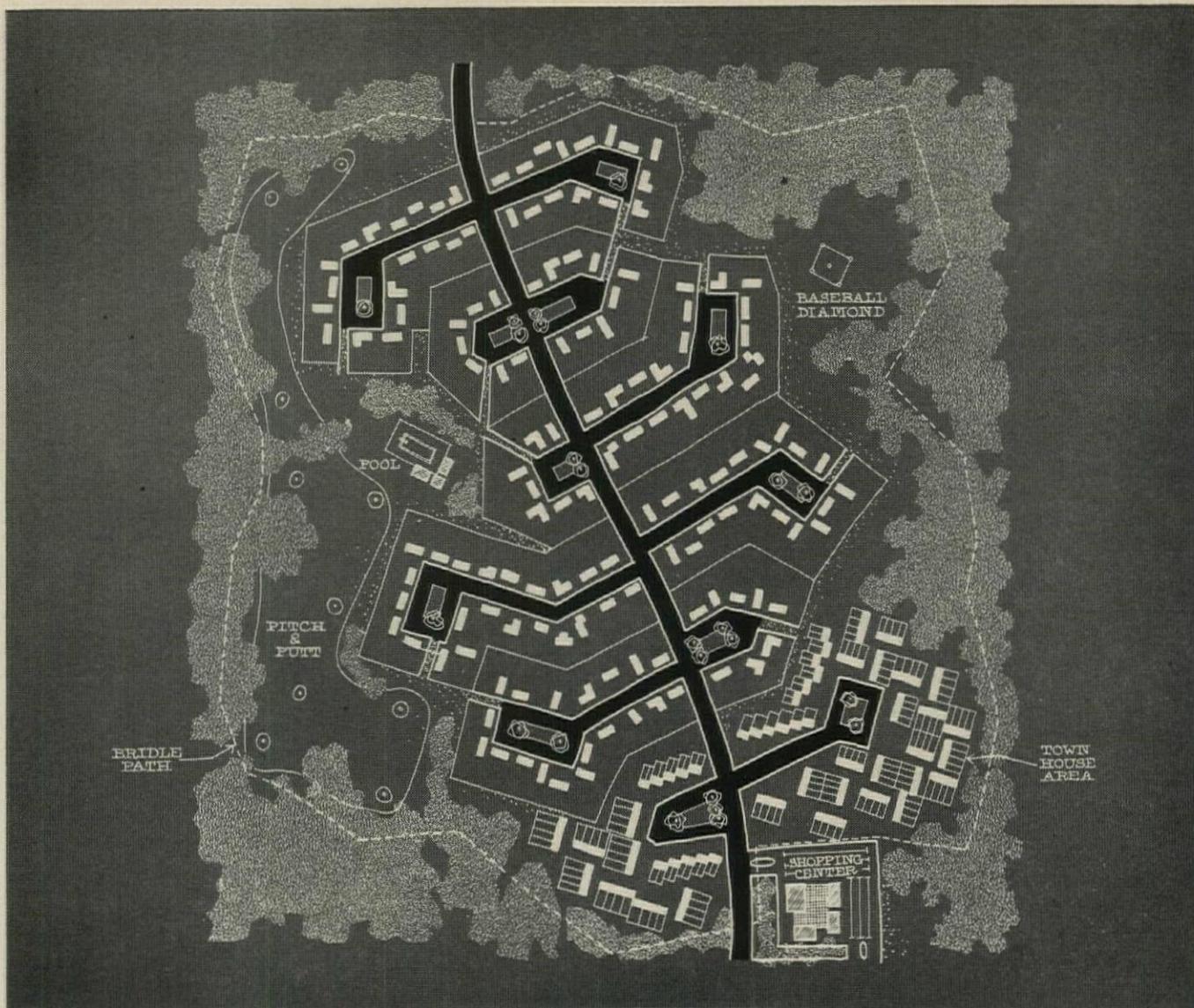
The drawings at right show two other examples of "Fremont planning." The upper pair contrasts a typical single-family layout with 6,000 sq ft lots, left, with a scheme for attached patio houses, right. In the latter, lots are 10% smaller and are surrounded by Mediterranean-style walls. Developer: Dan Bodily.

The lower pair of drawings show at left, a typical layout with 18 single-family houses on 6,000 sq ft lots and five separate buildings of two-and-three-family garden apartments (11 units in all). At right is a "Fremont design" in which 19 single-family lots of 5,400 sq ft each are given walled-court house treatment for greater privacy and fuller use of open space. In addition, two-story townhouses linked by community wall treatment, are substituted for the separated garden apartments.



CONTRASTS show how two conventional plans (left) are improved by Fremont unit plan.

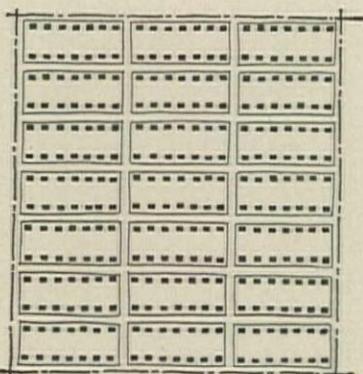
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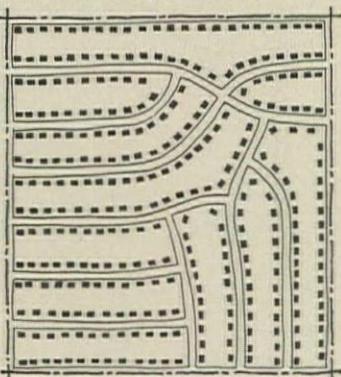
**CLUSTER PLAN** for Mequon, Wis. has one-family houses plus a few rows of townhouses built around a series of dead-end courts.

**NEW IDEA 5**

**The cluster plan—a layout that groups houses around courts and leaves the rest of the land in its natural state**



Old-fashioned grid street plan



Typical curvilinear pattern

"The term 'cluster' means different things to different people," says Land Planner William Nelson of Milwaukee, who prepared the Mequon plan shown above and in detail in upper right, opposite. The *Bulletin* quotes him as adding: "Some planners have stated that it is nothing more than a new name for the green belt or garden community such as Radburn. I would have to disagree with this as an over-simplification."

"The 'garden city' conceived by Ebenezer Howard was a frank attempt to create a small town or semi-rural atmosphere. This is not the basic philosophy of the cluster as we interpret it."

"We see in the cluster a way of restoring the fundamental advantages of urban living without destroying either the economy or the landscape of the metropolitan-area hinterlands. We sought it not as a revolt against the ugliness and drabness of bad city living, but as a desperately needed technique to prevent the new exurban areas from becoming equally unlivable."

To help place the cluster idea in today's scene, three stages in land planning are shown in *Bulletin* drawings re-

produced on this page. The grid pattern, left top, "resulted in drabness and monotony and . . . provided no protection against the invasion of traffic into residential areas . . . and cost of street and utility improvements becomes excessive," comments the *Bulletin*.

The curvilinear pattern, left bottom, recognizes the influence of natural topography and, says the *Bulletin*, "although esthetically more satisfying than the grid, is already becoming stereotyped—the monotony of repetitious curves replacing the monotony of straight lines. There is some reduction in total streets, but the plan is becoming increasingly uneconomic for providing utility services on a large lot basis. It also leaves unresolved the growing problem of preserving some open space."

**Here are the arguments put forward on behalf of the cluster plan idea:**

1. It reserves rapidly disappearing open land, utilizes rough wooded land which is otherwise unbuildable, and provides park and play areas.
2. It permits different size lots, a

variety of residential types, and a mixture of residential and commercial uses.

3. It relieves the monotony of rows of houses with standard setbacks.

4. It encourages the "amenities of intimate groupings around colorful courts of interesting paving textures, variations in parking arrangements, sculptural features, planting, etc."

5. It reduces development costs by grouping more lots around a short access street, by using center drains and services, and by eliminating need for curbs, gutters and, often, sidewalks.

6. It reduces lot size to a more usable and more easily maintained area.

7. It eliminates through traffic.

**Cluster-plan proposals are coming before local planning boards now**

The plan shown opposite and above right may be approved this spring by the city of Mequon, a Wisconsin community of 11,266, located just north of Milwaukee. The town has one-acre zoning and the proposed plan does not increase the density, although individual lots may be less than one acre.

It was prepared by Nelson & Assoc for a joint venture by two successful Milwaukee realtor-developers, Nordale Realty Co and Jordan-Jefferson, Inc. Local zoning permits cluster plans if the City Planning Commission agrees that adequate safeguards are set up. An important element of the plan is the placement of some houses close to the front or side of the lot, as the detail plan at right indicates.

**But there are unsolved problems in the cluster idea**

Among the many problems involved in getting zoning approval for a cluster plan, perhaps the greatest is this: Who will maintain the open space? Will it be public or private property?

"If the cluster plan is to succeed," argues the *Bulletin*, "it would seem that the open spaces should be private for the exclusive use of property owners within the created community. Neighborhood associations could properly accept dedication, and administer and maintain these park areas. In this way maintenance, improvement, enlargement, or even disposition of grounds and equipment, with adequate legal and taxing powers, would rest upon residents and not upon the public." But the vitality and permanence of neighborhood associations "has not been established to the satisfaction of planning boards and agencies."

If the open land is taken over by local public authority, these difficulties arise, according to the *Bulletin*:

1. Questionable willingness, ability, and availability of sufficient funds to assure proper maintenance and policing.

2. The feeling that the open spaces, although actually public, exist primarily for abutting residences.

3. The open spaces, being less accessible to the public than larger public parks, would very likely receive the least, if any, attention.

4. The open land, being public, would be for the use and enjoyment of everyone, whether from the immediate neighborhood or from across town.

5. Problems arising from disagreements concerning prior rights to use equipment, play, and public facilities.

**Here is a cluster plan proposal that was turned down by FHA**

As quoted in the *Bulletin*, the Omaha FHA office gave the following reasons (among others) for withholding approval from a cluster-type plan proposed for a subdivision near Omaha (see drawing lower right):

"The burden of maintaining the unused or as the sponsor states, park areas, would fall on the governmental jurisdiction, whether a district or village, and in my opinion would be excessive or possibly beyond the ability of the village to meet.

"Individual property owners would not be inclined to maintain areas they do not own, especially over a long period, and at the time when age would make it impossible for them to do so. You cannot change the habits and characteristics of people in a short time.

"This lack of responsibility and incentive would result in these areas becoming a 'no man's land,' creating a fire and health hazard which would affect future marketability seriously.

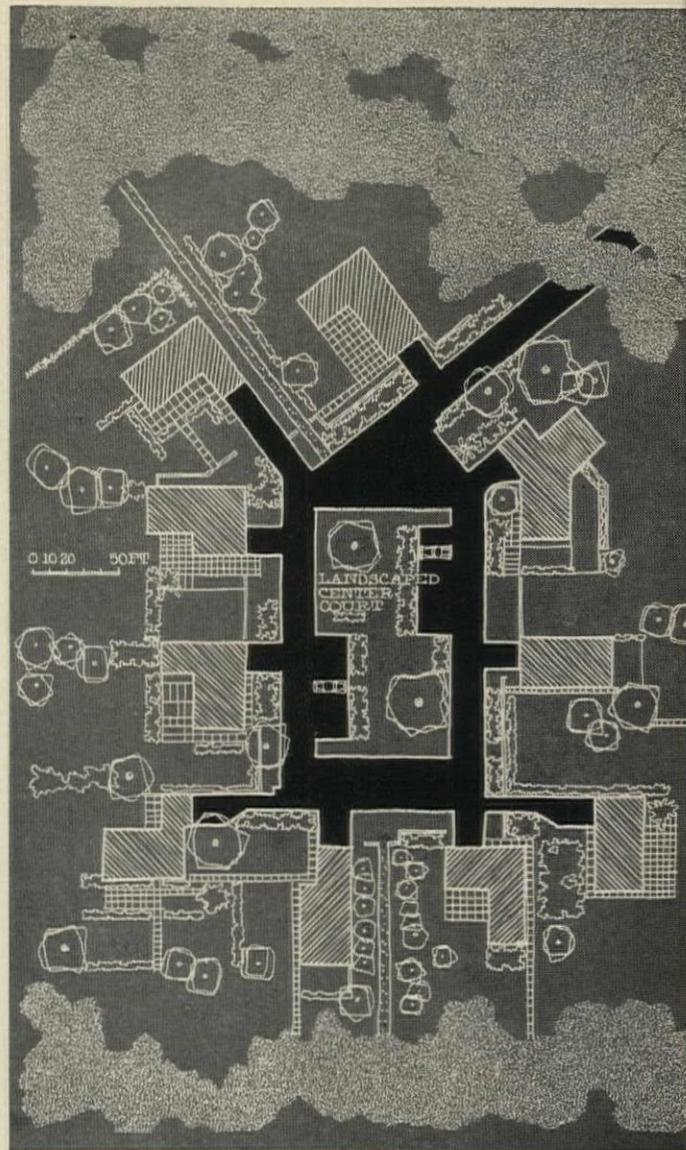
"There is no evidence that the sponsors intend to or have the ability, financially or otherwise, to prepare these areas for maintenance. Apparently no study has been made as to how this could be legally done or what the cost to the citizens of the proposed village would be.

"The deep T-shaped culs-de-sac proposed certainly do not appear to utilize the land to best advantage and apparently do not adapt themselves to adequate surface drainage and could result in excessive and unsightly drainage easements which also would have to be maintained by the village.

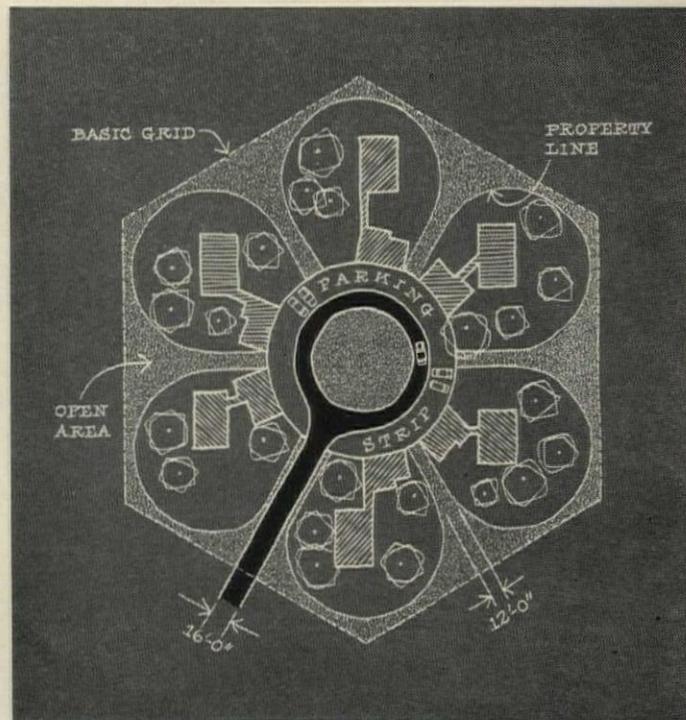
"It appears . . . that only about half of the available land is actually utilized for building sites, which surely results in an economic waste which it would be extremely difficult to justify in arriving at values as compared to costs.

"It cannot be assumed that the tenure of occupants of properties in this area would differ any from other areas and a turnover of properties would be inevitable. Therefore, there must be some evidence that the future market will accept or desire to live in this village.

"The evident motives of the sponsor in connection with this proposal are admirable. However, such motives do not necessarily create values or acceptable security for long-term mortgage insurance." /END



**LANDSCAPED COURT** is surrounded by ten one-family houses with excellent provision for car parking. This is a detail of typical cul-de-sac on opposite page.



**GROUP CLUSTER** plan turned down by Omaha FHA office, had circular lots with areas of community-owned open land around each lot which FHA thought was a liability.



RUSTIC HILLS, Medina, Ohio, is the brainchild of Edward C. Mears, President of Rustic Hills Development Corporation. (Top) Sholz Mark '60 home, built by R. E. Dresser Construction Co., Inc., a winner of American Builder Magazine's 1960 Quality Model Home Contest.

Rustic Hills

## FABULOUS RUSTIC HILLS COUNTRY CLUB COMMUNITY PROVIDES YEAR-ROUND COMFORT WITH CLIMATE BY CHRYSLER

Rustic Hills in Medina, Ohio, is one of the most delightful and imaginative residential communities ever built. It offers colonial and contemporary homes, eleven private lakes, a nine-hole golf course, country club membership for residents . . . and Climate by Chrysler.

Every home in this \$10,000,000 project is equipped with a Chrysler Furnace. And most homes have Chrysler Air Conditioning as *standard equipment*.

Rustic Hills' owner Edward C. Mears, as well as the other five builders in the project, make air conditioning standard because they realize that any home without it will soon be obsolete. They specify Chrysler heating and air conditioning because they know its reputation for low installation, operating and service costs. And they know the promotion value of the famous Chrysler name.

Whether your homes sell for \$12,000 or \$50,000, they'll sell faster with year-round Chrysler Air Conditioning. Check with your local Chrysler Air Conditioning Dealer for the full story. And ask him to show you the new Chrysler Model Home Promotion Kit for builders.

**CHRYSLER**  
AIRTEMP

Chrysler Corporation, Airtemp Division, Dept. CT-41, Dayton 4, Ohio.

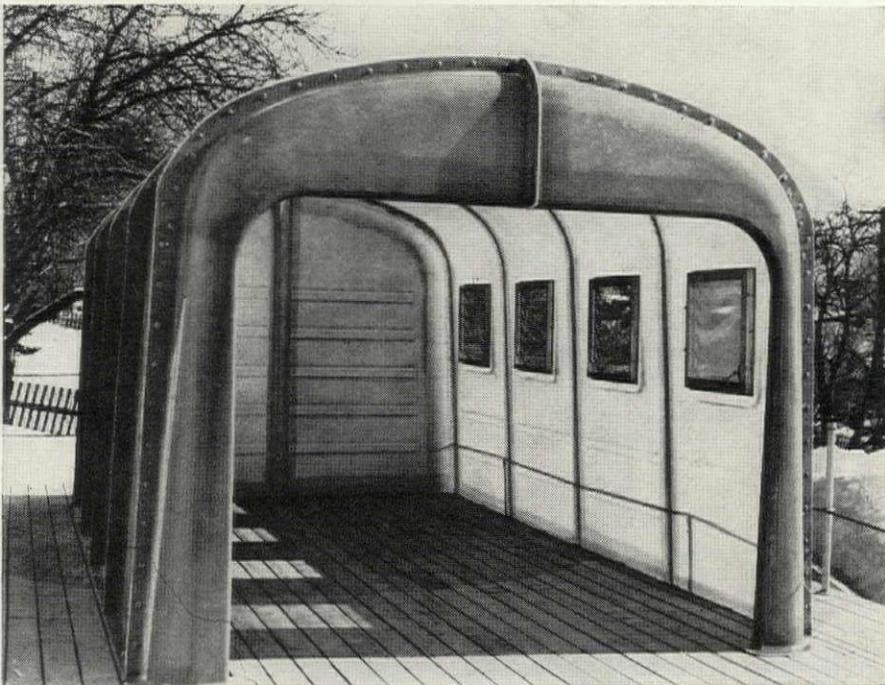
Be sure to see

# NEW WAYS TO BUILD BETTER

A monthly report on home building ideas, products, and techniques

Starting here

## New products



**Fiberglass prefab** is suggested for use as a vacation house, motel unit, utility shed, garage, greenhouse, etc. The basic 20' "bread loaf" is made up of four identical 4' curved flanged sections. A wide flange permits permanent or temporary fastening. The color and translucency of the shell can be varied to order. Insulation and various doors and windows are optional. Weight: 600 lb. Price: \$1,290.

Sealview Plastics Inc, West Conshohocken, Pa.

For details, check No. 1 on coupon, p 229

**Home fire escape** folds into an inconspicuous 2"x2½" aluminum post when not in use, opens readily to form escape route from second- or third-story bedroom. Base leg fastens firmly to wall; unit opens away from wall to give clear toe and hand room. Ladder will support 2,000 lb. Price: about \$75 for two-story model.

Win-Chek Ind, Moonachie, N.J.

For details, check No. 2 on coupon, p 229

And on the following pages

### What the leaders are doing

DFPA finds strong demand for retirement housing. . . . Architect-builder team wins AIA-NAHB award. . . . How Canada's biggest builder stays on top.

see page 177

### Technology

How to save 70% on duct-in-slab. . . . Gas heater generates electric power. . . . New fiberglass insulation cuts sound transmission.

see page 192

### Publications

New brochure is full of garage ideas. . . . How to insulate for electric heat. . . . How-to-use data on pop rivets, plastic pipe, overlaid board underlayment, acoustive plaster.

see page 224

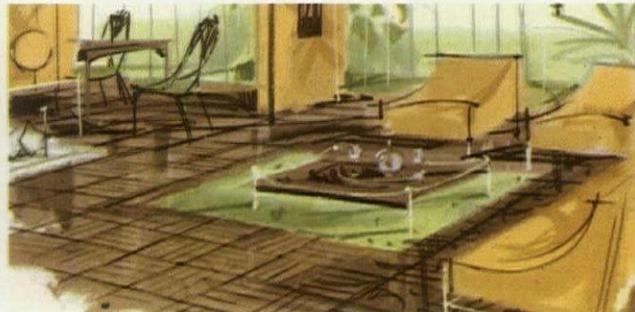
### More New products

Emerson plans a full electric line. . . . New builder's plumbing line. . . . New insulating window. . . . New bathroom wall panels.

see page 199



*A dark finish gives Oak Floors a different, distinctive effect—at no extra cost.*



### Vary your Oak Floors to attract home buyers

Here's an idea that will help you make faster sales: for a special "feature" room in your homes use one of the patterned Oak Floors. Random-width plank has ageless charm and beauty. Smart, sleek parquetry is appropriate for contemporary homes. Either floor design blends well with economical, popular Strip Oak.



National Oak  
Flooring Manufacturers'  
Association  
814 Sterick Building,  
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Dress up your  
homes with  
**OAK FLOORS**



Today's smartest homes have Oak Floors

In planning homes for the market, take a tip from the smartest contemporary houses and use Oak Floors. This preferred flooring for residential use dresses up any home to give you a definite selling advantage. With today's style trend favoring area

or accent rugs and exposed wood floors, Oak is the natural choice because of its beauty, durability and economy. Whether you build on wood joist or concrete slab foundation, always use Oak Floors and be certain of immediate buyer acceptance.



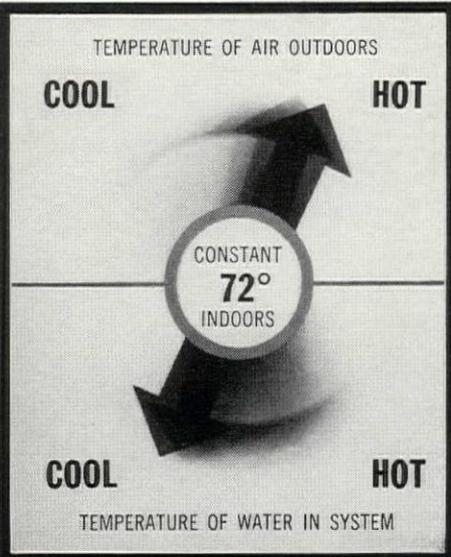
Richer looking • Longer lasting • More comfortable



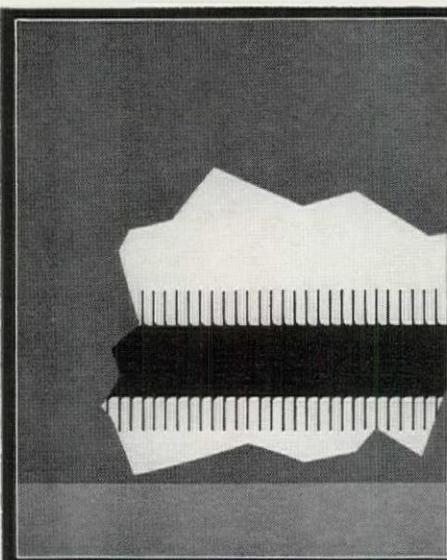
This pint-size package (only 2 ft. tall) easily heats a seven room house. It's



Crane's new budget-priced gas-fired boiler, the Sunnyday-3, that



automatically adjusts its heat output to outdoor weather conditions. Its



incredible efficiency comes from hundreds of fins cast integrally with the boiler



that lap up more heat and transfer it instantly to the water inside. Because



it's 100% factory assembled you can install it in a jiffy, even on wooden floors!

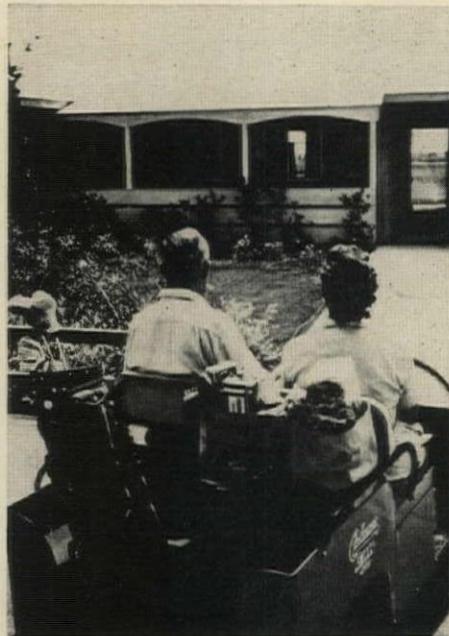
■ Now — you can install hydronic heat, with its distinct advantages, almost as economically as warm air. ■ This amazing Crane Sunnyday-3—compact, uncomplicated—saves time and labor on the job. It's completely assembled and wired at the factory ... in 3 sizes—from 60,000 to 100,000 BTU capacity. ■ A man and a boy can carry it ... install it quickly. Easily. Anywhere. Only 1-inch clearance necessary. The 60,000-BTU Sunnyday-3, for instance, is just 25 $\frac{3}{8}$ " high, 15 $\frac{1}{8}$ " wide. Yet does the big work of regular boilers that bulk

and cost far more. ■ Because it is specially designed, specially engineered for mass-market homes, it helps you bring luxurious, draft-free hydronic heat to home owners at just about the cost of an efficient warm-air system. It's silent, a real fuel-saver and responds instantly to thermostat demands. ■ For more details on the revolutionary new Sunnyday-3 Boiler see your regular contractor or your Crane representative. Or write Crane Co., Plumbing-Heating-Air Conditioning Group, Box 780, Johnstown, Pennsylvania.

AT THE  
HEART  
OF HOME AND  
INDUSTRY



VALVES AND PIPING  
ELECTRONIC CONTROLS  
PLUMBING  
HEATING • AIR CONDITIONING



*"We are just beginning to realize that the needs of the elderly constitute a housing problem on the same level as children and the war."*  
 —Merrill J. Hines, President, Hines Co., Chicago, Illinois, before House Committee on Aging

*Here is what every housing professional should know about . . .*

## Today's neglected retirement market

What is the "retirement" market? How big is it? When do retired people want to live? . . . page 98  
 What kind of housing do retired people want? Can they afford it? . . . page 97  
 How do you look for older buyers? And what are their needs, how do you sell to them? . . . page 99  
 Why is the retirement market "neglected"? How can housing professionals break into it? . . . page 99  
 What is the best word to design for retirement housing? . . . page 100  
 What special features and equipment should retirement housing include? . . . page 103  
 What kinds of houses or what price ranges are being sold today in the retirement market? . . . page 104  
 What kinds of apartment units are being built for older people, and how are they financed? . . . page 106  
 What was the fastest selling retirement community in 1960, and why did it sell so well? . . . page 108

*For a closer look at the retirement market, turn the page.*

**BIG RETIREMENT MARKET** for builders was described by H&H in a 16-page February report.

## Here is still more evidence that today's market for retirement housing is really hot

New evidence—from Douglas Fir Plywood Assn—shows a strong demand for suitable retirement housing, a current shortage of it, and new interest by builders in meeting this neglected market (it also backs up much of what HOUSE & HOME said in a 16-page February report on housing needs of older buyers).

News from DFPA is based on:

1. Results of a DFPA survey answered by roughly 500 delegates to the White House Conference on Aging in January.

2. Surprising builder interest in the DFPA prototype retirement house—displayed at the White House Conference (and shown in the H&H report).

### Here are seven major findings from the DFPA survey:

1. Only 6% of the 500 conference delegates who filled out the questionnaire said there is adequate retirement housing in their communities.

2. Sixty per cent said their own homes are not suitable for retirement living, and only 20% would want to remodel their homes for their retirement needs.

3. Only 20% said they would want to retire to Arizona, Florida, or California (26% want to stay in their present houses, 31% want a different home in the same area, and 23% want other housing).

4. Seventy-five per cent want to live in communities with people of all ages.

5. Sixty-three per cent want to live in single-family houses, 18% in garden

apartments, 10% in high-rise apartments, 9% in hotel-type housing.

6. Most desirable community facilities named are 1) shopping center, 2) bus service, 3) library, 4) medical clinic or offices, 5) swimming pool.

7. Only 10% could not pay more than \$1,000 down on a retirement house. Nearly half could pay more than \$3,000.

### More than 500 homebuilders have requested plans of the DFPA house

"This is the greatest builder response we have ever had to a national promotion" says Don Jaenicke, DFPA special projects manager. Requests—from 46 states—have also come from more than 100 dealers and from about 5,000 prospective homebuyers.

DFPA will send names of prospective local buyers to builders who erect a model, and will help with local promotion. Also available from DFPA (for 50¢) is a 64-page *Encyclopedia on Retirement Housing* covering construction, marketing, and promotion.

Jaenicke says large builders who are erecting the model include Charles Cheezem in St Petersburg, Fla.; Joseph Bazole in Hardy, Ark.; and Carl Mitnick in southern New Jersey. Two home manufacturers—Crawford and Harnischfeger—are interested in adding the house to their lines. Detroit and Fort Worth HBA groups are displaying scale models in their home shows.

To see Builder Cheezem's DFPA retirement house—the first model to be built for sale—turn to p 180.

### More about the leaders:

Architect-Builder team wins second AIA-NAHB award . . . . . p 184

Philadelphia builder sells . . . . . townhouses at \$7 a sq ft . . . . . p 186

How Canada's biggest builder . . . . . sold 500 houses in four months . . . . . p 188

ANOTHER FIRST FROM INSULITE:

# NOW 3 WIDTHS IN



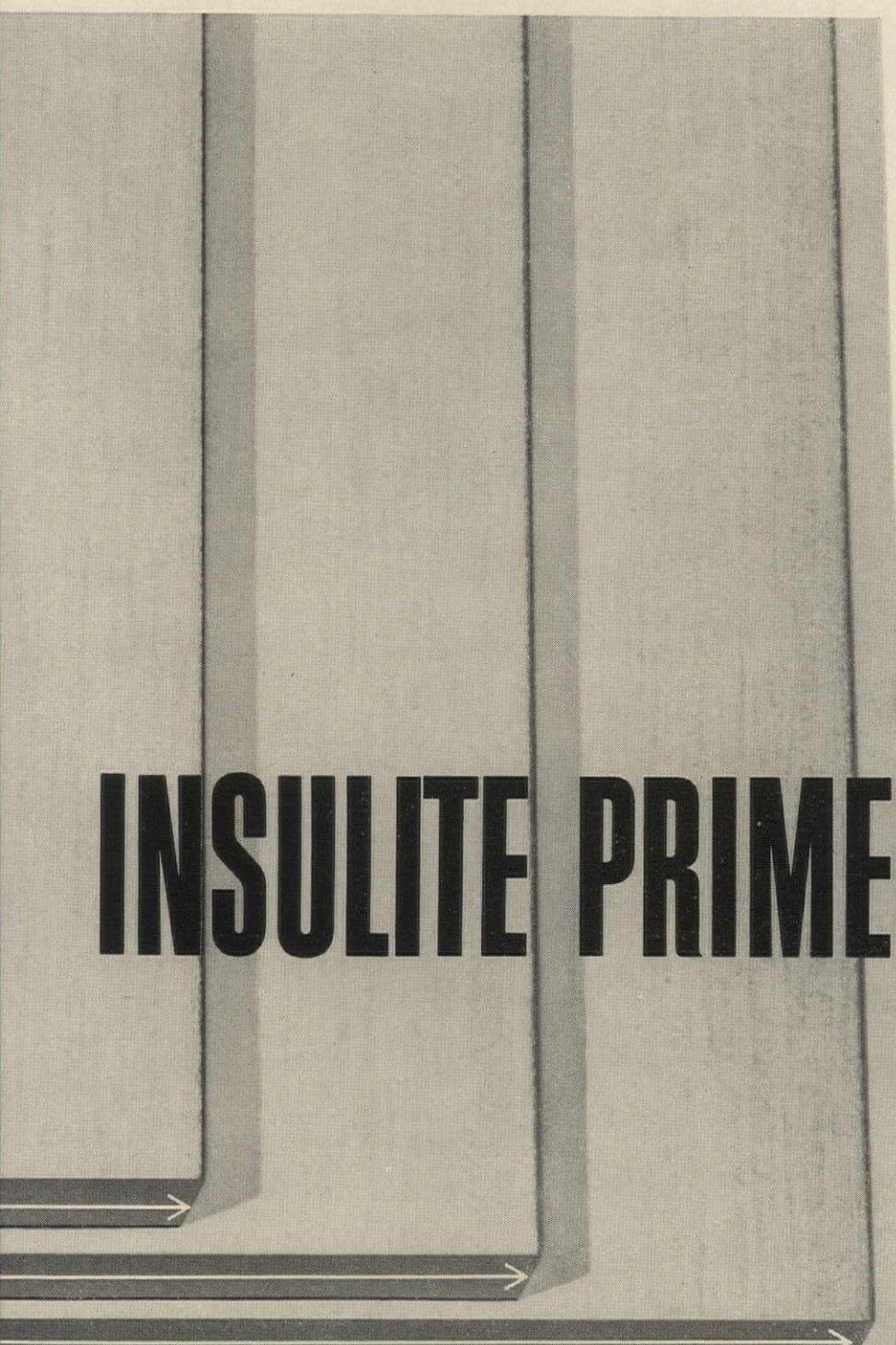
*New 8" and 10" widths—in addition to the 12" width give new design possibilities, match existing sidings*

In just four years this man-made siding has proved itself on more than 250,000 homes! Leading builders know from experience that homes built with Insulite Primed Siding are easier and faster to sell. And now Insulite Primed Siding is available in three lap siding widths for even greater versatility. Builders now can use Insulite Primed Siding to match existing 8", 10", or 12" sidings when adding a garage or an addition to an existing home.

**NAILS EASILY — SEATS PERFECTLY.** Has no structural grain—which means no knots or splits. It's easy to saw, easy to nail, easy to put up fast.

**COMPLETELY PRIMED AT FACTORY.** Deep priming on face, edges, ends and back saves time and cost of on-the-job priming coat. Finish coat goes on easily, bonds firmly, is extremely resistant to paint blistering.

**PROVED DIMENSIONAL STABILITY.** Four years of experience with exposure to all kinds of climates has demonstrated the superior stability of Insulite Primed Siding.



# INSULITE PRIMED SIDING

**Horizontal siding**  
in all three widths—  
8", 10", and 12" —  
is available in  
16' lengths. 8' lengths  
available on order.

### 3 TYPES OF INSULITE PRIMED SIDING GIVE EXTRA DESIGN FLEXIBILITY

- 8", 10" and 12" widths of horizontal (lap) siding. (10 pieces per bundle of 8" x 16' siding; 8 pieces of 10" siding; 6 pieces of 12" siding.)
- 4' x 8' grooved vertical panel with shiplapped edges. Grooves  $\frac{1}{2}$ " wide and 8" apart.
- 4' x 8' plain vertical panel for board-and-batten construction.

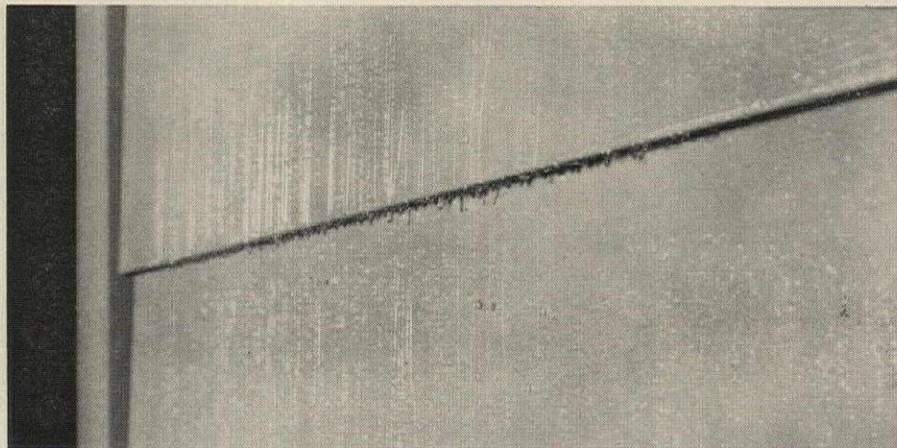
Now available for fast delivery—plant capacity doubled for 1961. Contact your building supplies dealer, Insulite representative—or write Insulite, Minneapolis 2, Minnesota.

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**INSULITE**®



Insulite Division, Minnesota and Ontario Paper  
Company, Minneapolis 2, Minnesota

**EXCLUSIVE WEATHER-DRIP EDGE.** Both long edges of horizontal siding are angle cut causing water to run down and off the edge—rather than back and under the siding where it can cause staining, rot and paint damage.

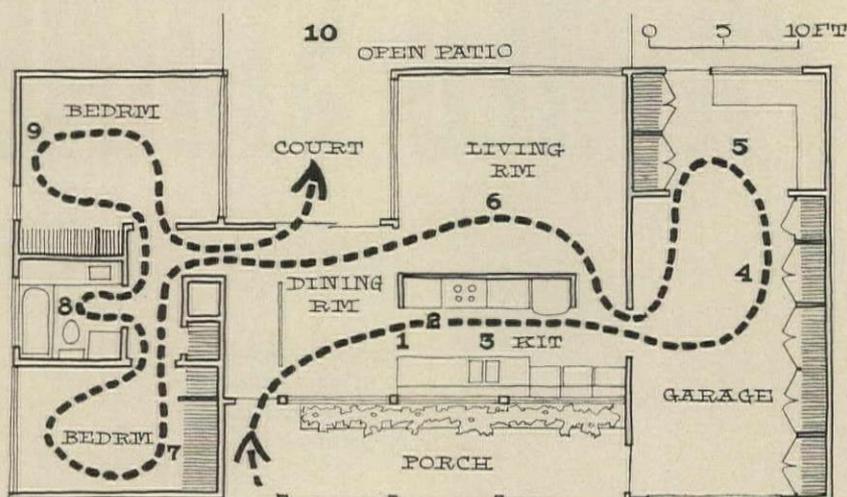


## What the leaders are doing



**TILED ROOF WITH CUPOLA** is used on first merchant-built DFPA model in Charles Cheezem's retirement community at St Petersburg, Fla.

## This DFPA retirement house sells for \$15,950



It is the first merchant-built model of the prototype house designed for the retirement market by Douglas Fir Plywood Assn (see p 177).

Builder Charles Cheezem of St Petersburg, Fla. drew 5,000 visitors when he opened the model March 5. Says Cheezem: "The biggest crowd we've ever had, and the most enthusiastic. We made four sales the first day."

The \$15,950 price includes air conditioning, refrigerator, washer, dishwasher, garbage disposer, terrazzo floors, tile roof, and low voltage wiring for master light controls.

Cheezem is building 20 more models, some to sell as low as \$13,450. (Lots are valued at \$3,000.)



**1. LOW CABINETS** and pull-down lighting fixtures in the kitchen make it easy for old-

er buyers to reach storage, to clean lamps, and to replace bulbs.



**2. LOW WALL OVEN** is designed to reduce lifting and chance of being burned.



3. **SIT-DOWN SINK**, lower than countertop, has knee room and kick space underneath.



4. **GARAGE STORAGE** extends full length and height of outer garage wall. Through-

out the house, the many big storage areas total about 10% of the living space.



5. **WORKSHOP** (9' x 13') at rear of garage has pegboard wall, two closets.



6. **STORAGE WALL** has built-in desk and shelves, separates living room from kitchen.



7. **BEDROOM CLOSETS** have floor-to-ceiling louvered doors, 6' long in each bedroom.



8. **BATHROOM** features grab bar for shower and tub and tiled seat at one end of tub.



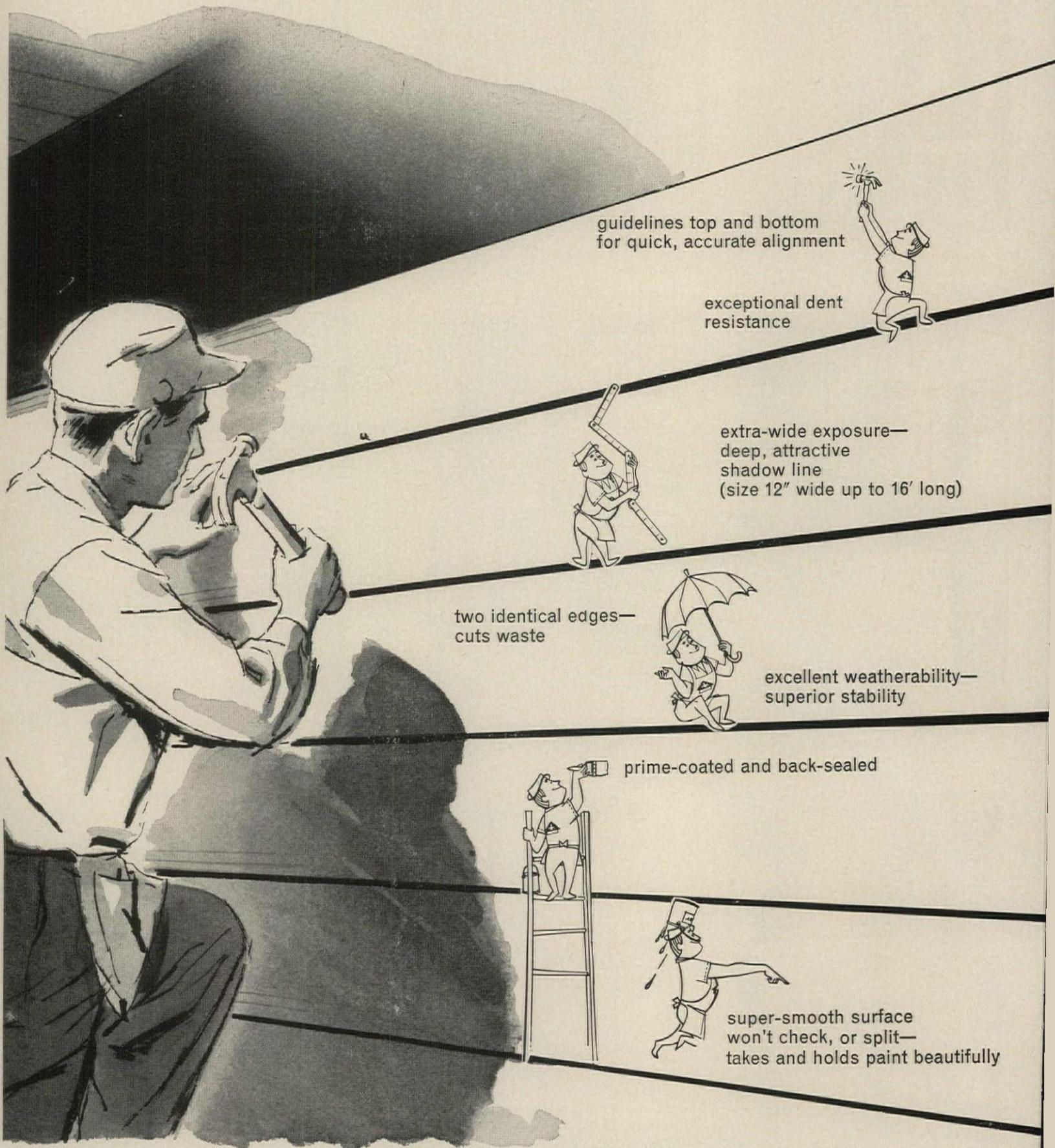
9. **MASTER CONTROL** of all lights is located in bedroom, also at front and back doors.



10. **OUTDOOR SALES OFFICE** was set up in the rear of several Cheezem models.

Leaders continued on p 184

# WHY SUCH DEMAND FOR



guidelines top and bottom  
for quick, accurate alignment

exceptional dent  
resistance

extra-wide exposure—  
deep, attractive  
shadow line  
(size 12" wide up to 16' long)

two identical edges—  
cuts waste

excellent weatherability—  
superior stability

prime-coated and back-sealed

super-smooth surface  
won't check, or split—  
takes and holds paint beautifully

# NEW MASONITE "X"-SIDING?

## Improved weatherability and stability

—exclusive X-90 fibre formula developed through years of research and field experience—specially treated surface—greater thickness ( $\frac{3}{16}$ " nom.).

**Exceptional durability**—amazing dent resistance—toughness without brittleness—won't check or split—eased edges for longer paint retention.

**Face primed**—for easier applied, better looking, longer lasting top coats. Back-sealed, too, for added protection.

**Architecturally beautiful**—rich-looking, wide exposure—attractive shadowline—smooth, blemish-free surface—few joints.

*plus* a host of features which substantially reduce application costs:

Easy sawing and nailing.

Guidelines for fast, accurate alignment.

12" width: fewer pieces than with narrower siding.

Low lap loss.

Convenient 12' or 16' lengths.

Identical edges mean less waste in gables.

No special skills or tools required.

No essential extras or costly accessories.

You must actually see "X"-Siding to fully appreciate what it can do for you. The Masonite representative or your building materials dealer will be pleased to show it to you and give you more details; or write Masonite Corporation, Dept. HH-4, Box 777, Chicago 90, Illinois.

# MASONITE

*shows the way*



Always look for this trade-mark on the panels you build with; it says this is genuine Masonite® hardboard. It's wood-made-better—made through the exclusive explosion process for unequalled strength, smoothness and uniformity.

©Masonite Corporation—manufacturer of quality panel products for building and industry

*OFF TO HAWAII* for two weeks are Mr. and Mrs. Tom Shannon. He is grand winner of Masonite's "Name the Siding" Contest and manager of Braun & Aldridge, Inc., leading Chicago area builder, which now uses "X"-Siding (with X-90 fibre formula) on many homes.



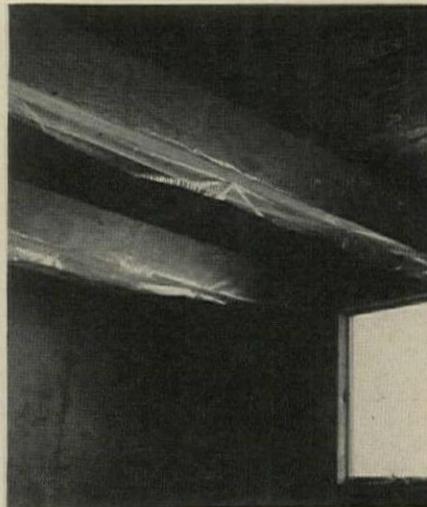
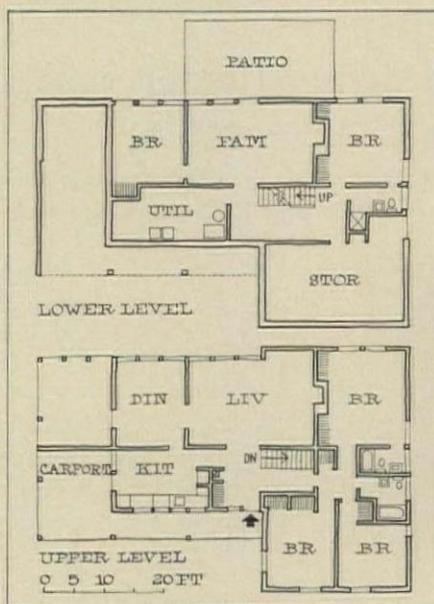


**WINNING TEAM**—Architect Francis Lethbridge (representing Keyes, Lethbridge & Condon), left, and Builder Ed Bennett, center—is congratulated by AIA's Ed Fickett.

**AIA-NAHB cites architect-builder team**

Builder Edmund Bennett of Bethesda, Md. and Architects Keyes, Lethbridge & Condon of Washington, D.C. are the joint winners of this year's AIA-NAHB honor award for "excellence of their cooperative efforts to create better homes and communities for Americans." The award was first given last year and went to Eichler Homes and its two architectural firms, Anshen & Allen and Jones & Emmons (H&H, Mar '60).

The award is not the first Bennett and his architects received for their 43-house Flint Hill community. In 1960 they won a top award for houses priced at more than \$25,000 in the annual AIA "Homes for Better Living" competition on which H&H cooperates (H&H, May '60). Below is a typical Bennett model, priced at \$37,800. Plan at right has 2,189 sq ft.



**Polyethylene film covers beam to ease painting**

By wrapping plywood box beams with polyethylene film, Builder Andy Place of South Bend, Ind. can spray-paint ceilings when the beams are to have a contrasting color. After painting, the painter simply cuts off the film with a razor blade. This leaves a layer of the film between the beams and the floor above, so an added benefit is reduced floor squeaking.

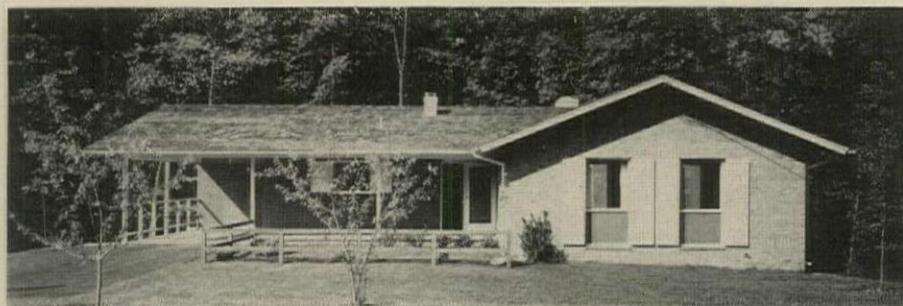


**New offer to homebuyers: a money-back guarantee**

That tried and true sales device—guaranteed satisfaction or your money back—is now being used by Hallcraft Homes of Phoenix.

Results? "Highly successful," says Sales Vice President Dave Reade. Here is how Hallcraft's full-page newspaper ads (above) spell out the 90-day unconditional guarantee:

"For a period of ninety days after you receive the keys to your new Hallcraft home in Scottsdale Estates, if for any reason what-so-ever you are not convinced that your new home represents the best value, liveability, and construction quality for the money, Hallcraft will buy back your home for the original price, assume the mortgage, and return every cent you have put into it for down payment and any other costs incidental to closing the purchase transaction. This guarantee is also extended to cover any unforeseen financial difficulties such as illness, transfer or loss of job, or for any reason whatever."



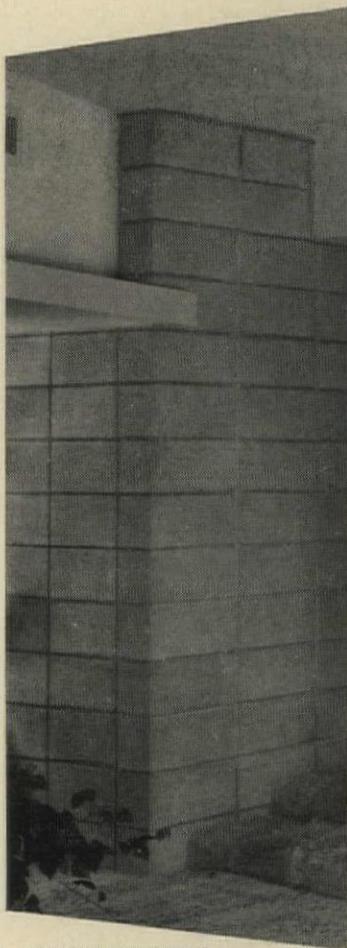
**HILLSIDE MODEL** opens to grade at top level in front, above, at bottom level in rear, below.



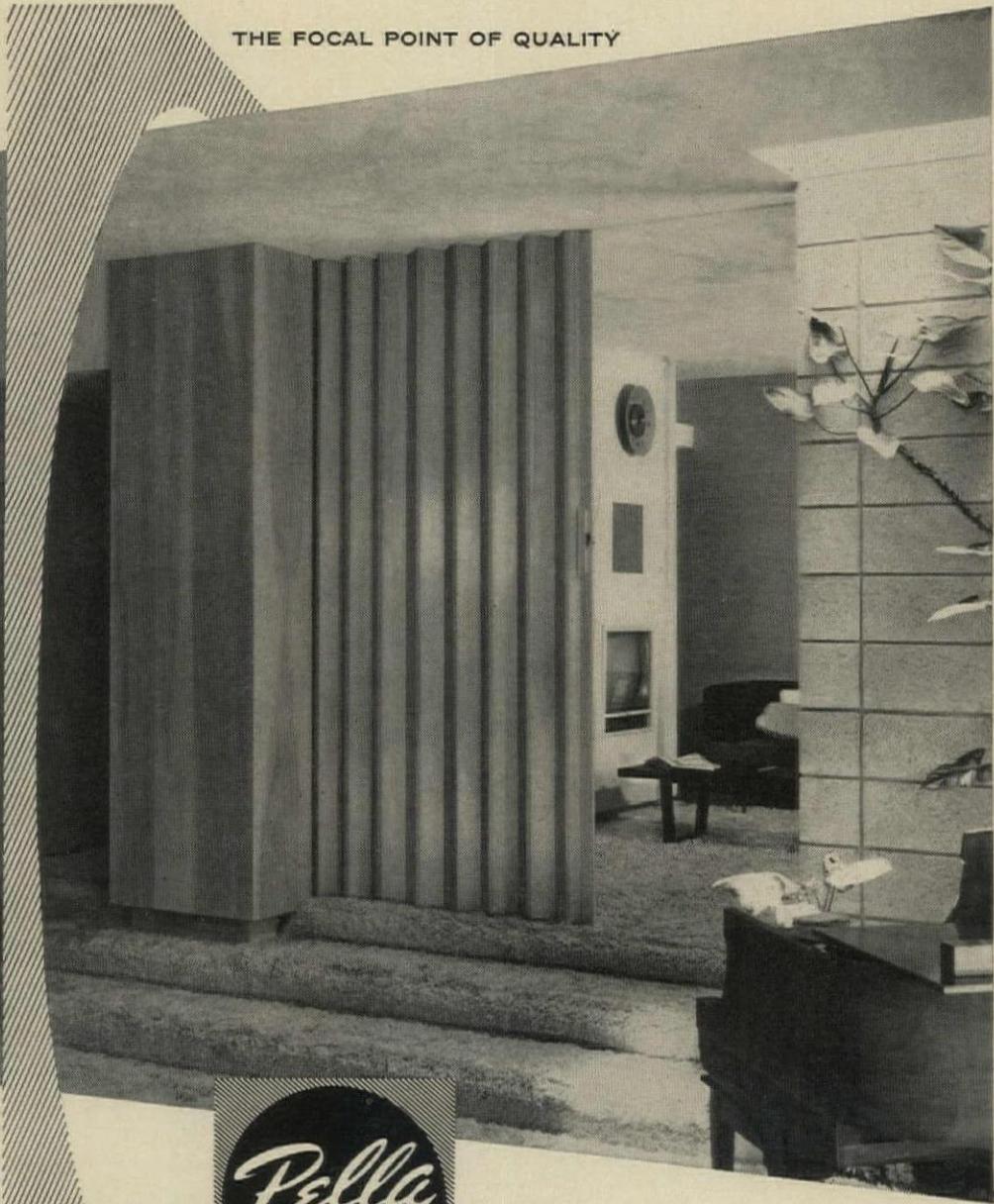
Leaders continued on p 184

PELLA PRODUCTS

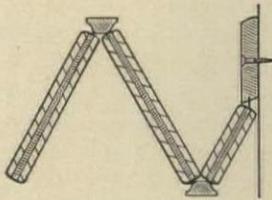
THE FOCAL POINT OF QUALITY



ARCHITECT: BLAINE DRAKE  
CONTRACTOR: HOMES & SON, PHOENIX, ARIZONA



**wood  
folding doors**  
*add privacy to open living*



**SPECIAL ALLOY STEEL**

spring hinges run horizontally and are spaced 14-7/10" apart. Panels come together quietly, flat and compact.

Homeowners have both privacy and rich beauty at their fingertips when you install PELLA WOOD FOLDING DOORS. Used as room dividers in open plan living, these handsome folding doors give interiors the natural warmth of genuine wood veneers. You may order PELLA WOOD FOLDING DOORS factory-finished or unfinished for on-the-job painting or staining. Patented "live-action" steel spring hinging assures effortless operation of even the largest units. Solid wood "Lamicor" construction prevents warping. Factory-assembled PELLA WOOD FOLDING DOORS are available for any width and in heights up to 12'-1". Call the PELLA distributor listed in your classified telephone directory or mail coupon.

6 Fine Wood Veneers • ASH • OAK • PHILIPPINE MAHOGANY • AMERICAN WALNUT • BIRCH • PINE

**THIS COUPON ANSWERED WITHIN 24 HOURS**

PELLA ALSO MAKES QUALITY WOOD FOLDING PARTITIONS, WOOD CASEMENT AND MULTI-PURPOSE WINDOWS, ROLSCREENS AND WOOD SLIDING GLASS DOORS.

**ROLSCREEN COMPANY**, Dept. MB-30, Pella, Iowa

Please send details on PELLA WOOD FOLDING DOORS

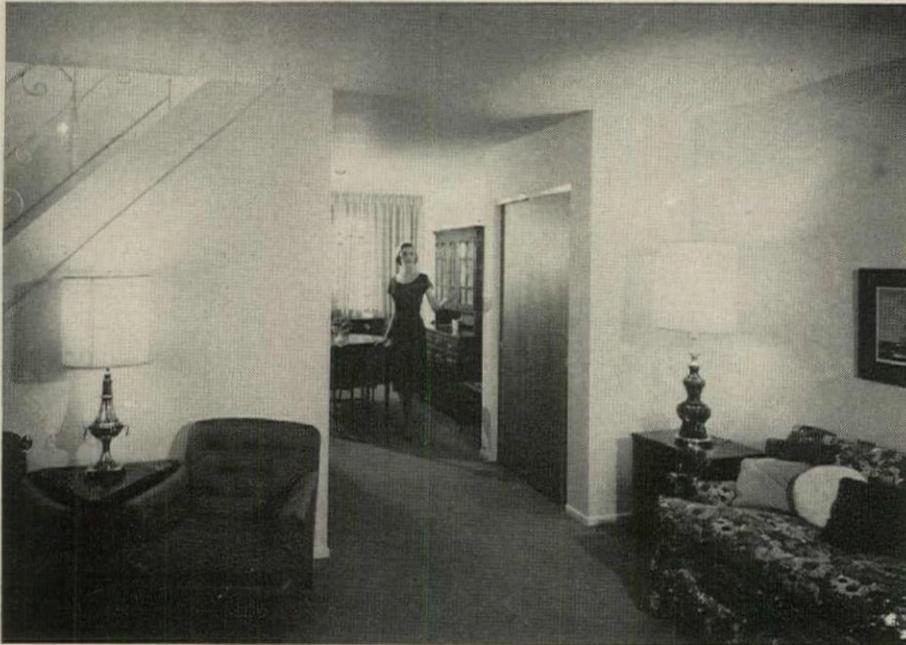
NAME \_\_\_\_\_

FIRM NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY & ZONE \_\_\_\_\_

STATE \_\_\_\_\_



LIVING ROOM, foreground, is 19'x17'6", opens to big dining room through 6'-wide passage.

### This town-house space sells for \$7 a sq ft

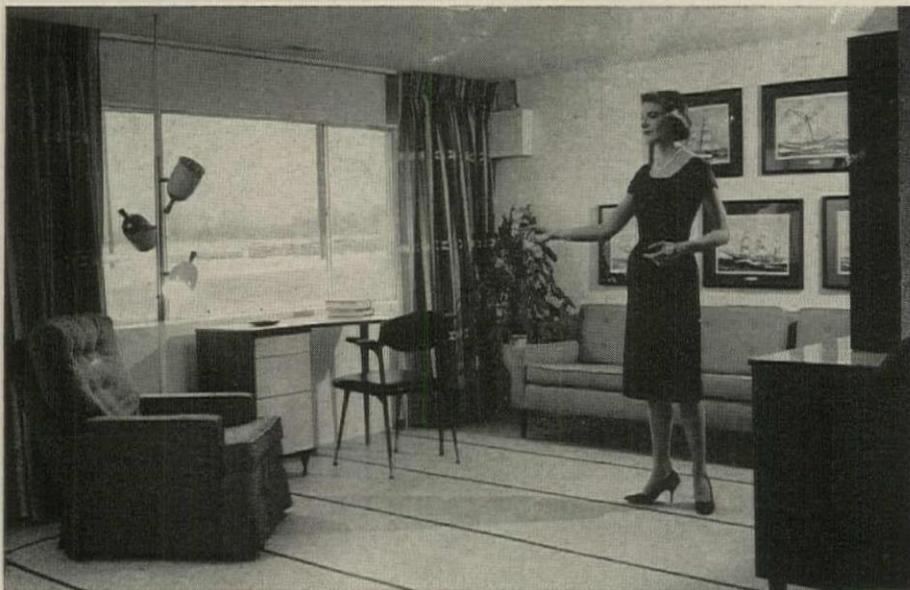
And Builder Hyman Korman is selling it fast in Philadelphia.

Korman, who opened a community of 2,000 town houses in early January, had sold more than 300 by early March.

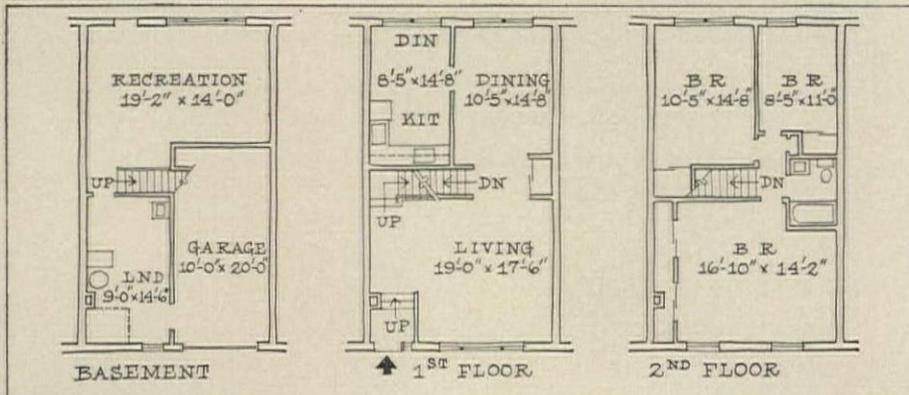
The three-story town houses—20' wide and 34' long—have 1,650 sq ft of living space, plus a garage and large

laundry. They sell for \$11,590, including land, which cost Korman \$1,600 to \$1,800 per unit.

Korman, who at one time built town houses 18' wide, says the 20' width adds to sales appeal by permitting more spacious rooms and a more workable plan with better traffic flow.



RECREATION ROOM on lowest level is 19'2"x14', opens at grade level to backyard.



THREE-STORY PLAN has two dining areas, large master bedroom with 14 lin ft of storage.

### Here are ten reminders for dealing with subs

Pittsburgh Builder Vincent Amore sub-contracts almost all of his work, so he knows how many problems can crop up to hamper builder-subcontractor relationships.

"Most of these problems," he says, "are caused by nothing more than carelessness on the builder's side. We all know what practices we ought to follow but sometimes we don't follow them simply because they are so obvious."

Here are some basic rules he suggests builders keep in mind when they start a new project:

1. *Put your specifications in writing before you hire anybody.* "You have to decide on your specifications sooner or later, so why not at the start?"

2. *Tell the sub exactly what equipment he needs.* "Go into minute detail on what trucks and tools and materials he must have. This list will also help you judge whether a sub can handle his assignment on schedule."

3. *Don't let subs borrow from each other.* "Each must understand he has to supply his own water, his own electric generators, and so on. If he relies on the next man to furnish what he needs, he will cause delays that put your whole operation behind schedule."

4. *Let each sub know your billing procedure.* "Subs bid largely on their expectation of pay schedules. If you are a 'paying' builder, you will probably get lower bids."

5. *Insist on a clean job.* "The important point here is that he understands you are not fooling."

6. *Warn each sub to be careful about others' work.* "Tell each trade you will not tolerate cutting joists and wires or cracking plaster that others have installed."

7. *Don't pay extra charges unless you have authorized them.* "You can't allow a single exception to this rule if you want to control your costs."

8. *Emphasize promptness.* "Tell each sub you expect him to keep his promises to do his job on time. This means you must establish a reputation for being on time yourself—ready for the sub when you say you'll be ready. Also, be specific about time: Don't tell a man to 'come next week.' Tell him 'next Monday at 8 AM.'"

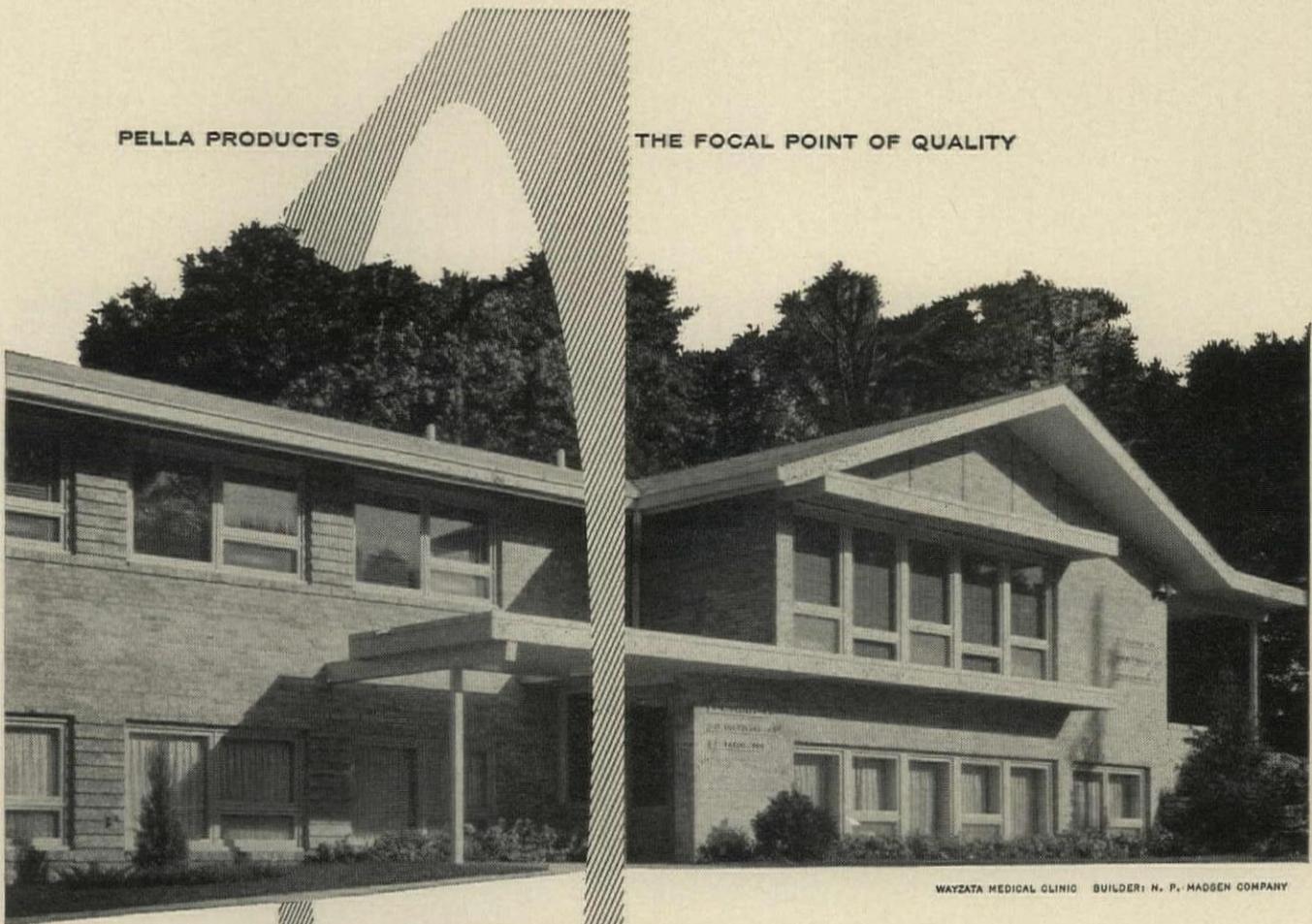
9. *Stick to subs who have proved their ability.* "Don't put yourself in the position of holding the hose for the plasterer or plugging in the drill for an electrician."

10. *Above all, be firm.* "If you keep forcing your subs to follow your rules, they will become more efficient. They will plan their work better, do a better job, make more money, and give you lower bids."

Leaders continued on p 188

PELLA PRODUCTS

THE FOCAL POINT OF QUALITY

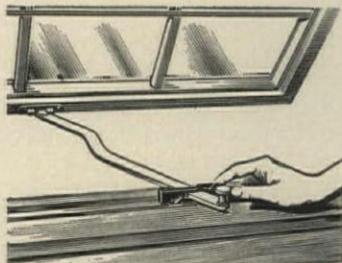


WAYZATA MEDICAL CLINIC BUILDER: N. P. MADSEN COMPANY



**wood  
multi-purpose  
windows**

*give commercial buildings "home" convenience*



**UNDERSCREEN OPERATOR**  
is of extruded aluminum. Exclusive nylon **GLIDE-LOCK**® permits locking M-P window in 10 positions.

Your commercial customers will long appreciate both the residential atmosphere and practical convenience of PELLA WOOD MULTI-PURPOSE WINDOWS. The handsome wood frames offer recognized insulating advantages and self-storing inside "storms." Stainless steel spring-type weatherstripping is on all 4 sides of the sash. A complete range of 20 standard-size M-P units combine into hundreds of combinations for any kind of architectural treatment. To save your construction time, PELLA WOOD MULTI-PURPOSE WINDOWS arrive factory assembled, and in many areas local warehouse stocks are available. PELLA also offers WOOD TWINLITE® WINDOWS, featuring awning convenience with the traditional "double-hung" look. Call the PELLA distributor listed in your classified telephone directory or mail coupon.

THIS COUPON ANSWERED WITHIN 24 HOURS

**ROLSCREEN COMPANY**, Dept. MB31, Pella, Iowa  
Please send details on PELLA WOOD MULTI-PURPOSE and TWINLITE WINDOWS.

NAME \_\_\_\_\_

FIRM NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

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PELLA ALSO MAKES QUALITY WOOD CASEMENT  
WINDOWS, WOOD FOLDING DOORS AND PARTITIONS,  
ROLSCREENS AND WOOD SLIDING GLASS DOORS

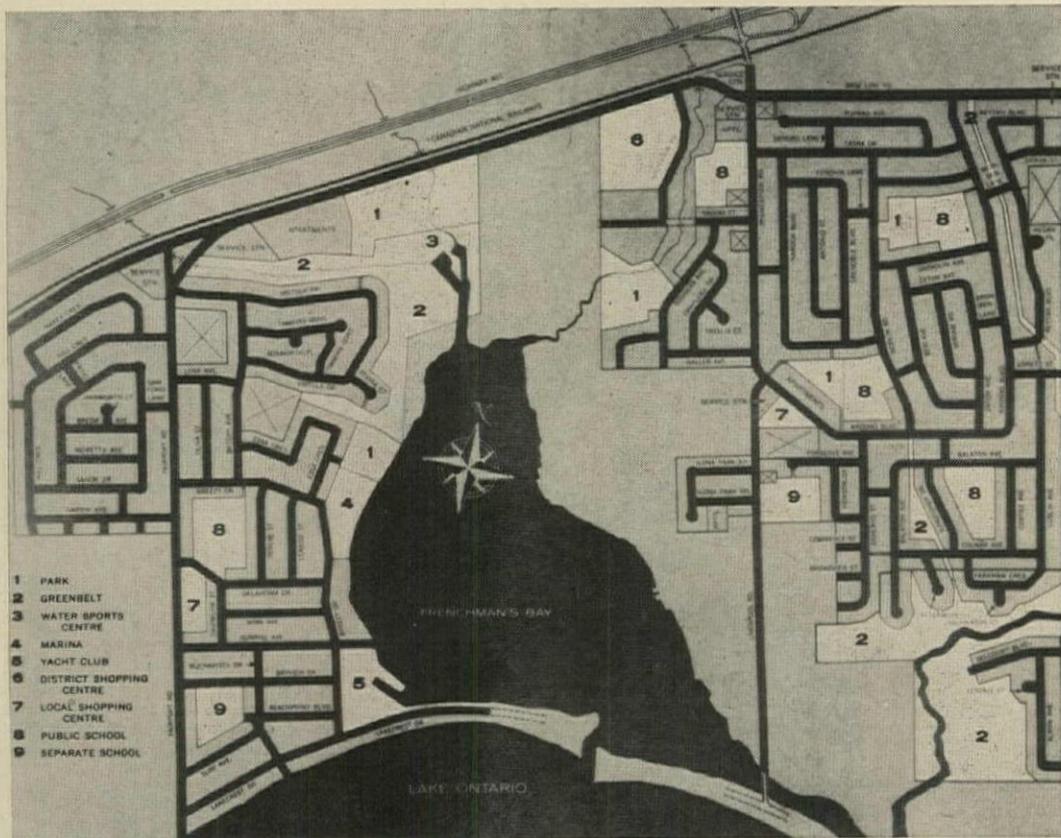
## What the leaders are doing



**\$88,000 EXHIBIT HALL** contains product displays, cutaways showing construction, scale models of houses and of community facilities.

## 500 sales in four months:

## Here is how Canada's biggest builder stays on top



Despite rugged weather conditions and a generally slow market, Consolidated Building Corp of Toronto sold houses so fast through the winter that it expects its 1961 sales to reach 1,500—up 500 from last year.

The company's four-point formula for keeping its sales up:

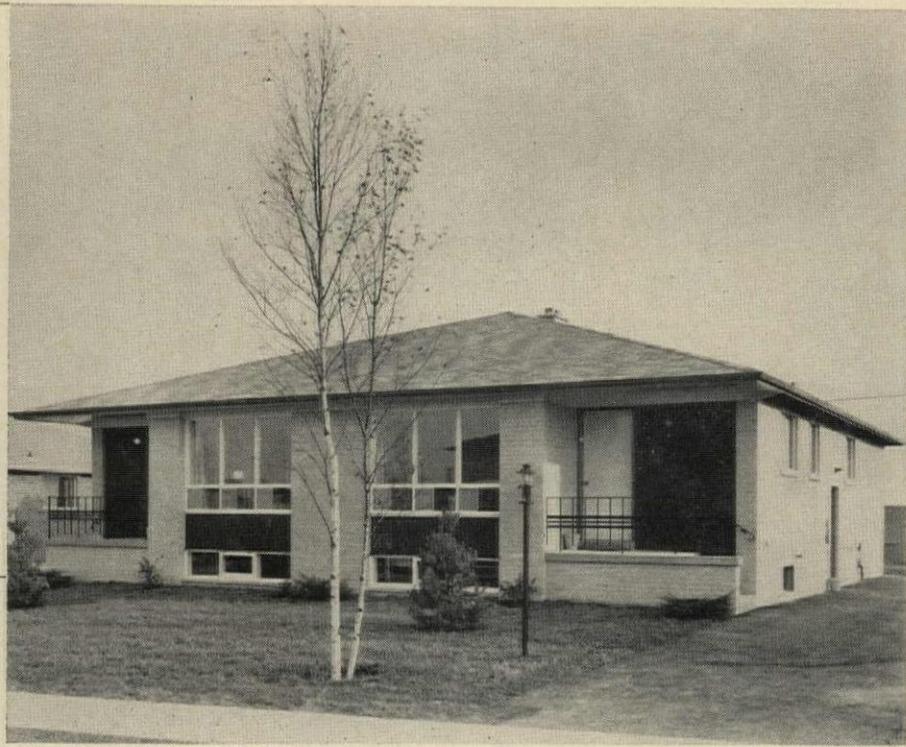
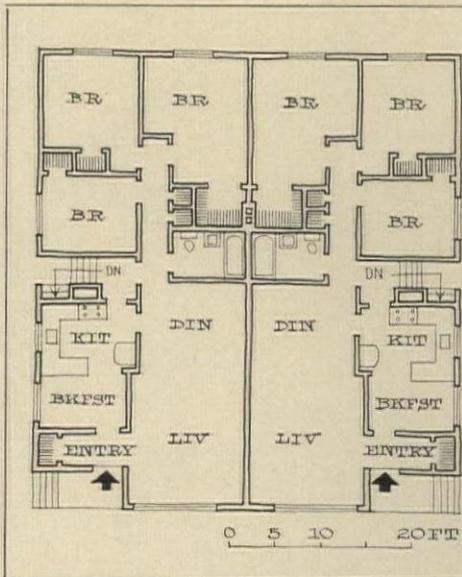
1. It offers a wide variety of houses (13 furnished models) in a relatively narrow price range (\$12,670 to \$15,700). Buyers average incomes: \$415 a month.

2. It introduces features like indoor-outdoor living (opposite) that are new to the Toronto market in Consolidated's price bracket.

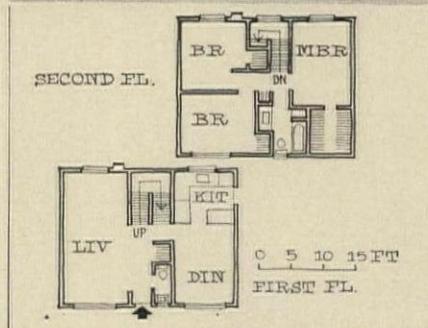
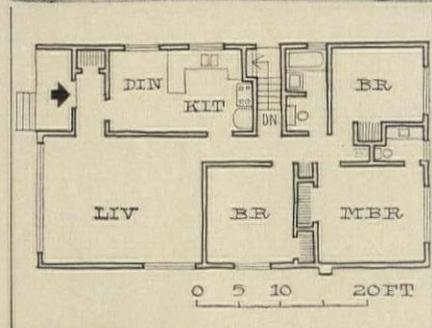
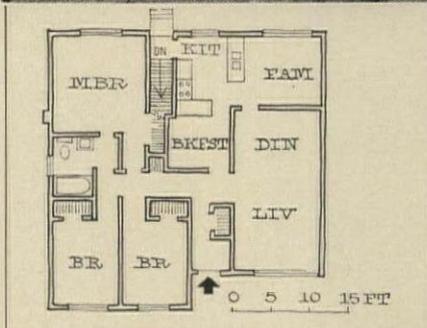
3. It provides plenty of recreation and service facilities in a planned community (left).

4. It uses displays—housed in a large exhibit hall (above)—to sell quality and community features.

**COMMUNITY PLAN** (left) for 3,000-house, 700-acre site on Lake Ontario includes three shopping centers, six school sites, parks, and several waterfront sports areas.



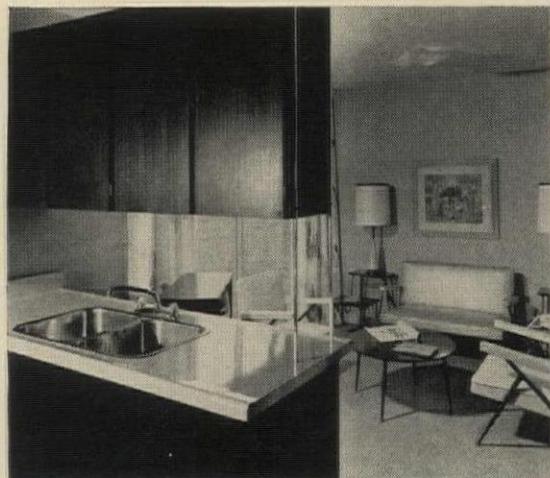
**BEST-SELLER** is this two-family house. Each of the twin units has 1,111 sq ft of living space over a full basement. Price per unit is \$12,670, the lowest of any Consolidated model. Price per square foot of living space (\$11.40) is also lowest because less land is needed per family unit.



**CENTER-HALL ENTRY** and bathroom with two entrances have made this 1,207 sq ft ranch a fast seller at \$15,111.

**LARGE BEDROOMS** and extra half-bath have made this ranch the second-best seller. It has 1,208 sq ft, is priced at \$15,347.

**TWO-STORY PLAN** offers 1½ baths, three bedrooms (one with walk-in closet), stairway at rear, and 1,300 sq ft. Price: \$15,512.



**OPEN PLANNING** is featured in all models. Here a kitchen opens to family room.



**INDOOR-OUTDOOR LIVING** is provided with sliding doors opening to paved terraces.



**KITCHEN EQUIPMENT** includes mahogany cabinets, steel sinks, exhaust fan and hood. /END



**FATHER AND SON BUILDERS** Homer C. Valentine, left, and Lynn are concentrating new construction in total electric Gold Medallion Homes for greatest buyer appeal.



**SIMPLE TO INSTALL**, heating cable is completely covered by ceiling plaster. No time is lost, because the electrical subcontractor handles electric heating along with the rest of his wiring job. And the Valentines like the fact there are no vents to cut.

# "Electric house heating actually helps us sell our houses before we finish construction"

**H.C. and Lynn Valentine, Los Angeles, Calif. builders, explain why they've switched 100% to flameless electric house heating**

"Buyers are impressed when we show them how clean electric heating is in homes we've already finished," explains Lynn Valentine. "This helps us close sales fast.

"Another thing that interests our prospects is that there are no heating vents or registers. This makes our homes easy to decorate. We also show buyers how they can keep different rooms at different temperatures with individual room controls.

"In addition, we tell customers how they'll save on cleaning bills for drapes and carpets, and how little maintenance there is with electric heating.

"To appeal to our quality-conscious buyers, we build in all the modern features we can," adds Lynn Valentine. "And electric heating is

tops from the sales aspect. In fact, we sell our homes while they're still under construction."

In construction itself, the Valentines gain time installing electric house heating. Without delay, the electrical subcontractor follows right behind the men putting up ceiling lath. Moreover, the Valentines like dealing with only one subcontractor instead of several.

It's easy to see why sales-minded builders like H. C. Valentine and Son are installing and promoting flameless electric house heating across the nation. Today over 850,000 American homeowners are enjoying its new standard of comfort and cleanliness. So it's important for every builder who's concerned with profits to find out how electric house heating can help him.

To get complete information about the five basic types of electric heating—ceiling cable, baseboard, wall panel, heat pump and electric furnace—why not call your local electric utility representative as soon as you can.



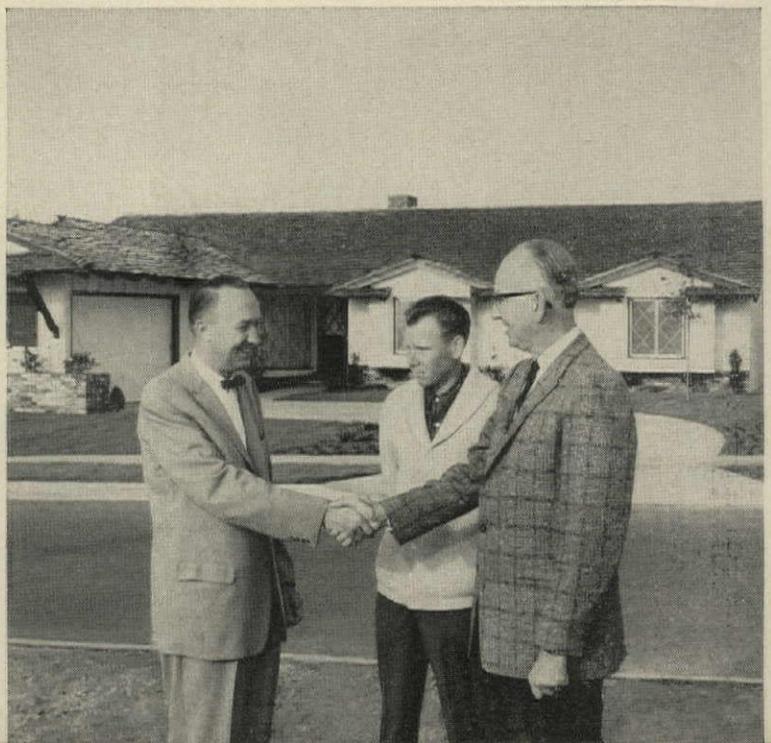
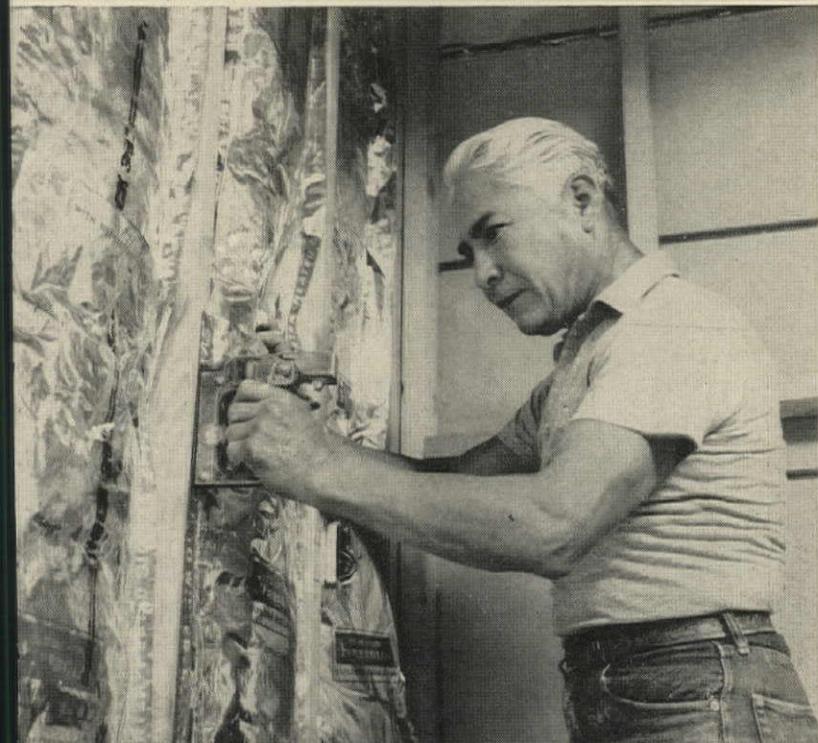
*With clean, comfortable Electric House Heating*

**YOU LIVE BETTER ELECTRICALLY**

*Sponsored by Edison Electric Institute*

**CORRECT INSULATION** is the key to operating economy and buyer comfort. Full-thickness batts of foil-wrapped fiberglass provide both insulation and vapor barrier. 6" of fiberglass blown into the ceilings complete the wrap. This also helps keep the house cool in summer.

**ENTHUSIASTIC BUYER** Frank Hevrdjes happily reports that he has had no maintenance worries with his electric house heating. And he's especially pleased with its evenness and cleanliness, and with the individual temperature controls in each room.





**RUBBER TUBES** form ducts in slab. They are inflated before slab is poured, deflated and withdrawn after concrete sets.

## Now you can save up to 77% on ducts in slabs



**ALUMINUM ENDS** of inflatable forms have tire-type valves. Forms can be used in any weather and stored in the open.

"With inflatable rubber forms, we are casting 8" ducts in our slab foundations for 20¢ a foot or less—15¢ below the installed cost of galvanized ducting and 66¢ below asbestos-cement duct costs."

So reports Builder Larry Goldrich of Norfolk, Va. whose heating contractor, Climatmakers Inc, is using the new duct forming system. The forms, laid in the foundation and inflated before the slab is poured, leave a smooth round void in the slab after they are deflated and withdrawn.

Climatemakers pays \$600 for an 8" form 50' long. Used 100 times (the guaranteed minimum), the form produces 5,000' of duct. So use of the form costs 12¢ a foot. But forms are often good for 500 uses (or for 25,000' of duct), which drops their cost to 2.4¢ a foot of duct.

Labor costs—roughly the same as for other kinds of duct—are 8¢ a foot. For example: It takes two man-hours (at about \$2 an hour in Norfolk) to place the forms for 130' of 8" duct complete with floor and wall registers and risers.

The patented forms come in ¾" to 10" diameters, have FHA and VA acceptance, and are made for sale or rental by Elgood Concrete Services Corp of Brooklyn, N.Y.

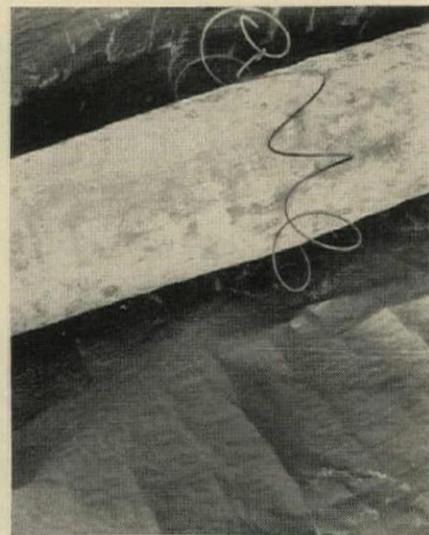
## Here is how inflatable forms are used to cast ducts in place



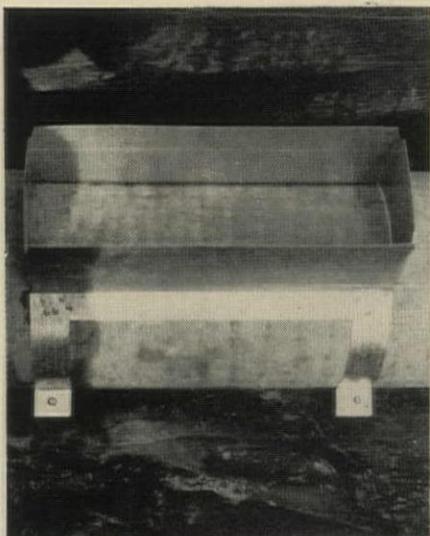
**1.** Gravel base is formed, right, to bring bottom of duct to exterior grade, rather than 2" above it (this is new FHA-MPS ruling).



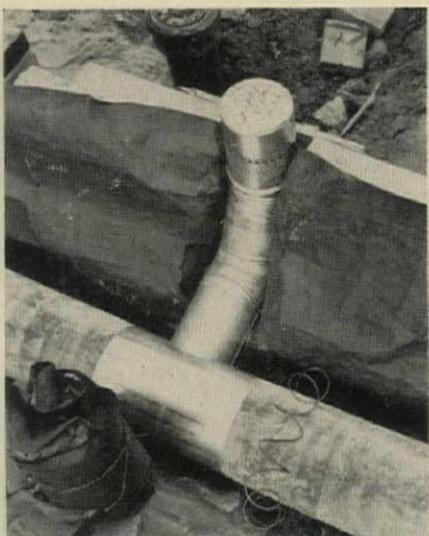
**2.** Forms are laid on vapor barrier, inflated to 14 psi. To turn corners, forms can be bent to a radius five times their diameter.



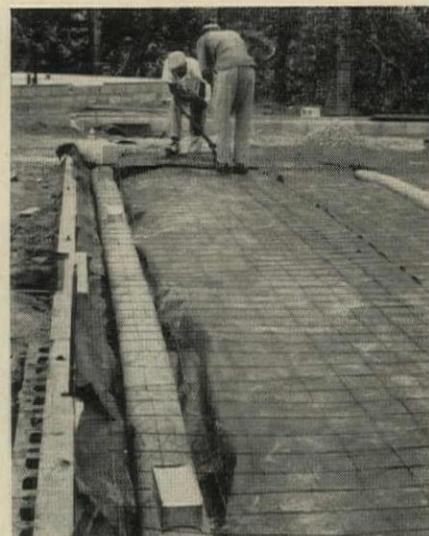
**3.** Loose wire coil is placed around inflated form. Coils at 5' intervals raise form 2" so concrete will flow under it.



**4.** Galvanized floor register is strapped around form. Registers are capped temporarily (photo 6) before slab is poured.



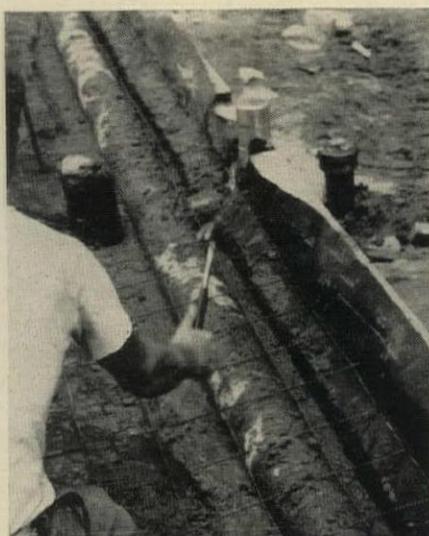
**5.** Wall register is strapped on like floor register. When form is deflated, it is easily drawn out through galvanized sleeve.



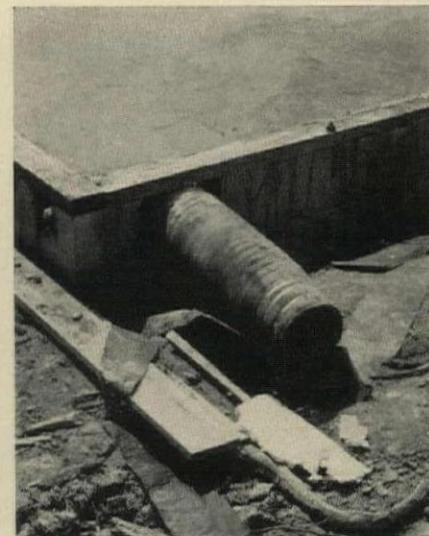
**6.** Reinforcing mesh is positioned. It keeps forms from floating when slab is poured. If walked on, forms spring back up.



**7.** Monolithic pour forms slab and ducts at same time. Resulting jointless duct cannot be blocked with concrete or rubble.



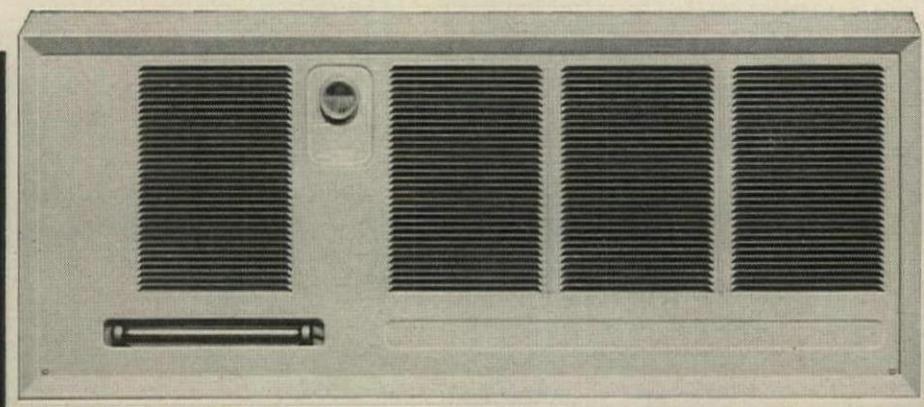
**8.** Flexible form, hit with hammer, vibrates concrete and insures smooth ducts. Most other duct systems need special vibrators.



**9.** At end of job, form is deflated and withdrawn—it has nylon reinforcing that contracts to break bond with concrete.

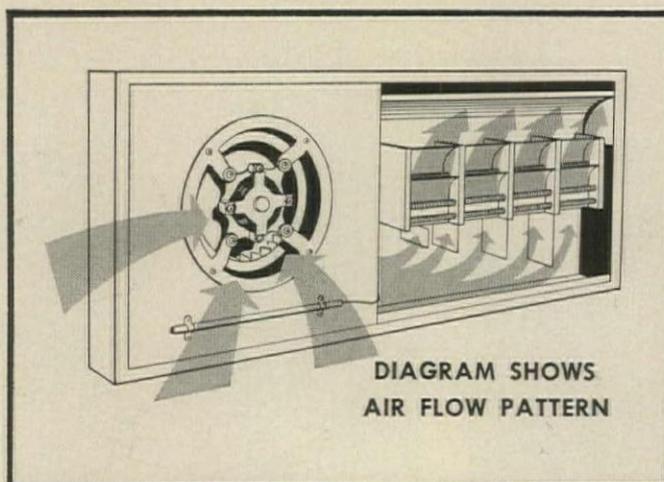
*Technology continued on p 196*

# R & M-Hunter introduces AN ENTIRELY NEW TYPE OF ELECTRIC HEATING



R & M-Hunter  
Forced Air  
Baseboard

BASEBOARD + FORCED AIR  
comfort with economy



## Advantages of two proven heating principles combined

The R&M-Hunter FORCED AIR BASEBOARD combines the best features of forced air and baseboard heating. Cooling floor-level air is whisked into the unit by a quiet, low-speed centrifugal blower. This air is forced over a series of heating elements for fresh warmth and delivered directly into the "living zone" at the temperature selected for complete comfort. Positive control of circulation at low levels mixes the tempered air with room air immediately. Outer wall and window areas are kept at or near room temperature for economical operation. Floor-level thermostat and return air inlet maintain ideal comfort conditions, with a minimum of heat loss.

*Backed by R & M-Hunter's 80-year experience in electrical equipment*



The Forced Air Baseboard harmonizes with modern room interiors; paint to match.

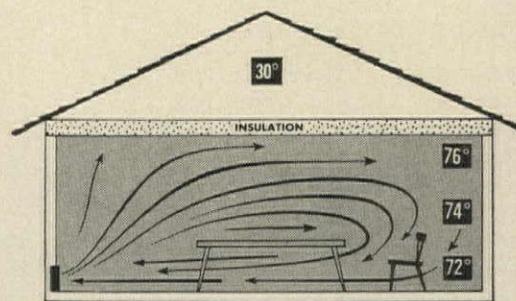
SAFE! CLEAN! QUIET!

Heat control in each room

Lower maintenance and decorating cost

No cold drafts or hot blasts

No ducts—no heater closet



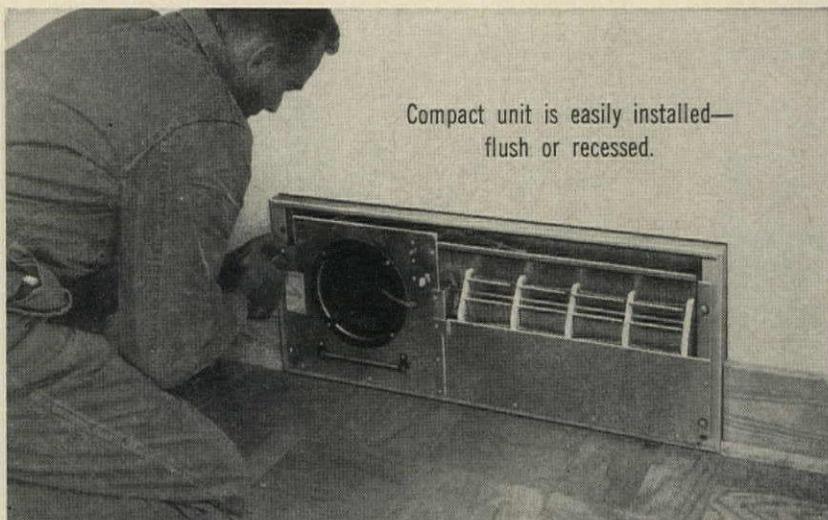
EVEN FLOOR TO CEILING TEMPERATURE

**SAVE ON COST AND INSTALLATION**

The new Forced Air Baseboard costs much less than convection baseboard, and is easier to install. No expensive accessories, no parts to assemble, no complicated wiring. Underwriters' Laboratories listed.

**Engineered for compactness** — Dimensions are: 33" long, 13" high, 3 7/8" deep. When recessed, unit extends only 1 3/8" from wall.

**1000 to 4000 watt capacities** — 1000, 1500 and 2000 watt models are available with or without thermostats. One thermostat-equipped model can control two or more units in a room. 2500, 3000 and commercial 4000 watt models have thermostats for individual zone control.



Compact unit is easily installed—flush or recessed.

**R&M-HUNTER ALSO MAKES CONVECTION BASEBOARD, WALL, AND BATHROOM HEATERS**

**R&M-Hunter  
FORCED AIR BASEBOARD  
ELECTRIC HEAT**



*It's Matchless!*



Mail now for data

Hunter Division—  
Robbins & Myers, Inc.  
2730 Frisco Ave., Memphis 14, Tenn.

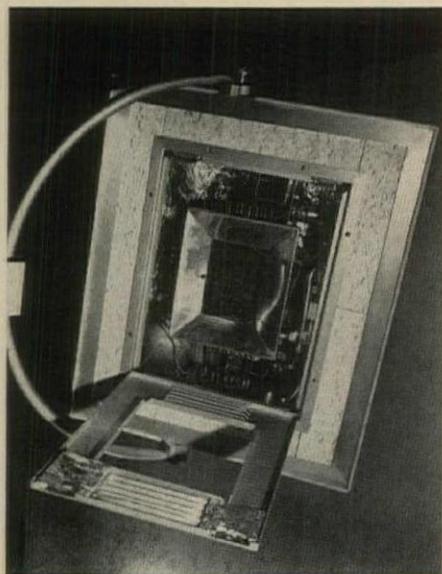
Send complete data on the new Forced Air Baseboard to:

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**This heater cuts costs by re-using its own heat**

The experimental thermoelectric unit generates enough electricity from a gas flame to operate its automatic controls and air handling fan.

It was developed by Lone Star Gas Co, Dallas, for use in bathroom ceilings. The thermoelectric generator is a series of 42 small thermocouples on three sides of a radiation burner. It develops 1.5 volts and produces 1.5 watts. The heater is rated at 6,800 Btuh.

**Are plastics in building due for a cost breakthrough?**

Plastic products designed for home building—piping, molded bathrooms, and sandwich panels, for example—may soon be competitive with products made of conventional materials.

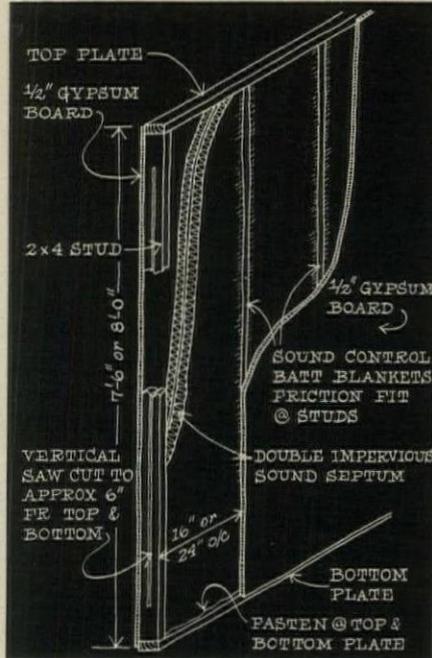
*Reason:* Costs of all the major basic plastics except phenolics have been driven down by a price war in the highly competitive plastics industry.

*Item:* Polystyrene, which sold for 29¢ a lb in 1955, dropped to 21½¢ in 1959 and to 18¢ or lower by the end of last year. Housing experts have long said that when the cost fell below 20¢, foam-core sandwich panels made with polystyrene could be priced to compete with frame walls.

*Item:* High-density polyethylene, 47¢ a lb in 1957, is down to 35¢—a price that warrants a thoughtful look at products like waste, vent, and cold-water lines that are made of this material.

*Item:* Low-density polyethylene, 41¢ a lb in 1956, has dropped to 26¢. The result could well be a wider use of polyethylene vapor barriers.

*Item:* Vinyls, 35¢ a lb in 1955 and 23½¢ in 1959, are now selling for 18½¢. So homebuilders can look for important market changes in wall, floor, counter, and even roof materials.



**All-electric house gets foamed-in-place insulation**

Sprayed-on urethane insulation costs Pittsburgh Builder Victor Anderko \$800 compared with \$550 for equivalent mineral wool insulation.

Says Insulation Contractor H. E. Werner who did the job: "The higher cost of foamed-in-place urethane is partly offset by its special advantages in an electrically heated house, which must be well insulated to control heating

costs. The urethane foam bonds fast to all surfaces, seals all holes, and forms a vapor barrier. At a thickness of 1¾" it has the same U factor as full-thick mineral wool."

Werner also points out that urethane—because of its bonding ability—could eliminate the need for sheathing behind brick veneer and thus save up to \$400 a house.

**New noise-control system uses lightweight material**

The system reduces noise transmission as well as a 6" block wall, according to Owens-Corning, which developed it.

As the photo and drawing above show, fiberglass batts (8"x1½", stud-space wide) are placed back to back between studs which have been ripped down the center almost their full length.

Particularly useful in garden apartments, the new sound barrier eliminates the need for solid masonry partitions, which must be supported by heavy footings and framing. Except for the slit studs, it requires no framing changes.

Owens-Corning cites four reasons why the new system works well:

1. The paper surfaces of the batts face inward and form a double impervious septum, which—with its small air space—has a low sound-transmission characteristic.
2. The limp stance of the batts—they are fastened at top and bottom only—dampens sound waves.
3. The resilient glass fibers of the batts cushion wall vibrations and thus reduce sound-transmitting vibration.
4. The slit in the stud breaks up the only solid material—and the only direct sound path—through walls. /END

At last... a lumber promotion that makes sales sense... built around an exclusive product, a complete plan and positive profits



Potlatch opens profitable new  
**SECOND HOME MARKET**  
 for contractors,  
 builders, lumber dealers

Potlatch's "Free-Time" Home Plan Idea Book makes it easy and profitable for you to get into the second home market. These exclusive plan ideas make extensive use of Potlatch's laminated tongue-and-groove building material . . . LOCK-DECK. Each home is attractive, practical and so economical everyone can own a second home. And . . . Potlatch is backing this promotion with national consumer and trade advertising and a complete merchandising kit. Get in on this rapidly expanding market—mail coupon today for FREE plan idea book in full color.



Each Potlatch "Free-Time" Home is designed for easy-style living with just a touch of luxury. Construction ideas include "A" frames, expandable homes, mountain retreats, lake-side beauties. A "Free-Time" Home is leisure-time living at its best.

MAIL THIS COUPON FOR FREE PLANS BOOK

Check which you are:

Architect  Builder  Wholesaler  Dealer

POTLATCH FORESTS, INC. • Lewiston, Idaho

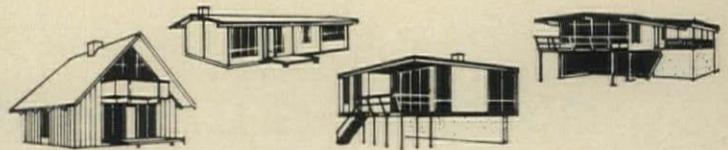
HH-A

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

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



**POTLATCH FORESTS INC.**

GENERAL OFFICES • LEWISTON, IDAHO



symbol of  
 quality  
 since 1906



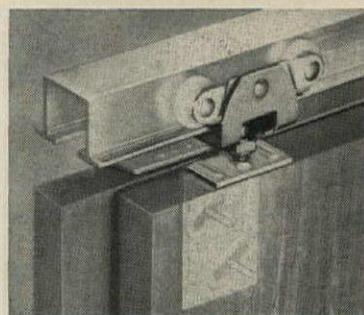
## HER EYES WON'T BE CLOSED THIS TIME

She's looking at sliding doors with a wary eye this time around—and with pretty good reason, too. In the past she's probably fumed and fussed and pulled and pushed sliding doors till she was blue-in-the-face.

If you're planning to show her the same "stuff" she had in her last house or apartment — watch out. She's a better buyer the second time around.

**Are you a smarter seller?** Grant 7000 Sliding Door Hardware is one line you can be certain won't fall down on the job. It's the best residential sliding door hardware ever made.

8 nylon wheels per door/aluminum track/exclusive "rocker arm" action/ball and socket suspension/all door thicknesses.



## GRANT SLIDING DOOR HARDWARE



GRANT PULLEY & HARDWARE CORPORATION

Eastern Division/ 31 High Street, West Nyack, N. Y.

Western Division/944 Long Beach Ave., Los Angeles 21, Calif.

sliding door hardware • drawer slides • drapery hardware • pocket frames • pulls • special sliding hardware • closet rods

DECORATIVE MIRROR LIGHT IS ONE OF SEVERAL NEW FIXTURES

MODERN STYLED HOODS COME IN 11 MODELS

ROOM AIR CONDITIONERS HANDLE UP TO 22,000 BTUH

NEW PRY-LITE TYPIFIES RECESSED FIXTURES

NEW SQUARE EXHAUST FAN SAVES INSTALLATION TIME

SET-BACK CONTROL TURNS MOTEL HEAT OFF & ON

ELECTRIC HEAT COMES IN BASEBOARD, WALL, & CEILING UNITS

INTERCOM ALSO TRANSMITS RADIO & RECORDED MUSIC

## Emerson Electric plans 267 new products for 1961

Says Emerson Vice President Ed O'Neill: "By the end of the year we expect 60% of our sales to be in products we didn't make 12 months ago."

The company's goal: a single catalog covering all the electrical accessories for a house except major appliances and wiring. Adds O'Neill: "We think the housing industry needs a one-stop electrical supplier and we intend to be it."

Some products being introduced this Spring are shown above; others will

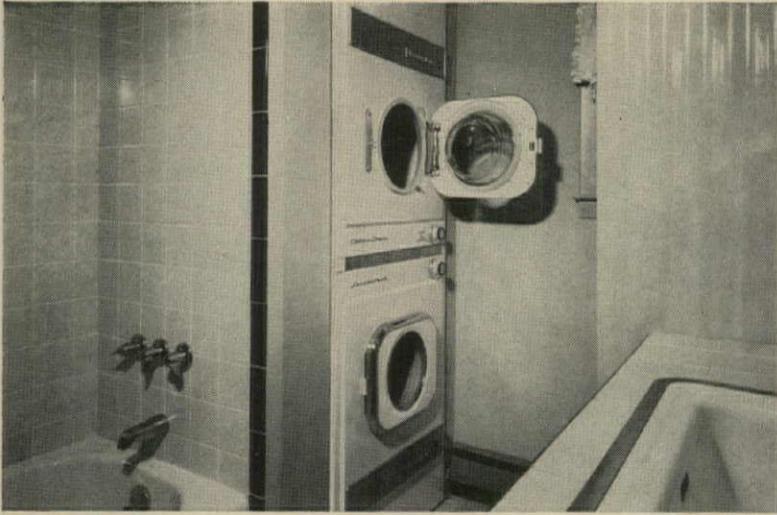
follow during the year. Full line of the Emerson Builder Products Group will include all types of fans—exhaust, attic, portable; unit air conditioners and heat pumps up to 2½ hp; baseboard, fan-forced, and radiant electric heat including controls and thermostats; dehumidifiers; range and oven hoods, including ductless, island, and retractable models; recessed lighting and decorative lighting; and the Rittenhouse chime, intercom, and music systems.

The single catalog is backed up by a central billing and order service. Orders from eastern and midwestern states go directly to St. Louis, are edited, taped, and sent immediately to the manufacturing plants. West coast orders are received and shipped from Pomona, Calif. All orders will soon be covered by a single monthly bill.

Emerson Electric, St. Louis.

For more information about Emerson products check No. 3 to 10 on coupon, p 229.

New Products continued on p 202



**HOUSEWIVES** appreciated having the washer and dryer in the bathroom. Stacked as shown, the Westinghouse Space-Mates fit in a space only 25 inches wide. A removable panel in a closet provided access for servicing.



**THE UNDERCOUNTER DISHWASHER** guarantees spotlessly clean dishes, because it heats its own water to a sanitizing 140 degrees. Choose 'N' Change front panels give a wide choice of decorative effects.

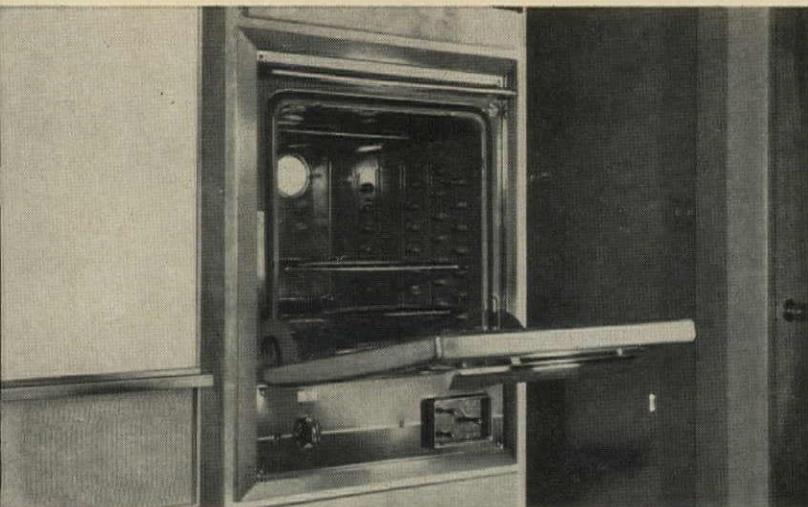
Leading Massachusetts developer says:

# "ONE-CONTACT BUYING SOLD WESTINGHOUSE RESIDENTIAL



**MR. ADELARD ST. ANDRE**, the builder, is shown here in front of the first model home. It was built to prove that electrical heating is practical in a cold area like Massachusetts. The slight additional cost for equipment and power, compared

to the cost of oil and bottled gas, was no obstacle to prospective buyers. They snapped up six homes on opening day. Within three months all 28 homes in the development were sold!



**THE POPULAR** Built-in Oven attracted lots of attention. Only 17 inches, it nevertheless handles big meals. The unit slides easily into place, has only one simple electrical connection to be made.



**LIKE THE OVEN**, this 4-unit Range Platform goes into place in a jiffy. It drops snugly into the counter top without special fasteners. The Remote Control Panel and lift-out Corox® Units mean extra convenience in cooking and cleaning.

# US ON THE NEW MARKETING PROGRAM™

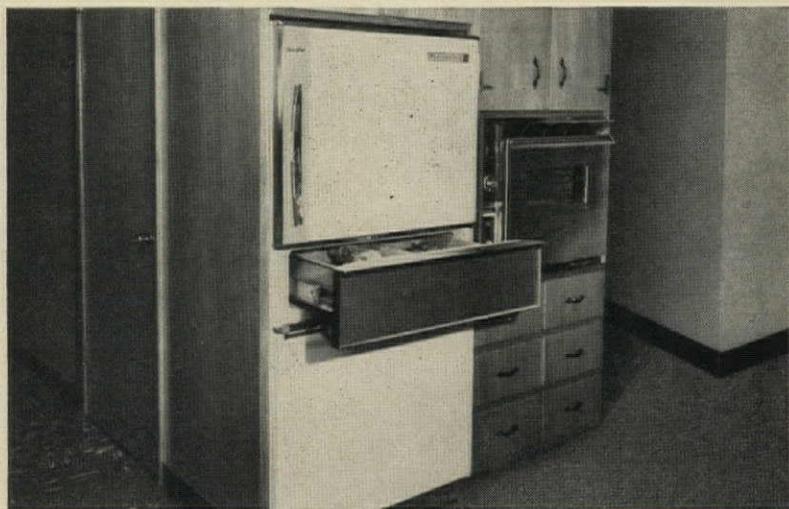
It's Mr. Adelard St. Andre, president of Mount View Corporation, South Hadley, Massachusetts, speaking. "Like every builder, we want to cut costs. So we tried the Westinghouse Residential Marketing Program at our Batchelor Knolls development in Granby. It worked out just the way we hoped." Yes, Mr. St. Andre got everything he needed—appliances and heating equipment—with one contact. Deliveries were fast, complete, and on time! And Westinghouse really pitched in to attract prospects! Six homes were sold on opening day alone. All 28 were gone in three months! Now the Mount View Corporation is planning a big 140-acre development at South Hadley, with 225 Westinghouse Total Electric Homes! See what the Westinghouse Residential Marketing Program gives you:

- 1. One source of supply . . .** a complete line of quality home products.  
HEATING AND AIR CONDITIONING: *Baseboard electric heating; heat pumps; central air conditioning and heating systems* • WIRING DEVICES: *Load centers; outlets, receptacles, switches; plus the popular Westinghouse Automatic Appliance Center* • ELECTRICAL APPLIANCES: *Built-in ovens and range platforms; water heaters; dishwashers; food waste disposers; refrigerators; freezers; Laundromat® washers; dryers; combination washer-dryers; room air conditioners* • MICARTA: *Counter tops and vanities, and Micarta wall-building products* • KITCHEN CABINETS: *Wall and base units in de luxe Heirloom Maple finish* • APARTMENT ELEVATORS.

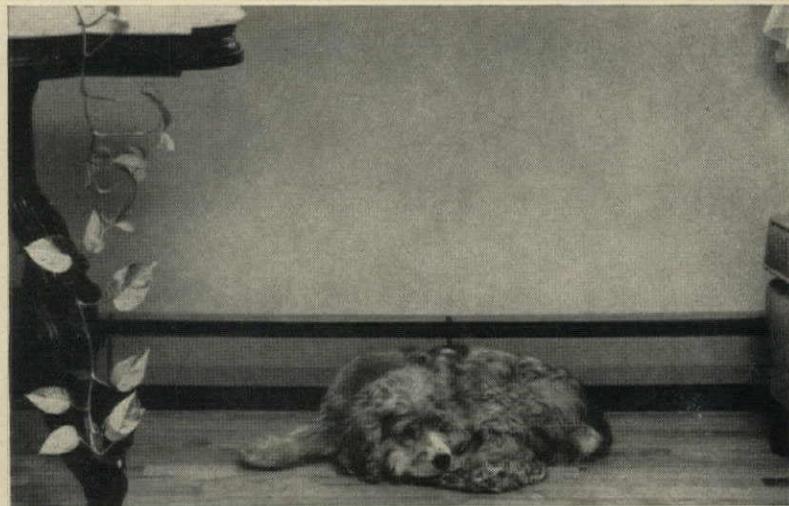
**2. One point of contact . . .** Residential sales managers in 54 principal markets responsible for full line marketing.

**3. One coordinated merchandising plan . . .** tailored to sell houses in volume—traffic-building advertising, promotion aid, selling ideas, product training, and publicity assistance.

Learn how the Westinghouse Residential Marketing Program can save you time and money . . . make building more profitable. Call your Westinghouse Major Appliance Distributor today. Or write Westinghouse Electric Corporation, Pittsburgh 22, Pennsylvania, for free booklet "New Direction in New Profit for Builders."



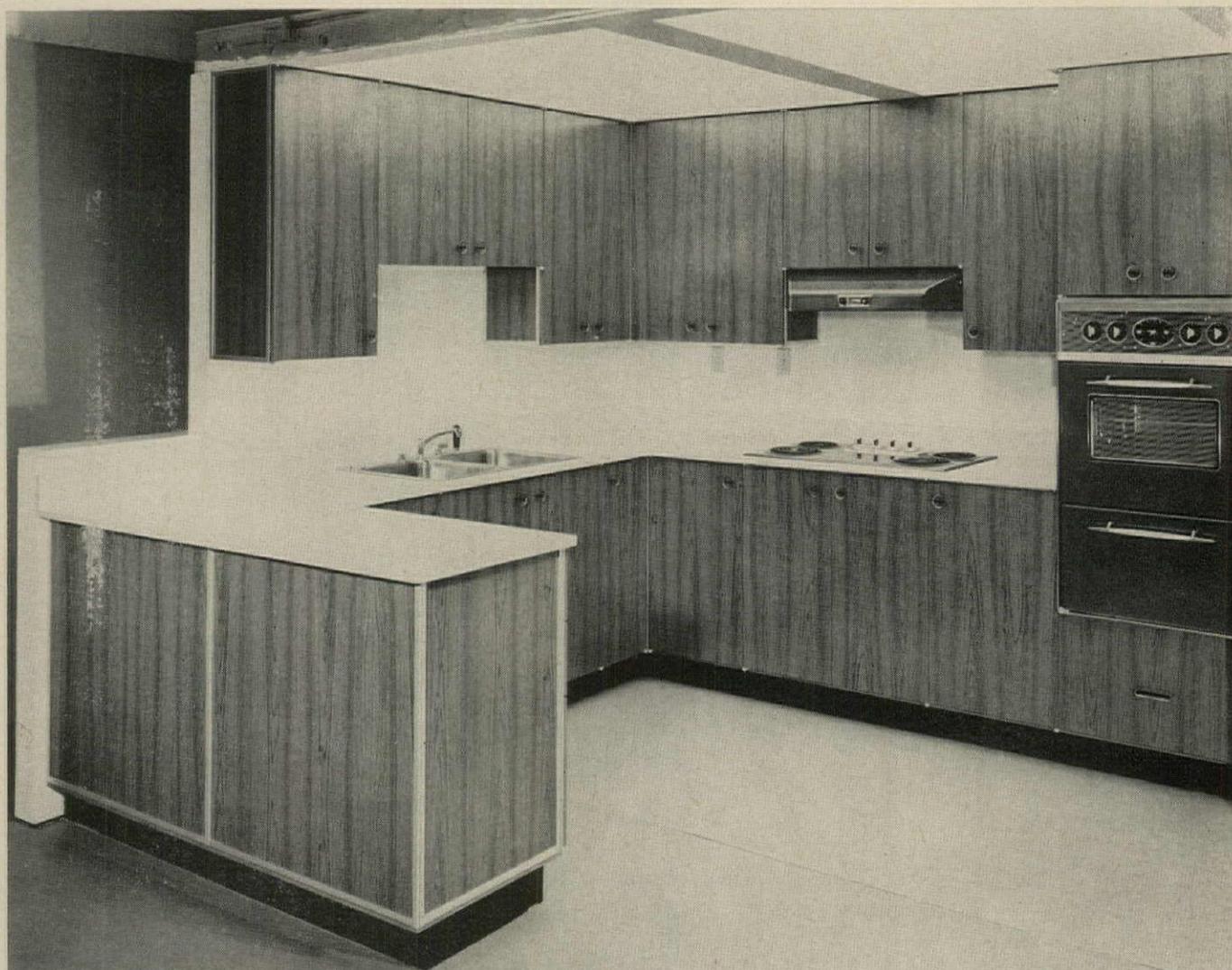
**EASILY** built in, the big Refrigerator-Freezer was pushed into place before the trim kit was installed. 90-degree door opening within cabinet width saved valuable floor space.



**THE BIGGEST ATTRACTION** was the electric baseboard heating. Every Batchelor Knolls home was a Westinghouse Total Electric Gold Medallion Home. Electric heating assured maintained resale value through the years.

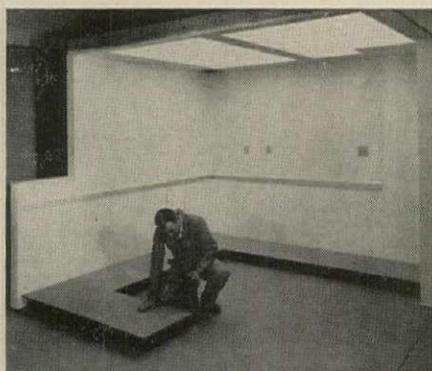
You can be sure . . . if it's

# Westinghouse



**FINISHED CABINETS** offer a choice of several wood grains, contrasting countertops, in most common sizes. Cabinets are made ceiling high.

## New plastic cabinet panels hang in aluminum frames



**CABINET BASE** is built conventionally.

The Modulux system—devised in cooperative effort by Fibersin Plastics Co, Stanley Hardware, and NAHB researchers—combines the durability of reinforced plastic panels with the flexibility of an extruded aluminum frame. The result: quality cabinets that adapt easily to new construction or remodeling.

The panels are dimensionally stable, resist hot, moist, odor-laden kitchen air. The frames—basically a single extrusion—are assembled with hardware that

allows enough “give” to counteract any reasonable variation in walls or partitions. The system—bolt-together frame and slip-in panels—installs in no more time than it takes to hang prefabricated cabinets. Price is about the same as good ready-made wood or steel cabinets. For example, one builder was able to cut \$2 a kitchen off the cost of good wood cabinets.

Modulux Inc, Chicago.

*For details, check No. 11 on coupon, p 229*



**FRAMES** are precut, assembled before hanging.



**PANELS** slip into grooves formed in frames.



**DOORS** hang from adjustable hinges on frame.

*New Products continued on p 207*



# BERMICO®

... OUTLASTS A LIFETIME

When  
he is



today's  
installed  
Bermico  
will still be  
on the job

Bermico Bituminized Fibre Pipe exceeds Federal Specification SS-P-356. Add to this the advantages of its light-weight, ease of handling, and superior strength and its root-proof features, and you have a good idea why Bermico "Life-Guarded" tough cellulose fibre pipe — fits the job fast . . . forever.

Write for full details to Brown Company, Dept. HH-4, 150 Causeway Street, Boston 14, Massachusetts.

*Another Quality Product of*

**BROWN  COMPANY**

Berlin, New Hampshire

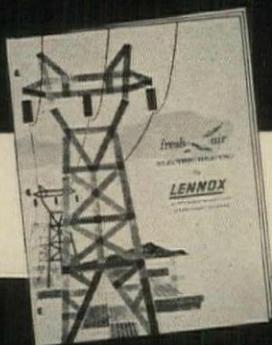
*General Sales Office: 150 Causeway St., Boston 14, Mass.*

Now!

**LENNOX**

®

TAKES  
ELECTRIC HEATING  
OUT OF THE  
"TRIAL AND ERROR"  
ERA!



WRITE FOR YOUR FREE COPY OF THIS COMPLETE BROCHURE THAT FULLY EXPLAINS LENNOX FRESH AIR ELECTRIC HEATING SYSTEMS

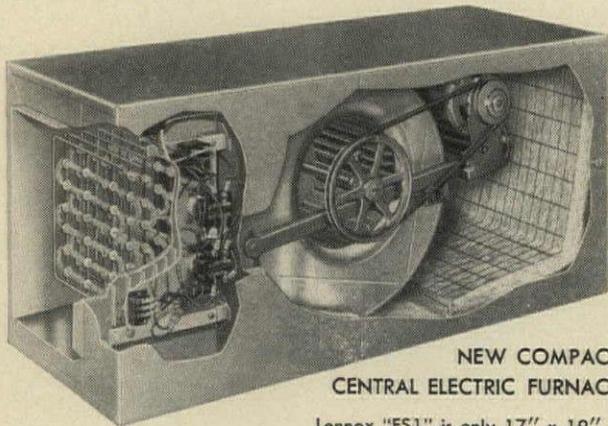
Address: Marketing Services Dept., Lennox Industries, Inc., 319 S. 12th Ave., Marshalltown, Iowa.

The Long-Time Leader in Developing the World's Finest Indoor Comfort Systems Introduces

# *fresh air* ELECTRIC HEATING

You can offer your buyers their choice of three different systems:

- \* ZONED CONTROL
- \* WHOLE-HOUSE CONTROL
- \* INDIVIDUAL ROOM CONTROL

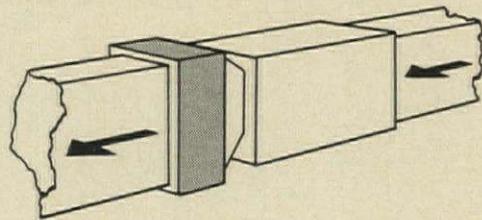


NEW COMPACT CENTRAL ELECTRIC FURNACE

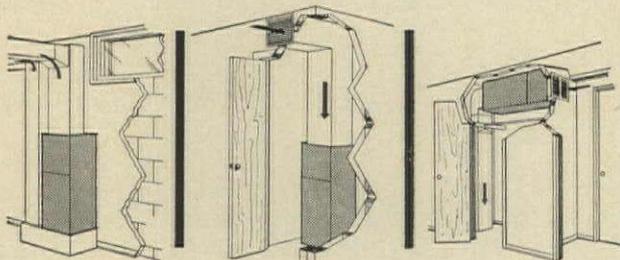
Lennox "ES1" is only 17" x 19" x 42 1/2". Can be installed almost anywhere for up, down or horizontal air flow. 39,000 Btuh. UL listed.

Now, the answer to practical, comfortable and affordable electric heating has been found... *Lennox Fresh Air Electric Heating*. This system introduces, filters and continuously circulates fresh outdoor air throughout the home; so vital to comfort in a tight, heavily insulated house. Humidity is kept at a perfect level, and operating costs are held to a minimum. Give your homes the glamour of electric heating, plus the comfort that only a ducted system and sensitive low-voltage thermostats can provide. IT'S THE SAME SIMPLE, PROVEN DUCT SYSTEM YOU KNOW... installed by a heating expert.

Unlike most electric heating systems, **YOU CAN EASILY ADD AIR CONDITIONING!**



Another big plus. Lennox Fresh Air Electric Heating gives you and your buyers easy economical adaptability to air conditioning. This electric heating system's ductwork, filter and blower can be used to air condition the home in the summer... providing perfect year 'round indoor comfort.

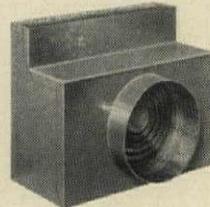
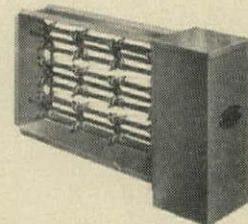


Up-flo in basement or closet.

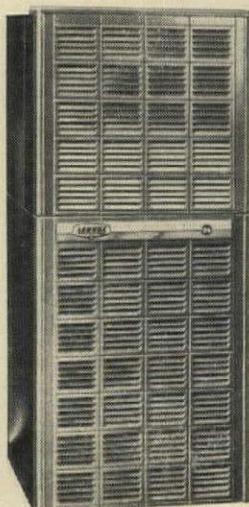
Down-flow in closet or utility room.

Horizontal in crawl-space or above closet.

HEATERS THAT FIT IN DUCT for zone or large-room control. Air supplied by central blower-filter unit. UL listed.



HEATERS THAT FIT IN DUCT OUTLET for individual-room or zone control. Air is supplied by central blower-filter unit.



DELUXE LENNOX LANDMARK central electric furnace for larger homes. Matching cooling and heat pump sections optional. UL listed.

# LENNOX

*Aire-Flo*® HEATING • AIR CONDITIONING

© 1960 Lennox Industries Inc., founded 1895; Marshalltown and Des Moines, Ia.; Syracuse, N. Y.; Columbus, O.; Decatur, Ga.; Ft. Worth; Los Angeles; Salt Lake City. In Canada: Toronto, Calgary, Montreal, Vancouver, Winnipeg.

# the right *flair* steps out front

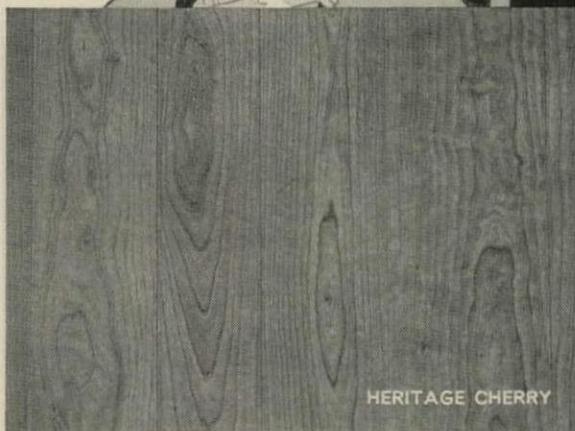
## in new finishes

New distinctive patterns! Richly beautiful. Surprisingly economical. Add new sales appeal, quality and value to your homes with these four new wood-grain finishes from Plywall.

Poly-Clad Plywall wood paneling—available in a selection of twelve finishes—offers a combination of beauty and wearability that lends a "want-to-own" influence to every room, every home. Prefinished. Poly-Clad protected to resist mars, scuffs, stains. The first paneling guaranteed against fading, structural defects and delamination—*in writing!*



NATURAL OAK



HERITAGE CHERRY

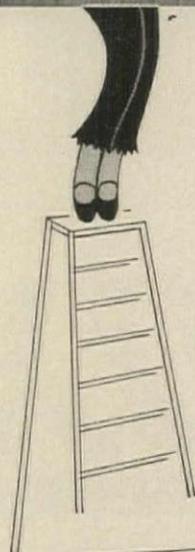


MODERN CHERRY

## in matching moldings

Now, accent the quality look with Poly-Clad Plywall matching moldings. And save money! Ten styles, twelve finishes. Prefinished and Poly-Clad protected, for easy, time-saving application. Perfect for any room decor—paneled, painted or papered.

See Poly-Clad Plywall's complete line of prefinished products at your dealer's today—Paneling, Matching Moldings, Bi-fold Doors, High-Pressure Laminex Doors, Poly-Clad Cabinet Stock.



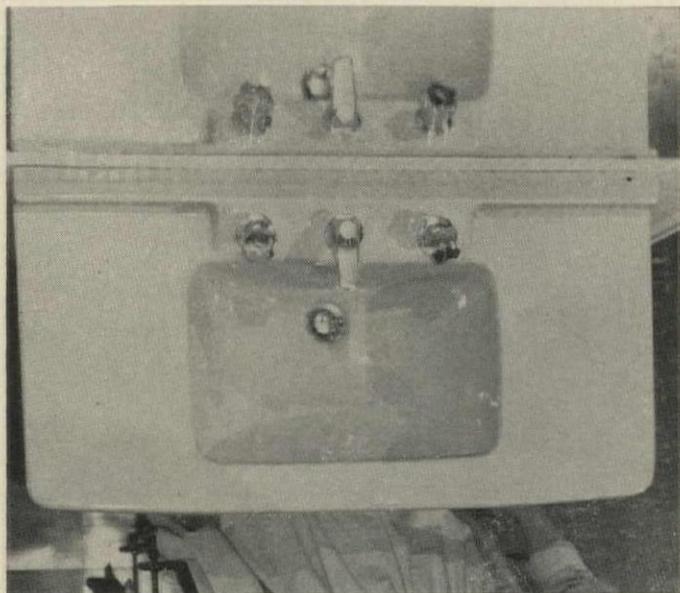
ADIRONDACK BIRCH

**Plywall**

**PLYWALL PRODUCTS COMPANY, INC.**

Fort Wayne, Indiana • Corona, California

*A subsidiary of Evans Products Company*



36" WIDE LAVATORY serves as one-piece basin and countertop.

**Kohler shows new builder line**

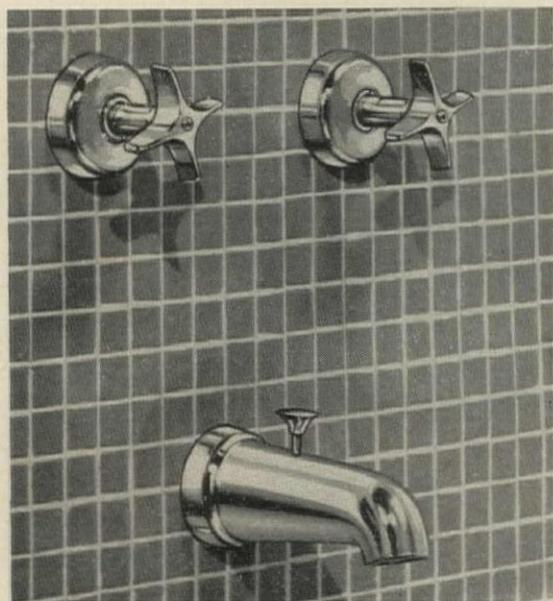
Chief element in the line: new all-brass fittings (below) featuring the Valvet no-drip unit, to be economy priced. Chief economy: eliminating ornamentation in favor of less-expensive-to-make straight styling. Aquaric line will include all type of fittings. Also new: three lavatories including the 36" wide Valcour above; others are a 20"x18" enameled cast-iron drop-in and a china countertop or freestanding model.

Kohler Co, Kohler, Wis.

For details, check No. 12 on coupon, p 229



AQUARIC FITTINGS are used in one-piece lavatory units.

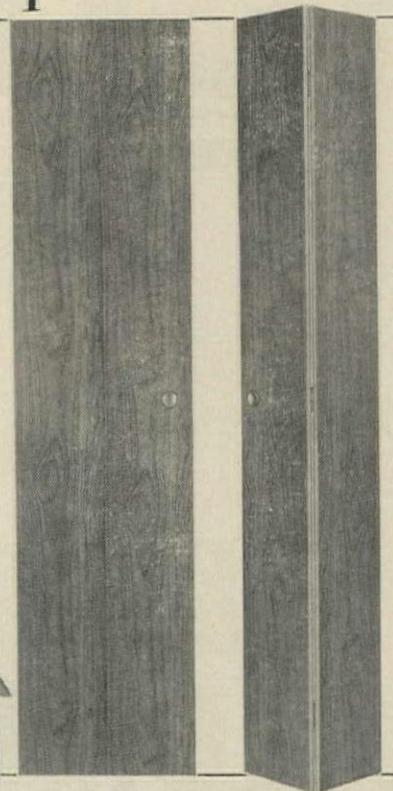


SHOWER SET shows simple design that allows lower price.

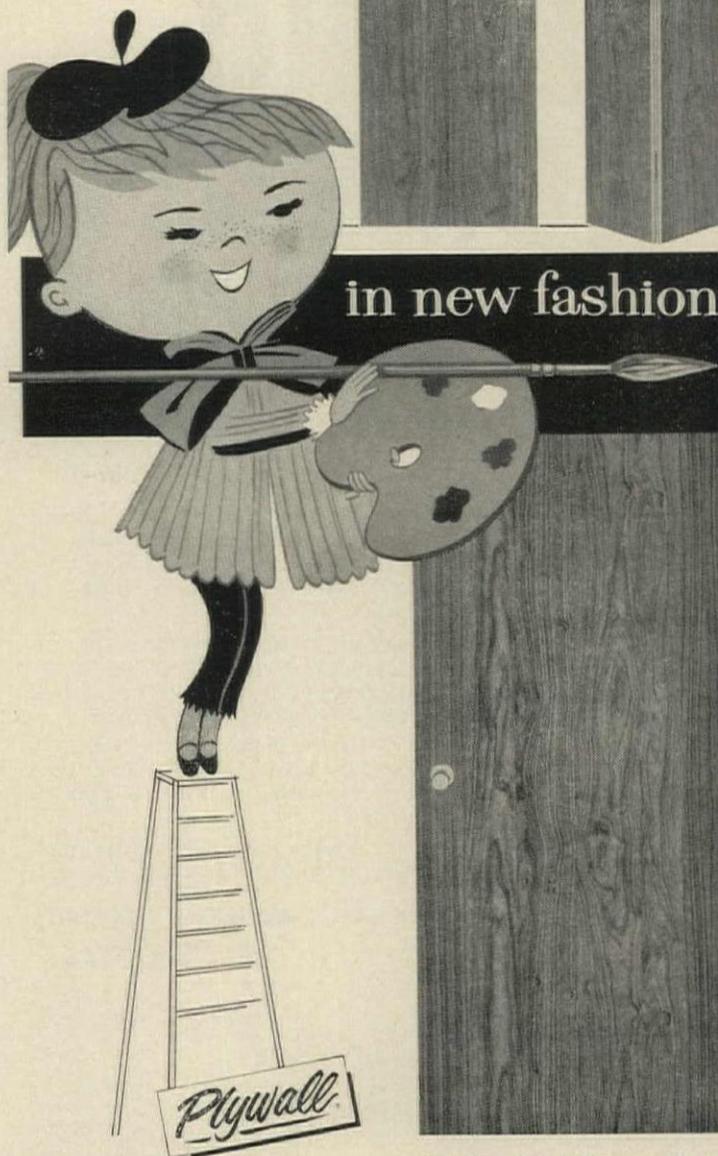
*New Products continued on p 208*

the right flair  
steps out front

**Now! Plywall flair in Bi-fold Doors!** Unusual quality and beauty—unusually economical. No jambs or trim necessary—for floor to ceiling openings. No finishing or painting—faces are prefinished Rock Maple, Poly-Clad protected. Back-sealed and edge-banded. Top-quality hardware. Ready to go right up.

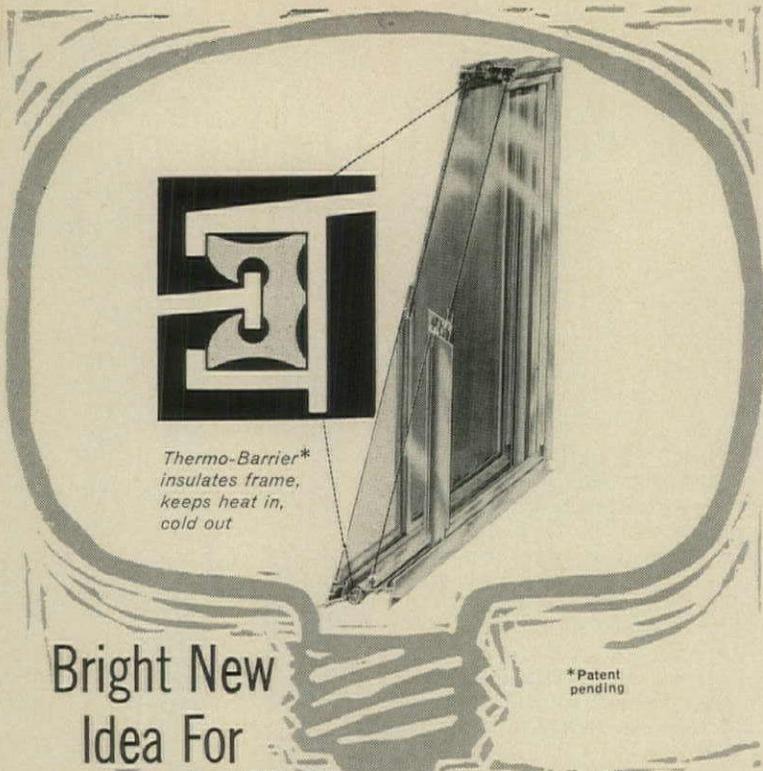


in new fashions



**Distinctive! Economical!** Plywall's High-Pressure Laminex doors bring new flair to interiors. Poly-Clad protected wood-grain finishes add more beauty, more value—without extra cost. Prefinished Rock Maple or English Walnut. Complete selection of heights, widths and thicknesses.

**PLYWALL PRODUCTS CO., INC.**  
Fort Wayne, Indiana  
Corona, California



Thermo-Barrier\*  
insulates frame,  
keeps heat in,  
cold out

\*Patent  
pending

Bright New  
Idea For

# ELECTRIC HOME HEATING!

**Aluminum prime windows insulated and precision engineered to keep heat bills down, sales appeal up!**

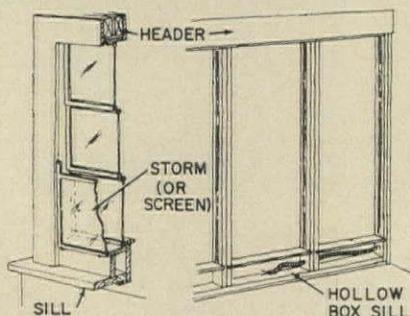
Builders of new electrically heated homes can now satisfy the demand for the convenience and clean-cut look of lifetime aluminum windows. As up-to-date and functional as electric heating itself, DeVac's new combined prime and self-storing anodized aluminum window is joined in a uniquely designed frame with a Thermo-Barrier\*

**THERMO-BARRIER\* PROTECTION** — A belt of high impact dry vinyl surrounds entire window and securely interlocks the frame of the prime unit with the frame of the combination storm unit, insulating against cold or heat transfer, keeping the electric bill competitively lower.

**CONDENSATION DAMAGE STOPPED** — Higher humidity in electrically heated homes requires greater resistance to condensation and frost buildup inside. Damage to drapes or decorating is avoided through Thermo-Barrier\* action.

**AIR INFILTRATION NEGLIGIBLE** — Windows are manufactured to exacting tolerances with triple weatherstripping to keep heat in, cold out.

## ANOTHER DeVAC WINDOW FOR ELECTRIC HOME HEATING



Hollow Box Sill for Electric Heating Unit

### GlassWall Modular Floor-to-Ceiling Windows

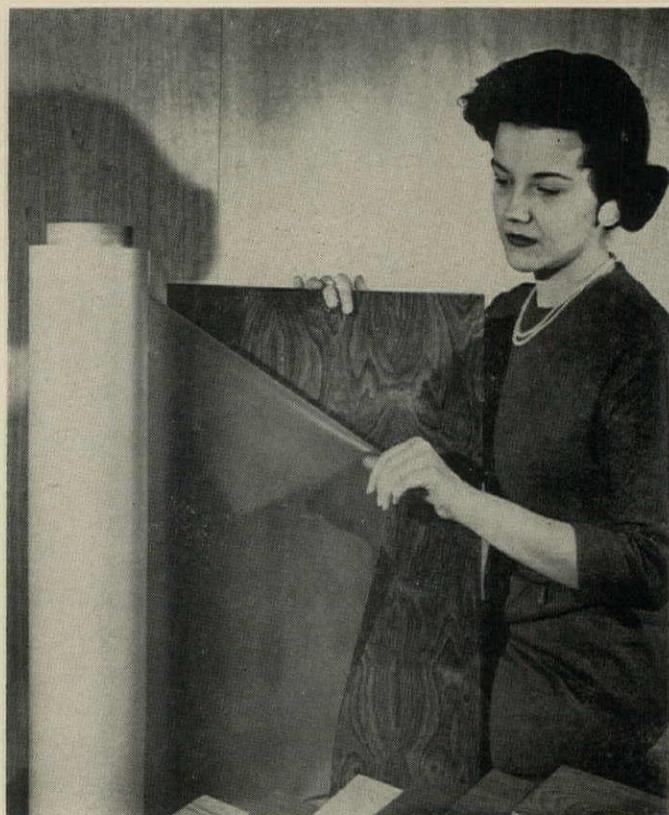
Porches, patios or breezeways may be easily built (or remodeled) for year 'round use with electric heat in any climate with DeVac Glass-Walls. Prime sash is separated from storm window by approximately three inches of air space. Each modular section is supplied with a non-conductive wood frame which includes a hollow box sill that can be used for continuous built-in electric heating units. In summer screen replaces storm sash, panels adjust quickly to a variety of ventilation positions.

How can DeVac's line of insulated windows help builders sell more electrically heated homes? Write us on your letterhead for a complete technical report and more information pertaining to your specific locality.



DeVAC, Incorporated

5900 Wayzata Boulevard, Minneapolis 16, Minnesota



## Plastic film makes plywood more durable

Long life, low maintenance, and the look of a fine furniture finish are offered in a new prefinished panel by US Plywood. The product, called Weldwood Permagard, is basically Algoma hardwood plywood laminated to a sheet of polyester film, Goodyear's Videne. The elements (shown in the photo above) are roll-laminated under heat and pressure, form a bond that is guaranteed for the life of the building.

The new product is claimed to outwear even high-pressure laminates (like Micarta) and to rival them in resistance to stains, heat, humidity, household solvents, etc. Any dirt that gets on the panel can be wiped off with a damp cloth.

Panels need no job-site finishing. They come with a satin or gloss finish (the satin finish can later be waxed to a dull gloss if desired). They can be easily worked with ordinary woodworking tools—the surface film will not delaminate.

To begin with, Permagard will come in korina, walnut, cherry, birch, red and white oak. It will be priced about 20% higher than present Weldwood prefinished panels of the same species.

US Plywood, New York City.

For details, check No. 13 on coupon, p 229



**IN PROCESS**, film is sealed on with heat, pressure.



**IN TEST**, Permagard resists concentrated acid and base.

New Products continued on p 210

Perfect  
for the PLAYROOM



Ideally suited for  
homes, motels, hotels,  
cabins, apartment efficiencies  
and resorts.

Write for illustrated  
catalog and price list

## ACME-NATIONAL REFRIGERATION CO., INC.

OFFICES & FACTORY: 19-26 Hazen Street, Astoria 5, N. Y. Mailing  
Address: P.O. Box 188, Astoria 5, N. Y. RAvenswood 1-5510

In today's buyer's market...  
**ACME - Refrigerator - Freezer -  
Range - Sink - COMBINATIONS**  
are often the plus that closes the sale!

Prospective buyers are impressed by the smart, sleek lines  
of these decorative and practical space-saving units. An Acme in the  
playroom or other much-used "family" room adds the extra convenience  
of a second kitchen... a benefit that a prospect can see.  
Today's buyer is quality-minded. What better way is there  
to provide quality at low cost than by installing Acme combinations.

**DEBONAIR**  
Refrigerator-Range,  
Freezer, Sink and Bar

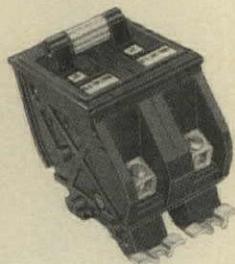
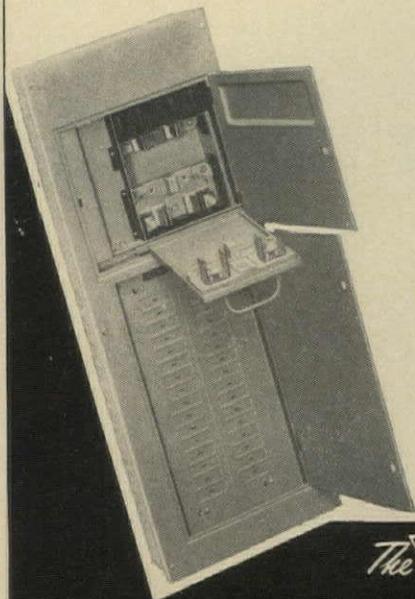


See our complete line  
SWEET'S CATALOG 25  $\frac{B}{AC}$

## Newest in Automatic CIRCUIT CONTROLS E-Z TO READ-OPERATE & INSTALL MODERN "NI" BREAKERS

*for the modern home*

BUILT BY  
A PIONEER IN  
SAFETY SWITCH  
MANUFACTURING—  
PROMOTING HIGH  
STANDARDS OF  
QUALITY



U/L LISTED

**The WADSWORTH Electric**  
MFG. CO., INC.  
COVINGTON, KENTUCKY.  
WRITE FOR FREE CATALOG

## SHURWOOD <sup>TM</sup> ELECTRICAL OUTLET COVERS

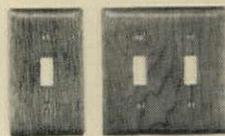


**Genuine exotic hardwood veneers  
permanently bonded to aluminum**

NEW AND LOVELY electrical outlet covers in ASH, BIRCH, CHERRY, OAK,  
WALNUT, TEAK, PINE and MAHOGANY. Smooth-sanded ready for finishing  
to blend with finest wood paneling.

### EIGHT POPULAR STYLES

Single Toggle	} Retail 49c Each	Double Toggle	} Retail 59c Each
Duplex Receptacle		Combination Single	
Telephone Outlet		Toggle and Duplex	
Blank Cover		Triple Toggle	} Retail 79c Each
		Quadruple Toggle	



INCLUDE SHURWOOD\* electrical covers in your  
plans. Available through building materials,  
electrical supply and hardware stores or write

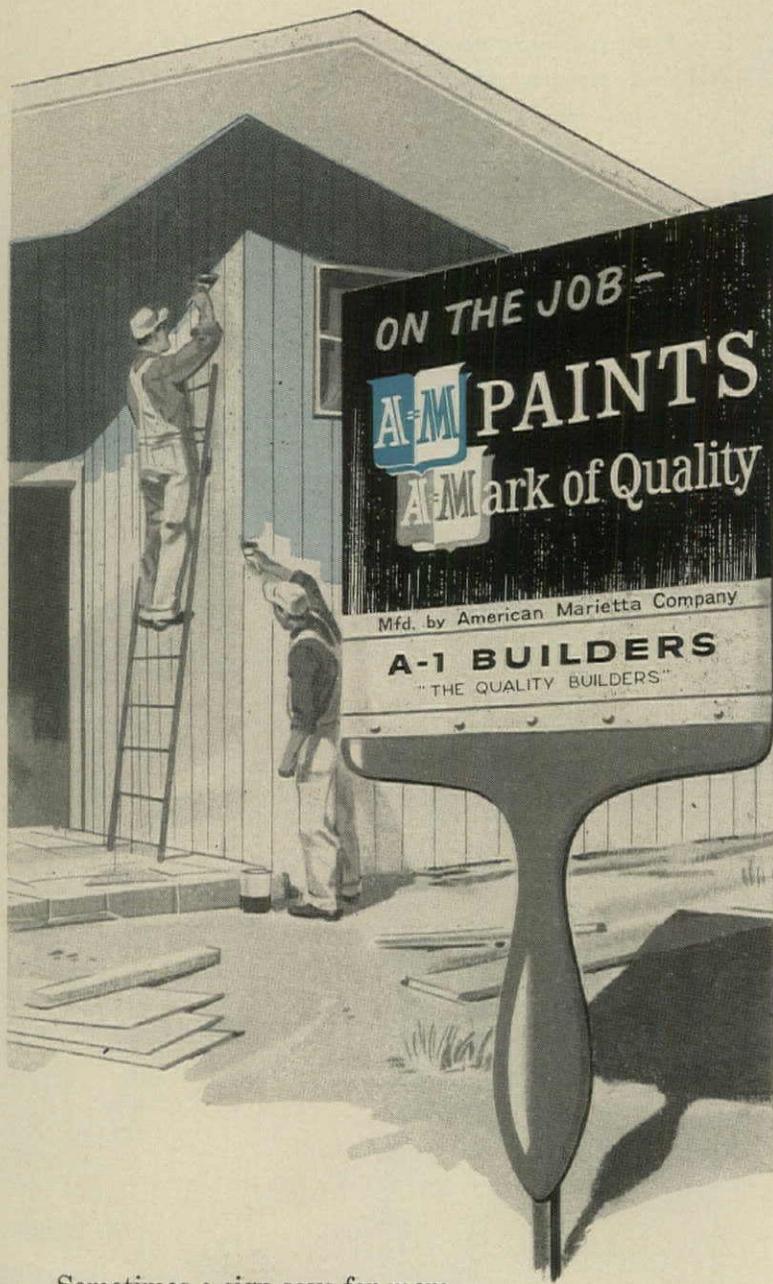
Woodtape Dept.

**ELLIOTT BAY LUMBER CO.**  
600 D WEST SPOKANE STREET • SEATTLE 4, WASH.



\*SHURWOOD (T.M. applied for) previously tradenamed "Tru-wood"

# sign language



Sometimes a sign says far more than the few words that are printed on it. This is a sign like that.

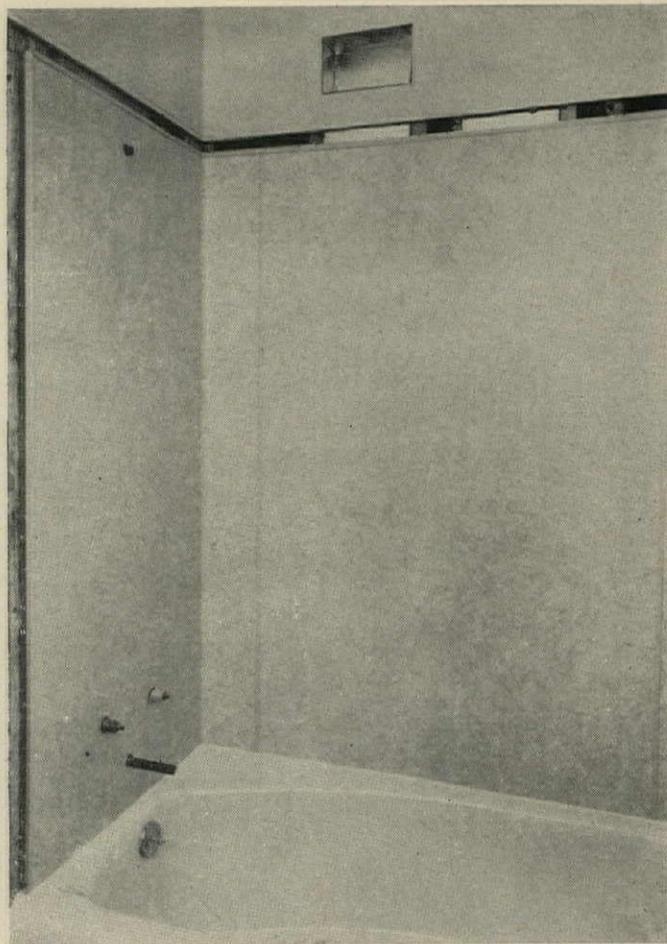
It states simply that quality paint is employed on the job and the prospect's first impression—his first look at your house—supplies ready confirmation. The obvious implication, however, which tells the complete story you want your prospects to have, is that you believe in quality and use it in your construction. Can you think of a better way to tell your quality story?

If you would like to know more about the A-M quality story and how it can help identify you with quality, direct your inquiry to—

**American-Marietta Company**  
101 East Ontario Street • Chicago 11, Illinois

## New products

start on p 199



**FINISHED WALLS** show only two seams, inset 7" from corner bend.

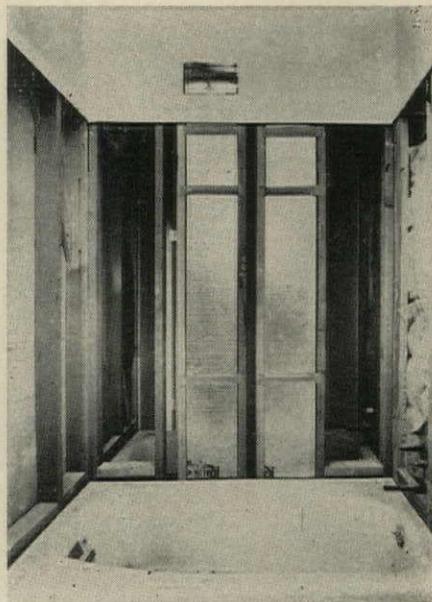
## New bath panels offer four pluses

The panels—a .55" thick sandwich of styrene foam between Micarta faces—are 1) more durable and easier to clean than other wall materials; 2) heat and sound insulating (they are warm to touch, transmit less noise); 3) less prone to leak (solid panels run to the ceiling, have no corner joints); 4) quickly installed (take one man less than three hours).

The complete package—panels in a variety of patterns, moldings, adhesive, and caulking—will also be available for full length shower stalls. Enclosures are expected to cost about \$1.50 a sq ft installed.

Westinghouse, Hampton, S.C.

For details, check No. 14 on coupon, p 229

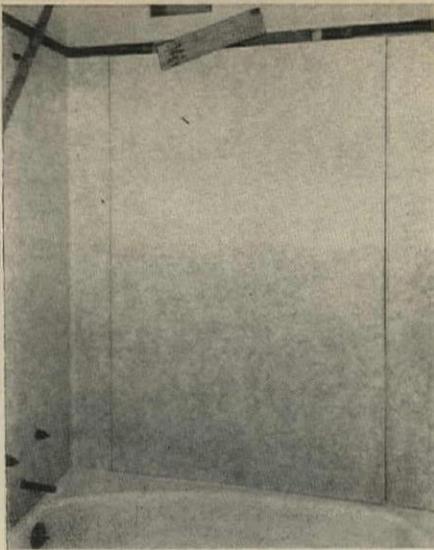


**1**

**JOB STARTS** with bare studs after heating and plumbing are roughed in. No wallboard is necessary.

2

**PANELS ARE FITTED** to studs before being attached. Panels are easily cut to fit wall variance.



3

**HOLES ARE DRILLED** for pipe after panels are fitted. Note postformed 7" return on side panel.



4

**WALL IS GLUED** with non-brittling adhesive. Furring strip forms backer for joint at edge return.



5

**JOINTS ARE MADE** with H-molding and caulking. Crown molding is optional. Wall could go to ceiling.



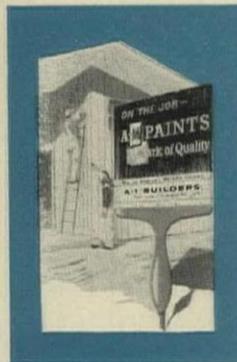
### Peel-Proof

A top quality, ready-mixed alkyd house paint especially recommended for new work. It is guaranteed against peeling and blistering when applied according to directions. Modern flat finish in a wide range of colors.



### Rev Exterior

Rev Exterior is an acrylic emulsion paint formulated by American-Marietta to provide the ultimate in latex benefits in exterior application. Its ease of application, 30 minute drying time, and its beautiful, blister resistant, satiny finish distinguish it as the most modern development in house paint. Available in both Ready-To-Use and Custom colors.



These are featured house paints in A-M's complete line of fine exterior finishes

### Shieldwhite

This is A-M's finest formulation in an oil-base white gloss house paint. Special specifics including Busan 11 make this product fume-proof and highly resistant to blistering and mold and mildew. Available in super-white only.



### One Coat

One Coat has the hiding power of two coats of ordinary paint yet application is remarkably smooth and easy. Famous for saving time and money . . . and for appearance too. Available in high gloss white only.



**A-M PAINTS**

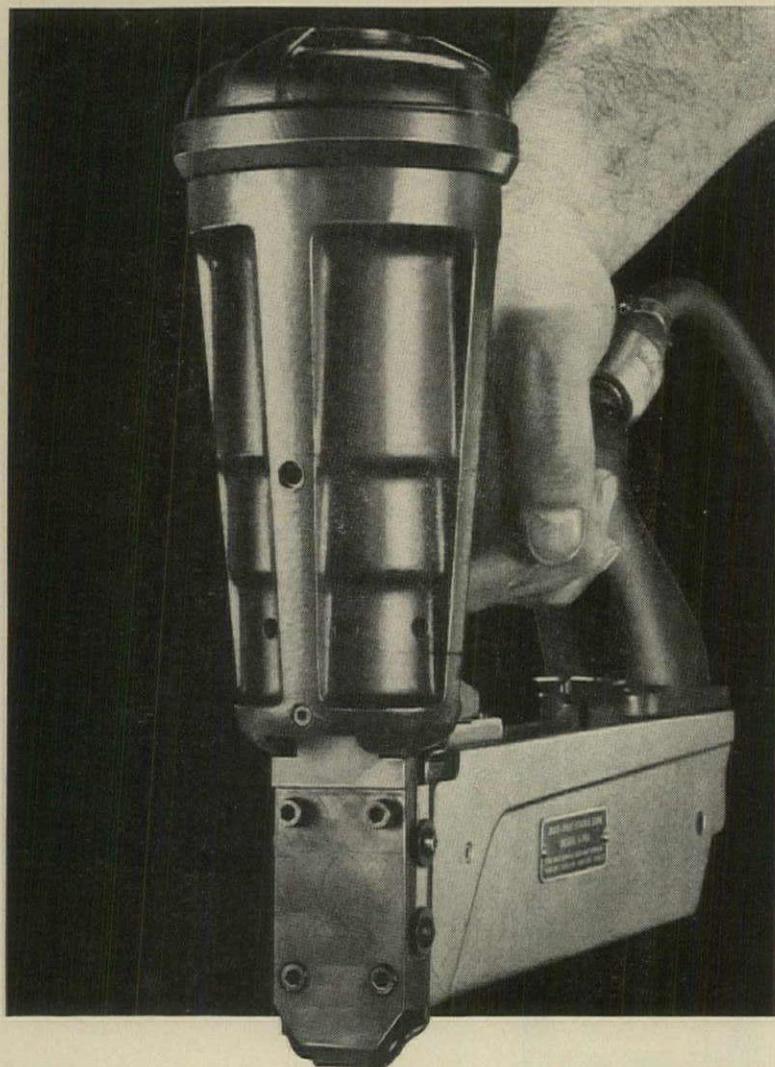
A-M Mark of Quality

American-Marietta Company

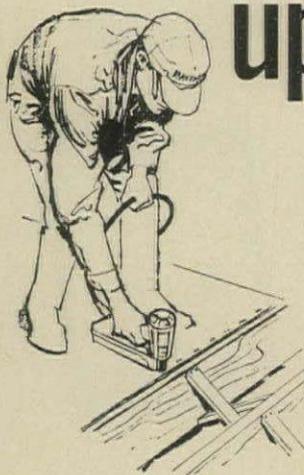
101 East Ontario Street • Chicago 11, Illinois

New Products continued on p 212

## NEW **DUO-FAST** MODEL S-763



Powered to drive  
heavy staples  
up to 2" long



This new S-763 drives four 2" staples in less time than it takes to pound one nail.

Speeds, simplifies and cuts costs on bigger nailing jobs in the home building field.

Drives 1½" to 2", 16-gauge staples that outhold equivalent nails. Operates at 60 to 100 psi. Lightweight, easily portable, one-hand operation. Built-in safety features prevents accidental firing.

Write today for the complete story on this new S-763 Staple Nailer.

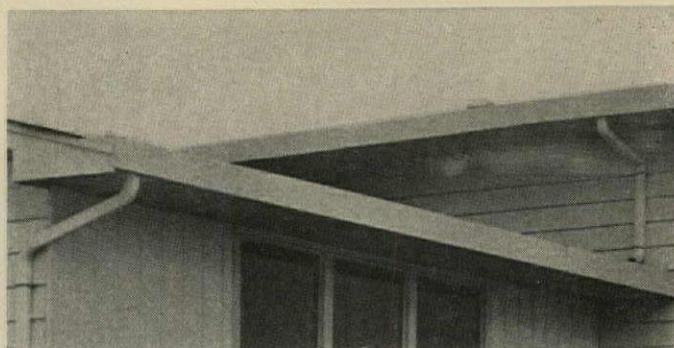
FASTENER CORPORATION, 3706-10 River Road, Franklin Park, Illinois

**DUO-FAST** Staplers  
Tackers  
Staples

Everything you need for tacking, stapling and nailing.

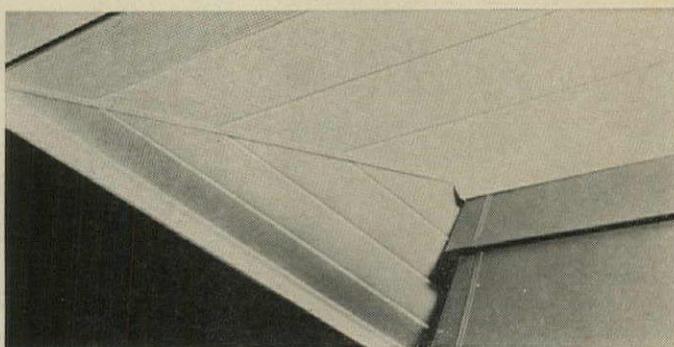
## New products

start on p 199

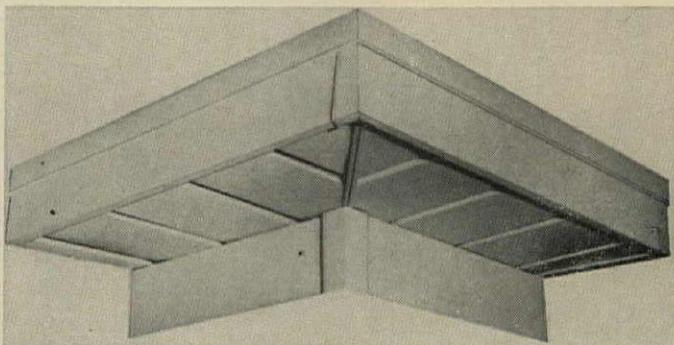


**GARY STEEL CO.**, Gary, Ind., joins three .032 guage aluminum components to form a V-shaped gutter, a 6" to 10"-high fascia, and a 6" to 48"-wide ventilated soffit. The downspout extends through the soffit. Finish is white enamel. For details, check No. 15 on coupon, p 229.

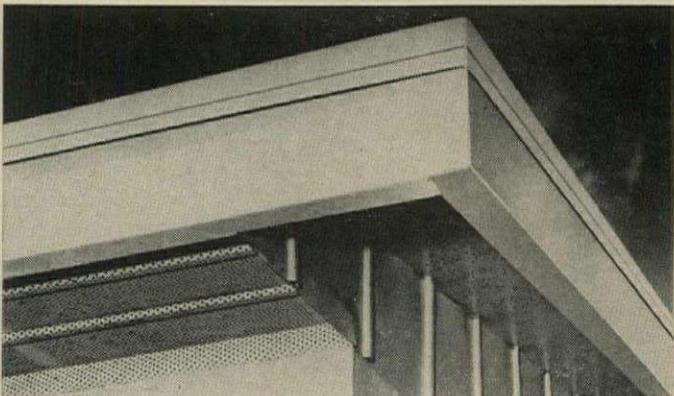
### Here are four aluminum soffit systems



**NATIONAL ROLLEX CORP.**, Elk Grove, Ill. calls its system V-Alum. features V-jointed modular design (it is 6"x8"), simple snap-on installation (like siding), no exposed nailing. Soffit perforations exceed FHA-VA requirements. For details, check No. 16 on coupon, p 229.



**LIFEGUARD INDUSTRIES**, Cincinnati, makes a four-part system—soffit, fascia, fascia caps, frieze board—that can be erected by one man, will cover 4" or 6" fascia, eliminates top two rows of brick. Face nailing is not needed. For details, check No. 17 on coupon, p 229.



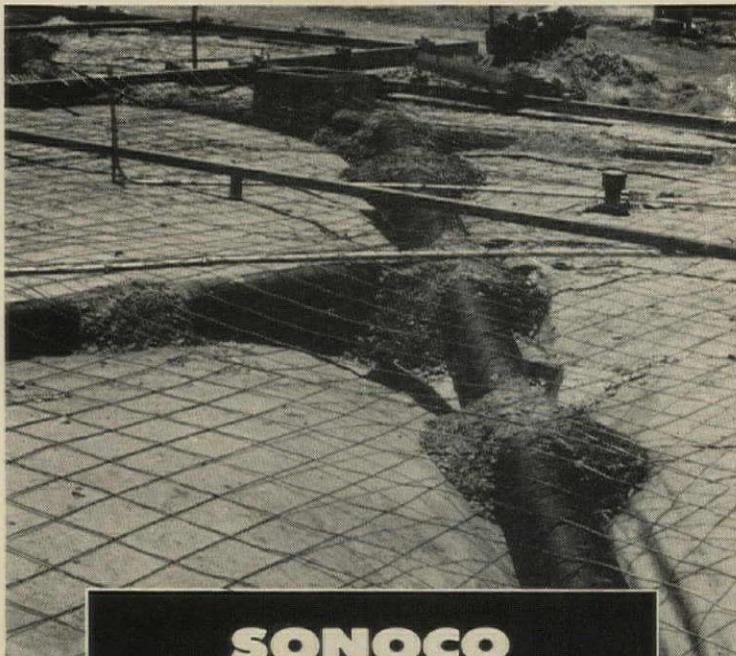
**FLORIDA INDUSTRIES**, Tampa, offers a unit usable with shingles or gravel roofing. Soffit is roll-formed 15¾" wide. Fascia covers 2x6 or 1x6 boards. Gravel stop has 2" face and return, 5/8" lip, comes in 10' lengths. For details, check No. 18 on coupon, p 229.

New Products continued on p 214

HOUSE & HOME

# THE DEPENDABLE FIBRE DUCT

that's easier to install



**SONOCO**  
**SONOAIRDUCT®**  
**FIBRE DUCT**

In slab perimeter heating and cooling, do you want to hold down costs while maintaining high quality? Do you want dependability you can count on, in a system that's easily and quickly installed? Then you want SONOAIRDUCT Fibre Duct for your next slab perimeter job!

Year after year, SONOAIRDUCT has been America's best selling Fibre Duct—proving its dependability in thousands of installations. And, aluminum foil-lined SONOAIRDUCT meets or exceeds all F.H.A. criteria and test requirements for products in this category.

**FREE  
INSTALLATION  
MANUAL**



Contains latest, detailed, step-by-step installation data for SONOAIRDUCT Fibre Duct. For copy, send us name, address on company letterhead.

This low-cost, lightweight fibre duct saves you time, labor and money too! Easy-handling SONOAIRDUCT joins and levels quickly... can be cut to length or mitered with a hand saw. There are no sharp edges, and it won't chip, crack or break when dropped—every piece is usable!

To protect your reputation, your profit margin, and the interests of your customers, always install Sonoco SONOAIRDUCT—the Best in Fibre Duct. Available in 23 sizes, 2" to 36" I.D., standard 18' lengths. Special sizes to order.

For complete information and prices, write

**SONOCO**  
Construction Products

SONOCO PRODUCTS COMPANY, HARTSVILLE, S. C. • La Puente, Calif. • Fremont, Calif.  
• Montclair, N. J. • Akron, Indiana • Longview, Texas • Atlanta, Ga. • Ravenna, Ohio  
• MEXICO, Mexico City • CANADA, Brantford, Ont.

5508

# please

don't make me  
a  
garbage  
collector!



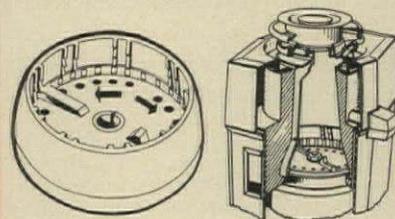
I'm tired of garbage "trudgery." We're moving into a new home because we want a better life. Believe me, I'm making sure the kitchen has conveniences I want. Number one is a garbage disposer.\*

Make it an In-Sink-Erator, and I'll be easier to sell. Unlike others, In-Sink-Erator prevents jams thanks to its exclusive, patented, automatic reversing feature. Installed costs in new homes is surprisingly low.

Write for further information and name of In-Sink-Erator representative who has merchandising aids. Address Dept. 61-4-HH, In-Sink-Erator Manufacturing Company, 1225 14th St., Racine, Wis.



In-Sink-Erator Saturn, Model 707  
One of 7 in the industry's most complete line.



Unlike other disposers, In-Sink-Erator prevents jams thanks to exclusive, patented automatic reversing feature. Doubles shredder life. Self-cleaning.

In-Sink-Erator's exclusive sound-absorbent liner permanently blankets interior of unit... smother's sounds! That's why it's quieter than any other.

\* An overwhelming majority of delegates to the Women's Conference on Housing voted the garbage disposer the most wanted appliance of all.

## In • Sink • Erator® ISE

The originator and perfecter of Garbage Disposers • In-Sink-Erator Manufacturing Co., Racine, Wisconsin

# LOOK at the new look in windows!



ALL-WETHR  
**trimline** **IDEAL**  
REG. U.S. PAT. OFF.  
**WINDOWS**

The new IDEAL All-Wethr TRIMLINE Window Unit is made of selected Western Ponderosa Pine and Preservative Treated to last a "housetime." It is thoroughly weatherstripped with anodized aluminum and equipped with efficient spiral balances. Window stop and sill strip are applied at factory to speed up installation. Stool is not required. Unit can be trimmed out to give picture frame effect. No screen hanger hardware needed. Side jambs are cut off flush at top and bottom to make installation easier, faster, more economical. Mail coupon today for a free brochure containing complete information.

*IDEAL Windows, Doors and Cabinets are sold at building materials stores in Alabama, Arizona, Arkansas, Florida, Georgia, Illinois, Indiana, Kansas, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Nebraska, New Mexico, Ohio, Oklahoma, South Carolina, Tennessee, Texas and Wisconsin.*

Send for Your free Catalog

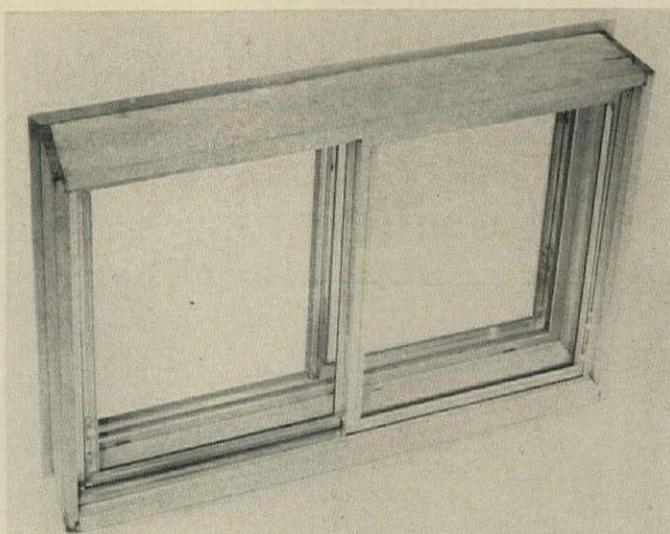
IDEAL COMPANY, BOX 889, WACO, TEXAS  
 Please send catalog on IDEAL Millwork to:

NAME

ADDRESS

CITY & STATE

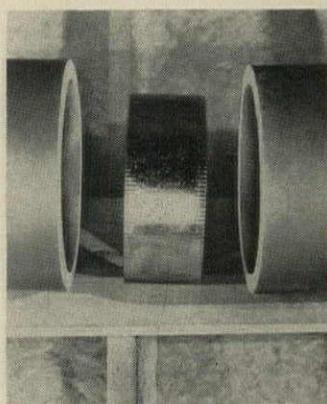
H&H 4-61



### Here's a low-cost insulating window

It's made of two aluminum-framed sliding windows set in a toxic-treated wood liner that limits heat transfer, prevents condensation problems in cold weather areas or in air conditioned and electrically heated houses. A 3" air space between sash provides optimal insulation. Window is simply nailed to the framed opening through the wood surround or the integral fin trim. Thermaliner comes in sizes 2'x2' to 4'x10'. Price for 4'x9', complete with screen and hardware: \$139. Ida Products, Detroit.

For details, check No. 19 on coupon, p 229



SECTIONS ARE JOINED with a metal sleeve, then sealed with tape.

### Prefab duct is molded glass fiber

As a result it is airtight, vaportight, fireproof, a thermal insulator, and a sound absorber. It has a .22 K factor, offers a 2 db to 3 db loss per foot. The duct comes in 6' lengths in standard galvanized-pipe diameters, fits standard sheet metal fittings. It will serve as ductwork for all heating-cooling jobs; works well in attics and crawlspaces. Manufactured and sold by Gustin-Bacon as GB Duct, it is also sold by Armstrong Cork as Armaglas Duct.

Gustin-Bacon Mfg Co, Kansas City.

For details, check No. 20 on coupon, p 229



LATERAL JOINT is made over a sheet metal union.

New Products continued on p 216



**MODERN IN EVERY  
CONCEPT...**

The three and a half million dollar Atlanta Hilton Inn was developed and constructed by Hogan Bros., Inc. of Metairie, La. The architect was George Saunders, Walter E. Blessey handled the structural engineering, and Edward Sanford was in charge of mechanical engineering. The installation of the plumbing system was made by Hoffman-Wolfe Southern Corporation of Atlanta.

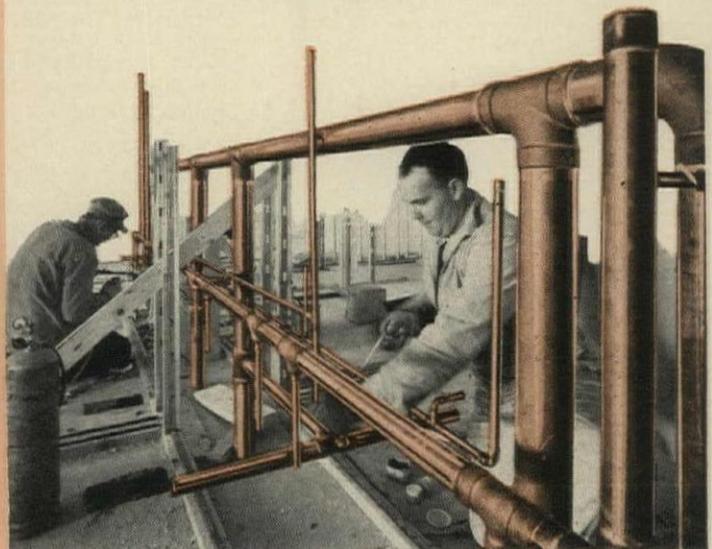
When it comes to modern, rust-proof, clog-proof, life-time supply and drainage plumbing systems, more and more architects, builders and plumbers are saying: "All copper". The jet-age Hilton Inn, just opened in Atlanta, Georgia, is an excellent example because Streamline copper tube and solder-type fittings are used for supply and drainage plumbing in this ultra-modern 310 room structure.

Because of solder joint strength and lighter weight of copper, even complex plumbing assemblies can be quickly shop prefabricated or assembled on the site with a minimum number of solder joints. With copper there's more actual useable area in the building because furring-out is eliminated. The standard 20 foot lengths, uniform dimensions, complete range of sizes, weight-savings and lower labor costs make Streamline copper tube and fittings more economical, too.

Send for catalog D-459, for all the latest facts on Streamline DWV copper tube and solder-type fittings, the modern, sanitary drainage piping material.



**INCLUDING THE**  
*Streamline®*  
**COPPER TUBE AND**  
**FITTINGS USED IN**  
**THE PLUMBING SYSTEM**



318-R



**MUELLER BRASS CO. PORT HURON 10, MICH.**

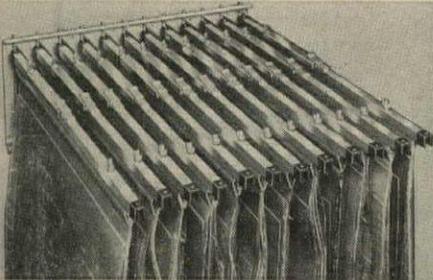
## Profitable Planning

starts with  
**PLAN HOLD®**

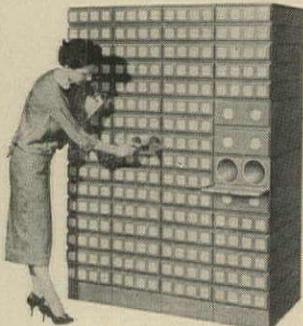
### Vertical and Roll Files for PLANS, PRINTS, DRAWINGS

You increase efficiency and cut expense with PLAN HOLD filing equipment:

1. Systematic filing is practically automatic; you find the plan you want in seconds...no clerical time wasted.
2. Your investment in valuable plans is protected; sheets never get mutilated or lost...no replacement expense.



Wall mounted out of the way, this unit holds up to 1200 sheets in only 24 lineal inches.



Made of furniture steel, these PLAN HOLD roll file units can be stacked as desired. Take sheets of any length up to 5' wide.



Exclusive with PLAN HOLD, this "Caddy Rack" with folding table is your project office at the job.

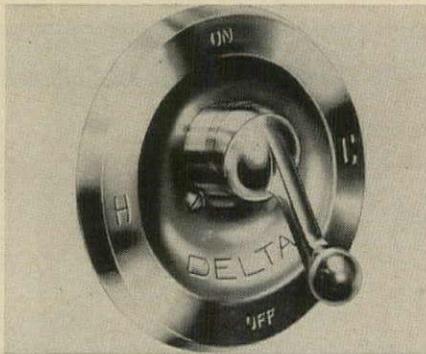
Adaptable to all your needs... PLAN HOLD vertical and roll files come in modular sizes, fixed, mobile, portable and in cabinets. At engineering supply and office equipment dealers. Mail this coupon for illustrated catalog and prices.

Plan Hold Corporation, Dept. 603  
5204 Chakemco St., South Gate, Calif.  
Please send me your current catalog and price list.

Name \_\_\_\_\_  
Company \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

## New products

start on p 199



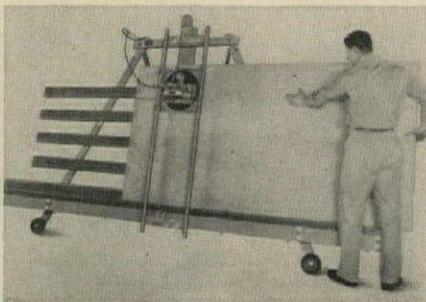
**New bath control** is latest Delta faucet to use the single-lever, ball valve design. With diverter spout, the device will control flow and temperature of water to bath or shower or can be used with bath or shower alone. Price: \$18.95 and up.

Delta Faucet Corp, Greensburg, Ind.  
For details, check No. 21 on coupon, p 229



**Built-in range** includes base and wall cabinets and range hood. The Californian comes in 30" and 40" widths, in gas or electric models, with antiqued white or wood finish cabinets. Connections are recessed so cabinets fit flush to wall.

Gaffers & Sattler, Los Angeles.  
For details, check No. 22 on coupon, p 229



**2-way panel saw** has been added to the DeWalt line. Models to handle panels 48" or 62" wide are available. Both use Black & Decker heavy-duty saws. Saw can be changed quickly from cross cut to rip, cuts any panel material. Motor switch lock permits continuous ripping. Nylon rollers on pressure bar prevent marring. Price: \$287 to \$475.

DeWalt, Inc, Lancaster, Pa.  
For details, check No. 23 on coupon, p 229

New Products continued on p 218

Buy Your

**BUILDING MATERIALS**  
at **WHOLESALE**  
FROM THE BIG  
NEW COMPLETE

**MORGAN-WIGHTMAN**

**CATALOG**



**NEW!** Exclusive M-W Pre-Paid Freight Plan helps you pin point your delivered material costs in advance on more than 7,000 items.

Benefit from one stop shopping, one invoice. Less paper work.

America's Wholesale Suppliers of Nationally Advertised Products to the Building Industry.



when you order  
by mail,  
**MORGAN-WIGHTMAN**  
is as near to you  
as your mailbox  
**ST. LOUIS, CHICAGO**  
and now **MILWAUKEE**

If you don't have our free catalog,  
send for one today.

**MORGAN-WIGHTMAN**

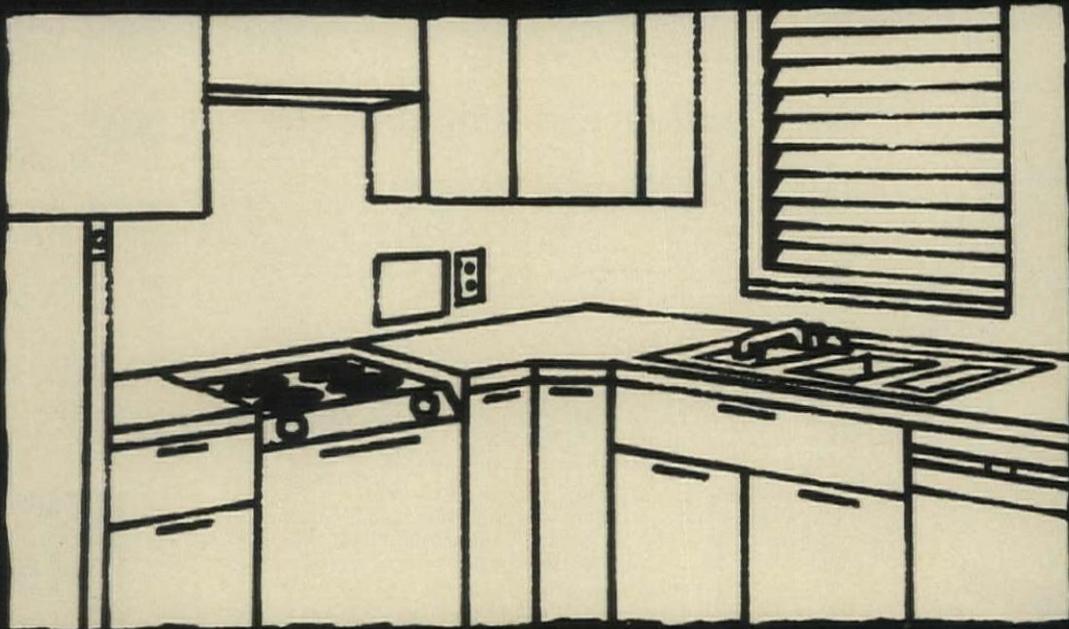
Dept. 41, P.O. Box No. 1, St. Louis 66, Mo.

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

*WHY WON'T YOUR BUYERS BE SATISFIED WITH THIS?*



*BECAUSE YOUR BUYERS NOW WANT THIS*



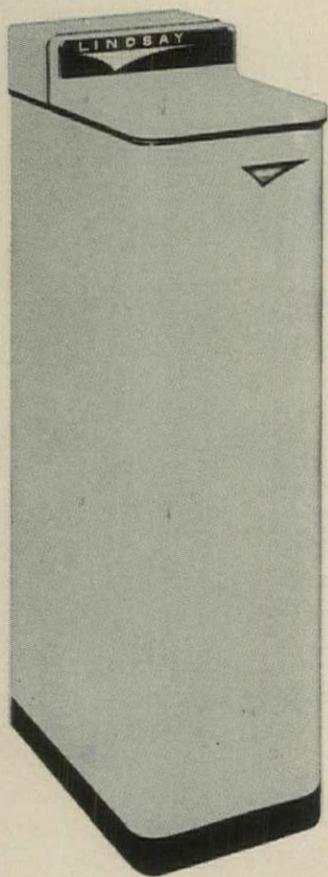
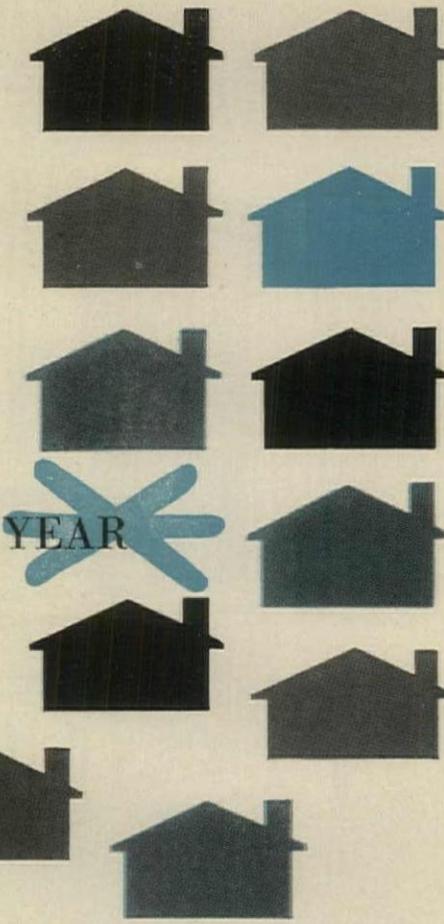
Beauty, style, convenience. That's what your prospects look for in the kitchens of your homes. Why? Because over the years, through advertising in LIFE, building products manufacturers have proved kitchens can be beautiful—made your buyers dissatisfied with merely workable second-rate. ■ To build traffic, cash in on the selling these manufacturers have been doing in LIFE. Promote the consumer-accepted products with LIFE's new home and modernization program. **Move up in the chain of demand for dollars in your market.** ■ For information about LIFE's exciting new home and modernization program write: Building Products Merchandising Manager, LIFE, Rockefeller Center, New York 20, N. Y.



Here are the famous products "Advertised-in-LIFE" to help you attract traffic and sell homes: ALSYNITE TRANSLUCENT PANELS • AMANA • AMERICAN-STANDARD • ANDERSEN WINDOWS • ARMSTRONG FLOOR TILE • CONGOLEUM NAIRN • COLORIZER PAINTS • FLINTKOTE BUILDING PRODUCTS • FRIGIDAIRE APPLIANCES • FULLER PAINTS—Western and Overseas Regions • GENERAL ELECTRIC APPLIANCES • GLIDDEN PAINTS • HOTPOINT LAUNDRY EQUIPMENT • JOHNS-MANVILLE BUILDING PRODUCTS • LIBBEY-OWENS-FORD • MASTER LOCKS • MATICO FLOORING • MAYTAG • NAUTILUS NO-DUCT HOODS • ORANGEBURG PIPE—Eastern Region • OWENS-CORNING FIBERGLAS BUILDING PRODUCTS • PABCO BUILDING PRODUCTS—Western and Overseas Regions • PITTSBURGH PAINTS • SAKRETE • STYLON CERAMIC TILE • REDONDO TILE—Western Region • U. S. PLYWOOD • U. S. STEEL • WALL-TEX WOVEN WALL FABRIC. **ASSOCIATIONS:** AMERICAN TELEPHONE & TELEGRAPH • EDISON ELECTRIC INSTITUTE—Medallion Home—Live Better Electrically • FOUNDATION FOR COMMERCIAL BANKS • NATIONAL LUMBER MANUFACTURERS ASSN. • PORTLAND CEMENT • SAVINGS AND LOAN FOUNDATION. **SPECIAL PROMOTIONS:** SHOW-HOUSE.

THE NEW  
**Lindsay**  
 Princess

WILL SAVE A  
 HOUSE PAYMENT A YEAR  
 FOR YOUR BUYER



5  
 decorator colors

*this Lindsay water softener  
 is as important to your sales  
 as any appliance you might add*

Of all the fine "extras" builders can offer their potential home buyers, only the Lindsay "Princess" Water Softener can help make the house payments. Yes, it's a fact! Many well-known magazines and independent testing organizations have revealed that soft water plumbed in the home can save the average family up to \$117.00 a year! The homeowner saves on soaps and detergents, clothing, cooking, cleaning, etc.

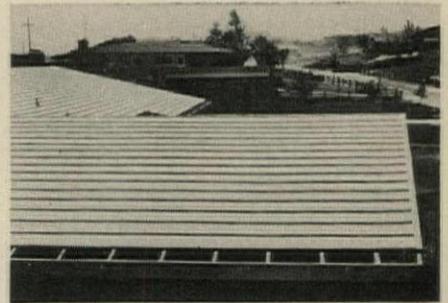
Feature the Lindsay "Princess" in your homes; tell the savings story, and see how your prospects really appreciate it. Then, too, the "Princess" is beautiful, trim and modern, and comes in five colors to complement the interior decor of your homes.

Lindsay, America's leading water conditioning equipment manufacturer, has three profit-making plans for you to choose from . . . each designed to help you make extra money, and at the same time, help your customers save it.

For further, more detailed information, write The Lindsay Company today about this new, profitable program.

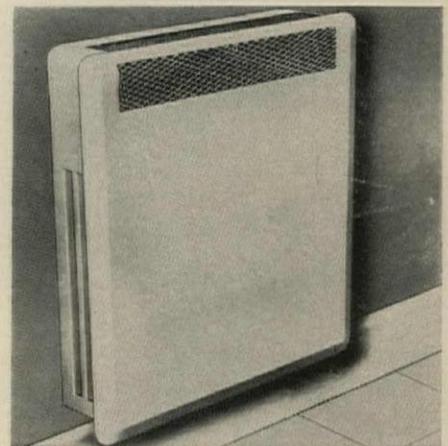
**New products**

start on p 199



**New aluminum roof** comes in panels 10' long, 12" wide, with 5/8" butt edge to give heavy shadow line. Shingles lock together like aluminum siding, install with only hammer and nails. New Regent roof is seven times lighter than asphalt shingle roof, 16 times lighter than built-up roof. Panels come in six baked-on colors.

Consolidated General Prods, Houston.  
 For details, check No. 24 on coupon, p 229



**Add-on heater** can tie into an existing hydronic system or a domestic hot-water line. Unit has its own pump, fan, filter, thermostat relay. With 120F water, it will put out 5,000 Btuh; with 200F water, 16,500 Btuh. Unit is compact, fits 16" stud space, projects only 4 1/2" into room. Price: \$100 to \$115 plus installation.

Iron Fireman, Cleveland.  
 For details, check No. 25 on coupon, p 229



**Small airless pump** to cut overspray in medium production will handle all conventional paints with a standard airless gun and a compressor as small as 1 hp. Pressure is supplied by a chromium piston in a stainless steel cylinder, operated by an air motor. Price: \$192.50 FOB Toledo.

DeVilbiss Co, Toledo.  
 For details, check No. 26 on coupon, p 229



**THE LINDSAY COMPANY** Dept. 13-B  
 (Division—Union Tank Car Company)  
 1381 Marshall Ave., St. Paul 4, Minn.

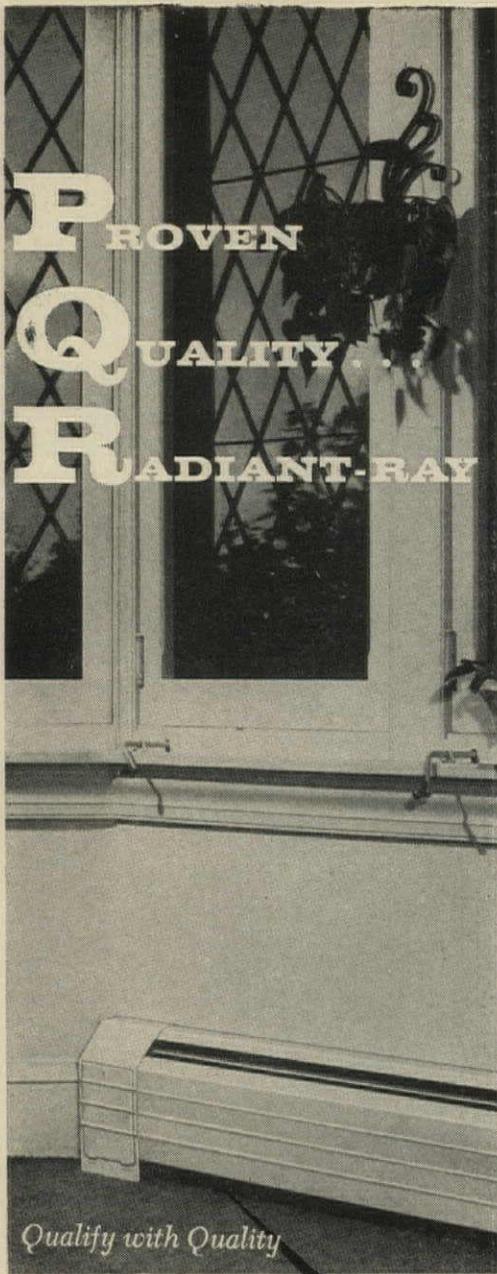
Please send me additional information on the Lindsay Water Softener Plans for Profits.

Name .....

Address .....

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

I build approximately ..... homes per year.



Qualify with Quality

For modernization of present structures or installation in new building, specify and insist on Radiant-Ray baseboard radiation. Get all the cost-saving advantages of hydronic heating plus the proven quality of Radiant-Ray, the most complete baseboard line in the industry . . . IBR approved ratings. Buy from this one source and fulfill every heating requirement in home, apartment building or institution.

**radiant-ray**  
Reg. U.S. Pat. Off.  
BRAND



**newington, conn.**

Please send me complete information, including your Free Easy Estimator

NAME \_\_\_\_\_

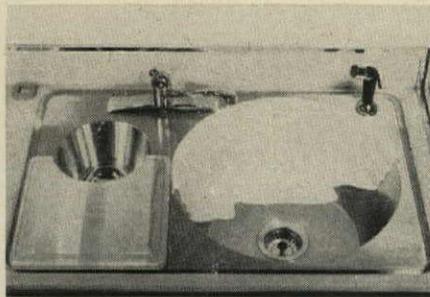
TITLE \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

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

## New products



**Food preparation center** combines 18½" diameter sink, disposer well, cutting board, and plastic colander. Compact design reduces mess, round bowls are claimed to make sinks self-cleaning. Unit is self-rimmed for easy installation, is formed from 18-gauge nickel-bearing stainless steel.

Aeronca Mfg Corp, Middletown, Ohio.

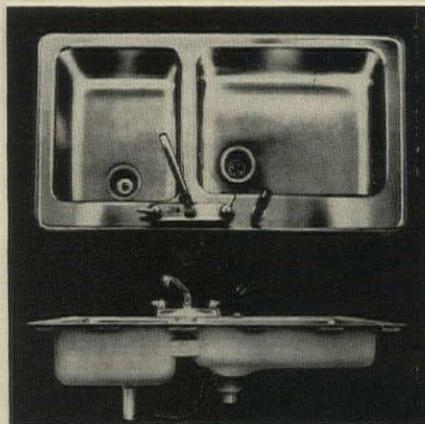
For details, check No. 27 on coupon, p 229



**Corner sink** uses normally dead space above and below the counter, saves counter space for other work areas. All-stainless-steel bowls, set at right angles, measure 43½" corner to corner, 22" front to back. Center mounted swing spout will reach either bowl. Self-rimmed model available.

Jensen-Thorsen, Addison, Ill.

For details, check No. 28 on coupon, p 229



**Disposer sink** combines a shallow food preparation sink that slopes towards a disposer well and a deep dishwashing sink. Both bowls are formed from 17-gauge nickel-bearing stainless that exceeds the western Uniform Plumbing Code specifications. A patented clamp binds sink to countertop, eliminates separate sink frame.

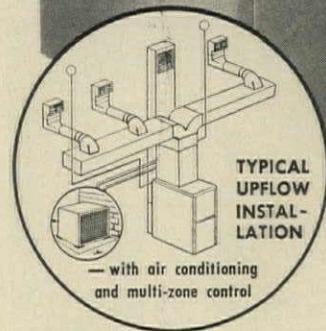
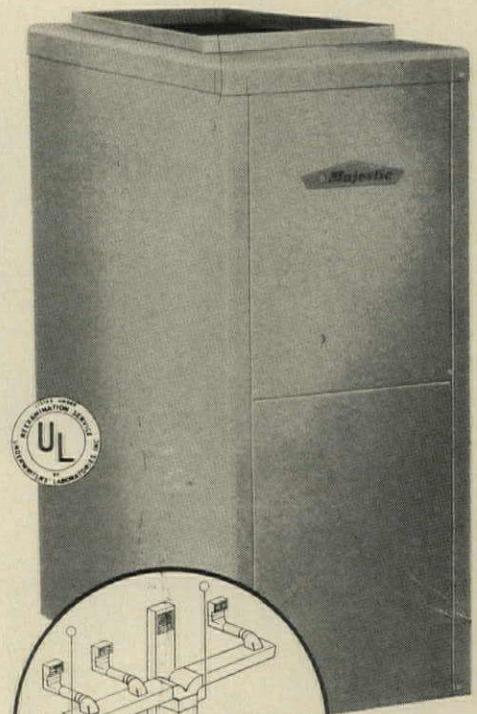
Zeigler-Harris, Burbank, Calif.

For details, check No. 29 on coupon, p 229

Sell all-season comfort with today's cleanest heat

THE NEW

# Majestic ELECTRIC FURNACE



TYPICAL UPFLOW INSTALLATION

UPFLOW & DOWNFLOW MODELS

Custom home buyers find a happy combination of leisure and economy in Majestic's Electric Furnace! It combines the *best* features of forced-air and electrical resistance heating. There's *no combustion*, no smoke, no soot, no burned fuel deposits to settle on walls, draperies and furniture.

There's *no heat lost*, just 100% clean, effective warmth. No stale, dead air results; instead, Majestic's smooth-running belt-driven blower circulates air healthfully through the system. To assure economy, the heat supply is *modulated*, delivered *only as needed* by means of automatic controls. It's the perfect furnace for adding year-round air conditioning with cooling, filtering, humidity control and multi-zone comfort.

It's the *best comfort* system available for today's better insulated homes.

Send "Electric Warm Air Heating Manual for All-Season Comfort" and other literature.

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

Company \_\_\_\_\_

Address \_\_\_\_\_

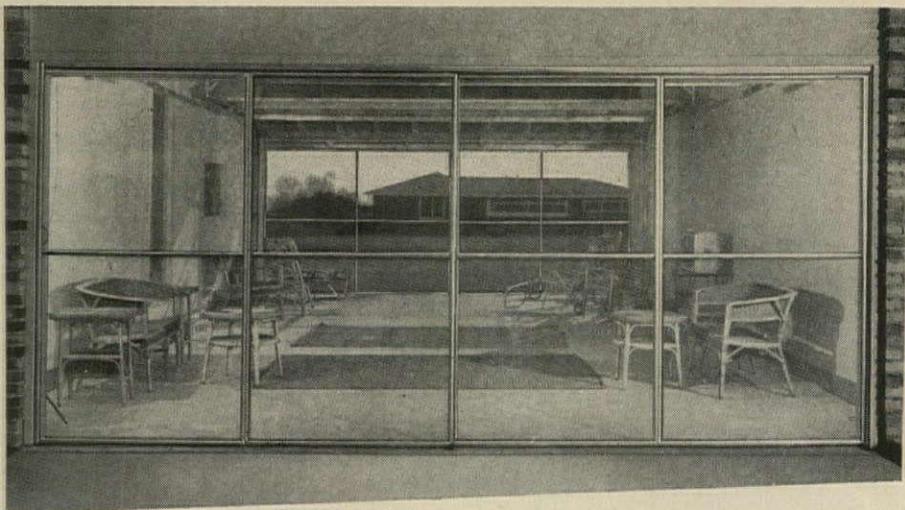
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_



The **Majestic** Co., Inc.

416 Erie Street, Huntington, Indiana

New Products continued on p 220



INDOOR LIVING AT ITS BEST

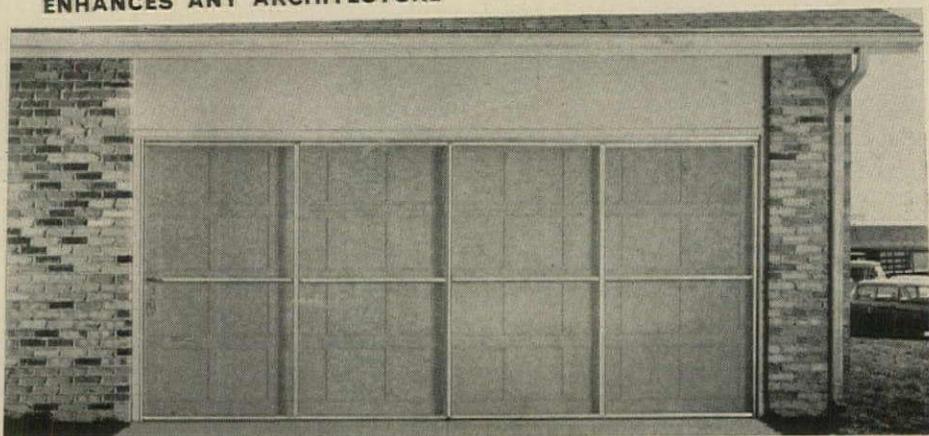


EASY ACCESSIBILITY



FINGERTIP OPERATION

ENHANCES ANY ARCHITECTURE



## RAYNOR MFG. CO.

Dixon, Illinois Hammonton, New Jersey

Builders of a Complete Line of Sectional Overhead Type Doors

## RAYNOR Garage-Aire SCREEN DOORS

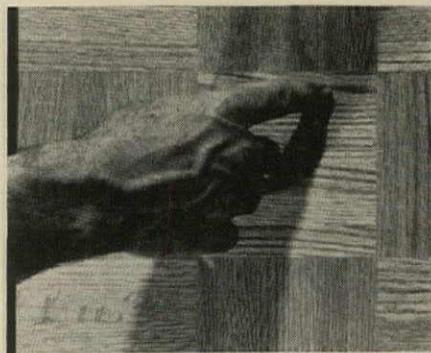
Mean SALES for  
the Homes You Build!

The garage becomes a SUMMER FAMILY ROOM . . . a cool, insect free covered breezeway for summer living that means usable—livable floor space at a low, low cost.

- Rugged, rolled aluminum frame, weatherproof fiberglass screening
- Available in both one and two car sizes
- Easily installed without costly alterations
- Attractively designed, will not mar the beauty of your homes
- Will not interfere with the operation of the garage door

## New products

start on p 199



**Mosaic parquet** from Modernwood is assembled into 18" squares from 5/16" thick Carolina upland oak slats. (Squares of black walnut, cherry, and hard maple will be offered later.) The squares are paper-surfaced for quick laying in adhesive on wood or concrete subfloors.

Modernwood Co., Clinton, S.C.  
For details, check No. 30 on coupon, p 229



**Washable ceiling** is made possible by a thin film of embossed vinyl stretched across perforations of wood fiber tile. Noise reduction coefficient in the 250 to 2,000 cps range is 65, better than many other acoustical tiles. Tiles are installed like any ceiling tile, come in three patterns: embossed white, heavily embossed white, embossed sandalwood. Price: 33¢ to 35¢ retail.

Barrett Div, Allied Chemical, New York City.

For details, check No. 31 on coupon, p 229



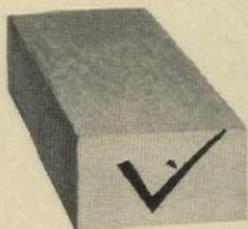
**Wainscot package** comes complete with paneling and moldings precut and ready to install, is now being marketed by Plywall. Kit covers an area 40" high, 12' long, includes three panels 48"x39", two 6'1" pieces of cap and base molding. Poly-Clad finishes include three oaks, two walnuts, four cherries, maple, and birch. Price: \$19.95.

Plywall Products, Ft Wayne, Ind.

For details, check No. 32 on coupon, p 229

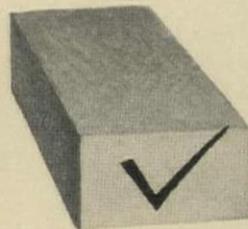
New Products continued on p 223

# Build in Salability Brick by Brick

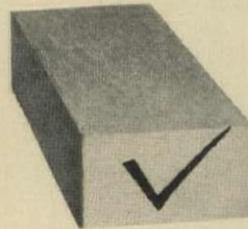


## Brick provides:

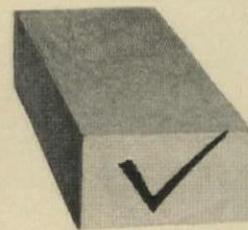
**Low first cost.** Homebuilders find that brick homes are no more costly initially than homes of any other quality construction.



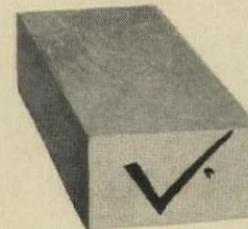
**Low upkeep.** No painting is required. Heat losses are minimized. Natural insulation for air conditioning provided.



**Durability.** Brick never wears out, never goes out of style, lasts for lifetimes without costly maintenance.



**High resale.** Because of home buyer preference for brick's beauty, because of longevity, because of low maintenance costs, brick homes are *salable* homes.



**Easier financing.** Because of the lower upkeep of a brick home, the purchaser frees money normally spent on maintenance; because of higher resale value, investment is protected; result is more attractive mortgages for bankers—and buyers.

Build with Brick — and build in sales appeal.

**Structural Clay Products Institute**  
1520 18th St. N.W., Washington, D. C.



## Imperial House

This spacious 30-story New York City luxury apartment contains over 900 non-overflow Case one-piece water closets.



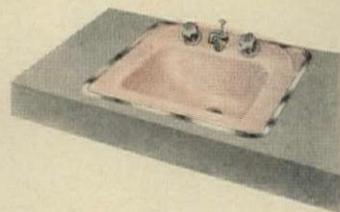
## The Finest Fixture You Can Specify ... Case One-Piece Water Closets

**The** new Model 3000 wall-hung Case one-piece closet provides the same unique operating features and time-tested fittings as other Case floor models. Case "E-Z" mount carriers make possible an easy and quick installation in any type of construction.

**Only** Case one-piece water closets offer positive protection against overflow of the bowl, plus quiet flushing and positive performance. All models are available in glistening white and 45 colors that correspond to or complement fixtures of other manufacturers.



**The Wellington Vanity**  
with wrought iron legs—  
32" x 24", 27" x 22", 24" x 20"



**The New Whitney—22" x 18"**—  
one of eight built-in  
Case lavatories

Send for catalog and color chip chart of the distinctive Case vitreous china line, including Water Closets, built-in Lavatories, Urinals and Drinking Fountains.



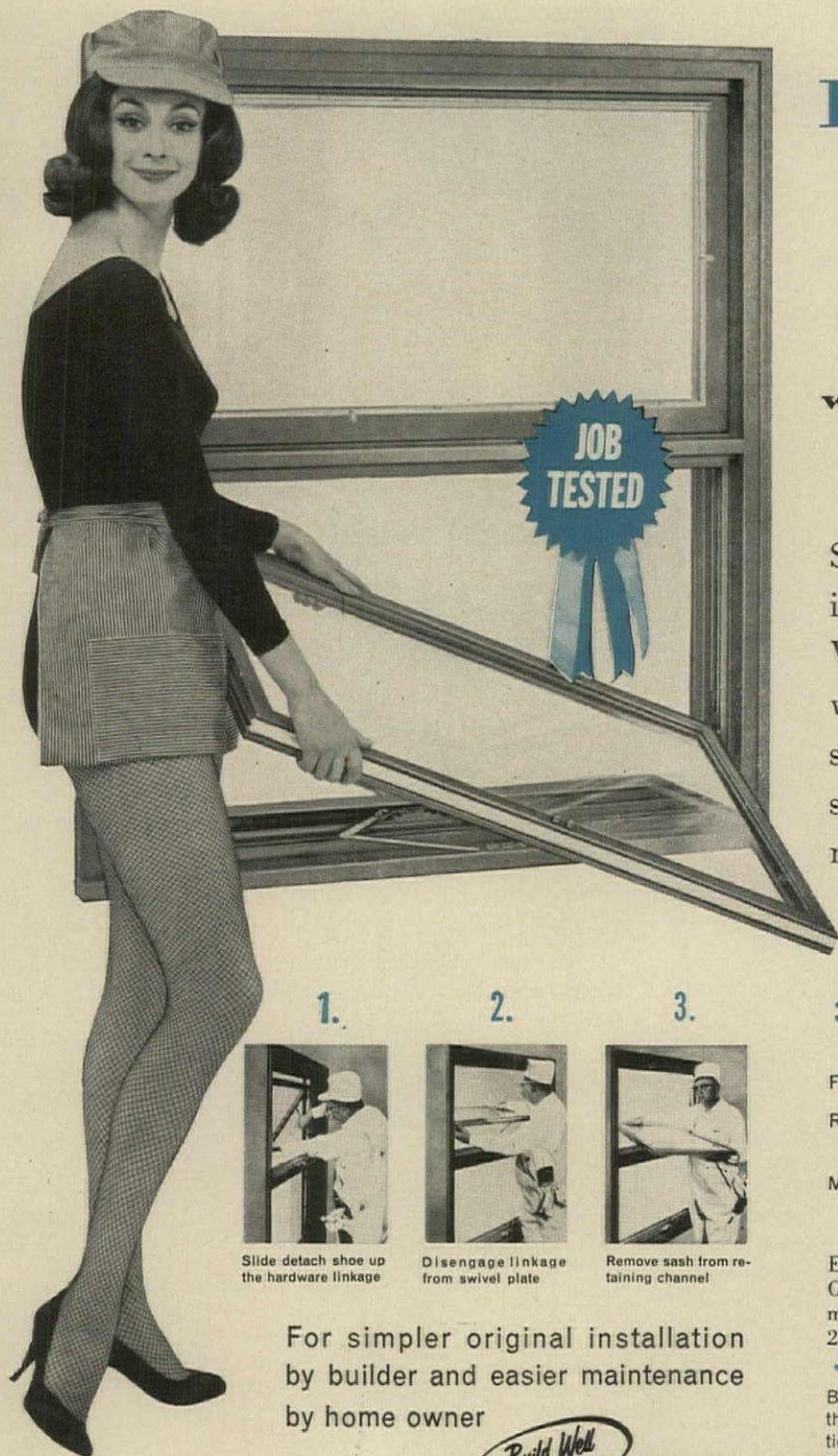
SINCE 1853

**CASE MANUFACTURING**  
Division of Ogden Corporation  
1042 Pine Street • Robinson, Illinois

ANOTHER BILT-WELL



FEATURE BY CARADCO



## BILT-WELL

### Removable Awning Windows

with Exclusive BILT-WELL  
Quick Release Hinges

Sash are easily removed from operating BILT-WELL Awning and Awning-Vue Window Units from the inside, without tools. Special detach shoe slides up hardware linkage permitting simple disengagement of sash from retaining channel.



1. Slide detach shoe up the hardware linkage  
2. Disengage linkage from swivel plate  
3. Remove sash from retaining channel

For simpler original installation by builder and easier maintenance by home owner



#### \* Always Look for These Other Bilt-Well Job-Tested Features

- |                                     |  |
|-------------------------------------|--|
| Fully Weatherstripped               | Widest Size Selection                  |
| Reglazable—<br>Clamp Glazed         | Water-Repellent<br>Treated             |
| Most Complete<br>Hardware Selection | No Finer Awning<br>Window at Any Price |

Every BILT-WELL Awning Window exceeds all U.S. Government requirements and are so labelled—permanently and clearly: U.S. Patent No.'s 2,716,784, 2,759,746 and 2,918,710.

#### \*What We Mean by "Job-Tested"

BILT-WELL "Job-Tested" means the products have been thoroughly tested in actual construction for ease of installation, weather-tightness, ease of operation, durability and acceptance.

**THE BILT-WELL LINE:** WINDOW UNITS, Double-hung, Awning, Casement, Basement. CABINETS, Kitchen, Multiple-use, Wardrobe, Storage, Vanity-Lavatory. DOORS, Exterior, Interior, Screen and Combination.

Mfg. Since 1866 by **CARADCO, Inc.** Dubuque, Iowa

Ask  
your supplier  
about these other



**JOB TESTED  
FEATURES**

of  
**BILT-WELL  
WINDOWS**

**BILT-WELL CASEMENTS**

- have a 90° opening sash
- have concealed hinges
- have double weatherstripping
- have dovetailed joint construction
- have patented unitized sill
- have gold-tone hardware
- have choice of regular or thermal insulating glass

**BILT-WELL DOUBLE HUNG  
WINDOWS**

- have flexible jamb-liner weatherstrip
- have patented unitized sill
- have removable sash
- have jamb adjustors
- have choice of regular or thermal insulating glass

**BILT-WELL AWNING and  
AWNING-VUE WINDOWS**

- have removable sash
- have concealed hinges
- have removable glazing bead
- have choice of operators
- have gold-tone hardware
- have choice of regular or thermal insulating glass



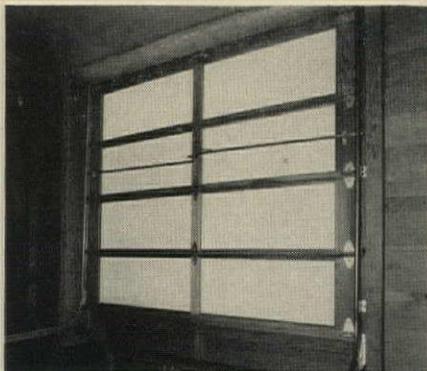
**CARADCO, Inc.**

Dubuque,  
Iowa



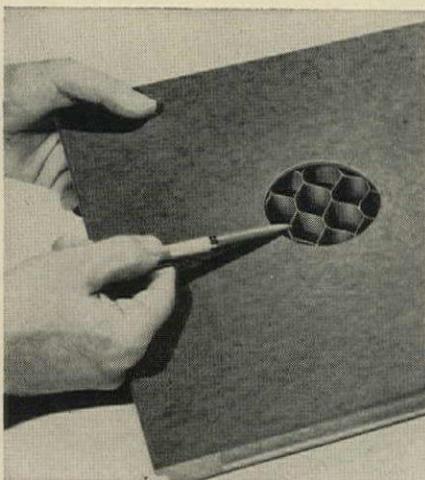
**New products**

start on p 199



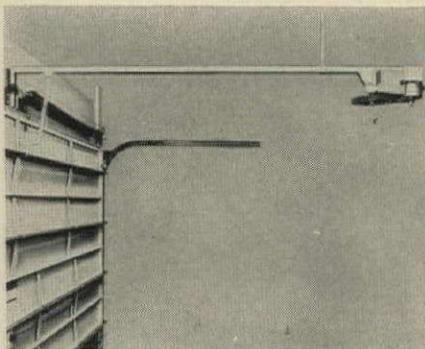
**Fiberglass door** is framed in Douglas fir. Translucent panels are Filon's Filo-plate, an acrylic-coated FRP sheet guaranteed for 15 years as to color stability and surface appearance. Doors come in three standard sizes with coral, snow, or yellow panels. Price: \$115 to \$260.

Better-Built Door Co, Denver.  
For details, check No. 33 on coupon, p 229



**Honeycomb panel** is being used in Crawford's new flush garage door. It is designed to give weathertightness and good insulation without excess weight. The honeycomb is framed in redwood, faced with tempered hardboard. The new door comes in 1 3/8" thickness for home use, 1 3/4" for industrial jobs. Price: about 30% less than Crawford's top line.

Crawford Door Co, Detroit.  
For details, check No. 34 on coupon, p 229

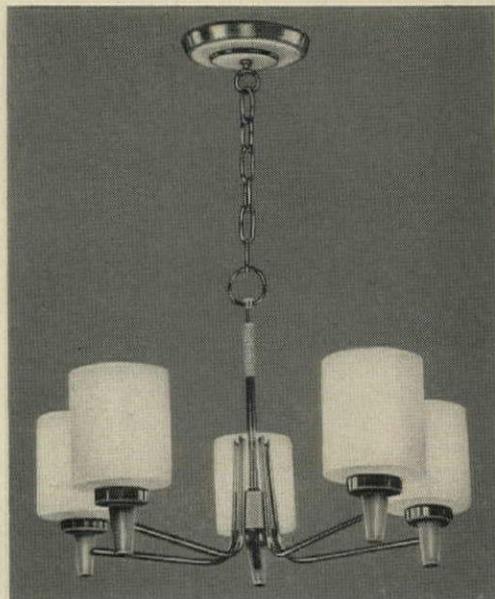


**Remote-control operator** is newest unit in the Berry Door line. It is designed to go in place in 30 minutes. Features include full adjustable safety clutch, self-adjusting chain tension, detachable operating arm. Door is operated from a portable transmitter or a push-button control in the garage. Price: \$119.50 retail.

Berry Door Corp, Detroit.  
For details, check No. 35 on coupon, p 229

*products of progress*

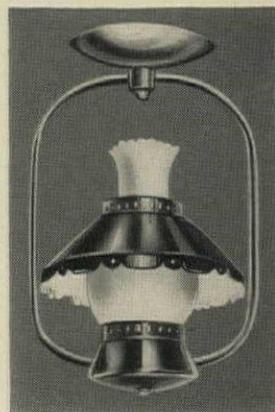
Inside the house...outside the house... no matter what the lighting fixture need, you will find the answer in the Progress collection.



**SONATA**—a contemporary fixture of classic simplicity. This five-light chandelier with polished brass arms provides warm, overall light from its luminous, soft white shades of imported glass. About \$49 retail.



**COLONIAL LANTERN** — designed to add traditional grace and charm. Homes are lovelier and safer with Post Lanterns on the lawn, by the patio, or marking the driveway. About \$13.95 retail.



**RANCHER**—a hall and foyer fixture styled out of the pride and adventure of the American Southwest. Its color and warmth capture the glow of frontier days. About \$17.25 retail.

**PROGRESS MANUFACTURING CO., INC.**  
Phila. 34, Pa.

Please send me complete information on:  
 SONATA  RANCHER  COLONIAL LANTERN

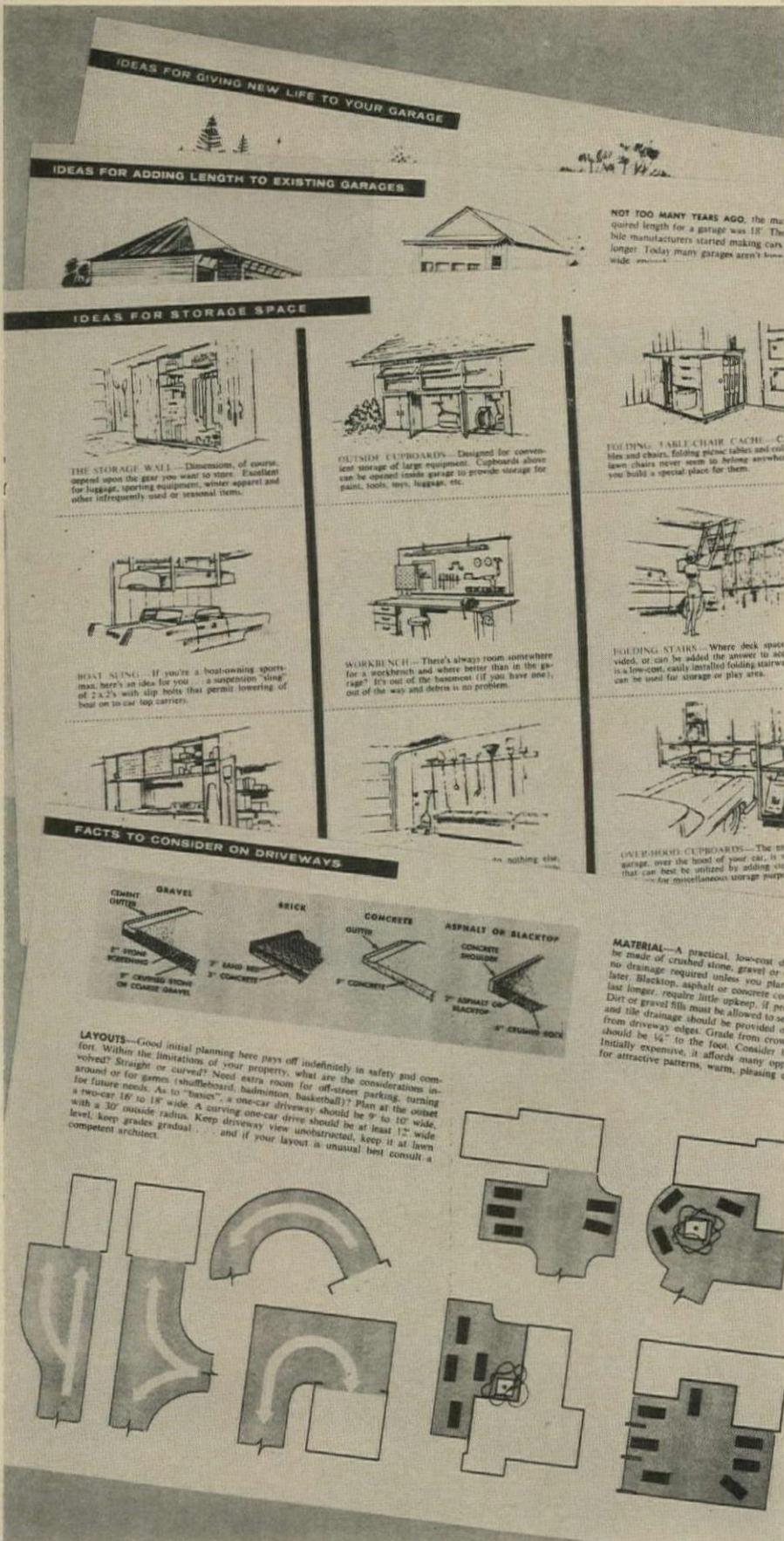
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Firm \_\_\_\_\_

Address \_\_\_\_\_

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

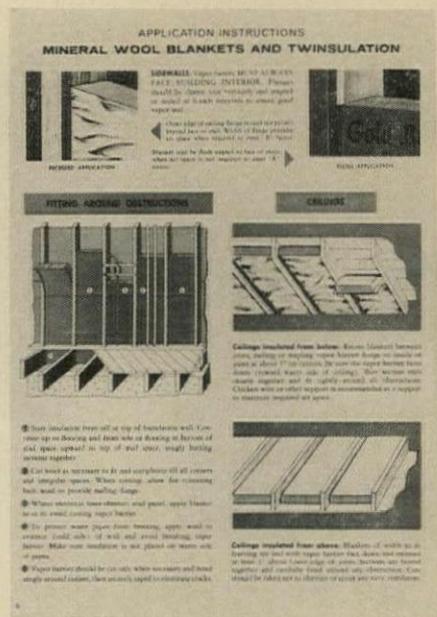
HH 4



**New booklet shows what to do with garages**

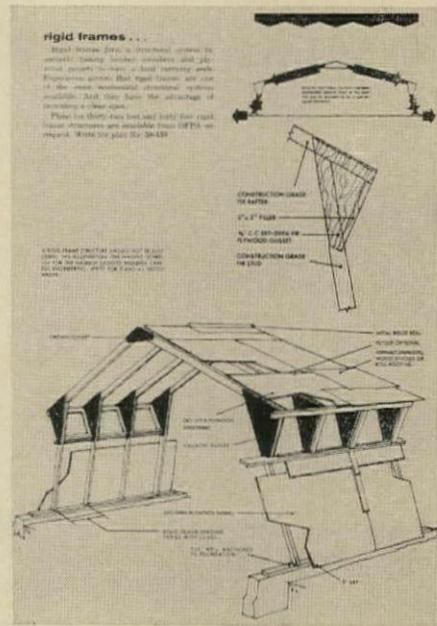
The new 12-page pamphlet from Crawford from which the sample pages above were taken contains a wealth of ideas for garage design. The ideas range from the purely decorative to functional. The pages above, for example, show various exterior treatments for garages; the many ways storage space can be

added; ideas for modernizing existing garages; siting plans for good access and parking. The booklet also illustrates many ways to do custom. Price 50¢. Crawford Door Co., 20263 Hoover Rd., Detroit 5. For copy, write direct to manufacturer



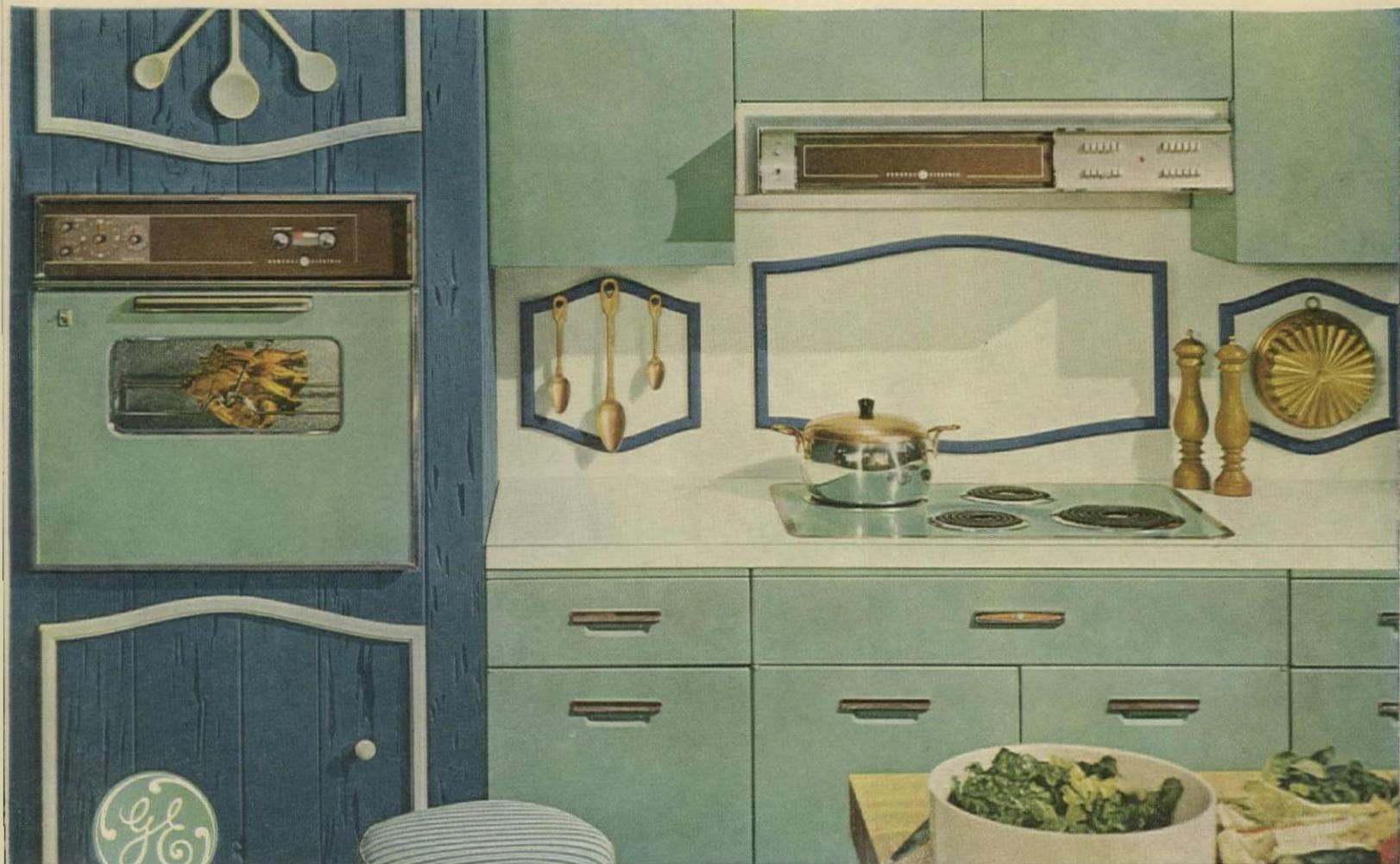
**How to insulate for year-round conditioning**

Gold Bond tells how to use mineral wool to meet the all-weather comfort standard in a new 12-page pamphlet. All sizes from semi-thick to 6" open-face are shown; sketches show where it should go; detail drawings show how to install. Heat loss and condensation are discussed, technical data charted. National Gypsum, Buffalo. For copy, check No. 36 on coupon, p 229



**New guide specifies plywood for farm use**

Latest technical brochure from DFPA covers a wide range of utility construction. The page above shows the basics of rigid frames. Others show floor and wall systems; siding, ceiling, and roof construction; doors and trusses. Nine pages of each type of plywood. Price 30¢. Douglas Fir Plywood Assn, 1119 A Street, Tacoma 5. For copy, write direct to manufacturer



The mark of quality your customers recognize

## NOW ALL CONTROLS ARE EYE-HI

**The Eye Appeal with Buy Appeal on General Electric Built-in Ranges**—General Electric, the “New Idea Line” has another bright brainchild for '61: *all* controls for the Custom cooktop (including the automatic Sensi-Temp\* unit) are on the hood! They line up with oven controls for the handsomest coordinated cooking center yet. And there are three brand new General Electric hoods in '61 . . . two with surface unit controls. News too: Mix-or-Match color inserts . . . inspiration for decorators!

**Built-in Beauty in Any Price Range!** Choose your ideal General Electric combination from six oven models, seven cooktops, three hoods! There's a combination to suit every homebuilder's need. Mix-or-Match colors, coppertone, and stainless steel. In today's market, it's not enough simply to match your competitors' built-ins. Women want features and the quality name. With General Electric's new look and new ideas, your home is 1961 all the way.

General Electric Company, Range Dept., Appliance Park, Louisville 1, Ky.  
\*Trademark of General Electric

*Progress Is Our Most Important Product*

GENERAL  ELECTRIC

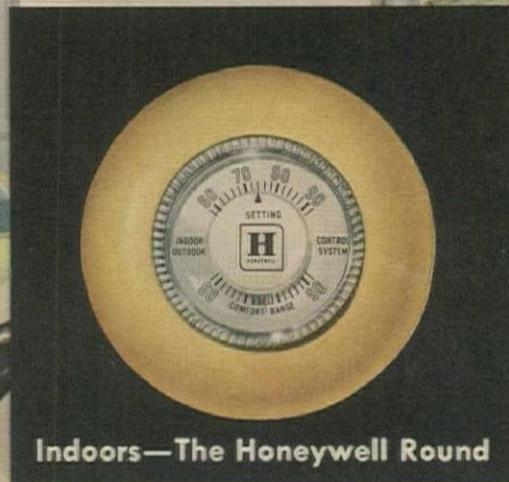
*Above:* Single Custom Oven JC15, Cooktop JP84 with remote controls on Hood JH94. *Below:* Famous Sensi-Temp Control on JH96 Hood. Custom Double Oven JC28 has exclusive “Dinner Dial” controls for *both* ovens. Cooktop JP86. *At bottom:* Low-priced combination with eye (and buy) appeal. Deluxe Oven JD12, Cooktop JP76, Hood JH92.



# UPSTAIRS

The thermostats  
that  
anticipate  
the  
weather

POWERFUL ADS LIKE THIS, appearing every month in BETTER HOMES & GARDENS, AMERICAN HOME or SUNSET, will help tell your quality story in 1961!



Indoors—The Honeywell Round

Honeywell's Indoor-Outdoor Temperature Control System anticipates weather changes outside, for continuous comfort inside. Working as a team, the precise Outdoor thermostat responds instantly to sudden changes outside — then signals the Indoor thermostat, which automatically adjusts your heating or cooling system. See your quality heating-cooling dealer.

## Honeywell



First in Control

SINCE 1885

# SPECIFY HONEYWELL—THE PRESOLD NAME

## Publications

start on p 224

### Acoustical plaster data

Test, application, and specification data on a new plaster called Mute is published in a folder from the Ohio Lime Co. Spelled out are the plaster's general characteristics, its uses, sound absorption, light reflectance, maintenance, painting, etc.

Ohio Lime Co, Woodville, Ohio.

For copy, check No. 37 on coupon, p 229

### Catalog of colored doors

The Flynn line of baked-enamel aluminum storm door combinations are pictured, in color in a new 12-page catalog. The line includes one-light and two-light models in six colors. Flynn's door hardware and accessories and combination windows are also pictured.

Flynn Mfg Co, Detroit.

For copy, check No. 38 on coupon, p 229

### New architectural house organ

It is called the *Architectural Beacon* and it's published for Sargent & Co. The first two issues dealt with the architectural revolution at Yale and the development of motor hotels. The magazine is being distributed to architects and through Sargent distributors.

Sargent & Co, New Haven.

For copy, check No. 39 on coupon, p 229

### Diffuser catalog

The new 44-page catalog of Lima Register is divided into seven indexed sections. Eight new models are introduced. Over a dozen pages of engineering data are included: the design of perimeter systems, sizing and location of registers, conversion of cfm to Btuh, etc.

Lima Register Co, Lima, Ohio.

For copy, check No. 40 on coupon, p 229

### How to specify hardwood

New 8-page color brochure discusses the color range, visual and physical texture of hardwoods. Veneer cutting methods and figure types are shown. A chart tells the commercial names, origin, color, and type of figures of 34 hardwood species.

Fine Hardwoods Assn, Chicago.

For copy, check No. 41 on coupon, p 229

### Equipment for concrete work

Stow Mfg has a new edition of its complete catalog. The 28 pages cover concrete vibrators of all kinds, concrete grinders, rotary trowels, vibrating screeds, etc. Featured is Stow's new T18-A Tamper.

Stow Mfg Co, Binghamton, N.Y.

For copy, check No. 42 on coupon, p 229

### "How to build out termites"

That's the title of a new 8-page booklet on how to prevent termite infestation of new houses. Controls for wood fungi, carpenter ants, drywood and dampwood termites are specified in simple non-technical language and drawings.

E. L. Bruce Co, Memphis.

For copy, check No. 43 on coupon, p 229

### How to use pop rivets

New 4-page bulletin shows 14 uses for these blind-fastening devices, among them: walls, roofs, ceilings, ducts, partitions, shelves, etc. A table gives facts and figures about the various types. Sketches show job advantages.

US Shoe Machinery, Shelton, Conn.

For copy, check No. 44 on coupon, p 229

### Where to use flakeboard

Formica has a new full-color folder describing its new three-layer flakeboard. The manufacturing process is described, characteristics are tabulated, various uses are suggested: as core-stock, cabinet underlayment, closet doors, paneling, displays. Board is available in 3/8", 1/2", 5/8", and 3/4" thickness, 2' to 4' wide, 5' to 12' long.

Formica Corp, Cincinnati.

For copy, check No. 45 on coupon, p 229

### Lightweight concrete bulletin

Permalite's 1961 Sweets file sheets are now available. The eight-pages describe the advantages of expanded perlite as aggregate for insulating, fire retardation, roof decks, floor fills, and floor slabs. Full details and specifications—weight, strength, insulation value, modulus of elasticity—are given for various mixes.

Perlite Dept, Los Angeles.

For copy, check No. 46 on coupon, p 229

### Three new heating-cooling manuals

Pioneer Mfg Co, West Coast heating equipment manufacturer, has three new manuals now available:

A 24-page manual covers automatic gas and electric water heaters, gives performance and specification data and sizing information. Examples include pool heating; apartment, hotel, and motel installations, etc.

An air conditioning service manual shows mechanical components, wiring diagrams, relative humidity chart, and service procedures. The manual also covers the heating cycle.

Pioneer air conditioning systems tells how to calculate U factor, size heating and cooling equipment, figure perimeter systems, etc.

Each booklet is priced at \$1 but is free if requested on company letterhead.

Pioneer Mfg Co, 3131 San Fernando road, Los Angeles.

For copies, write direct to manufacturer

### All about louvers

HC Products has available a 14-page story on house ventilation. It covers why you should ventilate, how to estimate, how to measure, kinds of vents—cupola, ridge, eave, gable, foundation, etc. Featured are new continuous soft-fit vents to pair with Vent-a-Ridge roof vents. Comparative costs of Vent-a-Ridge and other systems are listed.

Home Comfort Prods, Princeville, Ill.

For copy, check No. 47 on coupon, p 229

### Built-in clock movements

A 16-page color catalog from Lanshire Clock & Instrument shows wall clocks for mobile homes, fitups for bathroom clocks, bathroom cabinet clocks, kitchen clocks, electric clock assemblies for displays, etc. The booklet also includes many ideas for using and styling clock built-ins.

Lanshire Clock, Chicago.

For copy, check No. 48 on coupon, p 229

### How to use Versabord

Versabord—a kraft-overlaid wood panel—is described and specified in a new pamphlet from Weyerhaeuser. The booklet shows how to use the product as underlayment, for countertops and cabinet parts, as shelving, closet doors, wall paneling, etc.

Weyerhaeuser Co, Tacoma.

For copy, check No. 49 on coupon, p 229

### How-to data on plastic pipe

Johns-Manville has a 10-page brochure on its Supreme Plastic (polyethylene) Pipe. After an introductory section on the characteristics and properties of the pipe, the booklet details how to cut, how to connect, how to install, how to test, how to backfill.

Johns-Manville, New York City.

For copy, check No. 50 on coupon, p 229

### Quarry tile booklet

American Olean has a new 8-page color brochure showing the use of Murray quarry tile. Included are several patios and recreation rooms, as well as commercial uses. Full catalog data—sizes, installation data, specs—are included.

American Olean, Lansdale, Pa.

For copy, check No. 51 on coupon, p 229

Publications continued on p 229

# THAT GIVES YOU MORE TO MERCHANDISE

**DOWNSTAIRS**  
**Matched**  
**controls**  
**for top**  
**performance**



Fan Limit Control

Hot Water Limit Control

Honeywell Fan Limit and Aquastat\* Controls are typical of the matched controls designed to work with Honeywell thermostats. Their precision means maximum performance from the furnace or boiler in your utility room or basement. Ask for Honeywell controls for every home comfort: heating, cooling, humidification, dehumidification, water heating and appliances.

**Honeywell**



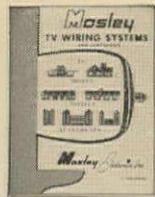
First in Control

SINCE 1885



Contemporary Design—switch plate, door knob, escutcheon and drawer pull

DESIGNED for beauty—SPECIFIED for durability. Luxurious in finish, original in styling, the Towne touch has transformed such humble items as doorknobs, drawer pulls and switch plates into objects of elegance. Corrosionproof and easy to clean... Towne hardware is suitable for any room in the house. For further information write for free, colorful Towne brochure. The Towne Hardware Division, The Yale & Towne Manufacturing Company, 144 East 44th St., New York 17, New York



OVER 5,000 BUILDERS  
ASKED FOR THIS  
BOOKLET IN '59!

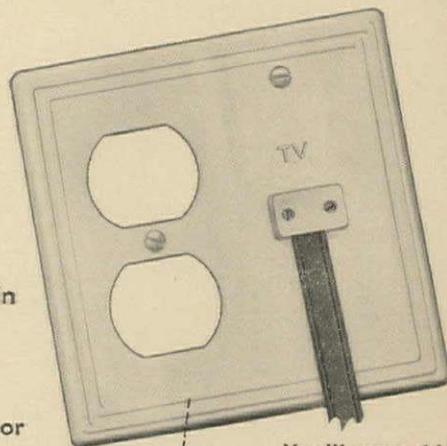
# MOSLEY TV WIRING HELPS SELL HOMES

Complete packaged kits with wiring, wall plates and hardware... designed by Mosley electronic specialists for perfect-picture reception.

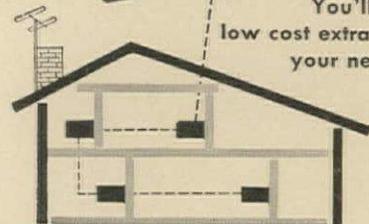
Gives each home a factory-engineered, built-in system that connects one rooftop antenna with two or four rooms. (Have a set in each room or move one around.)

ALREADY USED IN  
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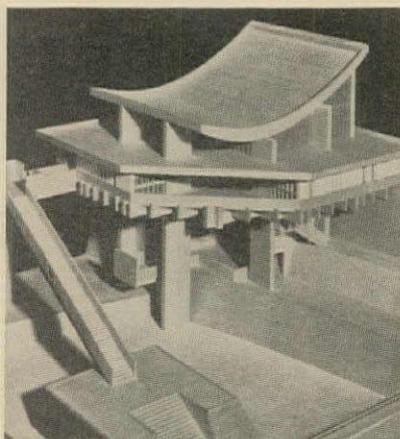
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House & Home

PUBLISHED BY TIME INC.

**Industrial tractors and equipment**

International-Harvester has a new 20-page color catalog covering its nine industrial tractors and the equipment they move. Separate sections cover earthmoving, landscaping, materials handling, mowing, snow removal, towing, cable laying, etc.

International Harvester, Chicago.  
For copy, check No. 52 on coupon below

**Cabinet catalog**

Featured in Standard Steel's new catalog are wood-grain-Pionite-covered wood kitchen cabinets including all basic units in three different wood finishes. Other new items are bathroom vanities, medicine cabinets, shower stalls, bath and tub enclosures.

Standard Steel Cabinets, Chicago.  
For copy, check No. 53 on coupon below

**Pressure drop data**

Reprints of an ASHRAE *Journal* article on tests of asbestos-cement air ducts are available from Johns-Manville. Charts comparing velocity and static pressure drop show how a-c ducts allow use of smaller diameters on a smaller blower than sheet-metal ducts.

Johns-Manville, New York City.  
For copy, check No. 54 on coupon below

**Ornamental iron designs**

New catalog from Colonel Logan shows wide variety of columns, railings, and grillework in cast and wrought iron. Also shown: standard-size porch and step railings in plain and twisted picket styles; gate assemblies; entrance railings. Installation data included.

Logan Co, Louisville.  
For copy, check No. 55 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:

**House & Home** Room 1960, Time & Life Building  
Rockefeller Center, New York 20, N.Y.

**NEW PRODUCTS • April**

- 1.  Sealview plastic prefab
- 2.  Win-Chek folding fire escape
- 3.  Emerson Imperial decorative lighting
- 4.  Emerson Pryne range hoods
- 5.  Emerson Northwind air conditioners
- 6.  Emerson Pry-lite recessed fixtures
- 7.  Emerson set-back control
- 8.  Emerson Pryne vent fans
- 9.  Emerson Electric heating
- 10.  Rittenhouse intercom music systems
- 11.  Modulux cabinet system
- 12.  Kohler's new builder line
- 13.  US Plywood Permagard paneling
- 14.  Micarta tub alcove
- 15.  Gary Steel soffit system
- 16.  National Rollex soffit system
- 17.  Lifeguard Industries soffit system
- 18.  Florida Industries soffit system
- 19.  Ida Products Thermaliner window
- 20.  Gustin Bacon GB duct
- 21.  Delta one-lever shower control
- 22.  Gaffers & Sattler built-in range
- 23.  DeWalt panel saw
- 24.  Consolidated aluminum roof
- 25.  Iron Fireman add-on heater
- 26.  De Vilbiss airless spray
- 27.  Aeronca disposer sink
- 28.  Jensen-Thorsen corner sink
- 29.  Zeigler-Harris disposer sink

- 30.  Modernwood mosaic parquet
- 31.  Barrett washable ceiling tile
- 32.  Plywall wainscot package
- 33.  Better-Bilt fiberglass door
- 34.  Crawford flush garage door
- 35.  Berry remote-control operator

**PUBLICATIONS**

- 36.  National Gypsum insulation manual
- 37.  Ohio Lime plaster data
- 38.  Flynn door catalog
- 39.  Sargent's Architectural Beacon
- 40.  Lima diffuser catalog
- 41.  Hardwood color brochure
- 42.  Stow concrete-tool catalog
- 43.  Bruce Terminix pamphlet
- 44.  US Shoe pop-rivet bulletin
- 45.  Formica flakeboard folder
- 46.  Permalite concrete bulletin
- 47.  HC Products ventilating guide
- 48.  Lanshire clock catalog
- 49.  Weyerhaeuser Versabord catalog
- 50.  Johns-Manville plastic pipe data
- 51.  American Olean quarry tile data
- 52.  I-H industrial tractors
- 53.  Standard Steel cabinet catalog
- 54.  J-M pressure-drop data
- 55.  Logan ornamental iron

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House & Home's servicing of this coupon expires July, 1961. In addressing direct inquiries please mention **House & Home** and the issue in which you saw the product or publication.

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**FREE! Redwood Nailing Data**

Descriptions of nails and nail heads for various uses of redwood; recommended nailing procedures; nail sizes and types for different siding patterns. Information taken from the Redwood Architect's File. Write on your letterhead for "Nailing Data"—CRA Builders' Service Department, 576 Sacramento Street.



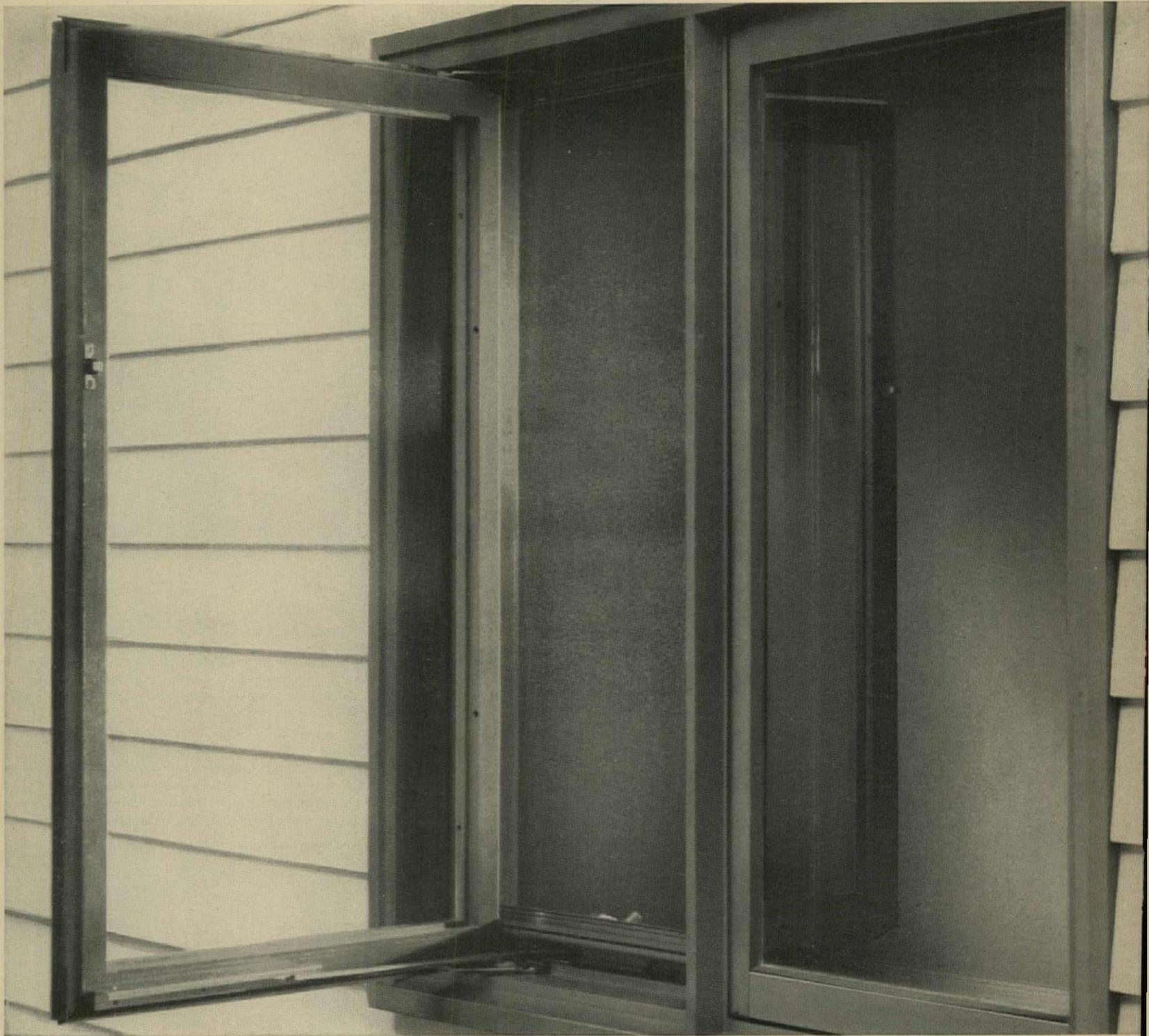
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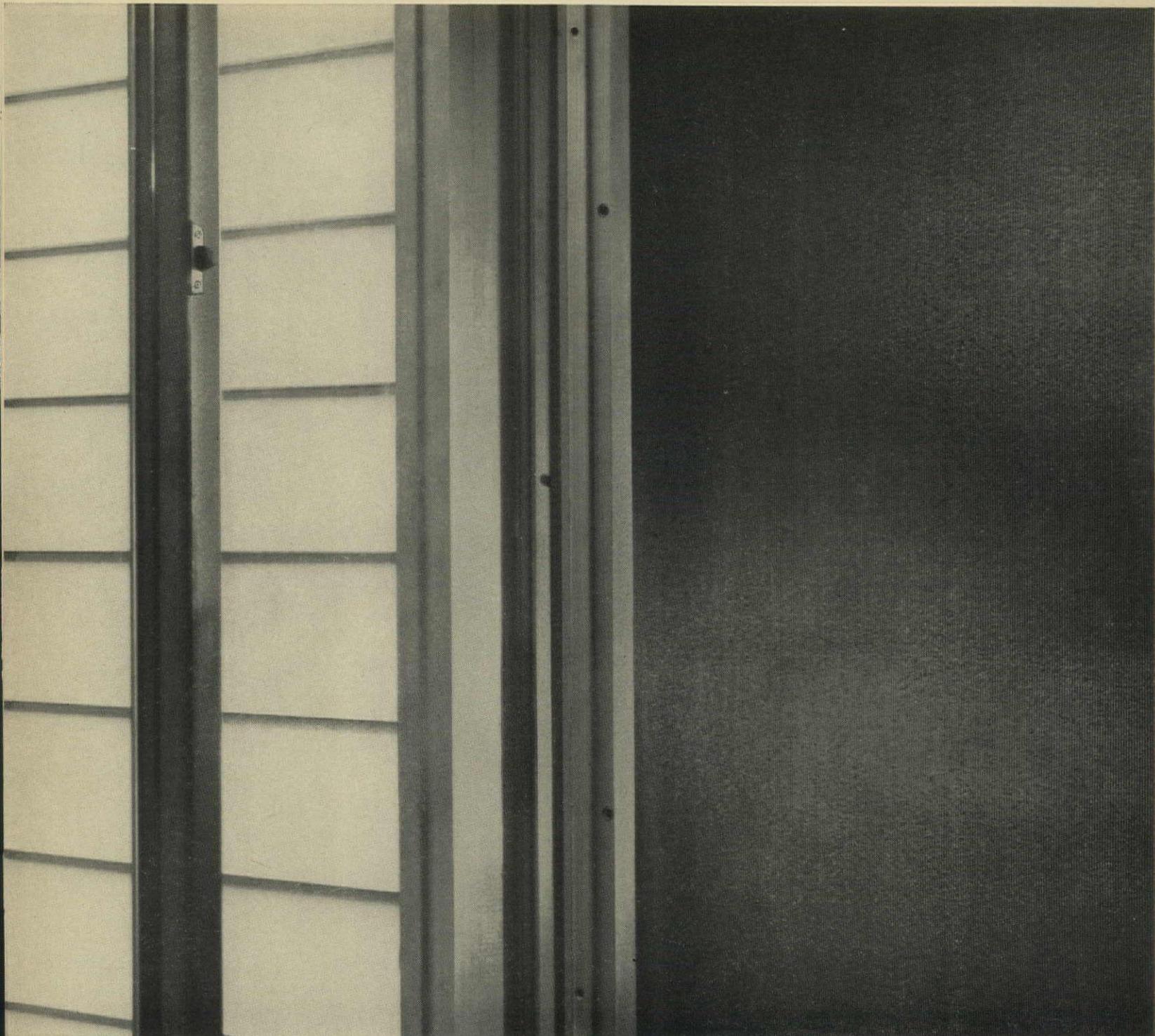
What's new in windows? In the Bilt-Well line of "Job-Tested" prime windows, it's the screening! To the same solid quality that has made Bilt-Well the builder's better buy for years, now add this important extra: Owens-Corning Fiberglas screening, so tough, so durable you no longer have to put up with screens denting on the job — or later. It's *guaranteed* for 10 years against denting, shrinking, corroding and rusting.

One of the "Job-Tested" Bilt-Well windows available with new Fiberglas\* screening is the popular casement shown here. It's been designed for maximum efficiency and comfort, with double vinyl weatherstrip and stainless steel spring leaf on all edges of sash. Reduction of air infiltration by this exclusive method is up to *four times* that specified by Commercial Standards Requirements. Result? An extra selling feature for

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T. M. Dubuque, Iowa



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Like other fine products from Owens-Corning Fiberglas, the new screening available with Bilt-Well windows is a part of the Comfort-Conditioned Home family of building materials. And now,

Caradco salesmen are offering the complete Comfort-Conditioned Home package, with all of its important features, including the unprecedented NAHB Sales Course sponsored by Owens-Corning Fiberglas. Like details? Get in touch with your local Owens-Corning Fiberglas office, or any Caradco salesman.

Owens-Corning Fiberglas Corporation, Department 67-D, National Bank Building, Toledo 1, Ohio.

OWENS-CORNING  
**FIBERGLAS**  
THE HOUSE THAT STAYS

\*T.M. (Reg. U.S. Pat. Off.) O-C. F. Corp.



Alternating patterns in the grain of the parquet floor highlight this dining area and blend smoothly with the random-width paneling of the walls. Paneled ceilings, like this one, tend to heighten the friendly atmosphere.

*In dining areas, wood adds warmth and dignity*

## WOOD sells the rooms that sell the house

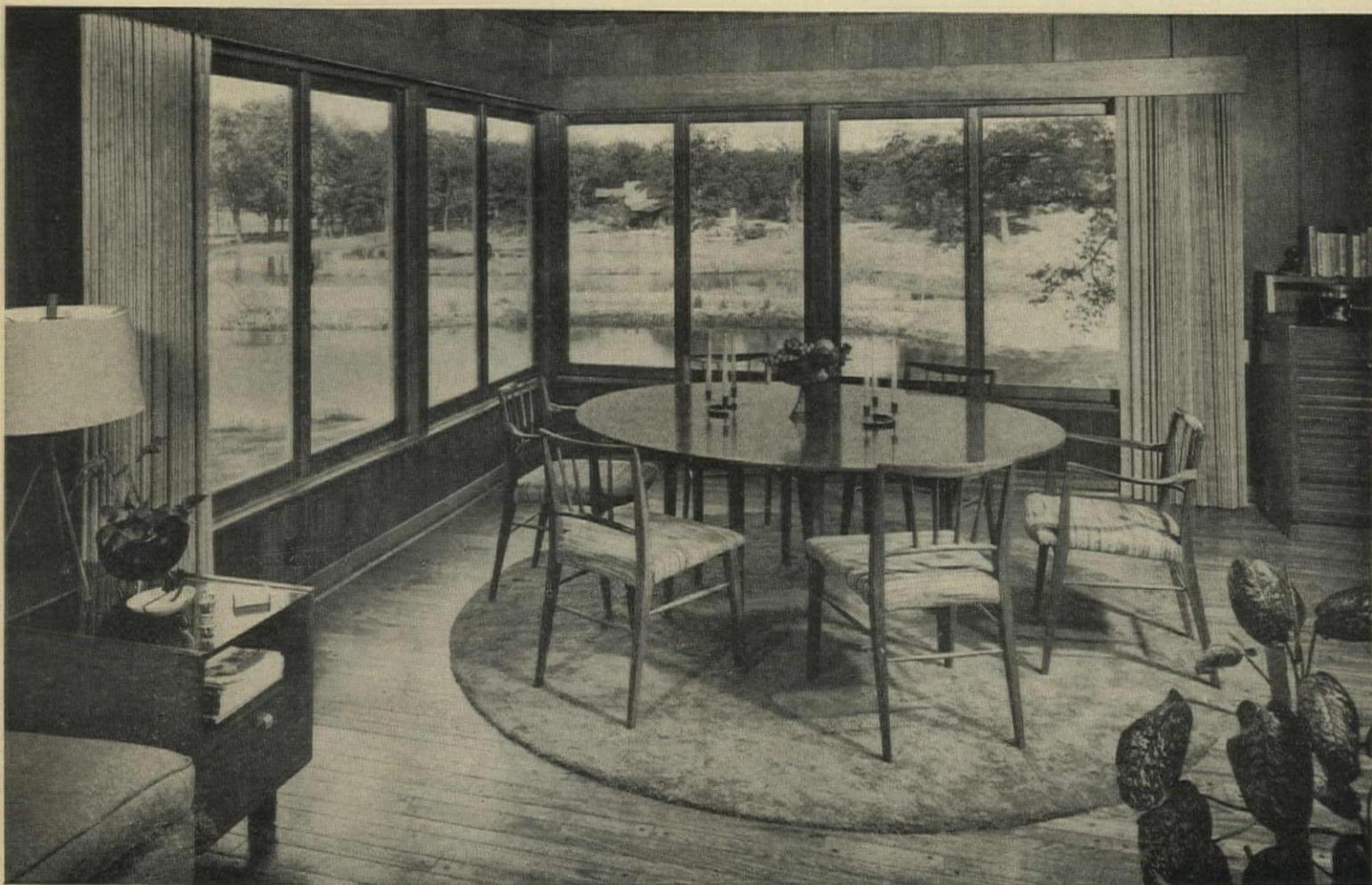
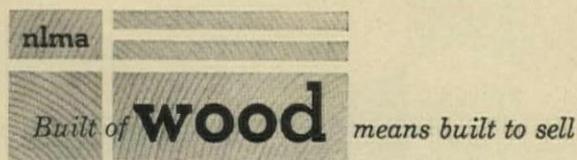


Sometimes unadorned simplicity shows wood's beauty best. In this dining area, the large, uninterrupted wood surfaces create a clean, spacious effect. A concave ceiling, supported by laminated beams, lends oriental charm.

Prospective home-buyers have a habit of taking a long, close look at dining areas. *Theirs* will have to look elegant yet casual . . . leisurely yet distinctive. *Your* best solution to their desires lies in the use of wood. Nothing in the world makes dining areas more desirable than wood. The serene beauty of paneled walls . . . the warm sheen of strip flooring . . . the homey quality of a beamed ceiling . . . any or all of the uses of wood can change prospects who just bide their time into prospects who make you a bid.

In the March 17th issue of *LIFE*, a full-page, full-color NLMA advertisement featured the uses of wood in dining areas. Millions of people—your prospects among them—saw the ad. They will be looking for wood in the dining areas you show them. For more information on better homes of wood, write:

**NATIONAL LUMBER MANUFACTURERS ASSOCIATION**  
Wood Information Center, 1319 18th St., N.W., Washington 6, D. C.



Large windows with frames of wood give this dining area a feeling of airiness. Walls are paneled with hardwood plywood. Beautiful floors—pegged in this case—generally make a strong impression on sales prospects.

Engineered by Edwards

## INSTALL LOW COST, PACKAGED, ZONE CONTROL BASEBOARD HEAT

...build your reputation for value!

EDWARDS . . . the one dependable manufacturing source for all hydronic and electric heating and cooling equipment . . . for new homes, older homes, motels, apartment houses, schools, churches, etc. Factory guaranteed . . . virtually eliminates costly call-backs. Edwards zoned systems are competitively priced with non-zone hot air systems and are completely assembled at the factory.

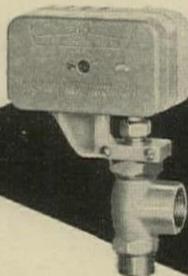
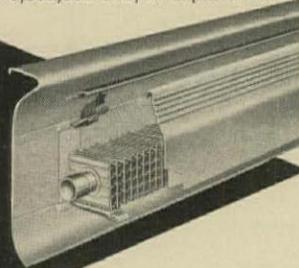


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Space-saving design (3' long x 2' wide x 3' high). Completely wired. 100% automatic air elimination. Oil-fired units are completely smokeless; feature rumble suppressant design. 100,000 to 3,000,000 BTU/Hr capacities.

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Lengths from 2 to 20 feet. Installation is simple and fast; quiet wire slide for 1/2" and 3/4" sizes. I.B.R. approved ratings. Available in chrome, copper-tone, wood-grain, white primer coat.

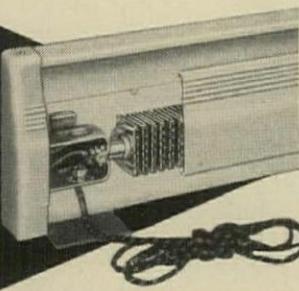


### COMPACT MOTORIZED ZONE CONTROL VALVES

Sealed mercury switches. Completely silent, long life. Positive shut-off valve. Powerful electric motor gear drive. For hot water, steam or chilled water systems. 1/2", 3/4", 1", 1 1/4", 1 1/2", 2".

### ELECTRIC BASEBOARD RADIATION

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For complete data on any or all of the above EDWARDS products, write today to:



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the basement



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**DON'T PAINT MASONRY! TREAT IT RIGHT** — with cementitious sealants, Thoroseal and Waterplug. Form penetrating, compatible bond with all masonry and concrete. Unlike thin paint film, The Thoro System allows the wall to "breathe" — prevents buildup of dangerous moisture. Sealants become part of the wall, and last just as long!

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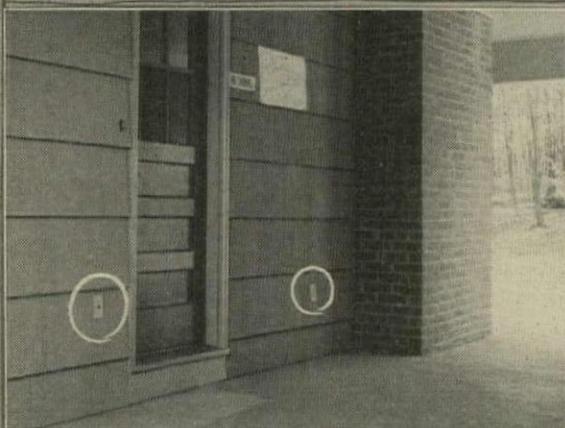
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STANDARD DRY WALL PRODUCTS, INC.  
DEPT. H-2, NEW EAGLE, PENNA.



Telephone man Robert Dahill checks position of telephone-wired kitchen outlet with builder Arthur P. Aaron.



Breezeways of A & A homes come with outlets for permanent or portable telephones.

*Your Telephone Business Office will gladly help you telephone-plan your homes. For details on home telephone installations, see Sweet's Light Construction File, 11c/Be. For commercial installations, Sweet's Architectural File, 34a/Be.*

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**SAYS ARTHUR P. AARON, A & A BUILDERS, INC.,  
AVON, CONNECTICUT**

Arthur P. Aaron was the first contractor in Connecticut to telephone-plan his homes with concealed telephone wiring. "For the nominal cost, concealed wiring is definitely a good investment," says Mr. Aaron. "We're always looking for something that will help sell homes, and concealed wiring does just that."

Mr. Aaron has constructed homes from \$20,000 to \$35,000, all with concealed telephone wiring. He's also planning to pre-wire homes of \$15,000 and \$16,000 which he expects to build in Avon and Norwich this year.

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**BELL TELEPHONE SYSTEM**





*New Kentile "Constellation" Vinyl Asbestos Tile in Orion Ivory. Here, accented by burnt orange feature strips and tile in "Designer Palette" Solid Vinyl. Black cabinet base is Vinyl KenCove®.*

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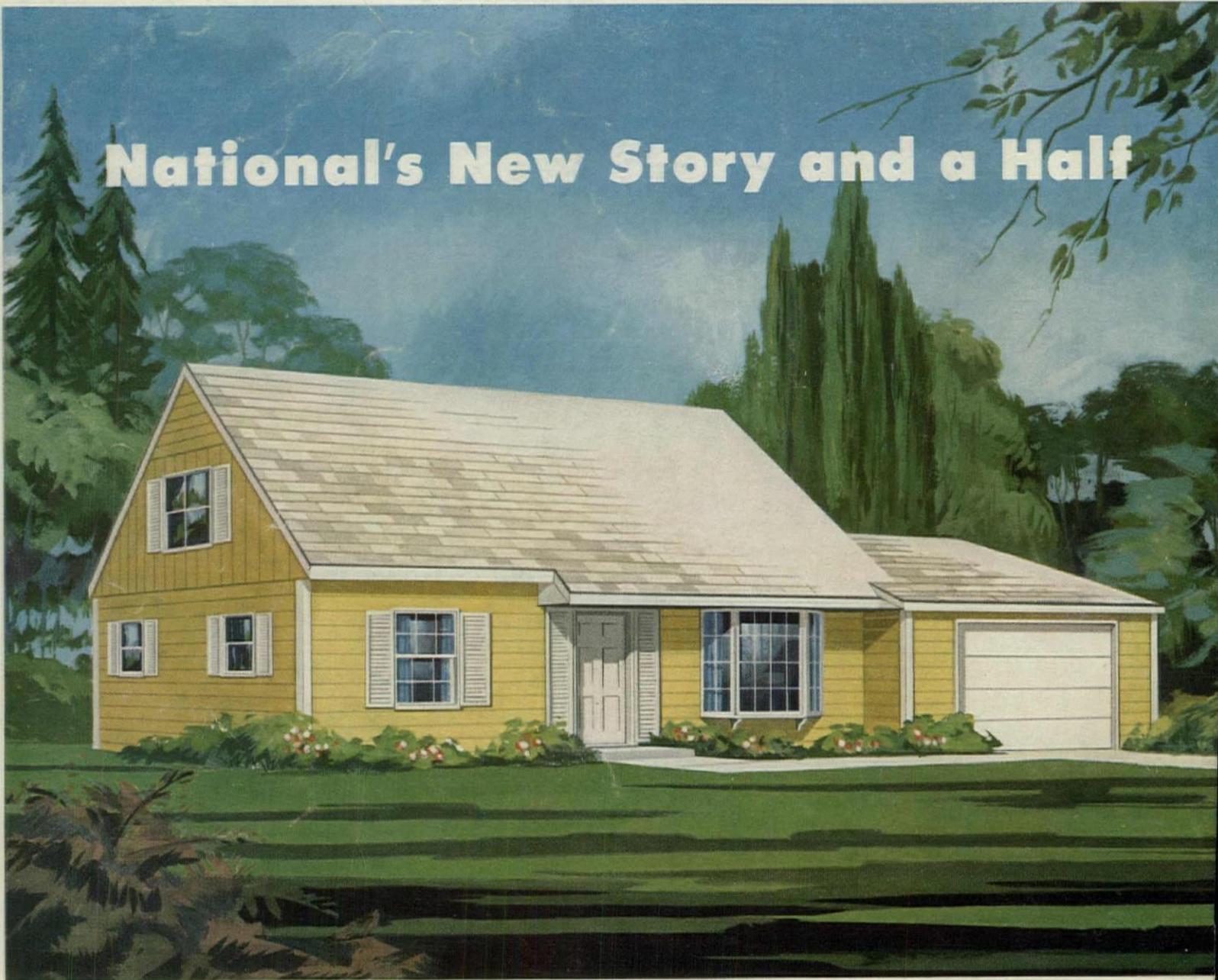
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