

AUGUST 1960 SIX DOLLARS A YEAR—ONE DOLLAR A COPY

House & Home

ARCHITECTS • APPRAISERS • BUILDERS • CONTRACTORS • DECORATORS • DEALERS • DISTRIBUTORS • FHA-VA • MANUFACTURERS • MORTGAGEES • PREFABRICATORS • REALTORS



How to get better land for less
and how to use good land better

Sell with the newest glamour
Concept '70 Vinyl Flooring



Congoleum-Nairn puts totally new beauty into homes: a *seamless* expanse of sparkle and glow.

Something entirely new yet completely *proved*: that's a real selling asset. Install it with Flor-Ever Concept '70* Vinyl, newest improvement of America's first and most used inlaid vinyl . . . a finer sateen finish with the greatest scuff and scratch resistance . . . excellent stain resistance . . . and magical SPARKLES. See the popular Concept '70 colors (planned to coordinate with your smartest interiors). And learn of *all* the selling aids offered by Congoleum-Nairn.

.....
ALL PATTERNS ACTUAL SIZE. To the left 6105, upper right 6101, below 6103.
SPECIFICATIONS: By the yard, 6 feet wide. May be used on above-grade floors of wood, concrete or ceramic tile, including those with radiant heating.



Congoleum-Nairn
FINE FLOORS

*Trademark © Congoleum-Nairn Inc., Kearny, New Jersey, 1960

NuTone Presents a New Combination ... Wall Electric Heater plus Exhaust Fan!

INSTANT HEAT FOR CHILLY MORNINGS OR OFF SEASONS

KEEPS AIR FRESH, ODOR-FREE AND MOISTURE-FREE

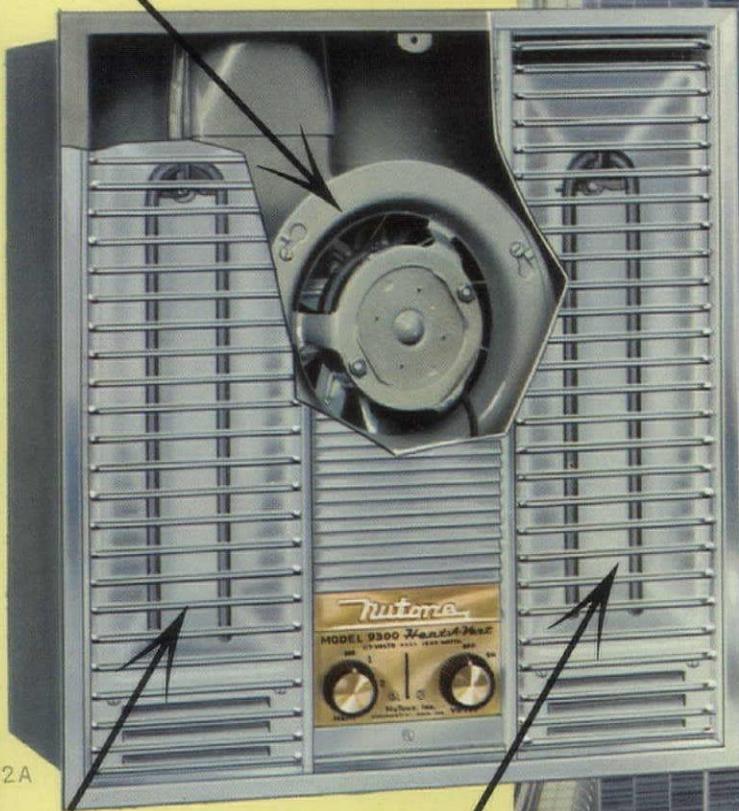
U. S. Patents Pending

NuTone

Model 9300

Newest idea for your bathrooms —
 Electric Wall Heat PLUS Ventilation

BATH ROOM
Exhaust Fan



DOUBLE ELEMENT
Electric Heater

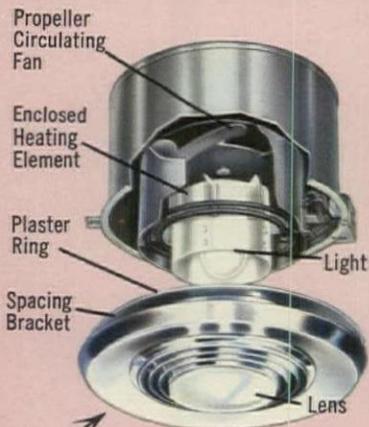
2 armored heating elements . .
 use both for instant 5460 BTU . .
 or single element for 2730 BTU.

Saves Space

Saves installation cost . . avoids double cutouts and double wiring. Heater and fan operate at SAME TIME or separately. May be wired to 120 or 240 volts. Super quiet cushion-mounted motor. \$56.95 list. — SEE NEXT PAGE →

... for Your Ceilings too!

Instant Heat and Ventilation

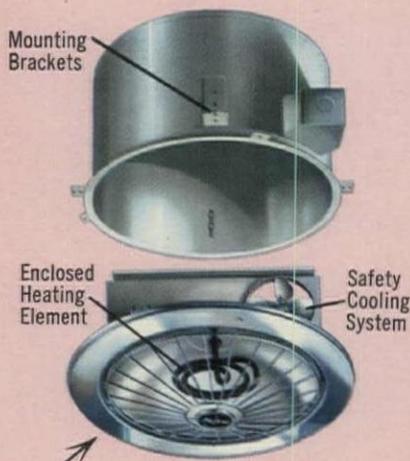


HEAT-A-LITE #9010

Circulating Heater plus light. New flush with ceiling design. Thermal protected. \$49.95 list

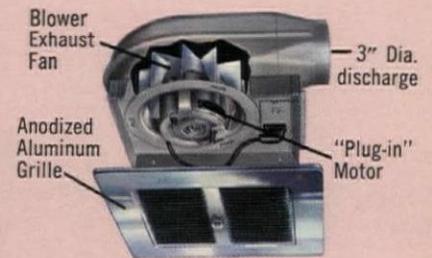
HEAT-A-VENTLITE #9090

Heater plus Light plus Exhaust



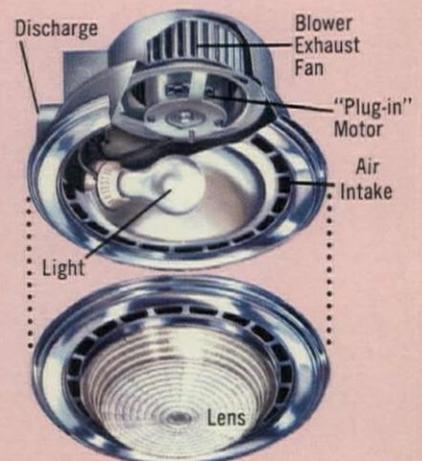
RADIANT HEATER #9200

The perfect answer for fast, effective, safe bathroom heat. Radiates healthful Infra-Red heat throughout the bathroom. Thermal protected. \$26.95



BATHROOM FAN #8330

Fits in Ceiling or in 4" Wall . . . for draft-free, odor-free and moisture-free bathroom. New cushion-mounted blower fan is super quiet. \$23.95 list



VENT-A-LITE #8660

Exhaust Fan plus Ceiling Light both for cost of a single unit. Blower is quiet . . . exhausts just the right amount of air without chilly drafts. \$36.95 list



FREE CATALOGS Write NUTONE, Inc.

Write Dept. HH-8, Cincinnati 27, Ohio

The Most Dependable Electric Heating and Home Ventilation

← See Other Side

All products shown are protected by U. S. Patents

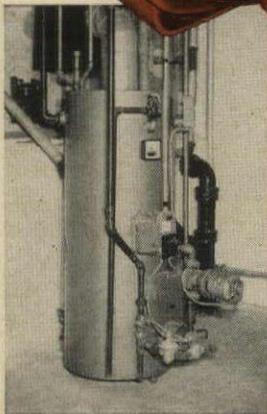
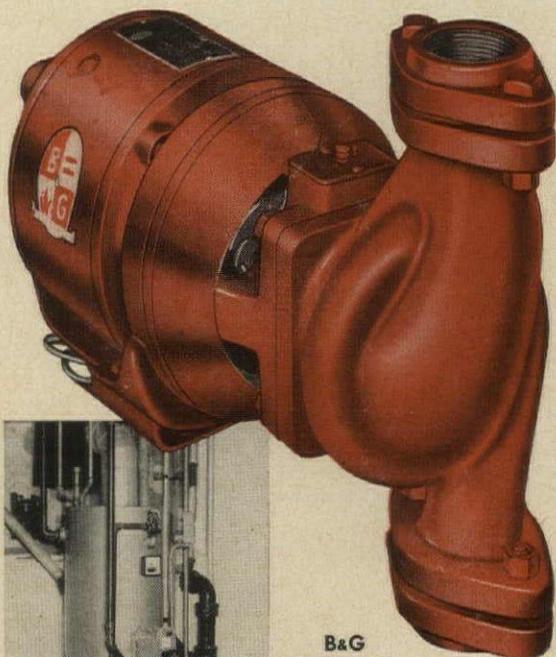
to custom-built
or mass produced
homes, **B&G**
Hydro-Flo[®]
HEATING
ADDS EXTRA VALUE



Designed and owned by Mr. Harry Weese, Chicago architect, this home was selected for "Record Houses of 1960".



300 Hydro-Flo heated homes in this development were sold over one week-end.



**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. Hydro-Flo equipment can be installed on any hot water heating boiler.

To homes built without regard to cost, B&G Hydro-Flo Forced Hot Water Heating brings comfort which matches the highest standards of design and construction. Where homes are built to sell competitively, B&G Hydro-Flo Heating adds distinction which gives them a strong selling edge over less adequately heated homes.

A builder who is installing B&G Hydro-Flo Heating in thousands of homes says this—

"In deciding on this type of heating, we were guided by the need in this highly competitive market for a feature of outstanding sales power. Radiant heating, with its sun-like warmth can't be equalled for genuine comfort and cleaner, quieter operation. Its warm, draftless floors guard against usual winter ills."

"Hydronic Homes" Sales Promotion for Builders

Every builder should see this presentation! There's no obligation in getting the facts on this comprehensive program of ideas and sales helps for utilizing the outstanding and exclusive advantages of hydronic* heating. Write, phone or wire today.



**Modern hot water heating.*

BELL & GOSSETT
C O M P A N Y

Dept. GH-10, Morton Grove, Illinois

Canadian Licensee: S. A. Armstrong, Ltd., 1400 O'Connor Drive, Toronto 16, Ontario



Interiors by Charles Anna Marsh
Photographs by Hulin of Alderman Studios

For above doors, specify Float-Away "Colonial," 8'-0" height, any width required.

Does **\$14.97** Extra Profit per Closet Installation Interest You?

With a pre-packaged Float-Away door . . . 20 minutes time . . . a hammer and screw driver . . . you can make \$14.97 additional profit on every closet you build. Float-Away metal closet doors completely eliminate unnecessary framing, wall finishing, costly labor. Write or wire collect today for proof of the Float-Away profit story.

FLOAT-AWAY

1173 Zonolite Road, N. E.



DOOR COMPANY

Dept. H-84

Atlanta 6, Georgia

Float-Away metal closet doors are made to fit all standard modular openings — available in Flush Panel, Louver or Colonial, prime coated — also prefinished Lavan and Birch. Five-year guarantee.

DAVE FOX, FOX and JACOBS CONSTRUCTION CO., DALLAS says...

"Foodarama has tremendous appeal for women"

"In Fox and Jacobs model homes, we insist on outstanding furnishings—both to interest prospects and to reflect the basic quality of construction. That is why we feature the Foodarama by Kelvinator in our model kitchens. In our opinion, Foodarama is the

outstanding product in the refrigeration field. We believe it has tremendous appeal for women particularly. They seem to love the idea of having a 12 cu. ft. refrigerator and a 6 cu. ft. upright freezer right in the kitchen—all in just 41 inches of wall space."



ONE OF THE NATION'S TOP BUILDERS, Dave Fox and his partner, Ike Jacobs, have won national recognition with eight major building awards. Mr. Fox is now the National Chairman of the Merchandising Committee of NAHB.



No ordinary refrigerator helps sell homes like Foodarama by Kelvinator!

Builders are reporting exciting sales results with Fabulous Foodarama by Kelvinator. And with all its terrific sales appeal, it's actually priced lower than

many ordinary refrigerator-freezers! Write or wire today for the special Foodarama Builder Plan. Let Foodarama help sell your homes.

there's a Sales Plus for you in every appliance made by

Kelvinator

Division of American Motors Corp., Detroit 32, Michigan

Refrigerators • Electric Ranges • Automatic Washers • Clothes Dryers • Home Freezers • Disposers • Room Air Conditioners • Dishwashers • Electric Water Heaters • Dehumidifiers



RUBEROID gives you quality where it will be seen!



FRED C. SPROUL, Sproul Homes Inc., Colorado Springs, Colorado: "Here at Sproul Homes we believe the picture a home buyer gets the moment he drives up to a house is worth a thousand sales words. That is why we desire both quality and appearance in our roofing and sidewalls. Use of RUBEROID roofing and siding lets the buyer know right away that Sproul Homes specialize in

quality construction. And the way RUBEROID products stand up over the years helps Sproul Homes build their reputation while building sales."

RUBEROID[®]

500 FIFTH AVENUE • NEW YORK 36, N.Y.

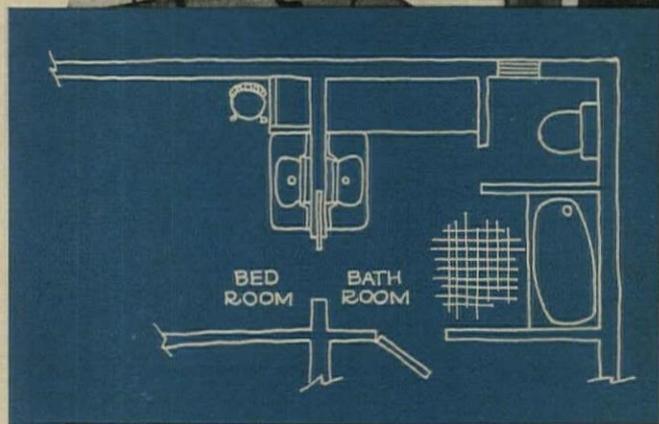
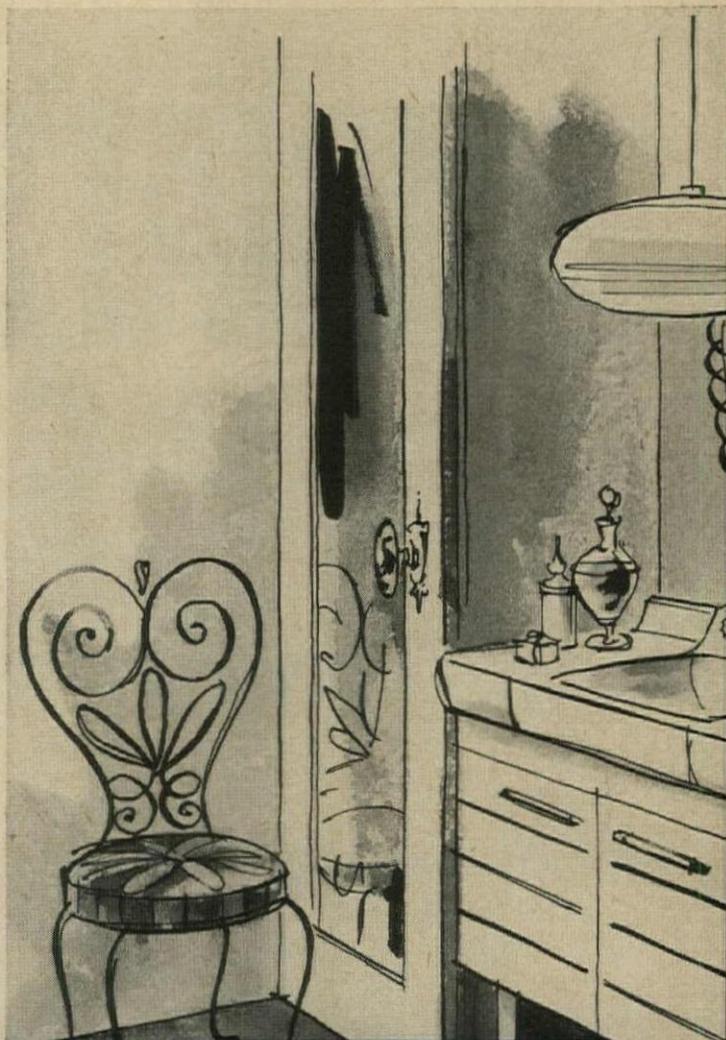
WHAT'S THE BIG IDEA?

What are the big ideas in your latest bathrooms? Are they ordinary rooms? Or are they "idea" rooms that cash in on the growing trend to extra convenience and beauty...the trend that is making bathrooms the most newsworthy rooms in the home. Bathrooms are the only completely furnished rooms in the homes you sell. When designed with imagination, they are second to no other rooms in their appeal to buyers...and in the way they can set your homes apart from other models.

HERE ARE SOME WAYS TO PUT BIG IDEAS INTO YOUR BATHROOMS...

IDEA: STOP PROSPECTS WITH AN ORIGINAL USE OF FIXTURES

Imagine the luxury look of a bedroom that has a dressing table with storage space and the convenience of running water. A Gracelyn cabinet-lavatory does the trick. Install it back to back with another Gracelyn in the bathroom, to cut piping costs. Buyers stop, look and remember your new home when you feature this Norwall wall-hung toilet. It makes a bathroom look bigger and makes cleaning easier.

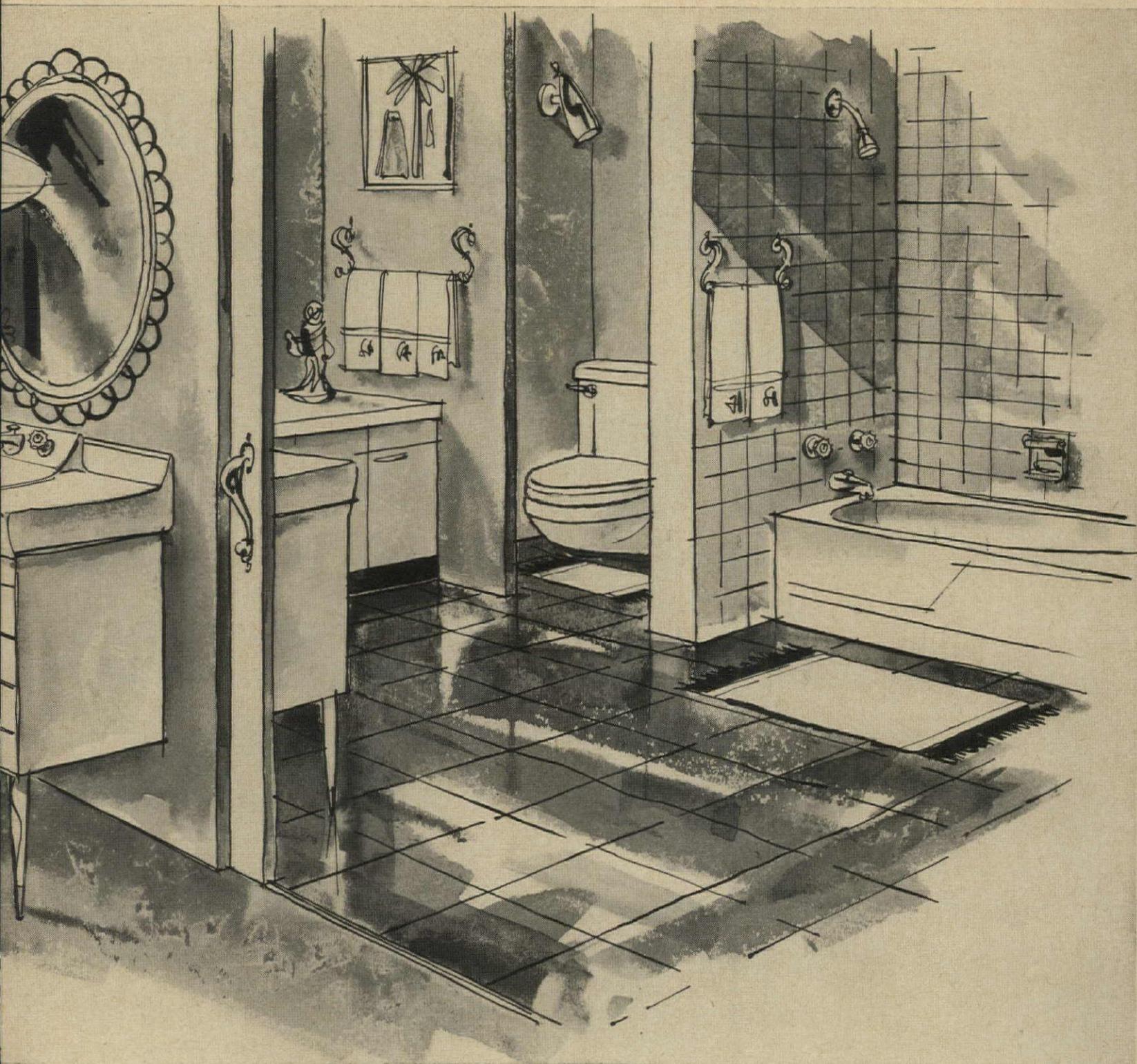


IDEA: PLAN A BATH WITH CHILDREN IN MIND

Install fixtures that are easy for children to use. For example: The Restal receptor bath has sides 4" lower than most tubs—making it easy for Junior to step in and easy for Mom to bathe him. The Restal is an ideal shower bath for anyone. Side-by-side lavatories can be placed at different heights (or a fold-out step installed) for children of different sizes. The 14'x 14" Dentaledge can be an extra lavatory just for brushing teeth. Here's a way to "customize" a home without adding extra cost.

IDEA: ADD A BATH WITHOUT ADDING SPACE

You can find space for the extra bathrooms people want without increasing floor area. Check your plans, and you will find that space. Example: The end of a hall plus the corners of two adjacent bedrooms can become a bathroom, with doors to each room. Example: Build a mud room off the kitchen or as part of the utility room, with a space-saving Viking corner lavatory. Example: Install a powder room, or half bath, under the stairs leading to the second floor or under the basement stairs. Use a Compact



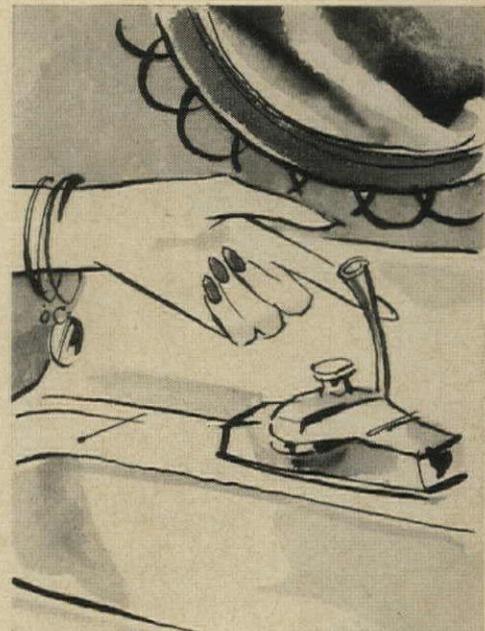
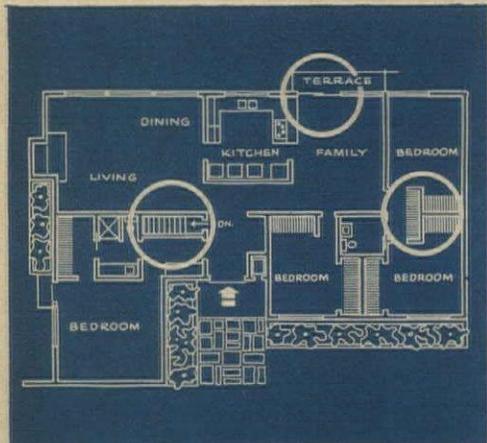
toilet and a small cast iron Ledgemere lavatory. The space is there when you look for it. Why not build in the solid sales appeal of an extra bathroom or half bath?

IDEA: TOP OFF THE BATHROOM WITH GLAMOR

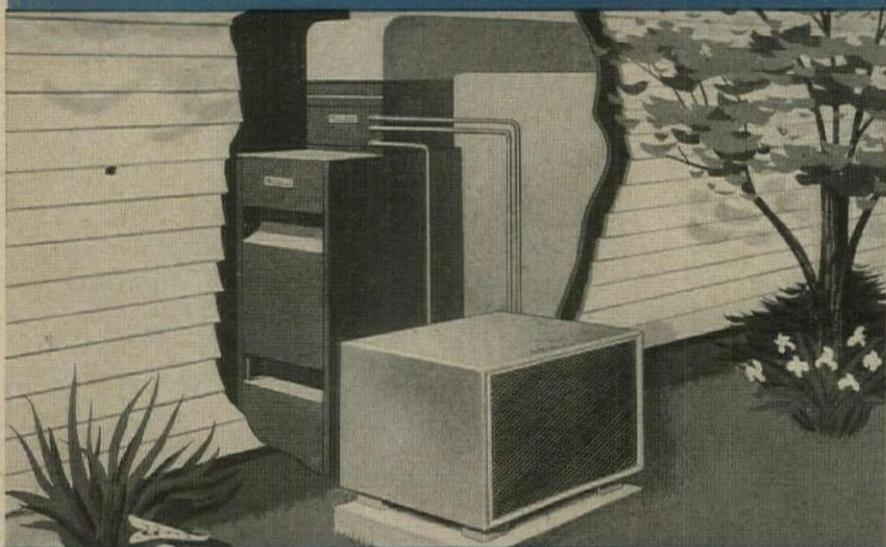
A single-lever lavatory faucet will catch the eye of model-home visitors. Place a sign nearby that encourages them to try the fingertip control. Nothing of comparable size packs the interest and convenience of this glamorous American Standard fitting.

IDEA: BATHE YOUR BATHROOMS IN COLOR

Get professional help from your American-Standard representative. He has decorating schemes planned around fixture colors, with samples of tiles, flooring, walls, towels, shower curtains and a brand-name list that's a helpful buying guide.



WHAT'S NEW FROM AMERICAN-STANDARD?



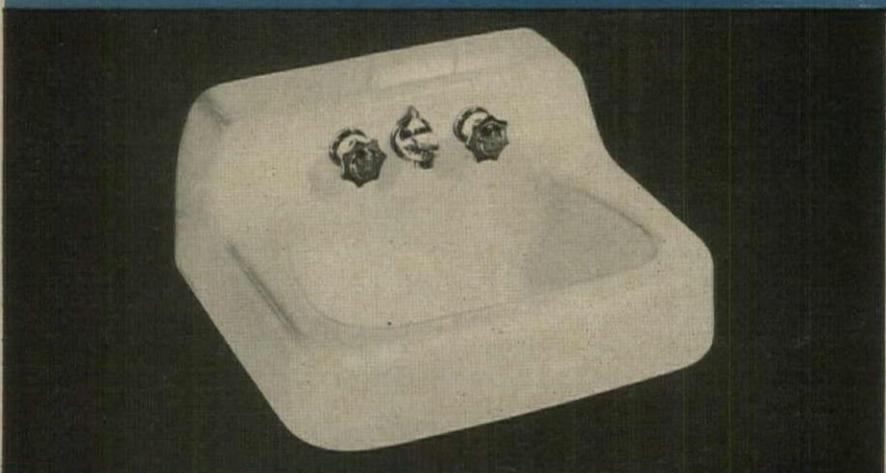
IDEA: NEW GAS FURNACE DESIGNED FOR HEAVY COOLING LOAD

This new gas-fired furnace is designed to handle the extra volume of air required for air conditioning in warmer climates. A real space saver, it fits in an alcove, closet, under stairs—almost any place. The typical basement installation shown has a cooling coil on top of the furnace connected to an American-Standard condensing unit outdoors. The furnace arrives assembled, wired and tested, ready to hook up and start up. All at a price below many units with fewer features.



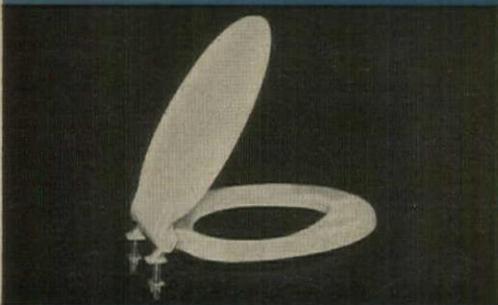
IDEA: TWIN APPLIANCES COOK THE DINNER—WASH THE DISHES

Youngstown Kitchens' beautifully matched Diana Oven-Range and Dishwasher-Dryer are "built-ins"—with quality built in. The Oven-Range installs in minutes, as easily as a base cabinet. It's versatile, too—range top and oven can be installed for use as one unit or separately, giving you maximum flexibility. The new 24" dishwasher features vinyl-coated racks with capacity to wash and dry service for ten. Both come in Monterey Beige, Chrome, Antique Copper and White.



IDEA: NEW LAVATORY HAS TRIM LINES—COMPETITIVE PRICE

The New Ledge wood lavatory of durable enameled cast iron has the smooth, modern lines so popular today. It is attractively priced, too. The Ledge wood features a deep, roomy bowl, anti-splash back, hidden front overflow, handy back shelf and gently rolling rim. Available in a variety of decorator colors and white, and in 19" x 17" and 22" x 19" sizes.



IDEA:

CHURCH SEAT and cover snap off, without removing hinge posts, for easy cleaning. Seat No. 300 is smartly designed and has a streamlined cover. Both of high-impact plastic in white and colors.

For more information write to:

AIR CONDITIONING DIVISION
40 West 40 St., New York 18, N.Y.

PLUMBING AND HEATING DIVISION
40 West 40 St., New York 18, N.Y.

C. F. CHURCH DIVISION
Box 471, Holyoke, Mass.

YOUNGSTOWN KITCHENS DIVISION
University St., N.E., Warren, Ohio



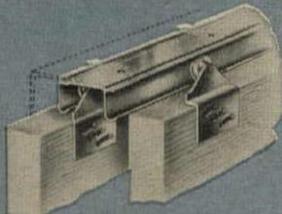
AMERICAN-Standard and Standard® are trademarks of American Radiator & Standard Sanitary Corporation

AMERICAN-Standard



**HOW MANY
HOMES COULD
YOU SELL,
IF YOU PAINTED
ALL OF THEM
BLUE?**

ANOTHER NEW PRODUCT FROM
National Hardware



SLIDING DOOR SET

Designed for quick and easy installation; eliminates those irksome call backs. Home buyers like the smooth, quiet action of the $\frac{3}{4}$ " diameter nylon rollers. No. 680 Sliding Door Set is adaptable for either $\frac{3}{4}$ " or $1\frac{3}{8}$ " doors. Separate fascia is optional.

National Hardware

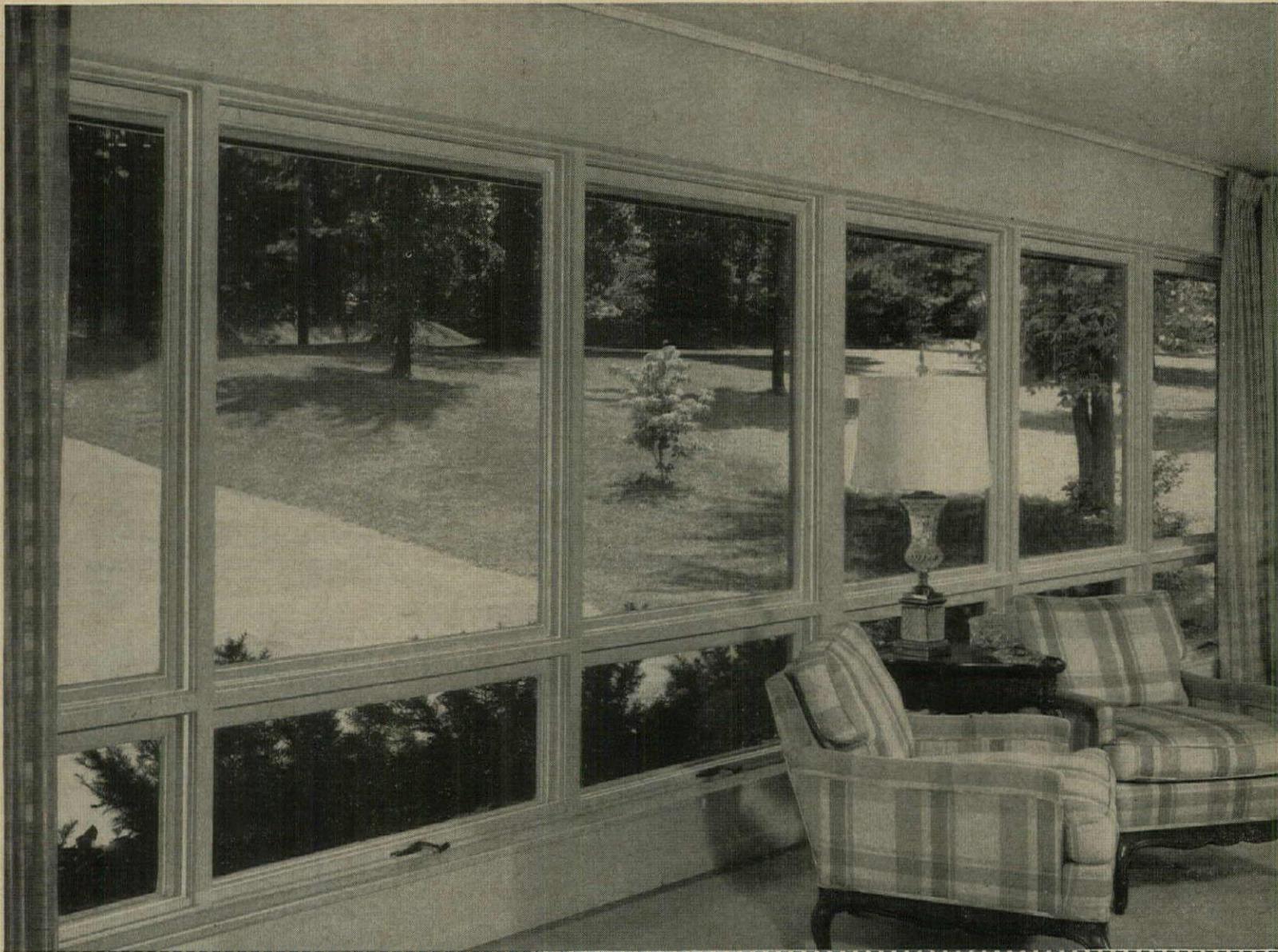
cabinet hardware gives you 21 different finishes to please discriminating buyers

Today's home buyer has some very definite ideas about color, style, and finishes. That's why so many builders choose National Mfg. Co. cabinet pulls, ornamental hinges, door butts and other items that help make a sales impression. You can please them all from the big selection of styles and finishes you will find at your National hardware dealer. Look for the familiar blue cartons . . . they're your guarantee that the hardware inside is quality you can rely on.

NATIONAL MANUFACTURING COMPANY

19008 First Ave.

Sterling, Illinois



*Put Andersen's creativity
to work for you!*



An Andersen Flexivent—
Hopper Style!



The same Flexivent—
Awning Style!

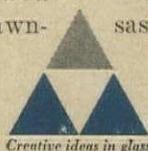


The same Flexivent—
Casement Style!

Flexivents® help you parlay builders' benefits into sales stimulants

Every so often, you find a building product of such excellence that it offers you significant savings . . . yet offers your customers feature after desirable feature. Example: the Flexivent window line—from the quality shops of Andersen!

Versatility is the key advantage of Flexivents. You can install each unit in any of three ways: as an awning, hopper or casement sash. You can use it alone . . . or in ribbons, stacks or an infinite variety of groupings. Its design is simple and clean.



So is its installation. So is its operation.

Wisely, Andersen glazes its Flexivent line with quality glass. When you demonstrate a Flexivent window, there'll be no disturbing flaws or distortions in the glass to mar your sales story!

The standards set by Andersen, and other leading sash manufacturers, are high ones. American-Saint Gobain, as a supplier of glass to practically all pre-glazed sash makers, is proud to serve the window makers of America.

ENTRANCE TREATMENT.
 Patterned glass panels framing the door let in natural light, add a feeling of hospitality and warmth—yet protect privacy. This glass is Doublex® by A-SG.



PRIVACY—AND PROTECTION. Alternate panels of Corrugated and Muralex® glass, framed in rich redwood, screen a patio against onlookers . . . and ward off unwanted breezes.



These creative ideas in glass
 add value far exceeding their cost

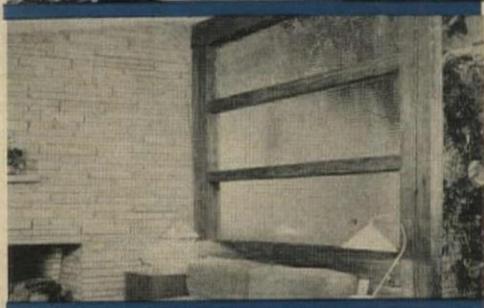
Time and time again, builders have discovered that decorative glass can be a powerful sales stimulant. 'Extras' like those pictured here are low in cost, yet highly merchandisable. In fact, functional glass can replace costlier installations. A Blue Ridge patterned glass wall, for instance, eliminates lathing, plastering and decorating on both sides . . . calls for far less labor.

The Blue Ridge glasses shown here are a small sampling from the dozens of available designs. If you wish, you can give a prospect his own choice of patterns . . . or individualize each of your houses by varying the patterns yourself.

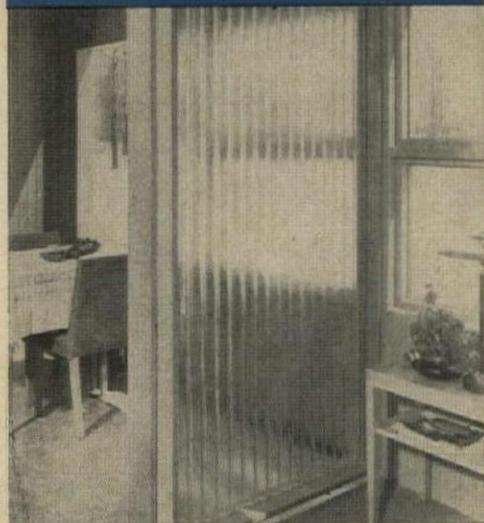
Whether you offer a dramatic expanse of glass or just a glamorous accent, remember: you'll find no broader line, no higher quality, than patterned Blue Ridge glass by A-SG! Contact your local glass jobber, or our district office nearest you.



ROOM DIVISION. A divider glazed with luxurious Velvex® separates living and dining areas . . . serves as a smart display for plants, bric-a-brac, glassware, etc.



LIGHT TRANSMISSION. Panels of Flutex® screen this living room from the street, yet admit plenty of light. Colors and shapes of the nearby planting come through too.



PARTITIONING. The rhythmic lines of Blue Ridge Corrugated glass give a striking drapery effect to this partition . . . make two rooms lighter, brighter, more spacious in feeling.



AMERICAN-SAINTE GOBAIN CORPORATION

Dept. HH-30, 625 Madison Avenue, New York 22, N. Y.

District Sales Offices: Atlanta • Boston • Chicago • Dallas • Detroit • Kansas City, Mo. • Los Angeles • New York • Pittsburgh • San Francisco

Put this
sales help
to work
for you.

Buyers
respect its
reputation!

IMPERIAL
MODEL FU-70



RCA WHIRLPOOL DISHWASHERS

provide the real work-saving
conveniences today's buyers demand!

Home buyers are becoming more demanding. Whirlpool is working with you by providing dishwashers with deluxe features buyers want such as:

- Built-in water heaters
- Capacity for up to 14 place settings
- Select-A-Door* front panels

plus four automatic dial settings with exclusive Dial-A-Cycle* control, two automatic detergent dispensers and automatic wetting agent dispensers. And RCA WHIRLPOOL Dishwashers are very *modestly priced*. There is also an RCA WHIRLPOOL companion Food Waste Disposer with quiet, positive action, three-position cover control and built-in reversing switch. It installs easily.

Mail coupon for full details

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

HH-8-0

Please send me complete information on the new RCA WHIRLPOOL Dishwashers and Food Waste Disposers.

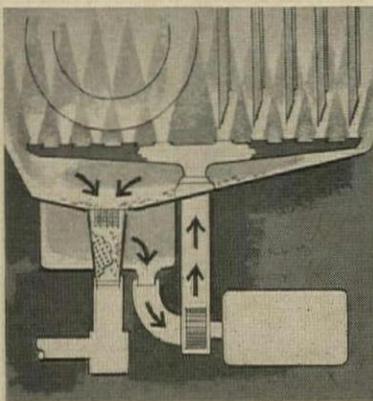
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Firm Name _____

Firm Address _____

City _____ Zone _____

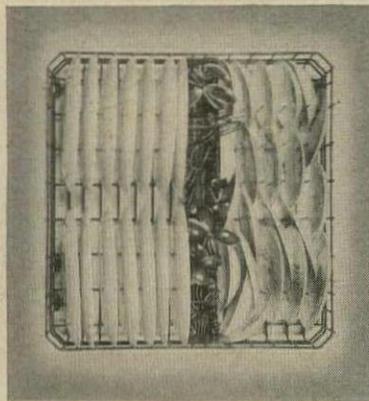
County _____ State _____



Filter-Stream Dishwashing ...

eliminates tedious scraping and pre-rinsing. Water is kept free of food particles by the Filter-Stream* system washing action that constantly filters the wash and rinse water.

*Tmk.



"Random-Loading" ...

racks that permit loading and intermingling of dishes in the most efficient manner for maximum capacity. It's almost impossible to load the dishwasher incorrectly.

Your family will love our family of home appliances

RCA Whirlpool

Products of WHIRLPOOL CORPORATION St. Joseph, Michigan



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



FOLLANSBEE STEEL CORPORATION
Follansbee, West Virginia

WILLIAM E. BOYD RESIDENCE, EL PASO, TEXAS
ARCHITECT: RAY PARRISH, SCOTTSDALE, ARIZONA
ROOFING CONTRACTOR: L. & K. SHEET METAL
ROOFING CO., EL PASO, TEXAS



Beautiful Roofing and Beautiful Dreamers

It used to be that the roof of a house was a very unimaginative thing—installed mainly to afford protection against the elements. It was given little consideration in the overall aesthetic expression of the house.

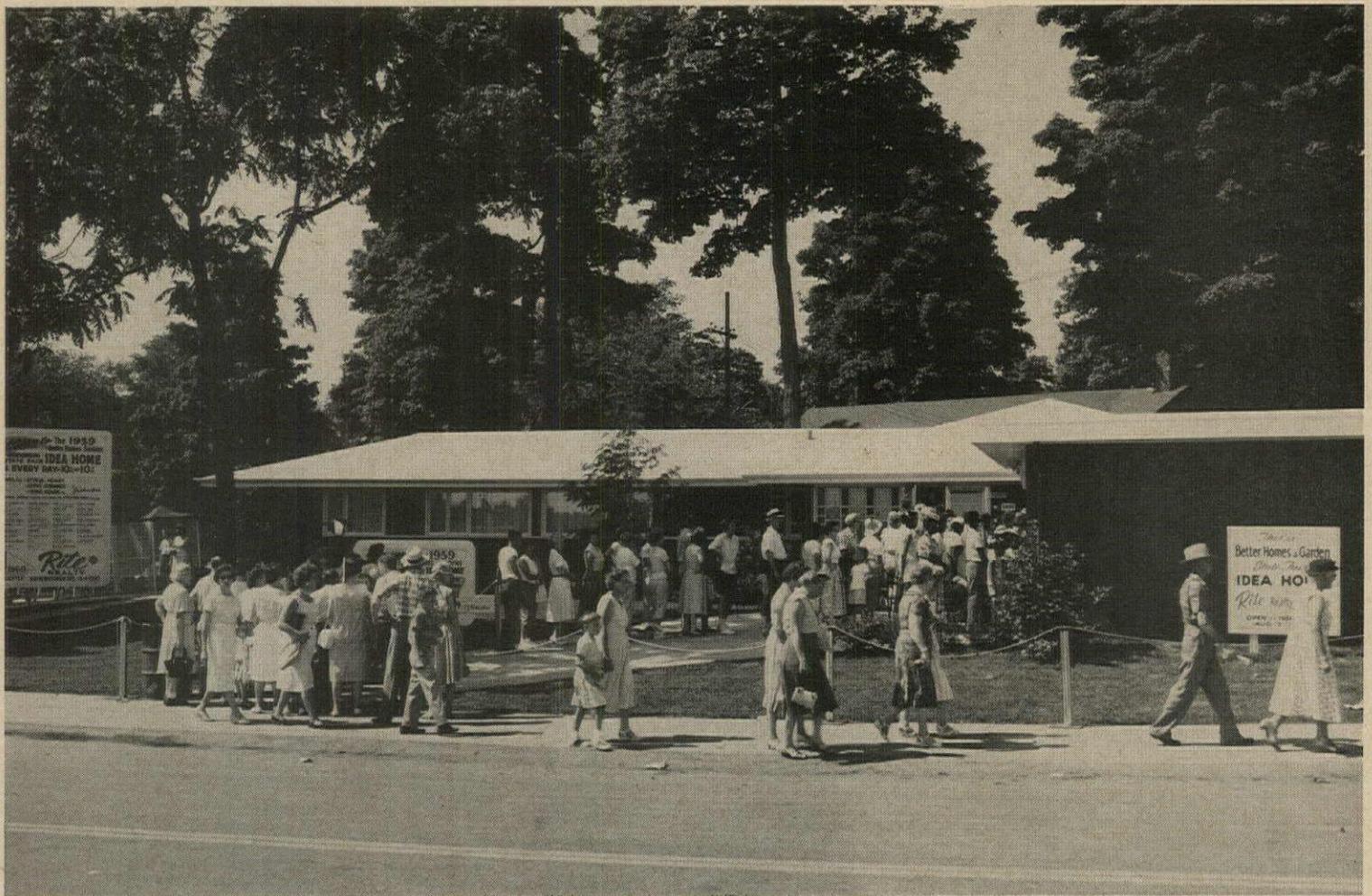
Then, a number of beautiful dreamers—architects and builders who felt that the roof was a significant design feature—began to design roofs that became the focal point of the house's beauty.

Follansbee Terne, an architectural roofing metal, has been used as the roofing material for many of these houses because its use places no limit on the imagination of the designer. Terne is versatile, allowing the desired expression of form, function and color because it can be applied in so many ways.

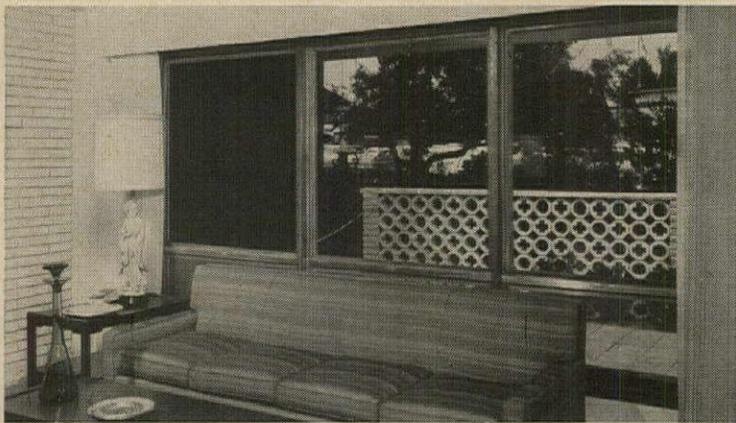
Follansbee Terne is a very practical roofing material, too. Properly installed and painted, it will last more than a lifetime. It can be painted any color, any time, to harmonize with other aesthetic changes. Painted a light color, it will reflect most of the sun's heat. And Follansbee Terne is completely fireproof.

Materializing a beautiful dream with Follansbee Terne is the practical way to a distinctive roof—one which makes a house an outstanding and beautiful structure. If you do not have the latest information on Follansbee Terne, we would be very pleased to send it to you.

Follansbee is the world's pioneer producer of seamless terne roofing.



MODEL HOMES ARE BETTER HOMES WHEN YOU USE



Let your creative desires take over . . . and you'll find a Qualitybilt window treatment available to match every inspired idea perfectly! The builder of this model home did!

Hundreds of delightful combinations like this model home kitchen and dining room can be created from Qualitybilt's complete line of over 120 types and sizes of units!



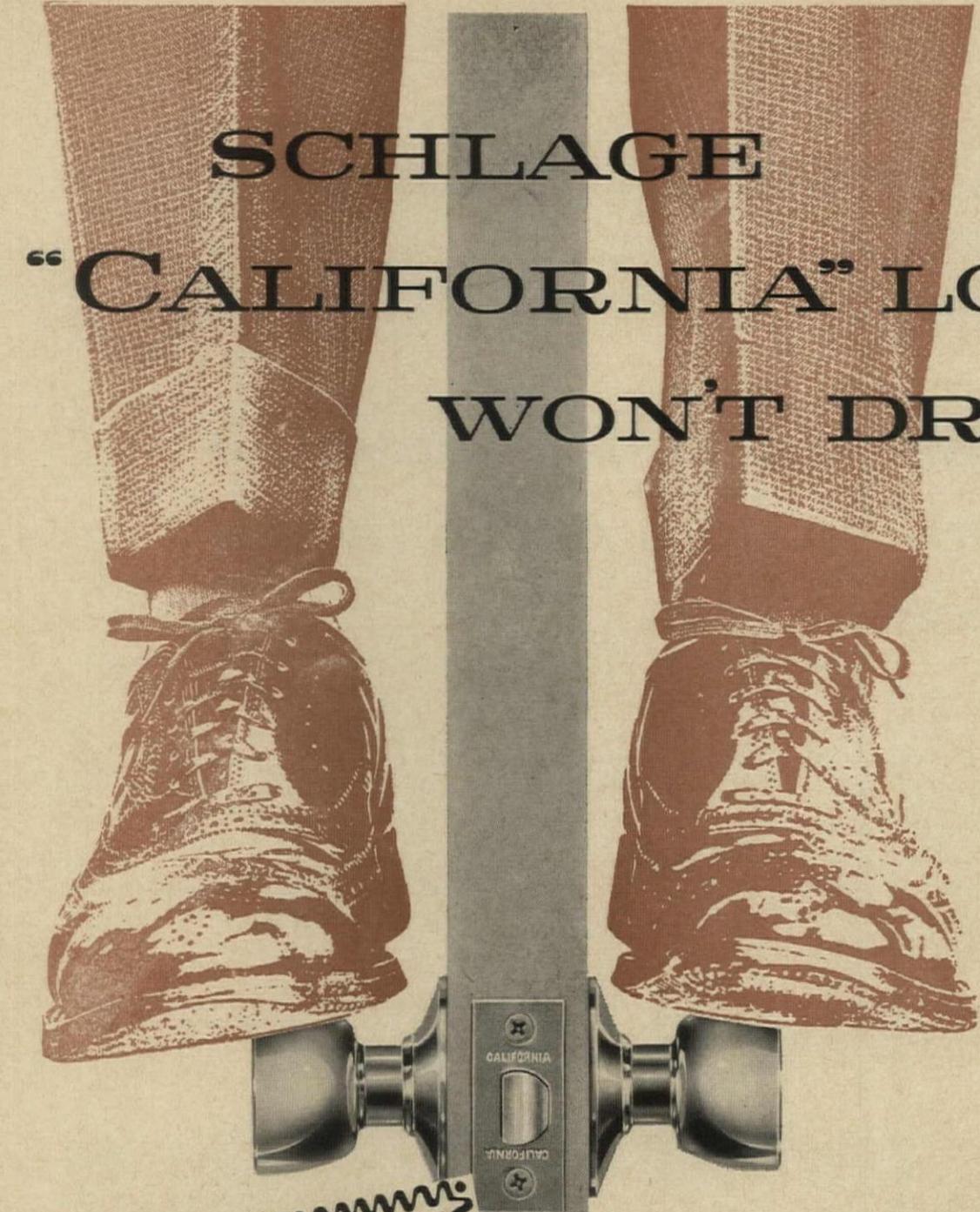
Qualitybilt WOODWORK

Successful home builders know that the *only* way to sell more homes . . . profitably . . . is with new ideas, like this well-attended Better Homes & Gardens IDEA HOME in Milwaukee, Wisconsin. The imaginative use of Qualitybilt Kitchens, Windows, and Millwork in this model home stimulated the interest of home prospects tremendously . . . put them in a buying mood. Best of all . . . these builders have found that Qualitybilt lets them sell *Quality* without the usual extra price tag.

Why don't you plan to capture more home prospects with Qualitybilt! Your nearby Qualitybilt distributor can show you how!

FARLEY & LOETSCHER MFG. CO.
DUBUQUE, IOWA

ENTRANCES / DOORS / FRAMES / SASH / BLINDS / CASEMENTS / SLIDING DOORS
SCREENS / COMBINATION DOORS / STORM SASH / MOULDINGS / INTERIOR TRIM
SASH UNITS / LOUVERS / KITCHEN CABINET UNITS / CABINET WORK
STAIRWORK / DISAPPEARING STAIRS / "FARLITE" LAMINATED PLASTICS.



SCHLAGE "CALIFORNIA" LOCKS WON'T DROOP

MADE, TESTED, AND
GUARANTEED BY
SCHLAGE®

"California" locks are manufactured by the Schlage Lock Company. Competitively priced, they are precision made and pre-tested to meet Schlage's exacting standards, and every "California" lock carries the same guarantee as the famous Schlage Cylindrical Lock.

Schlage Lock Company
San Francisco • Chicago
Los Angeles • New York

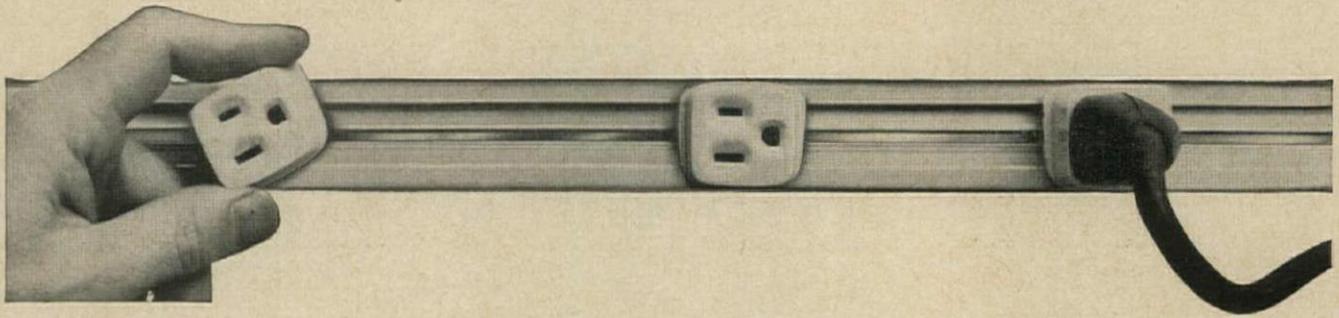
LOOK HOW STRONG! A 200-pound man can stand on the knobs of a "California" lock without causing the slightest damage. That's because this lock has far and away *more bearing surface* than average. In each knob of a "California" lock the spindle is supported by *two* bearings spaced scientifically for maximum strength. Result: no droop.

It's one of the reasons "California" locks are so trouble-free, and why they save you a big part of their cost by eliminating call backs.

All "California" locks have cold rolled zinc-dichromated steel parts, compression springs, and non-ferrous trim. They can be installed in a 2" or 2½" lock hole, are self-aligning, and can be adjusted to varying door thicknesses with equal knob projection. Available in Tulip and Plymouth designs, in bright brass, dull bronze, brushed aluminum.

"California" locks are ideal for interior use on development homes—perfect companions for the famous Schlage wafer key cylindrical locks.

The low-cost interior lock for community developments



Electrical outlets aplenty!
More flexible office layout
with new 3-Wire Electrostrip PATENTED ®

New 3-Wire Electrostrip® grounds office machines . . . gives you handy outlets you can move.

Here's absolute electrical safety combined with an abundance of outlet convenience. New 3-Wire Electrostrip is UL listed and meets the electrical code requirements for equipment grounding. Electrostrip outlet receptacles twist into place *anywhere* on the strip. When you relocate machines, you can relocate outlets right where you want them!

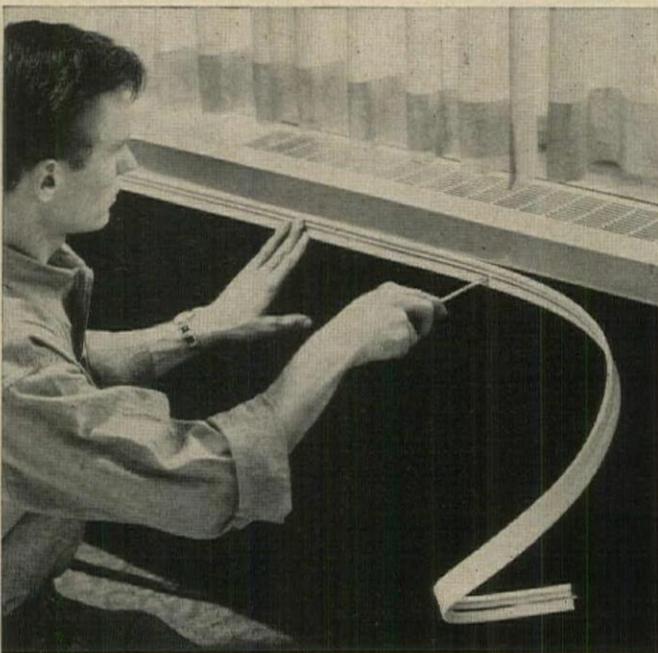
See your electrical contractor about 3-Wire Electrostrip. He'll install it swiftly, economically—without mess, with-

out disrupting work schedules. Electrostrip is the safe, modern system for wiring offices, showrooms, shops and institutions. It provides electrical outlets aplenty!

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



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



Installs quickly on wall surfaces



Outlets anywhere you need them

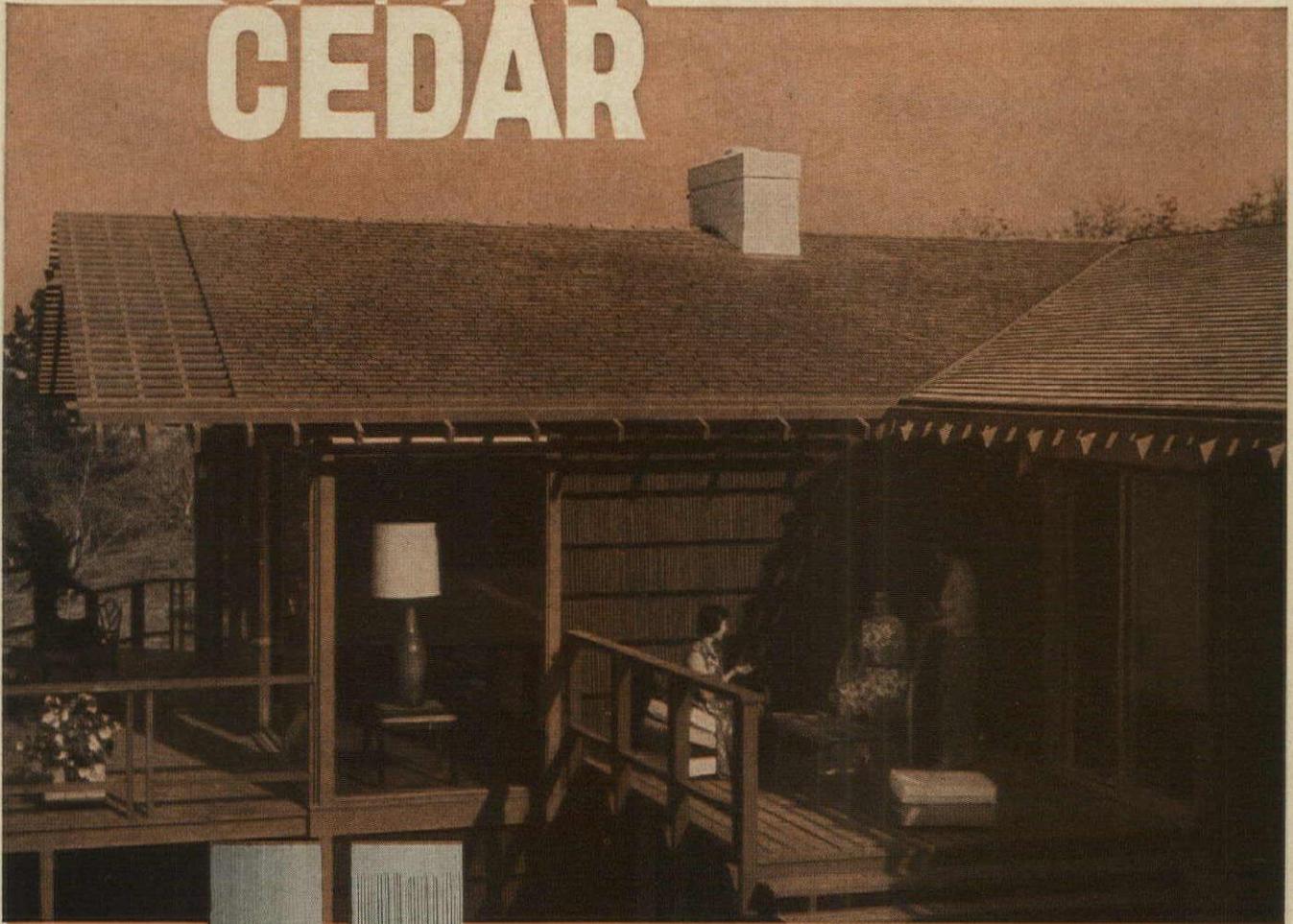
*pride
is part
of the
purchase*

How a house looks usually determines how it will sell.

That's why so many successful builders feature genuine cedar shingle roofs and cedar shake walls. Because pride of ownership is a mighty potent force.

And pride begins with exterior appearance. The natural character and unmistakable thickness of a cedar shingle roof...the rich shadow-lines, deep-etched striations and cheerful factory-applied colors of cedar shake walls... appeal to that pride of ownership. When you build with cedar, you build with pride.

**CEDAR
CEDAR**



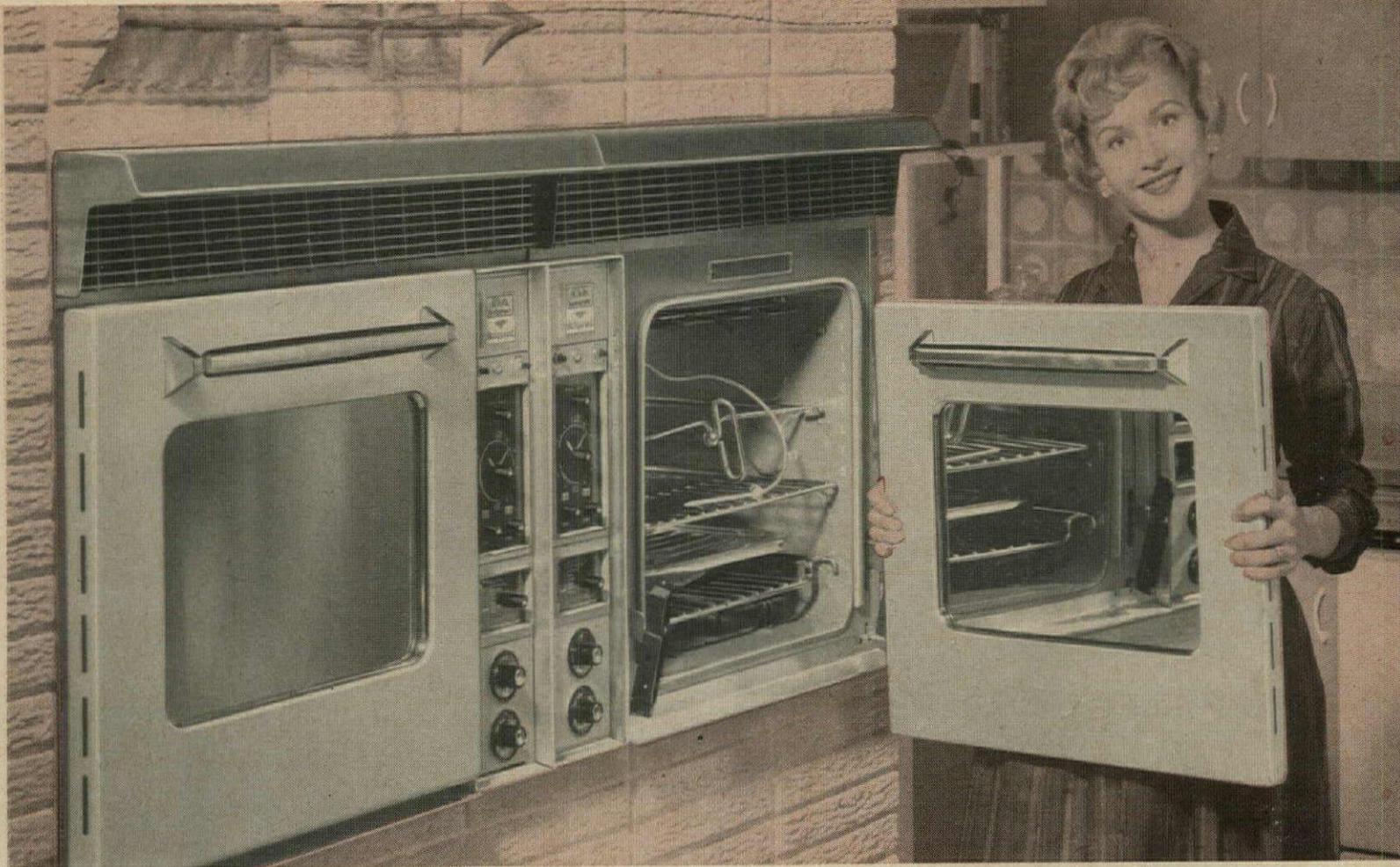
For complete application details see your Sweet's File, or write...

RED CEDAR SHINGLE BUREAU

5510 White Building, Seattle 1, Washington
550 Burrard Street, Vancouver 1, B. C.



Only **Hotpoint** gives you so



Model RJ76-A right-hand control panel

Model RJ77-A left-hand control panel

Only Hotpoint **Custom CREST** Ovens give you all of 1960's newest, most exciting features

NEW hood-fan automatically removes cooking odors during broiling and barbecuing.

NEW control panel comes mounted on side that fits your kitchen plan best.

NEW ventilation system circulates more even heat over every inch of each shelf for better baking.

NEW mirrored window gives a clear view inside when oven lights are on, but with them off the window acts as a mirror, hiding the oven interior.

NEW full-width door lifts off; new chrome floor liner, oven units and broiler spatter guards remove for faster, easier oven cleaning.

PLUS—Rota-Grill for recipe-perfect barbecues, Roast-Right Meat thermometer for just-right roasts.

Model RU75-A



New Hotpoint **Custom CREST** Surface Section with Cook Book Controls and Calrod® Recipe Heat Units

Now you can offer your prospects an end to cooking guesswork and an aid to recipe-perfect meals every time. One glance at Hotpoint's simple Cook Book instructions on the control panel shows how to enjoy the easiest cooking ever. One touch of a button lets your customers cook with Recipe Heat . . . heat as accurately measured as the ingredients of any recipe. And with the temperature-controlled Supermatic unit any pot becomes an automatic cooking utensil.

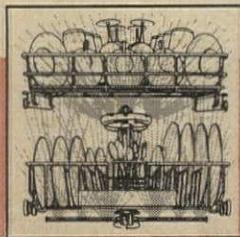
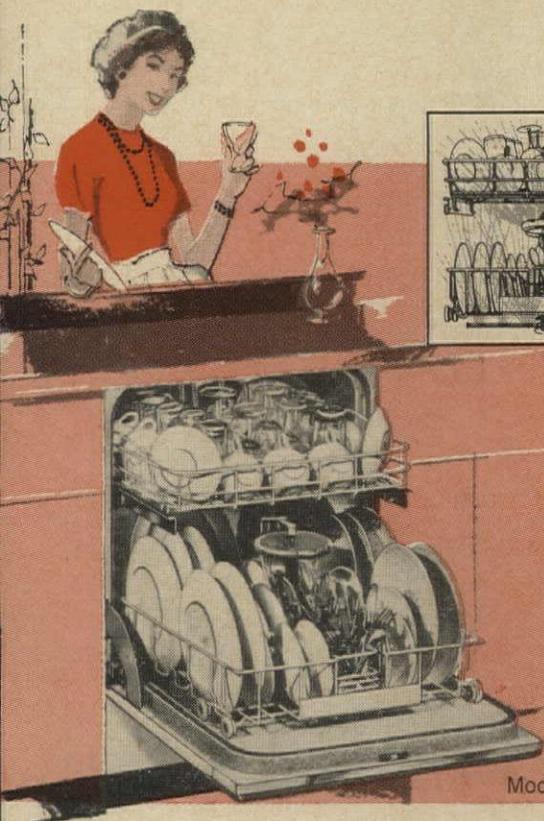
much MORE TO SHOW

MORE TO SELL

in the showplace of your home

Selling homes is really a "show" business and Hotpoint's business is to give you more to show and more to sell. That's why 1960 Hotpoint built-ins have more exciting, sales-boosting features than ever before. Features that say quality and better living the minute your prospects see them. Features that put new beauty and convenience in the showplace of your homes—the kitchen.

Never before has Hotpoint offered you so many models to choose from—all competitively-priced so you can build famous Hotpoint quality and convenience into even your moderately priced homes. And Hotpoint built-ins are available in four colors, classic white, stainless and brushed-chrome finish. Put the extra salespower of 1960 Hotpoint built-ins in your home today.



New Hotpoint Automatic Dishwasher with exclusive Double-Deck Washing Action

Only Hotpoint offers your customers a separate spray for each rack to wash dishes spotlessly clean. Top spray (1) washes glasses, dishes in upper rack, lower spray (2) scrubs away dirt from plates, utensils in bottom rack. Big front-loading Roll-R-Racks hold complete dinner service for 12. And Hotpoint's up-front connections mean faster, easier installation for you.

Model DE-1



Model MB65-A

New Hotpoint Disposall® is easier to install because plumbers helped design it

The Hotpoint Disposall food waste disposer installs fast—and it pulverizes and disposes of food waste quickly because of its super-hard cutting teeth and "jam-free" design.

When you build in Hotpoint you build in Public Preference

Hotpoint

LOOK FOR THAT DIFFERENCE!

A Division of General Electric Company, Chicago 44, Illinois



ELECTRIC RANGES • REFRIGERATORS • AUTOMATIC WASHERS • CLOTHES DRYERS • CUSTOMLINE® DISHWASHERS • DISPOSALLS® • WATER HEATERS • FOOD FREEZERS • AIR CONDITIONERS

The **ONLY** paneling
protected with the

**BRUCE
patented
finish**

USE Bruce-PlyWelsh hardwood paneling for walls that look their beautiful best when buyers visit your homes. Because it was originally developed for use on hardwood flooring, the PlyWelsh finish has maximum durability . . . is without peer in the paneling field. Scratch, mar and chip resistance are achieved with pressure impregnation and infra-red baking. This process makes the finish part of the wood itself, enhancing the natural beauty of grain and color for walls that look new for a lifetime.

Prefinished moldings to match

Matching moldings, panel stretchers, putty sticks and stains simplify installation and reduce your costs. Get the facts today from your local PlyWelsh distributor or write for literature. Welsh Plywood Corporation, Subsidiary of E. L. Bruce Co., 1680 Thomas St., Memphis 1, Tenn.



PLYWELSH

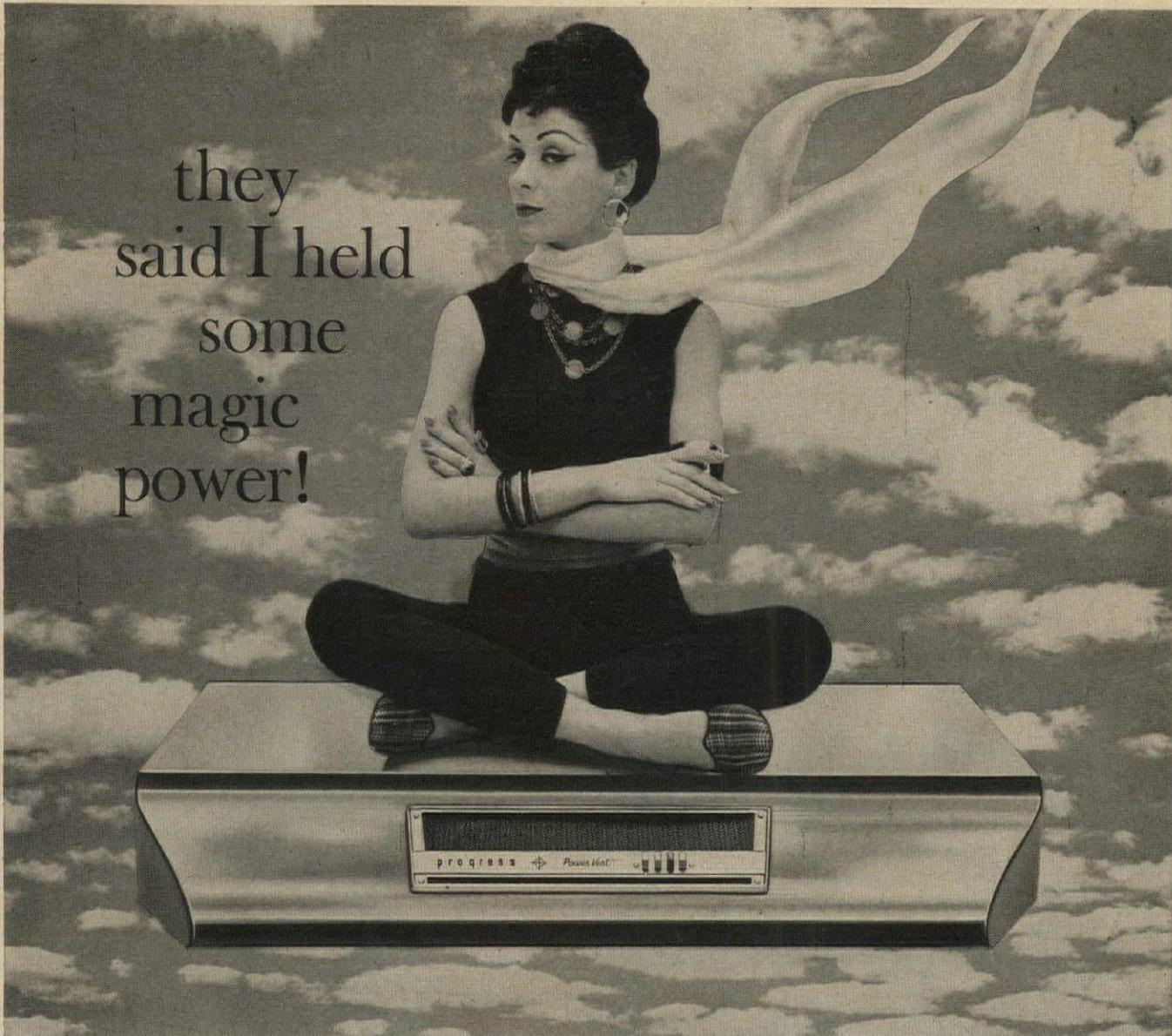
prefinished
**Hardwood
Paneling**



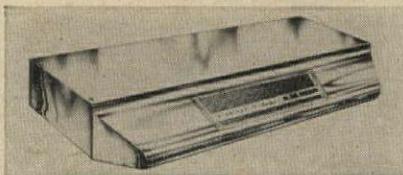
The finish won't chip off!

Bruce-PlyWelsh Antique Birch

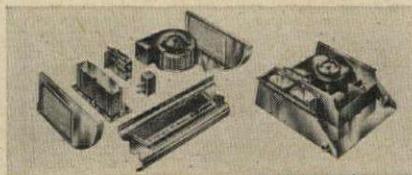
they
said I held
some
magic
power!



Forgive me if I'm carried away by my Progress Electronic Range Hood. Imagine a range hood that requires *no duct work, no charcoal filters, no complicated installation* that is magically electronic. That's my Progress Electronic Range Hood, engineered to outperform all previous ductless hoods. It works through electrostatic action that disintegrates millions of microscopic, grease-laden particles, neutralizes them. Then air is returned, purified! That, my friends, is science, not magic, but it all adds up to the same wonderful result. With the push of a button, smoke vanishes, grease and soot and cooking odors disappear. My kitchen becomes so fresh and sweet and cool I can close my eyes and imagine myself floating over a sun drenched field of mountain flowers! That's my Progress Electronic Range Hood.



PROGRESS ELECTRONIC HOOD
Available in three sizes and a choice of four finishes: Anodized Copper, Copper-tone, Solid Stainless Steel and Platinum. Superior performance.



EFFECTIVE FILTRATION
Blower fan draws smoke and soot particles across electrically charged ionizing grid, then to collector plate where they adhere. Air returns to kitchen deodorized, pure and clean.

PROGRESS MANUFACTURING CO., INC., Dept. HH-8, Philadelphia 34, Pa.
Please send me information about your Electronic Ductless Range Hood

NAME _____
COMPANY _____
ADDRESS _____

L-6

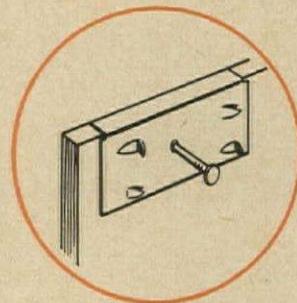


REPORT ON ASTM ACCELERATED AGING TEST #D-1037-56T:

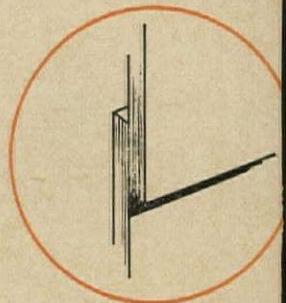
NO CRACKING • SPLITTING •



*Aluminum
fastener
eliminates
face
nailing!*



NOW YOU SEE IT!
Hidden fastener in place before
overlapping panel is applied.



NOW YOU DON'T!
Fastener cannot be seen after
overlapping panel is applied.

CHECKING OR SPLINTERING

of **Upson** Primed Siding in a LIFETIME * of outdoor exposure!

Here's the most durable, neatest looking and completely practical lap siding! And you can't buy a more economical siding, either. Upson Primed Siding is cut to uniform size—12" wide by 12' long. These precision dimensions permit exact layout. Edges are uniformly true and straight, too. Surface guaranteed knot free. No grain to raise or hide. Both surfaces and edges are primed for longer life. One side gray, one white . . . and this paint will positively not peel! Upson Primed Siding is waterproofed throughout. And the hidden aluminum fasteners (see illustration, left) not only eliminate face nailing and improve appearance, but provide automatic venting that prevents moisture build-up in the wall.

Our technical staff will gladly consult with you on your requirements. Phone, wire or write. The Upson Company, Upson Point, Lockport, New York.

*Here's proof! Read what brutal punishment Upson Primed Siding withstood during the ASTM accelerated aging tests estimated to be equivalent to 30 to 50 years of natural weathering. (The following six torturous steps were repeated six times.)



Soaked in water

1. One hour at 120°F.

Sprayed with steam

2. Three hours at 200°F.

Freezing storage

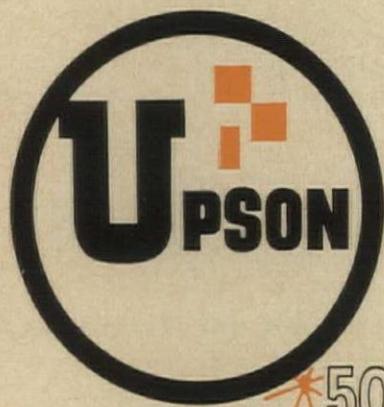
3. Twenty hours at 10°F.

Heated in dry air

4. Three hours at 210°F.

5. (Repeat of No. 2 above.)

6. Eighteen hours at 210°F.



*50th
YEAR

FREE

Please send me the FREE illustrated brochure about durable, strong and money-saving Upson PRIME SIDING and related Upson products.

THE UPSON COMPANY

180 UPSON POINT • LOCKPORT, N.Y.

NAME: _____

COMPANY: _____

ADDRESS: _____

CITY: _____

STATE: _____

THE UPSON COMPANY • UPSON POINT • LOCKPORT, NEW YORK

PRIMED SIDING • DUBL-BILT • TRIM-BILT • SOFFITS • ALL WEATHER • STRONG-BILT



HAR-VEY Bronze Hardware

has sales impact you can see and feel! Har-Vey's* beautiful 808 Facia Series adds new excitement to sliding door installations. Its delicate Bronze Tone blends naturally with traditional or modern decor and is a superb visual sales aid for your building.

Operation Its "matched" V-Groove track and Twin Nylon Roller Hangers guarantee you a lifetime of smooth, quiet door control.

Remember . . . for beauty and unexcelled operation, use Har-Vey's* Decorator Bronze 808 Series. *It sells for you.*

Write for Bulletin No. 27



beautifully quiet . . .



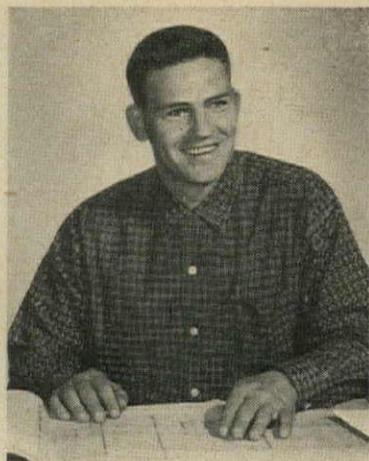
808 SERIES

**another great Homeshield product.*



©1960 by **AMERICAN SCREEN PRODUCTS COMPANY • CHATSWORTH, ILLINOIS**

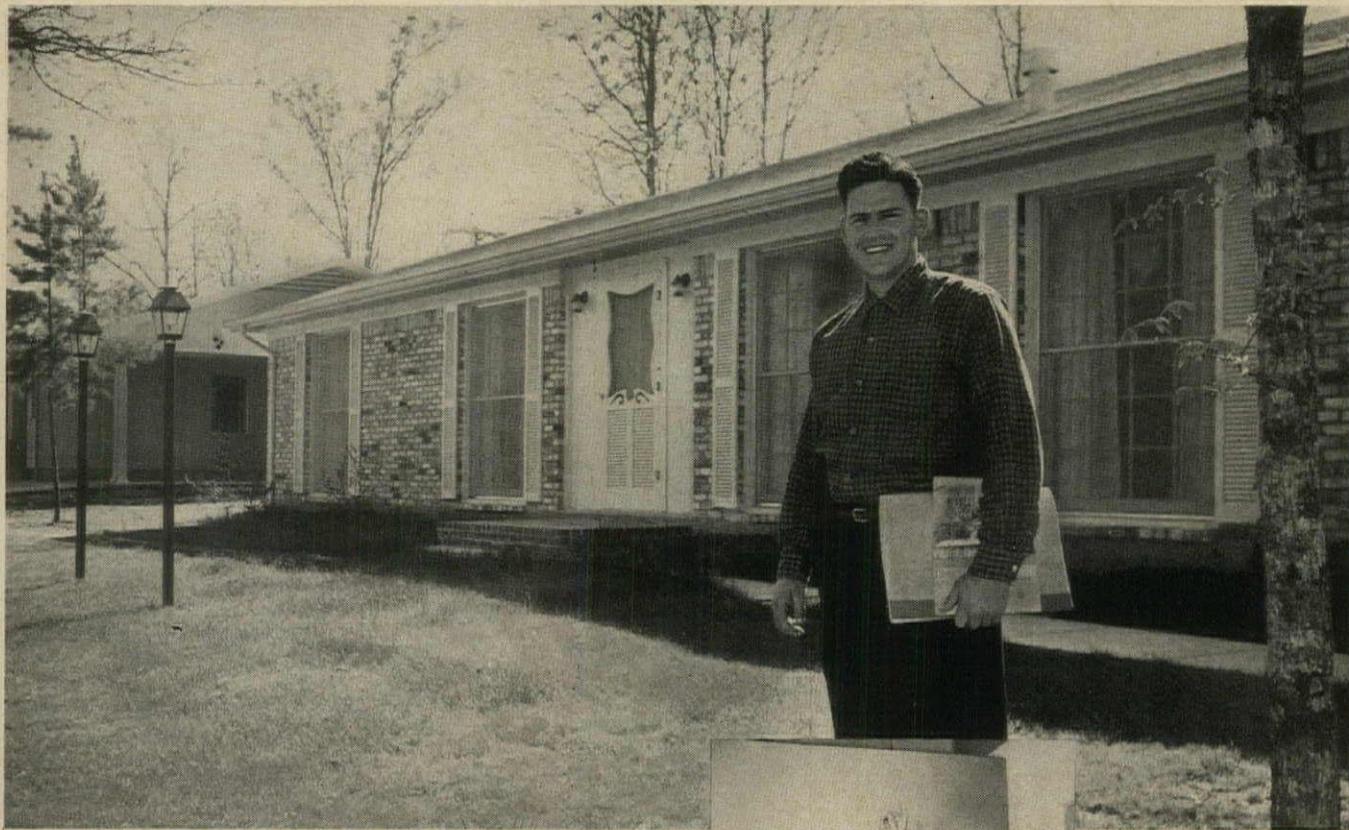
Air conditioning
helps sell homes—
the SUN VALLEY All-Year



*"Gas Cooling and Heating
Has Become Synonymous
with Quality."*

helps sell them faster because it's Gas!

Says Donald M. Arnold, Shreveport, Louisiana builder



FOR THE BUILDER—Homes sell faster with Arkla-Servel Sun Valley* All-Year® Gas Air Conditioning Systems! Most buyers today want quality, combined with economy. "That's what we give them in our Sun Valley Gas units," states Mr. Arnold, "plus efficiency, with no moving parts in the cooling-heating cycle to wear out."

FOR THE BUYER—All the comfort and the convenience of all-year Gas air conditioning! The buyer enjoys air conditioning in every room, yet monthly bills are lower than many pay to cool a couple of rooms with other type units. And the full 5-year warranty pleases both the buyer—and the builder. Comes in sizes to fit any house. For complete details, contact your Gas company or write Arkla Air Conditioning Corp., General Sales Office, 812 Main Street, Little Rock, Ark.

AMERICAN GAS ASSOCIATION



Mr. Arnold Shows a
Prospective Buyer The
Compact Arkla-Servel
Gas Unit.

ONLY **GAS**



does so much more...

for so much less!

*Trademark.

V
I
C
O

*Glazed Buckshot and
Large Random Ceramic Tile*

The Gracious Life
Of Ceramic Tile
Fashion... Made
Practical For Any
Setting... WALLS,
FLOORS...
INTERIORS And
EXTERIORS

VICO GLAZED BUCKSHOT

Now in new Designer Patterns. This Cushion-Edged, Finely Grained, Hi-Luster Tile is amazingly durable and even Frostproof. Mix or Match as preferred... can be color co-ordinated with any other VICO tile. Exclusive "Perfo-Mesh" backing for speed and easy installation. In 2 ft. by 1 ft. sq. sheets of 1 inch sq. tiles.

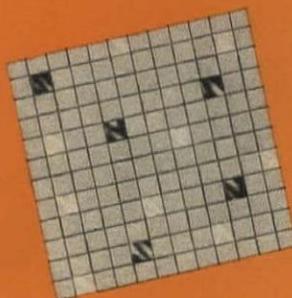
VICO UNGLAZED LARGE RANDOM

Assorted rectangular and square tiles are combined to make this Random Pattern. Satin-Smooth Surface in clear Luminous Colors. Cushion-Edged and Frostproof, Impervious to Liquids, and Permanently Durable. Available in 2 ft. by 1 ft. square sheets of 2" x 2", 1" x 2" and 1" x 1" tiles, backed with "Easy-Off" paper.



GLAZED BUCKSHOT

UNGLAZED LARGE RANDOM



Always Specify VICO Ceramic Tile, The Right Tile
To Suit Every Requirement, For Every Job!

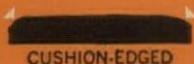
Contact Your Local Distributor For Samples, Prices,
And Further Information, Or Write Direct To:

**AMSTERDAM
CORPORATION**

285 Madison Avenue • New York 17, N. Y.



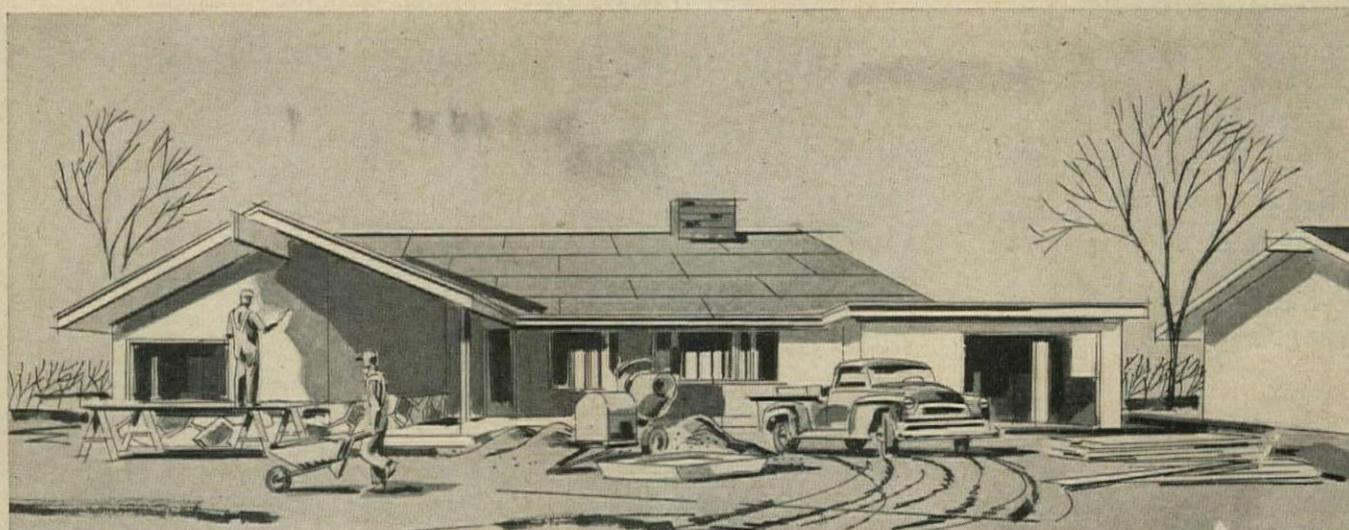
Awarded The Seal Of
Approval Issued By
The American Standards
Testing Bureau



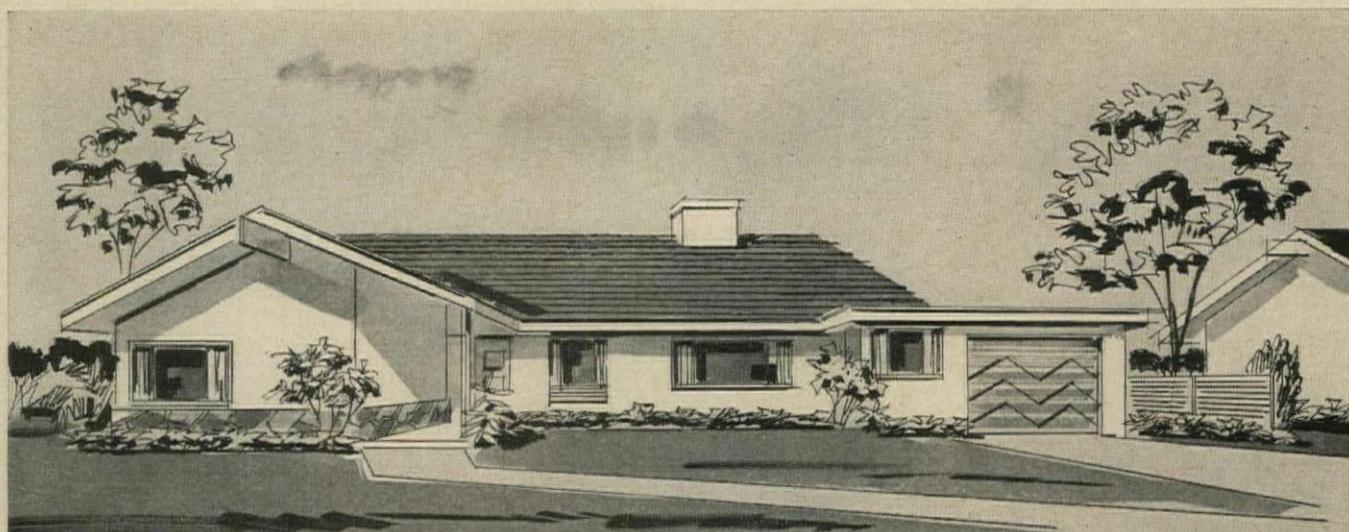
CUSHION-EDGED

VICO is a Reg. Trade Mark of the Amsterdam Corp.

built today...



sold tomorrow...



the key to sales and profits!

The recognized quality of genuine lath and plaster construction is the wise builder's answer to a customer demand for assurance of quality... will quickly turn prospects to buyers... will enhance the reputation of the builder who wants to be known as "the man to do business with"...

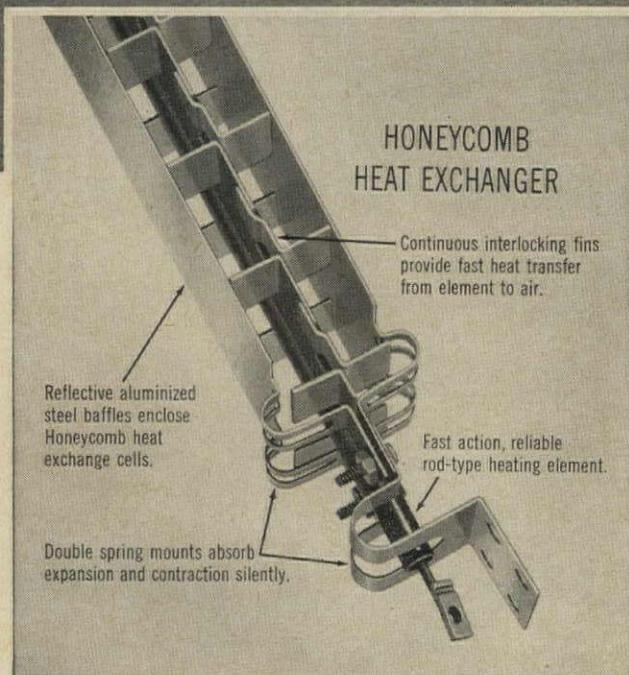
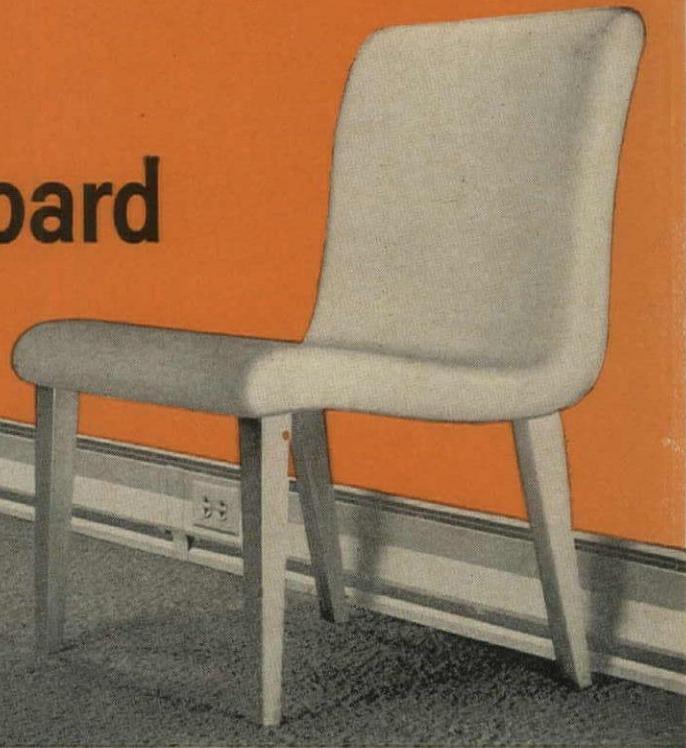
When prospects knock on the wall... be sure it's GENUINE LATH AND PLASTER

NATIONAL BUREAU FOR LATHING AND PLASTERING, INC. • 311 Tower Bldg., 1401 K St. N.W., Washington 5, D.C.



R & M-Hunter Convection Baseboard

Electric Heat at its best!



New, exclusive HONEYCOMB HEAT EXCHANGER increases warm air delivery

In the new R&M-Hunter Convection Baseboard, heating engineers have combined a fast-action, highly efficient heating unit with newly designed Honeycomb heat cells of non-corrosive aluminized steel. The result is greater metal-to-air ratios, providing more efficient heat transfer at lower surface temperatures. This means more comfort at less cost.

FEATURES

High and low density—Low wattage systems ideal for residential use. Higher wattage units primarily designed for institutional or commercial application. U.L. approved.

Automatic controls—Built-in thermostat sections control comfort levels in each room.

Thermal cut-out—Each section has thermal cut-out switch to prevent any over-heating if air flow through unit is cut off.

Accessories—Convenience Outlet Sections (240 or 120 volt), Dummy Sections, Matching End Plates and Corner Pieces, Built-in Thermostat Sections, Wall Thermostats.

Other data—Heating sections operate on 240, 277 or 208 volts. Section lengths: 32" and 48". 6 $\frac{3}{8}$ " high x 2 $\frac{1}{4}$ " deep.

AIRFLOW DESIGN DELIVERS HEAT WHERE IT'S NEEDED



Directional outlet speeds circulation of warm air into room, away from wall. The advanced design of the R&M-Hunter Convection Baseboard achieves a 9-to-1 ratio of warm air delivery to radiant heat.

For complete data, write
HUNTER DIVISION—ROBBINS & MYERS, INC.
2458 Frisco • Memphis, Tennessee



NEW

R&M-Hunter BATHROOM TRIO

Light—Ventilation—Heat in one unit

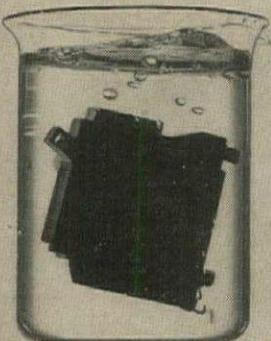
Write for
color literature.

This new R&M-Hunter unit provides any combination of light, ventilation and heat for complete bathroom convenience. The beautifully designed chrome and glass grille is flush mounted. Lights give brilliant diffused illumination through Alba-lite glass panels. An electrically reversible axial flow fan distributes 1450 watts of heat instantly, or exhausts air to ventilate bathroom. U.L. approved.

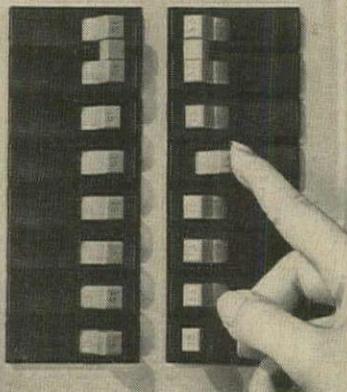




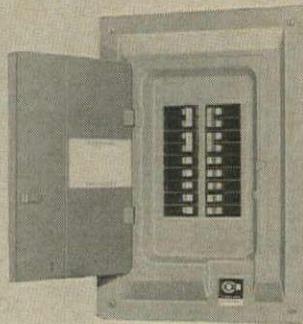
Won't corrode, won't rust. Every operating part either stainless steel or heavily plated for rust and corrosion resistance.



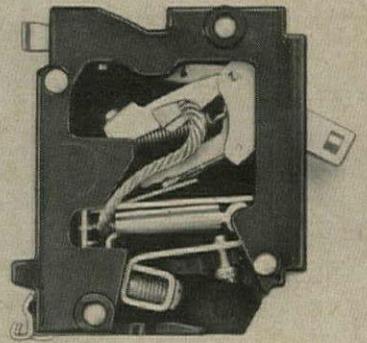
Two easy-to-see positions. It's either "on" or "off." No third "tripped" position to cause confusion.



The only circuit breaker with modern styling, finished in neutral sandalwood, Cutler-Hammer Safetybreakers will blend with any decorative motif.



Double protection. Both a magnetic trip for short circuits and a bimetal trip for sustained overloads.





Here's the new way to show that you've installed Full Housepower

(it's the new Cutler-Hammer Safetybreaker Center)

Here's the smartly-styled load center that says quality and Full Housepower to prospects.

Now Cutler-Hammer presents you with a powerful new selling feature for your homes—the new Cutler-Hammer Safetybreaker. It's styled in attractive sandalwood color for *main floor* installation.

Have your electrical contractor put the new Safetybreaker in or near the kitchen of the next home you build. It will indicate to prospects that the wiring is modern and high quality. It ties in with all the advertising and promotion about Full Housepower. And, it's the best looking circuit breaker you've ever put in a home!

But, the Safetybreaker's good looks aren't

the only feature that distinguish it from the crowd. Due to its ingenious construction, it's the safest circuit protection you could offer.

And, it's so easy to understand for the housewife. Only two easy-to-see positions on the Safetybreaker unit—"on" and "off." No tripped, mid-position to cause confusion.

For more details on how the new Cutler-Hammer Safetybreaker can help you sell your homes faster, have your electrical contractor get in touch with the Cutler-Hammer electrical distributor. Or call the distributor yourself and ask him what's new with the Safetybreaker. He'll be glad to tell you. So would a representative from the Cutler-Hammer sales office nearest you.

WHAT'S NEW? ASK...

CUTLER-HAMMER

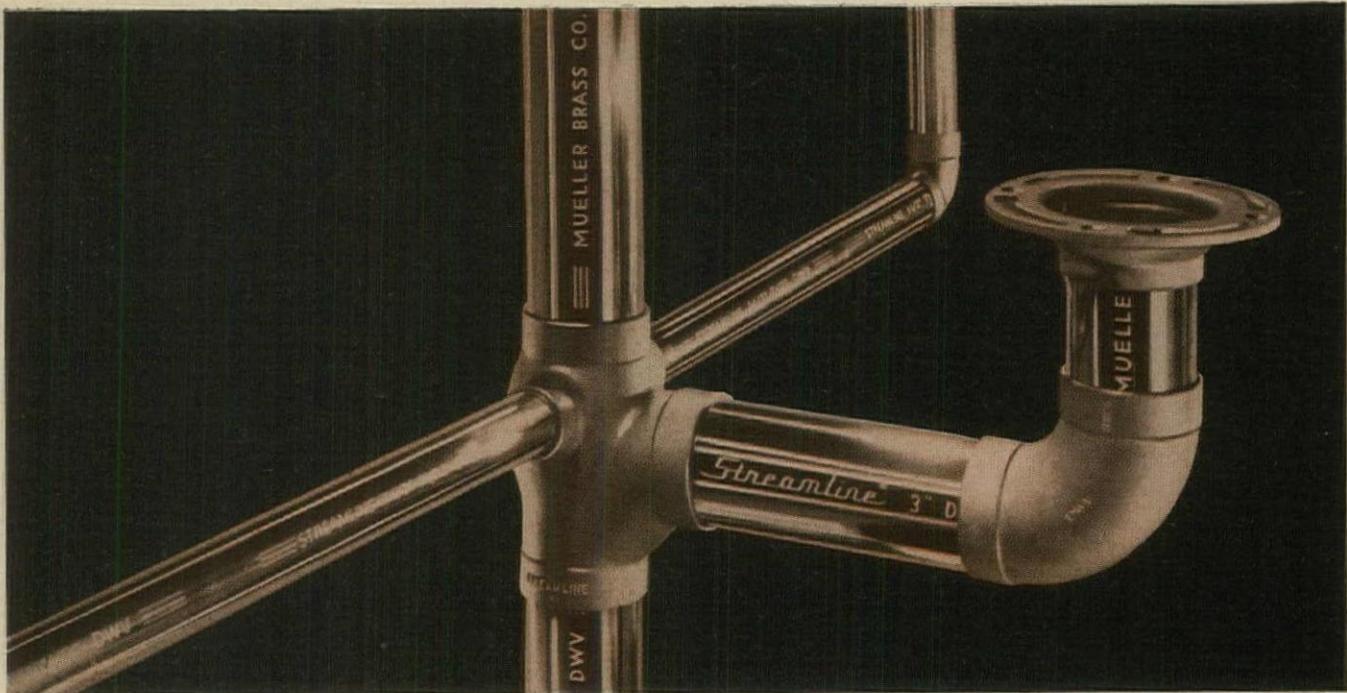
Cutler-Hammer Inc., Milwaukee, Wisconsin • Division: Airborne Instruments Laboratory • Subsidiary: Cutler-Hammer International, C. A. Associates: Canadian Cutler-Hammer, Ltd.; Cutler-Hammer Mexicana, S. A.



Streamline® DWV* COPPER

*(DRAINAGE, WASTE AND VENT)

**TUBE AND SOLDER-TYPE FITTINGS
CAN SAVE YOU UP TO 15% AND YOU
GET A BETTER INSTALLATION TOO!**



You can install STREAMLINE DWV COPPER TUBE AND FITTINGS at savings up to 15% and get the most modern drainage system possible . . . a compact, space-saving system that's lightweight, sanitary, non-rustable and clog proof.

COMPARISON WITH RUSTABLE MATERIAL PROVES INSTALLED COST OF STREAMLINE DWV COPPER TUBE AND FITTINGS IS LOWER!*

3" ALL COPPER DWV DRAINAGE INSTALLATION		3" GALVANIZED AND DURHAM DRAINAGE INSTALLATION		3" IRON DRAINAGE INSTALLATION	
	COST TO PLUMBING CONTRACTOR		COST TO PLUMBING CONTRACTOR		COST TO PLUMBING CONTRACTOR
Stack Fittings and Tube	\$62.46	Stack Fittings and Pipe	\$53.01	Stack Fittings and Pipe	\$26.52
Drainage Branch Lines	50.89	Drainage Branch Lines	30.91	Drainage Branch Lines	30.78
Solder and Flux	1.31	Lead and Oakum	1.00	Lead and Oakum	4.87
Labor	60.00	Labor	120.00	Labor	120.00
TOTAL COST OF INSTALLATION	\$174.66*	TOTAL COST OF INSTALLATION	\$204.92*	TOTAL COST OF INSTALLATION	\$182.17*

*This comparison is based on actual material and labor costs in effect on January 7, 1960, in a mid-west metropolitan area of 75,000 population.

Complete technical information on Streamline DWV Copper Tube and Solder-Type Fittings is included in big, new 32-page Bulletin D-459. Send for your free copy today.



MUELLER BRASS CO., PORT HURON 10, MICHIGAN

294

this is SCHOLZ DESIGN

now available... your own book of these famed designs!

... and this is the MARK '60 ... from the famed Scholz Design Collection. Your own copy is now available.

Use of these famed designs have sold tens of thousands of homes in recent years ... at the highest profit margins in their builders' experience ... largely pre-sold from leads furnished by Scholz Homes in its continuous promotional programs.

This same world renowned distinction of design, this impeccable quality and craftsmanship can build your prestige reputation as well as provide a continuous pre-sold building program at pleasantly surprising profit levels for you.

Call or write today (coupon at right) on a franchise for your area.

Please forward the 36-page, full color "Famed Scholz Design Collection"

I would also like more complete information on the Authorized Custom Builder Franchise.

I would also like information on lower priced Scholz '60 North American Homes.

NAME

STREET

CITY ZONE

STATE PHONE

Mail to: SCHOLZ HOMES, Inc., P.O. Box 156, Toledo 7, Ohio



TRANSLUCENT VINYL DESIGNS SO POPULAR IN FLOORING —NOW AVAILABLE IN COUNTER TOPS, TOO

Low material costs, fast installation, unique decorative styling are some of the other advantages of Armstrong Counter Corlon

Practicality and good looks—those are the things prospects and buyers expect in counter-top materials. *You*, in addition, seek low product cost and fast, economical installation. New Armstrong Counter Corlon—a thoroughly flexible vinyl material—provides you with all these advantages. And it enables you to offer counter tops backed by the best known name in vinyl products for the home.

1. The interesting designs and smart colorings dress up any kitchen. Counter Corlon comes in varied stylings. The photo at left gives you an idea of the distinctive decorative effect of the Supreme Series. It's made of colored vinyl particles and pearlescent chips, with metallic accents scattered in "pools" of clear vinyl. This gives Supreme an intriguing third dimension that charms your prospects.

Two other design effects in Counter Corlon merit special mention. In the Starglow Series, metallic flecks sparkle in rich, plain backgrounds. The Granette Series has a gentle



"pebbly" graining. In all series, the variety of colors enables you to use any of them in any type of home.

2. Toughness and easy care impress prospects—keep buyers happy. In the Supreme and Granette Series, the colors and designs extend all the way through the thick vinyl wearing surface; in Starglow the pattern is heavily coated with a layer of clear vinyl. These features, combined with the flexibility of Counter Corlon, prevent chipping, delamination, and blurring of the design.

Counter Corlon provides superior resistance to boiling water, wear, abrasion, staining, strong soaps, household chemicals, and soil. A damp sponge cleans away spilled foods and grease. And because the surface "gives" slightly under impact, Counter Corlon greatly reduces the clatter of pots and pans.

3. Installed cost less than most counter-top materials. The price of Counter Corlon material is surprisingly low: about 65¢ sq. ft. before installation. More important, the extreme flexibility of Counter Corlon—and the fact that it comes in long rolls instead of rigid sheets—greatly facilitates installation and reduces mechanics' time on the job. Counter Corlon can be coved snugly around the edge of a counter and up a backsplash, providing a seamfree installation from the

lip of the counter, across its surface and up the wall. (You can do this without wasting material on counters of almost any size, because Counter Corlon comes in long rolls 30", 42", and 72" wide.) By eliminating the need for metal trim, expensive in itself, the flexibility results in a gracefully flowing, molded effect.

4. Exclusive backing prevents moisture and mold damage. Because of the exclusive Armstrong Hydrocord Back (the same backing that permits the use of sheet vinyl floors on and below grade), Counter Corlon is completely resistant to moisture. Hydrocord also prevents mold from building up under the surface and breaking the adhesive bond or staining the surface. So you won't be plagued by callbacks to repair damage caused by mold growth or moisture.

5. Added convenience: Counter Corlon can be installed by your flooring contractor. You can have Counter Corlon put in at the same time your floors are installed by your flooring



contractor. Fashionable, exclusive matching effects can be achieved by combining Supreme Counter Corlon with one of the newest stylings in Armstrong sheet vinyl floors, Futuresq Supreme Corlon. Or fetching "mix" effects can be had by co-ordinating Starglow and Granette with other Armstrong Vinyl Floors. The colors in dozens of materials are decorator planned to be used together. If you have a fabricator make up your counters, his post-forming equipment can handle Counter Corlon to your advantage.

6. Free builder's kit: Counter Corlon installation demonstrator, color samples, complete specifications. The Architectural-Builder Consultant in your Armstrong District Office will give you this valuable and useful kit. The demonstrator—a section of a counter covered with Counter Corlon—makes it easy to show home buyers the unique features of this new counter top. And, if you desire, your Architectural-Builder Consultant can provide you with free display signs and hand-out literature. Call him, or write to Armstrong, 108 Sixth Street, Lancaster, Pennsylvania.

Armstrong COUNTER CORLON

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In celebration of our 60th year of world-wide progress . . .

Special Anniversary Offer to Builders

A Genuine Coleman

gas-lite

with the installation of



America's Only Bonded Line Heating and Air Conditioning

Now you can give your homes the extra elegance of outdoor gas lighting at no extra cost!

As a 60th anniversary salute to builders, Coleman makes this offer: A genuine Coleman Gas-Lite for every home in which you install a Coleman central furnace, wall heater, floor furnace or air conditioner.

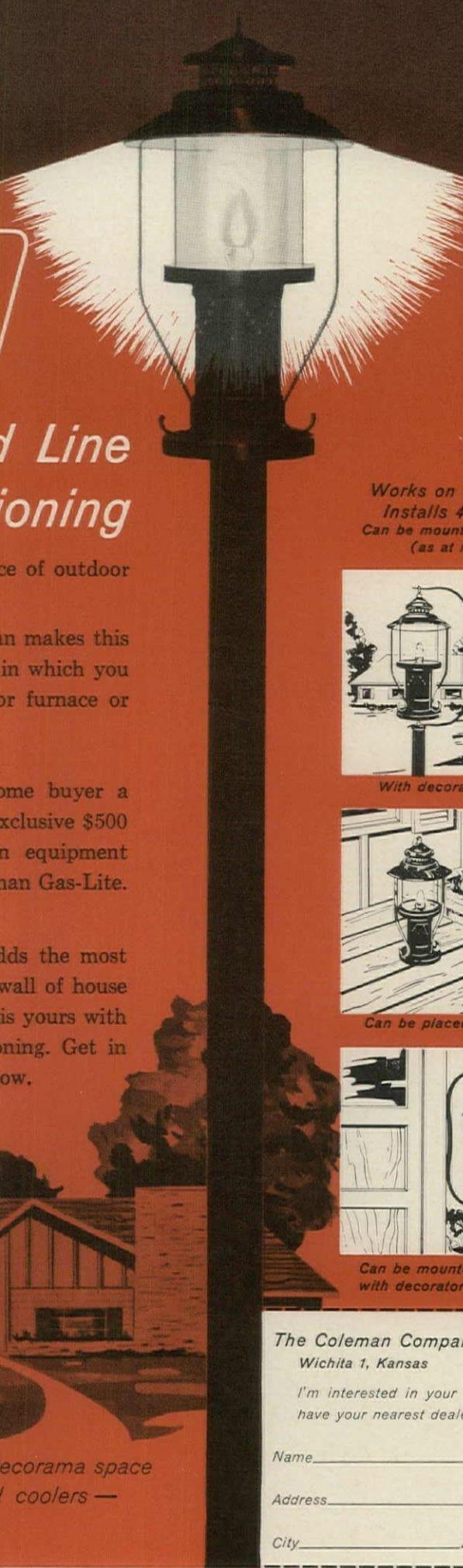


This allows you to offer the home buyer a double bonus. Bonus No. 1 is an exclusive \$500 Warranty Bond on the Coleman equipment installed. Bonus No. 2 is the Coleman Gas-Lite.

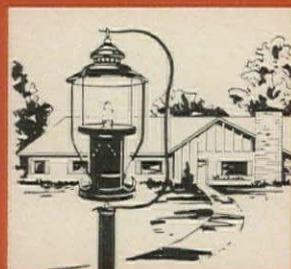
Lamp is easily placed at any point where it adds the most charm—in front yard or patio, along driveway, on wall of house or garage, on a table. And remember—the Gas-Lite is yours with the installation of Coleman heating or air conditioning. Get in touch with your Coleman dealer or mail coupon below.



Also makers of famous Vit-Rock water heaters, Decorama space heaters, Coleman lanterns, camp stoves, jugs and coolers — mobile home heating and air conditioning



Works on any gas—
Installs 4 ways
Can be mounted on post
(as at left)



With decorator pole



Can be placed on table



Can be mounted on wall
with decorator bracket

The Coleman Company, Inc.
Wichita 1, Kansas

I'm interested in your gas-lite offer. Please
have your nearest dealer see me.

Name _____

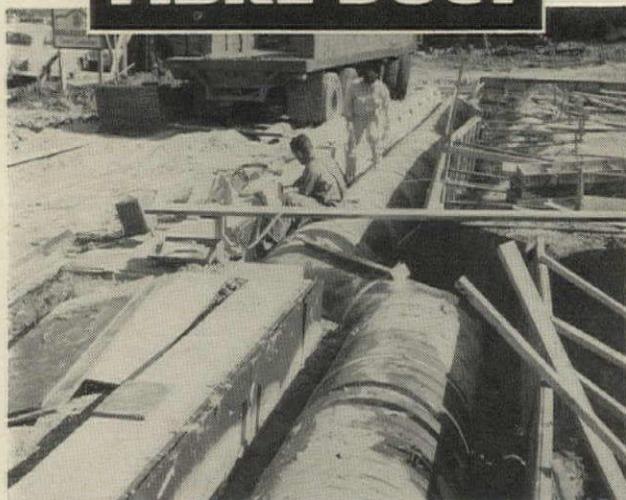
Address _____

City _____ Zone _____ State _____

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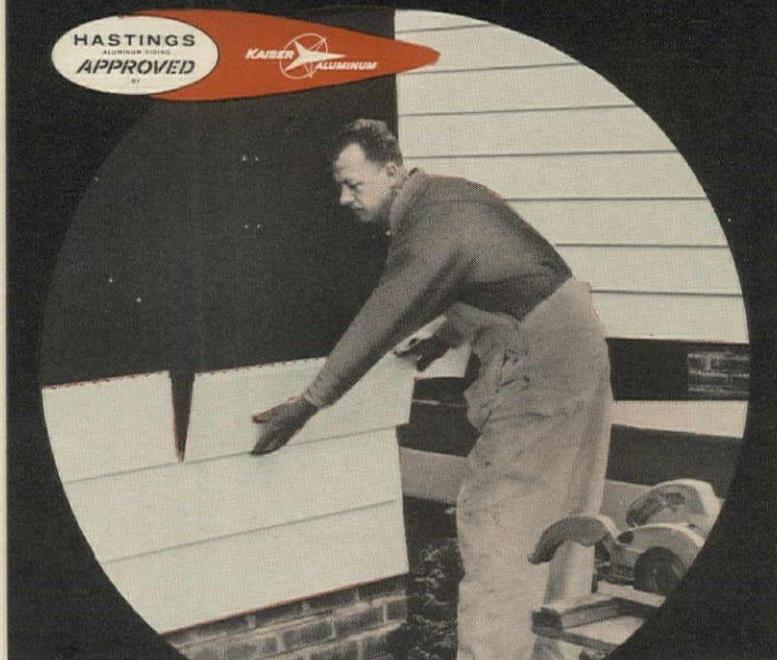
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INSTALLATION
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Contains latest, detailed, step-by-step installation data for SONOAIRODUCT Fibre Duct. For copy, send us name, address on company letterhead.

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Manufacturers of aluminum siding, awnings and patio covers, columns and store front materials.

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Yes, I'm interested. Show me how Hastings insulated and hollow-back aluminum siding can help me build better homes for less money.

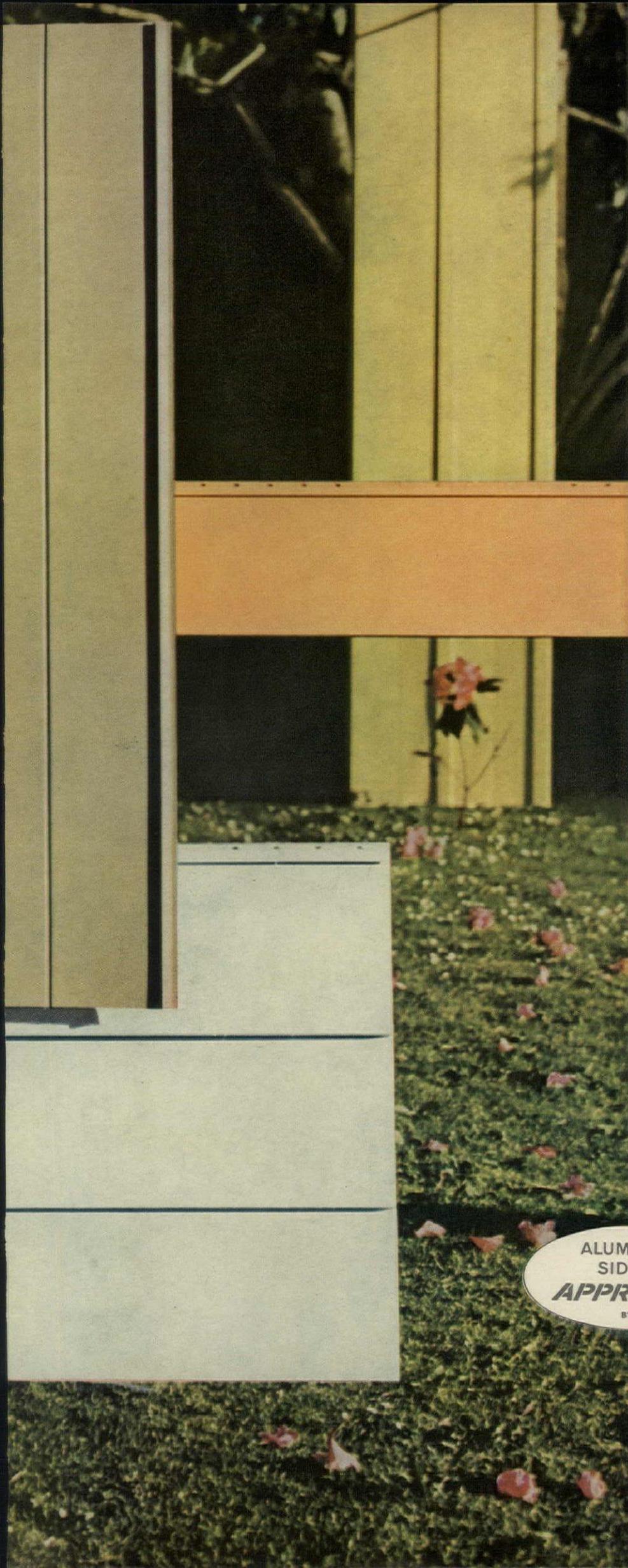
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Kaiser Center, 300 Lakeside Drive
Oakland 12, California

*We'll supply names, facts and figures if you like.



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Roundup:

First solid hints of a market upturn

Some signs of the expected response to easing mortgage money are beginning to appear. FHA reports that insurance applications on new homes turned up for the first time this year in June. VA appraisal requests, too, hit an eight-month high. Finally, Census' revised figures for May show the year-to-year starts gap, which has widened steadily each month so far, began to shrink again (for details on housing statistics, see p 69).

The trend gives some backing to growing hopes that 1960's showing will improve as the year continues. New home starts declined from May on, last year, so any improvement this year will close the gap more. But sales are still only so-so over most of the country. Warns Economist Miles Colean: "The time is past when easier money can solve all problems." Some hint of why is contained in the University of Michigan's latest Index of Consumer Attitudes, taken in May. It shows consumers cutting back plans to buy new houses or cars from the last Index taken in February. Though some 26% of the sample said they felt mortgages are hard to get, interest rates higher, the big reason, says the University, is edginess over a coming recession. Only 35% of all families expect to be better off next year than now (vs 40% in February).

In its semi-annual market survey, NAREB showed its realtor panel evenly split on whether demand for new houses is up or down—27% said up moderately, 28% said down. Listings of new homes at \$12,000 or over is about the same as last year, but volume under that price down in 43% of areas surveyed, vs 20% where it was up. Sales in under-\$12,000 bracket are down in 42% of the areas, up in 21%; for houses up to \$20,000, sales lag in 36% of the areas, are ahead in 27%; houses over \$20,000, down in 39%, up in 27%.

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Push for remodeler licensing grows

Inability of the industry to police its own ranks, weed out gyp operators, is spurring demands for state regulation. Latest state to do so: New Jersey, which requires licensing of home improvement contractors and home financing agencies. The law requires that all remodeling contracts be in writing, contain a complete rundown on price, down payment, installments, fees and credit charges. Penalty for violations: up to \$2,500 for each offense. Only other state regulating the industry now is California. But a number of others, some at the urgent request of legitimate contractors, are eyeing laws aimed at curbing gyps. Among them: New York, Massachusetts, Pennsylvania, Illinois, Ohio, Virginia, Kentucky and Kansas. District of Columbia officials are drafting regulations now, expect to put them in effect.

In a new effort to establish a professional focus for one-stop remodelers, the Metropolitan Assn of General Improvement Contractors in Washington, D. C. has launched a drive to set up a Natl Assn of Rehabilitation Contractors. Goal: an organization of one-stop experts equipped to sell and execute home improvement in urban renewal areas, as well as the suburbs. Among the group's proposals: a system of standards and certification to establish members' qualifications in the eyes of local renewal authorities.

WASHINGTON INSIDE: Republican strategists now hope they can let the steam out of Democratic plans for an omnibus housing bill this year. As Congress reconvenes, FHA's mortgage insurance programs seem to have enough authorization to last until next year. So the only hostage left is FHA's Title I program, due to expire Oct 1. Republicans hope they can push through a year's extension and \$250 million more insuring authority separately. . . . Look for S&L leaders to unveil a counterproposal to the Administration's plan to raise the Federal Savings & Loan Insurance Corp's premium from 1/12% to 1/8%. Their idea: increased buying of FSLIC stock by S&Ls to beef up its reserves, with a corresponding decrease in required stock purchases from the Home Loan Bank system—from 2% to 1% of assets. . . . FHA finally lost out in its battle to get more budget flexibility in the operations of field offices. Its request to be allowed to exceed its non-administrative budget by 15% if necessary was stricken out of the Independent Offices Appropriations bill by the House, restored by the Senate, but thrown out again by a conference committee. For FHA, flexibility is academic this year

because its program has no overload, but the agency plans to keep fighting for both the budget leeway and permission to use fee appraisers next year. But chances of success are admittedly dim as long as Rep Albert Thomas (D, Tex) heads the House ways & means committee. . . . President Eisenhower, angered that his veto of a 7% pay boost for government employes was overridden by Congress, has quietly ordered that agencies must absorb the boost within their present budgets (eg: shrink their staffs). FHA uses no Treasury funds, so probably will not be required to comply, but the edict will affect HHFA, Urban Renewal, Public Housing and Community Facilities Administrations. . . . Urban Renewal Commissioner David M. Walker is trying a new tack to solve the problem of producing lower middle income housing in urban renewal projects. The tack: electronic computers. Under a \$66,266 grant to the Pennsylvania State Department of Commerce (augmented by \$33,134 in state funds), Temple University in Philadelphia will use its data processing center to sort out all possible combinations of costs, standards and financing programs. NEWS, continued on p 42

FHA takes a big new step to broaden the mortgage market

When Commissioner Julian Zimmerman approved sale of FHA mortgages to individuals last month, it was no surprise—FHA had been ironing kinks out of the idea all spring. But it may be the biggest housing news of the year, because

It opens the way for a return to the market by investors who once dominated it.

Before FHA revolutionized the mortgage industry by making the amortized, long-term loan a standard attractive to institutional buyers, individuals were by far the largest holders of mortgages. In 1925, says the Home Loan Bank Board, "individuals and others" accounted for 40% of total dollars invested in mortgages; in 1959 only 12.8%.

Now, say mortgage men, a decline in bond yields, FHA's relatively high return (5¼% after ½% for servicing) and its insurance that at worst investors will get 4⅛% on their money through FHA debentures, should draw a substantial number of individuals back to mortgages. Says B. B. Bass, president of the Mortgage Bankers Assn: "Within a few years, this new source may well account for 25% of the new money going into FHA loans."

Realtors and mortgage bankers foresee important benefits right away.

They are among the most enthusiastic supporters of FHA's move. They say it will do much more than channel more funds into home mortgages—and these bonus benefits will be felt much sooner.

Says Bass: "Some effects in the tone of the market will be noted immediately, especially for higher discount loans. Few institutional investors want these anyway, and the high yields will be particularly attractive to individuals."

Says NAREB President C. Arnel Nutter: "It will help Realtors make more sales, especially where the seller of a house doesn't need the money right away. With the new order, he can sell the house FHA, take back

the mortgage himself, and thus not have to pay the discount he would if the loan were going to an institution."

Says Robert Tharpe, MBA's 1st vice president: "It offers a great opportunity for smaller pension funds that don't want to bother qualifying [as approved mortgagees] with FHA. And mortgage bankers can borrow their warehousing money from anybody, not only approved mortgagees."

But the goal of much more mortgage money may take longer to achieve.

FHA figures it will take two months to "see where the program is headed." But mortgage men think this is optimistic. The reason: sophisticated investors and dealers may move in quickly, but the bulk will need to be coaxed.

FHA has solved the problem of making sure the loans will be serviced properly by requiring that they be bought from one of the 10,000 banks, S&Ls, insurance companies, and mortgage companies now on its list of approved mortgagees. These become "sponsoring mortgagees," who retain servicing and re-

sponsibility to FHA for the insurance contract. Individuals, "investing mortgagees," get net proceeds, may sell their mortgages as long as servicing remains with an approved sponsoring mortgagee. FHA has put no ceiling on servicing charges; but may if fees go too far over the current ½% rate.

Biggest problems limiting quick acceptance, say mortgage men, are: 1) the higher cost of servicing small accounts; 2) investors' problems in handling an investment where principal is returned monthly; 3) lack of liquidity.

Says Mortgage Banker Tom Coogan: "The investment will be an annuity, not a fixed investment. And the investor will have a re-investment problem each month as principal returns. We will see some firms specializing in this kind of thing. But the lack of liquidity

could cause confusion and reflect on FHA."

Says Sam Neel, MBA general counsel: "We hope that it will produce a different kind of investor. It should be attractive to the long-term investor. I don't think it will be attractive to savings bank depositors."

Congress revives dying GI programs

World War 2 GI home loans and the \$150 million per year direct loan program get two more years beyond their July 25 expiration.

The bill sailed through both houses virtually unopposed, and President Eisenhower signed it without comment. He opposed both items in his budget message—especially the budget-affecting direct loans to veterans in outlying areas where mortgages are scarce.

Among changes in the law which rode through with the extension are two that:

- Require builders to hold veterans' down-payments or deposits in separate trust accounts until the loans are closed, to prevent their loss in case the builder goes broke.
- Give VA all the time it needs to process applications on hand at the end of the extender, instead of setting a cutoff date beyond which pending applications die.

Second-time buyers prop Milwaukee sales

Most builders and lenders are not optimistic about prospects for the rest of the year. In the first quarter, permits in the metropolitan area for single-family homes were off 19.8% from a year earlier (1,595 vs 1,989), and, says a building executive, "1959 wasn't anything to write home about." May indicated no pickup. Sums up a realty expert: "The bad weather hurt, but if the market had been strong, houses would have been built, weather or no weather. Land costs are so high they are almost out of this world and many of the suburbs do not help things with restrictive controls like minimum half-acre lots. So people say, 'What the hell, it's cheaper to rent.' And they do just that."

Says an S&L executive glumly: "Our home loan business is down 20% to 25%. There's plenty of money, but the guy who buys a home isn't so dumb. He sees that things are levelling off and maybe declining. So he says to himself, 'Let's hold off awhile; maybe prices are going down.' And he might be right."

Robert L. Fetherston, assistant FHA director, estimates that the unsold overhang is at least as big as last year, which was a peak. He adds: "It's still a buyer's market here." But he disagrees with some industry men who feel the area is overbuilt. "The inventory is a healthy situation for the buyer," he says.

More sanguine than most are President Gustav Wand of the Metropolitan Builders Assn of Greater Milwaukee and Builder S. Daniel Tishberg. They expect a pickup in sales in the next couple of months, largely because mortgage money, if expensive, is readily available.

Best sellers are in the \$16,000 to \$18,000 range (compared to \$14,000 to \$15,000 a year or so ago). Reason: most buyers now are "second-timers" who want a little better house than they have, will shop 'till they find it. Most popular still is the 3-bedroom, 1½-bath rancher.

San Antonio: Starts have dropped 16%, reports the local HBA, but because of a sticky sales market the inventory of unsold new houses has shrunk only slightly since the first of the year. Total unsold new houses, under construction and completed, is down only 2% since January, and the inventory of homes completed more than 30 days has remained almost static. The HBA is warning its members to proceed with caution: prospects of a pickup in sales soon are not bright.

Baltimore: "Everybody is feeling the slow market in Baltimore," says the local builders' chapter. For the first time in its 40 years, the HBA has started an advertising campaign (theme: "Buy Your Home Now") to spur sales.

Single-family starts were off 19.3% the first quarter of this year from the same period a year earlier (1,705 vs 2,112). Builders are optimistic but do not expect to match 1959's total of 8,504.

Most builders are playing it carefully, selling from samples. Although several who have gone ahead with large tracts without commitments from buyers, have upwards of 100 unsold houses on their hands, the overall unsold inventory is smaller than a year ago. Best sellers are in the \$14,000 bracket.

HOUSING MARKET:

National Homes does an about-face

Quality—not price—is to be the company's big push for 1960.

Why? First-half sales figures show two startling facts:

1. National's long-favored minimum-price line has accounted for only 10% of sales vs 40% in the same period last year.

2. The best-selling model this year is the 1,670 sq ft, \$13,500 Estate, as against the 900 sq ft, \$8,500 models in several lines last year.

Result: National—in a major shift in merchandising policy—is telling its dealers to "sell bigger houses, aim above the economy market."

"There are fewer first-time buyers than there have been in a good many years," says Chairman Jim Price. "High land and money costs are keeping the factory worker out of the market. And about nine out of ten buyers are looking for larger living areas."

One important effect of the sales switch: Though National's first-half unit volume probably will drop 20% from the same period last year, dollar volume will be down only 10% to 12% because of the upgrading.

Company aides say National is enjoying a prefabricator's advantage of a quick production change to meet the market—something conventional builders might find harder.

But the impact of the sales trend is also reflected in company plans for 1961. National expects to produce more bigger, mid-range houses than ever before, with emphasis on bi-levels, splits, perhaps even two-story

models. One line will offer 1,900 to 2,100 sq ft, with a target price of \$16,500 to \$20,000 including land.

The company makes it clear it does not plan to give up the big market for economy houses. One '61 house will offer 912 sq ft at about \$10,000. But "the spacious house is still going to dominate," says one official. "It's a market we've never tapped before. It's a hard-sell market. But it's there. Our market tests show it's there."

New entry in prefab field aims at customized look

Shooting for "custom design at a prefab price," and ultrafast on-site erection, Seaboard Homes Inc has opened the first section of a new plant at Cold Spring, N.Y.

Initial capacity is 150 houses per month, in a wide range of price and style made possible through use of interchangeable components. The firm offers some 20 basic styles in ranch, split-level, and two-story houses, with some 40 design variations at prices from \$2,500 for a minimum, unassembled house to \$40,000 for a luxury model finished on the lot.

Joshua Ben Anav, Seaboard president, says in-plant inspection facilities for building officials, and preapplied interior decoration should cut erection time to two days for most models. The company offers interim and permanent financing for dealer-builders, a five-year guarantee on the house to buyers.

Bill Levitt starts work on Washington area tract

Dismissing market sluggishness as a short-term trend, he has begun models at Belair, the 2,300-acre Maryland estate which his firm bought in 1958 for \$1.75 million. Six models, priced from \$14,990 to \$21,990, are slated for completion this October. Delivery on orders taken then is scheduled for the following fall.

Levitt plans only 4,500 homes (vs 17,000-plus in New York and Pennsylvania Levittowns, 16,000 scheduled for his New Jersey tract). But if the development goes well, "you are going to see us here permanently," he says. And he plans quality merchandising features to move the houses. Among them:

- All weather central air conditioning for every house, making it the first tract so solidly equipped.
- Average density of two houses per acre.
- Concealed master TV and FM antenna, for each house with plug-in connectors throughout the house.

The project marks the first time Levitt & Sons have built at more than one site at a time. Levitt says this is now company policy. He is assembling land for a New York City area project, and "we are setting our sights beyond that. We are prepared to build anywhere and everywhere."

In the company's first annual report to stockholders since Levitt's public sale (NEWS, Feb), it reported sales of \$26.7 million, net of \$1.3 million pretax, \$766,000 after tax for fiscal year ending Feb 29, 1960.

STOCK MARKET:

Housing's stocks follow the market

A check of 45 companies which have joined housing's rush to the stock market shows them doing as well, and in many cases somewhat better, than the overall market.

Included in the list are only those stocks which are traded actively enough to constitute a market. Of these, 30 over-the-counter stocks issued prior to May 10, 1960 showed gains in June and a drop in July, paralleling the movements of both the over-counter market and the Dow-Jones industrial average. But unlike over-counter stocks generally, average prices for housing's stocks showed a net gain for the period (up \$.17 vs a drop of .61 on the National Quotation Bureau's averages for 35 industrials).

Of 14 issues marketed after Jan. 1, 1960, eight are selling at better-than-issue prices, while six are down slightly.

Land development, realty investment, and prefabricators show net drops for the period; building and financial (lending) companies show gains.

Worst performance: realty investment, down \$2.50 average.

Most spectacular contribution to overall performance of housing stocks comes from financial companies—all but one of them S&L holding companies (the exception: Nels Severin's Palomar Mtg Co).

Born almost entirely in the past year and a half, the S&L holding company market has fascinated securities men with its growth potential. The reason: overall growth of S&L deposits, calculated by Kidder, Peabody & Co at 15½% per year for the period 1945-58, for a total of \$48 billion.

While the 16 S&L holding companies that have made public stock offers (14 since February 1959) control only 51 of the nation's 500 stock S&Ls, they are concentrated in the fastest-growing sector of this fast-growing industry: California. There, S&Ls offer premium returns to depositors to meet the state's booming mortgage demands, are growing at

1.6 times the national average. All but three S&L holding companies (and 40 of their S&Ls) are there.

Improvement in S&L holding companies for the three-month period shown does not reflect a decline they suffered from Oct '59 to March '60, when Kidder, Peabody's index for S&L stock prices dropped 12.5% while Standard & Poor's 500-stock index dropped only 1.4%. The reason: a glut of new S&L stock issues

continued on p 44

HOUSING'S STOCK QUOTATIONS

COMPANY	Offering May 10, 1960		June 10, 1960		July 15, 1960	
	Price	Bid	Asked	Bid	Asked	Bid
Building						
Elchier Homes	e	6¼	6%	6%	7	6%
First Natl Rlty & Const.	10	b	b	b	9%	10
Kavanagh-Smith	5	6%	7	6%	7	7½
Levitt	10	5%	5%	4%	5	5½
US Home & Dev	e	4	4½	3%	3%	3
Wenwood	e	2%	2%	2½	2%	2½
Wise Homes	e	10%	10%	12%	13	10%
Land Development						
All-State Prop	e	7c		4%		4%
Arvida	e	10%	10%	10	10%	8½
Cons Dev (Fla)	5	5	5½	5	5%	5%
Forest City Ent	10	b	b	13½	13%	12½
Garden Land	6½	5	5%	5%	6%	6%
Gen Dev	e	14½c		14½c		14½c
Grt Southwest	18	b	b	17%	18	13
Laguna Niguel	e	11%	12%	10½	11%	12
Lefcourt	e	4¾c		4¾c		4c
Major Rlty	e	4	4%	3½	3%	2%
Pac Cst Prop	10	b	b	10	10½	8½
United Imp & Inv	e	6c		6c		5%
Finance						
Calif Fin	e	18¼	19	22%	23½	20%
Emp Fin						
Emp Fin	e	9%	10%	10%	10%	11
Fin Fed	e	41%	42%	48½	49½	47½
First Chrtr Fin	e	22%	23%	27½		24½
First Fin Wst	e	9	9%	10½	11	10½
Gibraltar Fin	e	18½	18%	22	22½	22½
Get Wstrn Fin	e	57½d		63½d		60%
Hawthorne Fin	e	8½	9	9%	10¼	9½
Lytton Fin	e	12%	13½	18	18%	13
Mdwstrn Fin	8%	8	8½	8½	9	7½
Palomar Mtg	e	6½	6%	8%	9½	7%
San Diego Imp	e	8¼d		9%		8¼d
Trans World Fin	e	8%	7%	8½	9	8%
Union Fin	15	15	15½	15½	15%	15%
United Fin of Cal	10	b	b	b	b	17½
Wesco Fin	e	24	24½	27½	28	22%
Realty Investment						
Gt Amer Rlty	e	1%	1 13/16	1%	2	1½
Krattler A	e	20%		20%		20%
Rlty Equities	5¼	4%	5	4%	5¼	4%
Wallace Prop	6	b	b	b	8	9
Prefabrication						
Admiral Homes	e	2%	3	2½	3	2%
Crawford	13	b	b	b	9	11%
Inland Homes	e	9%		8½		9c
National Homes A	e	12%	13%	12½	13	10½
National Homes B	e	12%	13%	12½	12%	10½
Scholz Homes	e	5%	6½	4½	5	4½

* not traded that day; nearest day prices

b stock not yet marketed

c closing price (American)

d closing price (New York)

e stock issued before Jan 1, 1960

Sources: NY Hanseatic Corp; National Quotation Bureau; American Stock Exchange; NY Stock Exchange.

continued from p 43

(total: some 15 for an estimated total of \$126 million) on the market, and threats of government action. Chief among the latter:

- Pending bills to cut the amount of reserves S&Ls can put away tax-free from the present 12½% level.

- A two-year freeze on acquisitions by holding companies, imposed last year by Congress pending a Home Loan Bank Board report, with bills now pending to make it permanent.

But barring regulation that would put existing companies out of business, enthusiasts say the industry's "very steady," earnings ratio of 1.4% of gross assets, and the growth atmosphere of S&Ls generally, are signs of only more growth to come.

Stock swap creates new "integrated" land firm

It combines two of housing's growing array of publicly owned companies—Northern Properties Inc and United Improvement & Investment Corp under the United name with what officers say are pluses for both stockholders and builders:

1. Investors get balance between the growth potential of land development (Northern) and the stability of a mortgage and title firm (United).

2. Builders get—perhaps for the first time in a single company—all the functions to produce developed land, including insured title, interim and permanent financing.

MATERIALS BRIEFS

Plywood drops to \$62

Despite a decline in production because of Northwest fir mill vacations, slumping demand prevented ¼" sanded stock from holding last month's base price of \$64 per M sq ft. Most sales were either at \$62 or \$64 with extra discounts. Sheathing was holding fairly steady at \$89 to \$90.

Other materials price changes:

- Armstrong Cork raised prices for vinyl surfacing for walls and countertops 3%. Prices for vinyl-surfaced rugs and floor covering were raised between 1% and 2%.

- Mastic Tile Division of the Ruberoid Co reduced wholesale prices of its 3/32" vinyl-asbestos tile by 7% and its ¼" tile by 10%.

- Johns-Manville Sales Corp boosted the dealer price of plain and painted insulation-board ceiling tile by \$5 per M sq ft.

- Sterling Faucet Co increased prices of its tubular brass plumbing products 5% to 17%.

Reprieve for transit lumber

The ICC's on-again off-again ban on diversion-and-delay privileges offered lumber shippers by western railroads was on again last month, but now it's off again. The ICC imposed the ban last year but suspended it pending "further investigation." After the Supreme Court upheld a stoporder against the Union Pacific (which offered free hold-time but did not list it in its tariffs as did the other roads) the ICC reaffirmed the ban effective July 21. The Chicago & Northwestern and 104 lumber wholesalers and medium and small mills got an order from Federal District Court, Portland, temporarily restraining the ICC ban. The

United holds a servicing portfolio of \$68 million in mortgages, originates \$37 million a year. It owns 95% of Lawyers Mortgage & Title Co, second-biggest New York State domestic title firm. Northern, organized last year, owns three apartment developments, 700 acres of raw land in suburban New York counties, is one of several companies (including United) that have contracted to buy the 910-acre Breezy Point peninsula in Rockaway, Queens, N. Y.



UNITED'S MARQUEE, EDWIN KATZ, KAY

In the swap, Northern's founders, President John L. Marqusee and Vice President L. William Kay, become vice-chairman and executive vice president, respectively, of the surviving firm.

Along with some 800 other stockholders, they receive two shares of United for each Northern share. Total price: about \$2.6 million. Marqusee is already a director of United, succeeding his father, a 10% stockholder and longtime business associate of its officers, veteran New York Realty Man Jerome Katz, chairman, and his brothers Edwin, president; Sidney, treasurer; Abner,

suit accuses the ICC of showing preference to large mills with adequate storage and financing that do not need delayed rail shipments. Also cited: delays permitted for commodities like coal, fruit, and grain.

The large mills, who are firm-order shippers, oppose in-transit delays as a form of free warehousing on wheels favoring speculating wholesalers and smaller mills (who ship lumber unsold hoping to find a buyer by the time the shipment arrives) and a cause of freight car shortages.

New spark for electricity

Spurred by a survey showing that electric power executives think the gas industry is outpromoting them, Edison Electric Institute is budgeting a record \$3 million for its Live Better Electrically program.

Special target of the 18-month campaign is heavy (ie heating, air conditioning) appliance sales. By 1970, the utilities hope one out of four new houses will have electric heat, boosting their power load 700% to 800%.

The program was begun after EEI found that 71% of many electric utility managers and appliance dealers rated gas promotion ahead of electricity. Its approach is shaped by two consumer studies that show (with merchandising hints for builders too) that:

- Some 60% of consumers equate modern living with new appliances, vs only 9% for a new house, 9% for a new car.

- Electricity's big sales plus is that it is flameless, which housewives tend to associate with cleanliness and safety.

secretary. All retain their posts in the new setup.

Also merged into United last month: L. W. Kay & Co, management firm wholly owned by Kay and Marqusee, which has handled management of Northern's apartment investment.

Only fly in the new firm's ointment: a \$12 million damage suit filed against Northern on behalf of 3,100 leaseholders on Breezy Point. The suit charges that announcement of plans for a \$1.2 billion apartment development on the land has lowered the value of their holdings. The area is heavily dotted with vacation homes.

Volk-McLain goes public to launch big new tract

Volk-McLain Co, the giant California builders (2,654 starts in '59 in or around San Diego), have joined the rush to the stock market.

The company placed \$4 million worth of debentures and stock in a private sale to institutional and individual investors to buy 4,3000 acres of gracefully rolling farm and vineyard land in the San Roman Valley 20 miles southeast of Oakland. The land cost some \$11 million.

Plans call for a \$250 million satellite city of 32,000 persons. For the first two years, drinking water will be pumped from wells. The state gave Volk-McLain permission to use 40 acres of sewage ponds for a year despite objections by San Francisco's Water Department, which has 100 deep wells in the valley and contends seepage from the ponds might contaminate some.

DFPA pushes "second homes"

The campaign is the top new effort in this year's record \$5.5 million promotion and research program for the Douglas fir plywood industry. Sample: at Los Angeles home show this month, DFPA is offering 50' x 100' lots in the San Jacinto Mountains for \$1 each to the first 400 buyers of DFPA vacation houses.

Chief target of the campaign is the fast-growing vacation house market (estimates of potential range to 200,000 starts per year), but retirement housing and mobile homes are included. Named to head the new Special Project Dept: Donald A. Jaenicke, 31, former asst publicity director.

At DFPA's annual meeting at Sun Valley, President Henry C. Bacon showed the 150 executives how the promotion-wise softwood plywood industry has already expanded its markets: In 1950 it sold an average 400 sq ft for each new house; this year, estimate is 2,600 sq ft.

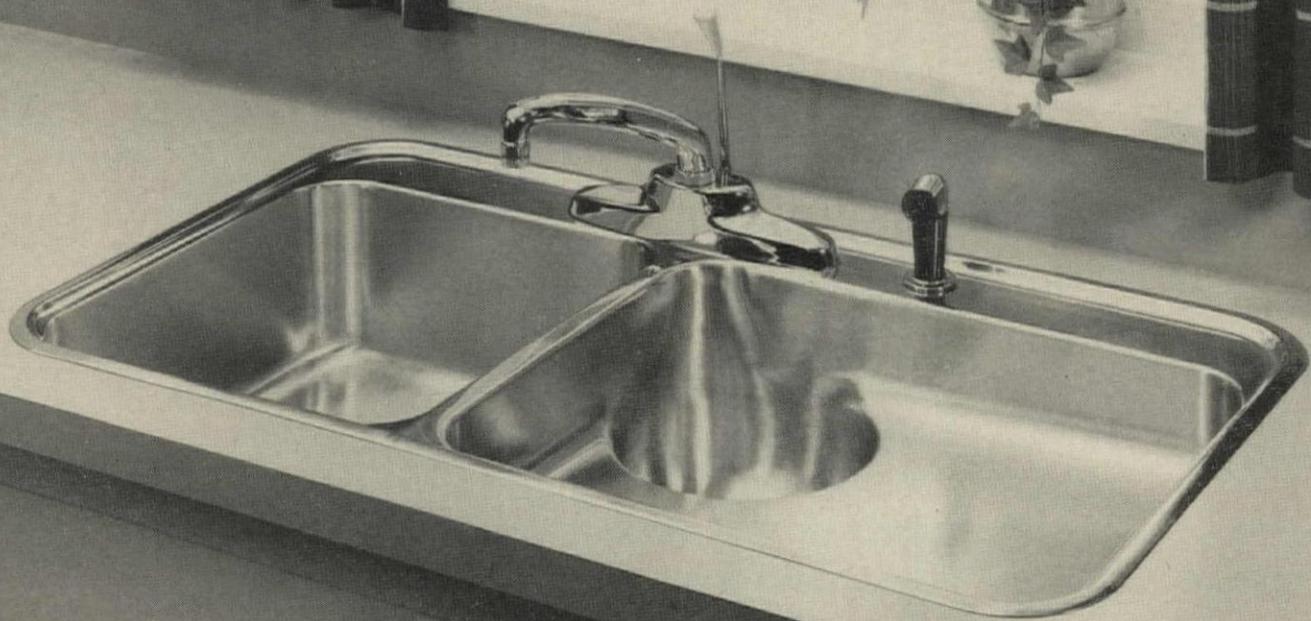
• • •

Lumber manufacturers and dealers are realizing big new campaigns to push wood's use.

The National Wood Promotion Committee of the National Lumber Manufacturers Assn voted to expand its budget from \$1.4 to \$2 million a year, if NLMA's regional associations approve. This would boost members' payments of from 10¢ to 16¢ msf of production.

The National Retail Lumber Dealers Assn will launch a co-operative advertising campaign in LIFE magazine. The ads—two-page spreads appearing four times a year—will stress home modernization.

NEWS continued on p 49



No Upkeep, No Aging, No Replacement
 with "Tenant-Proof" **LYONCRAFT STAINLESS SINKS**

Once installed, Lyoncraft Stainless Sinks are in for good! This cost-cutting fact is being proved daily by apartment house owners and builders across the nation.

There's good reason for Lyoncraft durability. Made of finest nickel stainless steel, Lyoncraft Sinks refuse to chip, crack or stain. Their one-piece construction with integral Redi-Rim® prevents waste or dirt from collecting in corners or cracks.

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Nationwide . . . a Lyoncraft sink for apartments of any price or size



Denver, 888 Logan, sleek structure with 87 Lyoncraft sinks. Architects: W. C. Muchow and Nat S. Sachter. Builder: Al Cohen.



Birmingham, Mich., Glenn Wood Terrace, 21-unit terrace apartments. Architect: Alden Paul Eroh. Builder: Kassabian Builders.



Chestnut Hill, Mass., Hammond House, equipped with 48 Lyoncraft sinks. Architect: Arthur Manaselian Associates. Builder: Hammond Construction Co.



South Redondo Beach, Calif., Eden Rock, 58-unit apartment-hotel. Architect: Starkman & Kreisel Associates. Builder: Carl Braverman Co.

Photo by Hookallo Studio

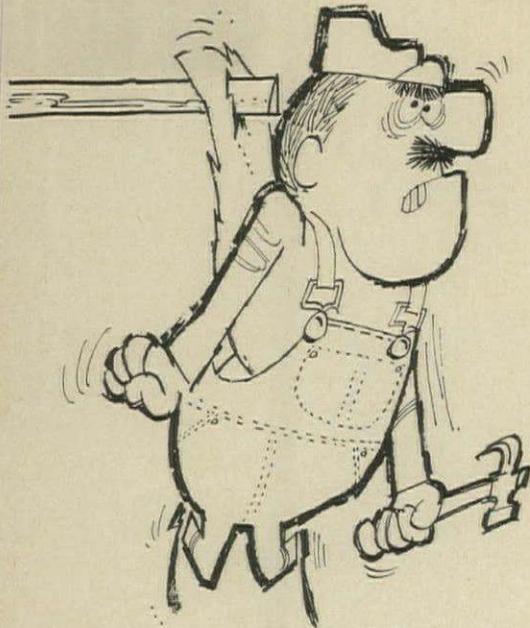
World's largest fabricator of nickel stainless steel



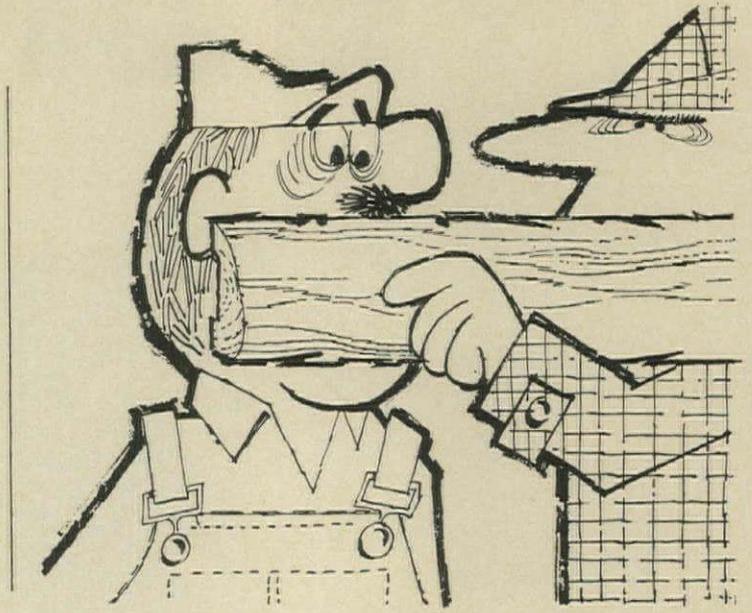
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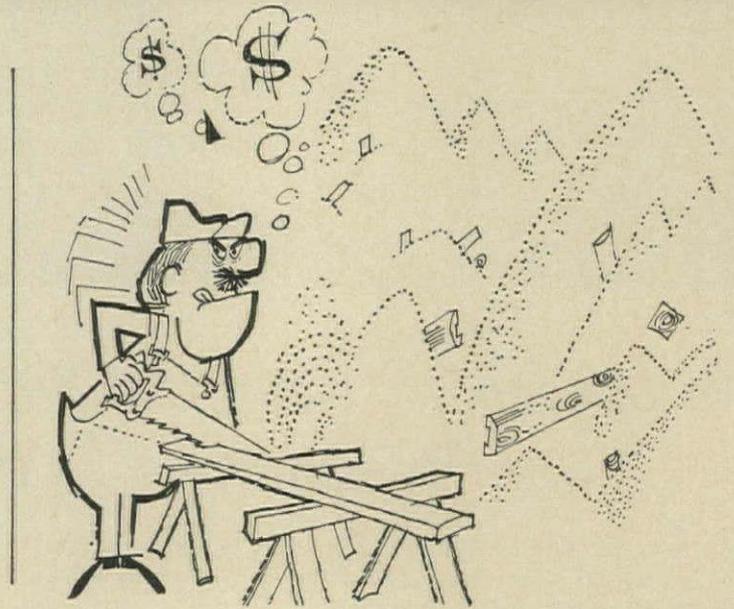
1. "I WAS LOSING MY SHIRT on linear trim because of labor costs and waste."



2. "And customers would complain about dirt and nicks."



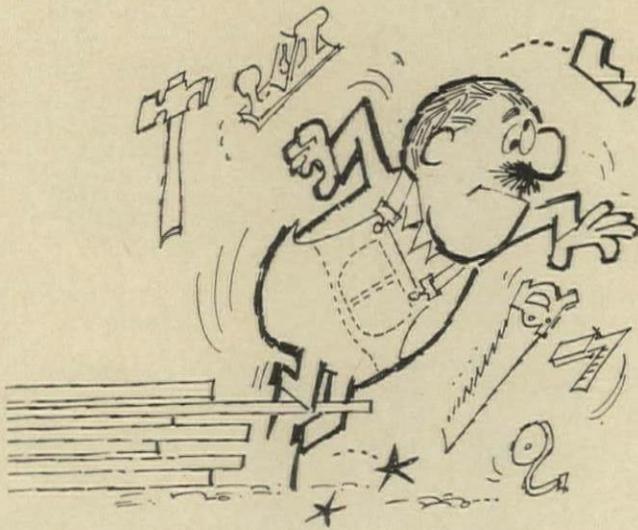
5. "I lost plenty of valuable time sorting through the pile trying to find the right pieces for economical cuts."



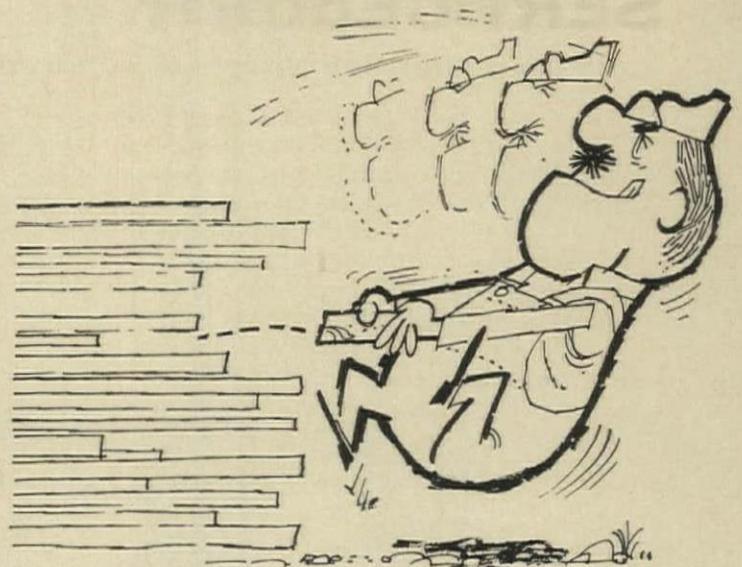
6. "I lost more time and material trimming out knots and defects."

HINES

JOHN DAY TRIM FOR DOORS
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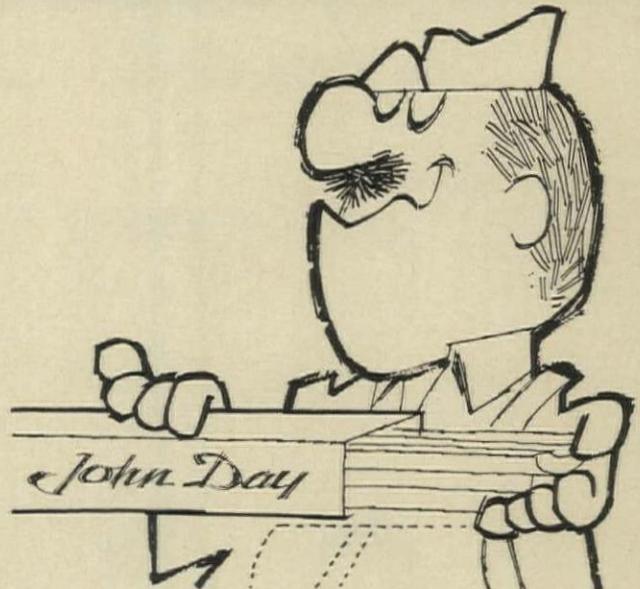
3. "Pieces were either too long..."



4. "...or too short to fit the window I was trimming."



7. "No matter what I did, I always finished up to my neck in shorts."



8. "Now I save time and money with John Day Trim."

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MA/60/8

MORTGAGE MONEY:

The cost of money continues to show an easing trend

FHA and VA discounts and conventional loan rates are still edging downward. Underscoring the trend is Fanny May's across-the-country reduction of discounts through an increase of half a point in its over-the-counter purchase prices for FHA and VA mortgages. The discount reduction was the first on a nationwide basis in the six years of the agency's secondary market operations.



Another market indicator: the Pittsburgh and Chicago Home Loan Banks have cut their rates for loans to member S&Ls from 4½% to 4%, second reduction for both since spring. Observes a Home Loan Bank Board official: "Money is getting easier all along the line."

In HOUSE & HOME's monthly survey of 17 cities, reduced discounts were reflected in higher FHA prices in six cities and in higher VA prices in four. Conventional rates displayed a more gradual softening.

FHA minimum-down immediates moved up in Chicago from 96-97 to 96-97½; in Detroit, from 96-96½ to 96½-97; in Los Angeles, from 95½ to 96; in Newark, from 97 to 97½; in Oklahoma City, from 95½-96½ to 96-96½, and in San Francisco, from 96 to 96½.

In a more sluggish VA market, no-down immediates edged up in Cleveland from 92 to 92½; in Los Angeles, from 91½ to 92, and in Oklahoma City, from 91½-92 to 92.

Detroit reported the biggest gain—from 92 to 92½-93.

Boston savings banks were still quoting 95-96 for FHAs and 91-92 for VAs, but most buying has moved up to the top figures.

Conventional rates were shaved by insurance companies, banks and S&Ls in Cleveland from 6-6½% to 6-6¼%. Los Angeles S&Ls edged down from 6.6-7.2% to 6¼-7%. In Jacksonville, banks and insurance companies were easing from 6-6½% to 6-6¼%.

Will Fanny May's action push the trend still further?

"Not necessarily," opines Economist Miles Colean, "but it is significant in that it advertises to the world the easier money situation." FNMA officials agree, reiterate that agency policy is to peg prices within the range of the market, neither above nor below. The last FNMA price boosts (discount reductions) were made on a regional basis in 1955. In money-tight 1959, FNMA slashed prices four times for a total of up to 5 points. The upward adjustment now, says FNMA President Stanley J. Baughman, "reflects the greater availability of mortgage credit and the generally improved climate of the market." Left unchanged: standby commitment prices, the ½% purchasing and marketing fee and the negotiation arrangements for over-the-counter prices for multifamily housing mortgages.

To most mortgage men, the FNMA boost augers well for a further improvement of the market climate. Another big reason:

The demand for mortgages is growing but the supply isn't.

FHA has just opened up new sources of money by approving the sale of its insured mortgages to individual investors (see p 42). Pension funds are continuing to come into the market. With bond yields down, insurance companies are showing renewed interest in home loans. And now, some eastern and mid-western S&Ls, long on deposits and short on conventional loans, are buying FHA and VA mortgages, which they traditionally have shunned.

But housing starts have been lagging and many mortgage bankers are hard put to fill orders. FHA new-house applications in the first six months of this year totalled only 133,377, down 42.3% from 1959's comparable total of 231,338. Applications on existing houses were also down a sharp 27.9%, totalling 203,503 compared to 1959's 282,069. VA applications for the same periods were off 27.5% for both old and new houses—74,641 this year compared to 102,914 last. (For more news on FHA applications, see p 41.)

Investors are expected to put \$12.2 billion into mortgages this year, down from last year's \$13.6 billion.

Corporate pension funds will boost their purchases this year over last, says the Life Insurance Assn of America, S&Ls and MSBs will drop back. Here's how the association sees 1960 investments compared to '58 and '59:

NET INCREASE IN 1-4 FAMILY MORTGAGES HELD BY INVESTORS (billions of dollars)				1958	1959	1960e
Savings and loans	4.9	6.8	6.3	0.1	0.1	0.2
Life insurance companies	0.9	1.2	1.2	0.1	0.3	0.3
Mutual savings banks	1.5	1.3	1.2	*	1.6	1.3
Commercial banks	1.3	1.5	1.0	1.3	0.8	0.7
TOTAL NET INCREASE				10.1	13.6	12.2
<i>e Estimate</i>				* Less than \$50 million		

MORTGAGE BRIEFS

Money for N.Y. homebuilding

During the tight-money squeeze earlier this year, New York State homebuilders complained that savings banks were buying out-of-state mortgage loans while local builders were going without money. The complaints sparked an idea that has now become a going plan. The plan: a special fund supported by the banks to feed the state's homebuilding industry by funneling mortgage money into N.Y. areas where it is short.

The fund is being administered by Institutional Securities Corp, which is wholly owned by the Mutual Savings Banks of New York State. The corporation, acting as agent for participating banks, will buy eligible mortgages from local lenders who do not have enough money to meet local demand.

So far, 33 banks have joined the fund and have made commitments totalling \$9,050,000. In addition, sales of mortgages by one bank to another have channeled \$7.7 million into sections of the state where money was not readily available.

First FHA shares sold

After a year of frustration caused by soaring yields in other investments, Mortgage Corp of America has marketed its \$1-million issue of participations in FHA mortgages—first in history (NEWS, July '59). Sold in a privately negotiated deal, the 20-year, 5¼% collateral trust notes went for 97.5—a yield of 5.55%. MCA, which is owned by three mortgage banking outfits, says it is pledged not to reveal buyers' identities. But it does say they were an insurance company and an employee retirement fund. MCA was formed in 1958—after FHA authorized sale of participations in FHA loans—to tap just such money sources. The company says it will soon mount another issue, expects a much faster sale in an easier money market.

Was S&L seizure lawful?

The House government operations subcommittee, investigating the Home Loan Bank Board's emergency takeover of the Long Beach (Calif.) Federal S&L (NEWS, July), says no.

In a blistering interim report, the subcommittee calls the seizure "arbitrary and unlawful." Specifically, it accuses the board of 1) failing to back its action with facts, 2) making up a "basket of charges," many up to 12 years old, to prove an emergency existed when there was none, and 3) acting with "callous disregard" for the fact that the summary action would cause a run on the \$130-million institution (in six weeks panicky depositors withdrew \$37 million).

The real reason for the seizure, says the subcommittee, was to head off the association's plans to convert from federal to state charter.

When the HLBB took over Long Beach Federal in April, it accused the S&L of failing to pay insurance premiums on deposits, failing to buy stock in the board as required by law, paying excessive (4½%) dividends in relation to earnings, and making unsafe loans. The subcommittee, headed by Chairman John E. Moss (D, Calif.), finds the S&L was paying premiums and stock payments into court pending the outcome of its longstanding suit against the HLBB for a previous seizure

continued on p 50

in 1946. The subcommittee declined to second guess the board on the other charges but noted that if they were true, the board was then "derelict in its duty" in allowing charges to accumulate to require seizure.

The subcommittee's recommendations: Long Beach Federal should be restored to its old management and less drastic measures taken to correct the troubles. And the board should not interfere with a conversion to state charter.

The report sums up: "The subcommittee believes there are better ways for the federal

government to regulate the savings and loan industry than are indicated on the record before us. Appropriate legislation will be drafted to overhaul the supervisory apparatus and administrative procedures of the Home Loan Bank Board."

S&L troubles in Maryland

Because it has no state laws regulating savings and loan associations, Maryland is a haven for fly-by-night S&L operators. (Only other state with no regulations: Alaska.) To go into

business, all these operators need is a \$30 charter, a rented room, and a promotion campaign—usually stressing "save by mail."—offering gullible depositors exorbitant (as high as 6¼%) dividends.

Result: fly-by-nights, finding laws in other states hampering—have been thronging in at an alarming rate. To add to the problem, the Maryland attorney general has issued an informal opinion that the state has no authority to bar stock S&Ls (which are illegal in 32 states). Moans Albert W. Ward, director of the State Department of Taxation & Assess-

MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee who retains servicing.) As reported to HOUSE & HOME the week ending July 8, '60.

FHA 5¼s (Sec 203) (b)						City	VA 5¼s					Conventional Loans		
FNMA Scdry Mkt	New Construction Only		Existing*		City		FNMA Scdry Mkt	New Construction Only		5% or more down		Comm. banks, Insurance Cos.	Savings banks, S & Ls	Construction loans w Interest + fee
xy	30 year	10% or more down 20-25 year	Min Down 25 year	Immed		Fut	xy	Immed	Fut	Immed	Fut			
96½	96-97	96	97-98	97	96-96½	Atlanta	92½	a	a	a	a	6-6¼	6-6½	6-6½+2½
97½	par-101°	par-101°	par-101°	par-101°	par-101°	Boston local	93½	98	98	98b	98b	5½-6	5½-6	5½-6
—	95-96*	95-96*	a	a	—	out-of-st.	—	91-92*	91-92*	a	a	—	—	—
96½	96-97½b	95-97b	95-97½b	95-97b	96-97½b	Chicago	92½	90-92b	90-92b	90-92b	90-92b	5¾-6¼	5¾-6¼	6¼-6½+1½-2½
96½	96-97	95-96	97-97½	96	96½-97	Cleveland	92½	92½	91½b	92½	91½b	6-6¼	6-6¼	6-6¼+1-1½
96	95-97	94½-97	96-98	96-97½	95-97	Denver	92	92-93b	91-93b	91-93b	91-93b	6-6½	6-6¾	6½+1-2½
96	96½-97	96½	97½	97	96	Detroit	92	92½-93	92	93	92½	5¾-6	5¾-6	6+1
96	94-96	94-96	96½	96	96-96½	Honolulu	92	92b	a	a	a	6½-7½	6½-7½	6½+1½
96½	96-97	95-96	96½-97½	96½-97½	96-97	Houston	92½	92-93	92	a	a	5¾-6¼	6-6¼	6-6½+1-2
96½	95½-96	95½-96	96-97	96-97	94-95½	Jacksonville	92½	91½-92	91½-92	92-93b	a	6-6¼	6-6½	6½+1½
96	96	95½	97	96½	95½-96	Los Angeles	92	92	91½	a	a	6¼-6½	5¾-7	6+1½*
97	97½	97	98	97½	97½	Newark	93	a	a	a	a	6f	6f	6+1
97½	96b	96b	96b	96b	96b	New York	93½	93b	93b	93b	93b	6	6	6+1-2b
96	96-96½	95-96b	97½-98b	a	95½-97½	Okla. City	92	92b	91b	92b	91b	6-6¼	6¼-6½	6-6½+1-2
97	98	97½-98	98½	98	97½-98	Philadelphia	93	a	a	a	a	5¾-6	5¾-6	6+1-2
96	96½	96	96-97	96	95-96½	San. Fran.	92	92	92	a	a	6¼-6½	6½-7½	6-7+1½-2½d
96½	94-97	93½-97	94½-97	94-97	94-97	St. Louis	92½	a	a	a	a	6-6½	6-6.6	6-6½+1-2
97	97	97	97½	97½	97	Wash., D.C.	93	93	92½	93	93	6	6	6+1½-2

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

SOURCES: Atlanta, Robert Tharpe, pres, Tharpe & Brooks Inc; Boston, Robert M. Morgan, vice pres, Boston Five Cents Savings Bank; Chicago, Murray Wolbach Jr, vice pres, Draper & Kramer, Inc; Cleveland, David O'Neill, vice pres, Jay F. Zook, Inc; Denver, A.C. Bradley, asst vice pres, Mortgage Investment Co; Detroit, Harold Finney, exec vice pres, Citizens Mortgage Corp; Honolulu, Gordon Pattison, dir of mortgage financing, Bank of Hawaii; Houston, Donald McGregor, exec vice pres, T.J. Bettes Co; Jacksonville, John D. Yates, vice pres, Stockton, Whatley, Davin & 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, B.B. Bass, pres, American Mortgage & Investment Co; Philadelphia, Laurence J. Stabler, vice pres, W.A. Clarke Mortgage Co; St. Louis, Sidney L. Aubrey, vice pres, Mercantile Mortgage Co; San Francisco, Raymond H. Lapin, pres, Bankers Mortgage Co of Calif.; Washington, D.C., Hector Hollister, exec vice pres, Frederick W. Berens, Inc.

- ▶ Immediate covers loans for delivery up to 3 months; future covers loans for delivery in 3 to 12 months.
- ▶ Quotations refer to prices in metropolitan areas; discounts may run slightly higher in surrounding small towns or rural zones.
- ▶ Quotations refer to houses of typical average local quality with respect to design, location, and construction.

Footnotes: a—no activity, b—very limited activity, c—commercial banks do very little mortgage lending in Texas, d—S&Ls charging up to 4 point fees, e—S&Ls charging 6-6½ plus 2½-3½ point fees, f—occasional loans available at 5¼%, g—bulk at 96, j—highest price for better quality loans only, n—bulk at 92, o—at 5½%, w—six-month construction loans unless otherwise noted, x—FNMA pays ½ point more for loans with 10% or more down, y—FNMA net price after ½ point purchase and marketing fee plus 2% stock purchase figured at sale for 50¢ on the \$1, z—on houses no more than 30 years old of average quality in a good neighborhood.

FNMA PRICES effective July 6, 1960.

For immediate purchase Subject to ½ point purchasing and marketing fee and 2% 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 ½% for each 5-year period (or part thereof) above 30 years.

States	FHA 5¼s		FHA 5¼s		VA 4¾s	
	Loan to Value	Ratios:	90% or less	over 90%	90% or less	over 90%
Conn., Me., Mass., N.H., N.Y., R.I., Vt.	99½	99	95½	95	91½	91
Del., D.C., Md., N.J., Penna.	99	98½	95	94½	91	90½
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	98½	98	94½	94	90½	90
Ariz., Calif., Col., Hawaii, Ida., Kan., La., Mich., Mont., Nev., N.M., Okla., Utah, W. Va., Wyo., Virgin Is.	98	97½	94	93½	90	89½

NEW YORK WHOLESALE MORTGAGE MARKET

FHA 5¼s	VA 5¼s	FHA 5¾ spot loans
Immediates: 95-96½	Immediates: 91-92½	(On homes of varying age and condition)
Futures: 95-96	Futures: 91-92	Immediates: 91-94

Prices for out-of-state loans, as reported the week ending July 8 by Thomas P. Coogan, president, Housing Securities Inc.

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

FNMA STOCK

	June 9		July 8	
	low	high	low	high
Bid	57	58	57	58
Asked	59	60	59	60

Quotations supplied by C. F. Childs & Co.

ments: "We've been deluged with applications for stock charters."

The situation has caused mounting concern among state officials and the big majority of legitimate state and federally chartered S&Ls who fear that a few fast-buck operators will give the entire industry an undeserved smear.

The blue-sky operators got a reprieve when Gov. J. Millard Tawes vetoed a bill to impose at least stop-gap curbs on S&Ls. The bill was supported by the Maryland Savings & Loan League and the Maryland League of Building & Loan Assns but opposed by a number of small, legitimate uninsured S&Ls who were afraid it would put them out of business. Said Tawes: "The bill wouldn't cure the ills for which it was designed."

But there are signs that the honeymoon won't go on forever. Items:

- Tawes has appointed a 15-member committee to write a new and even tougher bill aimed at the blue-sky S&Ls for the next session of the legislature.

- The SEC has obtained injunctions restraining two S&Ls from further business on the grounds of fraud. The S&Ls First Capitol and American Seal, both of Baltimore are allegedly controlled by James G. Sorce Jr of Belleville, N.J., who is under indictment in New Jersey for fraud.

- Three S&Ls, First Capitol, Commercial, and First Colony, have been indicted for fraud by a federal grand jury. Named in an indictment: C. Oran Mensik, Chicago S&L operator. Mensik achieved fleeting notoriety in Illinois in 1956

when he was found to have made loans to Orville E. Hodge, state auditor convicted of taking \$2.5 million in state funds. Mensik's three Illinois S&Ls (two stock, one mutual) were later taken over by the state when reserves were found insufficient by Hodge's successor.

New rules for ten percenters

California's freewheeling second-trust-deed industry (NEWS, July) is getting its first taste of stiff controls.

State Corporations Commissioner John G. Sobieski has issued new regulations for the ten percenters. The rules require ten percenters to obtain a permit to do business, set up standards which must be met to keep the permits (eg, ad claims that investments are "safe," "secure" or "liquid" are banned).

But there is sharp disagreement whether these regulations will do the job. Severest critic is State Assemblyman Richard T. Hanna (D, Garden Grove) who heads a special legislative subcommittee studying possible new laws to govern the ten percenters.

The new regulations are unenforceable, says Hanna, and the commissioner's approach "falls far short in coming to grips with the real problem." They merely assure sound second-trust operations, but won't attack the real evil, soaring secondary financing itself. Encouraging second trust deed investments, he warns, will contribute to further inflation

in land values, spur speculative building of cheaper houses with higher financing costs pegged to easier credit.

At a subcommittee hearing at San Francisco, Edward O. Landels of the California Mortgage Bankers Assn summed up the fears of many opponents of Sobieski's regulations: a new monster will be created that will drain money out of primary home-financing institutions. Warned Landels: "You're not going to create any new money, and you will tend to weaken the banks and S&Ls. You might as well tear up the savings and loan charter bill." Landels pinpointed what may be a key issue when he expressed doubt that Sobieski has authority to issue such regulations.

MGIC volume, net soar

In spite of lagging starts in the first half of 1960, Mortgage Guaranty Insurance Corp of Milwaukee, FHA's only private mortgage competitor, more than doubled volume, nearly doubled earnings compared with last year.

In its first-half earnings report, the company shows \$87 million worth of mortgage insurance applications, vs \$37.5 million in the same period last year. Earnings are \$92,188 for the period, compared with \$92,352 for all of last year, the first year it showed a profit. The company now operates in 38 states.

TAXES:

FNMA stock losses ruled deductible

A federal district court in Tennessee has ruled that losses on resale of Fanny May stock bought at par from the agency are deductible as ordinary business losses for income tax purposes.

The finding overrules a two-year-old IRS decision that such losses can be used only to offset capital gains. This is of little help to mortgage men and/or builders who seldom have capital gains but must buy the stock in order to sell mortgages to the agency. Current requirement is 2% of the mortgage price. But few sellers are willing to freeze their capital, and so resell the stock at a market price of 50¢ to 60¢ on the dollar.

In the court case, Schumaker Mortgage Co of Memphis sued IRS for refund of \$7,893.60 based on its loss in sale of 300 shares in 1956. With back interest, the award is \$8,428.70.

Ruled Judge John Martin: "Where a mortgage banker as an incident in the regular conduct of its business sells mortgages to Federal National Mortgage Association, and receives in return therefor and as part of a single and inseparable transaction cash and common capital stock in FNMA computed at par value, without intent on its part to acquire or hold said stock, as an investment, and the mortgage banker later sells said stock, the difference between the par value and the sale price of said stock constitutes for Federal Income Tax purposes an ordinary business loss to the mortgage banker for the year in which it was sold."

The ruling goes a long way toward the relief builders and mortgage bankers have been pressing for, in Congress and IRS itself. IRS has not said whether it will appeal.

Another attempt to provide similar relief by law has passed the House and is in the Senate Finance Committee. It would allow holders of the stock to claim their losses at

once, for tax purposes, but hold the stock and treat any later realized gain or loss on the deduction as a capital gain or loss. A nearly identical measure, but one which made the relief retroactive, was vetoed by President Eisenhower earlier this year. Sponsors believe he will sign the new version, with the offensive provision removed.

Builders warned on withholding liability

Smart homebuilders can save themselves a good deal of trouble—and money—if they make sure their subs are withholding income and social security taxes.

That's the moral of a recent tax case in Texas, where a contractor was stuck for taxes his subcontractor didn't withhold. The reason: the sub was classed as an employee, not an independent businessman.

IRS says there is no new rule involved—just an old one that is often overlooked. Normally, where a subcontractor fails to make proper deductions, he is held responsible for them. But where IRS feels the sub is not an independent operator, they will hit the contractor, often retroactively.

Typically, IRS will set forth no simple yardstick for judging subcontractor's status. But if the sub maintains a separate office, and is listed in a classified telephone directory, he is probably an independent operator in IRS eyes.

If in addition the sub works without supervision, on the basis of a finished job instead of time, supplies his own tools and materials, and has his own helpers, the case is more certain, says NAHB. If in doubt, IRS will give an advance ruling—but it may take some time.

Supreme Court, Congress cut depletion allowances

In separate actions, both sides have ruled that producers of building products from raw materials may claim depletion allowances for tax purposes on the value of the raw material alone—not on the finished product.

The Internal Revenue Service says the Supreme Court decision affects some 380 claims totaling \$287 million. It was rendered against a clay sewer pipe company, but brick, cement, and some kinds of roofing are also affected. In the decision, the court rejected the company's plea that the value of the finished pipe be taken as the deduction.

It pointed out the depletion allowance is to compensate for use of an asset, not to help expensive or inefficient operations.

"If [the allowance] were extended as respondent asks, the miner-manufacturer would enjoy, in addition to a depletion allowance on his minerals, a similar allowance on his manufacturing costs, including depreciation on his manufacturing plant, machinery, and facilities," says the court.

Congressional action took the form of a rider on the 1960 tax bill. Passed shortly after the court ruling, it serves notice that no legislative relief for the producers can be expected.

Hardest hit so far are cement companies, many of which have claimed the higher allowance on basis of a 1957 high court decision which allowed it. Estimates are their 1959 earnings will be cut as much as 20%, under the double-barreled setback. An offsetting general price rise in affected products is not expected by most industry men. Says one: "You don't make prices in a vacuum. All of these products are highly competitive." But others say a cement hike of 20¢ to 30¢ per barrel may come, especially if construction demand is high.



Read why builders are

From coast to coast, builders, like the four shown here, are discovering exciting new sales allures in Medallion Homes equipped by General Electric. Here's what makes a Medallion Home: 1. At least four major electric appliances; 2. Eye-saving lighting properly located throughout the

home; 3. Full housepower with wiring planned for all present and future electrical needs; 4. And in addition, Gold Medallion Homes have electric heating. You'll find this foursome adds up to the biggest selling combination since plumbing moved indoors.



HOUSTON, TEXAS

"Naturally a home like the Steiningers' is easier to sell," says John D. Townshend, the builder of the Don Steiningers' house shown here. "Down here, air conditioning is a must. But when you take a home like this one, with its Weathertron heat pump, you've got a natural. People go for a one unit heating-cooling system like the General Electric Weathertron." Mr. Townshend has found that a Gold Medallion Home simplifies financing, too. "Because they know it isn't about to go out of style, bankers are favorably impressed by these homes."



ROSLYN, LONG ISLAND

"Women just can't resist a house with a kitchen like this one," says Kalman Klein, builder of more than 7000 Long Island homes. He has found the highest public response to General Electric products. "And once they've moved in, people like Mrs. Simon (shown with her daughter) appreciate the dependability of General Electric equipment. That's why we started using General Electric appliances," he says, "and believe me, that's why we've stayed with them. People just naturally want a name they know and trust."

building Medallion Homes everywhere



SANTA ROSA, CALIFORNIA

Lewis Meyers, who began to use General Electric equipment more than six years ago, explains why he continues to build General Electric equipped homes: "It couldn't be simpler," he says. "I stay with them because they're up to date, because they have the best service and because my customers like their reliability." The living room of Dr. and Mrs. Walter Weber shown here is part of a model home built by Mr. Meyers to illustrate light for living. "It was so successful," he says, "I'm starting another model home next week."



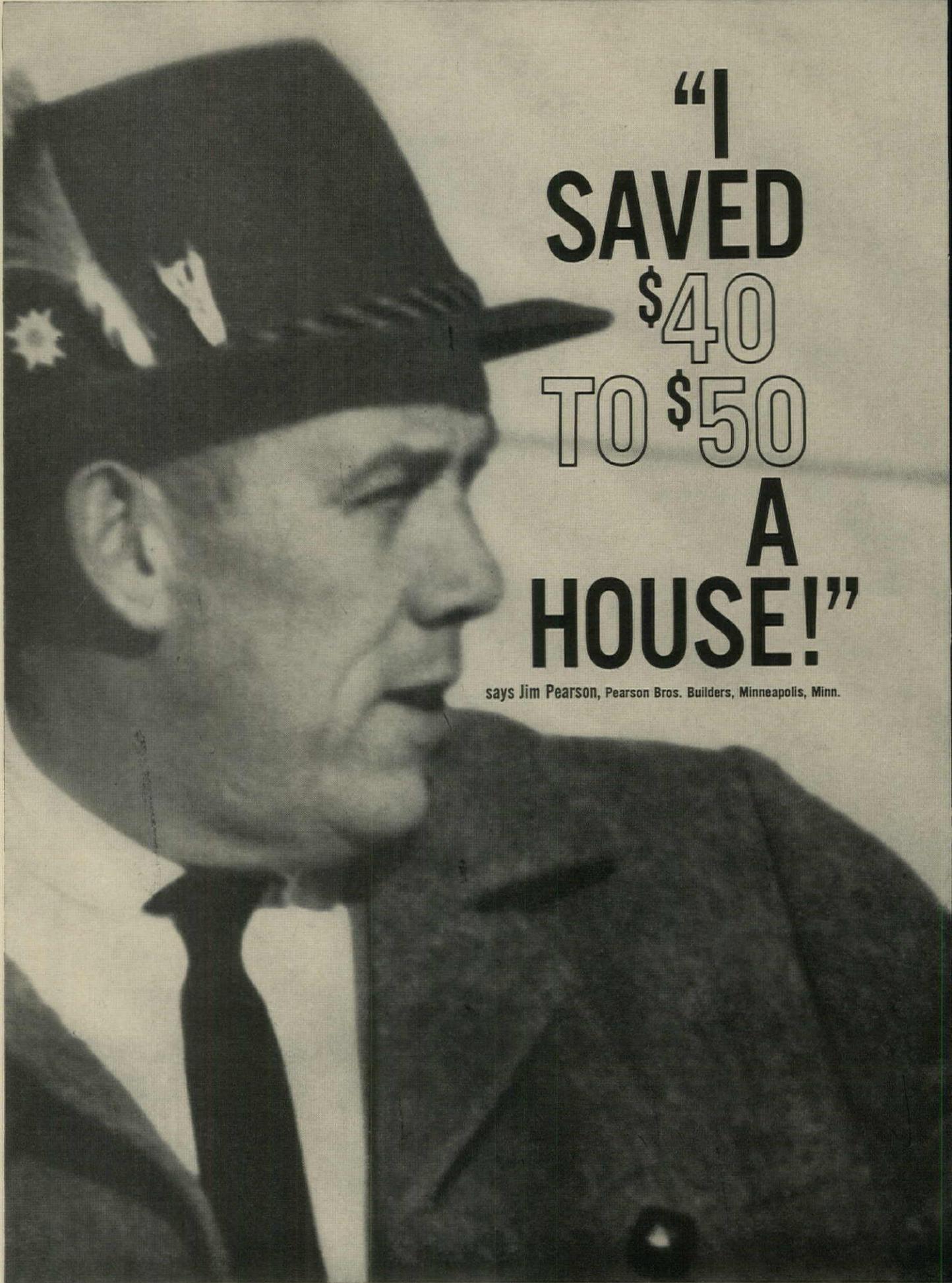
DELMONT, PENNSYLVANIA

The warm comfort of General Electric ceiling heat is illustrated here by the family of Mr. and Mrs. Adam Ardisson. Louis Meneghin, who built the Ardissons' Gold Medallion Home almost two years ago is presently building several more in the Delmont, Pennsylvania region. "I see it as the coming thing all over the country," he says. "More people are becoming more aware of electric heating every day. I expect to build a lot more Gold Medallion Homes around here. And one thing, for sure . . . they'll be equipped by General Electric."

For free copy of booklet "Building for More Sales and More Profit with Electrically Heated Homes," Pub. No. 49-515, write: The General Electric Company, Electric Comfort Heating Section, Appliance Park, Louisville 1, Kentucky.

Progress Is Our Most Important Product

GENERAL  ELECTRIC



“I
SAVED
\$40
TO \$50
A
HOUSE!”

says Jim Pearson, Pearson Bros. Builders, Minneapolis, Minn.

Part of the Pearson Bros. Project at 83rd and West River Road in Brooklyn Park, Minn., Minneapolis suburb, where they saved \$40 to \$50 a house by using Barrett "Rigidwall" Sheathing. Homes are in the \$13,600 to \$14,800 price range.



BARRETT RIGIDWALL[†] SHEATHING UPS PROFITS for well-known Minnesota builder!



"We switched to Barrett 'Rigidwall' Sheathing for our new project—Pearson Park," Jim Pearson says. "Smartest move we ever made. The lower cost of the 1/2" 'Rigidwall' helped save us \$40 to \$50 a house over the standard 25/32" sheathing we had been using. Lower labor costs were part of the big saving, too. We've had such success with 'Rigidwall' that we're going to use it 100% on a new project of over 300 homes we now have under construction."

Barrett "Rigidwall" is stronger than FHA requirements for application without corner bracing. No nailing strips needed when siding shingles are applied. Handles easily, scores and snaps cleanly, saves time on every start, gives you less waste.

"Rigidwall" is made by Barrett's exclusive CHEM-FI process that brings the fiber strength of natural wood to insulating board, and is asphalt-treated to provide protection from weather during application. These large panels go up fast. Despite their economies, they produce a more soundly constructed and a more rigid wall than most other types of sheathing, and have two to three times the insulating value of plywood! Jim Pearson is just one of many big builders who are switching to "Rigidwall" to cut building time and application costs. No reason why you can't do the same! Call your Barrett representative or contact us direct *today*.

[†]Trade Mark of Allied Chemical Corporation

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



LABOR:

How Davis-Bacon inflates wages

For 25 years, builders and contractors have cried that the Davis-Bacon Act has been helping to inflate the cost of multi-family housing. Now, the US Chamber of Commerce has come up with five exhibits to back the complaint.

The 1933 act was intended to prevent contractors from importing low-pay labor into towns with a higher scale. It calls for the Secretary of Labor to set wages on government construction jobs or jobs involving federal financing (eg FHA multi-family projects and Capehart Act military housing). He is supposed to set rates equal to those "in the city, town, village or other civil subdivision in which the work is performed," the law says. But now, so the chamber charges, the Labor Dept is distorting the law to impose higher wage rates than actually exist locally. How? By setting rates equal to those in nearby metropolitan areas instead of local communities where they are lower.

The chamber's exhibits:

	Local rates	Davis-Bacon rates
HASTINGS, NEB. AIRPORT		
Bulldozer operators ..	\$1.75	\$2.80
Metal pipe layers	1.60	2.30
WAVERLY (IOWA) AIR FORCE STATION		
Carpenters	2.25-2.50	2.98
Bricklayers	2.50-2.75	3.60
Cement masons	2.00	2.85
Electricians	2.25-2.50	3.10
Iron workers	2.25-2.50	3.32
Laborers	1.25-1.65	1.55-1.75

Painters	2.00-2.25	2.35-2.75
Plasterers	2.25	3.35
Plumbers & pipefitters	2.00-2.25	3.15
Heavy equipment operators	2.00-2.50	2.61-3.15
FRANKLIN (TENN.) HOUSING AUTHORITY		
Plumbers	1.50-1.75	3.55
Electricians	2.75	3.40
Carpenters	1.90	2.85
Brush painters	1.75	2.75
Bricklayers	2.50	3.62
Roofers	1.85	2.45
COLUMBIA, S.C.—SHAW AIR FORCE BASE		
Mechanics	2.00	2.40
Backhoe	2.00	2.40
Bulldozer	1.60-2.00	2.15
Crane, derrick, or dragline	2.00	2.40
End loader	1.75	2.15
Motor grader	2.00	2.15
Pan scraper	1.65	2.15
Roller	1.65	2.40
SELMA, ALA., SCHOOL		
Carpenters	1.75	2.25
Concrete finishers	1.75	2.85
Concrete mixer and traveling machine operators	1.50	2.75

Plasterers skip pay boost to hold down house prices

Concerned at the inroads of drywall on their trade, plasterers and lathers in Portland, Ore., have agreed to pass up a 15¢ per hr pay hike so homebuilders who use plaster can hold the price line.

The unions had already won the raise in a two-year contract when they "shocked" local contractors by offering to suspend it if the contractors would pass on the savings (and thus boost use of plaster).

"It's not the earnings per hour that count, it's the earnings per year with more steady work," says Robert Stanfill, business agent for Plasterers' Union Local 82, who proposed the idea. Lathers Union Local 54 joined them in it. Stanfill says his members had a "pretty good year" in 1959, with earnings averaging \$6,000. But "an average of only 10-15% of our plasterers now work on residential. It should be 40 or 50%, which is our ultimate goal. We are in a very competitive field, not so much with wallboard itself but because of the fact manufacturers of plaster also manufacture drywall and have been promoting it so heavily."

The pay hike moratorium applies only to residential and "small commercial" jobs, not major ones which are covered by a 28¢ raise over two years. Present rates are \$3.59½/hr for lather, \$3.65/hr for plasterers.

In Chicago, by contrast, strikebound contractors finally capitulated on continued support of the union-dominated Chicago Plastering Institute after 1) individual contractors began signing new union contracts calling for 7¢ per man hour contribution to support the promotional body and 2) a federal judge refused to rule it illegal and enjoin their payments. It was the second rebuff for the contractors in a year (NEWS, Nov), in efforts to kill the institute. They gave in on condition welfare funds are separately administered.

CANADA:

Ontario curbs mortgage brokers

Ontario Province, where 38% of Canada's new housing is concentrated, has acted to curb whopping interest charges on second mortgages.

Province-wide attention was first directed to abuses in the mortgage field by the *Toronto Star's* political gadfly, Columnist Pierre Berton. Sample: a widow, thinking she was borrowing \$1,500 at 7½% interest, left a loan shark's office owing \$2,225 at 12%, secured by a third mortgage on her house. When the loan fell due in four years, she would still owe \$1,580. With discounts on such paper running from 20-40%, often on top of first mortgages at 7½% conventional, (sold at discounts as high as 20%), Berton's needling got action.

Upshot was a new provincial law requiring all mortgage brokers to register, giving provincial officers sweeping investigative power, right to withhold a license if they think it in the public interest. The law requires borrowers to sign statements that they have signed no blank papers in arranging for their loan, and lenders are required to provide a clear statement of the property covered, true interest, actual amount to be repaid, and size of the balloon.

Igor Kaplan, solicitor for the newly-formed Ontario Mortgage Brokers Assn, points out the new law has teeth: officials can seize all records on a given loan, and freeze a lender's assets pending the outcome of their investigation. Furthermore, fines for a first violation are \$500 for individuals and corporations, but

climb to \$1,000 and six months in jail for individuals, \$5,000 for corporations, upon a second offense.

But all this by itself still would not be more than annoyance to big-time operators. The law does not set interest rates, cannot, as one official put it, "save borrowers from their own folly." What gives it added punch is a crack-down announced by Attorney General Kelso Roberts, under another law, passed in 1946, but so far little used, that allows persons who find themselves caught in an unfair lending scheme to appeal to the courts within seven days, get the deal called off.

RAIC housing report raps nearly everyone

Canada's post-war housing is drab, monotonous, and it fails to meet the environmental needs of the families that live in it.

So says the Royal Architectural Institute's committee on residential design in a report presented last month to the RAIC assembly in Winnipeg. The report was financed by a \$30,000 grant from Central Mortgage & Housing Corp. (NEWS, Apr) which asked for recommendations on how Canada's future housing could be improved. RAIC sent three top architects on a six-month trek across Canada to hold hearings with homeowners, builders, government officials, and anyone else concerned with housing.

The report recognizes no sacred cows. It

blames its angel, CMHC, for not insisting on better design and planning. It blames lending agencies for being too concerned with individual mortgages to pay attention to projects as a whole. It blames all levels of government for not promoting better dwellings. And, mostly by implication, it takes builders and architects to task for not getting together to design and build better houses.

Lack of planning is the big problem. And the worst result of this lack, says the report, is the sameness of design it has produced. Houses have "... dull rubber stamp similarity ... the same plan for every exposure." Even the best plan looks bad when it is repeated ten times in a row, and "... the urban mass produced by a hundred of the same specimen repels almost everyone."

Underlying much of the sameness, the committee believes, is the economic stratification of most developments. "We are giving federal guarantees to whole townships of three-bedroom bungalows. For every third birth notice in a metropolitan daily, some family will have to abandon not only its house, but also its whole environment of similar little houses."

What's needed is a "richer mixture" of family types and dwelling types in developments. While "economic extremes do not mix well, there is plenty of proof that grandmothers and brides, large families and smaller, owners and tenants could mix much better than most modern suburbs allow them to."

The use of land must be better planned. The present preponderance of detached dwellings is burning land up much too fast, the report notes. Apartments and other types of

continued on p 69

HOUSING ABROAD

Central mortgage bank proposed by European realty men

Talk of a central mortgage bank for Western Europe was the big news at the 11th annual congress of the International Real Estate Federation in Salzburg, June 18 to 22.

Private realty men from most of the dozen nations* whose national real estate groups belong to IREF agreed on the need for international mortgage credit (or at least Europe-wide credit) to do the same job FHA and VA did for the US years ago: make money

* US, France, West Germany, Austria, Switzerland, Italy, The Netherlands, Belgium, Sweden, Spain, Finland, Japan.

Belgian, Swiss, and West German sources are now looking for new outlets for capital investments

IREF President Hans Plank of Austria told HOUSE & HOME that Belgian investors loom as the new No. 1 source of money for an international mortgage bank. One reason is that Belgians have a surplus of funds from liquidated Congo investments. Another: they are willing to take a 3% yield, according to Plank. (Swiss real estate men say lenders there need "more than the 3½% to 4% we get at home—plus insurance." West Germans want about 7%—but even this would be cheap in some European countries.)

What makes this fact take on new significance is Europe's new efforts toward economic and customs union—notably the European Economic Community pact signed in Rome in 1957. One of EEC's major aims is re-establishing the free flow of capital across European boundaries.

Speaker after speaker at IREF's sessions predicted that these efforts would soon create a climate of stable currencies and balanced national budgets (perhaps even a common European currency, several hoped) in which a private international mortgage outfit could

"Obstacles or not," President Plank told HOUSE & HOME, "the bank will be formed." How soon? "In a year or more," he said, a little vaguely. "And it will be done wholly without government funds from any nation. We want it free of government controls."

Norman Mason offered the meeting a three-step plan for an international mortgage set-up

Last-minute Congressional action on the 1960 housing law kept Mason in Washington, but in an address read for him by John Tysen, head of the American chapter of IREF, the HHFA administrator urged that IREF 1) devise a standard mortgage instrument for all nations 2) standardize appraisals, and 3) let each national government stand behind mortgages on property within its borders. Advised Mason:

"The first step in making the mortgage instrument an international commodity that will attract investors on a world-wide basis is to create standards by which the value of the mortgage can be measured whether the property is in New England or Old England—Frankfort, Ky. or Frankfort, Germany. This is going to take planning and hard work. Just as the silver craftsmen of years gone by worked hard to give 'sterling' its place of respect in world markets, so you must strive to find a benchmark for mortgages that will make them attractive in an inter-

IREF went on record in a resolution declaring: "The lack of savings and mortgage financing institutions in many countries, particularly in the underdeveloped nations, makes impossible the ownership of homes except by wealthy families and results in social and political unrest. We urge . . . more adequate savings and mortgage financing institutions be developed."

for housing flow where it is needed most.

When this idea was first broached eight years ago, blocked currencies, jealous national governments, and war-ravaged economies made it unrealistic. And many US delegates felt Europeans wanted US taxpayers to finance it. Now, with European prosperity mounting, the same delegates sensed this year that European realty men feel independent of US aid.

sell debentures on the world market to raise funds for mortgage lending. The idea would be much like an international Fanny May, but without any kind of government support or—and this is much more important to European realty men—any kind of government control.

The remaining big obstacle, says President Plank, is national governments (most of them in Europe are welfare-state minded) "which want to swipe any available money for governmental purposes—and won't tolerate it being used for private building."

national mortgage market. . . .

"It is not beyond the realm of possibility that standard mortgages guaranteed by local governments could become an international commodity. Canada already has a National Housing Act. So do the Philippines and both Western Germany and France are studying ways and means of promoting private mortgage financing somewhat along the lines of FHA. . . ."

Mason chided foreign nations for not developing "the institutional framework for channeling savings into home financing."



SEC JEAN BAILLY & PRES PLANK

European delegates also expressed concern over land speculation

No American touched on the topic, but the opening session had scarcely begun before Mayor Beck of Salzburg, himself a banker, was calling on real estate men everywhere to "channel land speculation the right way, or, better, prevent it altogether."

In Switzerland, complained Delegate Willy Egeli, land purchases by foreigners have driven land prices so high the average-income Swiss family can no longer afford a freehold house or apartment. In Sweden, said delegates, rising land prices must share the blame for dampening housing construction (in a nation where 100,000 families are still waiting for apartments).

Photos: H & H Staff



US DELEGATES NUTTER, TYSEN & CONSER

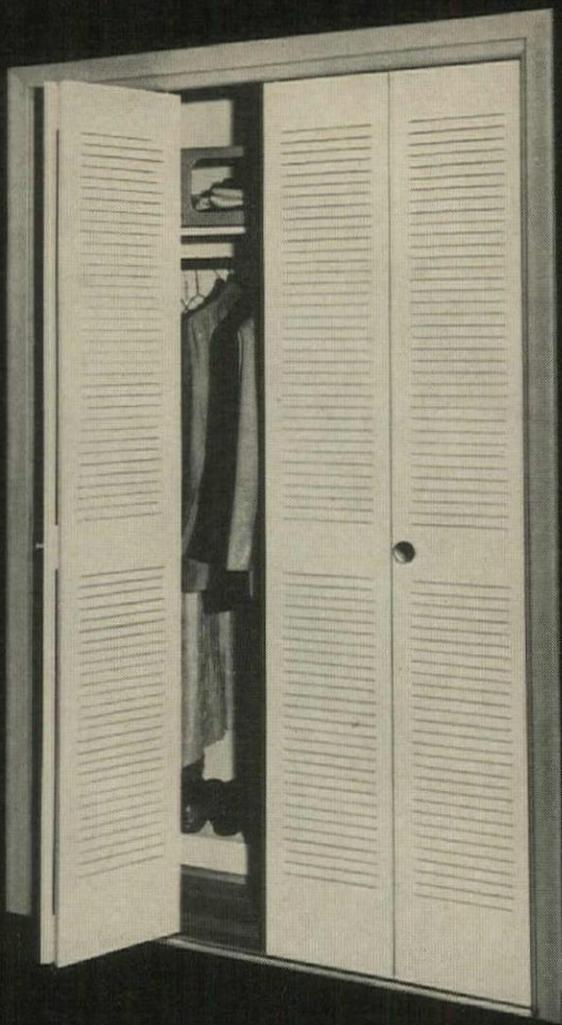
What is the International Real Estate Federation?

Even though Realtor Leonard P. Reaume of Detroit was president of IREF for two years (1958-59), it remains primarily a European organization, dominated by France. IREF's first president was Pierre Colleville of Paris. And its headquarters have been in Paris since its founding in 1951—even when Executive Vice President Eugene Conser of NAREB served as secretary-general in 1958.

IREF's aim is to swap information, study common problems of realty men and to promote the standing of the profession. It sits as a consultant on UNESCO.

But the pace of its work is maddeningly slow to Americans. European realty men apparently consider it a day's work to meet at 10 AM, adjourn at noon, reconvene at 3:30 PM and quit for the day at 5:30.

IREF accepted NAREB President Arnel Nutter's invitation to hold its 1963 Congress in New York City. Up to now, European currency controls blocked a US convention.

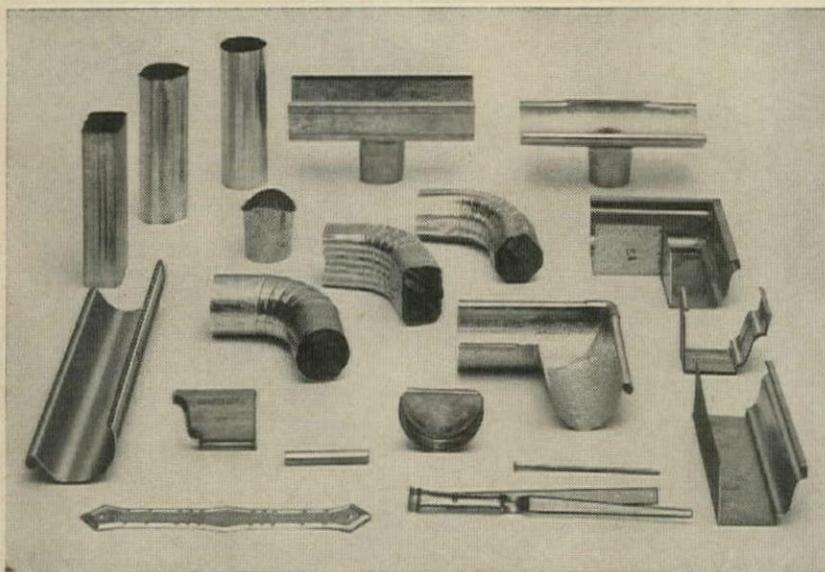


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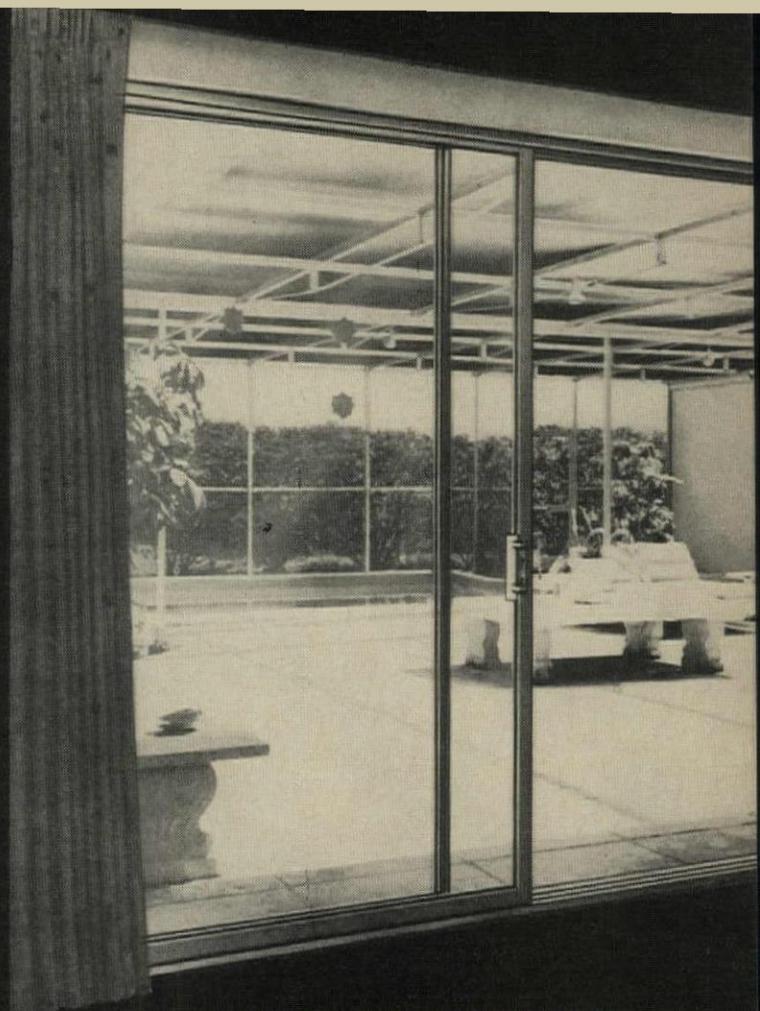
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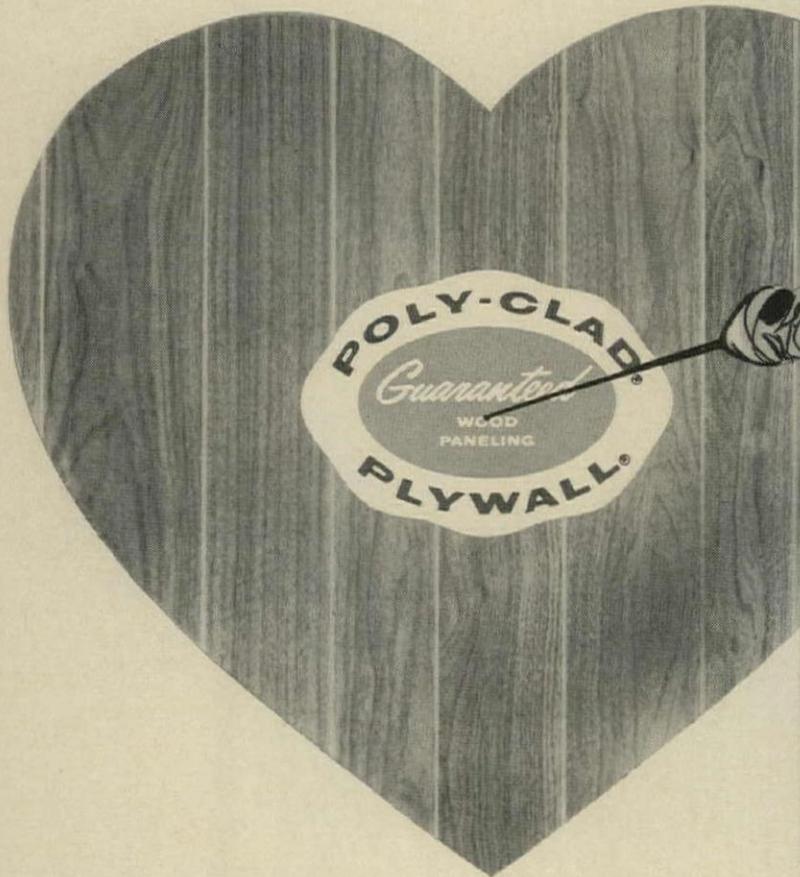


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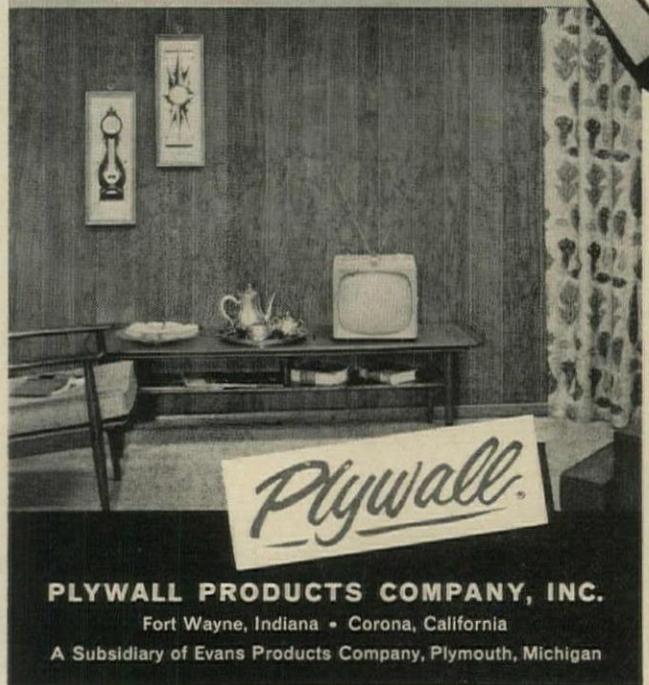
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Mr. Thompson builds homes in the \$20,000 to \$40,000 price class, and is well known for putting extra value into each of his houses. This reputation has helped make him one of the leading custom builders in the Worcester area.

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CODES:

Los Angeles secedes from ICBO

The city's withdrawal climaxes a bitter policy fight over management of the powerful group (full name: International Conference of Building Officials) which sponsors one of the nation's most widely-used model building codes.*

In the dispute, Los Angeles' building superintendent, outspoken Gil Morris, a past president of ICBO, charges ICBO management with "extravagant and unwise expenditures" and meddling in the group's politics.

Cancelling his city's \$250-a-year membership on the eve of his own retirement (News, July), Morris wrote ICBO that he could no longer approve use of city tax money "to subsidize this kind of management." He called for a complete change, added: "The ICBO should be run for the benefit of the cities, the building officials, the construction industries, and not for the benefit of management."

ICBO President Cassatt D. Griffin says the furor simply tops off a long personal conflict between Morris and longtime ICBO Managing Director Hal B. Colling. But Morris says he has letters from nearly a score of cities supporting his stand. Griffin admits "there may be a few more terminations" but they won't affect ICBO's work.

Begun 38 years ago as the Pacific Coast Building Officials Conference, ICBO was first to publish (in 1927) a model code for use by municipalities. Its Uniform Building Code, revised annually and reissued every three years, is used or supported by some 500 cities, towns and counties, mostly in the West, at dues from \$35 to \$250 a year. The group also publishes related manuals and pamphlets, and a monthly bulletin. It screens building products for code conformity, issues approvals at \$150 each plus \$10 per month for publication and \$100 a year renewal.

President Griffin, who is assistant chief deputy engineer for Los Angeles County, defends Colling as a dedicated man who "loves a good fight." He says Morris' action was set off by 1) executive board action raising Colling's salary and setting up a pension for his wife, who is director of publications; and 2) Colling's support of a successful executive board candidate opposed by Morris. Colling has been employed by ICBO since 1933. In 1938, he became managing director. His wife has published the code and other items (first as a contractor paying royalties for them, and since 1954 as a salaried employee) almost as long. Colling's reaction to the charges: "The less said the better for all concerned. We are the largest by far (of model code groups) and we intend to stay that way."

*Other top codes are sponsored by Building Officials Conference of America, Southern Building Code Congress.

NAHB gets code changes

"BOCA's code officials are bending over backward to cooperate with the homebuilders. They are taking a common-sense approach."

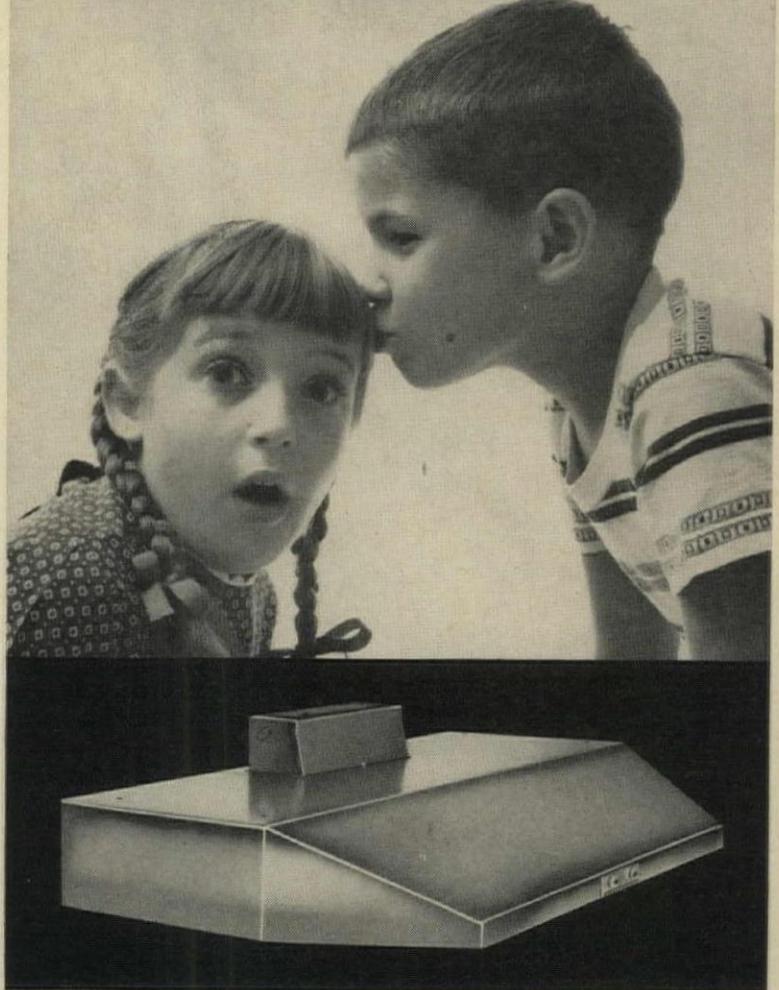
So reports Ward Buzzell, NAHB's assistant technical services director, after the builders easily won a half-dozen code improvements at the 1960 meeting of the Building Officials Conference of America (News, July). What the changes do:

- Clarify the definition of "habitable room" so that basement heating rooms and other areas not often used can have ceilings less than 7'6" high.
- Ease rules requiring fire-resistant wall construction so that only that part of a wall less than 6' from a lot line need be so built.
- Require less glass window area for crawl space than for basements.
- Permit smaller hearths for fireplaces with less than 2'x3' openings.
- Reduce treads of open-riser basement stairs from 10 1/4" to 9 1/2".
- Allow the maximum open area of sliding glass doors to be counted in meeting room ventilation requirements. Says Buzzell: "This means builders do not have to provide a window if they want to offer a sliding door. This should stimulate more builders to offer buyers sliding glass doors in bedrooms, particularly since the National Fire Protection Assn has been pushing for outside doors for bedrooms."

Code costs backfire; Phoenix eases them

Man has bitten dog in Phoenix. The city has changed its building code because the old code was making builders' costs too high.

In 1958, Phoenix adopted a building code that pushed costs up 2% to 3%. Normally a builder could pass on such a small boost. But in Phoenix, city and county builders are in direct competition, and the difference of \$200 to \$300 on a \$10,000 house had to come out of the city builders' profit. The city, faced with resistance to its annexation plans from outlying builders because of the high-cost code, suffered too. So it consulted with city builders, made 26 changes that cut in-city costs to within 1/2% of those outside.

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RENEWAL:

Supreme Court splits on surveys

Its 4-to-4 tie vote lets stand the arrest of a Dayton homeowner for failure to admit a housing inspector without a warrant, as required by a local ordinance. But it leaves still clouded the legality of such requirements—vital to the housing surveys cities need to qualify for Federal renewal aid. Reason: the tie vote has no force as precedent.

In 1959, the high court upheld the right of a Baltimore health official to inspect a home for health violations without a warrant (NEWS, June '59). In the Dayton case, justices upholding the search say the Baltimore case should govern. But the dissenters say there is a vital difference: the Baltimore inspector could show good reason to believe the violations existed; in Dayton the inspector did not.

Should a final test be forced? Some observers (among them NAREB's Public Affairs Director Charles Stewart) think cities would be smarter to get a warrant in the rare cases where inspectors are turned away, instead of risking the bad public relations—and a possibly unfavorable decision—of a court fight.

VHMCP sets sights on renewal

In a major policy switch, the Voluntary Home Mortgage Credit Program has quietly undertaken to spur private investment in the nation's lagging urban renewal mortgage programs.

The Program, set up under HHFA auspices in 1955 as private lending's answer to direct, subsidized government mortgage loans, has already started pilot projects in Nashville, Louisville, Wichita, and Kansas City, Kan. In all these cities, VHMCP is seeking private lenders for 220 and 221 financing. In Louisville it has extended its efforts to housing for the elderly—and succeeded in its first project.

VHMCP was founded to act as a clearing-house to help find local or out-of-town lenders willing to finance mortgages for two groups: veterans in out-of-the-way areas where VA financing is not easily obtained, and minority groups everywhere. In its first two years it so reduced the demand for direct VA loans that VA used only a fraction of authorized funds for the purpose. Direct-loan enthusiasts in Congress first tried to kill the program, then let it live on condition HHFA stop giving VHMCP first crack: at VA direct-loan applications. In its five years, VHMCP has brought lenders and borrowers together to finance 43,000 homes, with mortgages totaling \$425 million. But with direct loans easier to get (and VA's interest rate frozen) VHMCP's business has been cut back seriously.

The decision to get into renewal was taken quietly at VHMCP's last advisory board meeting in April. Executive Secretary Joseph Graves says reception of the trial runs has been excellent. By first trying local lenders on hard-to-finance properties, only later going further afield, VHMCP has persuaded the six S&Ls in Nashville (with the nation's biggest 221 quota: 3,800 units) to form a \$1-million pool for the purpose. In St. Louis 35 S&Ls have agreed to a similar setup.

In Louisville, the program has arranged financing for Trinity Methodist Church's 218-unit \$2.6 million rental project for the elderly (as part of a new church building) with the Ziegler Co of Chicago, one of the nation's largest church-loan firms.

Toledo mobilizes leaders against blight

Latest city to organize top business and financial help to power renewal is Toledo, Ohio. The city announced its plans for its first project, redevelopment of a 99-acre Skid Row area, to 150 lenders, industrial and commercial leaders at a meeting chaired by G. P. MacNichols, president of Libbey-Owens-Ford, and sponsored by a citizens' committee of nine other top executives.*

Plans for the project call for \$12 million for acquisition and demolition, shared by city and federal governments. Another \$35 million in private investment will be needed for construction of a planned complex of 400 to 600 high-rise and garden apartments, commercial and civic facilities.

But civic leaders at the meeting were warned that no such project builds itself. "All the tools the federal government can offer don't mean a thing," FHA Commissioner Julian Zimmerman told them, "unless you have a city that is on the ball." J. Stanley Purnell, chairman of Pittsburgh's ACTION-Housing, Inc, reviewed the history of that city's 16-year renewal effort: a \$200-million investment by private enterprise in eight project areas—almost all taxable. He described ACTION-Housing's projected \$2-million revolving loan fund for renewal housing. "Where a job is properly one for private enterprise, we urge private enterprise to do it. When public powers are needed, we use them. When public subsidy is required, we usually get it."

* Among them: the president and/or chairman of Owens-Corning Fiberglass Corp; Owens-Illinois Glass Co; Overland Corp; Electric Autolite Co; Toledo Scales Corp; Champion Sparkplug Co; Willis Motors, Inc.

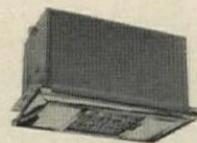
NEWS continued on p 67

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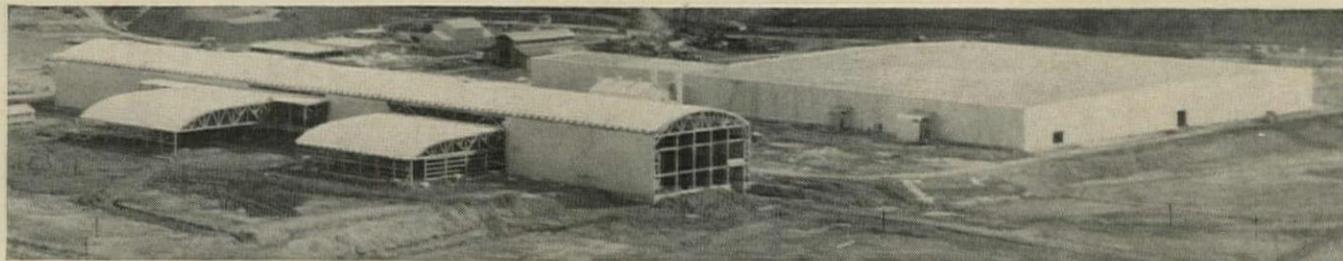
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SEGREGATION:

Oregon test sets extra-legal blaze

The voice on the phone was so casual that at first the dispatcher in Portland, Ore. Fire District 10 thought he was joking. "I believe you have a fire at 140th and Halsey," it said. "It's an unfinished house." But firemen responding to the call just after 11 p. m. last July 3 found it was no joke. The half-finished \$17,000 trilevel was blazing fiercely—too fiercely, investigators decided later, to be accidental. By morning, bits of gasoline-soaked straw, pieces of a gallon glass jug found in the smoldering wreckage confirmed their suspicions, and Portland officials realized they had on their hands the city's first case of race violence in housing.

Victims of the arson were Rowan Wiley, 41, sheet metal worker, his wife and four children. Wiley, a World War II Purple Heart veteran and former Duluth, Minn. high school football star, moved with his family from St. Paul to Portland three years ago. They provided the first case under the state's 1959 law against discrimination in sale of housing when a realty firm refused to sell, and a builder refused to build them a house. The case, decided administratively in Wiley's favor, is under appeal in the state courts.

Meanwhile, Wiley bought a lot and began building a house, only to have the water district serving the neighborhood, just outside the Northwest boundary of Portland, begin condemnation on his land. Filing civil rights action in Federal Court, Wiley won an injunction on grounds his race was the reason.

Surveying the ruins of his house on July 4th, Wiley noted the \$7,000 damage was insured, said, "We'll rebuild. They can't keep us out that way." Already celebrated as a trailblazer testing Oregon's new anti-discrimination law, the Wiley case also looked like a test of Portland, a city with nonwhites living in all of its 61 census tracts, and no record of race violence.

Michigan moves against realty bias

Michigan, whose legislature has steadfastly refused to pass a law against racial bias in housing, is seeking the goal administratively.

The State Corporation and Securities Commission has made national, racial, or religious discrimination by brokers or agents in sales or rentals cause for license revocation.

The ruling follows a statewide furor over disclosure that the fashionable Detroit suburb of Grosse Pointe has for years used a "point system" of rating would-be newcomers for desirability. Operated by the Grosse Pointe Property Owners Assn and the Grosse Pointe Brokers Assn, it gives point values to items like swarthythness, style of dress, accent, religion. "Passing" scores were higher for Poles, Southern Europeans, Jews, than for others. Negroes and Orientals did not pass. The scores were used to "advise" prospective sellers.

The system was uncovered when a former Grosse Pointe property owner sued to regain possession of his unfinished home in the suburb. He charged property owners there, who took a mortgage when he met financial difficulties, now would not resell it to him.

The Grosse Pointe system is still under investigation by State Attorney General Paul L. Adams. His office also drew the new administrative rule, which is effective Aug 14. A court test is likely.

Supreme Court rejects Levitt appeal

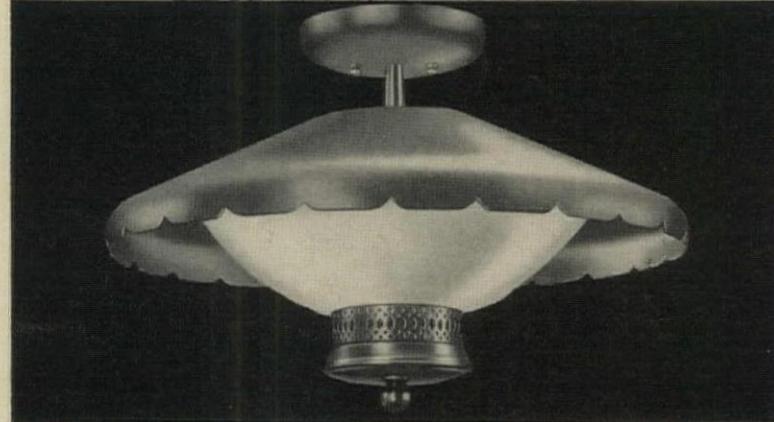
It declined to review the New Jersey decision that, because his houses are financed FHA, Bill Levitt must sell them to Negroes as well as white (NEWS, Mar). The reason: "No substantial federal question."

Main issue was whether FHA financing constitutes "public assistance" within the meaning of the New Jersey law—which bars discrimination in public or publicly assisted housing. Levitt argued in the lower courts that no public funds were involved, and that the FHA insurance went to the homebuyer, not the developer. But the state court said that by its very existence, FHA made mass-production operations like Levitt's 16,000-house Levittown, N. J. possible—and thus is a kind of public assistance.

In the federal appeal, Levitt also argued that the state law is so vague it deprives him of due process. The state denied the arguments. None were ruled on by the high court.

The rebuff comes as no great surprise to Levitt. Convinced that whether he won or not, integration is inevitable, last spring he opened his development to Negro buyers on a "selective" basis (NEWS, May). Dr Harold A. Lett, retired Negro assistant director of the state's Division Against Discrimination was hired to help prepare the community for the first arrivals, due this month. Levitt aides report that so far, sales have not been affected. Says one: "There aren't many Negro families here who can afford these houses." In his newest project, Belair near Washington, D. C. (see p 44), Levitt says only that he will sell "according to the laws and customs of the area."

NEWS continued on p 69

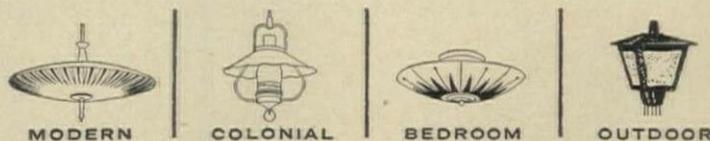
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"I believe in pre-wiring my homes for telephone convenience," says builder Fogarty. "It's a feature people want and *I'm convinced* it helps me sell my homes faster. I'm a practical man, too. I know it gives me a competitive advantage."

Mr. Fogarty, who builds homes in the \$17,000-\$35,000 range and has recently acquired land for 1250 more Telephone-Planned homes, provides from 10 to 12 pre-wired outlets in each home. In addition, he advertised his homes as "Certified Telephone Planned Homes."

"I give a gift certificate to every customer for an extension phone," he says. "He can choose his own color and the telephone company will install it where he wants it. I'm also providing a patio outdoor jack for all of the homes I build on half-acre lots."

"Folks today *expect* a modern home to provide for extension telephone service. And I certainly believe in giving them what they want."

* * *

Joliet builder Luke Fogarty (right) and telephone man Frank Metzger survey one of Fogarty's Brook Forest split level homes.

Your local 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.

BELL TELEPHONE SYSTEM



Higher volume would help quality

continued from page 56

common wall housing put many more families on less land, should be tried on a larger scale than at present. And raw land costs are too high, are contributing a disproportionate share of present higher home prices. "Where a five year supply (of land) is in the hands of builders, a further supply for ten or even 20 years after that may be held for sale to builders." And this speculation will mean high prices, and developments too small to be adequately planned.

Higher volume, is the report's surprising answer to improve housing. "Significant improvements . . . will be possible . . . if at least 150,000 new dwellings a year are built, but hardly at lower rates." (Estimated 1960 output, little over 100,000.) And far more attention should be paid to the design of these dwellings and to more diversification of size and type among them.

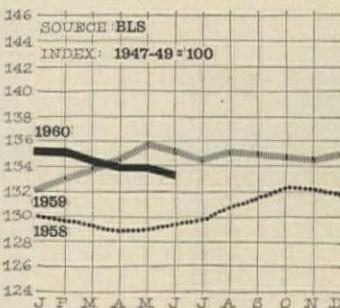
First step towards better housing?

One recommendation promises to stir controversy among architects. It suggests RAIC act to draw up stock plans of higher quality.

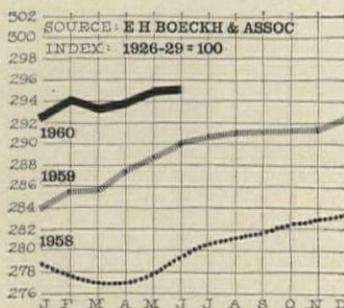
Better design, the report points out, can only be achieved by better teamwork. Builders and architects must learn to work together, and lending agencies and governments must learn to insist on good design. . . . Only in special few cases . . . is municipal power exercised to refuse a building permit . . . we need hardly wonder that so much of urban Canada consists of bizarre and misshapen assemblies of wall, wires, signs, and stoops."

So far the only official outside reaction to the report has come from NHBA President Campbell Holmes. He hoped more architects would make a career of house designing instead of looking at it as "a way station on the road to a more lucrative future elsewhere."

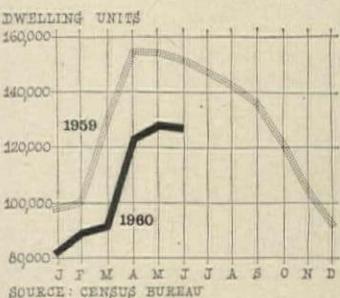
STATISTICS:



MATERIALS PRICES fell 0.5% to 133.2 in June, 1.9% lower than prices a year ago. The continuing drop in lumber and wood products is chiefly responsible, but plumbing equipment and concrete products also declined slightly.

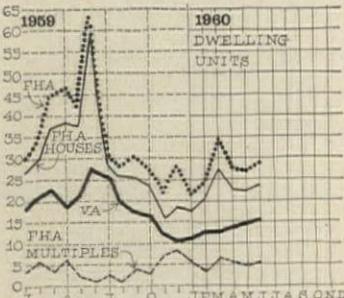


RESIDENTIAL BUILDING COSTS rose another 0.4 point in June to 295.1 on Boeckh's index. Reason for the climb, says Col E. H. Boeckh was the continuing increase in labor rates. This offset a slight weakening in steel and lumber prices.



HOUSING STARTS, based on Census' new series (NEWS, July), fell .47% in June to 127,800, 15.9% below June, 1959. May's starts totalled 128,400, up 4.1% from April but down 16.8% from the year before. Private nonfarm starts for June were 123,500, down 1.8% from May and 15.7% from the previous June; May's private starts of 125,700 were 3.4% ahead of the month earlier and 16.7% below May 1959.

Seasonally adjusted annual rate for private starts was down a slim .08% in June to 1,316,000, 15.8% below the rate a year before. Annual rate for the first six months is 1,376,000, 18.3% below the first half of last year. NEWS continued on p 72



FHA APPLICATIONS on new units rose in June for the first time in 1960, were up 8.4% from May to 29,108. They were still, however, 53.6% below June of last year. New home applications of 23,664 show the same trend—up 5.5% from May and a whopping 60.7% below June 1959. For the first six months, new home applications are down 42.3% from last year to 133,377. Project applications of 5,444 are 22.8% ahead of May and 12.7% below June 1959.

VA appraisal requests are 15,213, 5.7% above May and 44% behind June 1959. First six months total of 80,208 is 37.7% lower than the first half of last year.

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Here's how! From one quality source you get ventilating fans and hoods, chimes and intercoms, recessed and decorator lighting and electric heating and air conditioning equipment. Just one dependable supplier . . . Emerson Electric . . . is responsible for guaranteeing quality, for billing your order and for shipping. You save not only the hidden costs in time spent ordering from many different suppliers . . . but you also save money in initial costs because you are an important quantity buyer!

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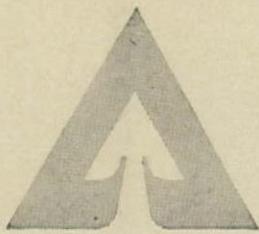


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Weyerhaeuser Water Repellent Treated Lumber gives you a better finished job—4 ways to save

- Protects the wood
- Protects the finish
- Improves the job

Weyerhaeuser's specially developed repellent is a combination of water-resisting resins with a pentachlorophenolic toxic additive (to protect against stains, molds, decay-forming fungus, and termites). These active ingredients are mixed in a volatile mineral spirits vehicle which carries them evenly over the faces, edges, and ends of siding or lumber. A retention of 5 to 7 gallons of repellent per thousand feet is our specification.

Water Repellent Treatment is available in 4-Square Kiln-dried Western Red Cedar, Douglas Fir, West Coast Hemlock. It is recommended for all exterior applications except where there is ac-

the most common causes of paint failure. It slows down the loss or pick-up of moisture by the wood with the result that there is less cupping and swelling, reduced grain raising, less checking, and little or no water stain.

4 ways to save

Water Repellent Treatment makes immediate savings possible on paint and labor costs. In addition paint jobs last longer, and when the time does come to repaint, fewer repairs are necessary. These savings are possible because Water Repellent Treatment serves as a good paint undercoat . . . reduces brush "drag" so painting goes faster . . . makes paint spread further . . . and keeps more of the paint oils on the surface to prolong the life of the job. It makes two coats very nearly as effective as three coats.

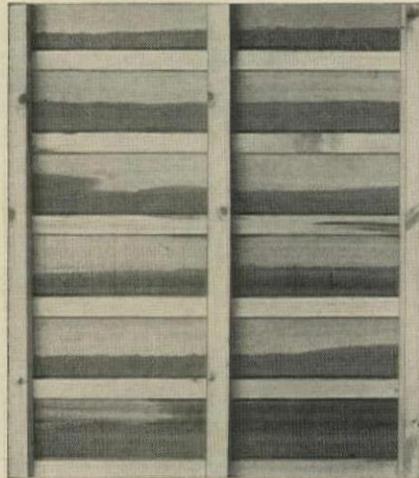


Photo of untreated test panel, after exposure to moisture in simulated weather conditions.

tual ground contact or an unusual moisture condition.

The untreated siding illustrated above shows the results of capillary action ("wicking") of wood fibers. The illustration in the next column shows how effectively Weyerhaeuser's Water Repellent Treatment stops this action.

Water Repellent Treatment actually "raincoats" lumber and siding to give it surface protection from rain and snow that's new to lumber handling. This raincoat permits painting at any favorable time up to several months after construction has been completed.

After painting, Water Repellent Treatment prevents wicking of storm-driven rain and snow, thus eliminates one of

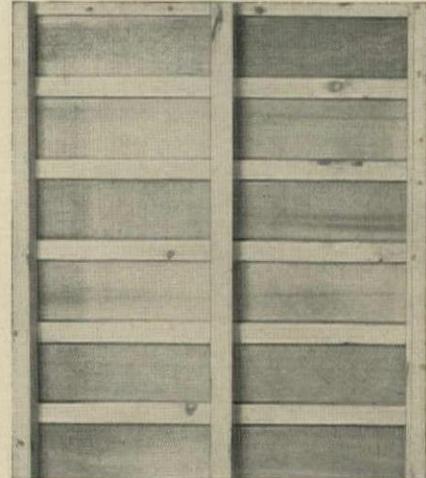
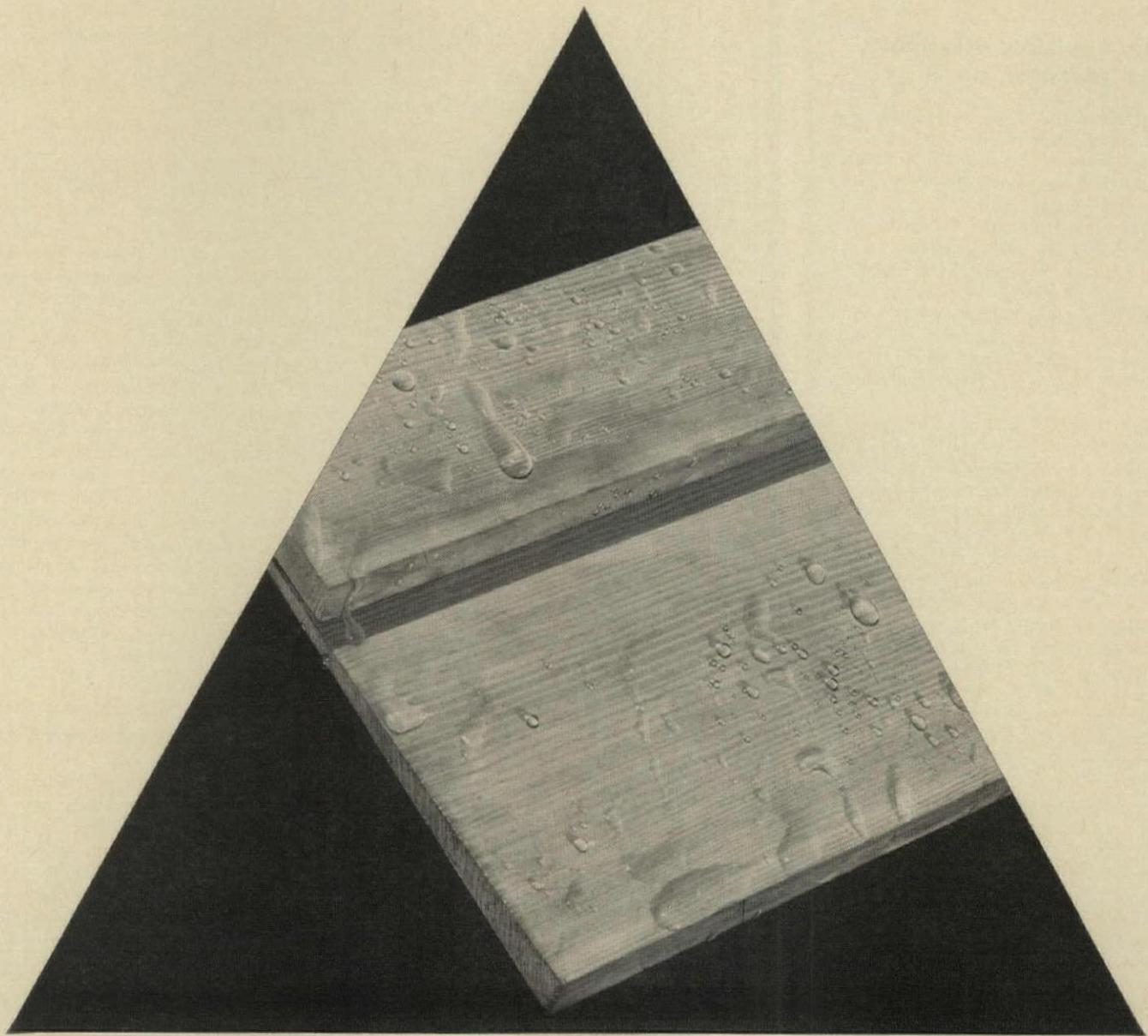


Photo of Water Repellent Treated test panel shows moisture resistance in identical test.

Uses

Bevel siding and dropsiding for homes, garages, barns, churches, schools, and commercial buildings. Also vertical siding in Board & Batten, WC-130, WC-134, WC-136, and WC-140 patterns. *Outside trim*, including fascia boards, casings, porch posts, soffit lumber, bevel sill, barge boards, pulley stile, and exterior mouldings. *2x6 Roof decking. Exposed beams* made of doubled or tripled 2x6s, 2x8s, 2x10s, 2x12s. *Porch and deck floors*—1x4s, 5/4x4s, or 2x6s. *Decorative fencing* (note: use pressure treated posts wherever there is ground contact, water repellent treated lumber above ground.)

For additional information, write: Weyerhaeuser Company, Lumber and Plywood Division, Dept. 56, Tacoma Building, Tacoma 1, Washington.



WATER REPELLENT TREATED LUMBER

Bevel and Vertical Siding—Roof Decking—Outside Trim

Weyerhaeuser's Water Repellent Treatment gives wood products a "raincoat" that protects before, during, and after installation and finishing. This raincoat protects lumber products from moisture absorption, and where such conditions are prevalent it also protects against damage from stains, molds, decay-forming fungi and termites. It provides a better paint base, paint spreads farther and lasts longer.

For a quality sales story . . . a quality job . . . and for the savings that a quality material can bring . . . use Weyerhaeuser 4-Square Water Repellent Treated wood products for siding, trim, decking, flooring, and fencing. It is available in 4-Square Kiln-dried Western Red Cedar, Douglas Fir, and West Coast Hemlock. Be sure to have your Weyerhaeuser 4-Square Lumber Dealer give you the complete story.



Weyerhaeuser Company

Lumber and Plywood Division

PEOPLE:

Denton replaces Northup in FHA planning post

Graham Northup, 34, has resigned as acting assistant FHA commissioner for plans and programs. Named to succeed him: **Harold Denton**, 50, veteran of housing both in government and private industry.

Northup, an FHA staffer for three years, won notice through his launching of the Certified Agency Program. His resignation came just two months after he was promoted to the assistant commissioner post in a major shakeup of top FHA brass (NEWS, May). He's the son of **H.R. "Cotton" Northup**, executive vice president of the Natl Retail Lumber Dealers Assn.

Kansas Denton has a government background dating back to the early days of the TVA. His jobs include stints as research chief for the Home Loan Bank Board, War Production Board staffer, and chief industrial economist for the Natl Housing Agency. In 1946, he went into private industry. Among companies he's worked for: Lustron, Ferro, US Steel Homes, and the Knox Corp. He joined FHA as deputy to Northup in June.

Daniel G. Minto, 54, who resigned as FHA's assistant commissioner of operations May 1 (NEWS, April) has been appointed head of HHFA's new \$20-million program for direct loans for housing for the aged. The program was authorized in the 1959 Housing Act but no money was available until an appropriation bill was signed by the President last month.

Lester Eisner, jr., 47, has been appointed administrator of HHFA's Region I office (New York, New England) succeeding **Walter S. Fried** who resigned to join the New York City Housing & Redevelopment Board. Eisner, a lawyer and real estate expert, has been New York State's assistant housing commissioner since 1959 and has been in charge of the state's urban renewal assistance program.

Madigan quits NAHB staff to direct prefab association

Jerome J. Madigan, 45, has resigned after eight years as director of membership and field services for the Natl Assn of Homebuilders to take over as executive vice president of the Home Manufacturers Assn. He replaces **Conrad "Pat" Harness**, 40, who quit HMA (NEWS, June) to go into the homebuilding business in Texas.

Wiry, energetic Jerry Madigan was the second NAHB staffer to leave at midmonth. The other: **Andrew Murphy**, 37, who quit as labor relations director and assistant legislative director to join the staff of Economist **Miles Colean**, H&H consultant, as counsel and specialist in legislative analysis.

Madigan, a native of Cleveland, where he attended John Carroll University, served as an Army Air Corps combat correspondent in World War 2. Subsequently he directed public relations for the Ohio State Employment Service and the Cleveland Planning Commis-



MADIGAN

sion. He entered the housing field in 1948 when he was appointed PR director for the Cleveland HBA. After moving up to executive director of the Cleveland association (and serving a term as president of NAHB's executive officers council), he joined the NAHB staff in Washington in 1952. He lives with his wife and son in Arlington, Va.

Softspoken, knowledgeable Andy Murphy was born in Swampscott, Mass, majored in government at Harvard ('43). After Navy destroyer duty as a gunnery officer in World War 2, he studied law (Boston University, LLB, '49), then practiced in Boston for three years. He went to Washington with the Economic Stabilization Board, joined NAHB in 1954. He is married and has four children.

M. Penn Phillips hits snag over water in desert project

M. Penn Phillips, 70, roly-poly real estate developer whose 100 companies have sold more than \$39 million worth of lots, most of them in the Mojave Desert, has run into trouble with the California Real Estate Commission.

Sales at Phillips' 36 sq mi Hesperia development near San Bernardino have been stopped pending an administrative hearing on charges of fraud, deceit, and misrepresentation which have been filed with Commissioner **W.A. Savage**. The charges, filed by Deputy Commissioner **Henry Block**, allege that: 1) the water supply at Hesperia is inadequate, and 2) salesmen lured people into investing in lots on which the company would build "income units" with false promises that an airport, hotel, and recreation area would be built nearby. Block asked for the revocation of the real estate brokerage licenses of the M. Penn Phillips Company and a number of employees, including its president (and Phillips' son-in-law), **Carlo P. Giuntini**.

Phillips, who denied the charges, won a point when Deputy Attorney General **Lee Stanton** conceded at the opening of the hearing that a federal survey proved there was sufficient underground water at Hesperia. But Stanton amended the complaint to charge that Phillips has been trying to dodge his obligation to furnish water to Hesperia Township. Sale of the Hesperia Water Co by Phillips to **Nathan K. Mendelsohn** in 1956, said Stanton, was a "paper transaction" to keep Phillips and his corporations out of the grip of the Public Utilities Commission. The water company is insolvent and is unable to rehabilitate its inadequate and antiquated system as it has been ordered to, Stanton added. Snapped Phillips: "utterly false."

The current action does not affect Phillips' many other promotions, including his most ambitious project: Salton City, a development of 19,600 acres of desert along the shores of Salton Sea, 150 miles southeast of Los Angeles.

HONORED: Arthur B. Gallion, FAIA, dean of the University of Southern California school of architecture, who received the silver medal of Scarab National Architectural Honorary Fraternity for his contributions to archi-

tectural education. **Frederick H. Ecker**, 92, honorary chairman of Metropolitan Life, who was awarded New York City's medallion for his pioneering in "imaginative housing." Cited were 2,125 apartments built by Met for below-market rentals during housing shortage after World War 1.

MANUFACTURERS INSTITUTES: A. Allan Bates, vice president of research and development for the Portland Cement Assn was elected president of the American Society for Testing Materials, succeeding **F.L. LaQue**, vice president for development and research for International Nickel Co. **Harold P. Henningson** of Henningson & Assoc was elected president of the Natl Assn of Plastic Prefabricators. The Natl Particleboard Assn has named **Robert E. Dougherty** as executive director. President **Lester T. Potter** of Lone Star Gas Co, Dallas, has been nominated for the presidency of the American Gas Assn. Elections will be held at the association's convention in Atlantic City Oct 12. The Copper & Brass Research Assn has elected **G.P. Bakken** president. Bakken, president of Chase Brass & Copper Co, succeeds Chairman **James M. Kennedy** of Revere Copper & Brass, Inc. **Joseph L. Maloney**, eastern sales manager for Natco Corp, has been named president of the Clay Flue Lining Institute.

Builder Jack Worthman quits to join Consultant Stan Edge

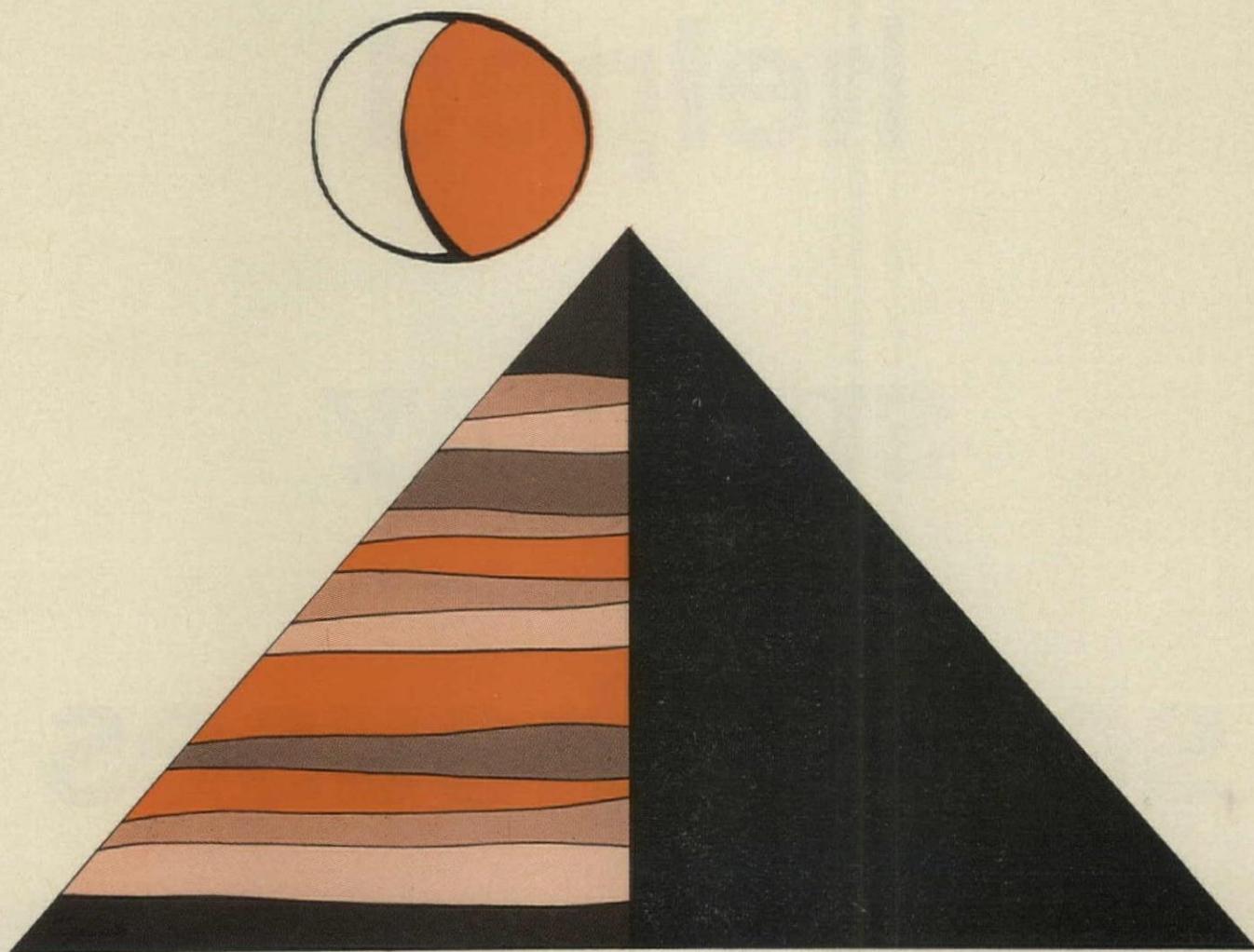
The young (32) Fort Wayne builder has been a junior partner with his father, **John**, in the family realty and building firm since graduation from Purdue ('49) and a year of design school. Both father and son are prominent in organized homebuilder affairs. **Jack Worthman** has headed NAHB's publications and construction committees, appeared often before builder groups to speak on trade-ins, other merchandising subjects.

Edge, whose consumer housing research has made him the industry's top merchandising consultant, now lists 25 homebuilders as clients, also serves top manufacturers.

Architect **George Bain Cummings** has been named building code consultant to the New York State Division of Housing. Cummings, vice chairman of the state's building code commission from its beginning in 1949 until it was abolished in 1959, will study ways to improve services provided municipalities by the division's building code bureau.

DIED: E. Boyd Stewart, 71, president of Stoneson Development Corp, large California homebuilding concern, June 14, at San Francisco; **Paul W. Albright**, 67, who retired in 1955 as general secretary of the Savings Bank Assn of the State of New York after 30 years with the organization, June 15, at New York City; **Albert C. Brown**, 48, executive director of the New Jersey chapter of the American Institute of Architects and the New Jersey Society of Architects, June 19, at Chatham, N.J.; **Willard G. Sawyer**, 60, retired president of the John C. Virden Co and a founder of the American Home Lighting Institute, June 19, at Atherton, Calif.; **John B. Kelly**, 70, onetime bricklayer who became a multimillionaire contractor, leader in Democratic politics, and father of Princess Grace of Monaco, June 20, at Philadelphia.

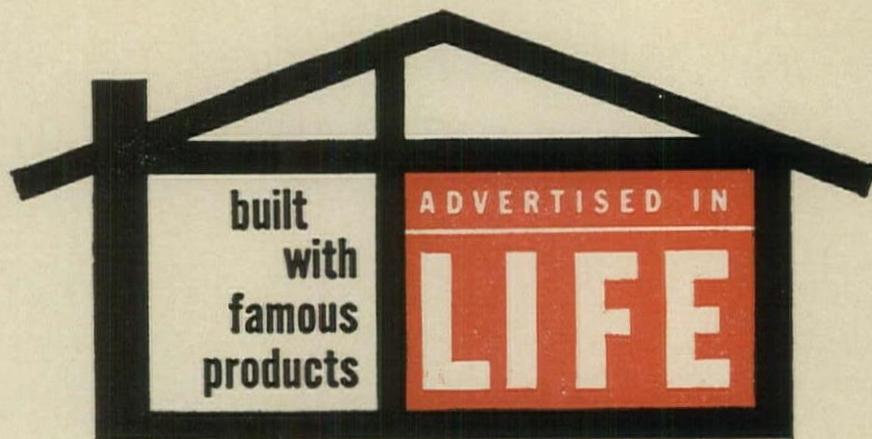
When they're home-hunting... nothing says "built to last" like brass. That's one good reason why more and more of today's model homes are showcases for all the things that brass does better and more beautifully than any other material. You'll increase sales appeal with solid brass hardware and fixtures. And the finest brass products start with **Western Brass**—the "tailor-made" metal that's alloyed and rolled to your suppliers' individual requirements.



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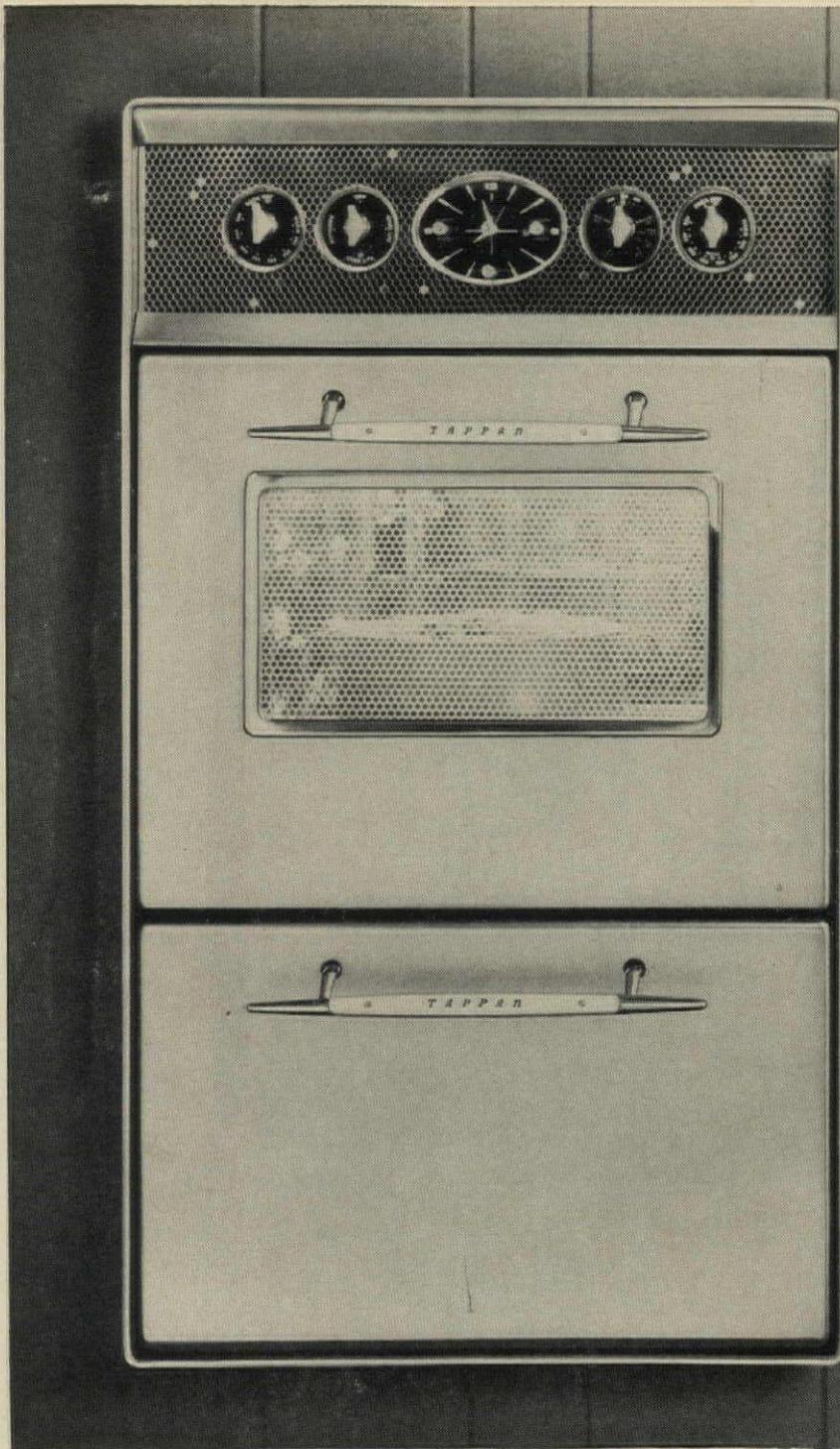
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sell 20 houses opening weekend

Says Los Angeles Builder Ray Watt, "Sun Ray's tie-in with LIFE's Model Home Merchandising Program helped us sell 20 houses opening weekend at Artesia. We're repeating with LIFE at Montebello, and will continue to use this great LIFE selling program on our other subdivisions."

A TIE-IN WITH "Advertised-in-LIFE" products can help you sell more houses, too. People know that "Advertised-in-LIFE" is an assurance of quality. To get *your* FREE MERCHANDISING MANUAL with full details on LIFE's Builder Program, write: LIFE Model Home Merchandising Program, Time-Life Building, New York 20, N. Y.



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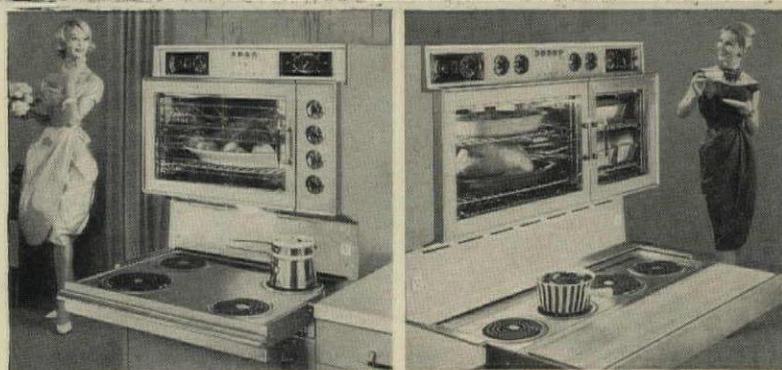
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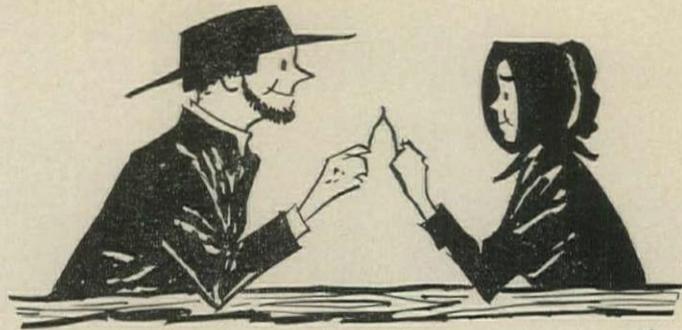
The Tappan Company, Department HH 8-0, Mansfield, Ohio.

Please supply me with complete specification, installation and model information on Tappan: Built-in gas ranges ; Built-in electric ranges ; Electronic ranges ; The 'Fabulous 400' and the 'Debutante 400' ; Built-in refrigerators

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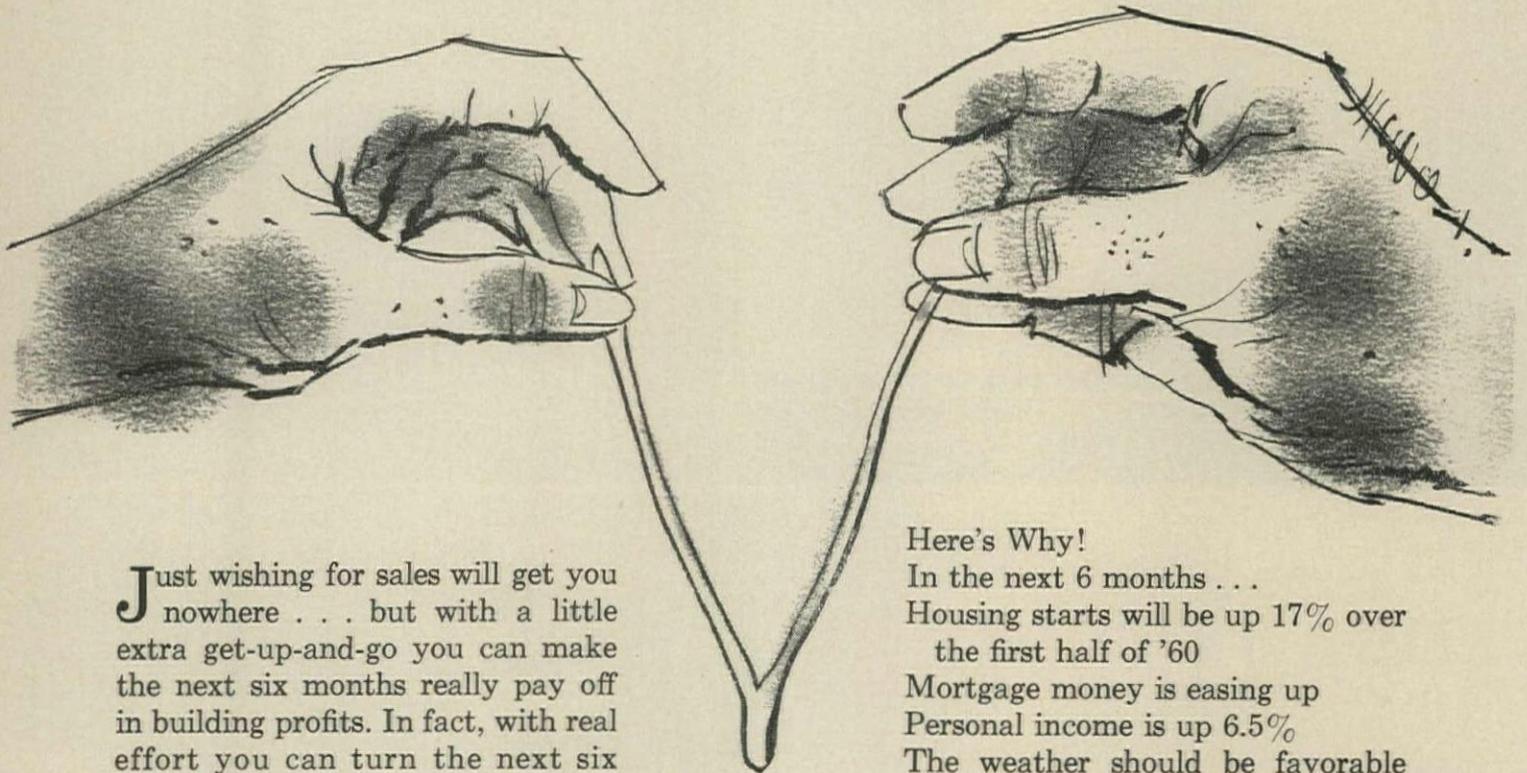
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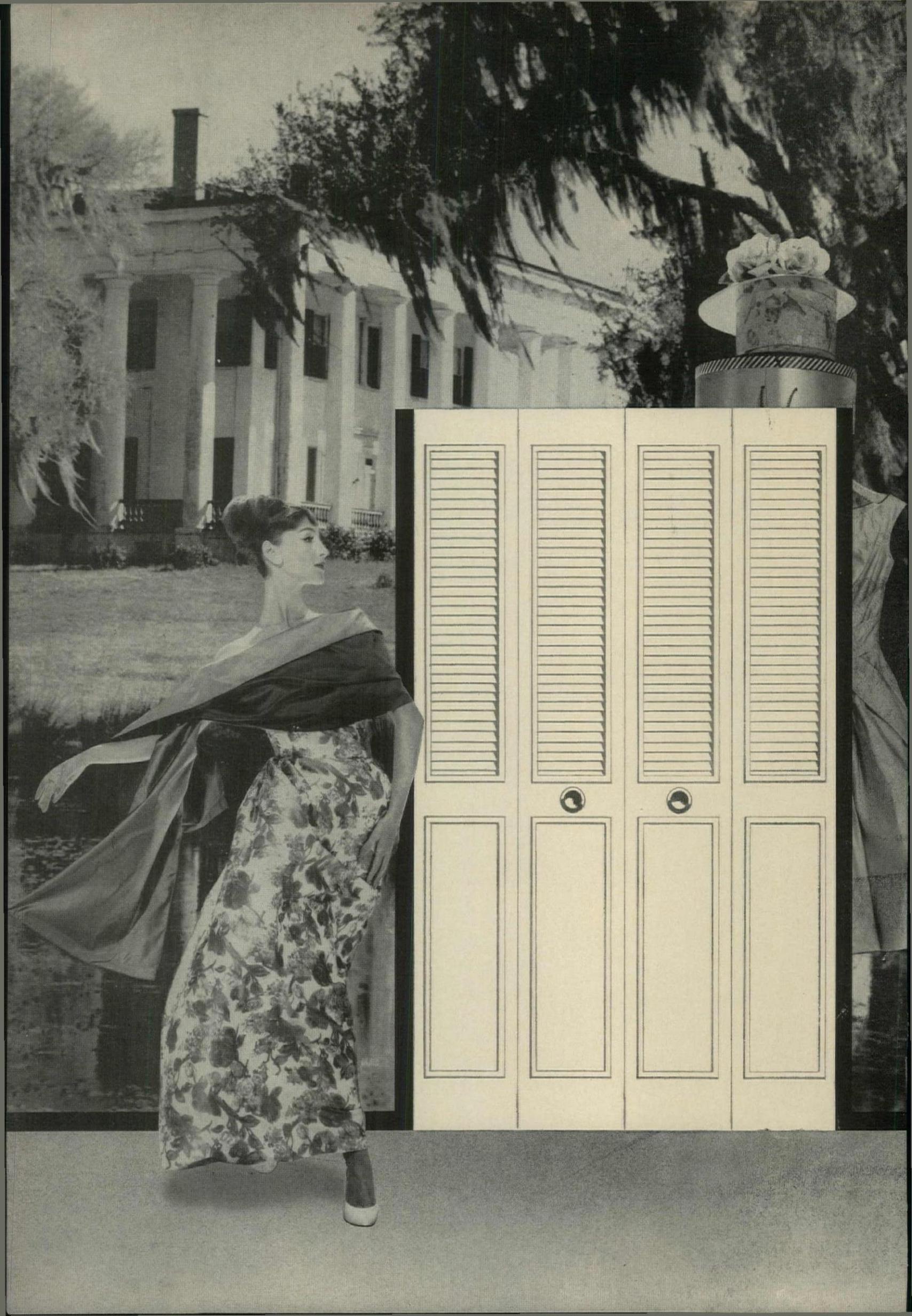
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how to turn closets into "closers"

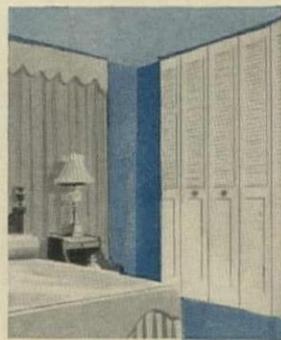
How can you use closet space to help sell your homes? First, use classic-inspired closet doors to add a high-styled luxury touch to home interiors. Then, be sure these doors open effortlessly . . . and make storage space easily accessible. Do all this at lowest cost.

Sounds like quite a job, but Fenestra metal folding closet doors provide this economical "extra" that sells homes. There are three styles—Classic (illustrated at left), Louvered, and Flush—one that's right for every room. Now, you can add a decorator touch to the simplest bedroom or put a distinctive finish on entry hall closets at very modest cost.

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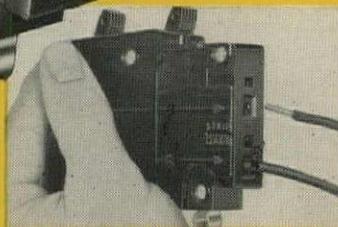
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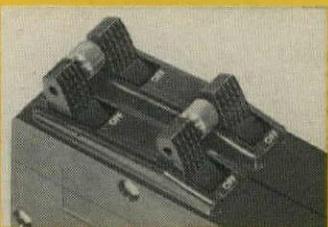
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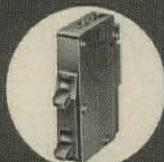
Why settle for half-size breakers? With the QO Tandem it's no longer necessary to sacrifice quality to save space and money



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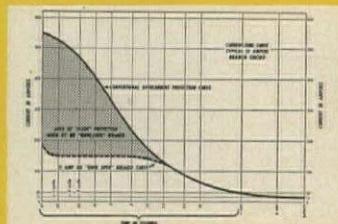
THE
QO
FAMILY



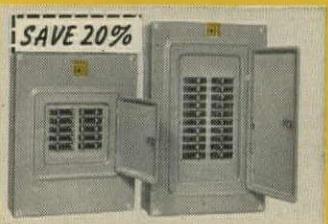
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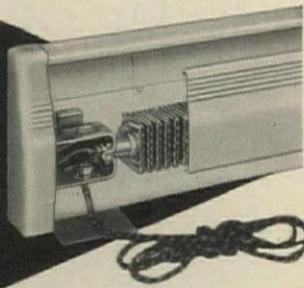


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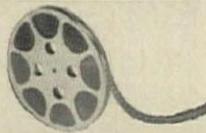
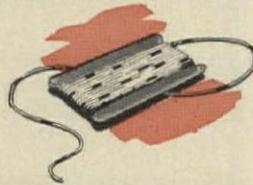
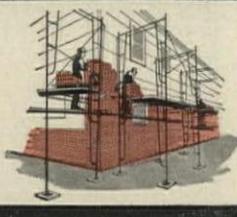
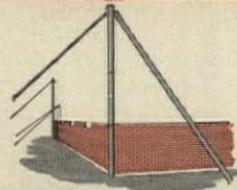


Build Better Manage Better
Sell Better...
with **BRICK!**

Save Up to 25% on Overall Costs With New SCR Masonry Process

Today, you can build beautiful and sturdy brick homes at costs competitive with and often less than frame construction. You can save as much as 25% on overall brick construction costs—almost 50% on labor costs alone. How? By using the new SCR Masonry Process. Proven after 5 years of testing and development, the SCR Masonry Process features three different work-saving tools: Corner poles, a light, self-elevating scaffold, and a string guide-line system. Set up quickly, these tools stay set for the life of the job. Using this method, production rises to new heights. Unlike conventional construction, masons at the middle of the wall don't have to wait until the corner men finish their work.

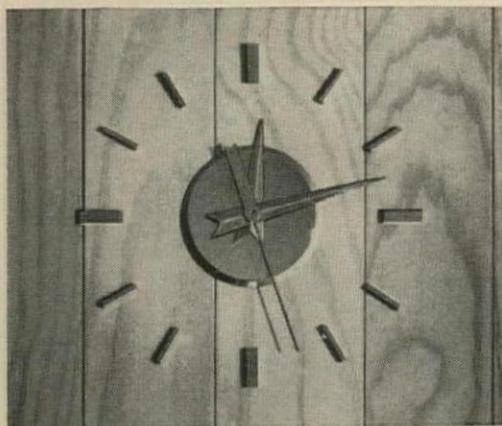
For the complete story on the new, money-saving SCR Masonry Process, see your brick supplier. Also ask him about a new film, "Masonry's Modern Method," produced for home builders by the Structural Clay Products Institute.



Structural Clay Products Institute

1520 18th St. N.W., Washington 6, D.C.

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For you... Mr. Builder!

AN EXCITING NEW LINE OF BUILT-IN ELECTRIC WALL CLOCKS from

Leigh

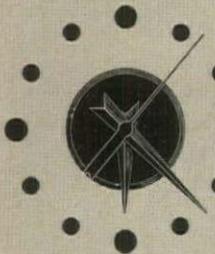


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THE DECORATOR LINE... *



Elegant styling to enhance any decor. World renowned Synchronous movements assure a lifetime of accuracy... fully guaranteed. Two distinctive designs... "classic bar" or "tempo round" hour markers with either popular colonial black or sparkling polished brass finish.

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Rich, custom design at a budget price. Colonial black or polished brass with unique half-oval hour markers add eye-catching appeal. Whisper-quiet Synchronous movements guarantee trouble-free performance. Ideal for both new home and remodeling jobs. *Fast, simple installation in plaster, dry wall and wood.

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

LEIGH BUILDING PRODUCTS
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Letters

Will and Parkinson

Congratulations on another excellent issue of *HOUSE & HOME* [June]. The article on Phil Will certainly points up the continuing part the architect must play in the creation of our new communities.

EDWARD H. FICKETT, AIA
Committee for the homebuilding industry
Chairman

Congratulations on the two excellent articles on Will and Parkinson. Imagination of this kind is necessary in our era of monotony.

BARNETT BERLINER, AIA
Soep & Berliner
Boston.

Philip Will is right. It is high time Americans started thinking of ways to make this country a more gracious place to live in, and more stimulating to individual growth. This means educating developers, planners, builders, and architects toward goals larger than just making money and getting by the law.

Your magazine packs the punch. It is quick and easy to read, a great convenience for busy people. Your writers really condense and organize the essentials. Above all I like your crusading spirit.

MRS. LLOYD BALSAM
Los Angeles

Apartments

The October, 1959 *HOUSE & HOME* was the most comprehensive issue we have ever read on apartment house construction. As a result of having studied it thoroughly, our own plans and ideas have undergone some radical changes.

For instance, we took a cross-country trip early this year and visited many of the cities highlighted in your articles. The information obtained from interviewing the builders, architects, money lenders, etc. throughout the country has been of great benefit. As a result of the emphasis brought by *HOUSE & HOME*, many new concepts of development are being carried out right now.

JAMES D. FLOOD, general contractor
Cleveland.

H&H will take another long look at apartments in its October 1960 issue.—Ed.

S&L power to loan in Latin America

I cannot recall seeing so many excellent stories about the savings and loan business in one issue [News, June] of any magazine. We are particularly pleased with your treatment of the testimony by Charlie Wellman and the hearing before the Senate subcommittee regarding loans to Latin American savings associations.

WILLIAM KERWIN, director of information
National League of Insured
Savings Associations

Everything's up-to-date in Honolulu

Our entire staff avidly reads your magazine. It keeps us up-to-date on all the latest in design and production.

H. O. WALLACE, architect
Weed, Wallace & Assoc
Honolulu

continued on p 91

housing
professionals
depend

ON



In small towns just as in big towns.

Says W. D. Schamber of the
Fairmont (Minn.) Federal
S & L:

"When we get *HOUSE & HOME*, I first take it home to read. Then I bring it back to the bank and set it on the counter and let people — builders as well as home-buyers — take it out and bring it back."

Says Harold Kramer,
President of the Kramer
Lumber Company in
Clifton, N.J.:

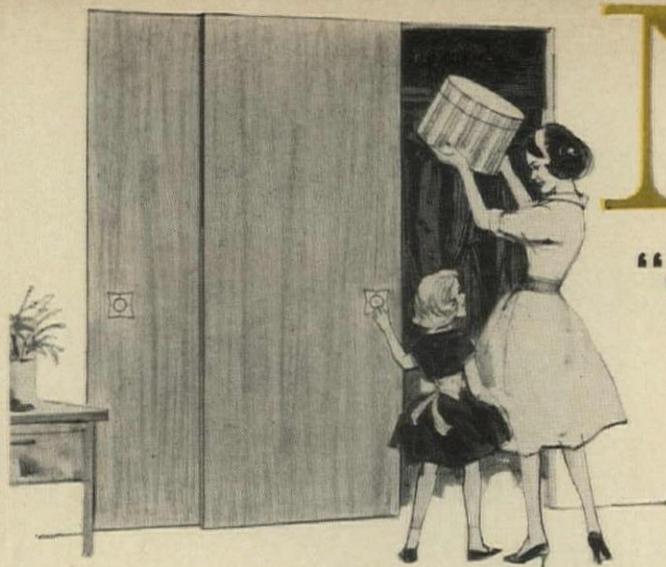
"I consider *HOUSE & HOME* the finest and most complete in the field; the others can't touch it."

in America's biggest industry
almost everybody

reads **House & Home**

Published by Time Inc.

Watch for
HOUSE & HOME's
second major
reference issue
on **APARTMENTS**
in **OCTOBER-1960**



NEW

"JUMP-PROOF" BY-PASSING DOOR HARDWARE

by **Leigh**

Quality . . . smooth, quiet, trouble-free performance . . . and *low cost* too! COMPARE the many exclusive features offered in these 3 sensational new By-Passing Door Hardware sets. Then specify LEIGH!
Ideal for closets, cupboards and many other applications.

NEW! "DIAL-O-MATIC" JUMP-PROOF BY-PASSING DOOR HARDWARE . . .

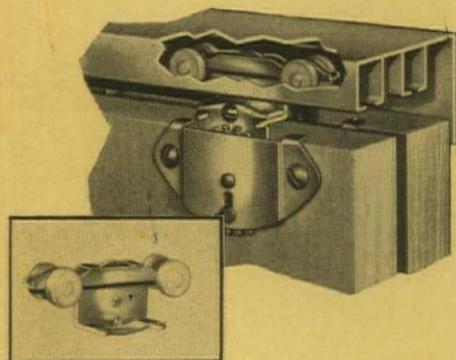
finest "deluxe" line ever designed . . . with every feature builders have been asking for to provide a "perfect" installation, at a surprisingly LOW PRICE

NEW! "ECONOMY MODEL" JUMP-PROOF BY-PASSING DOOR HARDWARE . . .

customer-satisfying performance . . . at a cost less than any comparable hardware set . . . an easy, one man installation

NEW! "MUL-T-SIZE" JUMP-PROOF POCKET DOOR HARDWARE

. . . a top quality, completely prefabricated steel sliding door unit . . . at a LOWER COST than any comparable pocket



- "JUMP-PROOF" ONE PIECE SOLID ALUMINUM TRACK AND FACIA . . . with low 1 1/4" head room. Easy to put up. Track comes in four lengths.

- 8 HEAVY-DUTY NYLON WHEELS PER DOOR . . . 4 per trolley. For smooth, quiet performance. Even load distribution.

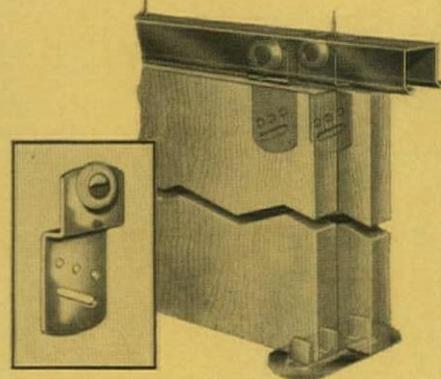
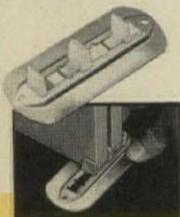
- FACTORY INSTALLED TROLLEYS . . . right on the track. Guaranteed "jump-proof". With unique wheel balancer.

- POSITIVE DOOR HANGER-TROLLEY CONNECTION . . . exclusive design makes installation fast, easy. Special locking screw allows doors to be removed for decorating.

- EXCLUSIVE "DIAL-O-MATIC" DOOR ADJUSTMENT . . . plumbs door with jamb "in seconds" without removing the door from track.

- NEW DESIGN PLASTIC DECORATOR DOOR PULL . . . adds that "finished look" to your door.

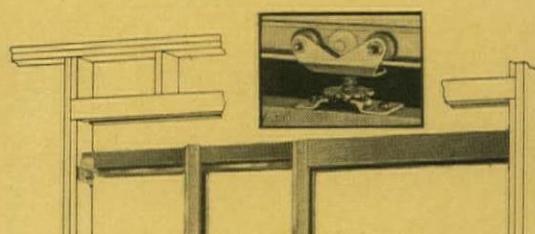
PLUS . . . A PRESSURE-SENSITIVE ADHESIVE-BACKED DOOR GUIDE is included on both the "Dial-O-Matic" and "Economy Model". The new, easy modern way to install door guides on floors, without troublesome nailing or screwing. Just peel off the protective paper and press down. As permanent as the floor itself. Fits 3/4", 1 1/8", 1 3/8" thick doors. Heavy-gauge steel base plate has holes for nailing too.



- PRECISION-FORMED ROLLED STEEL TRACK . . . with low 1 1/4" head room. Easy, fast to install. Special design allows wheels to roll smoothly, quietly.

- REVERSIBLE "JUMP-PROOF" HANGERS FIT ANY STANDARD DOOR SIZE . . . by merely reversing the offsets. Unique "anti-jump" screw guarantees trolley will never jump track. Allows easy removal of doors for decorating. Adjusting slot plumbs doors easily without removing from track.

- NEW DESIGN PLASTIC DECORATOR DOOR PULL



- FITS ANY SIZE POCKET DOOR 2' TO 3' WIDE . . . one piece precision roll-formed steel track and wood header marked at proper cut-off points for easy, fast sizing.

- EASY TO INSTALL END BRACKETS.

- HEAVY GAUGE STEEL SPLIT JAMBS . . . extra wide nailing strips provide ample nailing area.

- "JUMP-PROOF" 3-WHEEL TROLLEYS . . . no jumping track and jamming pocket. Large lifetime nylon wheels.

- EASY DOOR ADJUSTMENT . . . adjusting dial permits fast, easy plumbing of door without removing from track.

- POSITIVE ACTING DOOR COUPLER . . . spring loaded mechanism snaps door into place securely. Allows easy removal for decorating.

- SPLIT JAMB FLOOR PLATE . . . separate from jamb. For easier installation.

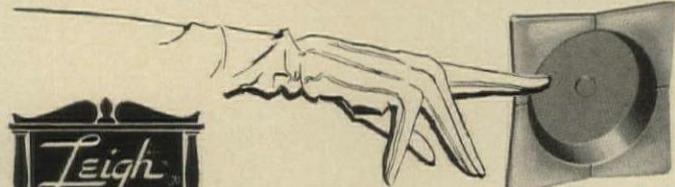
- NYLON DOOR GUIDES . . . adjustable. Holds doors in perfect alignment.

- NEW DESIGN PLASTIC DECORATOR DOOR PULL



NEW, DECORATOR STYLED DOOR PULL

. . . furnished on all 3 illustrated sets . . . a new, modern design that adds a "distinctive look" to your doors . . . made of rugged, shatter-proof, high-impact plastic . . . in a beautiful, deep glowing, mar-proof beige finish that perfectly blends with any natural wood or painted door.



LEIGH BUILDING PRODUCTS, Coopersville, Mich., Division of Air Control Products, Inc., 2560 Lee Street. West Coast Warehouse: Leigh Industries (California), Inc., 649 South 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—Copyright 1960 LBP-ACP, Inc.

CLIP AND SEND for a copy of Bulletin 278-L and complete price information.

LEIGH BUILDING PRODUCTS
2560 Lee Street Coopersville, Mich.

Name _____
Address _____
City _____ State _____



LENNOX continues to
 campaign for **better quality**
 throughout the modern home

Builders, as well as Lennox, benefit by the series of 4-color advertisements represented by the one shown here in black and white. These dramatic messages appear year 'round in such giant-circulation periodicals as *Saturday Evening Post*, *Life*, *Reader's Digest* and *Good Housekeeping*. Local readership, in your own neighborhood, is astoundingly high.

This Lennox campaign helps upgrade the public's standard of quality when buying homes. It also identifies Lennox heating and air conditioning as a symbol of that higher quality. Your use of Lennox equipment becomes "proof of quality" to your prospects—helps *your* homes win acceptance as *better* homes.

Nothing else like this!

To help you even more directly, Lennox offers what successful builders say is the world's finest LOCAL promotion program. It is individually PERSONALIZED to YOUR needs, features YOUR homes.

It is available to you through your Lennox *Comfort Craftsman*, listed in your Yellow Pages. Phone him soon! Or write: Lennox Industries Inc., 348 South 12th Avenue, Marshalltown, Iowa.



65 MILLION READERS WILL SEE THIS AD IN 4 COLORS IN



JULY 2,



JULY, 1960

LENNOX

World leader in indoor comfort for homes, business, schools

LENNOX

*it's
wonderful!*



SPIRIT OF '76! Degrees, that is! Or 70° or 72°— whatever temperature you prefer is yours, when you have Lennox all-season air conditioning. Makes no difference if it's hot enough *outside* to fry eggs on the sidewalk, *inside* a Lennox home the weather is always perfect!

Costs less than you think! You already own *half* an air conditioning system. Simply add Lennox *cooling* to your

forced air heating for pennies a day. Use the same ducts and registers.

Call your factory-trained *Comfort Craftsman* for a *free* survey. His phone is listed in the Yellow Pages. Lennox, world leader in indoor comfort for homes, business, schools.

FREE booklet on *Air Conditioning and Heating*. Write *Lennox Industries, 348 S. 12th Ave., Marshalltown, Ia.*

AIR CONDITIONING AND HEATING

©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, Montreal, Calgary, Vancouver, Winnipeg.

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Oven-Sink 4 in 1
Complete Packaged Kitchen



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DEBONAIR
Refrigerator-Range,
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ARISTOCRAT
Refrigerator and 2 burner
Hide-away Range



RES-4AF
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Refrigerator and Sink

**ACME...
REFRIGERATOR-RANGE-
SINK-COMBINATIONS**

Architects everywhere find ACME Space-Saving Units ideally suited for apartment conversions, homes, motels, hotels, cabins, resorts, playrooms, etc. Send for our fully illustrated catalog with complete specifications and prices.

See our complete line in SWEET'S CATALOG 25 $\frac{B}{AC}$

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

For Simple, Dependable Sewage Treatment

FOR SMALL SUBDIVISIONS, TRAILER PARKS, MOTELS,
SCHOOLS AND FACTORIES—WHERE IT IS IMPRACTICAL
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"OXIGEST"

Factory-Built Sewage Treatment Plant

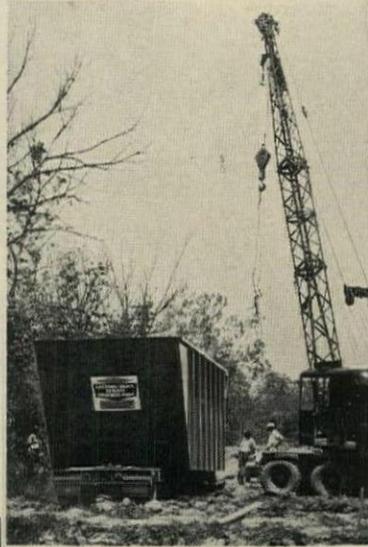
Complete factory-built unit . . . available in 27 standard sizes, in single units to serve from 10 to 100 homes—or can be installed in parallel, as needed, to serve larger subdivisions.

The Smith & Loveless "Oxigest" provides low-cost, dependable treatment of domestic sewage without requiring a skilled operator. Its treatment process can be described as a long-period "Aerobic Digestion" activated-sludge sewage treatment system. The process provides maximum treatment efficiency with minimum annual maintenance.

The Smith & Loveless "Oxigest" is built by the world's largest manufacturer of factory-built sewage lift stations. It is built of the finest materials by expert workmen.

WRITE TODAY for free engineering data manual containing design notes, selection charts, dimension drawings, and specifications.

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Delivered to job
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installation.



(2444)



Smith & Loveless

DIVISION-UNION TANK CAR COMPANY
P. O. BOX 8884
KANSAS CITY 15, MISSOURI
Plant: Lenexa, Kansas

Letters

start on p 86

Modernization school

... But you didn't tell me where to write for more information on Abrams' and Richheimer's school for modernizers [July].

RALPH SHIRMEYER, *builder Ft Wayne.*

Write Charles Abrams, Westchester Modernization Inc, West Post Rd, White Plains N.Y. Incidentally, Modernizer Charles Abrams is not to be confused with Housing Expert Charles Abrams, who has authored many books on housing, is a Visiting Professor of Housing at MIT and the New School for Social Research, has been New York State Rent Administrator and chairman of the State Commission Against Discrimination.—Ed.

Community growth conferences

The article on community growth conferences [News, June] is excellent. It should do much to explain these conferences to those who may not have had a clear picture of what they are.

ROBERT C. LEDERMANN, *director Community facilities and urban renewal, NAHB*

Merchandising

Congratulations are in order on your May issue. All work was laid aside until I read the issue from cover to cover.

RAY K. CHERRY, *builder Hadley-Cherry Inc Los Angeles.*

Your merchandising issue is outstanding. ROBERT GARDINER, *public relations counsel Gardner, Jones & Cowell Chicago*

Dealing as we do constantly with builders and suppliers, we find the articles [H&H, May] entitled "How to plan your advertising—and your advertising budget" and "Listen to what five experts say about selling houses in today's market" extremely interesting and helpful.

HARLEY WEST, *regional sales manager Community Broadcasting Co Toledo.*

When to use components

Read your "The industrial revolution in housing, progress report No. 4 [H&H, June] and want to congratulate you on another of your very good reporting and research projects.

RICHARD D. FLOWERS, *president Home Materials Co Mansfield, Ohio.*

FHA lumber grade marking

The May issue did a tremendous job of objective reporting on FHA and the new lumber grade marking provision.

Julian Zimmerman is a most courageous public official. Our industry showed its appreciation for his efforts by passing a resolution of commendation at the last board meeting. Our association also endorsed FHA grade marking shortly before it was actually announced by FHA.

MORTIMER DOYLE, *executive vice president National Lumber Manufacturers Assn. Washington, D.C.*

from ILCO

different patterns of solid Philippine Mahogany MOLDINGS

When we say we offer the widest selection of Philippine Mahogany moldings, we mean it—77 different patterns, enough to do any job however unusual. And additional patterns are constantly being added to the Ilco line.

Like all products of Insular Lumber (world's oldest and largest producer of Philippine Mahogany), Ilco moldings are solid hardwood. They are thus rich looking and elegant; they add a touch of genuine distinction to all interiors; and they combine perfectly with stone or brick, papered or painted walls. Also important: firm-

textured Ilco moldings require no sanding and they take all types of finishes easily and beautifully, so much so that they can be closely matched to any other wood.

Like handsome Ilco paneling and siding, Ilco moldings instantly convey to homebuyers a feeling of unmistakable quality. And despite their superiority, they actually cost very little.

WRITE FOR FREE CATALOG

All-new illustrated catalog of the entire Ilco line, with special emphasis on moldings.

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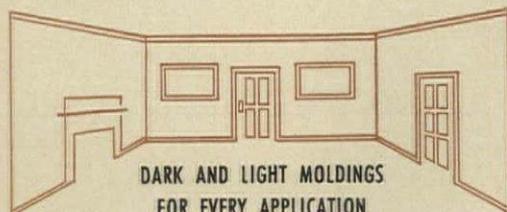
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FOR EVERY APPLICATION

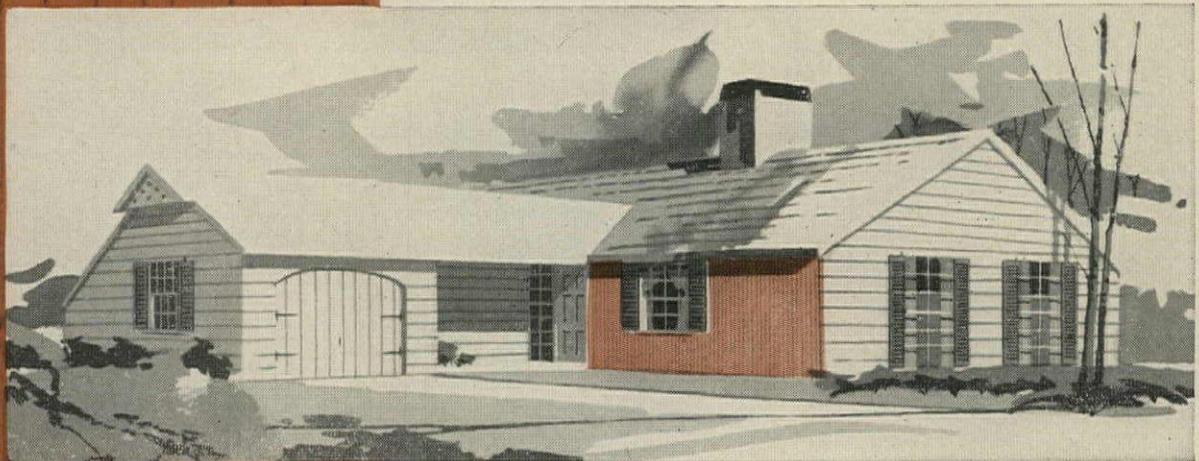
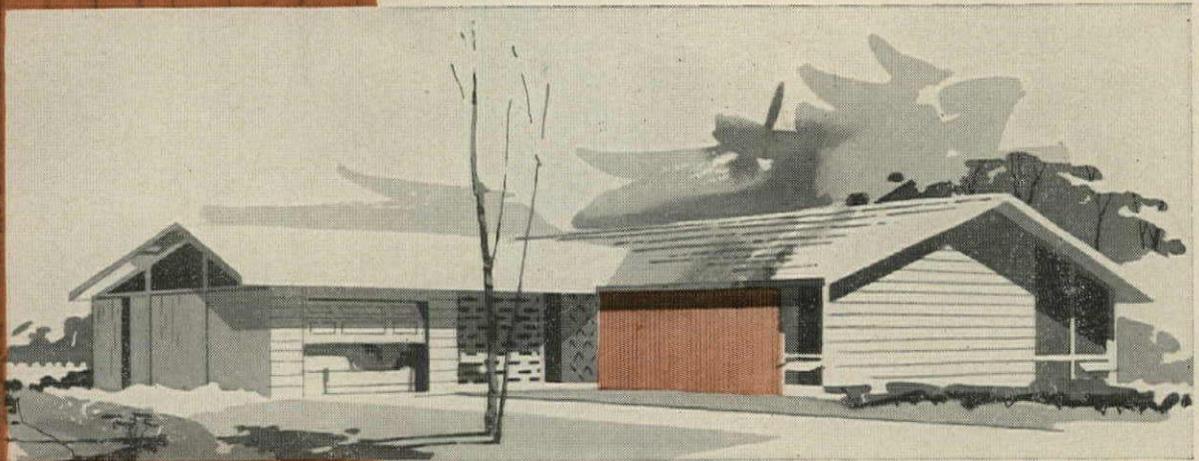
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LUMBER SALES CORPORATION

1405 Locust Street, Philadelphia 2, Pa.

STUCCO...

whether you build contemporary or traditional

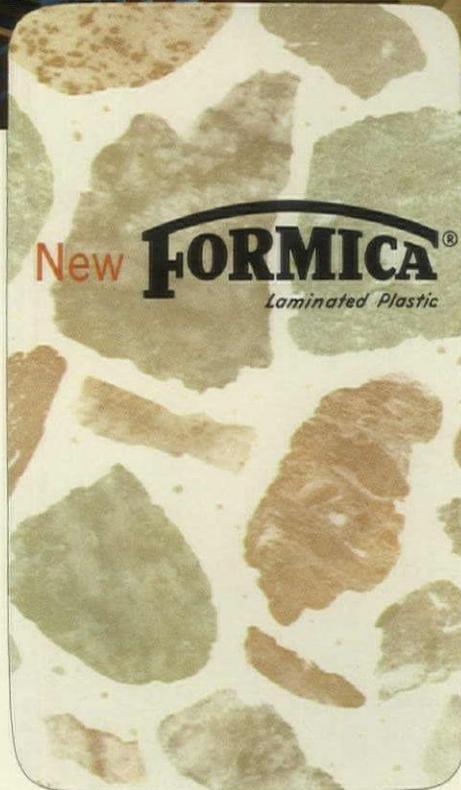


stucco can help you sell homes faster! No matter what type you build—contemporary or traditional—add extra sales appeal with stucco. You can easily get wide varieties of interesting patterns and designs, including “combed” stucco—sure-fire ways to speed the sale! And for that special attraction, remember: with tinted white portland cement you can have any color you want. For sales-making beauty at low cost, no wonder more and more builders are turning to concrete . . . material of modern living.

For the newest in homes . . .

**LIVING
CONCRETE**

**PORTLAND CEMENT ASSOCIATION . . . a national
organization to improve and extend the uses of concrete**



New **FORMICA**[®]
Laminated Plastic

ad theme **sells homes for builders**

Millions of readers of Formica national advertising are being urged to visit builders' model homes . . . to discover today's best buy . . . a better, more comfortable home.

Formica surfaced rooms like this Show Case Kitchen illustrate the exciting new ideas that alert builders are using to win buyers in competition with autos, boats and travel.

Many prospects who visit your model home are presold on the benefits of beautiful, carefree Formica and new 10" x 10" Formica Wall Tile.

To cash in on this extensive advertising program you will want to feature these Formica products in your homes. You may wish to duplicate this very kitchen or create a variation of your own.

Any or all of the Formica Show Case Rooms are yours to use. To make it easy, see offer on reverse side of this page for free plans, and bill of materials.

The wash-off trade mark is your assurance of the world's finest laminated plastic.



a product of

CYANAMID





construction information

Formica faced cabinets and counter tops should be shop constructed according to fabricating details furnished free with plans for this room. The 10" x 10" Formica Wall Tiles are applied on the job over drywall using special Formica Wall Tile Adhesive with thin line of Formica Seam Finish between tiles. The best possible underlayment for Formica laminated plastic is Formica Flakeboard—assures smooth, non-telegraphing surface, better screw-holding and machinability.

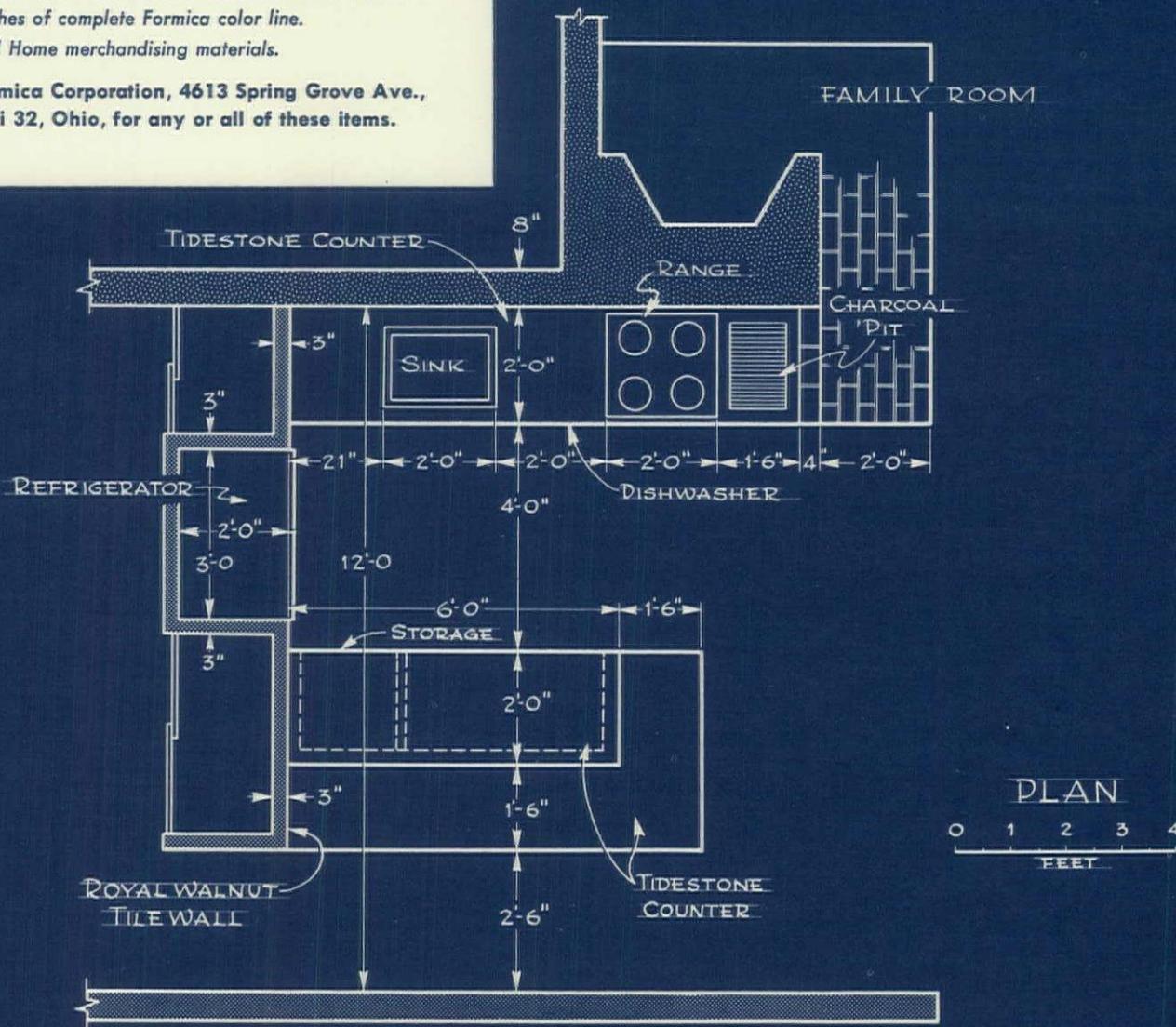
Materials and Sources:

- CABINET TOPS:** Formica Tidestone #7-ST-1
- WALL CABINETS & BAR FACE:** Formica Primrose #893
- BASE CABINETS:** Formica Royal Walnut #17-BG-44
- END WALL:** Formica Wall Tile—Royal Walnut #17-BG-44
- FLOOR TILE:** Kentile Vinyl Forsythia (R-24)
- REFRIGERATOR AND FREEZER:** Revco with Formica front
- RANGE:** Youngstown Kitchens
- SINK:** Eljer Corp.
- DISHWASHER:** A Formica front is a practical decorating idea for nearly all dishwashers.
- CABINET HARDWARE:** Simons Hardware Co.
- BRASS STUDS:** Clavos, Inc.

Additional Free Information:

1. Blueprints covering construction details of this kitchen.
2. Swatches of complete Formica color line.
3. Model Home merchandising materials.

Write Formica Corporation, 4613 Spring Grove Ave., Cincinnati 32, Ohio, for any or all of these items.



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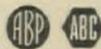
Walter R. Browder

DIRECTOR OF MARKETING

Arthur S. Goldman

ADVERTISING DIRECTOR

Richard N. Jones



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AUGUST 1960

House & Home

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LAND—A SPECIAL ISSUE

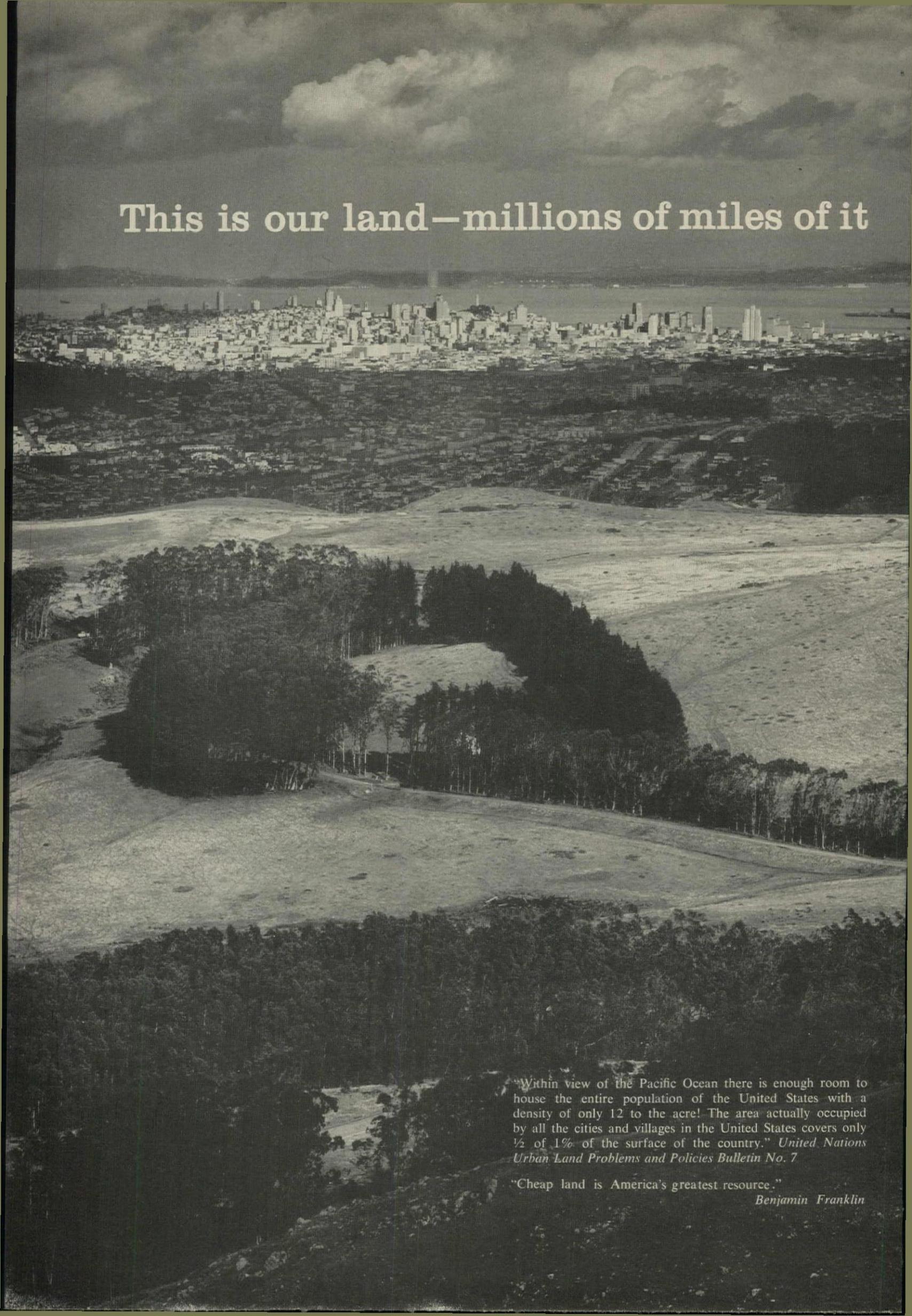
- 98 **Land, say the homebuilders, is our most critical problem.** Despite the millions of miles of open countryside in the US, inflated land costs threaten to price good housing out of the market (100). Since 1950 land prices have soared anywhere from 100% to 3760% (101). In Orange County, Calif. land priced at \$2,000 an acre in 1952 now costs \$32,000 (102). Prices like these are danger signals (104).
- 106 **Most land shortage talk is nonsense**—as any airplane flight can show you (108). But suburban sprawl is proliferating land waste, dollar waste, time waste (114)—through land speculation, land hoarding, overzoning, fragmentation, poor market information, archaic land use requirements (117). A thorough land survey, as Indianapolis has shown, can spot plenty of land ripe for housing (119).
- 122 **Unless promptly checked this wild inflation can be serious.** How can we form sound national policies without a sound policy for land? (124). Said Winston Churchill 40 years ago: "Land monopoly is a perpetual monopoly and the mother of all other forms of monopoly" (126).
- 130 **Other countries have found answers to these abuses.** Until recently, land paid all the costs of government in England (and it's a hot issue again today, (129). Though the Communists redistribute land by executing landowners, humane methods are working in Scandinavia, France, Italy, Iran, Egypt, the Caribbean (130). And Australia and New Zealand are untaxing land improvements to tax land values only (132).
- 134 **Unimproved land differs from any other kind of private property.** So said Moses, Spinoza, Locke, Blackstone, Adam Smith, Tom Paine, Jefferson, J. A. Froude, John Stuart Mill, Lincoln, Herbert Spencer, Tolstoi, Henry George, Sun Yat-Sen, Irving Fisher.
- 136 **Today's taxes make misuse of land more profitable than good use.** They harness the profit motive backwards (137), give land speculation a better tax break than any other business (136) and by abetting speculation, abet suburban sprawl (138). Slums are subsidized by undertaxation, developments penalized by overtaxation (141). Speculators are subsidized by public improvements for private profit (142). Thus the only way to prevent land-price inflation is to tax land more heavily (143).

But there are many things you can do right now to make better use of the land. For example:

- 144 Look how a 7,000-acre tract of range land—only 48 miles from downtown Los Angeles—is being transformed into a self-contained new town for 30,000 people.
- 151 Look how you can now build profitably on land others wouldn't buy.
- 160 Look how you can cut development costs if you know how to make the best use of today's earthmoving machinery.
- 164f And now look how far our land planning has come—look how today's housing industry is using master planners to create communities in the best tradition of Radburn, Chatham Village, and Baldwin Hills.

Also in this issue: *News*, indexed on page 41. *Letters to the editors*, page 86, and *New ways to build better*, indexed on page 164u.

Cover: Santa Clara County, Calif. Photo: William A. Garnett, FORTUNE.



This is our land—millions of miles of it

"Within view of the Pacific Ocean there is enough room to house the entire population of the United States with a density of only 12 to the acre! The area actually occupied by all the cities and villages in the United States covers only $\frac{1}{2}$ of 1% of the surface of the country." *United Nations Urban Land Problems and Policies Bulletin No. 7*

"Cheap land is America's greatest resource."

Benjamin Franklin



The land price, land economics, and land tax sections of this issue were researched and written in collaboration with America's No. 1 housing economist, Miles L. Colean, and two of America's foremost land economists—Professor Ernest M. Fisher of Columbia University and Professor M. Mason Gaffney of the University of Missouri. Much of the field research was done by Grady Clay.

GAFFNEY



FISHER

... but the homebuilders vote 4 to 1 that

LAND

is the most critical problem

Says MARTIN BARTLING, president of NAHB: "The average cost of raw land has at least quadrupled, the cost of development tripled. Here is a problem that will require all our ingenuity."

Says HFA administrator NORMAN MASON: "The land problem is becoming critical. Premium prices for desirable homebuilding sites are driving up the cost of housing and forcing development into areas that often compound the problems of growth."

Says JULIAN ZIMMERMAN, FHA commissioner: "FHA is deeply concerned over the way land prices are shooting up. The average land cost component in our valuations has climbed from \$761 in 1946 to \$2,362 in 1959."

Says PHIL WILL, president of AIA: "We are making frightening mistakes in land use and we are guilty of a criminal waste of the land that God gave us."

Says MAX WEHRLY, executive director of the Urban Land Institute: "Inappropriate, unimaginative, and outmoded site development requirements of public regulation bodies have produced disastrous consequences—excessive costs, inefficient land use, stereotyped plans, and the destruction of natural amenities."

Says W. O. DUVALL, president of the US Savings & Loan League: "Land has been the main villain in housing for a long time. Its high

cost has become the No. 1 reason homes cost so much. Now we must work with the builders to educate landholders that the boom in land prices is over, and we must help the builders finance land acquisition and subdivision in a more orderly and therefore less expensive fashion."

Says B. B. BASS, president of the Mortgage Bankers' Assn: "Big speculators have been gobbling up land ahead, stifling competition, and putting the squeeze on builders."

Says NAT ROGG, NAHB economist: "Today's land situation is a killer for the builder. Land costs have climbed more than all other homebuilding costs combined."

Says United Nations Housing Adviser CHARLES ABRAMS: "The misuse of land is a worldwide problem and the failure to cope with it is a worldwide default. The US is lagging behind most countries in Europe in adopting a positive policy to correct it."

Said the economists and housing industry leaders at the HOUSE & HOME Round Table on inflation: "Steepest inflation of all has been the price inflation in land, but nobody is doing anything to stop it and we have no land policy designed to bring land onto the market when it is needed. The result has been a largely fictitious shortage of land for housing that has pushed prices far above today's values and is almost sure to end in a bust."

So this issue of HOUSE & HOME is researched, written, and edited to help the housing industry solve its most critical problem:

How to get better land for less page 100

How to use land better page 144

Ansel Adams, Wells Fargo Bank American Trust Co. San Francisco

Inflated land costs threaten to price good housing clear out of the market

In the suburbs sky-high land prices in good locations are driving homebuilding further and further out to find land cheap enough to build on profitably.

This further-out land costs twice as much to buy as land close in cost just a few years ago. It costs twice as much to connect to existing streets, sewers, and utilities. It takes a much bigger slice of the homebuilding dollar—19% today for far-out land vs 12% for close-in land in 1950. The high cost of getting home to this further-out land is a big new factor in housing expense—a bigger factor than mortgage interest for some new houses—and this in turn is driving many families who would like new houses to move to apartments or stay where they are.

So sky-high land prices are the No. 1 reason houses are harder to sell this year, the No. 1 reason merchant builders are finding it harder to offer good enough values in good enough locations to tempt second-time buyers out of their present homes.

Homebuyers balk at paying \$15,000 today for a house little better than the houses they could have bought five years ago for \$12,000—with most of the price difference wasted to pay twice as many dollars for big discounts for less desirable (ie; higher-interest) money, and twice as many dollars for less desirable (ie, further-out) land.

In big cities high land prices are also the No. 1 reason private enterprise cannot build good new housing for middle-income families, so high land prices are the No. 1 excuse for subsidized public housing (in which the supposedly poorest families are housed largely at the tax payers' expense in apartments costing up to \$17,500 per unit), and high land prices are the No. 1 justification for asking federal tax payers to subsidize slum clearance by buying out the slumlords at up to three times the re-use value of their land.

Any apartment builder who pays too much for his land has to pay too much for his building too, for 1) he has to build high-rise to spread his land costs over enough units and, 2) building high-rise costs much more per square foot than building low-rise. Says Jim Scheuer, America's second biggest redeveloper: "Walk-ups are the only apartments anyone can hope to build cheaply enough to serve the middle-income market, and you can't build low-rent family-size walk-ups on land that costs much more than \$35,000 an acre (which would work out to about \$1,000 per unit at FHA maximum density for family-size, two-bedroom apartments in three-story buildings)."

Since 1950, building material prices have climbed 24%; building trades wages have risen 60%; but . . .

Since 1950 land prices for homebuilding have soared anywhere from 100% to 3,760%

In SAN FRANCISCO, Big Builder Henry Doelger paid \$580,000 for a tract that was offered for \$15,000 in 1948; Peterson & Moretti are paying up to \$10,000 a quarter-acre lot for developed land on the old Mills estate that sold for \$2,000 an acre in 1952!

On LONG ISLAND, NAHB Vice President Leonard Frank says builders are paying \$16,000 and more for raw acreage they could have bought for \$3,500 in 1950!

In MIAMI, Builder Gene Fisher is paying \$7,500 an acre for land he could have bought for \$500 ten years ago!

In SOUTH JERSEY, NAHB Past President Carl Mitnick says the farmer who bought 60 acres and a house right next to Colwyck for \$20,000 in 1948 has just turned down \$360,000 for the land without the house. Mitnick himself has just sold another builder for \$40,000 ten lots in Colwyck that cost him \$3,000 fully developed in 1949, and at Cape May he is getting \$1,600 to \$2,200 for lots he bought at a tax sale fully developed for \$25!

In the TWIN CITIES, MBA Past President Walter Nelson closed out a land syndicate at 200% profit on the prices it paid in 1954—"and we could have bought the land a whole lot cheaper in 1950"!

In TAMPA, Developer Ed Wright says: "Ten million dollars would not be a shocking price today" for 2,100 acres he bought in 1945 for \$20,000!

In the sagebrush east of EL PASO, lots are selling for \$795 that Arthur Rubloff bought in 1956 for \$9 an acre!

In HAWAII, apartment sites 50'x100' near Waikiki Beach sell for \$200,000, and land 15 miles from Honolulu that sold for \$1,200 an acre before statehood is now selling for \$20,000. The Bishop Estate value has soared from \$6 million to \$120,000,000!

In CHICAGO's suburbs, the Herzogs paid \$3,500 an acre for farm land outside Des Plaines where Olcott's Blue Book of Land Values shows acreage inside the town was selling for \$350 in 1946.

Outside SEATTLE, Bellevue acreage that could be bought in 1950 for \$250 is selling for \$3,000 now.

South of SACRAMENTO, land pegged at \$200 to \$300 an acre ten years ago is going for \$7,500 an acre for subdivisions.

Near ALBUQUERQUE, the University of New Mexico rejected Dale Bellamah's bid of \$6,600 an acre for a 360-acre tract it bought in the '20s for \$3 an acre. And 18 miles north of Albuquerque, Builder Ed Snow paid almost \$1,000 an acre for land that sold ten years ago for \$4 an acre.

Outside PHOENIX, Builder Forrest Cox turned down \$4,500 an acre for land that sold in 1947 for \$100 an acre.

Forty miles from downtown LOS ANGELES the federal government got \$19,000 an acre at auction for the Santa Ana Air Force Base it bought in 1942 for \$350 to \$500 an acre.

continued

Here, on one picture, is the whole inflation story— \$2,000 an acre in 1952, \$16,000 an acre today

This is a slice of Orange County around Garden Grove outside Los Angeles. Ten years ago it was all orange trees. Today it is mostly houses huddled on 60'x120' lots.

The first orange trees were cut down in 1952, when Home-builder Henry Cox bought a parcel shown at the right center for \$2,000 an acre. Two years later the price had doubled. By 1958 it had quadrupled to \$8,000 an acre. Now what little land is left is being held for prices ranging from \$11,500 to \$16,000 an acre for housing, and up to \$23,000 an acre where the owner hopes to get commercial zoning.

On each parcel in the picture you can see the year and price of its sale—or today's price if the land is not yet sold.

Photo: Pacific Air Industries

DISNEYLAND

1960: \$85,000
FOR 85 FT
COMMERCIAL
STRIP

1956:

1954: \$5300

1955: \$5200

1957: \$7000

1957: \$9000

1957:
\$7950

1958: \$8000

1955:
\$5200

1955: \$6000

1960: \$12,000-15,000

1955: \$6000

1953: \$5250-5500

1954: \$4250

1954: \$4600

1956: \$8000

1954: \$5400

1955: \$5150

1954: \$4000

1954: \$6000

1956:
\$5500

1957: \$6500

1960: \$70,500

1959: \$18,000-
20,000

1960: \$25,000

1954: \$5000



1960: \$12,500

1960: \$20,000

1960: \$25,000

1953: \$2,590

1954: \$58.00

1956: \$6,000

1956: \$2,000

1960: \$15,000

1956: \$6,000

1952: \$7,000

1955: \$5,500

1955: \$4,500

1960: \$11,000

TOTAL AREA

1956: \$7,000

1957: \$5,750

1954: \$4,250

1954: \$3,700

1955: \$5,500

1954

1954: \$3,150

1954: \$5,250

1955: \$4,000

1956: \$5,000

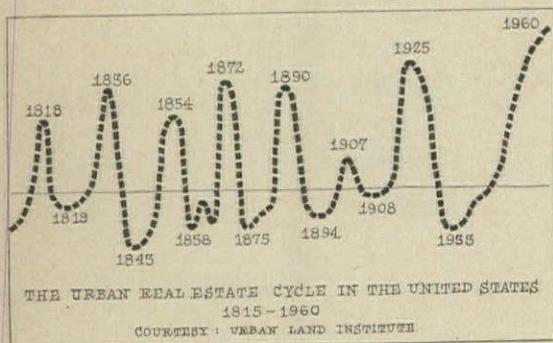
SCHOOL

1960: \$32,000

1955: \$6,000

1955: \$4,500

Land prices like these are your danger signal; take a look at this graph before you buy today



Ten years ago land was a bargain and builders were smart to buy land ahead. Hundreds of builders got rich, not because they built for less but because they bought land for less and cashed in on their land speculation.

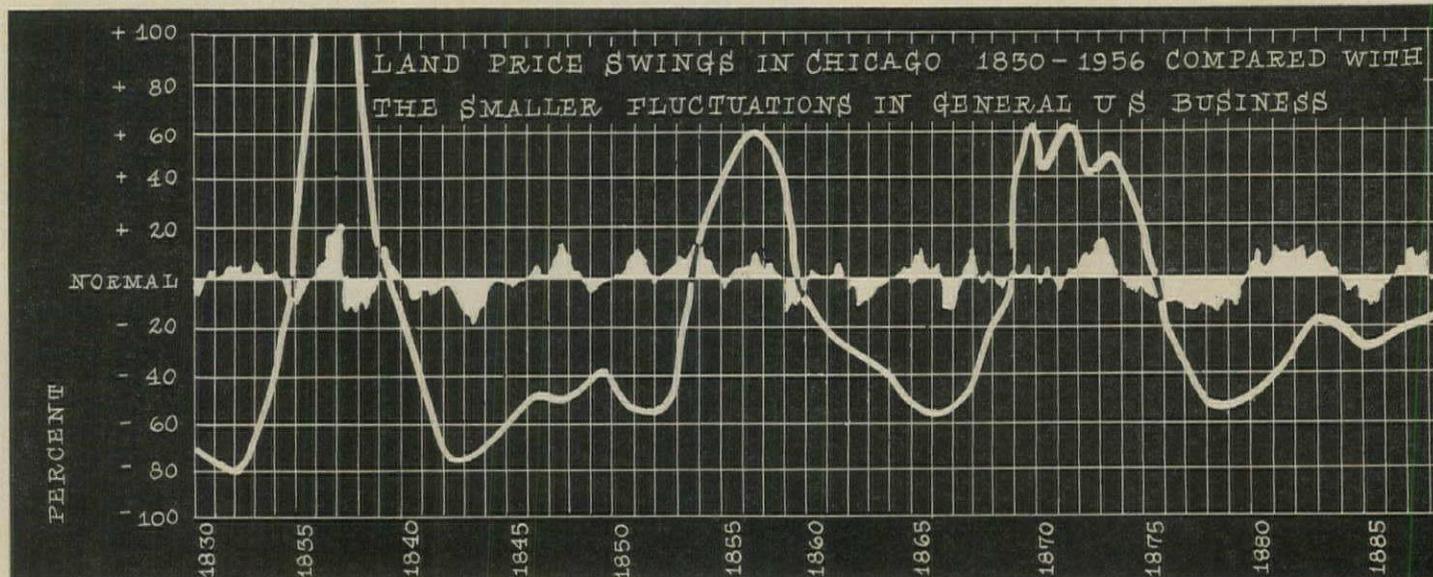
Good timing is the key to speculative profits. There is a time to buy and a time not to buy. It's smart to buy ahead at the bottom of the market, before prices start up. But it is not smart to buy ahead at the top of the market, just before prices start tumbling down again. Suburban land is over-priced today. Just because land was a bargain in 1948 for \$500 an acre does not make it a bargain today at \$5,000.

Don't count on the "population explosion" to guarantee perpetual motion upwards in the price of land. From 1940-50 US population increased by 14%; from 1950-60 by some 20%. But don't forget that:

- From 1810-20 population increased 33%. This did not sustain the land boom that busted in 1819;
- From 1830-40 population increased 33%. This did not sustain the land boom that busted in 1837;
- From 1850-60 population increased 36%. This did not sustain the land boom that busted in 1857;
- From 1870-80 population increased 30%. This did not sustain the land boom that busted in 1873;
- From 1890-1900 population increased 21%. This did not sustain the land boom that busted in 1893;
- From 1920-30 population increased 16%. This did not sustain the farm land boom that busted in 1920, nor the suburban land boom that busted before 1929.

Population increased, yes. But land development increased faster, anticipating more demand than ever materialized, bringing more land into the market than the market was ready to take at the prices asked.

The 100-year graph shows that land prices don't always go up; land prices also fall down. "Land prices go up and go down in bigger and wilder swings than any other prices in our economy," says Nat Rogg, economist for NAHB. Suburban prices have been going up for 27 years now—longer and higher than they have ever gone up in all our history. They are now overdue for a fall. Famed Realty Economist Roy Wenzlick has been warning his high-paying clients for years that the boom could not last much longer. Just because he cried "Wolf! Wolf!"



too soon does not mean the wolf will never come.

And the longer the price break is delayed, the more serious it will be.

Good land may indeed be worth twice what it averaged in 1952; ie, the true value of suburban land may have risen ten times as fast as the 10% rise in the consumer-price index. Good land may even be worth three times what it averaged in 1952; ie, its true value may have risen nearly twice as much as stocks in Wall Street rose from their 1952 peak of \$107.25 to their present level around \$205.

But take a good long look ahead before you let today's artificial and temporary land scarcity (see below) scare you into paying land prices you may soon have reason to regret.

Already farm prices outside the suburbs have leveled off and started to fall (see clipping, right). And don't forget that land prices in most central cities are lower today than they were in 1929!

Says Housing Economist Miles Colean: "Present land prices cannot be sustained unless we get a big new shot of inflation, because 1) cheap money did more than anything else to start land prices soaring and 2) today's 6% interest rate makes it much harder for homebuyers to absorb inflated costs (like today's land prices).

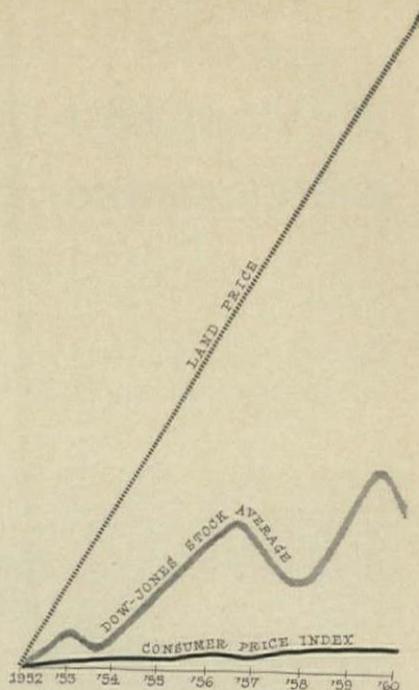
If you want to get better land for less, wait for the market to turn. Suburban land will sell for much less before it sells for much more.

Today's sky-high suburban land prices are predicated on an artificial and temporary scarcity—a scarcity created in the midst of plenty by holding off the market vastly underestimated miles and miles of land in anticipation that vastly overestimated future demands will drive prices still higher.

Today's fancy land prices can be kept high only as long as the illusion of scarcity can be preserved, as long as each buyer thinks the land he pays too much for today would cost more—and sell for more—tomorrow. But what will happen when the inevitable day comes when land prices can go no higher and speculators try to cash in on their paper profits? What will happen and who will get hurt when this land-price boom collapses—as every other land-price boom has collapsed?

Says Professor Fisher in his classic study of premature subdivision: "It takes nearly 30 years to produce a new generation that has to learn by pain and disappointment that while many fortunes have been made in real estate, many paupers likewise have arrived at their destination by the same route. That is one reason the price cycles in real estate are so long."

Says Roy Wenzlick unequivocally: "Land is not in short supply."



REAL ESTATE
Land Prices Reach a New High... But the Return Has Dropped

Has Long Rise Come to a Halt?

Slight drop in prices for farm land in Midwest and declining of investor demand leads the experts to believe the 20-year price advance has run its course.

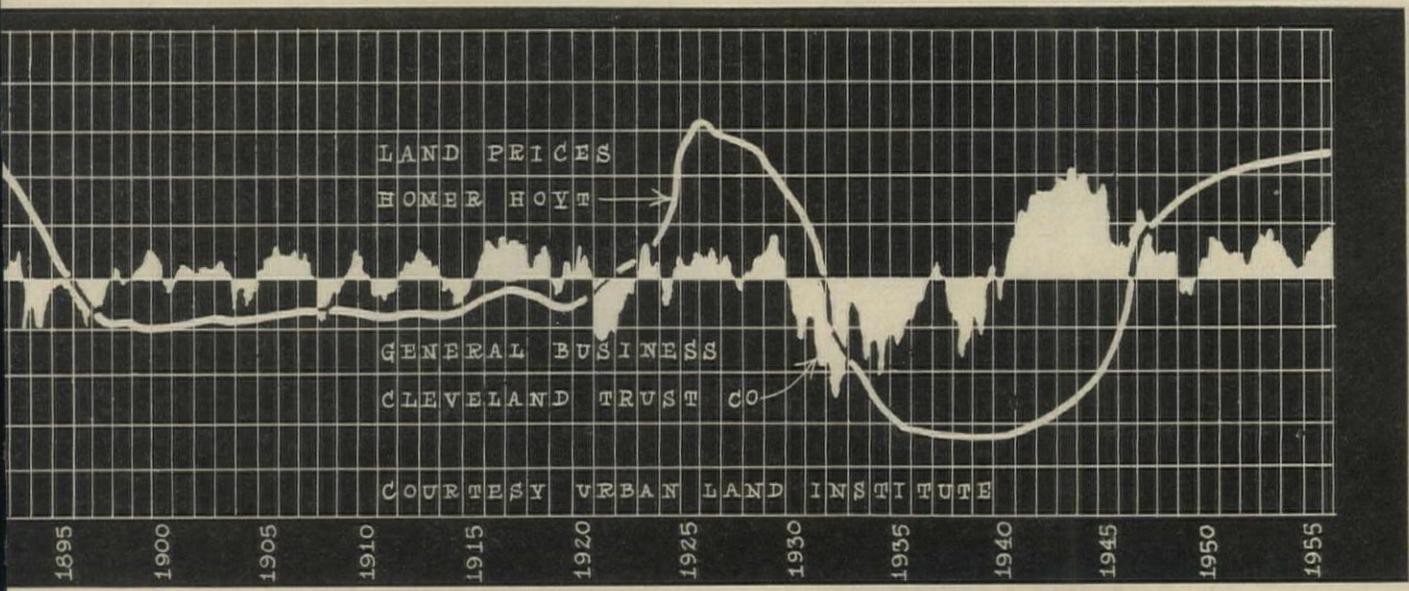
Signs of Change

100 Years of Farm Real Estate Values

Yield on Farm Loans

194 Real Estate

APRIL 1960



Most of the land shortage talk you hear is nonsense: here are 7 big reasons why

The easiest-to-build-on big raw acreage of flat land just the right distance out in the right direction may be gone, but:

William A. Garnett, Fortune



1. There are millions of acres of by-passed land closer to town than most of today's new tracts—more millions of acres of by-passed land than the housing industry will need for many, many years. Around booming San Jose, for example, where builders have scattered their tracts one-or-more-to-the-mile over 200 square miles of the finest fruit land in California, they have actually used only 12 square miles, leaving 188 still to go. (Turn to the front cover of this issue if you want to see for yourself some of the land that is being by-passed there.)

2. New earthmoving equipment makes it practical to use millions of acres of hillside land that could not be developed economically in the last big boom. These new machines are so efficient that grading, filling, and compacting are the only homebuilding costs that are lower today than in 1929. Says super-Realtor Bill Zeckendorf: "The bulldozer is the best invention we got out of the war." Hillside sites offer pleasanter living than the flat fields where most recent homes have been built. For more about using hillside land see *page 151*. For more about the new earthmoving machines see *page 160*.

Ray Johnson



Carroll Seghers, Black Star, Fortune



3. Millions of premium homesites can be reclaimed from under water with today's new and more durable dredges—more land than even the Dutch have empoldered with all their dikes. Hundreds of dredges are at work making new land right now; they are filling in the shallows of San Francisco Bay, where the water resources board says 158,000 acres of tidelands can be reclaimed; they are draining the mango swamps along the Indian River, where Miami Beach (see photo, left) itself was an uninhabitable snake-island not so long ago; they are filling in the Louisiana bayous, where Murchison and Wynne have bought 32,000 swamp acres to add 175,000 new homesites to New Orleans; they are working in the Jersey meadows, in Jamaica Bay out beyond Brooklyn, along the shores of Oahu, in Tampa Bay, along Lake Erie and a hundred other lakes (see *page 164b*).

4. There are millions of vacant lots in existing neighborhoods and developments (nearly 13 million vacant lots of record in 1955, according to the US Census of Governments). That is almost as many vacant lots as all the houses built from 1950 to 1960. When the last land boom collapsed Professor Fisher found that "in most urban communities the number of lots is nearly twice as great as the number in use."

Walter Sanders, Life



5. Cities can and do grow upward whenever their growth outward is checked by high land prices. Scarcity breeds substitution, and the easiest substitute for cheap land on the outskirts is to add more floors over close-in land. One big apartment building (like the 1,570 units planned for the Dodgers' abandoned ballpark in Brooklyn) can house as many families as two square miles of suburban sprawl. Right now, half the new homes being built around New York and Los Angeles (see photo, right) are apartments; and more and more single-family houses are being built split-level or two-story in order to get more living space on less land.



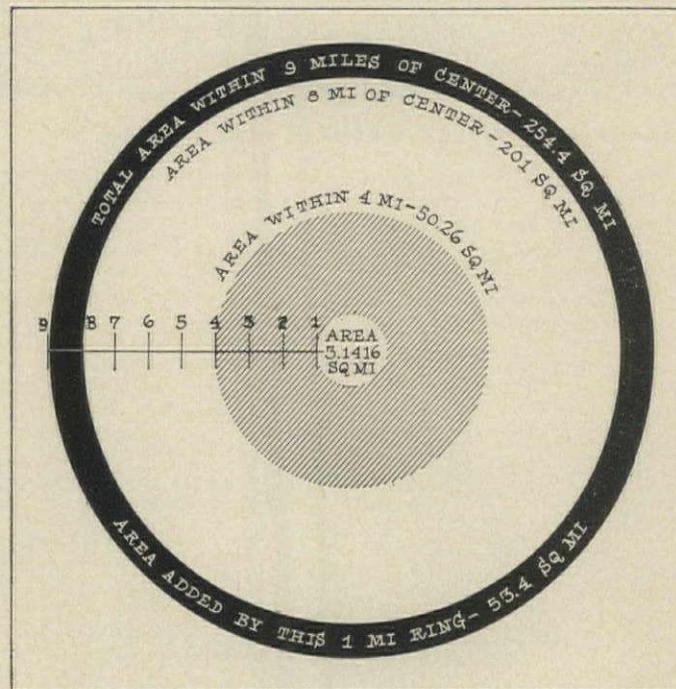
Gordon Sommers



6. Cities can also grow back inwards. Decentralization has deflated downtown land prices and made the most expensive land a bargain compared with outlying sites whose asking prices have multiplied. Downtown is starting to rebuild—and when downtown rebuilds it still has the primary advantage of location that made it downtown in the first place. Most of downtown is underused today. For example, Victor Gruen reports that in Fort Worth (see photo left) “the underused or derelict land reservoir was big enough to provide space for a belt highway, parking garages for 60,000 cars, green belts, a 300% increase in office space, 80% more hotel space, and new civic, cultural, and convention centers . . . Fort Worth is not a special case.”

7. New highways from downtown are making millions of acres easier and quicker to reach than land much closer in was right after the war. With today's bridges and expressways it takes only a little longer to drive from San Francisco across the Golden Gate to the wide-open spaces beyond San Anselmo than it took to drive through rush-hour traffic to the Cow Palace near the city line in 1946. It takes only a little longer to drive out the expressway from Manhattan 30 miles to Oyster Bay than it took to drive through traffic 13 miles to Queens Village inside the city limits in 1930. When new roads increase the easy-to-reach radius of a city from eight miles to nine miles, that one-mile extension adds more easy-to-reach square miles than all the land within four miles of downtown! It adds 17 times as many square miles as all the land within one mile of the center.

More specifically, that one-mile extension adds enough easy-to-reach land to house nearly 200,000 more people at a density of two families per acre, or 400,000 more people at the usual tract density of four families per acre, or 2,000,000 more people at row-house density!



There is more than enough land in and around all our cities to meet all our homebuilding needs for years to come—more than enough land to let an urban population of more than 200 million get more use and enjoyment of the land than most urbanites and suburbanites get today.

If you don't believe there is still plenty of land left, just go up in an airplane and see for yourself—or take a good look at the next six pages of aerial pictures.



Chicago Aerial Industries

There is plenty of land left around Chicago

This is some of the open country commuters see between Chicago and its biggest new suburb, Park Forest. Says Morton Bodfish of Chicago's First Federal S&L: "An almost unlimited supply of easily accessible land is one of Chicagoland's greatest assets. The 6½ million people who live here today use only one-sixth of the land within the present metropolitan area boundaries. The rest is open or partially used farm land readily available for tomorrow's development."

Fairchild Aerial Surveys

There is plenty of land left around Washington

This picture looks over the Capitol and the Monument towards Montgomery County. If the camera pointed south towards Virginia it would have shown even more open land.



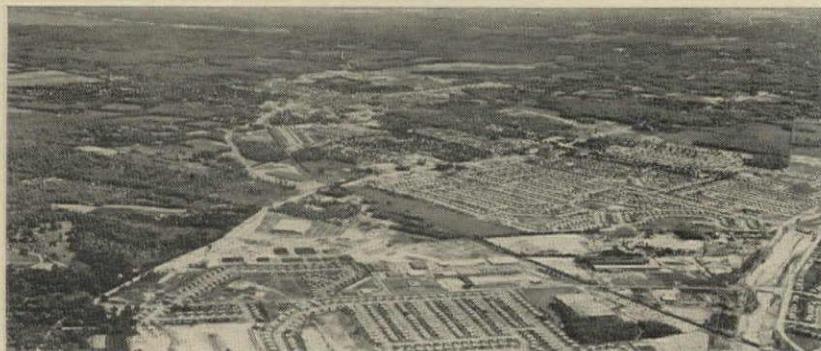


Bob Bailey

There is plenty of land left in Texas

This picture is looking towards Houston from the 1960 Parade of Homes.

Fairchild Aerial Surveys



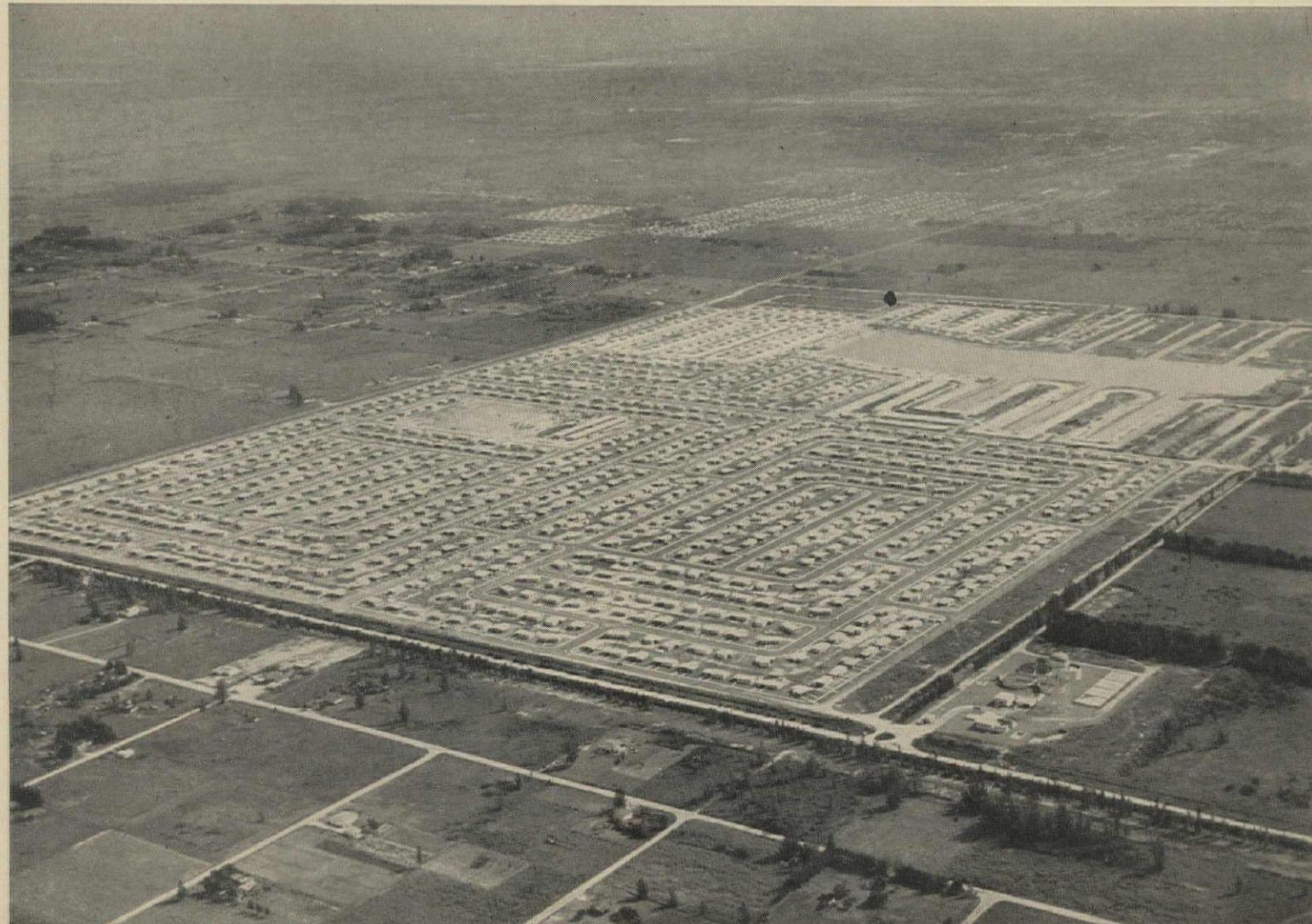
← There is plenty of land left around New York

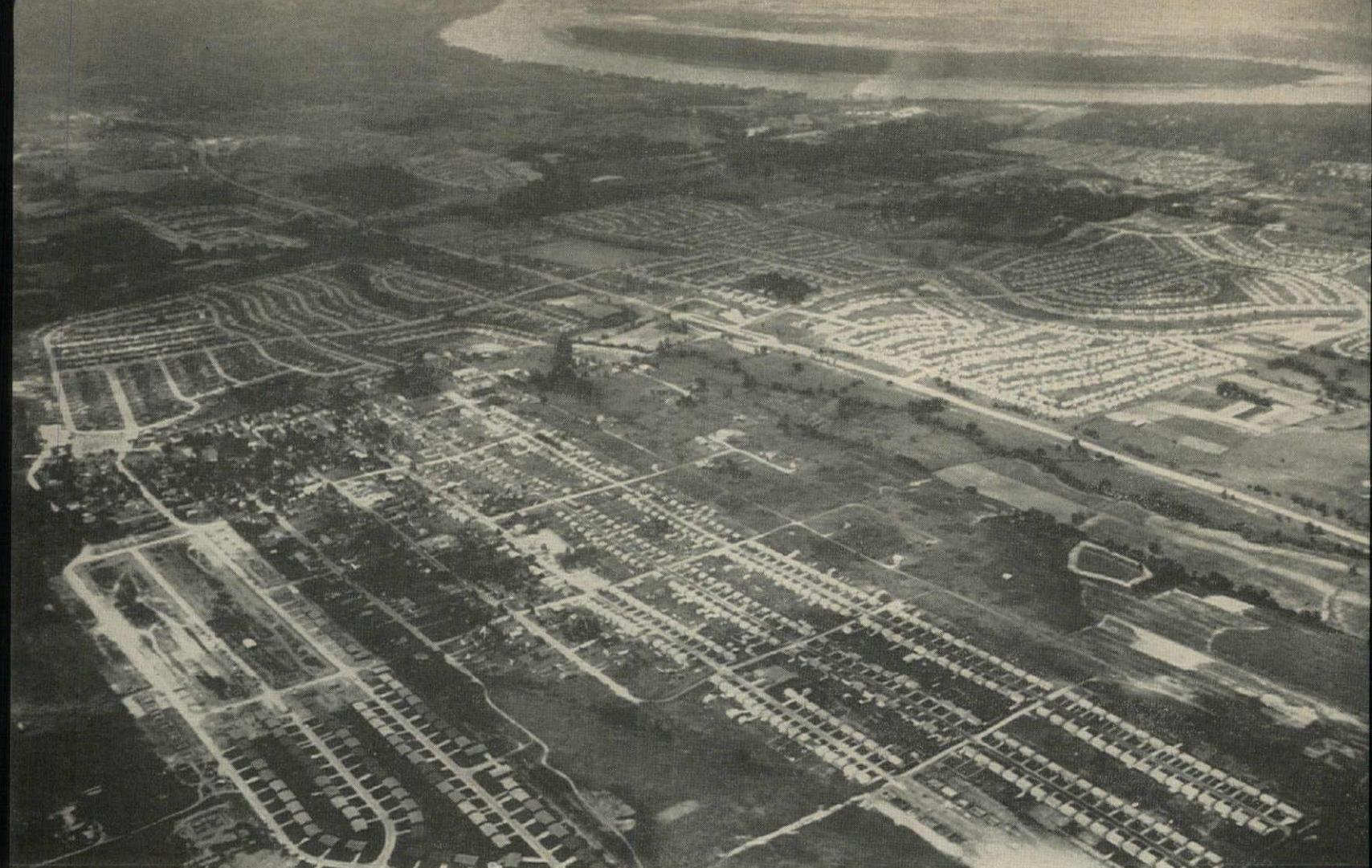
This picture shows where the builders' tracts have stopped on Long Island. In 1955 the Regional Planning Assn reported only 21% of the "suitable land" in the metropolitan area (or 16% of the gross) was developed for urban use. (They counted estates of two acres or more as undeveloped.) It listed as "undeveloped" 54% of Bergen County, N.J., 63% of Westchester County, N.Y., 81% of Fairfield County, Conn.

There is plenty of land left in Florida

This is Mackle's big Westwood Lake project just southwest of Miami.

Flemming's Photo Center





There is plenty of land left between tracts around St Louis

Photos: William A. Garnett, Fortune



There is plenty of land left around Baltimore

Says the Planning Commission: Southwest you can drive out to open country from downtown in 15 minutes. Northwest, where this picture was taken, it takes 30 minutes at the rush hour.

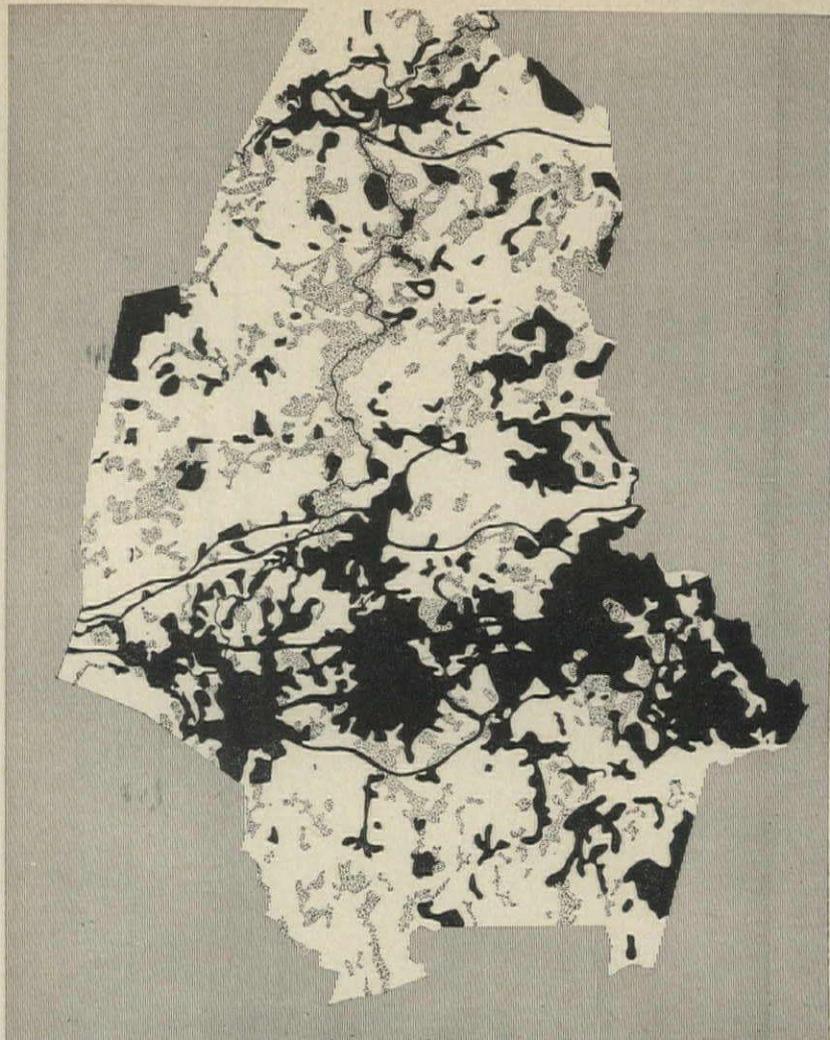


There is plenty of land left around Sacramento

(but not quite as much as when this picture was taken in 1955).

There is plenty of land left around Boston →

All the white area in this map is described as "suitable vacant land" by the Urban Land Institute. The black area is described as "land in use," the gray as "unsuitable vacant land." It is located in Wellesley, Natick, Weston, Needham, Sudbury, and other nearby suburbs 10 to 20 miles west of Boston Common.



There is plenty of land left around Los Angeles

In 1955 the California Water Resources Board said that only 35% of the "suitable land" in the Los Angeles hydrographic unit (ie, the city of Los Angeles, Orange County, and the enclaves like Beverly Hills) had been developed. This same report said that only 15% of the suitable urban land in the ten-county San Francisco Bay area had been developed for urban use, and in 1953 the Bay Area Rapid Transit Council found that there was suitable acreage there for 31 million people, allowing ample areas for recreation and industry.



From coast to coast the picture around every city is almost the same

There is plenty of vacant land for many times as many people, if only the land could be bought. Now let's take a big look from the air at a fairly typical city—fast-growing Louisville, population: 741,000.

There's plenty of land left around Louisville

This picture shows that nearly three quarters of the fringe acreage is being bypassed and/or left underused, even in the direction of the city's fastest growth. Right in the center, within 3½ miles of downtown Louisville, is a 1,270-acre pocket with a population density of less than one person per acre.

Local planners say the 186 sq mi "urban area limits" (119,040 acres) on the Kentucky side of the Ohio could house 1,350,000 people without any crowding—roughly twice the present population. And right across the river in Indiana (upper right) there are miles and miles of open country with a population density of less than 50 per square mile.

Photo: Billy Davis





There is nothing wrong with the air views— but there is plenty wrong with what they show

which you saw on the last six pages

What they show is that none of our cities is expanding in an orderly, economical way. On the contrary, they are disintegrating and spreading the pieces over miles and miles of countryside.

What they show is not a shortage of suburban land, for there is no shortage. What they show is not shortage—but waste—the tragic land waste, dollar waste, and time waste of the checkerboard pattern of

SUBURBAN SPRAWL

Suburban sprawl is what happens when land developers cannot assemble at a profitable price the tracts they would like to buy first, so they have to leap frog out to find land cheap enough to build on here, there, and everywhere—often five or ten miles further out.

Suburban sprawl is what happens when owners whose land is wanted next for suburban expansion—the nearest land, the land that would cost least to connect up to existing streets and sewers and utilities—hold out for tomorrow's price today and fail to find a buyer willing to pay it now.

Suburban sprawl is what happens when estate owners hold out for capital gains of 1000% to 10,000% above what their acres cost to buy in horse-and-carriage days. (The Whitney estate preempted for a single family one-eighth as much land as all of Levittown five miles further out—population 65,000.) Millionaires pay almost no taxes to hold on to their estates; they can deduct up to 91.72% of the local levies from their state and federal taxes.

Suburban sprawl negates and frustrates the purpose of cities, which is to let more people live and work close together and so utilize and enjoy the maximum efficiency of community facilities and community enterprises, with easy access and cheap distribution. Cities exist to bring people together. Suburban sprawl, with its vacant and undeveloped land, keeps them apart. Even if suburban land had no alternative use for farming and market gardening, it would pay many a city to draw itself together.

*The best farm land in Iowa brings only \$600 an acre; the national average last March was only \$111.46 including buildings; the California average was only \$326.70.

**HOUSE & HOME thinks "development ease-

ments" are the worst idea yet. They just aggravate and perpetuate the sprawl by using tax money to keep golf links, orchards, and cow pastures where houses should be built and push homebuilding out beyond to where

the golf links, etc should be. Green belts should be planned for maximum, not minimum, public use and enjoyment of the land. The 1,200-acre Field estate will make a fine state park, but as fenced-in private property

Suburban sprawl is the direct opposite of planning satellite centers or self-contained new towns, each surrounded by its own green belt. Suburban sprawl is just the city spreading out over miles and miles that are neither fish, flesh, nor fowl—neither city nor county.

Suburban sprawl penalizes farmers who want to farm instead of speculate. It excites speculative hopes that inflate land prices far above the level farming can support.* It discourages farm improvement, for who knows how soon the orchards may be pulled, the barns leveled, the machinery auctioned? (Right now, thousands of acres of California's finest prune and apricot land in the Santa Clara Valley are being blighted because so many farmers, expecting soon to sell, have stopped replacing their aging trees.)

Suburban sprawl is what makes homebuyers drive past miles of unused or underused countryside to get home to their tiny 60' x 120' lots. (Open fields, cow pastures, private golf links, and millionaire estates are fine, but it is much better to drive out five miles *beyond* your home to enjoy seeing them when you want to see them than to have to drive five miles past their "No Trespassing" signs when all you want is to get home.**

Suburban sprawl is why Los Angeles homebuyers must drive 25 miles to Azusa while land much closer to downtown is being held off the market and farmed by land speculators who think they can sell it for ten times the 1950 price in 1970 instead of taking five times the 1950 price today.

Suburban sprawl defies good local land planning and mocks good local land planners.† The need of bigger and better planning is obvious everywhere. But what chance do far-sighted planners have against the profit motive working full blast in reverse and offering quick profits on bad land use? Without vastly increased authority how can the planners force speculators to release their land as it is needed if the speculators think they could double their profits by sitting tight? How can they check premature subdivision when speculators are gambling for big money? How can they keep farmers ten miles out from selling off their frontage to exurbanites and so messing up the neighborhood potential for orderly development later on? How can they keep developers from bulldozing the trees? How can they persuade each separate community to stop zoning out any land use that will not add more to the tax revenue than it adds to the budget?

continued

it was little or no good to anybody except the owners.

†Before one of the big Westchester tracts was built up, the Los Angeles planning board could not even persuade the Los Angeles

school board to buy school sites at the developer's raw-land cost around \$1,000 an acre or the park commission to accept land for playgrounds free, so scores of new houses had to be bought and moved later to clear

the sites at \$40,000 an acre! And few local planners anywhere, alas!, have been strong enough to get the state and federal governments to coordinate the new highways and their interchanges with the local areas' needs!

Suburban sprawl cries out for area zoning to assure a coordinated land-use pattern conceived in the public interest and to stop the premature urbanization of distant farm land. But area zoning would be just plain disastrous unless it is counterbalanced by a big enough tax increase on the land zoned for housing development to discourage hold-outs. To see how badly area zoning would work without this counterbalancing tax pressure, take a look at what happened in Louisville when the local water company applied its own area zoning to water service and the county health board forbade septic tanks in another big area where sewers were not available. This gave the owners of land already served with water and sewers a field day. Theirs was the only land builders could buy, so its price soared overnight. (In Australia, unimproved land is taxed up 12.4% a year on a valuation based on its "highest and best" use—see page 000).

Suburban sprawl is worse than ever today, thanks to the automobile. In our grandfathers' time the suburbs could sprawl no further than a man could walk to the train or the trolley and his wife could walk to the store, so yesterday's suburbs were tight little towns where only the carriage trade could live on the outskirts. Today, every suburbanite has one car; many have two; five miles mean not much more than five blocks; and the suburbs can sprawl from here to breakfast (provided, of course, nobody minds wasting gas, tires, and depreciation at 8¢ a mile).

Suburban sprawl is why almost every city is surrounded by a blight belt of by-passed land whose owners held out for too high a price and did not sell. *Suburban sprawl* is one big reason why downtown is stagnating and downtown stores are losing trade. *Suburban sprawl* is why almost every city spreads out over three to five times as much land as it uses. *Suburban sprawl* is why so many houses have to waste big money on septic tanks and disposal fields that will be junked when the sewer lines reach them. *Suburban sprawl* is one of the two big reasons why land development costs twice as much as it should—double the cost of more compact expansion with shorter street extensions, shorter sewer extensions, and shorter utility extensions. *Suburban sprawl* is one big reason why money is tight; ie, the money we need to build houses is being misspent to extend urban services far out into rural areas years before they should be needed.

Suburban sprawl, in brief: 1) costs billions of dollars a year, 2) blights millions of acres of countryside, and 3) makes homeowners waste millions of hours and millions of gallons of gas to get home to homes whose land cost they can afford.

There are five main reasons (all short-term) for today's seeming shortage-in-the-midst-of-plenty

Reason No. 1: Speculation

Countless acres are being held in "cold storage" by land speculators hoping for still higher prices tomorrow than their land would fetch today. (Some of these speculators are syndicates formed for the express purpose of land speculation; others are estate owners sitting tight for still bigger capital gains on their property, or farmers more interested in land prices than in crop yields.) This speculation is the No. 1 reason for expecting that great quantities of land will come on the market when the speculators decide prices can go no higher, so it is the No. 1 reason you can be sure supply will eventually overtake demand and bring prices down. (Outside Montreal, for example, the *Star* found that speculators were holding 610,000 acres—eight times as much land as the city's booming growth can use before 1970.)

Reason No. 2: Time

Countless acres now being developed will not be ready for homebuilding for another year or more. For example, the first 209 lots in the great Marin Bay project north of San Francisco did not go on sale until this month—four years after the land was bought by the developers.

Land development takes so long that the supply of land ready for homebuilding responds slowly to the stimulus of high prices, *but it responds massively*.* In Florida, for example, *FORTUNE* found that more land is being developed right now than today's fastest-in-the-nation rate of population growth can absorb before 1980. When all this land hits the market, something is bound to happen to the sky-high land prices that invited overdevelopment.

Reason No. 3: Overzoning

Countless acres are being withheld from economic use today by communities deliberately using wasteful zoning requirements, wasteful street improvement requirements (see *page 171*), and wasteful building code requirements to keep out tract builders and small homebuyers whose children would cost the town more to educate than their parents would pay in taxes.

These towns hope these 'snob' requirements will one day attract upper-class residents who will pay high taxes, support local merchants handsomely, and send their few children away to school. This is a sort of municipal land speculation on a grand scale. How much longer it can continue is an open question, for two reasons: 1. The courts may not always agree that the health and safety of the people necessitate two-acre lots, 16" truss spacing, worse-than-useless house traps, rigid-conduit wiring, and local streets wider than the transcontinental Lincoln Highway 25 years ago, and

2. The towns themselves may vote out the restrictions when enough local landholders are tempted by the higher land prices they could otherwise get. One New Canaanite has already carried his protest to the Supreme Court, arguing he could get \$250,000 more for his acreage if his four-acre zoning were voided.

Reason No. 4: Fragmentation

Countless underused acres are bypassed because they are broken up into holdings too small for economical development (unless, of course, all the small owners agree to sell at once). Says Dave Bohannon's righthand man Ron Campbell: "Trying to get a big enough piece to develop is a nightmare." Often the land needed to integrate a tract is tied up in an estate and the heirs are scattered or divided. So Nate Manilow and Phil Klutznick had to go out 30 miles from the Chicago Loop to start Park Forest; Bill Levitt had to go 16 miles from Philadelphia and 15 miles from Trenton to start Levittown, N. J.; Frank Sharpe had to go ten miles from Houston to start Sharpestown.

Reason No. 5: Misinformation

Billions of dollars worth of land is bought and sold without either party having anywhere near enough market facts to support his price judgment. Both buyer and seller must grope to decisions by hunch and by guess, for America's biggest industry must get along with more inept and inadequate statistics than any other industry. The federal government spends more money for market research on peanuts than for market research on land and housing. Few communities compile even such simple statistics as the number of lots subdivided each year. Nobody keeps a running inventory of unsold lots; nobody publishes the price at which sales are actually made. So scarcity is exaggerated and prices are inflated by professional optimists spreading inside dope that cannot be checked.

*"The dynamic process of overexpansion seems to work something like this," Professor Gaffney wrote in *Land*.

"High prices over the long period required for the response ultimately stimulate more new supply than the demand can absorb.

"Supply responds very slowly because the process of converting land to urban use involves many steps by several slowly moving, poorly coordinated, frequently reluctant, and sometimes downright obstructive public and private agents and because it

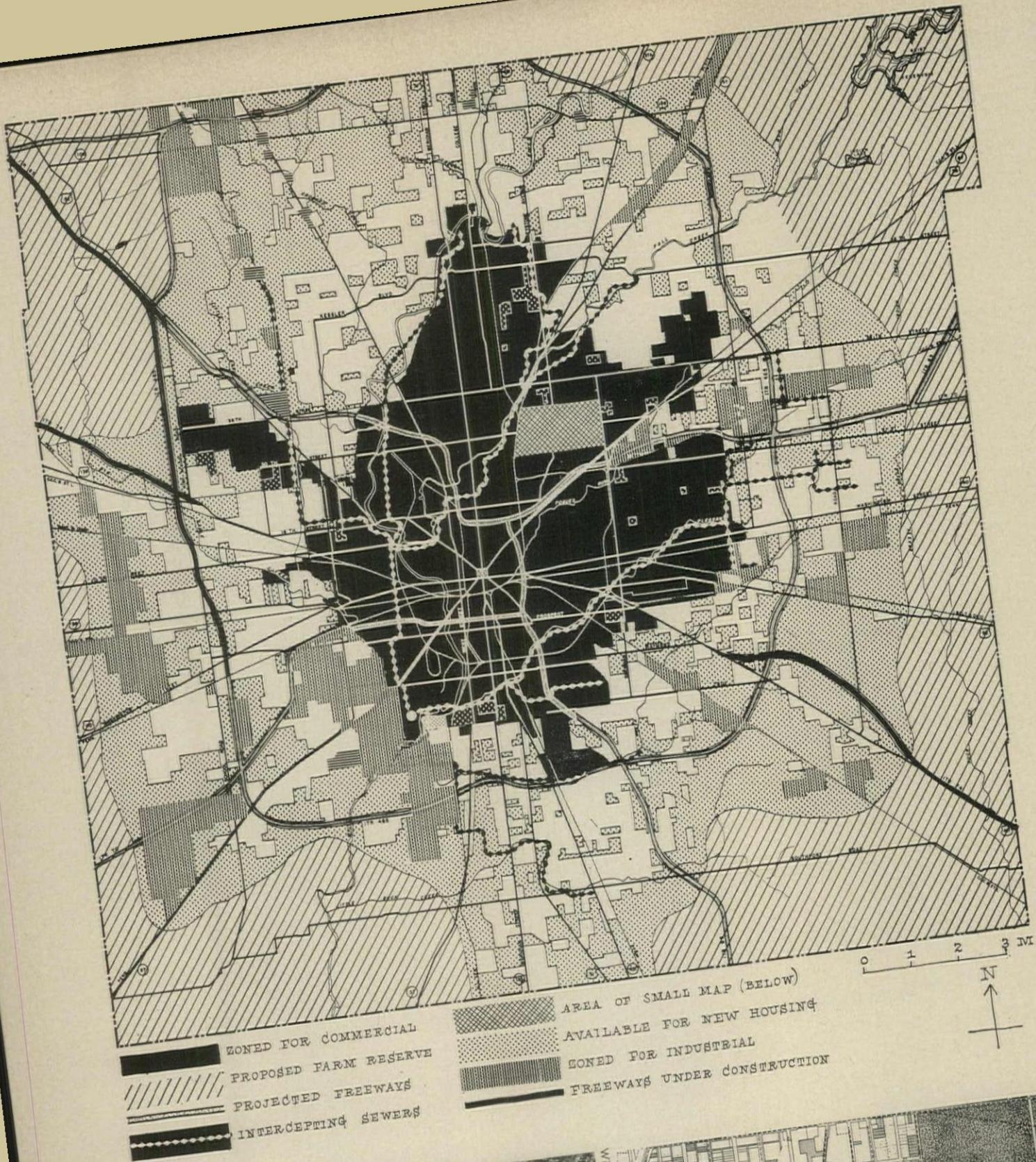
usually takes land holdouts a long time to release and then develop most of the sites for actual service.

"Say a new state-financed freeway begins the process of bringing farmland into an urban market. Besides transportation, the land needs water, sewers, telephones, gas, electricity, schools, fire and police protection, etc.

"Many time-consuming steps must be taken to extend these several services from trunklines out through forks and branches to the ultimate distributive tracery that finally brings

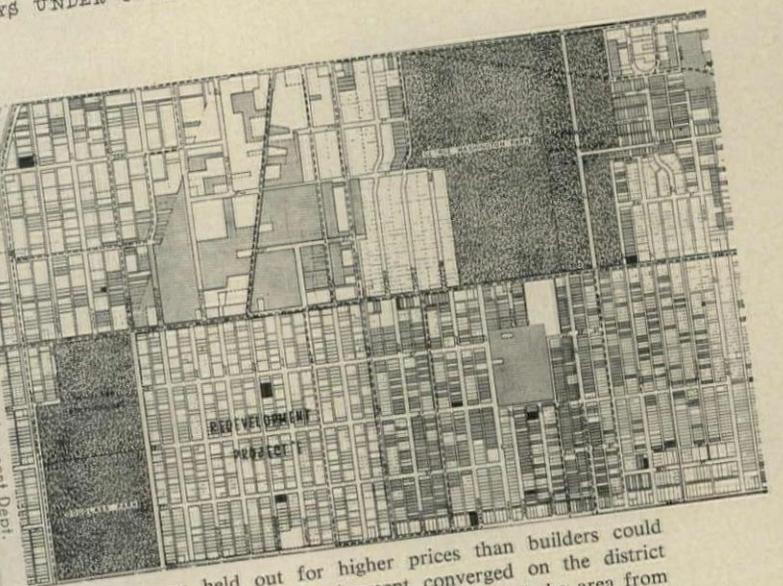
service to each parcel of land. Governments and utilities must decide to extend their lines and networks to individual parcels. Landholders must decide it is time to receive them—that usually means subdividing, dedicating lands for streets and easements for utilities, often paying for part of the utility extensions and street improvements, and perhaps being annexed and saddled with municipal taxes. The landholder today must decide also that his income-tax position is favorable for a sale.

"It would be nice for each party involved if all the others would commit themselves to development before he did—or at least when he does. Then he needs only pluck the ripe fruit from the tree, instead of undergoing years of risk, interest, depreciation, and obsolescence while he waits for complementary investments to help his own pay out. The situation lends itself to a long impasse of after-you-my-dear-Alphonse. At every stage, there is inertia, nostalgia, fear, bargaining, and jockeying."



Here is what the by-passed downtown area looks like from the air and on the planning commission vacant-lot map. The area was by-passed, partly because it was platted for 40' lots in the 20s, but not much homebuilding was done here until after World War 2, by which time homebuyers wanted wider lots, partly because several

William A. Oates, Indianapolis Redevelopment Dept.



big land owners held out for higher prices than builders could afford, partly because the development converged on the district from both north and south, but never quite reached the area from either direction. Not all vacant lots are shaded on the map—only those available in acre chunks.

In Indianapolis, thanks to these maps, land ripe for housing is easy to spot

The Indianapolis Metropolitan Planning Commission and its smart young Executive Director Calvin Hamilton are pioneering a brand new idea to keep the suburbs from sprawling.

In a special study for HOUSE & HOME, they have mapped all the open land inside the city and all the open land right around the city that is now ripe and ready for housing development.

"This is the best thing I've seen yet," said Realtor Robert E. Walker, past president of the Indianapolis Realtors: "None of us had any idea so much vacant land is available close-in until this map let us see it all at a glance."

Inside the city (black on the big map) the planners found 4,381 acres (nearly seven square miles) of unused level land zoned for homes, about two-thirds of it in 13,503 fully improved vacant lots. About 1,200 of these vacant lots are concentrated in a by-passed downtown neighborhood (see smaller map) where raw land is still available in plots as big as 23 acres and where a 32-block area (mostly vacant lots) is now being cleared and replatted in wider lots for redevelopment with single-family houses and a few apartments.

Right around the edge of the city the big map revealed 79,000 acres available for housing development inside the urban development boundary line that the Planning Commission is promoting. (The degree of availability varies, of course. Some owners don't want to sell; others who want to sell are asking exorbitant prices.) These 79,000 acres, shown in light grey on the big map, add up to more land than Indianapolis can absorb in 35 years at the present rate of growth.

Hamilton hopes these maps will bring more of this close-in land onto the market at prices builders and developers can afford to pay.

"The maps will show everybody that there is plenty of land, so there is no reason why developers should pay crazy prices and no reason why speculators should expect to get crazy prices," he says. But Hamilton knows that tax pressure would make it harder for speculators to hold land underused, so he sent a copy of the map to the county assessors with a covering letter suggesting that "land taxation policies might be reconsidered to encourage the development of this vacant land readily accessible to our community facilities."

In another letter sent with the smaller map to individuals interested in urban development he said: "These left-over areas should be fully developed in order to utilize our capital investment in community services to the maximum extent. Urban growth should be discouraged from going into the hinterland until present community facilities are fully utilized. . . . It is earnestly hoped that this [map] will encourage the early development of these vacant areas."

The map has already stimulated the Indianapolis Board of Sanitary Commissioners to step up their program for extending sewers throughout the proposed development areas. In recent years Marion County has been building the equivalent of a new town of 2,500 population every two years on septic tanks, and many homebuyers who had spent \$600 to \$800 for septic tanks have balked at paying an added \$1,000 to \$1,200 assessment later to connect their houses to intercepting sewers.

The map also shows how land has been zoned for industry (dark grey) all around the city, partly to give each suburban township an adequate industrial tax base, partly to provide local jobs in each area and so minimize travel-time to work.

Outside the development line, Hamilton would favor ten-acre zoning and low taxes to reserve the land for farming.

continued



Robert W. Kelley, Life

Our great-grandfathers showed better sense than we do when they planned their village streets. In all the show towns of our past—in Williamsburg, in Charleston, in Nantucket, in Salem (see photo above)—even the stateliest homes stand only a few feet back from the tree-lined sidewalks. This left most of the lot for pleasant walks and gardens in the rear.

Wisely used, an 8,000 sq ft lot with privacy planting and fencing is quite big enough to let middle-income families get almost as much enjoyment of outdoors as the rich can get from acres of land, for nobody can actually use more than a few square feet. And a 10,000 sq ft lot is more land than most men want to keep up when they have to cut their own grass and tend their own flowers.

Land in good locations is too precious to waste on useless, archaic setbacks

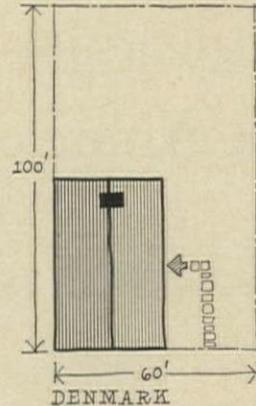
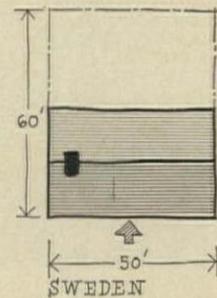
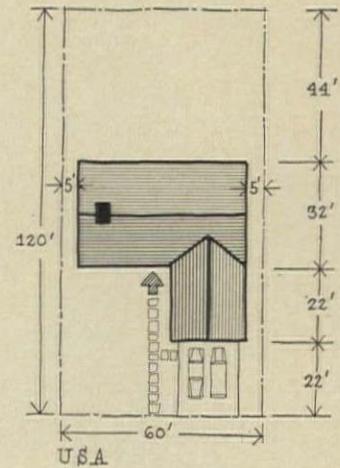
The one worst way to waste a small lot is to center the house on the site and cut the already small ground area into four smaller pieces, each too small to be much good to anybody. But that kind of land waste is just what the archaic setback rules require in most suburban towns.

This kind of site planning may be fine for big estates where you drive half a mile from the gatekeeper's lodge to the mansion. It may have been all right for suburban living 50 years ago, when the family used the front porch and the front yard, leaving the back yard for clotheslines, garbage pails, and stables. But it makes no sense at all for the way suburbanites want to live in this age of patios, rear living, garbage disposers, clothes dryers, and two-car garages. Says Max Wehrly of the Urban Land Institute, "The front yard is an anachronism." Nobody uses the front yard, and it is high time every community changed its setback rules to recognize that obvious fact.

But today many a tract house on a tiny lot must be set 44' back from the sidewalk because:

1. Not content with requiring local streets wide enough for moving traffic between cars parked on both sides, most towns require off-street parking in front of the garage, so the garage must be set 22' back from the walk;
2. On a 60' or 70' lot with 5' sideline setback there is no room for a two-car garage alongside the house, so the house must be set back another 22' (unless it is a split level) to put the garage in front.

If the house itself is 32' deep (today's most economical and desirable depth), the rear windows will be 76' from the street, leaving only 44' of usable depth for gardening and rear living on a 120' depth! This is not much more usable outdoor space than the Swedes get for row houses on 40'x60' lots with the fronts flush with the sidewalks. It is only a fraction of the usable space the Danes get for detached houses on 60'x100' lots with the building set close to the street right up to the lot line on one side.



There is no good reason why one-fifth of a 60'x120' lot should be wasted to provide guest-parking in front of the garage.

There is no good reason why the garage should not be permitted right close to the sidewalks. Los Angeles allows this on hillside lots, and the effect is much pleasanter, for the garages give some degree of privacy to the frontyards at the same time they make the frontyards smaller.

There is no good reason why each house should not be built flush with its lot line on one side and its garage flush with the lot line on the other side. The garage makes a better buffer between houses than the 10' of wasted land most suburbs now require. That is what was done at Radburn 35 years ago, and Radburn is still recognized all over the world as one of the half-dozen finest examples of good land use.

continued



Culver

Sky-high land prices were no problem in America until quite recent times

The Dutch bought Manhattan Island from the Indians for \$24-worth of baubles. Most colonies just took their lands free for nothing. We bought Louisiana, Arkansas, Missouri, Iowa, Minnesota, Oklahoma, Kansas, Nebraska, the Dakotas, Montana, and most of Colorado and Wyoming from Napoleon in 1803 for \$15 million. We bought all Florida from Spain for less than you would have to pay for Key Biscayne today. We gave Mexico \$15 million for California and most of seven other states. Seward paid Russia \$7 million for Alaska, and many Senators thought he paid too much.

What the government got for so little it gave away almost free (unless some earlier government had already given it away in princely grants often exceeding 100,000 acres). We gave the railroads millions of acres free to make it worth capital's while to open up the West. We homesteaded 160 acres of good land free to anyone who would take it up and live on it.

Within the memory of men now living, land outside our cities had almost no price beyond the cost of clearing it; and even on Manhattan Island corner lots sold in our grandfather's time for less than the price of a front foot today.

So it is small wonder that America has given so little thought to developing a constructive land policy to moderate land price inflation.

Unless land inflation is corrected soon, the consequences could be very serious

Many of America's biggest panics and depressions were touched off by over-speculation in land and a bust in land prices that carried hundreds of banks and other lending institutions down with it.

The panic of 1836 came with the collapse of the land boom along the new canals. The panic of 1857 came with the collapse of the land boom along the new railroads; so did the panic of 1873. And the 80% drop in land prices that started late in the Twenties played a bigger part in the bank failures of 1932 and 1933 than the 89% fall in the price of stocks from the 1929 peak.

A land bust in the Sixties could be even more serious if nothing is done quickly to check the inflation, because this land boom is blowing up to such monstrous size. Paper prices for land now total close to half a trillion dollars—nearly twice the national debt, more than six times the federal tax revenue, nearly twice today's price of all listed stocks, more than twice the resources of all our commercial banks.

If this bubble can be deflated quickly and now, little harm will be done. The speculators will lose their unearned paper profits, but that is about all.

But

If we postpone the correction until much more of the land has been sold and covered with buildings mortgaged at prices that cannot be sustained, the credit structure of the country will be deeply involved, as it was before 1932.

So it is high time everyone recognized the need of thinking out coherent land policies that will put a firm land price foundation under our prosperity. No economy can be sound and stable as long as its biggest asset is careening up and down on a \$500-billion roller coaster.

For 350 years our only land policy has been to give the public domain away free or almost free to anyone who would take it and then let him make as much money out of it as he could. This may have been all very well for a frontier nation with nearly two billion acres of wilderness to tame. But a highly industrialized and urbanized nation like America today needs a more positive policy to bring some order into the confusion our past lack of land policy is creating.

Today the misuse and overpricing of land add up to a national problem and a national danger of the utmost seriousness, but nobody is talking about it, nobody is thinking about it, nobody is worrying about it, and nobody is looking for even a short-term answer, let alone a long-term solution.

In fact, to quote the report of the HOUSE & HOME Round Table on money and inflation (H&H, Jan), nobody even seems to know the problem exists except the homebuilders it is helping to price out of the market.

Letting this land-price inflation price America's biggest industry out of the market is bad enough by itself, for a cutback in homebuilding throws more men out of work than a like cutback in autos, or steel, or oil. But . . .

How can we form any sound national policies without giving thought to a policy for land?

How can we have a sound, sense-making-anti-inflation policy without paying careful heed to the most runaway inflation of all?

How can we have sense-making tax policies—local, state, and national—without collecting enough taxes on our principal form of wealth—the only form of wealth whose use would be stimulated by higher taxes instead of curtailed? There would be little need or pressure for federal grants-in-aid for education, medical care, slum clearance, public housing, etc, if local governments were making better use of their exclusive power to tax land.

How can we have a sense-making farm policy without first giving careful thought to the top-heavy capital cost of farm land and adopting a sound land policy for farms? At today's land prices it takes a \$20,000 investment to create one job on a good farm. If the farm problem is how to reduce farm acreage and how to get marginal farmers moved off their poor farms into industry, perhaps the best farm program would be to offer these marginal farmers up to \$60 an acre to buy back and retire permanently up to 60,000,000 acres of not-too-productive land that was actually farmed this year.

How can we have a sense-making urban renewal program without first thinking through the problem of slum price inflation and adopting a sound land policy to rationalize urban land prices? Today most cities are subsidizing slums by undertaxation and discouraging improvements by overtaxation; and the federal government is making things worse by 1) letting slumlords take big depreciation write-offs on buildings that cannot possibly depreciate any further and 2) putting up land-purchase subsidies for redevelopment that push slum land prices still higher. The hundreds of millions these write-downs cost were supposed to be subsidies to give slum dwellers better homes, but they have been used as subsidies to make slum owners richer (see page 140).

How can we hope to have a scandal-free highway program without giving thought to what land for the highway should cost and what the highway program would do to land prices along the routes? Some highways are enriching landowners along the way with a windfall bigger than the whole cost of the road. The canny Dutch froze the price of land along the route first. We, on the contrary, are buying the right of way for many times what the land could have sold for without the highway program to inflate its price.

How for that matter, can we have a successful foreign policy until we recognize that on every continent except Australia the land problem is a critical issue ready-made for Communist exploitation—including, specifically, in Cuba, in Egypt, in Iran, in Iraq, in India, in black Africa, in much of South America?

Contrariwise, how can we have a realistic policy for the satellite states until we recognize that Communism is being entrenched in the rural districts of East Germany, Hungary, Poland, and Rumania by the confiscation of the great estates and the redistribution of the land among the peasants. It would be still more strongly entrenched if the Reds were not foolishly trying to force the new peasant owners to pool their new land holdings in big cooperatives.

The misuse and underuse of land and the evils of uncontrolled land speculation are urgent problems all over the world.

In this country the most direct and immediate dollar loser from these abuses is the housing industry, so the housing industry has the biggest stake in their correction, the biggest reason to study the problem in depth, the most to gain by promoting the adoption of sound planning and taxation policies to encourage better land use.

So the next 18 pages will give you a quick rundown on the land problem at home and abroad, reviewing the development of land policy over the years and reporting some of the solutions that are being suggested and tried today.

For so great a problem there is no one, there is no quick, there is no easy solution.

Part of the answer is better planning; part of the answer is better zoning; part of the answer (in special cases) is government acquisition; part of the answer is broader ownership; part of the answer is a complete overhaul of the tax system, local, state, and national.

No one answer will avail alone. But HOUSE & HOME agrees with the rising chorus of expert opinion that the first point of attack should be to ease the too-heavy tax burden on houses and other improvements, multiply the too-easy tax load on unimproved land, and make the unearned increment in land prices provide much more of the tax money needed to provide the highways, streets, water, sewers, and schools without which unimproved land would be neither livable nor saleable.

Two years ago HOUSE & HOME said land speculation is Public Enemy No. 1 of the homebuilding industry and the homebuying public

Winston Churchill said it much better and stronger forty years ago. Said he:

"Land monopoly is not the only monopoly, but it is by far the greatest of monopolies—it is a perpetual monopoly, and it is the mother of all other forms of monopoly.

"Unearned increments in land are not the only form of unearned or undeserved profit, but they are the principal form of unearned increment, and they are derived from processes which are not merely not beneficial, but positively detrimental to the general public.

"Land, which is a necessity of human existence, which is the original source of all wealth, which is strictly limited in extent, which is fixed in geographical position—land, I say, differs from all other forms of property, and the immemorial customs of nearly every modern state have placed the tenure, transfer, and obligations of land in a wholly different category from other classes of property. [Did you ever stop to wonder why property in land is called "real" and why land cannot be "personal" property? See page 128.]

"Nothing is more amusing than to watch the efforts of [the land] monopolists to prove that other forms of property and increment are similar in all respects to land and the unearned increment on land.

"They talk of the increased profits of a doctor or a lawyer from the growth of population in the town in which they live. They talk of the profits of a railway, from the growing wealth and activity in the districts through which it runs. They talk of the profits from a rise in stocks and even of the profits sometimes derived from the sale of works of art.

"But see how misleading and false all these analogies are. The windfalls from the sale of a picture—a Vandyke or a Holbein—may here and there be very considerable. But pictures do not get in anybody's way. They do not lay a toll on anybody's labor; they do not touch enterprise and production; they do not affect the creative processes on which the material well-being of millions depends.

"If a rise in stocks confers profits on the fortunate holders far beyond what they expected or indeed deserved, nevertheless that profit was not reaped by withholding from the community the land which it needs; on the contrary, it was reaped by supplying industry with the capital without which it could not be carried on.

"If a railway makes greater profits it is usually because it carries more goods and more passengers.

"If a doctor or a lawyer enjoys a better practice, it is because the doctor attends more patients and more exacting patients, and because the lawyer pleads more suits in the courts and more important suits. At every stage the doctor or the lawyer is giving service in return for his fees.

"Fancy comparing these healthy processes with the enrichment which comes to the landlord who happens to own a plot of land on the outskirts of a great city, who watches the busy population around him making the city larger, richer, more convenient, more famous every day, and all the while sits still and does nothing.

"Roads are made, streets are made, services are improved, electric light turns night into day, water is brought from reservoirs a hundred miles off in the mountains—and all the while the landlord sits still. Every one of those improvements is effected by the labor and cost of other people and the

rate payers. To not one of those improvements does the land monopolist, as a land monopolist, contribute, and yet by every one of them the value of his land is enhanced. He renders no service to the community, he contributes nothing to the general welfare, he contributes nothing to the process from which his own enrichment is derived.

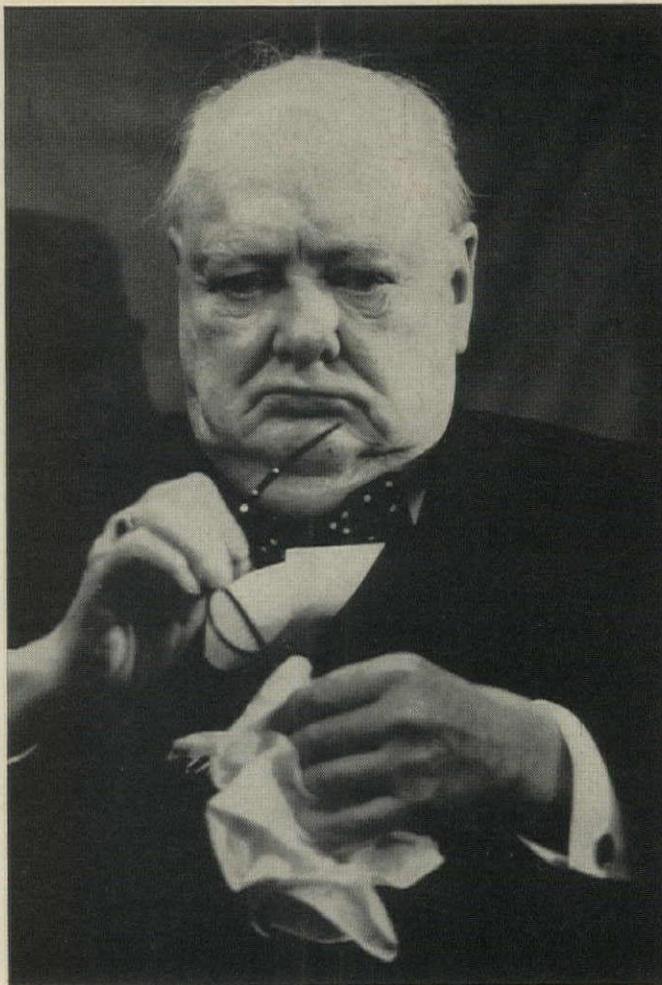
"While the land is what is called 'ripening' for the unearned increment of its owner, the merchant going to his office and the artisan going to his work must detour or pay a fare to avoid it. The people lose their chance of using the land, the city and state lose the taxes which would have accrued if the natural development had taken place, and all the while the land monopolist has only to sit still and watch complacently his property multiplying in value, sometimes many fold, without either effort or contribution on his part!

"But let us follow the process a little further. The population of the city grows and grows, the congestion in the poorer quarters becomes acute, rents rise and thousands of families are crowded into tenements. At last the land becomes ripe for sale—that means that the price is too tempting to be resisted any longer. And then, and not until then, it is sold by the yard or by the inch at ten times, or 20 times, or even 50 times its agricultural value.

"The greater the population around the land, the greater the injury the public has sustained by its protracted denial, the more inconvenience caused to everybody, the more serious the loss in economic strength and activity, the larger will be the profit of the landlord when the sale is finally accomplished. In fact, you may say that the unearned increment on the land is reaped by the land monopolist in exact proportion, not to the service, but to the disservice done. It is monopoly which is the keynote, and where monopoly prevails, the greater the injury to society the greater the reward to the monopolist.

"This evil process strikes at every form of industrial activity. The municipality, wishing for broader streets, better houses, more healthy, decent, scientifically planned towns, is made to pay more to get them in proportion as it has exerted itself

*"We have an unreformed
and vicious land system.
Our system of
local taxation today
is vicious and wasteful—
a harsh burden on the poor
and an impediment
to enterprise and progress."*



Larry Burrows, Life

to make past improvements. The more it has improved the town, the more it will have to pay for any land it may now wish to acquire for further improvements.

"The manufacturer proposing to start a new industry, proposing to erect a great factory offering employment to thousands of hands, is made to pay such a price for his land that the purchase price hangs around the neck of his whole business, hampering his competitive power in every market, clogging him far more than any foreign tariff in his export competition, and the land price strikes down through the profits of the manufacturer on to the wages of the workman.

"No matter where you look or what examples you select, you will see that every form of enterprise, every step in material progress, is only undertaken after the land monopolist has skimmed the cream off for himself, and everywhere today the man or the public body that wishes to put land to its highest use is forced to pay a preliminary fine in land values to the man who is putting it to an inferior use, and in some cases to no use at all. All comes back to the land value, and its owner is able to levy toll upon all other forms of wealth and every form of industry.

"A portion, in some cases the whole, of every benefit which is laboriously acquired by the community increases the land value and finds its way automatically into the landlord's pocket. If there is a rise in wages, rents are able to move forward, because the workers can afford to pay a little more. If the opening of a new railway or a new tramway, or the institution of an improved service or a lowering of fares, or of a new invention, or any other public convenience affords a benefit to the workers in any particular district, it becomes easier for them to live, and therefore the landlord and the ground landlord, one on top of the other, are able to charge them more for the privilege of living there.

"Some years ago in London there was a toll bar on a bridge across the Thames, and all the working people who lived on the south side of the river had to pay a daily toll of one

penny for going and returning from their work. The spectacle of these poor people thus mulcted of so large a proportion of their earnings appealed to the public conscience, and agitation was set on foot, municipal authorities were roused, and at the cost of the rate payers the bridge was freed and the toll removed. All those people who used the bridge were saved sixpence a week, but within a very short time rents on the south side of the river were found to have risen about sixpence a week, or the amount of the toll which had been remitted!

"And a friend of mine was telling me the other day that, in the parish of Southwark, about £350 a year was given away in doles of bread by charitable people in connection with one of the churches. As a consequence of this charity, the competition for small houses and single-room tenements is so great that rents are considerably higher in the parish!

"All goes back to the land, and the land owner is enabled to absorb to himself a share of almost every public and every private benefit, however important or however pitiful those benefits may be.

"I hope you will understand that, when I speak of the land monopolist, I am dealing more with the process than with the individual land owner who, in most cases, is a worthy person utterly unconscious of the character of the methods by which he is enriched. I have no wish to hold any class up to public disapprobation. I do not think that the man who makes money by unearned increment in land is morally worse than anyone else who gathers his profit where he finds it in this hard world under the law and according to common usage. It is not the individual I attack; it is the system. It is not the man who is bad; it is the law which is bad. It is not the man who is blameworthy for doing what the law allows and what other men do; it is the State which would be blameworthy were it not to endeavour to reform the law and correct the practice.

"We do not want to punish the landlord. We want to alter the law.

continued



The Bethmann Archive

Land paid all the costs of government in England until fairly recent times

There was no private ownership of land in England in the days of bad King John and Magna Charta. Every acre of England belonged to the king, which was the medieval way of saying all land belonged to the public domain. It was public or "royal" property.

That's why we call it "real estate"—the old spelling of regal or royal; and that's why land can never be your "personal" property. (*Did you think it was called real because all other property is unreal or imaginary?*)

That's why in English law there is no such word as "landowner;" the word is "landholder," which means a man who holds the land but does not own it. (*That's where our word "freeholder" comes from.*)

That's why we use the same word "title" to mean a title to land and a title of nobility. The king granted both titles, and usually a title to land went with a title of nobility: for example, the title Earl of Sussex carried with it title to all the land in Sussex, which the earl then parceled out on similar terms to lesser lords.

That's why the constitution of New York state still spells out clearly (Section I, Paragraph 10) that "The people of the state possess the original and ultimate property in and to all lands within the jurisdiction of the state."

In medieval times the king granted title to portions of his royal domain, but he did not grant it for nothing, nor did he grant it for keeps. He granted title in return for a big yearly rent called feudal dues—a rent so big that the revenue from land alone met all but a small part of the budget. This yearly rent was much too high to be paid in money in an economy where coin was scarce and paper currency unknown, so the rent was paid in kind. For example, the Earl of Sussex paid his rent 1) by taking on all the local costs of government, like preserving law and order in his county and maintaining the highways and 2) by assuming his full share of the national defense budget and sending so many thousand fully equipped archers, men-at-arms, and knights to fight for the king when needed, paying all their expenses in the field for up to 40 days a year. In addition, each lord paid a small amount of cash money each year to retain his lands, and made extra cash payments upon occasion. When the lord died, his oldest son had the right to succeed to the title when he came of age, but only upon making a substantial extra payment to renew the lease, so to speak. Until the heir was 21, the king took over the land and most of its income. If the lord died leaving only a daughter, the king took back the lands and granted them to someone else (usually for a sizeable consideration), but the new owner had to marry the dead lord's daughter as part of the deal. About a quarter of the land was held by the church which was expected to use its income from the land to support whatever scanty social services were then available, like almshouses, pesthouses, and a few schools. Population was sparse—less than 3,000,000 where 40,000,000 live today—so most of the land was vacant and any villager could use it for grazing. This vacant land was known as the commons, because it was for the common use of all the people. The king paid his own expenses and the expenses of his court with the income from the lands he kept for himself.

In brief, practically all the costs of

Land speculation and land taxation are hot political issues in England again today

government were met by the medieval equivalent of a very heavy tax on land. This was true as late as 1600, when all the money for local government and 81.5% of the traceable money for the national budget came from land (including all the money Queen Elizabeth I got by taking back the lands of such big holders as the Duke of Norfolk and the Earl of Arundel and granting their lands—for a price—to someone else).

But all this was changed after the civil war that cost King Charles I his head and thereafter made parliament supreme. Says Dr Gilbert Slater in the report of the 1913 Land Enquiry Committee: "After 1660 power was monopolized by the big landlords." Parliament could best be described as a landholders' convention. Only great landholders sat in the House of Lords; only landholders could be elected to the House of Commons, and only landholders could vote for Members of Parliament.

So guess what!

For the next 150 years this convention of landholders voted bigger and better tax relief for land and bigger and better property rights for landholders, relieving them of all feudal dues and passing some 4,000 "enclosure acts" to let big landlords fence in as private property, almost free for nothing, the common lands that had always belonged to everybody. The Duke of Sutherland grabbed off 1,358,546 acres, the Duke of Buccleuch 459,108, the Earl of Breadalbane 438,358, the Duke of Devonshire 196,665, the Marquess of Lansdowne 142,916, etc. (This fencing-in of the commons is one reason so many Englishmen came to America seeking new lands in the 17th and 18th centuries.)

In 1600 almost all the cost of government—local and national—was paid by taxes (or ground rent, if you prefer) on land. By 1800 rural land, as land, was completely tax exempt in England. It is still tax exempt today. Only the income or rent is taxable; if there is no income or rent there is no tax; idle land and unused property pays nothing at all.

"The good Lord has belatedly remembered the Labor Party and given them a prize rallying cry," TIME's London Bureau cabled.

The president of the Royal Institute of British Architects, Sir Basil Spence, helped the good Lord give Labor the issue. He opened the Institute's convention with a blistering attack on land speculators for "making our precious land a gambling casino, cornering the limited supply of building land, and holding the community up to ransom." Said he: "The money that should be going into better architecture and higher standards is being taken by people who have contributed nothing to the building process. This speculation has grown to the dimensions of a public scandal and threatens to make good planning prohibitively expensive."

Labor Leader Hugh Gaitskell snapped up the issue the very next day, alleging "a colossal scandal" and "a shocking and outrageous rise in the cost of land for building, all for the benefit of land speculators . . . a very ugly and unwholesome situation."

"People are beginning to realize what is happening and are getting angry about it," Gaitskell continued in a later speech. "There is a powerful case for the local authorities acquiring the freeholds in the land which is to be developed. There is also much to be said for other fiscal measures, such as a tax on site values, a tax on capital gains, or the imposition of a development charge."

Next the London *Times* reported that the Tory government is at work on "plans to discourage land speculation," and Liberal MP Donald Wade made it a three-party uproar by demanding "a modified form of site-value taxation. Speculators are deliberately holding back land for development, and land is changing hands at increasing prices without any building taking place."

Land taxes were the hottest political issue in England 50 years ago, when Winston Churchill made his famous Edinburgh speech reprinted on page 126. The Liberal Party won the bitter election of 1910 on a land-tax platform, but the big landholders in the House of Lords defined the popular mandate and stalled the reform—even though the king threatened to create enough new landless peers to give land reform a majority.

Then came World War I and land reform was forgotten. The Liberals lost their party identity in a coalition government with the Conservatives, who were anti-land tax. After the war the Labor Party took the Liberals' place as the second big party, and Labor wanted Socialism with government ownership instead of land-tax reform with private ownership.

continued

Other countries are trying five ways to stop the abuse of private ownership of land

1. The Communist countries did it by executing the landowners.

The Bolsheviks killed off or chased out most of the big landowners in Russia 40 years ago and starved most of their middle-sized landowners to death 30 years ago. They eliminated the satellite and East German landowners in 1945. The Chinese Reds are still busy killing off their landlords, either by starvation or by shooting them in the back of the head.

This kind of land reform has not been a success on the Russian farms, although in the Russian cities it seems to have worked fairly well for everyone except the dead landowners. In the cities it has permitted more orderly land planning than any US city can hope to get as long as thousands of landowners can profiteer on every public improvement and hold up every effort to assemble big enough land parcels for large-scale rebuilding. It has permitted more orderly land planning than you can find anywhere in Western Europe except Rotterdam and Le Havre, in both of which cities all the downtown area was taken over by the government after it was leveled by wartime bombing.

On the farms the Communists seem to have thrown out the baby with the bath water; ie, they have thrown out what was good in private ownership along with what was bad. They threw out a lot of landowners who were living high on their rents without doing enough to earn them, but they have failed to set up a substitute system that would stimulate the good management and the hard work you see on American farms. The Russians are ashamed of their farm failure and try to keep visitors from seeing it; but a cultural exchange of American farmers in 1958 reported that it takes 200 peasants on a mechanized cooperative farm to do the work ten men would do here. And the lag in farm production is one of Khrushchev's big headaches.



2. Other countries are redistributing land more humanely.

They are expropriating the big landowners peacefully (with or without equal compensation) and redistributing the land to small owners who are expected to farm it themselves. For example:

CUBA is trying to force idle land into use by breaking up the big estates and dividing them up among the peons. That is one big reason Castro is still popular despite all the mistakes he has made, and James Reston reports in the *New York Times* that: "In the other Latin American republics there is a great deal of popular support for Castro's land reform."

EGYPT is likewise breaking up the big holdings and parceling them out in small pieces to the fellahin. That is one big reason Nasser is still in power there.

IRAN's handsome Shah is giving big pieces of his own vast estates to the peasants who work them, hoping his example will inspire some of the other big landowners to do likewise. Today 300 families own all the land in Iran, which is twice the size of Texas. The 300 families count their wealth, not in acres, but in villages. The other 15 million people in Iran are landless and most of them have very little property to worry about in case of a Communist take-over.

MEXICO has broken up many great haciendas since the revolution.

ITALY is buying up some thousands of acres to resell on easy terms to small holders. And perhaps the most successful land distribution program of all has been pushed through by Chiang Kai-Shek in Free China (TAIWAN).

Breaking up big estates into small holdings is an ancient but doubtful cure for the land problem. Small farms are becoming more and more uneconomic





and before long slip back into big estates again. The canny Dutch are working on just the opposite tack. HOLLAND's government is pressuring farmers to combine their too-small properties and compensating the farmers so displaced with land newly empoldered on what used to be the Zuyder Zee. The DANES have built the world's most successful farm economy on middle-sized farms.

3. Some countries are freezing land prices arbitrarily.

Commonest method of land-price control is rent control, as applied in FRANCE for nearly 50 years. This is also the worst method, for it also discourages maintenance and inhibits improvements. Housing in France has been decaying for years.



The Dutch have rent control in the cities, but they apply direct price control in the country. When the Dutch extended their national freeway system they took the right of way at the fixed agricultural valuation of the land.

4. Some countries guide land use by purchase.

In SWEDEN, for example, the municipal government of Stockholm bought ahead of the city's growth more land inside and outside the city limits than all the land inside the city. Most of this land was bought before World War I; ie, it was bought far below today's prices. That explains why Stockholm can afford such wide open spaces between its suburban apartment houses. The city rents peripheral land to farmers until it is needed for housing.



In HOLLAND, almost every city over 20,000 population has a land reserve policy; Amsterdam alone owns some 8,300 acres ahead, partly "that the increase in land values may inure to the community." BRITISH cities are empowered to buy land, and some like Liverpool have long owned corporate estates. Land reserves are also owned by cities in GERMANY, AUSTRIA, FINLAND, and DENMARK. Municipal acquisition of raw or blighted land on the outskirts is authorized by the US Housing Act of 1949, but this power has never been used.

5. Some countries use tax pressure. For example:

DENMARK imposes a perpetual 3% a year tax on increased land values. This is such a heavy tax that on a once-only basis it would be roughly 100%. Denmark taxes land at steeper rates than it taxes improvements. And Denmark is making the big landowners pay for the breaking-up of their own estates by imposing a special added inheritance tax on large land holdings.



PAKISTAN has imposed a special 3% tax on unused land, in order to force it into productive use. This was suggested to the Pakistan government by Charles Abrams of New York and Otto Koenigsberger of London, United Nations advisers on housing.



JAMAICA, where most of the land is owned by a few families and most of the people are shockingly poor, is taking advantage of its new dominion status to shift the whole tax load off improvements onto land, in the belief that this will 1) bring much more land into production to earn its carrying charges, and 2) stimulate faster development (waterfront property with a hotel on it will pay no more taxes than the same land paid without the hotel). Four parishes have already been reassessed and put on the new tax basis and two more will be added every year until all 14 are covered. If the Jamaica experiment succeeds its example could have a profound effect in Latin America, where land ownership is similarly concentrated and the landless are similarly poor.

The best examples of how tax pressure works can be found in AUSTRALIA, NEW ZEALAND, SOUTH AFRICA, and WESTERN CANADA.

continued

Australia and New Zealand are untaxing improvements to tax land values only

"Undeniably impressive" is HHF administrator Norman Mason's comment on the great tax-reform experiment in Australia, New Zealand, South Africa, and western Canada as reported by the International Research Committee on Real Estate Taxation. This 50-page printed-and-illustrated report by Research Director H. Bronson Cowan says (Harpers, \$3), among other things:



"Site-value taxation (ie, exempting improvements from taxation and taxing only the unimproved value of the land) reduces taxes on the majority of homes.

"Site-value taxation reduces taxes where improvement values are high and so benefits all well improved properties.

"Site-value taxation aids the improvement of central business areas.

"Slums and blighted areas are among the first to improve when a municipality adopts site-value taxation. The removal of taxes from improvements encourages the renovation of old buildings and the erection of new ones. The increased taxes on land values reduce speculation in slum properties. Thus new and powerful forces commence to operate with results that effect a noticeable improvement in such areas . . . So many new buildings have sprung up among the old ones that former slum and blighted areas would scarcely be considered slums today by American and British standards. Pop-

ulation densities (in slum areas) are declining."

The report quotes the town clerk of Sydney, Australia as saying: "The removal of rates [taxes] on buildings encouraged their improvement as well as the erection of many fine new structures. Something in the nature of a transformation took place . . . The major benefits since this tax came into force include a great expansion in residential, apartment, and industrial building . . ."

The report also quotes the opinion of the Chamber of Commerce of Johannesburg (South Africa), where land is taxed four times as heavily as improvements, that: "this system has had a great deal to do with the development of Johannesburg into the premier city of the South African subcontinent . . . It discourages sites being held vacant or undeveloped and encourages the owner to construct a better building."

The conclusions of the International Research Committee are summed up as follows by Lord Douglas of Barloch, chairman of the British section:

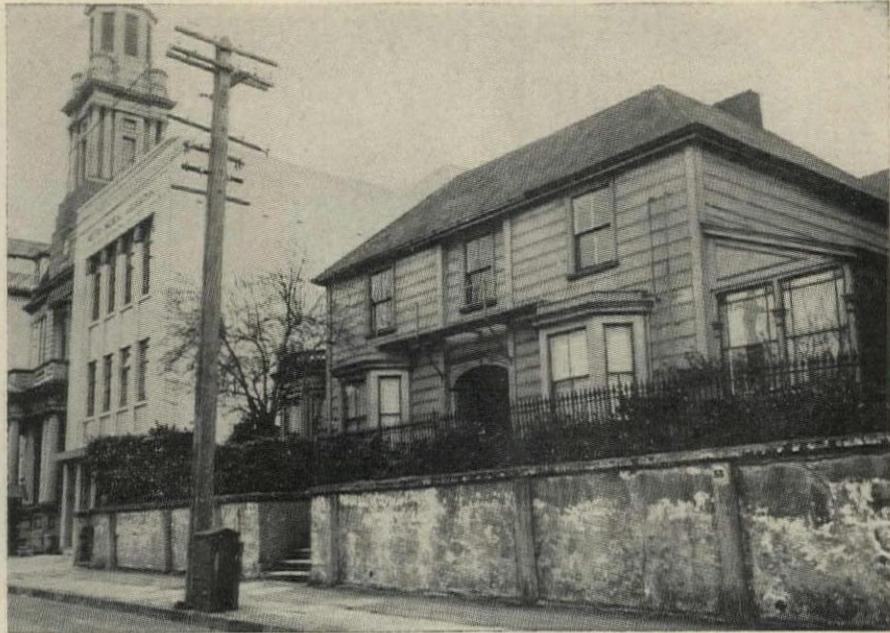
"One of the outstanding lessons of this study is that where local taxes are based on site values a constant pressure is exerted on owners of land to develop its productive capacity and, on the other hand, the development of land is not discouraged by attracting taxation on the improvements. This is so far admitted that it is sometimes said that taxation on site values will lead to overdevelopment. This is, however, a fallacy; the demand for building is not unlimited; buildings will simply be placed in those situations in which there is the greatest demand for them. In any case systems of town planning and control of land use are in operation everywhere, and the danger is not that building will not be controlled but that it will be stifled by controls."



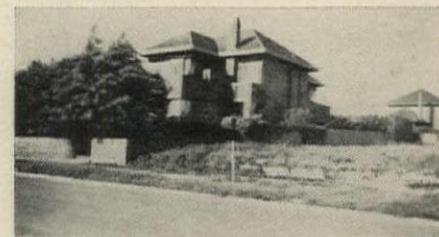
If only land were taxed in Kew, Victoria, this nice home would be taxed 55% less.



Because only land is taxed in Camberwell, Victoria, the owner of this good house was taxed 61% less.



Because only land is taxed in Wellington, N.Z., the owner of this run-down house was taxed 112% more.



Because only land is taxed in Camberwell, this vacant lot is taxed 289% more.

Because only land is taxed in Wellington, N.Z., this old building on a good corner was taxed 132% more.

Here is how site-value taxation spread

The state of Queensland exempted houses and other improvements from local taxation by state law in 1890; only the unimproved value of the land is taxed. In Brisbane a £500 lot pays a local tax of £47 a year, or 9.4%. In addition, there is a graduated state tax on land holdings, scaling up to an additional 3%.

The state of New South Wales followed Queensland's lead in 1906, but on a local option basis. Since then every local government but four has voted to exempt all improvements and tax only unimproved land values. As in Queensland, there is a graduated state tax on larger land holdings.

The state of Victoria followed with enabling legislation in

1920. Half the municipalities in greater Melbourne have now voted to tax only land; so have 13 scattered towns. (The pace of homebuilding in those Melbourne suburbs that tax only land is much faster than in the suburbs where homes are taxed too.)

Western Australia began letting local governments shift their whole tax burden to land in 1902, and this system is now widely used. In addition, there is a graduated state tax on land, with a 50% surcharge for absentee owners. Result: it now costs about 9% a year to hold undeveloped land.

The capital district of Canberra (corresponding to our District of Columbia) and the territory of Northern Australia both retain ownership of all land, but rent it out on 99-year leases.

South Australia gave municipalities power to adopt site-value taxation in 1893, but under severe restrictions that have hindered its general adoption.

New Zealand began exempting houses and other improvements from taxation on a local option basis in 1896. This plan has now been adopted by 75 of the 125 counties, 118 of the 146 boroughs, and 12 of the 20 independent town districts.

All cities in Natal and the Transvaal in South Africa either exempt improvements from any local taxation or at least tax land much more heavily. In Johannesburg, for example, the tax rate on land is four times the tax rate on improvements.



Many great lawgivers and economists have said landed property is different



Culver

MOSES (1400 BC): The land shall not be sold forever; for the land is Mine; for ye are strangers and sojourners with Me. *Leviticus XXV.*



Culver

BARUCH SPINOZA (1632-1677): The whole soil should be public property.



JOHN LOCKE (1632-1704): God gave the world in common to all mankind. Whenever, in any country, the proprietor ceases to be the improver, political economy has nothing to say in defense of landed property. When the "sacredness" of property is talked of, it should be remembered that any such sacredness does not belong in the same degree to landed property.



JOHN STUART MILL (1806-1873): Landlords grow richer in their sleep without working, risking, or economizing. The increase in the value of land, arising as it does from the efforts of an entire community, should belong to the community and not to the individual who might hold title.



ABRAHAM LINCOLN (1809-1865): The land, the earth God gave to man for his home, sustenance, and support, should never be the possession of any man, corporation, society, or unfriendly government, any more than the air or water, if as much. An individual, or company, or enterprise requiring land should hold no more than is required for their home and sustenance, and never more than they have in actual use in the prudent management of their legitimate business, and this much should not be permitted when it creates an exclusive monopoly. All that is not so used should be held for the free use of every family to make homesteads, and to hold them as long as they are so occupied.



Elliott & Fry

WILLIAM BLACKSTONE (1723-1780): The earth, therefore, and all things therein, are the general property of all mankind, from the immediate gift of the Creator.



HERBERT SPENCER (1820-1903): Equity does not permit property in land. . . . The world is God's bequest to mankind. All men are joint heirs to it.



Culver

ADAM SMITH (1723-1790): Ground rents are a species of revenue which the owner, in many cases, enjoys without any care or attention of his own. Ground rents are, therefore, perhaps a species of revenue which can best bear to have a peculiar tax imposed upon them.

LEO TOLSTOI (1828-1910): Solving the land question means the solving of all social questions . . . Possession of land by people who do not use it is immoral—just like the possession of slaves.



TOM PAINE (1737-1809). Men did not make the earth. . . . It is the value of the improvement only, and not the earth itself, that is individual property. . . . Every proprietor owes to the community a ground rent for the land which he holds.

HENRY GEORGE (1839-1897): Our primary social adjustment is a denial of justice. In allowing one man to own the land on which and from which other men must live, we have made them his bondsmen in a degree which increases as material progress goes on. It is this that turns the blessings of material progress into a curse.



Keystone

THOMAS JEFFERSON (1743-1826): The earth is given as a common stock for men to labor and live on.

DR SUN YAT-SEN (1866-1925): The (land tax) as the only means of supporting the government is an infinitely just, reasonable, and equitably distributed tax, and on it we will found our new system. The centuries of heavy and irregular taxation for the benefit of the Manchus have shown China the injustice of any other system of taxation.

Unimproved land differs in three ways from any other kind of private property

1. Unimproved land is the only kind of private property that the owner did nothing to create. He just found it ready-made (or bought it from someone who found it ready-made).
2. Unimproved land is the only kind of private property whose value grows, not because of anything the owner does, but because of what thousands of other people do. Said the great Victorian economist John Stuart Mill: "Landlords grow rich in their sleep." Suburban land would command only a small fraction of today's price if the city had grown up somewhere else.
3. Unimproved land is the only kind of private property anyone can own for years without doing anything or assuming any responsibility to maintain and protect his investment (other than paying a tax which is usually small and is always deductible).

If you invest your money in a building, your investment will crumble and decay within 20 years without constant upkeep.

If you invest your money in machinery, it will be obsolete within 20 years.

If you invest your money in stocks they will soon be worthless unless the company is well managed year in and year out.

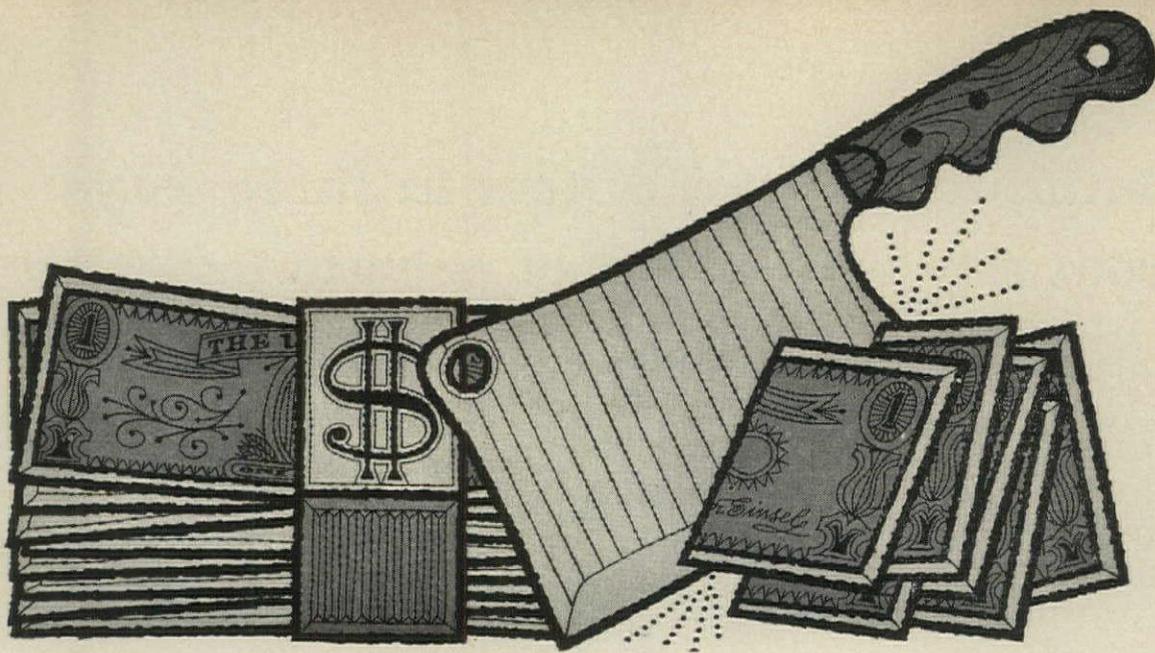
If you write a bestseller book, your copyright and its renewals cannot run longer than 56 years. If you perfect a great invention, your patent (which is not renewable) can run only 17 years. After that you have no more legal claim to your own brainchild than anyone else.

But unimproved land, which was there for a million years before the Pilgrims landed, will still be there a million years after you are dead, regardless of what you do or do not do about it.

The moral foundation for private property rests on our belief that in a free society every man owns himself and therefore is entitled to own whatever he himself creates. This foundation is very shaky indeed under the private ownership of unimproved land (unless, of course, the owner performs at least some of the essential functions of the land developer, who is surely worthy of his hire). That is why moralists and law givers from Moses to Jefferson and Lincoln have questioned any man's right to hold more land than he can use.

By definition, unimproved land is land whose owner has done nothing to earn a profit. So it is a strange paradox that our laws not only give private ownership of land all the protection they give the private ownership of other property; they go further than that to give the ownership of unimproved land the most favorable possible tax treatment and greater permanence-without-effort-than any other form of private property.

continued



Walter Einsel, The Travelers Insurance

Land speculation gets a better tax break than any other kind of business activity

Ours is a tax-activated, tax-accelerated, tax-directed, tax-dominated economy. Every business decision must be checked and rechecked against its tax consequences. Tax exemption is the No. 1 reason 5¾% FHA mortgages cannot compete with 4% municipal bonds; 52% tax-deductibility is why corporations can afford 8% interest easier than homebuyers can afford 4%. Tax allowances for depreciation make apartments a tempting investment even if they lose money. And many builders, alas!, find it much more important to get a good tax adviser than to get a good architect!

Almost everything is overtaxed. Incomes are overtaxed beyond the point of diminishing return. Corporation profits are so overtaxed that small business is in big trouble and many a big business must depend on accelerated depreciation. Good homes are overtaxed. Homebuilding is overtaxed; nearly 600 hidden taxes inflate construction costs, and some tax experts say all these taxes add up to one-third the cost of building!

But land as land is hardly taxed at all (see page 138).

Under our tax system, said FORTUNE ten years ago, it is no longer possible for anyone to get rich by hard work. The income tax has killed that great American dream that brought millions of eager workers to our shores and inspired the conquest of a continent. The harder a man works today the more of his earnings the Government takes. From the hardest and smartest workers the Government takes up to 91% of what they earn.

But our tax system—local, state, and national—gives land speculation so many special breaks that land speculation has been by far the easiest way to get rich.* So since World War 2 land speculation has made more millionaires than any other form of business or investment.

Said the first Marshall Field, who made most of his \$100 million fortune in land speculation: "Land is not just a good way to make money; it is not just the best way to make money; it is the only way to make money." If that was true before today's big taxes on ordinary income, it is twice as true today.

* The extraordinary tax treatment allowed the oil wildcatter may be justified by the chance he takes of drilling nine dry holes before he strikes a gusher. But land speculation in the suburbs involves no such risk. If the speculator picks his time and picks his land wisely, the double prospect of continuing urban expansion and continuing inflation almost guarantees him a good capital gain.

Today's taxes harness the profit motive ^(backwards); they abet speculation, but penalize development

Today's taxes often make it more profitable to misuse and underuse land than to develop it and use it properly.

They penalize land development, land improvement, and homebuilding by 1) multiplying the local taxes the owner must pay as soon as new houses are built on his land or existing buildings are improved, and by 2) taxing away most of the profit from land development and homebuilding at ordinary income tax rates.

But they subsidize land speculation by 1) undertaxing the land as long as it is left idle or underused, and 2) taxing the profits of land speculation less than half as heavily as the profits of land development and homebuilding are taxed.

"The only cure for land speculation is to eliminate the extraordinarily favorable tax treatment now accorded the land speculator," says Professor John Henry Denton, in charge of real estate studies at the University of Arizona. "No justification for this can be found in economic theory. Unlike speculation in commodity futures or common stocks, land speculation does not support a market or provide a stimulus to production. In fact, it has just the opposite effect. It destroys the marketability of large areas of land by pricing them out of the reach of immediate users. It deprives our communities of many facilities needed for good living (such as parks and playgrounds) by driving the price of land beyond what communities can afford. It limits competition by holding a large part of the land supply off the current market. It channels capital funds away from productive investment into sterile adventures and may be responsible for the present day dearth of private risk capital.

"But our tax system grants this nonproductive and destructive activity the most favorable tax treatment of all.

"There is no way to outlaw land speculation in a free economy, but . . . the principle of public intervention to raise the yields on desirable uses of capital and lower them on undesirable uses is well established by our countless subsidies and tax preferences. The capital gains tax is in itself one of those preferences, but its application to the profits and recouped expenses of buying and selling vacant land is clearly in support of a most undesirable economic activity. Preferential taxation should be reserved for activities that aid the growth and development of a free enterprise system and not for those that are destructive of it."

Says Professor Fisher: "The plain fact is that our present system of real estate taxation, like the whole system of local government finance of which it is the chief part, is obsolete, inadequate, and unsuited to present-day political, social, and economic conditions.

"The need to re-examine and overhaul this whole complex is urgent and imperative, not only for the sake of real estate and housing, but also and a fortiori to save our local governments from bankruptcy—if possible."

continued

Here is how our tax system aids and abets land speculation and suburban sprawl

Aid



Underassessment makes it cheap and easy for speculators to hold underused land for years.

Farms and acreage were assessed at only 20.2% of market value in 1957, the census of governments showed. They were assessed further below the market than any other real estate. (Vacant lots were assessed at 22.7%; non-farm homes at 31.5%; business properties at 40.8%.)

Underassessment must be even worse today than in 1957, for assessments have lagged far behind soaring suburban land prices. In New York's booming Westchester County, for example, assessments rose only 10% while land prices doubled and tripled.

Here are some not-too-untypical examples of underassessment:

Outside Salt Lake, NAHB Past President Alan Brockbank bid \$7,000 an acre for a farm assessed at \$300 an acre.

Westhampton, Long Island (and many other New York State villages), tries to assess land at 10% of market value as long as it is idle. (If a house is built on the land, the land assessment is tripled, in addition to the house assessment.)

In Contra Costa County, Calif., a farmer sold three one-acre lots for \$10,000 each while he was litigating an assessment increase to \$350 an acre!

In San Francisco, a lot on Telegraph Hill assessed at \$3,800 sold last November for \$60,000.

In Truro (and other Massachusetts towns) a big percentage of the land is not even registered. Nobody knows who owns it, so it cannot be assessed or taxed at all.

Aid



Land speculation profits are taxed not more than half as heavily as ordinary income, with a maximum rate of 25%; ie, they are taxed as capital gains instead of as ordinary income.

Said Professor Gaffney in the 1958 Year Book of the US Department of Agriculture: "To qualify for capital gains treatment, the speculator must establish that he is not 'in the real-estate business,' but is a passive 'investor,' neither improving land for sale nor soliciting buyers. Or he may establish that he is 'using the land in his trade or business' (other than real estate).

"Should he lose on one sale he can offset the loss against other capital gains. Better yet, if he establishes that he is using the land in his trade or business, he can offset losses against ordinary income, even though any gains would not be taxed as such.

"Still better, if it is his residence that he sells, and he puts the proceeds into a new residence within the year, the entire gain is tax free—and with a little effort a commuter may learn to 'reside' over a considerable investment.

"Best of all, one who buys land years ahead of his own needs never pays a tax on the rise of value so long as he does not sell—something

many large corporations, with huge reserves 'for expansion,' have little expectation of doing. Wilbur Steger, writing in the *National Tax Journal* for September 1957, estimates that 90% of all capital gains were thus left tax free from 1901 to 1949.

"The result of all this is a virtual scorched-earth policy for many lands around cities. Why risk any improvement or overt sales effort that might land you 'in the real-estate business' and thus disqualify your increments from 'capital gains' treatment?"



Aid

Most states forbid local governments to tax land more heavily than they tax improvements.

Exception is Pennsylvania, whose graded property-tax law lets second- and third-class cities levy all their realty taxes on land if they prefer, provided they do not try to get more money from land taxes alone than the tax limit set for land and improvements combined. No third-class city has yet availed itself of this chance, but Pittsburgh and Scranton, the two second-class cities, have taxed land twice as heavily as improvements for more than forty years and seem pleased with the results. Said Pittsburgh's Mayor David Lawrence (now Governor Lawrence): "There is no doubt in my mind that the graded tax law has been a good thing for Pittsburgh. It has discouraged the holding of vacant land for speculation and provides an incentive for building improvements."



Aid

Land carries a much smaller share of the realty tax load and a very much smaller share of the total tax load than ever before.

Fifty years ago land carried two-thirds of the realty tax load; homes and other improvements carried only one-third. Today the proportions are almost exactly reversed. Improvements carry two-thirds of the realty tax load; land carries only one-third.

Fifty years ago land carried nearly half the total tax load—state, national, and local. That was before the income tax, the inheritance tax, the corporation tax, the gasoline tax, the taxi-ride tax, and most of the other nuisance taxes were piled on. Today land—which is one-third of our total national wealth—carries less than 5% of the total tax load.



Aid

Even the small tax carried by land is fully deductible from state and federal income taxes (and from state and federal corporation taxes). So a land speculator can offset his land taxes against his ordinary income. This is another way of saying a rich land speculator in the 75% bracket can deduct 75% of his land tax from his income tax, thereby making the federal government reimburse him for 75% of his tax. Says Professor Denton (*see page 000*): "One of the simplest tax law changes that should be made immediately would require that interest and taxes on vacant real estate should be capitalized and should not be deductible from the taxpayer's ordinary income. This would recognize the obvious economic fact that the expense of carrying a nonproductive investment over a period of years are, in fact, part of the investment itself."

continued

Cities subsidize slums by undertaxation, penalize improvements by overtaxation

Most cities are generating new slums faster than they can salvage and rebuild their old slums. Urban decay and blight are spreading into new areas faster than all the billions we are spending for urban redevelopment and public housing can salvage existing slums.

This is bound to happen as long as our urban tax system subsidizes slums by undertaxation and discourages improvements by overtaxation. Overuse of land is easy to stop by zoning, but in a free enterprise economy like ours the only way to stop underuse is to put the profit motive to work and make it more profitable to improve a property than to let it decay.

Says Housing Administrator Norman Mason: "There is a close relationship between our prevailing real estate tax system and our problems of slums, blight, and urban renewal. This question of taxes—tax advantages and tax disadvantages—is inextricably intertwined with the problem of community development." And Mason goes on to quote Professor Frederick G. Reuss of Goucher College that: "By overtaxing good housing we first take away much of the incentive to keep values up; but once an area is blighted we reassess it at a low value and thus pay a premium for poor upkeep."

More than 50 years ago Lloyd George warned the British Parliament that low-rent (public) housing bills "will never be effective until you tackle the taxation of land values." And about the same time Theodore Roosevelt said: "The burden of municipal taxation should be so shifted as to put the weight of taxation upon the unearned rise in the land value, rather than upon the improvements."

Heavy taxation on *good* new city apartments is one of the two biggest reasons for not building them today (the other reason is too-high land prices). Says the ACTION report on rental housing: "Among the costs which determine rent, real estate taxes are among the most important." In FHA apartments around New York City local taxes take four times as big a bite out of each rent dollar as the landlord's profit.

But low taxation on run-down old buildings and slums is one of the biggest reasons why blight is spreading. Said the HOUSE & HOME Round Table on money and inflation:

"Heavier land taxes would make slumlords improve their property to get enough added income to pay their added taxes."

Echoed the HOUSE & HOME-ACTION-Pittsburgh Round Table:

"One big reason slums are so profitable and slum land prices are so high is that slumlords pay such small taxes per unit. They pay such small taxes because their buildings are so nearly worthless that they carry a very low appraisal; the worse the building the lower the appraisal and the smaller the tax. The average slum unit in Pittsburgh is taxed only \$50 a year—less than one-sixth of what the city has to spend for police, fire, schools, health, and other services in the slum areas (where the cost of municipal services always runs higher per capita than in better neighborhoods).

"Don't buy slum property for redevelopment without deflating its bootleg value—even though the federal government stands ready to subsidize a big write-down.

"There is no more excuse for asking federal taxpayers to buy up slums at prices based on the outrageous profits of overcrowding, undermaintenance, filth, and misery than for asking them to buy up a red-light district at a price reflecting the profits of prostitution. "If you increase the tax load on land and lighten the tax load on improvements, you could, at one stroke,

"1. Help deflate the bootleg value of slum property by making the slumlords pay more taxes and so make less profits;

"2. Help harness the profit motive to slum improvement, for you would, in effect, be giving partial tax exemption to any money spent modernizing or rebuilding the slums."



Because our tax system makes slums so profitable, slums today are bigger and almost as bad as they were in 1888 when this famous picture of New York's lower East Side was taken by Jacob A. Riis.

New York City subsidizes its worst slums by assessing the valuable land under fit-only-for-demolition buildings at almost exactly the same land-to-buildings ratio as the Manhattan average (37% land in twelve redevelopment areas, vs 40.6% average).

Says the Tax Policy Committee of the Citizens' Housing and Planning Council of New York Inc: "Any long range program for increasing and improving housing should have as one of its primary objectives the reduction of land costs. . . . The idea of exempting all improvements from taxation has much to commend it." And the Panuch report on *Building a Better New York* sums it all up in three sentences:

"The seemingly unstoppable spread of slums has confronted the great cities of nation with chronic financial crisis. . . . The \$2 billion public housing program has not made any 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."

continued

Speculators are subsidized by our system of public improvements for private profit

Suburban land would have little value if someone did not spend millions of dollars to build roads and highways and make it accessible, water and sewer lines to make it habitable, and schools and other community facilities to make it livable.

These essential improvements cost so much money that land speculation would be much less profitable and much less attractive if the speculators had to pay for them. The big profit in land speculation comes when the speculator can take the gains and get the bill paid by someone else—other tax payers and/or future owners.

In 1937 the National Resources Committee urged a study of the increment tax on real estate, "to see whether such a tax would make possible the financing of public improvements more nearly through tax revenue derived from the increased values which these improvements create, and whether such a tax would aid in combating speculation in land. Or the same result could be achieved by a vigorous system of betterment assessments coupled with detriment payments to landowners whose property was depreciated by the improvement (such as farmers whose farm is cut in two halves by a freeway). The Erie Canal, which multiplied land values in upstate New York was financed by a special tax on the land that benefited.

Most obvious example of public improvements that rebound to the land speculators' private profit is the new network of thruways and federal highways. Land values near interchanges along their routes have soared, but their entire cost has been paid by tolls and/or increased gasoline taxes; the landowners who got the windfall pay not a penny. On the contrary, many of them were directly enriched by selling their land for the right of way for far more than it could otherwise have brought.

Less obvious but equally important is the way acreage sellers escape paying more than a small part of the cost of building the new schools without which their acreage would not be worth much for homes. Most of the money for these schools is raised by taxes on houses, for under our local tax system the taxes on houses add up to many times as much as the taxes on raw land. So the owners of existing homes, who get little or no benefit from new houses on the edge of town, pay most of the taxes to provide the schools and other community facilities needed to make the speculators' land salable at a big profit!

Most of the homebuilders' community facilities problems would be eased if raw land were taxed more heavily, so that more of the cost of improved facilities would be paid by the landowners whose land prices are multiplied by the improvements.

“The only way land price inflation can be prevented is to tax land more heavily”

So said the consensus of the topflight economists, mortgage lenders, realtors, homebuilders, and manufacturers at the HOUSE & HOME Round Table on tight money and inflation (H&H, Jan). And they went on to say:

“A substantial part of the local tax burden now carried by improvements (like houses) should be shifted to the land itself.

“Taxes are the only important costs a land speculator must pay, so taxes are the only brake on the price of land, which reflects the capitalized margin between the rent the land can be expected to earn and the tax burden it can expect to carry. The bigger the land tax the smaller this margin will be and the less chance of big profits in land speculation. [In much of Australia and New Zealand improvements are not taxed at all; almost the whole cost of the local government is paid by taxes on land alone. *See page 00*]

“Taxing land more heavily would make the unearned increment in suburban land values pay the cost of schools and other community improvements needed to convert raw land into housing.

“Taxing land more heavily would let homebuilders offer better homes for less money.

“Taxing land more heavily would reduce the taxes on good homes by increasing the taxes on vacant and underused land.

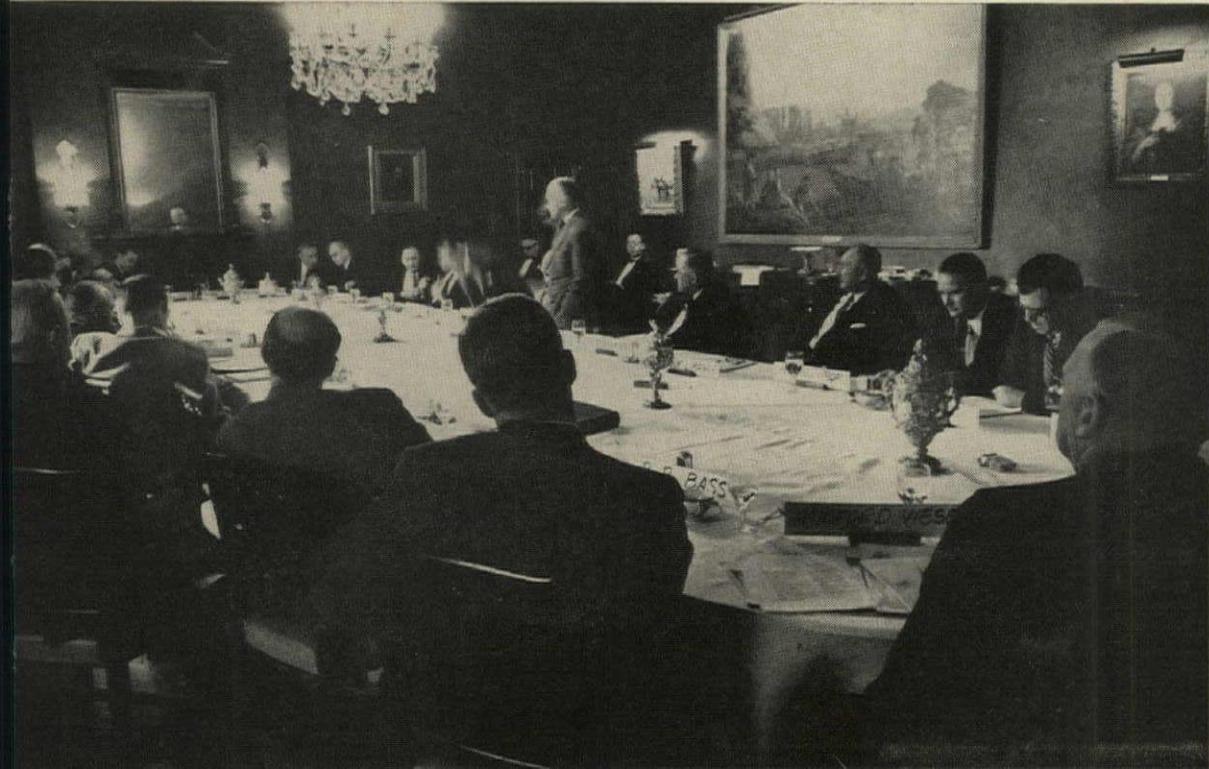
“And incidentally taxing land more heavily would cut the cost of highway extension by cutting the land costs for the right of way.

“The steepest price inflation of all has been the price inflation in land, but . . . We have no land policy designed to bring the land needed for our population growth on the market when it is needed. On the contrary, we make it easy [by undertaxation] for land speculators to hold their land off the market in anticipation of still higher prices later.”

Twenty-three years ago the report of the National Resources Committee pointed out that taxes on improvements discourage building by reducing the profits the building can earn, whereas taxes on land stimulate building by decreasing the price the builder has to pay for the land he builds on. Its report continued:

“State and local authorities should consider reducing the tax rate on buildings and increasing the rates on land, in order to lower the tax burden on homeowners and stimulate the rehabilitation of blighted areas and slums.”

Ben Martin



*Now let's get
down to cases on
how to use land
better . . .*



Look at this big tract of ranch land and see a new town in the making

It is located only 48 miles south of downtown Los Angeles.

It stretches back from the Pacific for seven miles and sprawls out over 7,000 acres of rolling range land.

It will be developed into a balanced community where, in the years ahead, some 30,000 people will live and work and play. There will be 10,000 houses, seven garden apartments, two high-rise apartments, motels, and hotels. There will be seven shopping areas, nine schools, seven churches, 600 acres for research and light industry, and an array of recreation facilities that the owners hope will make it the "ideal community for Southern California."

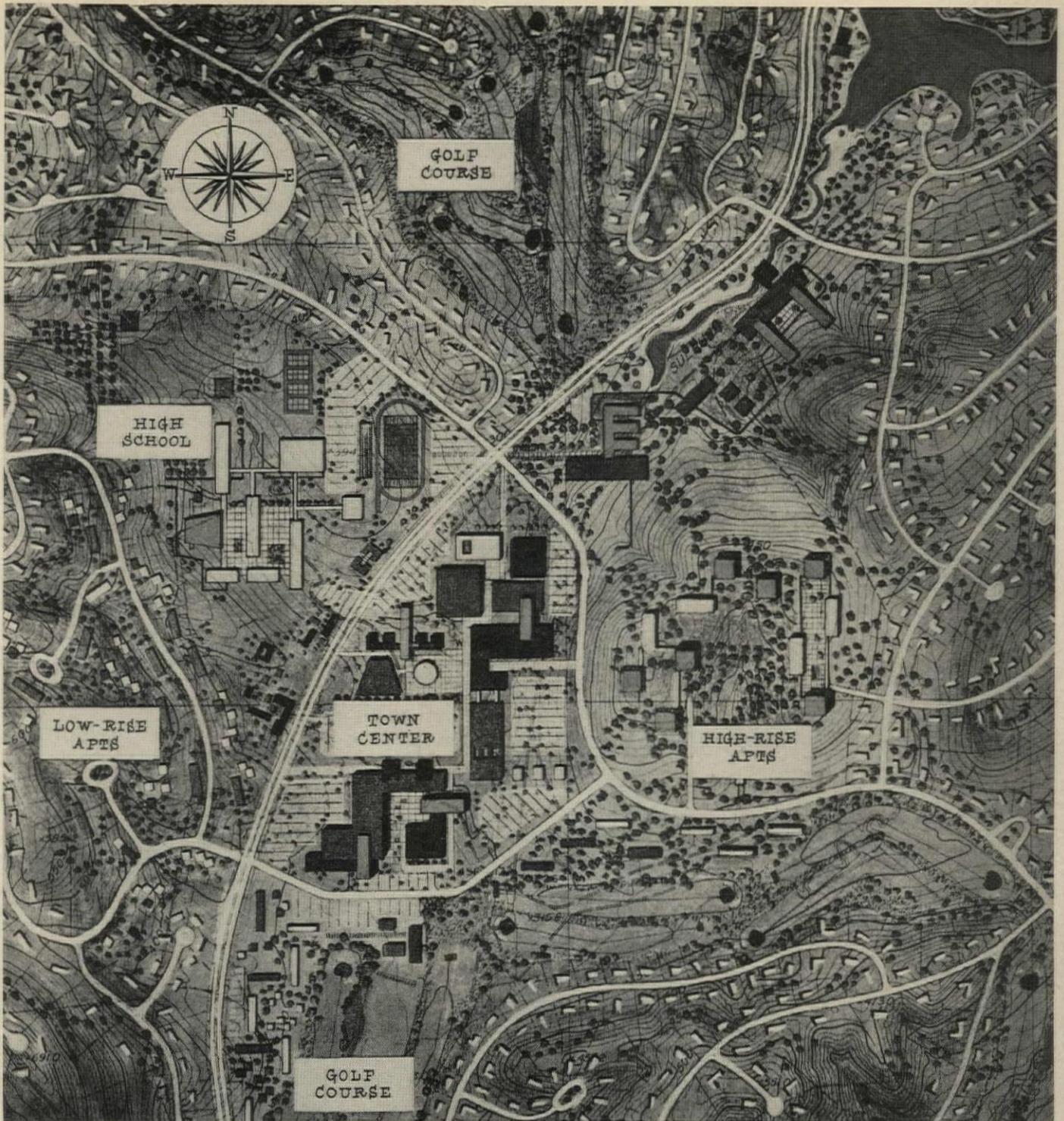
The new town will be called Laguna Niguel. Its owner and developer is the Laguna Niguel Corp of Santa Ana, Calif., a publicly owned company formed by Cabot, Cabot & Forbes of Boston, a 50-year old firm specializing in real estate development. Says Gerald W. Blakeley, Jr (president of both firms): "The development of

an integrated, large parcel of real estate today calls for techniques as dissimilar from the past as those required to pilot a jet compared to flying an ancient Jenny. We are no longer flying by the seat of our pants. Rather we proceed on instruments perfected by master technicians."

The new methods include market analyses—by Larry Smith & Co and Harris, Kerr, Forster & Co—and the use of basic economic data developed in an Orange County report prepared by the Stanford Research Institute (to study location, population growth, family income, industry potential, etc), a master plan for the whole project by Victor Gruen Assoc (to assure that the scope of the community concept matches the potential of the land), and public financing (to raise \$8,200,000 capital to finance the land purchase and improvements).

The first houses will be built this fall, will be on ocean-view lots, and will be priced at \$35,000 to \$60,000. Less expensive houses, apartments and facilities will be built later.

ROLLING HILLS looking much as they did when the Spaniards first saw them several hundred years ago make up the 11 square miles of ranch land that will become Laguna Niguel. Primary aim of the developers is to preserve as much of this natural beauty as possible. Overleaf fold-out shows the master plan for the development of this huge tract.



TOWN-CENTER SECTION of master plan at left shows some of the varied housing, school, and recreation facilities. Streets follow land contours.

The master plan grows out of the land

When Victor Gruen worked out this master plan for Laguna Niguel, he did his original layout on a greatly enlarged aerial map which showed every topographical feature of the entire 11 mile tract. His objective was to plan a community that fits hand-in-glove with the terrain.

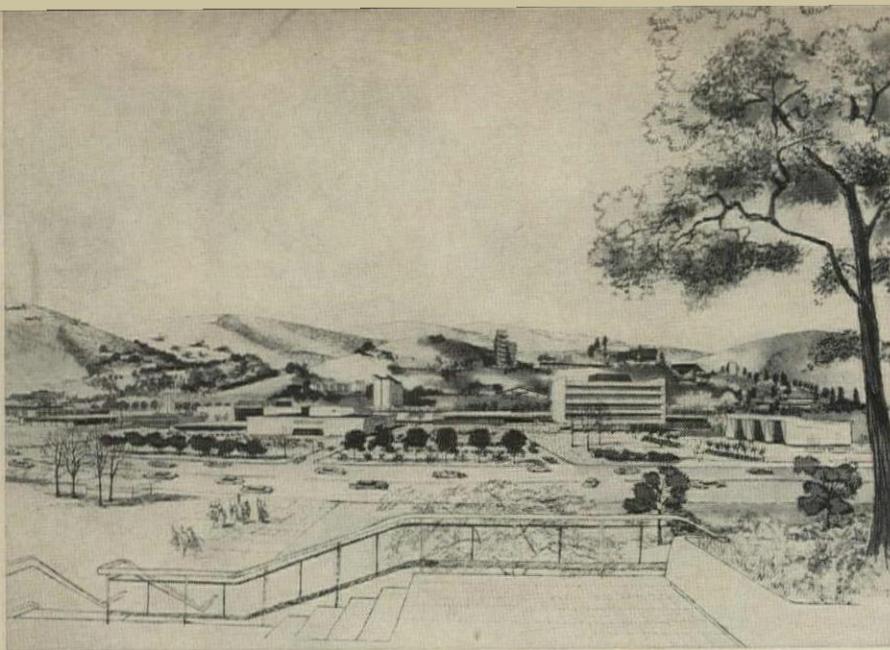
The rolling hills and the softly contoured valleys not only determined street and highway locations, but the siting of all the major elements shown on the fold-out relief map opposite.

The small residential neighborhoods, each close to a school and a shopping center, are located

throughout the area. Most apartment groups are near the town center (and the main shopping center), others are along main roads near smaller shopping centers, one is on a lake shore.

The research park is in a self-contained area isolated from houses. The industrial area, still farther from the residential districts, is located along a railroad (at lower right on plan opposite). Recreation facilities play a major role in the plan, and the location of two golf courses, the parks, and the man-made lakes was dictated by (and takes advantage of) the terrain.

Photos:
Marvin Rand



TOWN CENTER will have stores, theatres, office buildings, and other "downtown" facilities.



Business district is hub of town

Laguna Niguel's "downtown area" (left) will be centrally located, built on 118 acres of the relatively flat valley shown above. Vehicular and pedestrian traffic are separated; cars will be parked in pockets between perimeter roads and main buildings, shoppers will use malls and walkways.

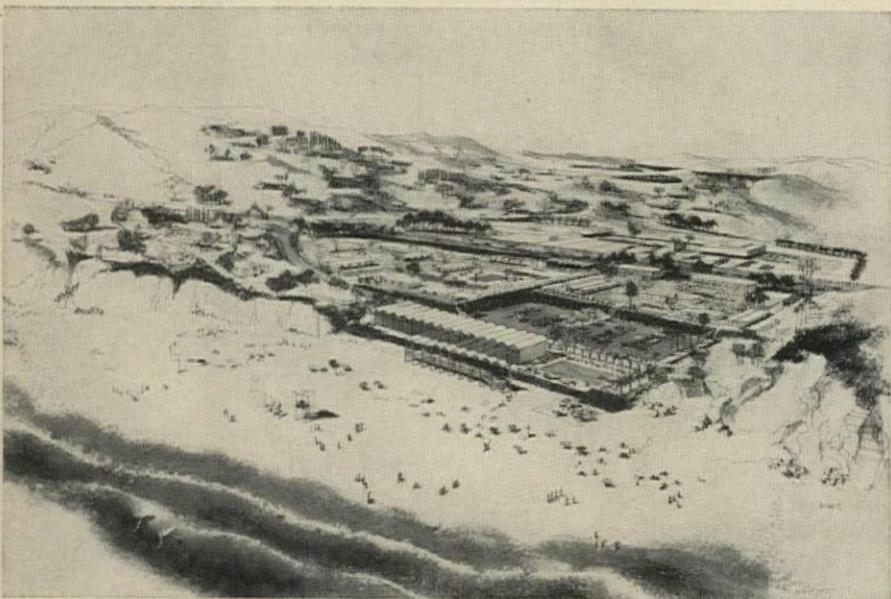


LAKE-SITES like this are a sought after rarity in California.



Lakes create valuable lots

Hundreds of choice waterfront or water-view lots will be provided by enlarging the existing lake in photo above and creating two new lakes. Many of the highest priced houses, and one apartment group, will be located around these lakes, sited to disturb the land as little as possible.



PRIVATE BEACH will have full water-front facilities for year-round use.



Beach club is major attraction

The beach facilities shown at left (and located on 1,000' of private ocean front shown above) will be a major sales feature. This beachfront complex will include motels and other rental units for transient guests. First houses in Laguna Niguel will be built on nearby hillsides.

Photos: Ansel Adams

END



MODEL HOUSE, in Sterling Forest near New York City, is being built on most difficult site developers could find to dramatize beauty of land.

Look how you can now build on land that others wouldn't buy

You could hardly find a more difficult site for a house than the rocky ledge shown above. Yet more and more built-for-sale houses (as well as custom houses) are being built on difficult land like this. There are two main reasons:

1. The difficult land is frequently closer in and lower priced than available flat land. And with today's know-how in design, technology, and earthmoving, the total cost of houses built on difficult sites is often no higher than houses built on flat sites.

2. Builders also are finding that buyers like the special attractions inherent in many problem

sites—views from hillsides, rugged natural landscaping, plenty of trees, water views.

So more builders are learning that—with imagination, courage, and know-how—they can build profitably on many kinds of land they once by-passed because they considered it unbuildable.

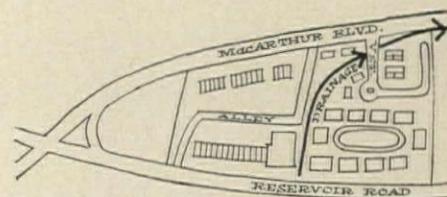
Some builders are creating terraces high on mountainsides, others are building on sand and muck pumped up from rivers or tidelands. Some are building in rocky woodland, leaving the land almost as nature created it; others are making beautiful sites out of dreary acreage. Some are designing houses to fit special sites, others are custom-building sites to fit their models.

For eight examples of good use of bypassed land, begin overleaf



FOUR-FAMILY APARTMENTS were built along one edge of a sharply sloping triangular tract in Washington, D.C. (see plot plan below).

These houses were built on a hilly five-acre tract inside a city



GEORGETOWN LOOK was achieved in design of these houses along cul de sac.

Apartments, row houses, single- and two-family houses were all built on a small triangle of Washington, D.C. land that Builder Ed Carr bought after other builders had passed it up. "It was so steep and presented so many problems that even I passed it up twice before I bought it," says Carr.

But he adds: "I've built many tracts—big and small—yet this is certainly one of the most successful."

After Carr bought the five acres, he put in sewers, a cul de sac, and alleys; soon sold a small part of the land for what the whole tract cost originally; then went on to build the variety of houses shown in the photos. Since they were built, they have commanded high prices because they are so close to the Capital's business and government centers.



APARTMENT ENTRANCES face a stone walk leading down to a landscaped mall at rear.



HOUSES ON STEEP TERRACED LAND show the kind of development possible with today's market for higher-priced houses and today's earthmoving techniques.

... and these houses were built in canyons long considered unbuildable

These houses, built on pads carved out of steep slopes behind Los Angeles, are typical of developments now being built on difficult land all along the California coast.

Until fairly recently it was seldom practicable to develop land like this, even though big, close-in tracts were often available at less than \$1,000 an acre. But with today's new machinery such development is both practical and profitable; especially since the market demand for handsome sites has hiked the retail price of some finished mountainside lots as high as \$30,000 or more.

In California, this land is being developed largely by well financed syndicates. But, in other parts of the country and on a smaller scale, the same kind of job could be done by a group of cooperating builders.

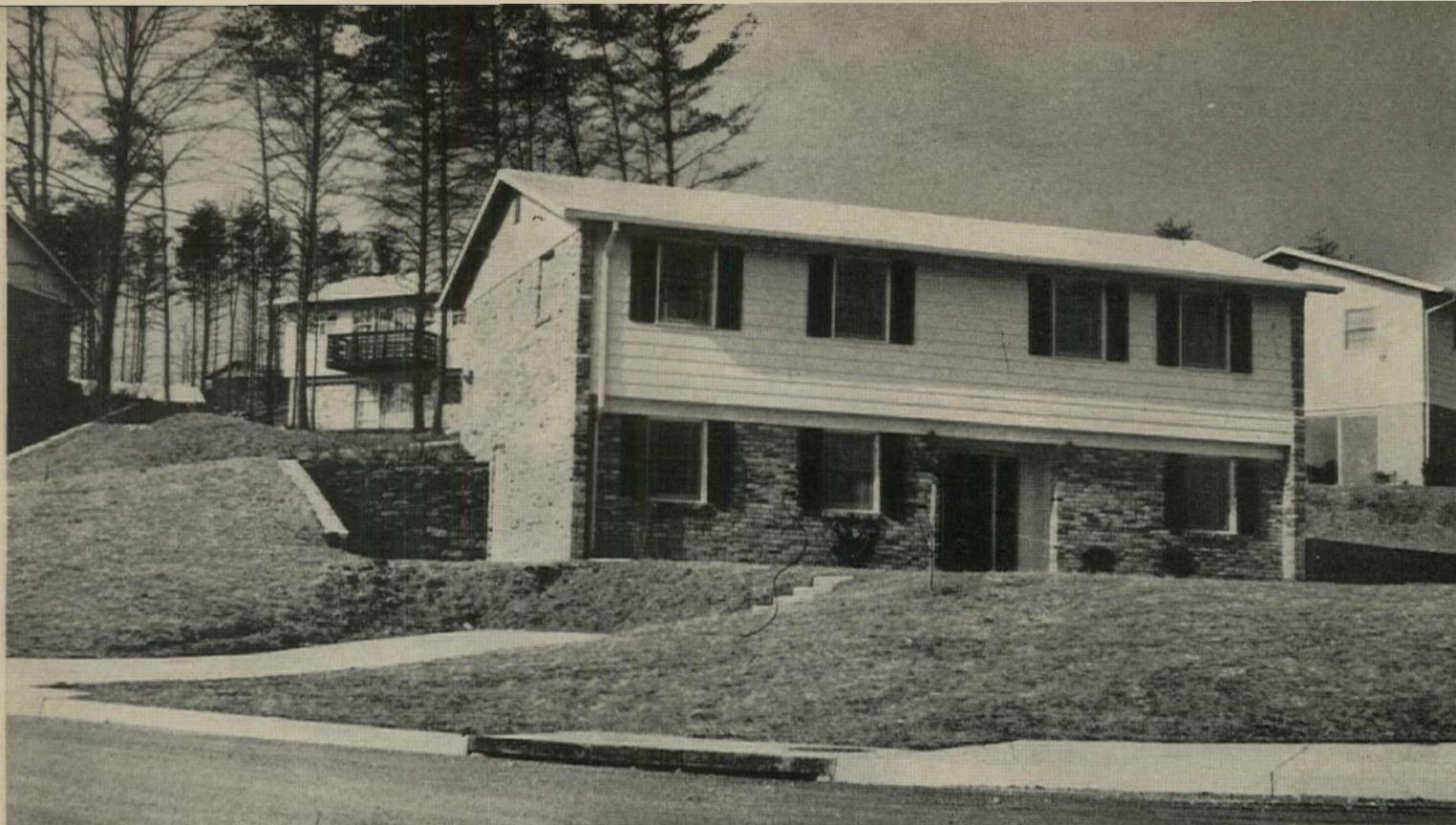
Photos: H&H staff



HOUSE BEING BUILT ON CLIFF overlooking Los Angeles was designed for terraced lot by

Architect Pierre Koenig. It is *Arts & Architecture's* Case Study House No. 22.

continued



TERRACING shapes hillside lots to fit four standard models, provides outdoor living at the rear of all houses and at the sides of some.

These houses were built on land bypassed because it was “too steep”



CURVING STREETS, contoured land, and trees help give streetscapes a “custom look.”

Builders long spurned this 150-acre tract because it is steeper and harder to build on than most land in Fairfax County outside Washington. So Community Builders were able to buy the land at a much lower price than surrounding acreage, which has been developed mostly into a prestige area of \$40,000-class homes.

“This was handsome land,” says CB’s Herman Greenberg, “and we did our utmost to save the natural contours and the trees.” This helped avoid a look-alike problem which might have been troublesome because CB builds only four standard models. Says Greenberg: “The land and the streetscapes presell buyers even before they put foot inside our models. We’ve sold 250 houses in the past 18 months (at \$23,750 to \$25,750). These are far and away the best-selling houses in this price range in the Washington area.”



In Pittsburgh, building on steep land is matter-of-course

Nearly all the thousands of houses built year after year in the Pittsburgh market are built on the kind of rough land that builders pass up in other cities. Here are two examples:

Sampson Bros, Pittsburgh’s largest developers, spend \$200,000 a year for earth-moving equipment to create 1,000 lots a year. Land can be bought for \$1,000 an acre, and adding development costs, a 60’ lot can be produced for \$3,600.

Builder Ralph Scherger is building

\$28,000 to \$50,000 houses like those at left on a 39-acre site that falls off 135’ across its 1,000’ width. To create 105 lots he has moved 350,000 cu yds of dirt, coal, and rock; brought in 7,500 tons of native stone to build terrace walls; and planted 11,000 creeping rose plants on big embankments. He bought the land for \$1,000 an acre; rough development cost \$10,000 an acre; and finish grading, terracing, and landscaping cost \$5,000. Total cost (at an average of 2½ lots an acre): \$6,500 per lot.



STREET IS CARVED OUT on 12% grade through rocky woodland for tract of \$18,500 to \$20,000 homes built on half-acre lots valued at about \$4,500.

... and these were built on land
 “too rocky and rugged to bother with”

Builder Sy Schwartz makes a specialty of building modest-priced houses on by-passed land like this in New York's high-cost Westchester County. Because he is so skillful at low-cost development of difficult land into handsome sites, he has become one of the area's biggest builders (80 houses a year).

“With careful planning,” says Schwartz, “you can develop rocky or steep land for only \$1,000 an acre more than level land. But you can do it only if you save natural contours and as many trees as possible. It costs money to move earth, rock, and trees, so it makes sense to leave the land alone except where streets and utilities go in.”

Schwartz works long and closely with his engineers and Planner Lee Moore in laying out streets and siting houses. Says Moore: “Schwartz invests heavily for land planning, and follows the advice he gets. He is interested and knowledgeable about good land use, and it pays off for him.”

SPLIT-LEVEL ON STEEP LOT required little earth moving. Driveway slopes up gently, and big trees are left untouched.



continued



NATURAL LANDSCAPING was preserved for group of eight 2,500 to 3,000 sq ft contemporary houses located only 35 minutes from midtown Manhattan.

These houses were built in woodland on the edge of a swamp



Architect Harry Wenning fitted his designs to the land when he built six houses like these (price: \$45,000 to \$70,000) in suburban Hartsdale, N.Y. The only change he made in the land was to dredge a swampy stream and dam it to form two 10'-deep swimming ponds (cost: \$4,200).

Says Wenning: "It is easy to find buyers for the exciting houses you can build on this kind of land. Most builders won't touch land like this. They worry about earthmoving and about water. There is no real problem if you know how to design for the site, how to move earth, and how to waterproof houses. Our building costs are actually little higher than they would be if we built on flat land—and raw flat land would cost a lot more."

PONDED STREAM, deep enough for swimming, continues under the upper living-room wing of this contemporary house.



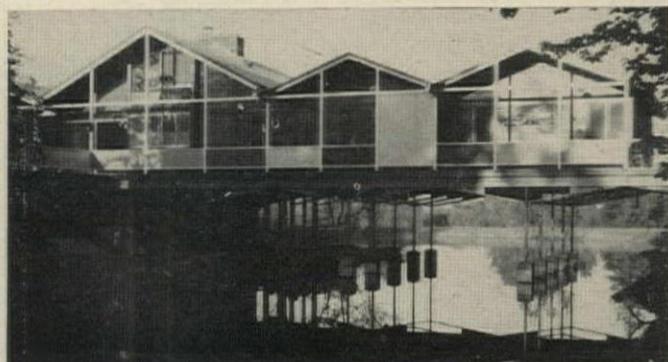
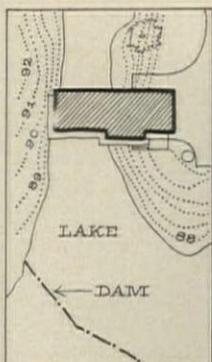
HOUSE ON A LAKE east of Cleveland has 1,880 sq ft on the main level, plus a study above the living room and a family room below almost at the lake level.

. . . and this was built over a ravine
on a lot with “no place for a house”

This exciting way to live—for a family that enjoys swimming, fishing, ice skating, and boating—was achieved on an Ohio site once thought unbuildable.

The lake you see covers what was recently a deep marshy ravine in the center of a five-acre lot so zoned that the only possible location for a house would be in the ravine.

Architect Bruce Huston’s solution was to erect an 18’ dam and build the house as a bridge over a narrow part of a lake that filled up from small springs. The dam cost only \$3,000, far less than it would have cost to fill the swampy ravine. Total cost to the owner: \$56,000, including \$8,000 for the five-acre site.



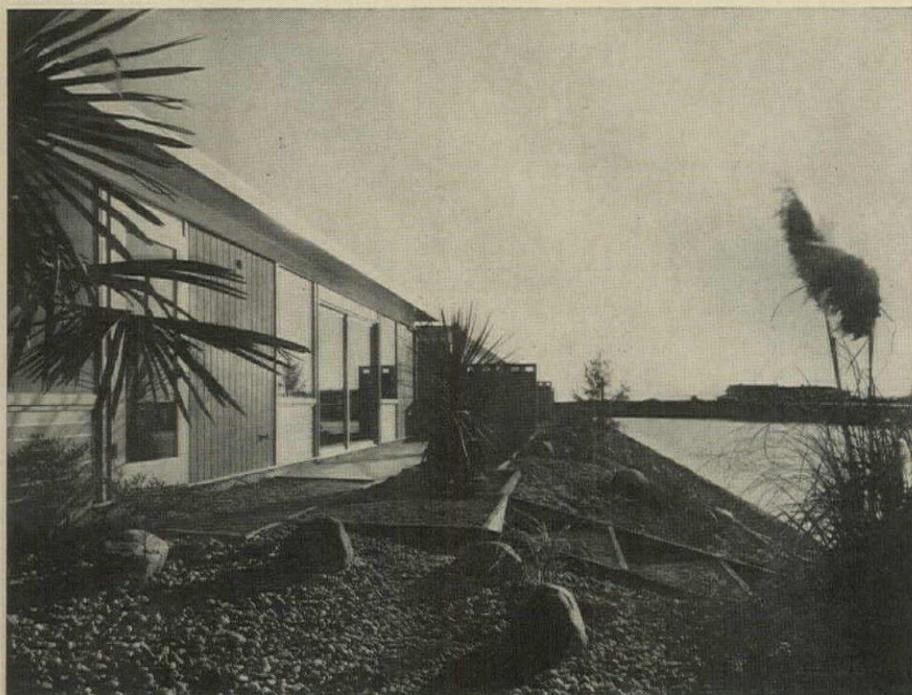
SITE PLAN AND PHOTO show how house straddles lake on piers supporting five 30’ I beams.



NEW HOUSES, NEW LAND, NEW LAGOONS now exist outside the former shore (indicated by the older houses at rear) of Alameda, Calif.

These houses were built along lagoons on choice land added to a city

Photos: Karl H. Riek

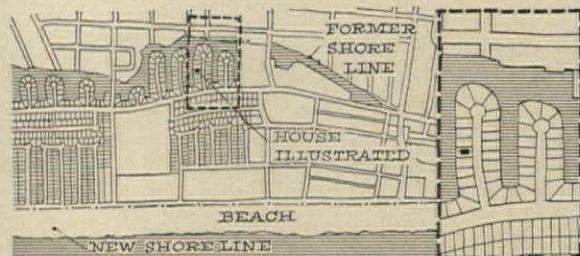


REAR YARDS are 20' deep, slope down to bulkhead lagoon. Lots are 4' above water level.

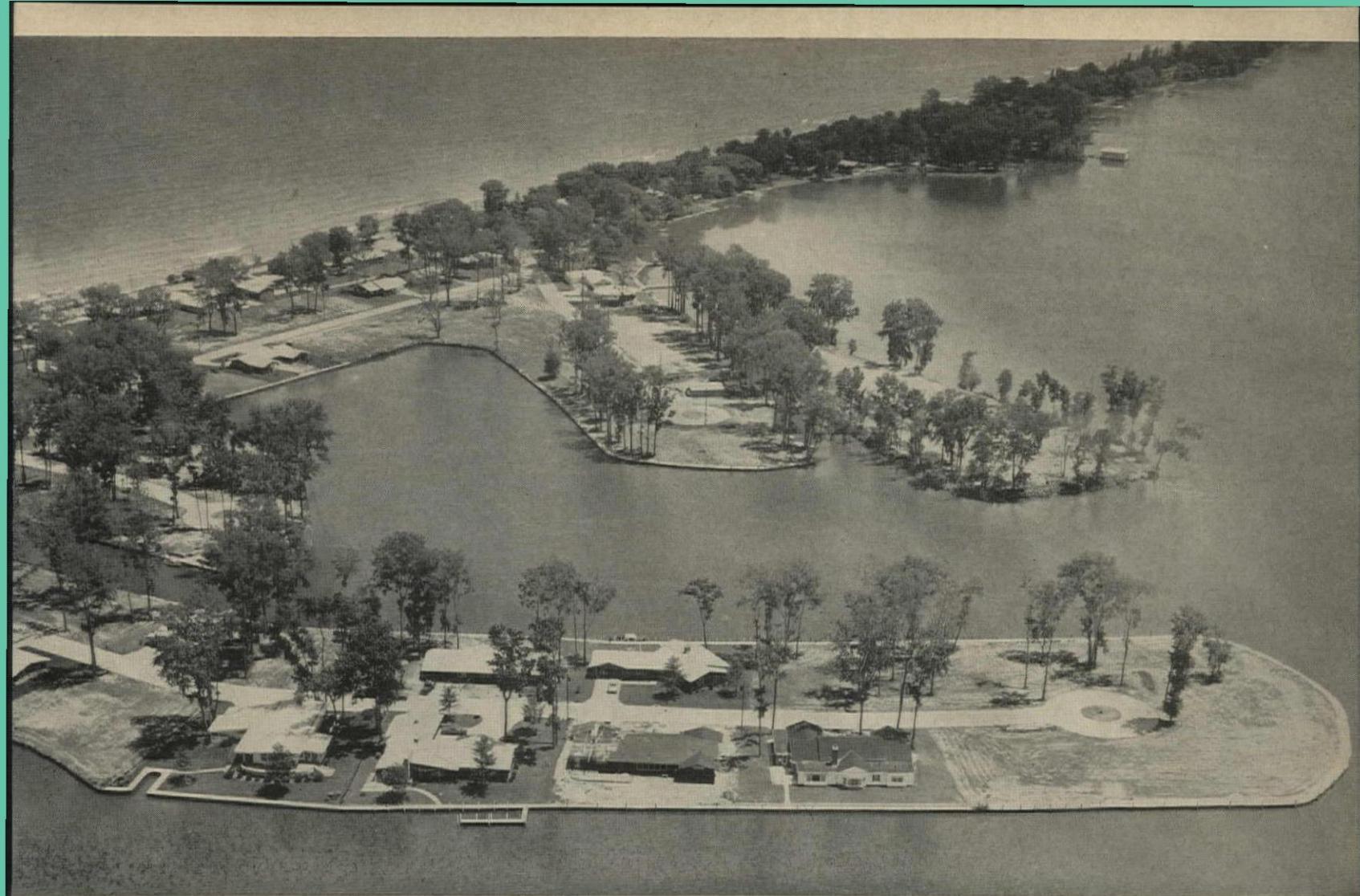
They are the first of more than 200 to go up on \$11,000 lagoon-side lots in Alameda, Calif.

The land, which in all includes 400 acres for residential, shopping, and recreational facilities, was created by pumping 9½ million cubic yards of sand from San Francisco Bay onto the south shore of water-encircled Alameda. Utah Construction Co used its own \$2½-million dredge to pump sand fill onto tideland and turn a rundown waterfront into valuable new land in the heart of the Bay area.

Architect Benson Eschenbach designed the 40'x42' houses (shown above and right) to make the most of 60'x100' lots. Each has a 20'-wide side yard facing a brick-walled side of the next house.

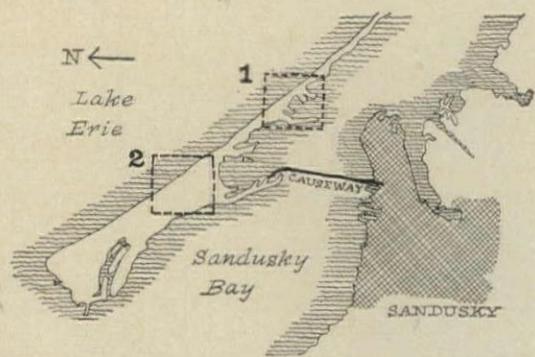


PLAT OF 400-ACRE TRACT shows lots on fingers extending into lagoon, landlocked so it will not be affected by tides.



LUXURY HOUSES stand on land that, except for narrow rim at rear, was filled in by the builder's dredge. He moved 100,000 cu yd at 30¢ to 35¢ per yard.

... and these were built on land
that until recently was useless marsh

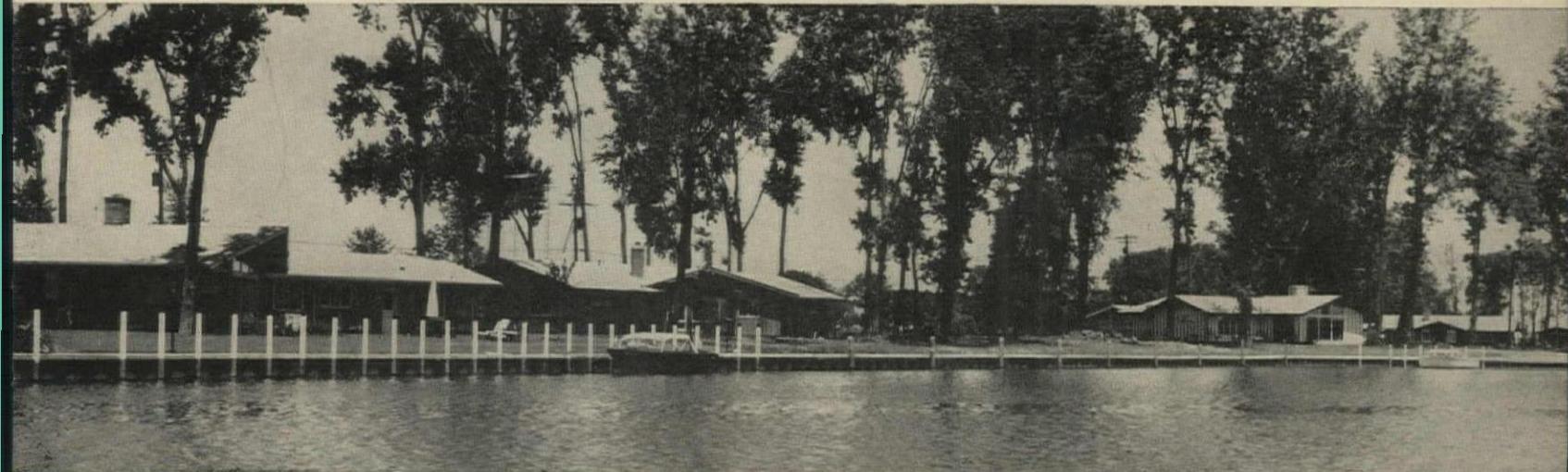


SANDUSKY MAP shows 1) location of present development (close-up below) and 2) site of new project now being filled.

The picturesque development you see above looks like one of Florida's plushiest—but it is only a few minutes drive from downtown Sandusky, Ohio.

Until four years ago it was just a swampy sand-spit extending into Lake Erie. Then Sandusky Development Co bought an \$80,000 dredge and started pumping sand and silt, and building steel bulkheads, to create quarter-acre lots now worth \$6,000 to \$12,000. Since the 35-acre tract was filled in two years ago (H&H, Apr '58), the builder has completed or started about 60 houses priced at \$50,000 to \$75,000. And now he is dredging another 140-lot tract farther out on the spit. /END

Photos: Alden





Look how you can cut land cost if you know how to profit from today's earthmoving machinery

Your actual costs will be lower, and—what is more important—you will be able to use cheaper land.

Your actual costs will be lower because earthmoving machines are now more productive than ever. They can handle massive quantities of material—some scrapers now carry up to 100 cu yds of dirt. They can work at astonishing speeds—some trenchers now dig a 100' ditch in one minute. And they can do a surprising number of specialized jobs—some inexpensive utility tractors now take attachments that do everything from clearing raw land to cutting the grass around model houses.

You will be able to use cheaper land because earthmoving machines now make it economically feasible to build on land that has been bypassed as too costly to develop. Today's machines can make attractive homesites on rocky hillsides, reclaim cheap marshland, and even create valuable waterfront lots where there was nothing but water before.

All these opportunities offered by today's machines raise an important question:

How big does a builder have to be to profit from owning earthmoving equipment?

He has to be big enough to keep his equipment busy a good part of the time. To translate that answer into the number of houses a builder builds per year, C.E. Hooper Inc asked the opinions of HOUSE & HOME's panel of "builders other builders follow." Here is what they said about owning three basic machines—a tractor, a grader, and a power shovel:

To own a tractor, 38% of the 265 builders who gave a house-production figure said you have to build at least 100 houses a year; 26% said 50 to 99 houses; 18% said 25 to 49 houses; 16% said 10 to 24 houses; and 2% said less than 10 houses.

To own a grader, 65% of the 213 builders who gave a house-production figure said you have to build at least 100 houses a year; 17% said 50 to 99 houses; 10% said 25 to 49 houses; 7.5% said 10 to 24 houses; and only one builder said less than 10 houses.

To own a power shovel, 72% of the 195 builders who gave a house-production figure said you have to build at

least 100 houses a year; 18% said 50 to 99 houses; 7% said 25 to 49 houses; 3% said 10 to 24 houses; and no builder said less than 10 houses.

So this much is clear:

If you are a medium-size or large builder, it can pay you to own earthmoving equipment

Chances are you can cut your earthmoving costs by doing the work yourself instead of subcontracting it. For example: Orrin Thompson, who built 1,450 houses last year in Minneapolis, never paid less than 25¢ a cu yd when he subcontracted his earthmoving. Now he does his own work at well under 20¢ a cu yd (including the cost of owning about \$375,000 worth of equipment).

But even if you cannot save the way Thompson does, you can still benefit by owning equipment. Here is why:

1. *You can save time—and time is money—because you can get work done when you want it done.* Most earthmoving is seasonal, so every builder in town wants the subcontractors' equipment at the same time. If you have to wait your turn, your whole building operation is likely to be thrown off schedule.

Says Builder Bob Schmitt, who builds 100 houses a year in Berea, Ohio and owns about \$250,000 worth of earthmoving equipment: "The actual cost of grading land and moving earth is not high. But the hidden cost of not having it done when you need it done is pretty horrible."

2. *You can estimate costs more accurately because you don't have to worry about contractors' fluctuating prices—high when the subs are busy, lower during slack periods.* Builder Thompson's estimates were off as much as \$300 a lot when he used subcontractors. Now he says he can estimate "within a few dollars of actual cost."

3. *You can get a break on taxes because depreciation allowances let you write off 64% of the cost of all but the heaviest equipment in two years.* So in two years you can trim your tax bill by more than 30% of the cost of your equipment. And at the end of two years, the equipment's resale value is still 60% of its original cost.

Predicts Builder Thompson: "Competition will soon force more and more builders to reduce their land costs by using more and more earthmoving equipment."

To see what you can do with today's machines, turn the page



TWO-WHEEL SCRAPER, pulled by one tractor, is pushed by another to speed job. Scrapers dig, carry, and spread dirt in one working cycle.

With today's machines, you can still dig, move, and dump earth at 1930 prices

So says H. A. Radzikowski, an official of the US Bureau of Public Roads.

Why has earthmoving—unlike almost every other home-building cost—resisted the rise in costs? Because technological improvements of earthmoving machinery—mostly in the last five to ten years—have offset cost inflation.

For example:

Today's machines are bigger. Ten years ago a scraper that could carry 20 cu yds was considered large. Today some scrapers can carry 100 cu yds.

Today's machines are more powerful. Ten years ago the heftiest tractor engines were rarely more than 175 hp. Today some tractors have 600-hp engines.

Today's machines make more efficient use of their power. Torque converters—introduced four or five years ago—match

the power to the load so there is no loss of speed as the load gets heavier.

Today's machines have better controls—power steering on heavy machines, hydraulic controls (they work faster and are easier to maintain) instead of mechanical controls, pushbuttons instead of levers for lowering scraper blades, and a single joystick instead of multiple levers on big shovels.

All these improvements (and many others) cut costs by speeding up output. So they make it possible to do things with land that you never dreamed of doing before.

For example: Now you can slice off mountaintops and use them to fill in swamps and ravines (see *p 174*); you can carve out terraces on steep slopes (*p 153*); you can turn marshes into lakes (*p 156*). In short, you can use the higher productivity of today's earthmovers to transform problem land into valuable land.

**Here are the best ways
to use different machines**

Use a bulldozer for short dirt moves. Moving dirt 150', a dozer (digging and pushing blade) mounted on a new 235-hp tractor, can handle about 185 cu yds an hour. Approximate cost (including tractor operation and depreciation): 7½¢ a yard.

Tractors vary widely—not only in power but also in type. Crawlers are best for work in wet clay and on hillsides, must be hauled to the job on trailers. Rubber-tired, wheeled models are best for work in sandy or rocky soil and on level land, can be driven to the job.

Dozer blades also vary widely. Use a straight blade for digging and straight backfilling; an angling blade (it can be moved 25° to either side of the tractor) for hillside work and backfilling trenches; a U-shaped blade for pushing extra large quantities of dirt.

Use a scraper for medium-length moves—no more than a mile. Scrapers dig, carry, and spread dirt in one working cycle. You can use them to strip and stockpile topsoil, cut high grades and fill low areas, dig out foundations, and spread topsoil around finished houses.

Scraper capacities range from 10 to 100 cu yds. Most practical sizes for a builder or developer: 15 to 30 cu yds. Owning and operating costs of a 20-yd scraper (based on a 12,000-hour life) are slightly more than \$15 an hour.

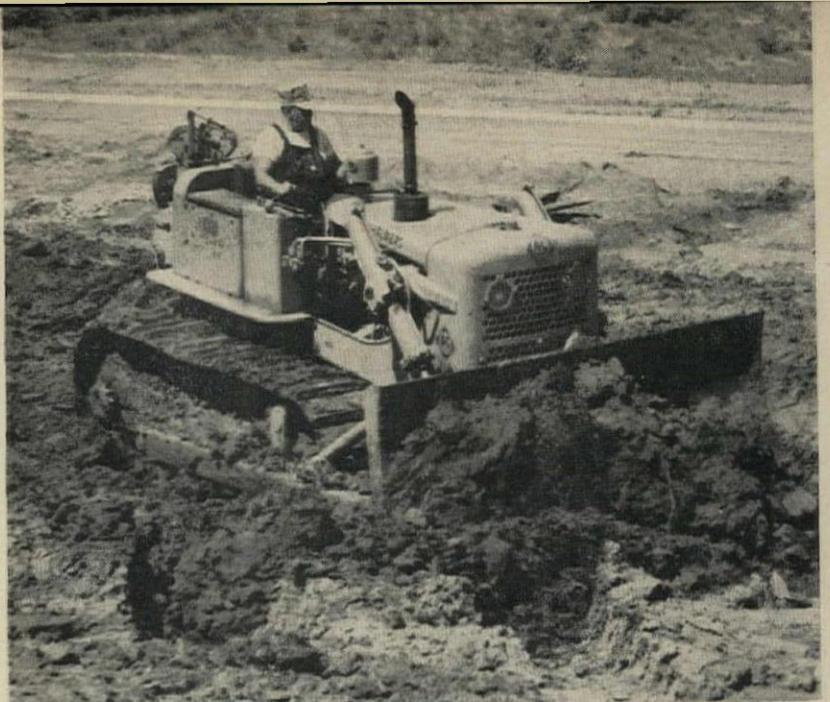
Although scrapers are self-propelled or tractor-pulled, it often pays to add power by using a second tractor to push them through their cutting cycle (photo, opposite). Reason: to cut costs by doing the job faster.

Use trucks for long moves—more than a mile. You can load the trucks with tractor shovels, stick shovels, or even conveyors.

Tractor shovels work well if dirt is not too tightly packed. You can use them to dig and (like a dozer) to shove dirt into piles for easier loading.

Power shovels work better in hard-packed earth—can dig the load and dump it in one swing.

Conveyors are designed for mass loading. Dozers push the dirt onto the conveyor belt, which carries it into trucks (example: a California contractor conveyor-loaded a 23 cu yd truck in 17 seconds).



BULLDOZER clears and shapes building site. Dozers' best use: short dirt moves.

F. R. Arver



FOUR-WHEEL SCRAPER hauls topsoil to new lots. Scrapers strip and stockpile topsoil before building starts.



TRACTOR SHOVEL loads dirt into dump truck after digging and piling it.

**With today's machines, you
can remove trees selectively**

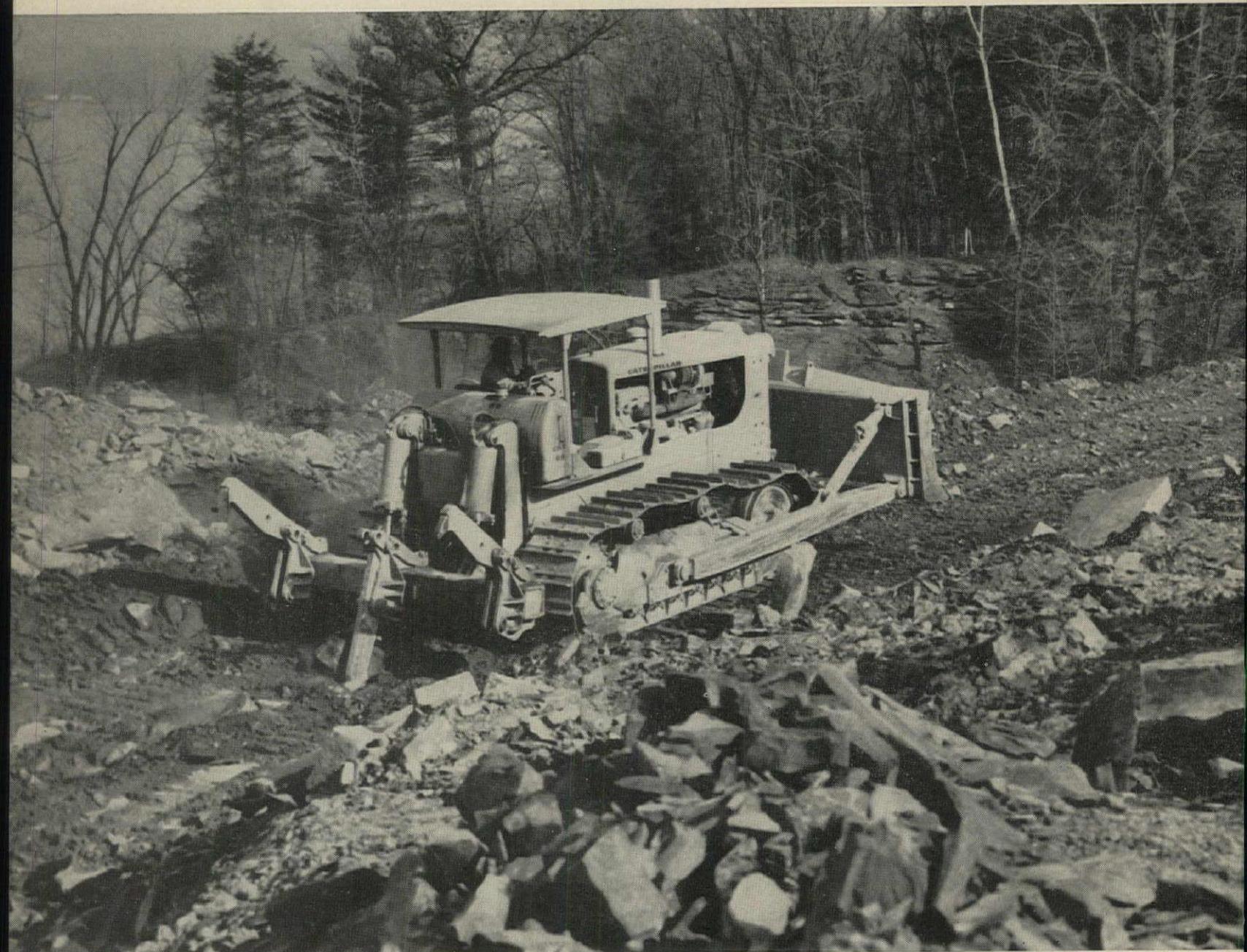
The tractor-mounted equipment at right makes fast work of taking out trees one by one.

A 30" stinger splits the trunk and weakens the tree. Then a sharpened dozer blade shears the tree at ground level and piles it for burning. A ripping attachment (it looks like a large rake), also tractor-mounted, pulls out the stump.

If you are clearing large areas, you can remove trees with an anchor chain dragged between two heavy tractors. The chain's weight (50 lbs or more a ft) topples small trees and pulls out large ones (up to 30" in diameter).

STINGER ATTACHMENT on dozer blade splits tree. Sharpened blade then shears trunk at ground level.





TRACTOR-MOUNTED RIPPER has three teeth, but only one is used in hard rock to concentrate full power and weight of tractor.

With today's machines, you can rip out rock without the high cost and hazards of blasting

So it is now possible to create desirable homesites (like those on p 155) on land that was once bypassed because of prohibitive rock-removal costs.

By ripping instead of drilling and blasting, you can cut the cost of breaking up rock by 50% or more. For example: Caterpillar compared ripping and blasting costs on eight widely scattered jobs (table, opposite) and reported a 65% average saving by ripping. Blasting costs on the eight jobs average 22.2¢ a cu yd. Ripping costs averaged 7.7¢.

By using a new electronic instrument, you can now get an accurate idea of rock-removal costs before you tackle a job. The new instrument, a refraction seismograph (photo, opposite), helps you decide if it will pay to remove rock and what ripping equipment you will need. It shows how

hard, how deep, and how widespread the rock is.

Rock rippers—steel teeth mounted on or towed by tractors—are not new (their family tree goes back to the horse-drawn plow). But they are now more effective than ever because tractors are heavier and more powerful than ever.

Can all rock be ripped with today's equipment? No. You can rip sedimentary rock like sandstone, limestone, and shale, or decomposed granite. You can also rip frozen ground and thus avoid a midwinter halt in excavating. But hard rock like solid granite, marble, and trap rock must usually be blasted. One easy-to-make, preliminary test: if only a sharp knife will scratch rock, it cannot be ripped; if a nail will scratch it, a good portion of it can be ripped; if a penny will scratch it, all of it can be ripped.

Here is how a seismograph probes rock formations

Shock waves travel through different materials at different speeds—rapidly through hard rock, for example, and slowly through loose soil. A seismograph measures how fast a shock wave travels underground and so how dense (and how ripplable) the ground is.

A sledge-hammer blow on a 1" steel plate (photo, top right) will send a shock wave as much as 50' deep. The wave travels through the ground to the seismograph receiver which records the time of impact and the time and pattern of the wave. With this data—and the known distance between the recorder and hammer—the density and depth of the material can be read from a set of tables.

HOW RIPPING AND BLASTING COSTS COMPARE ON EIGHT JOBS

Location	Material	¢ per cu yd	
		Rip	Blast
Tulsa	Limestone	7.3	17.3
Dallas	Limestone	5.2	15.1
Merriam, Kan.	Sandstone	2.1	11.7
Nelsonville, O.	Sandstone	5.7	13.8
Philadelphia	Limestone	11.5	19.3
Carbo, Va.	Sandstone	8.6	15.7
Hibbing, Minn.	Paint rock	6.1	54.5
San Francisco	Sandstone	15.0	30.0

Source: Caterpillar.

Here is why tractor power determines what to rip

The tractor not only pulls the ripper but also powers the hydraulic ram that holds the ripper shank in the ground.

The heavier and more powerful your tractor, the harder the rock you can rip, the deeper you can rip (up to 28"), the larger your ripper can be, and the more teeth it can have.

Most rippers are mounted on the rear of tractors and have one or two teeth. But some bigger ones have three teeth. And some are separately mounted and tractor-towed, or where extra power is needed, pulled by one tractor and pushed by another.

Ripper shanks, to which the teeth are attached, vary in design. Some are designed for breaking rock into small pieces, others for dislodging boulders.

Any choice of ripping equipment depends partly on how the ripped rock will be handled—by dozer, scraper, or power shovel. For example: a dozer can handle large chunks, but rock should be broken into small pieces to be moved by a scraper.

Don't overlook these byproducts of rock removal

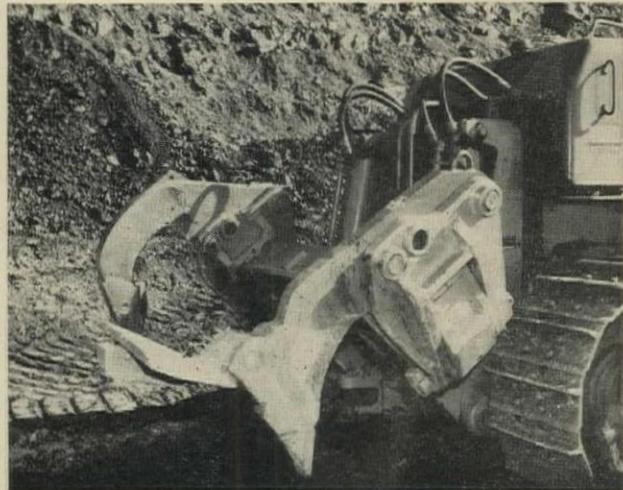
You can use ripped rock to fill in nearby swamps or for deep filling. Or, if there is a ready market for aggregate in your area, you can crush the rock and sell it—crushed rock (1½" size) sells for about \$2.70 a ton. Small crushers like the one at right cost \$20,000 to \$25,000, can be brought out to your job and loaded with a power shovel. Best uses of aggregate from ripped rock are for gravel driveways and neighborhood streets. Because the rock is sedimentary, it is usually too friable for use in concrete.

SMALL ROCK CRUSHER, towed to site and loaded by tractor shovel, reduces ripped rock to salable aggregate.



F. Kirschner

SEISMOGRAPH reveals rock's hardness and depth by analyzing shock waves set off by hammer blow.



TWO-TOOTH RIPPER is raised and lowered by hydraulic rams.



DOZER clears ripped rock. Ripper dislodged boulders or broke them in big chunks.





SMALL DREDGE dislodges and sucks up underwater soil with cutter head, foreground, and pumps it through tailpipe, right, to reclaimed site.

With today's machines, you can reclaim marshland and even create land where there was none before

It now makes economic sense for builders to reclaim swamps, tidal marshes, and low land along lakes, bays, and rivers because:

1. Prices of buildable waterfront land—particularly close-in land—are skyrocketing (waterfront lots with seawalls sell for \$10,000 in St Petersburg).

2. New dredges (like the one above) are scaled to builders' needs. Their prices are relatively low (start about \$50,000). They are small enough (draw as little as 18") to work in shallow water and ride a flatbed trailer to the site.

There are at least four ways you can use small dredges to turn valueless low land into valuable homesites:

1. You can build up swamps and sandspits. In the Florida Keys, Builder J. P. Sadowski reclaimed submerged land for luxury homes. His direct and indirect costs for landfill: about 30¢ a cu yd (for another example, *see p 159*).

2. You can build up land around lakes. Miami Builder L. W. Rozzo dredged a lake to bring the surrounding land up to grade. His direct costs for landfill: 5¢ a cu yd. And he paid for his dredge by selling excess fill for 50¢ a cu yd.

3. You can dredge deep canals in swamps and build up fingers of filled land between the canals so all houses have waterfront sites. New Jersey Developer George Freibott bought a swampy tract for \$800 an acre, spent \$1,500 an acre for dredging and improvements, to create land valued at \$12,000 an acre. Total landfill costs: 25¢ a cu yd.

4. You can add to shorelines of lakes and bays. In North Palm Beach, Developers Bob and Dick Ross created 300 acres of new lakeside land now valued at \$10,000 an acre. Their landfill costs: 25¢ a cu yd (for another example, *see p 158*). Reports the California Water Resources Board: The San Francisco Bay area has 158,000 potential acres of reclaimable tidelands (not including marshland).

Here is how a small dredge builds up marginal land

Dredges are floating vacuum cleaners. Their basic parts: a suction pump, a cutter head (foreground, opposite), and a tailpipe (background, opposite).

In one continuous operation, a dredge does three jobs:

1. It sucks up mud, silt, and sand from the bottom of a swamp, pond, or bay (also cleans out muck holes, a good source of valuable topsoil).

2. It pushes the waterborne materials as much as a mile or more through the tailpipe. The length of the push depends on the size of the dredge (rated by tailpipe size) and the power of its pump. For instance: an 8" dredge with a 145-hp pump can push material about 2,000' but needs a booster pump for longer pushes.

3. It spews the material into a settling area (top, right) formed by throwing up a dike around the site to be filled. The sand, silt, and mud settle into a compact base, and water drains back to the swamp, pond, or bay. When fill builds high enough in one spot the tailpipe is moved.



DREDGE TAILPIPE spews fill into dike-enclosed settling area. When fill is high enough, pipe is moved.

Here is why a small dredge builds up land at low cost

1. It keeps labor costs down. One operator runs the dredge, and an unskilled laborer moves the tailpipe when necessary.

2. It eliminates transportation costs. The dredge deposits earth exactly where required; there is no need to truck in fill.

3. It works fast. Hourly output of a 6" dredge (smallest made) is more than 75 cu yds. A 12" unit can handle almost three times that much. In West Palm Beach, Perini-Westward is using two big (16") dredges to fill a 5,000-acre site at 20¢ to 30¢ a cu yd (H&H, Mar).

4. It can cope with tough materials, hardpan and even some kinds of rock, that are broken up by whirling blades in the cutter or by high-pressure jets.

5. It eliminates need for mechanical tamping or piles to support foundations (the draining fill is self-compacting).

Is dredging always the best way to do the job?

No. Sometimes a dragline crane like the one at right is more practical.

A dragline is the only answer where there is not enough water to float a dredge or where underwater material cannot be pumped through a pipe. And it is often more efficient where marshy areas are small and scattered or where fill can be used close at hand.

Dragline cranes have extra-long booms so the bucket can be cast the way a fisherman casts a fly. Buckets, which usually range in size from 3½ to 5 cu yds, break up and scoop up underwater soil. They are especially effective in tough material like peat bogs and for digging deep channels. Dragline fill, unlike dredged fill, needs mechanical packing and binding. Compacting equipment includes sheepfoot rollers and rubber-tired compactors (photos, right), vibratory rollers, steel rollers, and plate-type compactors.

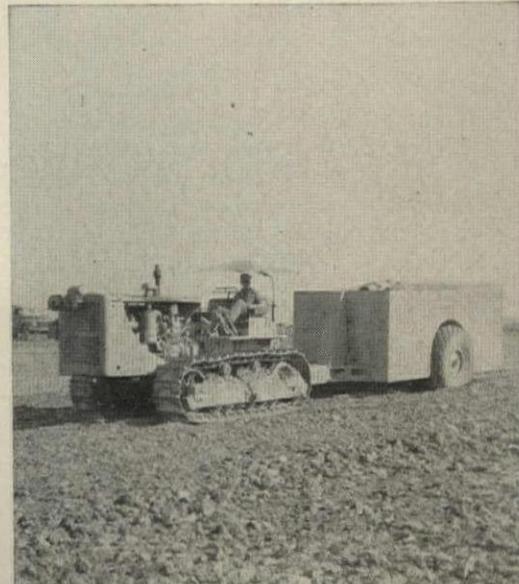
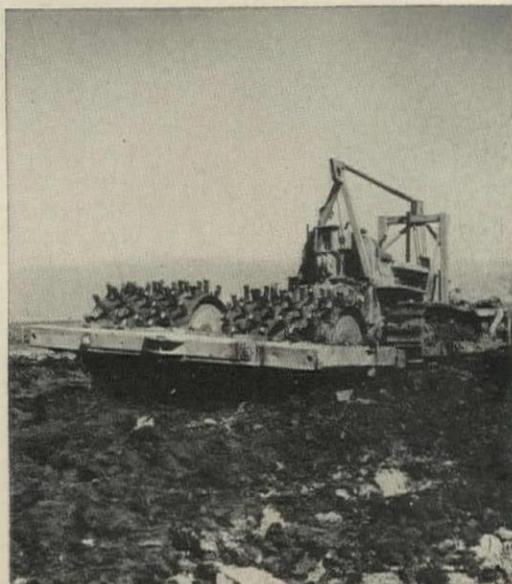


DREDGE CABIN houses pump, foreground, and controls, rear.



DRAGLINE BUCKET, swung by crane with extra-long boom, scoops fill from swamp.

TOWED COMPACTORS—sheepfoot roller, left, and rubber-tired compacter, right—pack and bind new fill.





UTILITY TRACTOR with front loader and backhoe also takes other attachments.* Photo taken for H&H at Allis-Chalmers proving grounds.

With today's machines, you can slash costs¹ on scores of run-of-the-field jobs

"You just cannot find guys to dig ditches any more."

So says Builder Bob Schmitt of Berea, Ohio, a former chairman of NAHB Research Institute. Many other efficient builders agree—and go a step further. Even if you can find manual labor, they say, it no longer makes sense to use it on even the smallest or most specialized earthmoving jobs.

With the mechanized equipment now available to builders, you can do almost anything far faster—and at far lower cost. Most useful for most builders: utility tractors, like the one above, which take a wide variety of attachments for a wide variety of jobs. (Some attachments are also available for tractor shovels, which are larger than utility tractors.)

With a utility tractor and the right attachments, you can dig sewer, water, and gas mains; dig and backfill foundations; bring utility lines from the street to your houses; spread topsoil and finish-grade your lots; seed your lawns; dig holes for trees and fence posts; and final-grade your streets.

Utility tractors are inexpensive. Prices start at \$1,500 although the models most practical for builders run from \$2,500 to \$4,000. Attachments are also inexpensive. For example: Trenchers are priced at around \$3,500. Backhoes range from \$2,500 to \$4,000; front-end loaders from \$500 to \$2,000; grading blades from \$150 to \$250; dozer blades from \$325 to \$700; rototillers (which pulverize hard ground) from \$500 to \$1,500.

Utility tractors are fast workers. For example: A tractor-mounted trencher can dig a ditch 14" wide and 2' to 4' deep at 400' an hour; a tractor-mounted backhoe can dig a ditch 24" wide and 4' to 5' deep at 100' an hour. (Says Builder Schmitt: "I don't think any builder of any size can do without a small backhoe.")

If you want still higher production on specialized jobs, you can use bigger special-purpose machines like the patrol grader, big backhoe, and big trencher on the facing page.

Here is what you can do with tractor attachments

With a backhoe, you can open up utility trenches from the curb to the house, dig out curb lines and catch basins, and even take on tougher work like excavating basements. Some backhoes can be mounted in line with either rear wheel as well as between them, can thus dig a trench right along a wall.

With a chain trencher, you can open up narrow (3" to 6") trenches—for example, to carry electrical conduit.

With a front-end loader, you can take dirt and other loose materials out of hard-to-get-at places, like basements. The tractor is light enough to move over lumber or new concrete without breaking it and maneuverable enough to move in tight quarters without hitting walls.

With other attachments, you can do most of your landscaping. For instance: 1) a bucket or blade distributes topsoil; 2) a disk harrow cultivates and readies the ground for seeding; 3) a mechanical seeder, run by the tractor's power take-off, sows the seed; 4) a tractor-towed rake spreads straw over newly seeded lawns; 5) an auger digs holes for trees and fence posts; 6) a tractor-towed mower cuts the grass around model houses.

When you are not using the tractor for digging, grading, and landscaping, you can hook up a fork-lift attachment for moving building materials and lifting sheathing and shingles to roof height. (One contractor even uses a fork lift for seeding lawns. He sets a 500-gal tank of seed and liquid fertilizer on the forks, pumps out the mix in 25' swaths, and seeds three acres an hour.)



LARGE BACKHOE digs deep trench for water main.



SMALL BACKHOE on utility tractor undercuts steep bank.



LARGE TRENCHER, wheel type, digs sewer main.



SMALL TRENCHER, chain type, digs narrow service trench.

Here is what you can do with specialized equipment

For almost every utility-tractor attachment, there is a special-purpose machine that can do the same job a lot faster.

With a big tractor shovel (100 hp or more), you can scoop out dirt in bucket bites up to 4 cu yds. Tractor shovels (now used more than ever for excavating basements) can dig, backfill, load, and grade. They can also be fitted with a few attachments, including backhoes, light-duty rippers, and fork lifts.

With a big wheel-type trencher, you can dig utility trenches up to 10' deep and open a 6'-deep trench at up to 100' a minute (fast-working chain-type trenchers are also available).

With some wheel trenchers, you can dig catch-basin holes up to 5' wide. (A hydraulically controlled boom swings from side to side of the machine while digging.)

And with some trenchers, you can dig a plumb trench across a hillside with one track as much as 8" higher than the other. (The digging wheel can be tilted up to 6½° from the vertical.)

With a new electronic grader-blade control, you can grade a street in half the usual number of passes, reduce the number of grading stakes needed and the labor to set them. The grader operator simply dials the required grade. From then on, the blade holds the grade no matter how uneven the terrain.

/END



TRACTOR SHOVEL excavates house foundation.



AUGER digs holes like this for posts, poles, or footings.

PATROL GRADER spreads and levels topsoil, maneuvers easily between nearly finished houses.



Carl Rickard

The best of our land planning

It is setting a new, and much higher, standard

The year 1960 may well mark a turning point in American land planning.

Until now, when visiting Europeans asked to see our best planned towns, they were taken to three communities inspired by famous planners Clarence Stein and Henry Wright: Radburn, N. J., Chatham Village in Pittsburgh, and Baldwin Hills in Los Angeles. All are at least 20 years old and, according to most critics of US homebuilding, nothing newer has been worth seeing.

But right now, and for the first time since these great experiments of the 1920s and 1930s, dozens of new towns and subdivisions are being built that not only use the principles taught by Stein and Wright, but are designed to solve new problems in land use that did not exist 30 years ago.

Communities like Laguna Niguel near Los Angeles, Greenhaven in Sacramento, Holly Hills in Portland, and University City in San Diego are being built with the open green parks, varied types of housing, and visual privacy that make Radburn a fine place to live even today. These 1960 new towns are being built with fresh street patterns that preserve the character of the land, break big neighborhoods into small neighborhoods, keep the auto in its place, and provide safety for children.

What is the reason for this sharp increase in the number of well planned communities being built? The reason is simple:

The advanced towns of 30 years ago were built only because there were a few far-seeing men who were willing

to back them financially to set a good example for American housing.

But the best of today's communities are being built to high standards of land use because builders and land developers have recognized that, with good planning, they can *manufacture* the prime requirement for success in today's competitive market—a good location.

Moreover, builders and developers are commissioning planners because they have learned that good land planning — far from requiring unrealistic development costs—can save money on earthmoving and street paving and utilities at the same time it produces a better looking and more salable community. And builders and developers are commissioning planners to help them create value that will last. Says Banker Clinton Loucks of Syracuse: "The better the land plan, the better the chance a builder has to get mortgage money. . . . The better the plan, the better the long-term value."

Today's new communities are better because they provide varied housing for a cross-section of the population.

Up to now, many experts feel, we have been building too many houses for the much-publicized "average family" and not enough housing for the hundreds of combinations of richer or poorer, younger or older, whose requirements are not "average."

AIA President Phil Will has said: "Today, all pressures seem to force builders into putting up whole com-

munities of the same kind of single-family, detached houses . . . This is patently silly for 90% of our population . . . I don't care how you curve the streets, when you've got 500 houses in a subdivision . . . with uniform down payments, you know you are going to attract only a certain kind of buyer" (H&H, June).

Recently, a committee of housing specialists, appointed by the Royal Architectural Institute of Canada, traveled throughout their country trying to find out what was good and bad about Canadian housing. Their findings probably would not have been far different had they been studying US housing. And their report ("The Design of the Residential Environment") points out that "No repetitive pattern of housing development can be expected to meet even a good part of the residents' proper choices through the years . . . To correspond with the variety of households, there must be a wide range of dwelling types." The committee found (as has been discovered elsewhere) that only one-third of all families are "typical"—ie, parents with dependent children living at home.

Obviously, in the design of a well balanced community, there must be a preponderance of one-family houses. But there should also be some row houses, some patio town houses, some garden apartments, and (when they make sense) some high-rise apartments. All of the best new communities include this better balance of housing. These new communities are evidence that row housing can be handsome and can blend in with

is now very good indeed

of land use that no builder or developer can ignore

single-family houses, and that when row-houses are renamed "patio town houses" they sell well. (Many builders have resisted row housing because they have assumed it must look like the worst housing in our older cities.)

Today's new communities are better because they provide green space for all the residents to look at and to use.

"The climax of a neighborhood," says the Canadian report, "is well planned open space." Radburn, Chatham Village, and Baldwin Hills are fine places to live today because of their open, park-like environment.

Despite today's high land costs, builders are dedicating green belt parks and recreation areas to municipalities. Open areas are provided to give the uncrowded feeling that neighborhoods 50 years ago achieved from vacant lots and the custom many families had of buying "the lot next door." Builders are finding new ways to finance recreation facilities, and new ways to work with cities, counties, and states in setting up quasi-public recreation districts.

These open green spaces are all the more pleasant and usable because, in the best planned communities, the land planning keeps the auto in its place. Says the Canadian report: "We do not intermingle picnic parks with rifle ranges; but that could hardly be more lethal than to tangle city ways for wheels with those for feet. [We must] deal more efficiently with the car and more graciously with space for living."

Many critics who have made invidious comparisons between European and US land planning have failed to realize that even the best European land plans cannot be applied in the US because of the automobile. Any land plan for the US must take into account the dominance of the auto in the American way of life. The best new land plans do this: but they also, with carefully planned street layouts and house siting, isolate the auto from the green space and from the paths children use on their way to school.

Today's communities are better because they overcome the public's greatest criticism of housing—monotony.

When AIA's Phil Will refers to the "slums" we are creating, he is speaking of "monotonous sameness . . . which imposes its own pattern and rigidly dictates a way of life for the inhabitants."

When the Canadian research team reports that "many buyers have misgivings about the character of their housing," they mean that people find their housing monotonous. Says the report: "The intensity of dismay is evident in statements made on behalf of hundreds of housewives." The report quoted from several of the groups interviewed.

Said the National Council of Women: "Monotonous, boring, dull, rubber-stamp similarity are some of the terms used to describe developments where the same (or very nearly identical) house is repeated over and over . . ."

Said the Victoria Council of Women:

"To create the best and most useful environment, greater attention should be given to scientific and aesthetic planning . . . There [need] not have been the development in some areas of monotonous rows of similar houses."

Said the University Women's Club of Ottawa: "These places [built in 1954] looked like slums almost before they were occupied . . . ugly, unimaginative, the same plan used for every exposure . . ."

Today's best new communities are not monotonous because instead of being rows of look-alike houses on look-alike streets, they fit Phil Will's definition of a well balanced community (H&H, June):

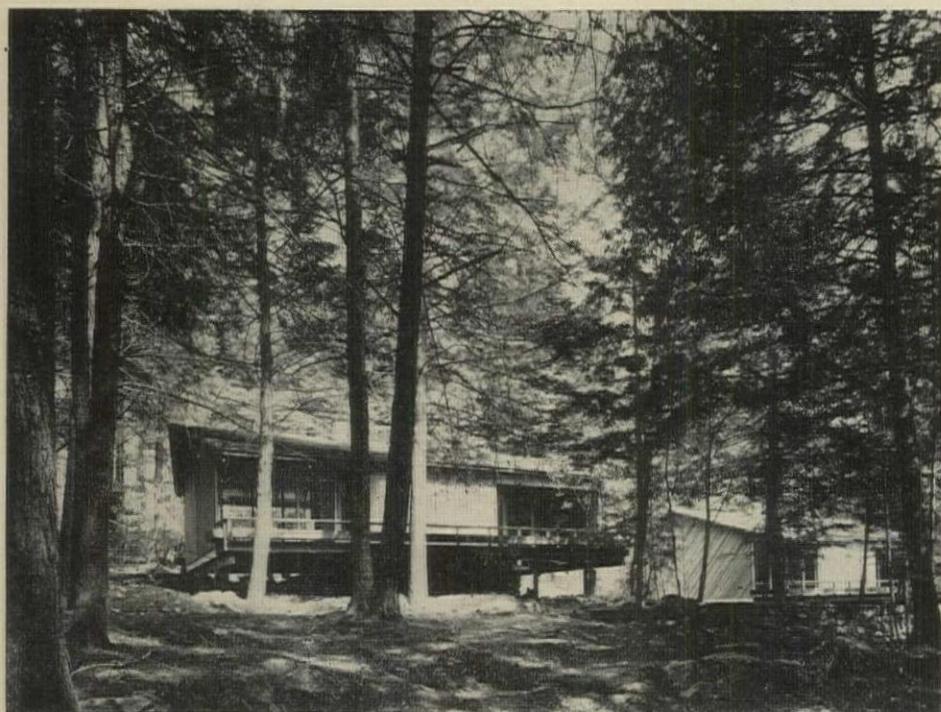
"It must begin with an overall concept. It must provide for a wide range of income levels. It must provide for a wide variety of human interests and ways of life. So it needs a variety of housing types—single-family, multi-family, town and court-type houses—mixed together in a thoughtful pattern. It needs all the amenities like parks, stores, squares with fountains, playgrounds, courts, and plazas. And it must take its plan, its form, its being from basic human facts—the root of all good design."

On the following pages you will find 13 rules for good land planning; rules based on the best new work of some of the country's best land planners; rules that will help you make better use of land, help you create communities that will be better places for family living for many years to come.



STREET LAYOUT AND HOUSE SITING at Toronto's Don Mills are carefully planned to save the most trees, conserve the natural beauty of the area.

1. Site each house to save the best trees

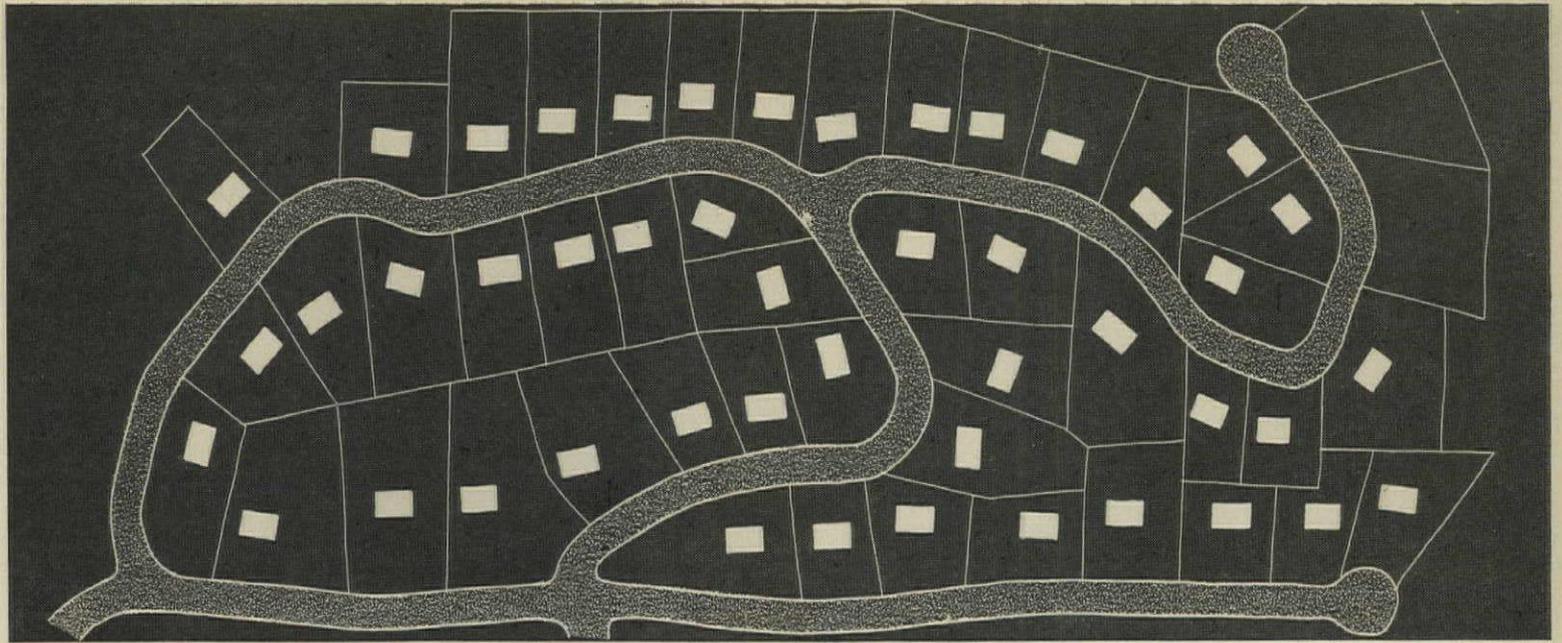


HOUSES IN HEAVY WOODS at Sterling Forest make good use of trees as privacy screen.

That is a good beginning in planning of any piece of land, small or large.

Nothing beautifies a neighborhood more than trees, which is why people buy wooded lots first and cheerfully pay more for them. Nothing has made more people angry at more builders than avoidable destruction of trees.

"More trees have been destroyed in recent years by building operations than killed by disease," says NAHB's *Home Builders Manual for Land Development*. Many fine trees are destroyed by builders who think it is cheaper to build on completely cleared land—which is seldom true (see p 155). Many fine trees are destroyed by careless bulldozer operators in the course of clearing brush and excavating. To save trees, careful developers send an architect or landscape architect to the site to help stake out the house, mark trees to be taken out and/or saved.



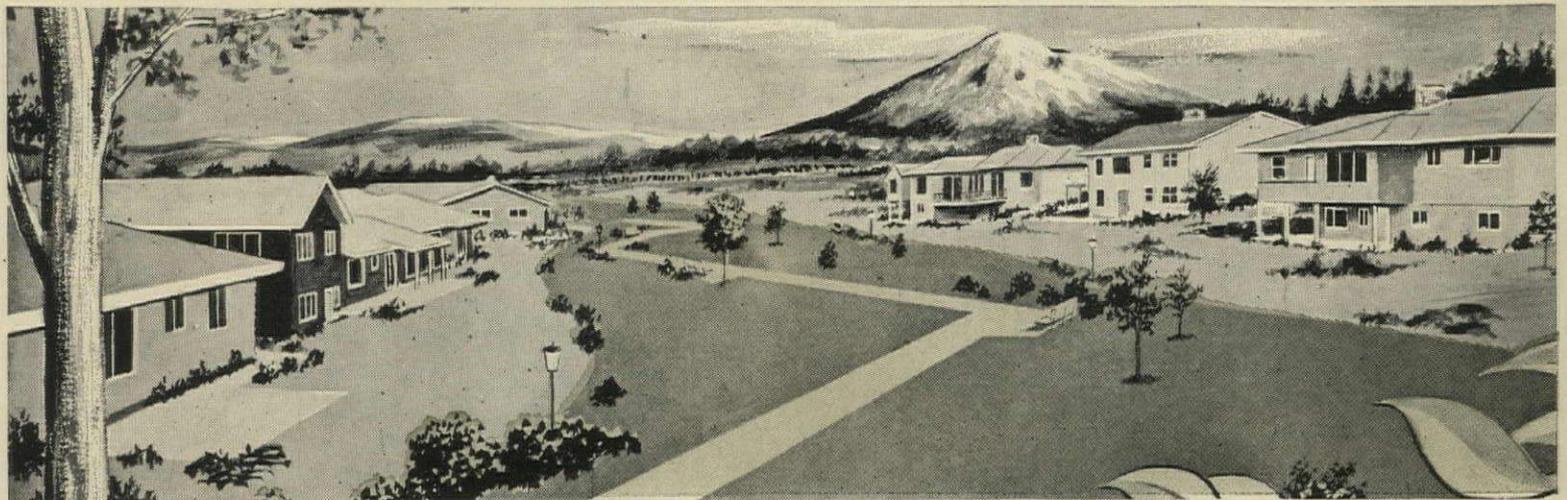
STAGGERED SETBACKS along curved streets, in 23,000-acre Sterling Forest, N.Y., avoid monotony of houses lined up like wooden soldiers.

2. Vary your setbacks for better looking streets

The greatest sales asset of the huge Sterling Forest community is its rolling, heavily wooded, unspoiled land (lower photo, opposite). To help preserve this natural beauty, each house is sited by the architect or land planner—not just to provide variations along streetscapes

by varying setbacks; but to screen houses from street, to give each house maximum privacy and best view, to save trees, and to require a minimum of bulldozing or blasting. Large lots (averaging over 100'x150') make this siting easier.

Robert Dowling, president of City Investing Co, which owns the land, hopes to make Sterling Forest "the country's best planned community." To attract visitors, he built 125 acres of landscaped gardens and a music center, plans other cultural features.



NO POWER POLES mar Holly Hills, a new garden village in Portland, Ore. planned by Architects Balzhiser, Seder & Rhodes.

3. Put all your wiring underground

The worst eyesore in most flat, treeless subdivisions is a string of tall power poles draped with wires.

So in areas where it is economically practical (eg, in areas where soil conditions do not make trenching costs

prohibitive) the best new land plans call for underground wiring.

Getting your wiring underground is a matter of convincing the utility that it should be done. In some areas like Chicago the utility makes no charge to

the builder if the houses meet requirements of siting and equipment (H&H, Apr). Other utilities say they charge anywhere from a moderate \$200 (in an area of sandy farm land) to a prohibitive \$900 per house.

continued



Copeland

BEFORE DEVELOPMENT, high ridge (line A-B) was unbuildable.



Aerial

RIDGE TOP was flattened to create plateau for houses.



SIDE VIEW OF RIDGE, photographed from great distance, shows how careful bulldozing saved natural contours and original vegetation of the hillside.

4. Let your plan follow the nature of the land

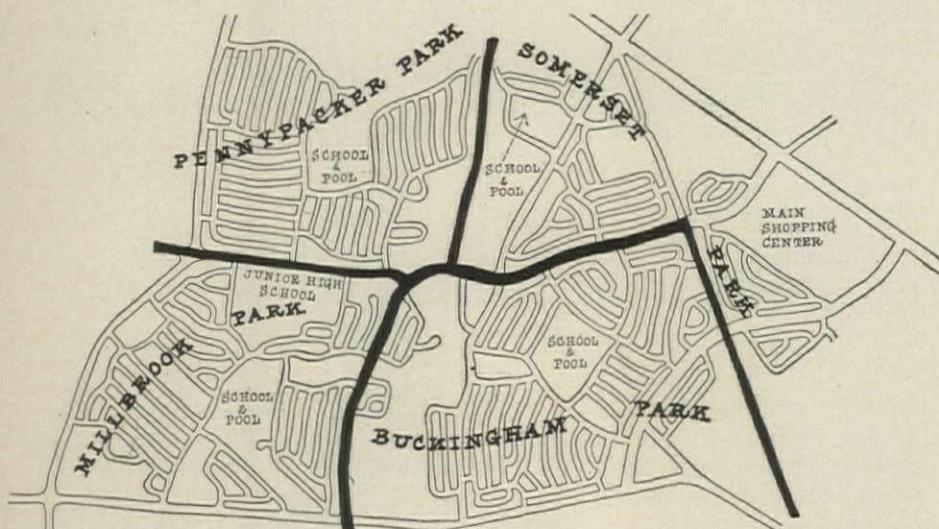
In developing land, it is always better—as well as cheaper—to work with nature, not against it.

That rule has been followed carefully in the development of 2,200-acre Marin Bay subdivision, 15 miles north of San Francisco (see photos). The

contours determined the master plan: streets run parallel with and along the tops of ridges and the bottoms of valleys. The ridge tops are graded to create level, usable plateau areas without hillside scarring. Sidehill contour streets are kept to a minimum, con-

finied if possible to non-wooded areas so that later the planted slopes will blend with the hillsides. Streets are sited to create views over the water or over natural lakes, wooded areas, or a golf course. Developer: Latipac-Perini Co.

5. Divide a big plan into smaller neighborhoods

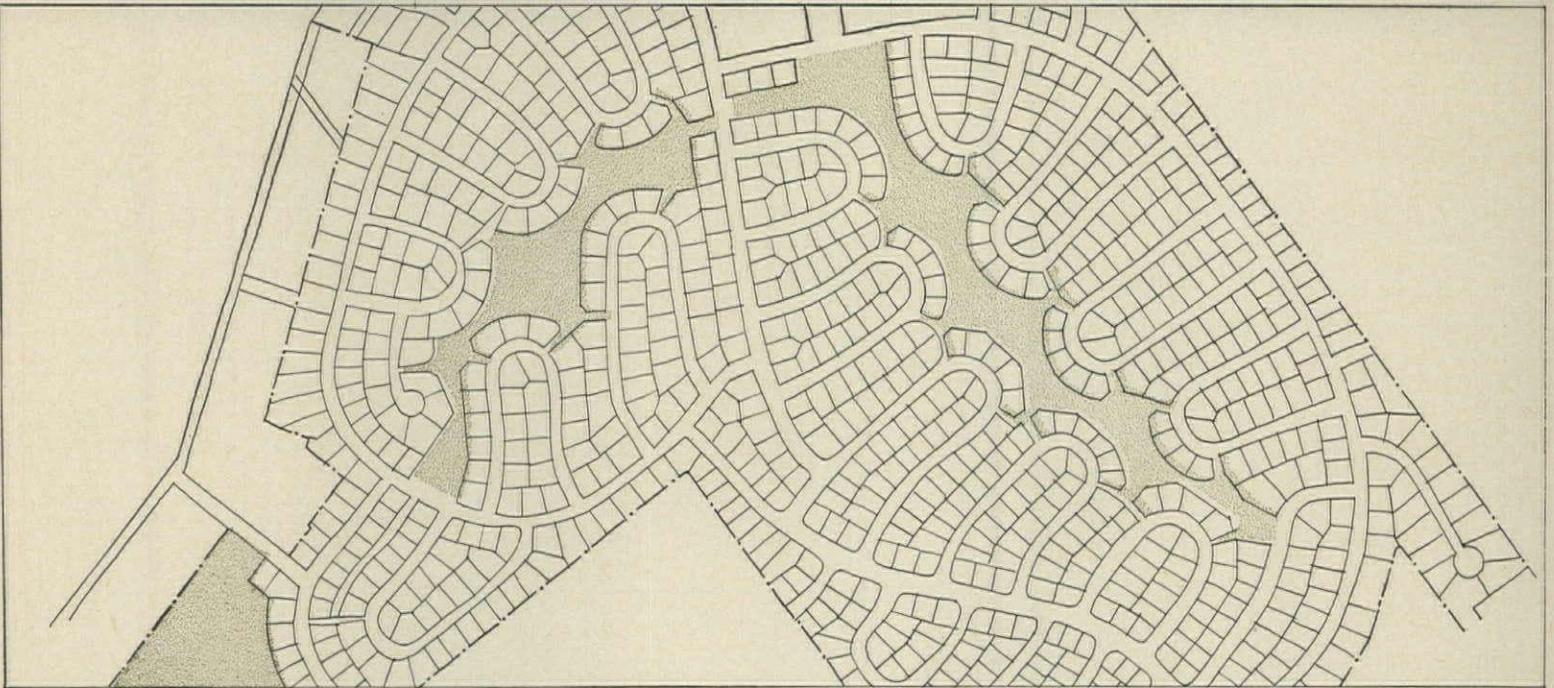


LEVITTOWN, PA. is divided into 800- to 1,200-house neighborhoods, each with school.

In his first Levittown on Long Island, Builder Bill Levitt learned that people do not want to live in a big, sprawling town: they prefer to be identified with a smaller, more intimate neighborhood.

So, in his next two Levittowns (in New Jersey and Pennsylvania) he divided the total development into groups of 800 to 1,200 houses separated by major collector streets (shown at left). Each neighborhood has its own name, and each has a centrally located school and swimming pool (see plan, left).

Levitt builds and gives to the town grade and high schools and pools; donates land for churches.



OPEN GREEN SPACE is the key feature of the plan (and the key sales asset) at Bayberry development in Syracuse, N.Y.

6. Dedicate some open space for common use

The subdivision shown in photo and plan refutes the common notion that a developer cannot afford to give away valuable land for green-belt parks.

Bayberry subdivision in Syracuse,

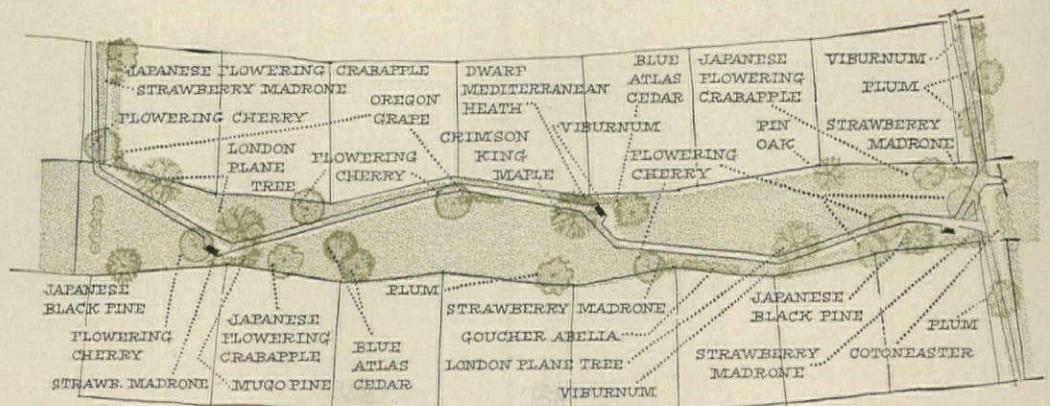
laid out by famous planners Mayer, Whittlesey & Glass for Builders Howard Berman and Joseph Prisant, has proved so popular that sales are running far ahead of construction of the

\$18,000 to \$23,000 houses. Says S&L official Ben Glowacki: "Open land like this makes a community desirable from both the buyer's and lender's points of view. We like it very much."

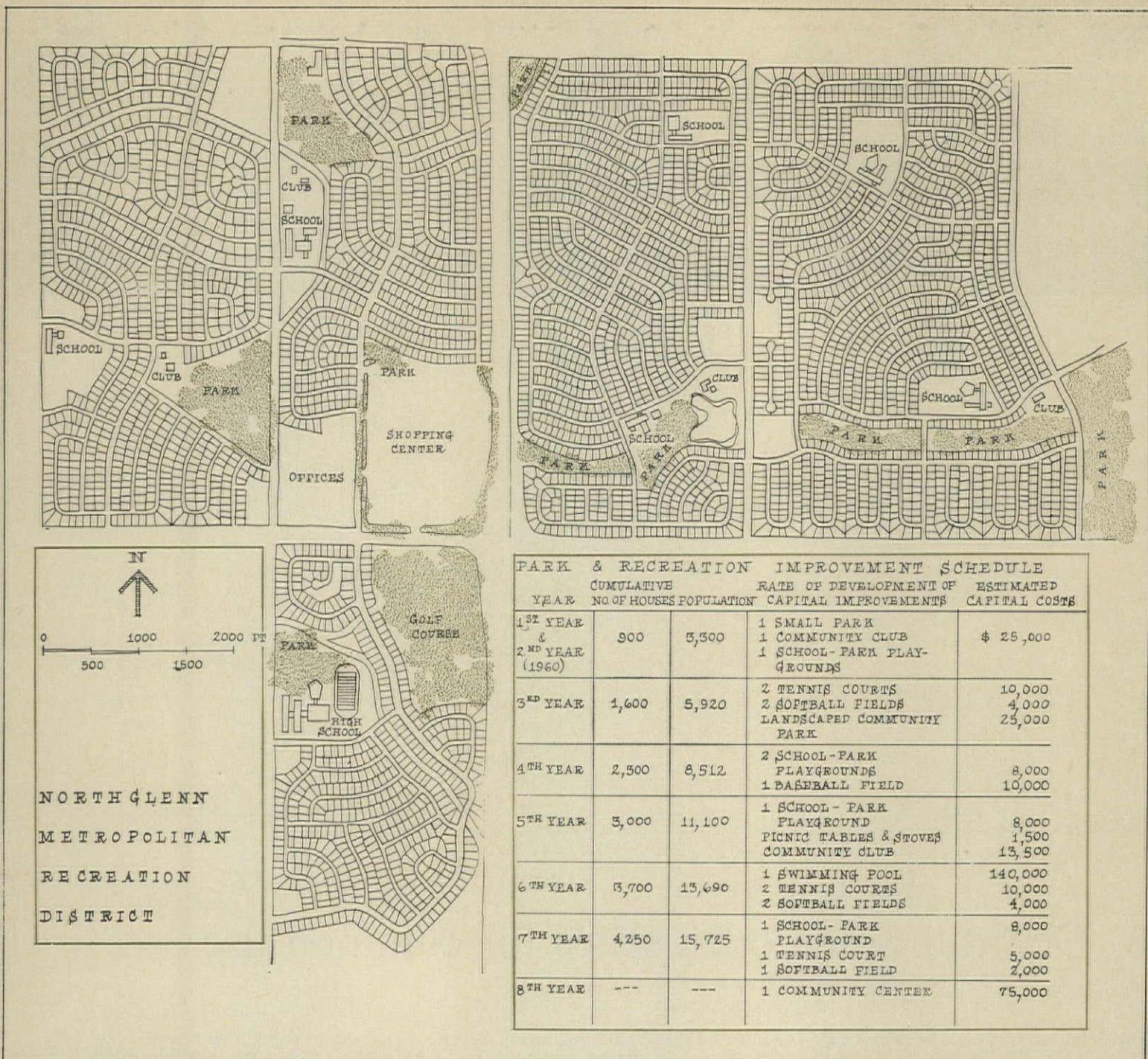
7. Beautify your open space with landscaping

Almost any open space can be made more beautiful and more usable if it is skillfully planted according to a well thought-out plan.

In the new Holly Hills subdivision, Portland, Ore. (see rendering p 164), the green belts were once just cleared farm land. The landscape architect used native trees and shrubs which he selected to be attractive and to be hardy enough so that children or dogs could not easily destroy them. These green belts have automatic sprinklers, photo-electrically controlled lights, underground wiring.



LANDSCAPE PLAN shows planting chosen by Landscape Architect Lloyd Bond for Holly Hills.



RECREATION AREAS, built or planned, are shown in green on this plan for Denver's Northgate subdivision. The table gives the completion schedule.

8. Make a long term plan for recreation areas

Particularly in larger subdivisions, some parks and recreation facilities need not be developed for several years. But these facilities should be planned, and a system set up for financing them, at the early stages of development.

Here is a three-step program used by Perl-Mack Construction Co in developing recreation areas in its 1,800-acre Northglenn subdivision in Denver.

Step 1: A detailed plan of all recreation facilities and equipment was drawn up by Perl-Mack's land planners (Harman, O'Donnell & Henninger). Their proposal included a schedule of dates by which each new

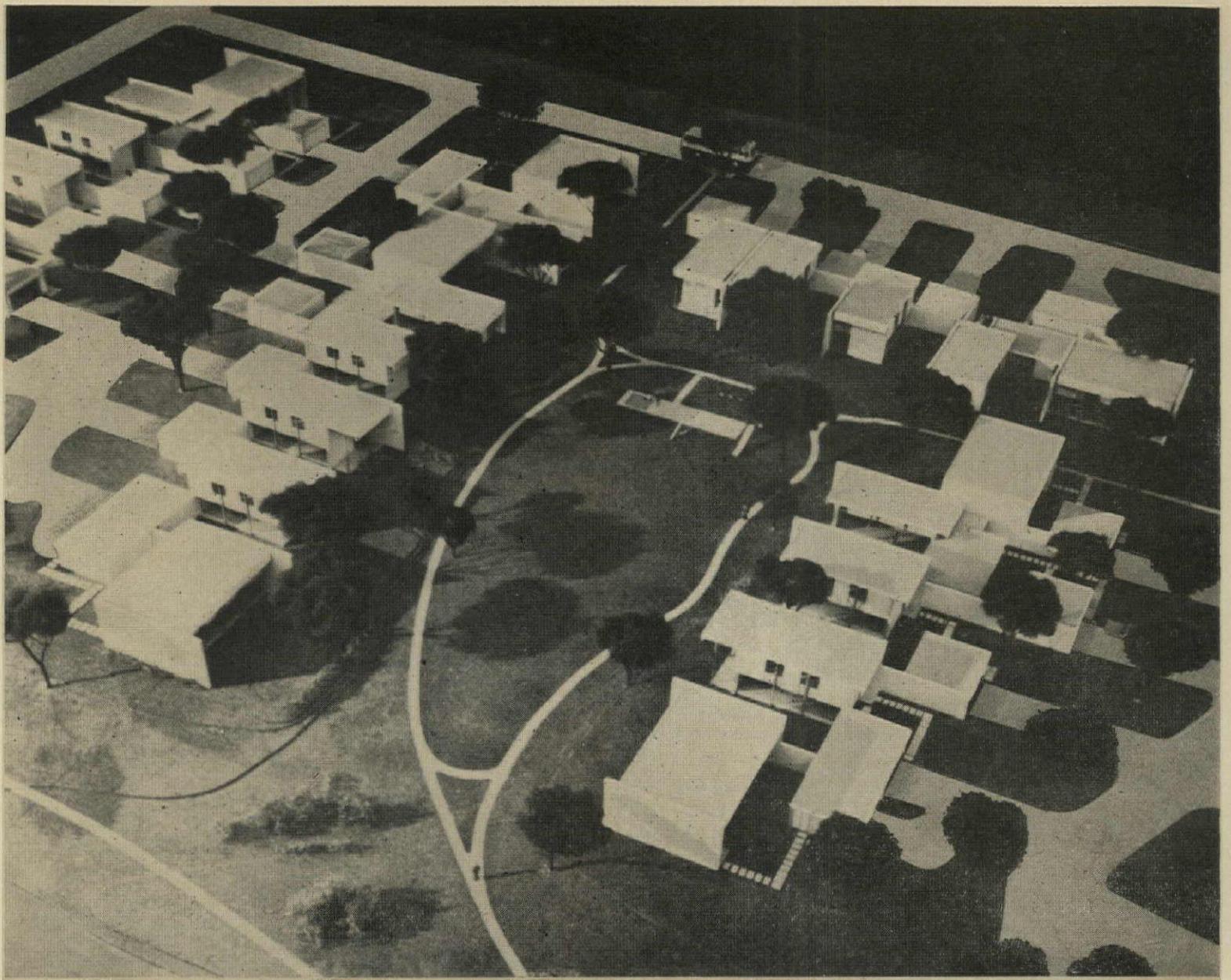
section of recreation land would be needed, and the costs of each.

Step 2: To finance the plan, a recreation district was set up, with authority to issue bonds. Northglenn Metropolitan Recreation District, a quasi-municipal corporation, owns the recreation land and facilities, has taxing power of up to four mills yearly. Last spring the District asked Northglenn homeowners to approve a \$150,000 bond issue, only \$25,000 of which would be issued in 1960 (to pay for a swimming pool).

Step 3: Owners were sold on the

overall plan. Northglenn homeowners approved the \$150,000 bond issue three-to-one. The vote was so favorable, Perl-Mack feels, only because homeowners had been sold on the bond issue by a monthly newspaper which explained the recreation plan, its advantages, and the financing system.

The success of this plan shows the importance of commissioning an experienced land planner. Perl-Mack's planners conceived the plan and wrote the 30-page recreation study, worked out the details of the financing, and worked closely with the builders on every phase of the operation.



ROADS AND GREEN SPACES are separated in this cluster scheme by layout of streets and by siting of houses and garages.

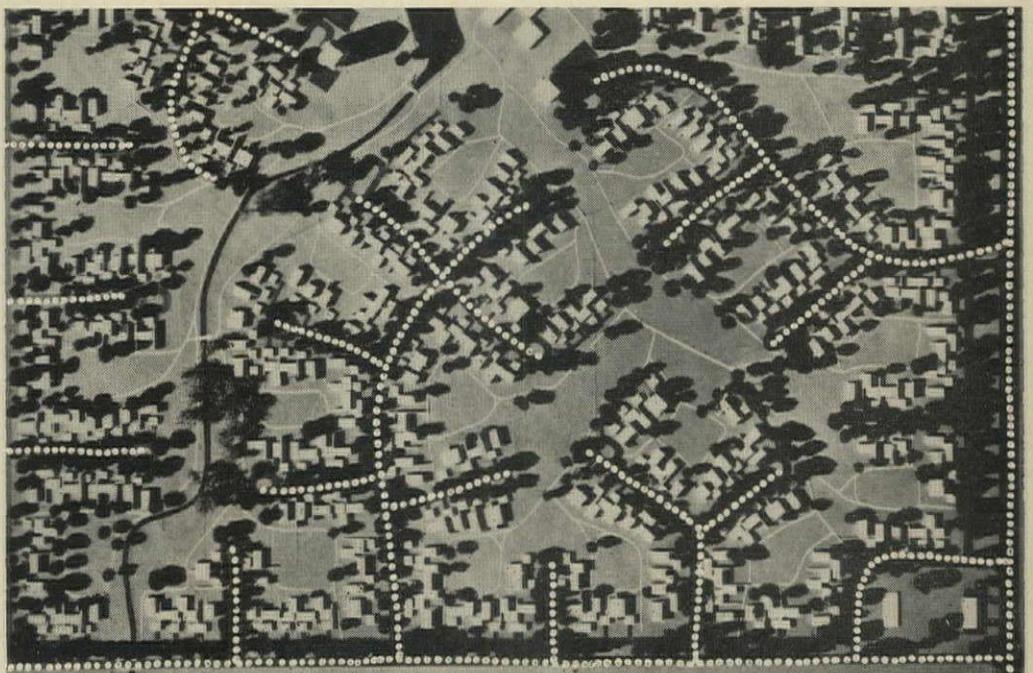
9. Put the automobile in its place

Separation of cars and people is a mark of today's good land planning.

This problem which is most acute in the US because of the role of the auto in American family life, is difficult to solve. But it has been solved in the plan shown in model form above and again in plan at right (this plan won second prize out of 4,000 entries in the Mastic Tile land-planning competition).

In this cluster plan, family life turns away from the streets (shown as dotted lines on plan at right) and inwards to the large, "Radburn-type" green park in the center of each cluster. Garages provide a barrier between side-yard gardens and street traffic.

This plan was developed by Manuel Dumlao, John Buenz, Robert Burley, and Edward Kovach of Birmingham, Mich.

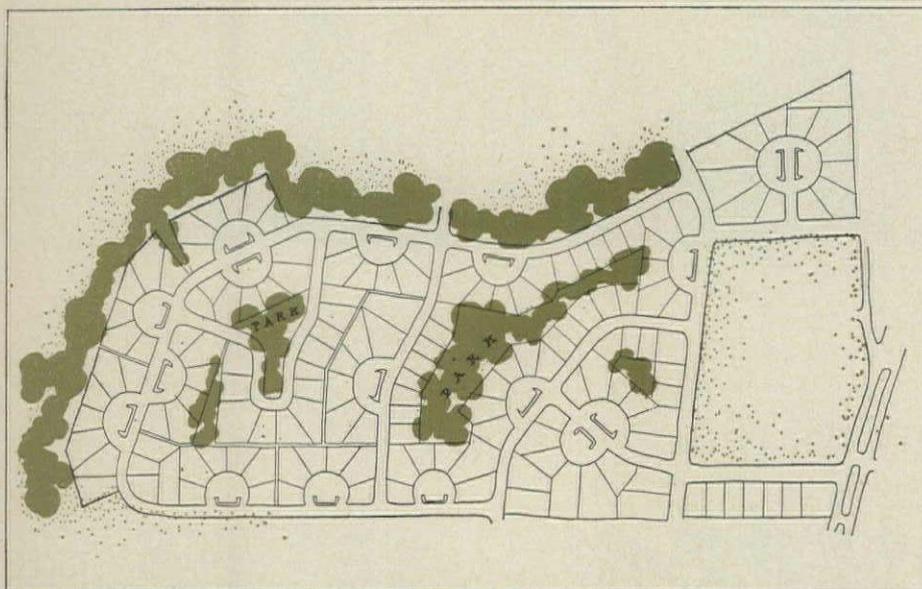


PLAN shows layout of streets (dotted lines), and how park spaces interconnect.

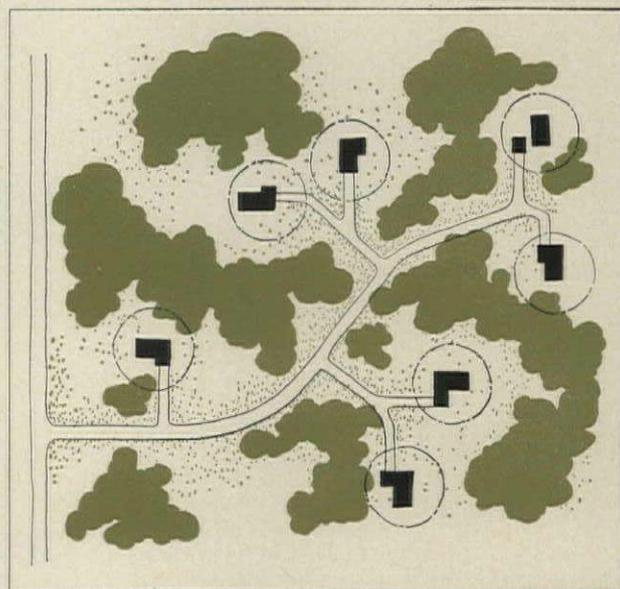
continued



OFF-CENTER CUL-DE-SAC for houses on ¼-acre lots won Mastic Tile merit award for Hayahiko Takase and Kyosuke Yoshioka of Detroit.



CLUSTER PLAN with green parks, half- and full-circle clusters was designed for Goodwin Housing Corp by Stephen Sussna Assoc, Trenton, N.J.



CIRCULAR LOT PLAN on wooded Colorado mountainside was designed for Castle Pines by Harman, O'Donnell & Henninger.

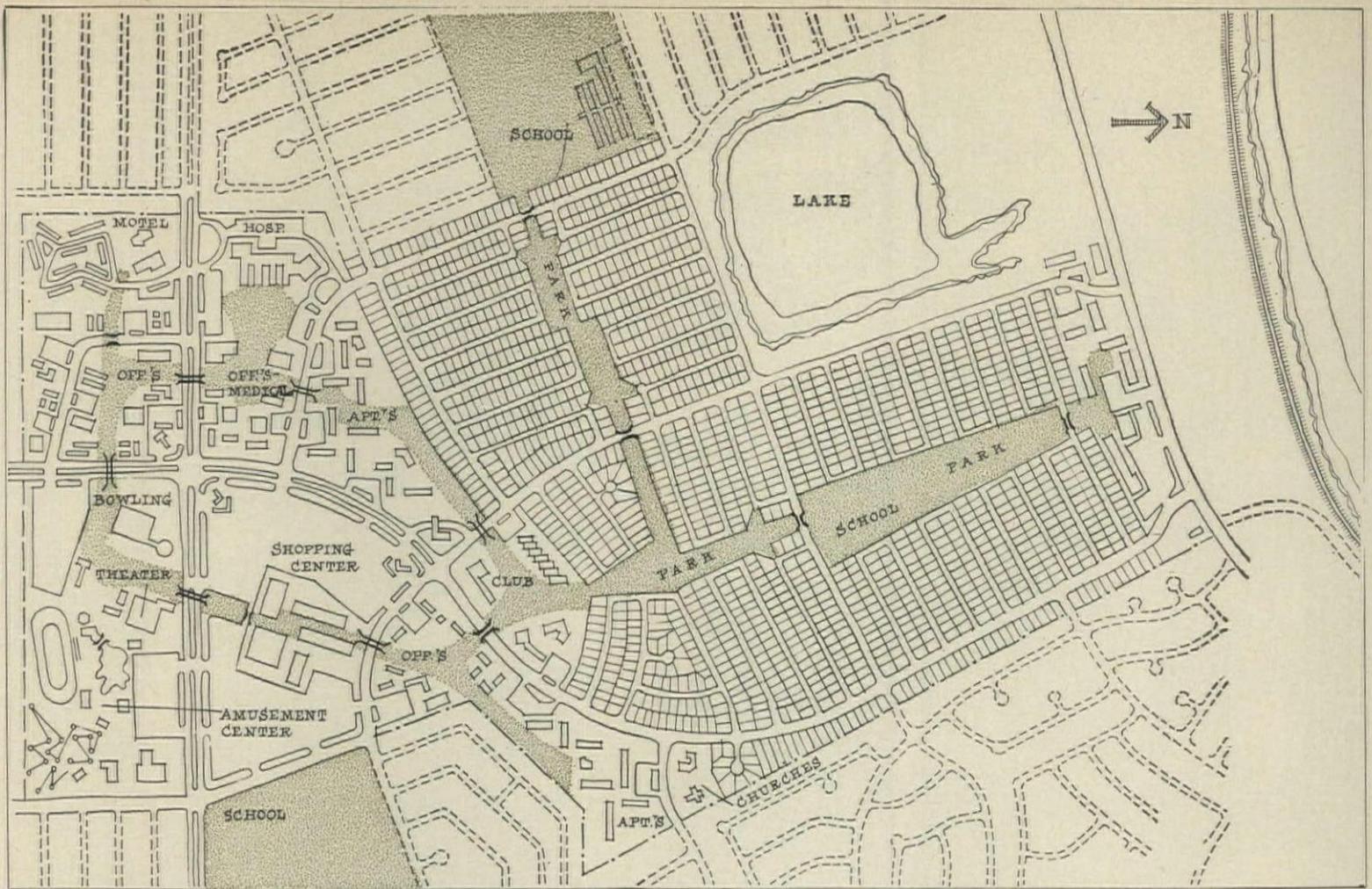
10. Don't settle for old-fashioned street plans

These three plans show some of the fresh ideas that planners are developing to create better family living. Conventional curvilinear street patterns are being modified into patterns like these, as well as other new layouts like long and short cul-de-sacs and loops (see plan opposite), and micro-neighborhoods (see p 164).

The round-lot plan above, perhaps the most unorthodox of any, is an

imaginative way to site houses with minimum disturbance to the land. It was conceived for Castle Pines, a 900-acre site with fine trees and a striking view of the Rockies. When the planners tentatively laid out conventional curvilinear streets, it was clear to them that this layout would destroy much of the character of this site. An interior park with perimeter lots was next studied and discarded. Since the de-

velopers wanted bridle trails and other common park land, the planners suggested that all land should be placed in a state park and recreation district, with a fire and water district to provide a mil levy to pay for upkeep. The state accepted the idea. Then Planner Bob O'Donnell worked out clusters of 17,000 sq ft circular lots and 20' approach streets, all located to leave a maximum of land untouched.



GREEN BELTS, accessible from short loop streets, provide traffic-free path for children walking to school in Greenhaven subdivision in Sacramento.

11. Plan so children can walk to school safely

One of the biggest assets of a well planned green-belt community is its safe pedestrian paths between houses, schools and other community facilities.

The plan above shows how the park areas in Greenhaven are all linked by

underpasses or pedestrian bridges so children need never cross a street.

Because Sacramento is renowned for its parks and encourages builders to include them in their plans, Greenhaven's developers were able to get

the city to accept dedication and continuous maintenance of the open space in this development. The cost of land used in this way, say the developers, "is recouped by simplification of street design, engineering, and improvements."

Dan Owen



Panda



UNDERPASSES connecting park areas provide safety for children in Bayberry development, Syracuse (left photo), Don Mills in Toronto (right).

continued



GRAND PRIZE WINNER among 4,000 land plans entered in Mastic Tile's 1959 contest, this plan includes four types of houses (opposite) grouped

in 56 "micro neighborhoods." One-third of the houses are row houses. Plan is by Dallas Architects Howard Meyer, James Pratt, and John Box.

12. Use several types of housing to avoid monotony

When you do, you also avoid the commonest criticism of US housing: too many subdivisions have only single-family houses, appeal to a single age and economic group.

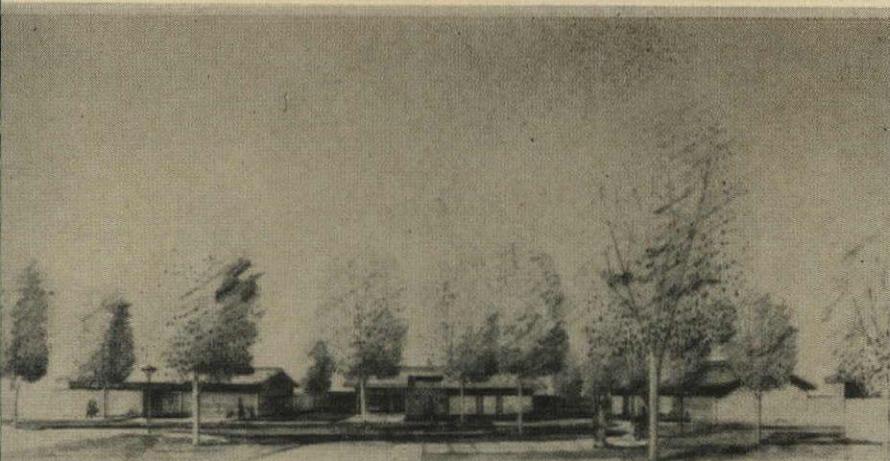
The subdivision plan above is designed to include four different kinds of housing. It won the grand prize in Mastic Tile's land-planning competition, and the jury—headed by MIT Dean Pietro Belluschi—points out that the plan provides for "... a community of varied texture in which many tastes

and modes of living can be happily achieved. It solves the problem of internal traffic while maintaining peace and serenity for the grouped houses."

Designed for a 160-acre tract, this plan has 614 units—3.83 per acre. Sixty-eight percent of the units are one-family houses, 32% row houses. The planners also developed a typical grid-iron plan for comparative purposes, computed that the plan above would produce a builder's profit of \$1,020,000 (vs \$903,000 for the grid plan) and

a return of 160% (vs 141%) on land-cost investment. The main reasons for this bigger profit: the micro-neighborhood plan has more housing units (614 vs 544) and fewer streets (25 acres vs 37.5 acres). This plan has 32 acres of parks (vs none in the grid development) but single-family house lots are smaller (65'x120' vs 75'x120').

FOUR HOUSE TYPES (right) are suggested for use in land plan above. Row houses and apartments will give variety to the subdivision, which is mostly single-family houses.



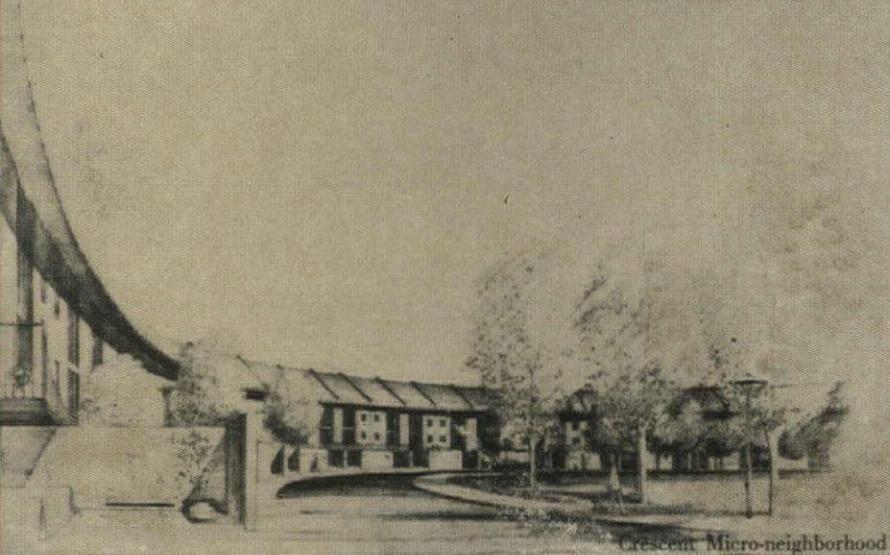
Detached House Micro-neighborhood



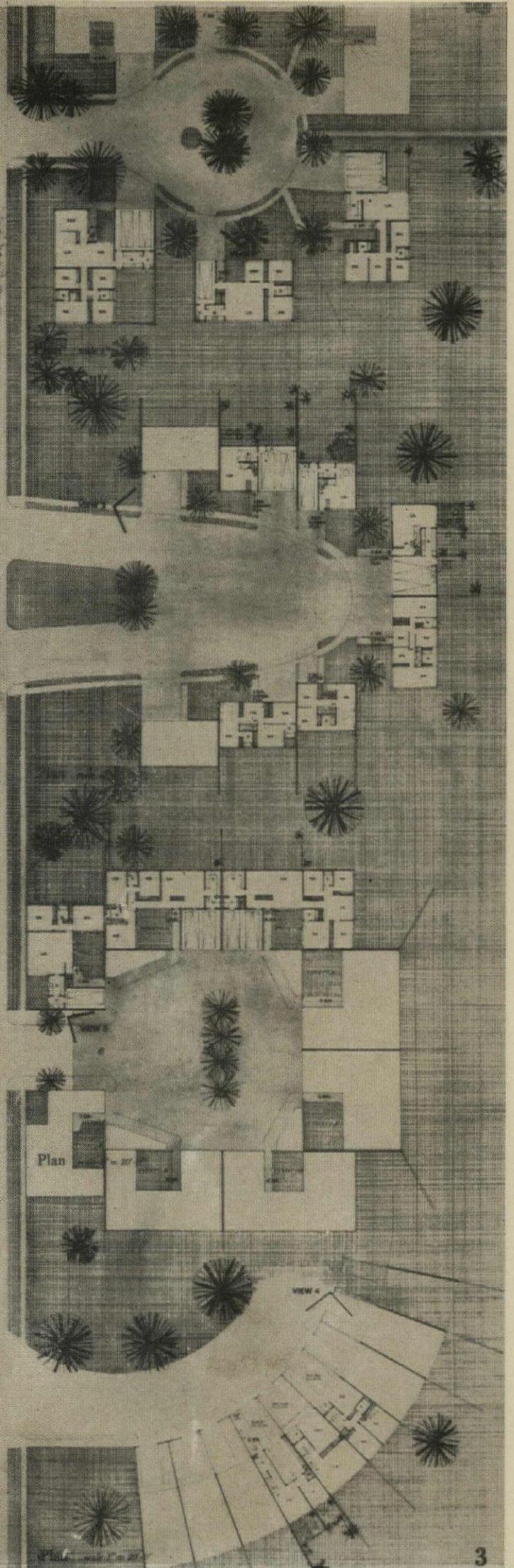
Staggered Row House Micro-neighborhood

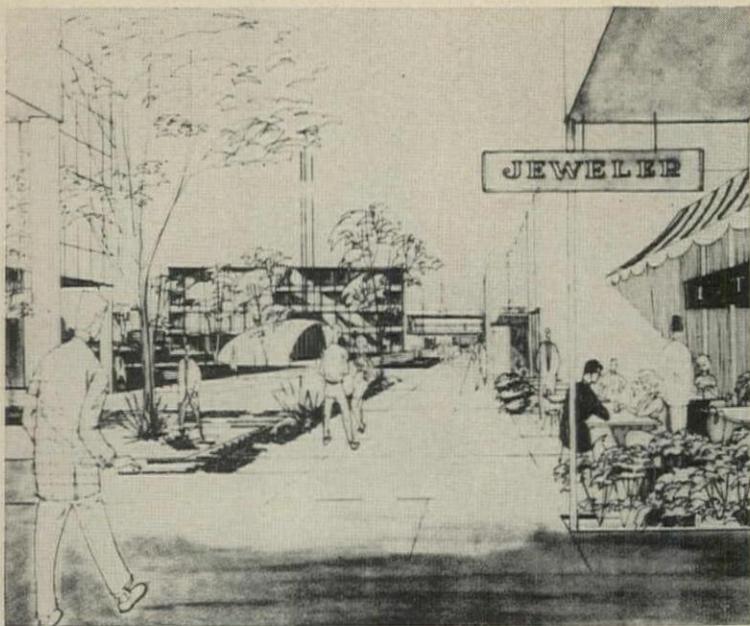


Atrium House Micro-neighborhood

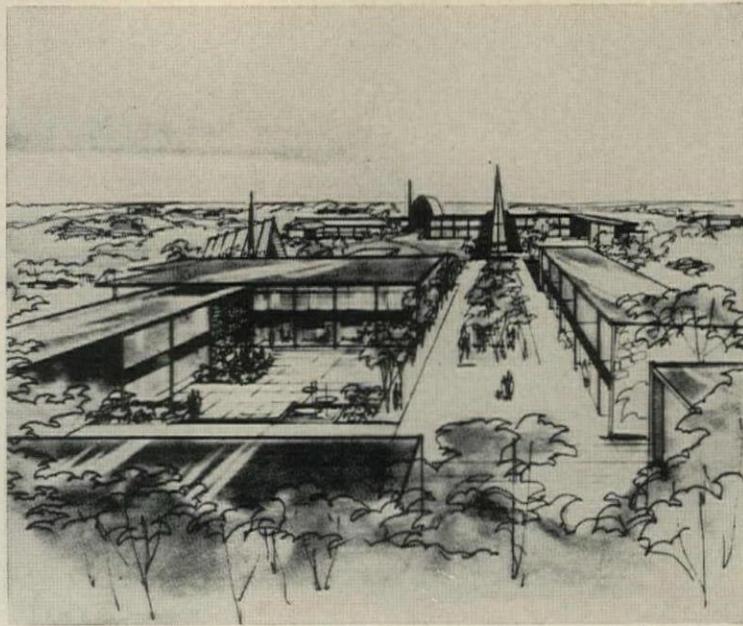


Crescent Micro-neighborhood





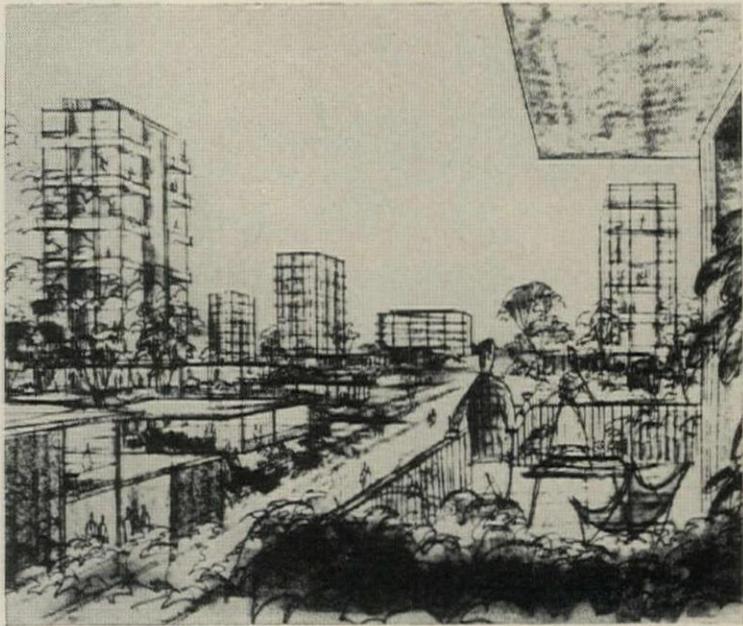
COMPLETELY PLANNED DOWNTOWN AREA, one of few in this country, will be built in University City.



SEVERAL COMMUNITY CENTERS will be located between residential neighborhoods, will have shops, churches, clubs, and libraries.



GARDEN APARTMENTS arranged around central greens in "park-village residence groups" of 15 acres each will house 50 persons per acre.



HIGH-RISE APARTMENTS (16 to 30 units an acre), semi-detached houses (5 to 15 units an acre), single-family houses (3.5 an acre) will be combined.

13. Tie your plan in with a master plan

This rule is responsible for one of the best planned new towns in the country.

The "new town" is the result of close cooperation between a team of land developers and a city planning department. The city is San Diego and the developers are Irvin Kahn, Carlos Tavares and Norman Smith (who are also homebuilders). The new town is University City, to be the home of a new branch of the University of California. In another ten years the new community, with the university as a hub, may have a population of 100,000.

Its first 22 model houses, built by the developers (though other builders have already bought lots) will be open next month when the first few hun-

dred students will also start classes. Some 2,000 students are expected in five years and eventually there may be 25,000 students and a staff of 8,600 on the 1,100 acre campus (shown in plan opposite).

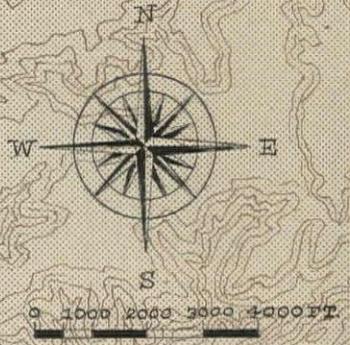
University City will be more than a college town. It will be a balanced community of research labs (General Atomics, with a \$10,000,000 campus-like establishment, is already located in the area), light industrial plants, hospitals, churches, schools, theatres, hotels, and a wide variety of shops and service facilities. In addition to single-family houses, the developers will also build garden and high-rise apartments like those shown in sketches above.

This variety of housing is intended to attract a cross-section of population.

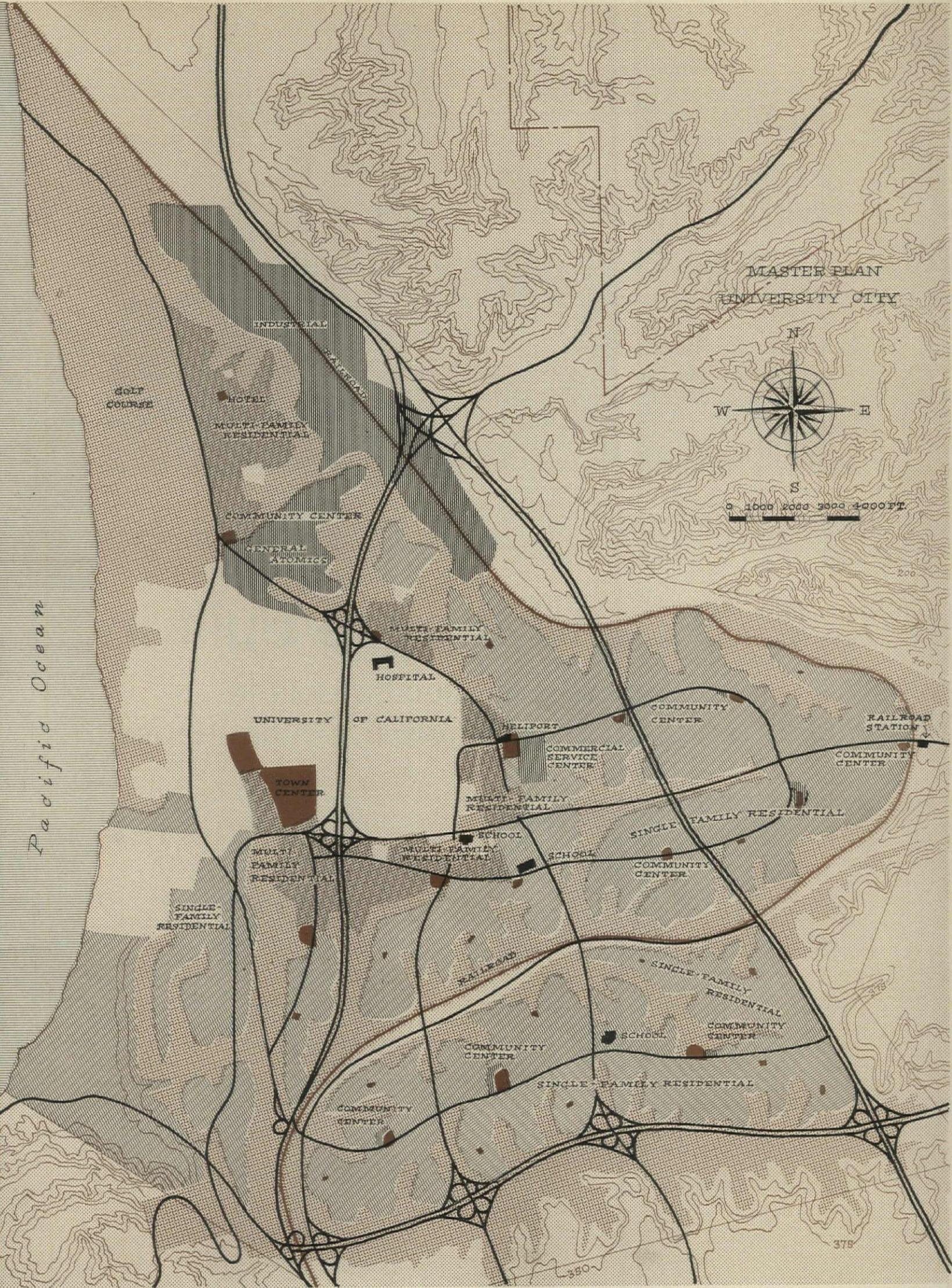
When the city and the university began talking about a San Diego campus four years ago on city-owned land ten miles north of downtown, they soon got together with the Kahn-Tavares-Smith group which owned some 4,500 acres of adjoining land. All three groups worked closely together, but the master plan opposite is largely the work of the San Diego planning department. Approved by the City Council, it will be carried out as shown here.

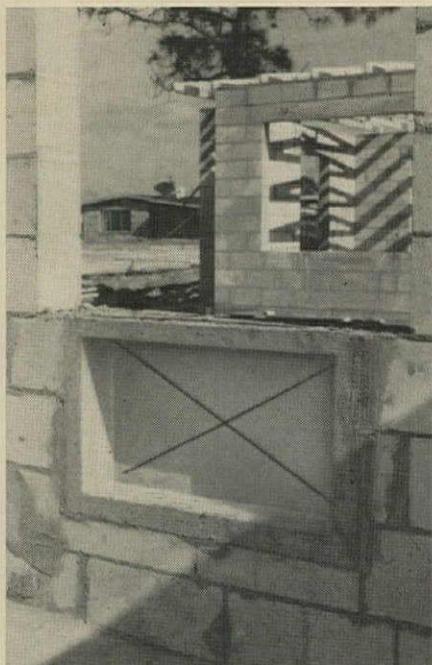
MASTER PLAN of University City shows how residential community, and industrial areas will surround town center and university.

MASTER PLAN
UNIVERSITY CITY



Pacific Ocean





1. "This pre-cast concrete form makes an ideal start for installing the General Electric Built-In *Thinline* in cement," Charles LaMonte says. To install the unit, merely tap out this outside shell.



2. After the all-aluminum case is permanently sealed into wall with mortar, the drawer-type chassis slides easily into place. No nuts, bolts or screws needed. Outside louver installs from room side.



3. Next, attach the interior baffle. It's adaptable to any room decor. Paint, paper or panel it. Or hang a picture over it. All that's left is to plug in the Built-In *Thinline* and let it run.

1...2...3...and they're built in and one General Electric Built-In cools Florida builders' whole five-room house



Left to right: Charles LaMonte, Mandell Shimberg and James Shimberg.

"ONE General Electric Built-In *Thinline* really does the whole air conditioning job!" says Charles LaMonte, "and in Florida that's *quite* a job." LaMonte, in partnership with the Shimberg brothers, Mandell and James, owns Everina Homes, Inc., builders of Town 'N Country Park in Tampa, Florida.

Everina offers home buyers an optional choice of other appliances, but finds that the majority of people want the General Electric Built-In *Thinline*. It's one of the top selling attractions of the homes.

The Florida builders went on to say that they especially like the *Thinline's* easy installation and design.

"With the inside baffle, it is so easy to furnish any room attractively. You can paint, paper or panel the baffle to match the decor. And, you don't have to worry about avoiding drafts when you arrange furniture."

Everina is partial to General Electric for other reasons, too. LaMonte listed three important ones. "The top acceptance of the General Electric brand name, the national advertising campaign that helps to sell the *Thinline* and the good product service that General Electric offers locally."

General Electric has the *Thinline* for your air conditioning needs, *whatever* the problem.* Your General Electric dealer will be happy to give you all the details. General Electric Company, Room Air Conditioner Department, Appliance Park, Louisville 1, Kentucky.

*Cooling capacities are tested and rated in accordance with NEMA Standard CN 1-1958.



Progress Is Our Most Important Product

GENERAL  ELECTRIC

NEW WAYS TO BUILD BETTER

Be sure to see

A monthly report on home building ideas, products, and techniques

Starting here

What the leaders are doing



Here is a low-cost way to finish block-walled rooms

It takes the painter above just 30 minutes to finish a basement recreation room for Gordy Enterprises, New Castle, Del., by spraying the walls with fleck-size, multi-color paint. Cost: \$12 for paint and labor.

Other builders—John Long in Arizona and Bill Levitt in New Jersey, for example—are using the same low-cost finish for above-grade block walls.

Says Gordy's Project Manager Ken

Freemark: "The small flecks make the mortar joints inconspicuous at 15' in artificial lighting. This is perfectly acceptable to our buyers, who also like the recreation room we give them 4' below grade level."

Gordy's below-grade rooms are waterproofed with a parge coat and tar on foundation walls and a polyethylene barrier under the slab. This will prevent damage to the painted walls.



RECREATION ROOM in Gordy Enterprises' \$13,500 house has block walls covered with heavy coat of sprayed-on multi-color paint. Gordy is developing a 1,200 unit tract.

And on the following pages

Technology

Circular roof spans 42' with light framing. . . . How orientation and roof overhang affect heat gain. . . . Plywood goes up faster with new gluing system. *page 165*

More What the leaders are doing

Production control board shows at once where all jobs stand. . . . Magazine house with nine good ideas. . . . Wooden jigs speed foundation layout. *page 173*

New Products

New modular fireplace takes many shapes. . . . Door panels with decorative styling. . . . Modular windows, built-in hardware, bath fixtures. *page 185*

Publications

How to apply tile to gypsum drywall. . . . How to start a market survey. . . . Catalogs on lawn sprinklers, electric heat, decorative tile. *page 208*



**“A top quality window unit that gives us remarkable savings in material and labor
...beats even very low-cost conventional windows”**

No need to tell you what today's home buyer wants. He wants recognized quality at a good price.

To meet the demand for quality—and to keep costs as low as possible—today's successful builders are taking advantage of Andersen Strutwall window units.

John Fiser, builder of 125 homes in Knoxville last year, expresses it this way . . .

“Strutwall is a top quality window installation with remarkable savings

when total installed cost is compared with even very low cost conventional windows.

“There are substantial direct material and labor savings which more than offset the slight additional basic cost of the Strutwall unit. And, the fact that the unit comes completely assembled and requires no application of outside trim or extension jambs, further simplifies warehousing and handling,” Mr. Fiser states.

Because Andersen Strutwall helps

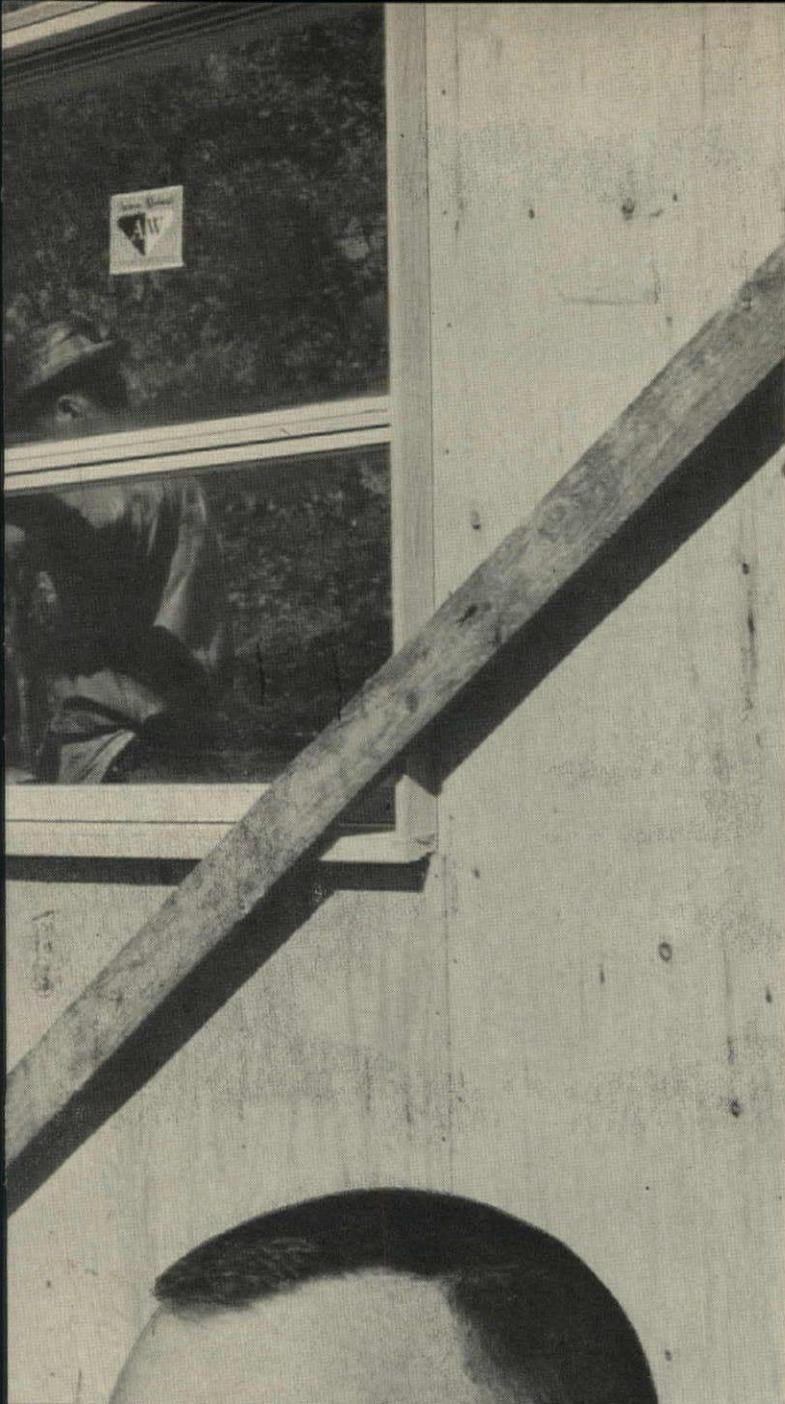
him achieve faster erection time of each shell with a smaller crew, Mr. Fiser reports the additional advantages of less supervision and fewer errors. This, he emphasizes, helps him make all around better use of his organization.

Why don't you take advantage of Strutwall? Saleable quality and lower installation cost add up to a big bonus benefit for you—*greater profit*. See Sweets File, your lumber dealer or write for all the facts.

Andersen Windowalls*

*Trademarks of Andersen Corporation

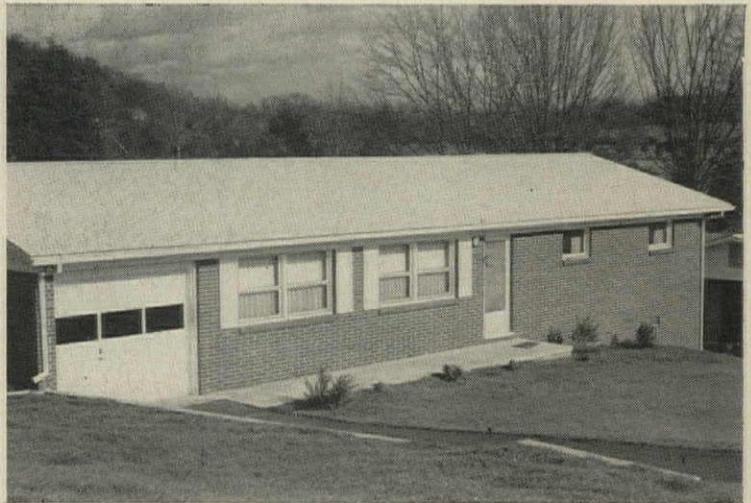
ANDERSEN CORPORATION • BAYPORT, MINNESOTA



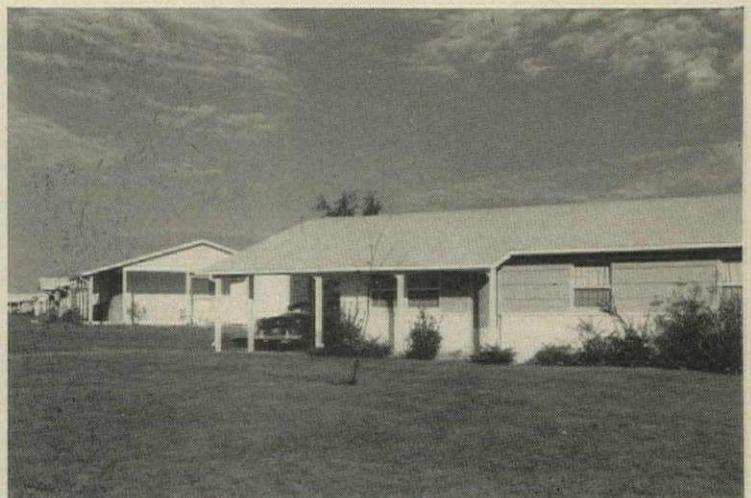
“We have used **STRUTWALL** almost exclusively in everything we’ve built” says John Fiser



Here you see **Andersen Strutwall**—a complete structural wall component with window unit—being tipped into place at the Fiser Development. Strutwall cuts window installation time from 30 to 50%.

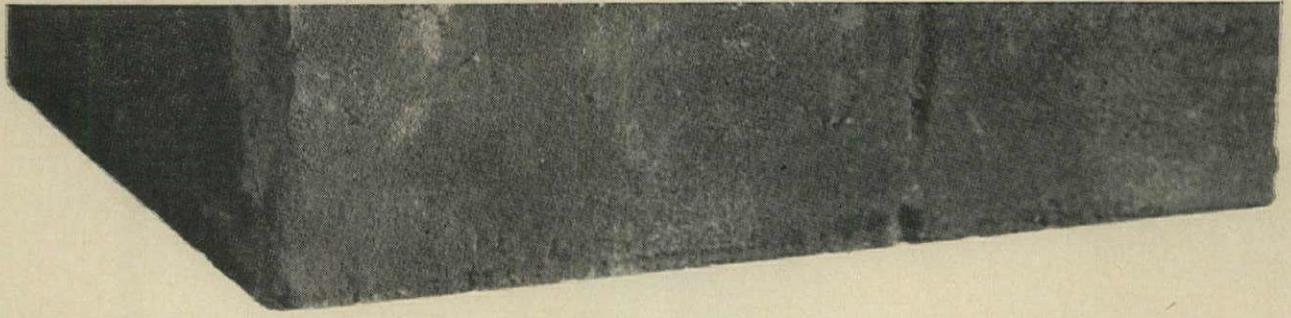


This **Fiser-built ranch house** shows how Andersen Strutwall combines beautifully with brick. Use versatile Strutwall with any type of construction, any type of siding. Easily pre-paneled.

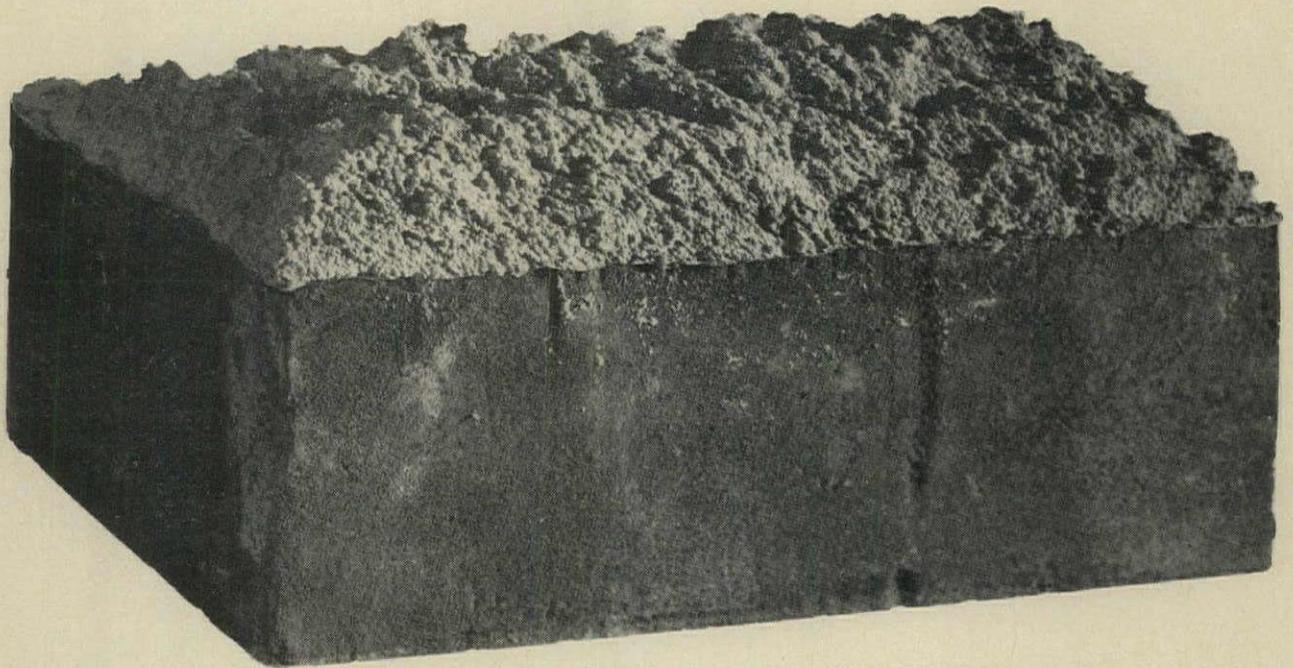


No “for sale” signs in a neighborhood like this. “The name brand Andersen, the beauty, quality and practical features of Strutwall give us numerous sales features,” reports Mr. Fiser.

Meet builder **John Fiser**, Knoxville, Tennessee. “We’re an enthusiastic supporter of Andersen Windows, and especially the Strutwall system,” says Mr. Fiser.



Successful Advertising
is Built
Brick by Brick



...in House Beautiful

To tell the story of brick, to remind prospective home buyers of the beauty, function and durability of brick, to make the most of each advertising impression, the Structural Clay Products Institute advertises in HOUSE BEAUTIFUL.

Month after month SCPI ads in HOUSE BEAUTIFUL reach more than 4 million readers, including HOUSE BEAUTIFUL'S 900,000* Pace Setter families – high income leaders (average: \$15,715) in communities across the nation. Pace Setter families are prime prospects for homes, home furnishings, home products of all kinds. When they see what they like, they buy. And when they buy, their example encourages others.

That's why SCPI uses HOUSE BEAUTIFUL to emphasize the safety, economy and versatility of brick.

And, that's why more manufacturers of home products than ever before use HOUSE BEAUTIFUL'S pages to influence this influential audience.

House Beautiful

572 MADISON AVENUE, NEW YORK 22, N. Y.

ONE OF THE 13 KEY HEARST SELECTIVE MARKET MAGAZINES

*PUBLISHER'S ESTIMATE,
LAST 6 MOS., 1960



CIRCULAR ROOF is made up of 12 triangular folded plates fastened to 12 joists (3x6s). Plates and joists converge at center steel compression

ring which frames skylight. Twelve buttresses (photo, bottom left), set on concrete piers at grade level, carry roof load.

This circular roof spans 42' with light framing



BUTTRESS—paired 2x8s braced by five 3x3 struts—supports 3x6 roof framing. Outriggers on ends of 3x6s are 1x12 fascia boards.

New Orleans Architect Albert Ledner designed this roof system for a pair of circular houses which he joined to make one house. Here is how the roof was built:

1. Twelve 3x6s 20' long were placed between outside buttresses (photo left), which support the roof, and a central steel compression ring.
2. Purlins and edge members (2x4s) were framed into triangular folded plates between each pair of 3x6s. The ridge beam for each folded plate is also a 3x6.
3. Sheathing (1x6 t&g)—which tied the roof together like a stressed skin—was nailed diagonally to the purlins.
4. Paper and asphalt roofing finished the job. To build a flat roof with a 42' span over a rectangular house with the same area (1,390 sq ft), you would need three times as much basic framing timber if you used dimension 3x16s or more than twice as much with laminated 3x12s.



FINISHED HOUSE has nonloadbearing exterior walls that can be set at any position because buttresses (photo at left) carry all loads.

Technology continued on p 168



Wood windows are the firm basis for imaginative and salable construction. Chosen from a wide and diversified array of stock designs, wood windows save builders time and money.

New sales opportunities are seen through wood windows

built of WOOD means built to sell



Good-looking wood windows are windows of distinction. They blend beautifully into every house you build. Both traditional and contemporary homes welcome eye-appealing windows of wood. William N. Alderman, architect.

Windows of *wood* are today's best buys for home seekers... best sellers for home builders. Wood windows add a warmth all their own. They're beautiful to see, and see through. In countless stock styles and sizes, wood windows are easier and more economical to use... offer more adaptability in most styles of homes, plus more versatility in exterior and interior decoration.

Wood windows help sell your houses, because they provide more insulation, permit less condensation, require little effort and expense for your customers to maintain. Wood windows help change "for sale" signs to "sold" signs. For more data on better homes of wood, write:

NATIONAL LUMBER MANUFACTURERS ASSOCIATION
Wood Information Center, 1319 18th St., N.W., Washington 6, D. C.

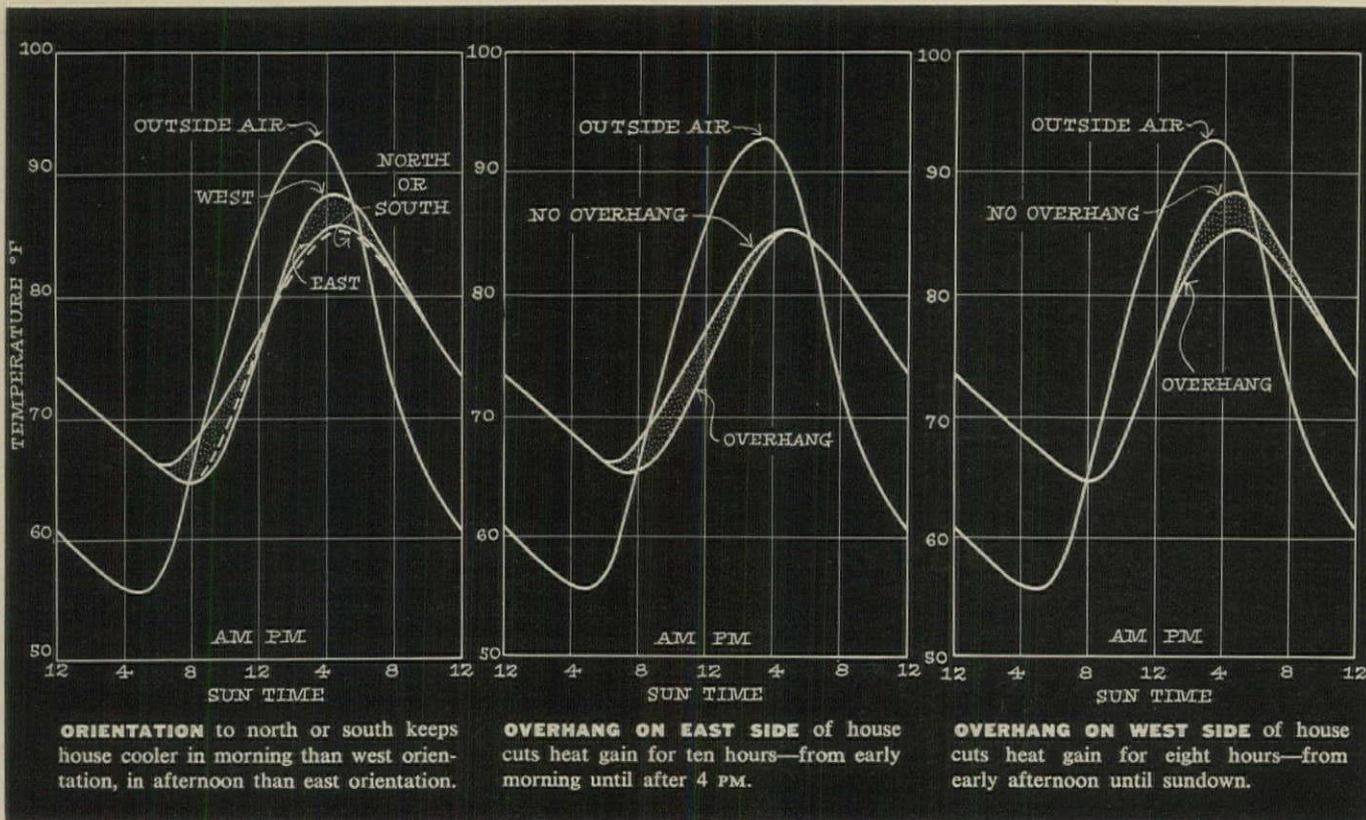
nlma

wood

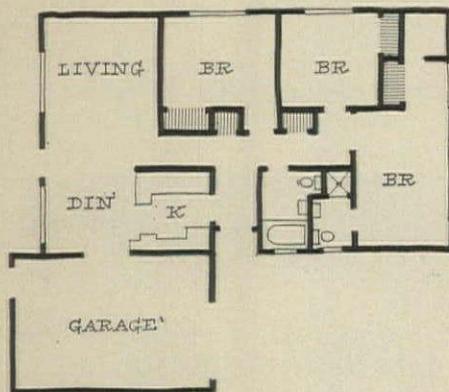
For built-in sales appeal, nothing takes the place of

The wide-eyed wonder of wood windows brings all the great outdoors into the great indoors. Buyers, by having more attractive "rooms with a view," are getting more livable homes for their money.





Here is how orientation and roof overhang affect heat gain



The graphs above show some results of tests made in identical tract houses (floor plan, left) by Richard D. Cramer, assistant professor of housing at the University of California.

All the houses were built on slabs, had insulated roof decks on exposed beams but no wall insulation. Glass areas were 35% of wall.

Here are Cramer's two most meaningful findings:

1. At the height of summer, a house whose living areas face south is as cool as a north-oriented house, and both are cooler than east- or west-

oriented houses (graph, above left). The south-oriented house rapidly loses its advantage as the summer wears on unless it has deep overhangs.

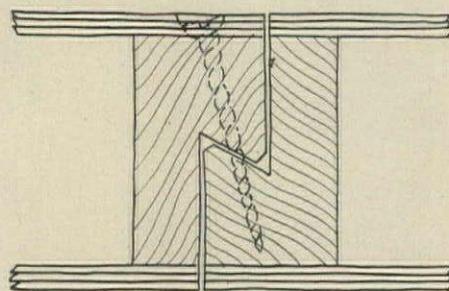
2. Even though the afternoon sun is hotter than the morning sun, exposed glass on the east side puts as big a heat load on the house as exposed glass on the west (graphs, center and right). Reason: Heat gain from the morning sun is dissipated slowly during the hottest part of the day, and heat gain from the afternoon sun is lost rapidly during the early evening when temperatures drop sharply.

New development may solve drywall stapling problem

The problem: Drywall often fails to hold to studs because its paper surface is perforated by the staples. Now Spot-Nails Inc is developing an automatic stapler that prevents perforations by combining a driving head with a dimpler.

The new stapler stops penetration of the staple 1/16" below the drywall's surface, leaves a small oval dimple that requires less joint cement than nails do.

Two big advantages of automatic stapling: 1) It is up to five times faster than driving nails by hand. 2) It reduces nail popping. The deeper a fastener is imbedded in the stud, the more popping. A staple leg is much shorter than a nail shank (although a staple grips about as well as a nail).



New Z-joint speeds erection of stressed-skin panels

Rabbeted into edge members, it automatically positions and aligns panels. Rabbeted edges are glue and screw fastened to make the joint a structural purlin. Using 4'x16' Z-joint panels (developed for Simpson Engineered Wood Products Co), five men erected a 5,000 sq ft school roof in Shelton, Wash. in five hours. Erection cost: 4¢ a sq ft.

Green wood will not crack or shrink after new treatment

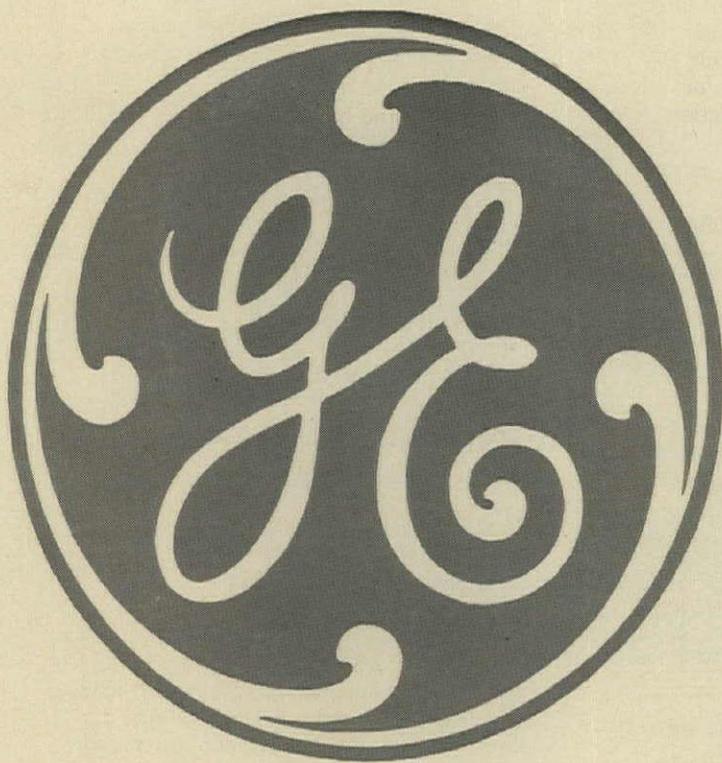
When freshly cut wood is treated with a polyethylene glycol solution, it becomes dimensionally stable, says Dr Alfred Stamm of Forest Products Laboratory.

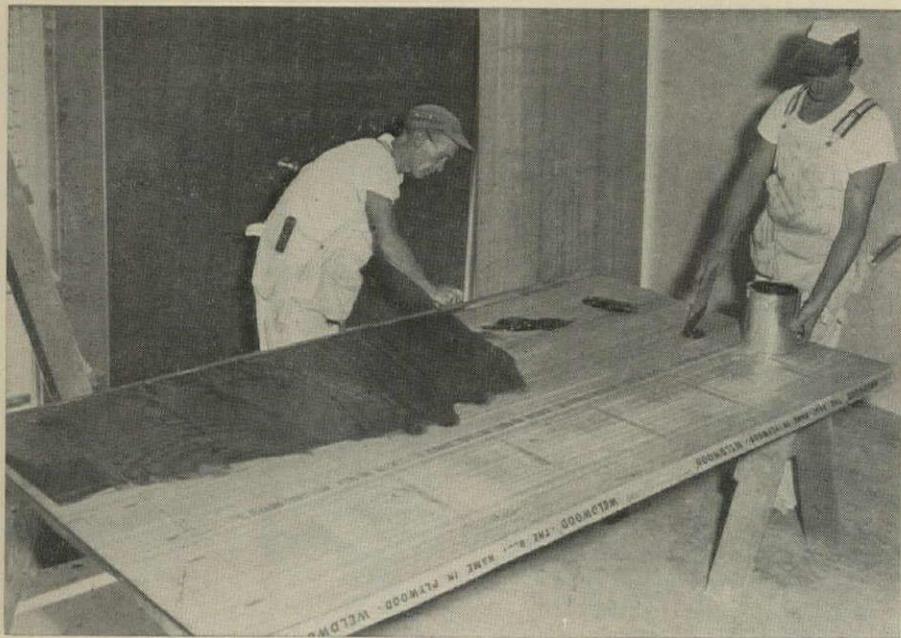
The green wood absorbs the chemical, which sets up a vapor barrier just under the wood surface. Evaporation in the wood cells is balanced and decay is prevented. FPL recommends a protective coat of polyurethane varnish after the treatment.

The treatment is one of three chemical methods being developed by FPL to stabilize wood. The other two—cross-linking cellulose molecules in the wood fiber and "bulking" spaces between cellulose molecules—are said to be tricky and expensive.

You, too, can realize benefits from the several important **firsts** made in the past two years by General Electric Textolite® laminated surfacing. Laminated plastics took on a new look when G. E. introduced Textured Textolite. This notable first gives a surface that is not glass-like...woodgrain patterns look and feel like real wood. G-E Textolite is first

to introduce a five-color pattern. Known as Rūban Mist, this unique ribbon-striped pattern, when combined with any of six other colors in the Mist collection, affords the opportunity for outstanding color harmony. Another important first is the widespread availability of new Walnut woodgrains with no grain pattern repeat for 63 inches. Add to the above the fact that G-E Textolite introduced the often copied Spungold pattern, developed light-engineered desk patterns and colors, and makes all woodgrains available in crossgrain. What does this progress mean to you? It opens exciting new avenues of expression in the use of plastic laminates...unlimited design opportunities provided by a new finish, new design concepts, more adaptable woodgrain patterns. Ask your G-E Textolite distributor for details on these new laminate advancements. You'll find his name under PLASTICS in the Yellow Pages. Or, write General Electric Company, Dept. HH-80, Coshocton, Ohio. Progress Is Our Most Important Product.





With this gluing system, plywood goes up faster

Two men simply apply a one-coat contact adhesive to the back of a plywood panel, erect the panel against drywall, and toe-nail it with 1¼" brads along the vertical edges for a sure hold until the adhesive sets.

No overnight shoring is needed—the adhesive (BB Chemical's Bostik 2293) sets quickly, yet gives workmen 30 minutes to "float" the panel into its

exact position. Edges of plywood need not fall over studs—the drywall gives sufficient backing.

Two other big benefits: 1) No nail heads mar the panel surface. 2) The drywall backing reduces reverberation and noise transmission (when glued directly to studs, panels act like a drum-head). The new system was developed by Cerel-Perini Assoc, Boston.

Navy scientists develop a paint that will not burn

The nonvolatile, nonflammable paint, a chlorinated alkyd resin, has passed the Navy's toughest paint test: A painted steel panel did not ignite when heated to 2,300 F for 30 seconds.

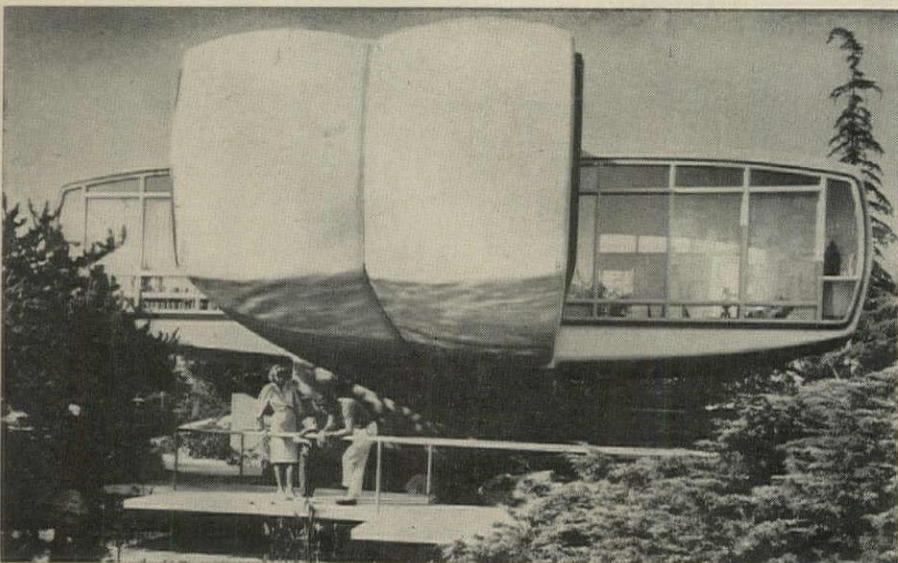
Although developed for use on ships, the new semi-gloss enamel is well suited to residential work (most injuries in home fires are from flash firing of paint films and furnishings, not from the burning structure). Paint can be made in a variety of colors to go on metal or wood; mineral spirits can be used as a thinner and solvent.

Alkyd resin solution is described in Military Specification NIL-R-21417.

Spray-on roofing may cut labor costs by 85 %

Using a new triple-nozzled spray gun, three men can coat a roof with glass fibers and asphalt at a rate of 15,000 to 18,000 sq ft a day. By conventional methods, a built-up roof of equal size would take nine men 2½ days.

The new roofing system, on which patents are pending, is called Monoform and was developed by Flintkote. Roofing contractors will be licensed to use it on flat and free-form roofs. A Flintkote spokesman says Monoform may lead to the replacement of many of the company's built-up roofing products. The gun used in the system was developed by Sealzit Co of America, a recently acquired Flintkote subsidiary.



Tests show structural plastic can take it

After three years and nearly six million visitors, Monsanto's plastic house of the future (above) has proved that it can do the job expected of a single-family home. The house is made of four 16'x16' reinforced plastic wings cantilevered from a central utility core.

Engineers have found that vertical deflection at wings' outer edges has been

at an average rate of only .048" a year. And the rate is slowing, soon will be no more than settling of a conventional house. Most likely reason: Balancing stresses between polyester plastic and glass fiber reinforcing takes time. At first the polyester carried more load than it was designed for. Now the glass fibers are taking full share of load.



FHA's new soil tester is now available to builders

If you want to use the PVC (maximum potential volume) meter (above center), get in touch with your FHA district office.

The meter (H&H Feb) shows how much your soil will swell through wet and dry seasons—a key factor when you decide how strong your slabs must be to prevent cracking under soil pressure.

A PVC test takes two hours. Here is how to make it: Put 10 teaspoons of soil in the tester's cylinder. Tamp it down. Add 5 oz of water. Soil will swell against a restraining ring and create pressure shown on the dial. With two charts (right), convert meter readings to psf and then to a PVC rating.

Land and development

both cost too much to justify

what many towns now require

"Development costs have at least tripled," says Martin Bartling, NAHB president. For this there are four reasons:

1. It is partly the builders' own fault. Not enough builders know enough about how to cut earthmoving and street-laying costs with today's much more efficient machinery (see *page 160*). Not enough of them own their own equipment, so they cannot schedule their work when they need it instead of waiting their turn on a subcontractor's timetable. Earthmoving is the only housing cost that should be as low today as it was 30 years ago; and street-laying costs have climbed only 20% (see *page 162*).

2. It is partly because cheap-to-develop land is getting scarcer. In the first postwar rush the builders used up the treeless potato fields on Long Island and the treeless flat ground between the Freeway and El Camino below San Francisco. Now they must begin using land where more earth must be moved and more trees, alas!, cut down.

3. It is partly because many towns had trouble with builders who put in streets so cheap that the taxpayers soon had to replace them. So now they are requiring better paving; many of them, in fact, are requiring much better paving than the traffic justifies.

4. It is partly because many communities are imposing development requirements that are almost scandalously high—requirements much higher than FHA standards, requirements much higher than the Urban Land Institute recommends. For example:

Arlington, Va. requires a 36' roadway in minor streets to permit two lanes of moving traffic between cars parked on either side, so houses even on cul-de-sacs front on a sea of blacktop. *Alexandria, Va.* requires a 66' right-of-way even on secondary streets. Why 66'? Because the

surveyor's 100-link chain was 66' long. Chatham County outside Savannah required 40' paving on a development street feeding into a 26' main highway. Many towns in the Southwest require not only streets, but archaic and useless alleys down the rear lot line.

Here are the standards recommended for single-family areas by the Urban Land Institute as "reasonable, time-tested, and entirely adequate." FHA agrees with all these recommendations, except that FHA is skeptical about rolled curbs. There is no good reason why any local community should insist on anything more.

"*Minor streets*—not over 26' to 27' between curbs in a 50' right-of-way. Such streets are for access to abutting property; they are not traffic thoroughfares. Rolled curbs are recommended. Single-family areas with three or less families per acre can be served adequately by roadways 18' to 20' wide, with turf or stone gutters and no curbs.

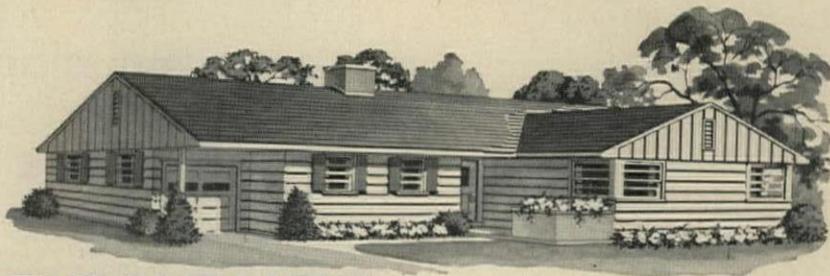
"*Secondary or collector streets*—not over 34' to 36' between straight curbs in a 60' right-of-way. A 34' roadway will permit two opposing traffic lanes plus parallel parking on each side.

"*Sidewalks* are seldom needed or even desirable on local streets in low-density developments, and often on only one side of the street in

low-to-medium density development. Sidewalk widths in excess of 3½' to 4' in detached single-family home areas are wasteful and unnecessary.

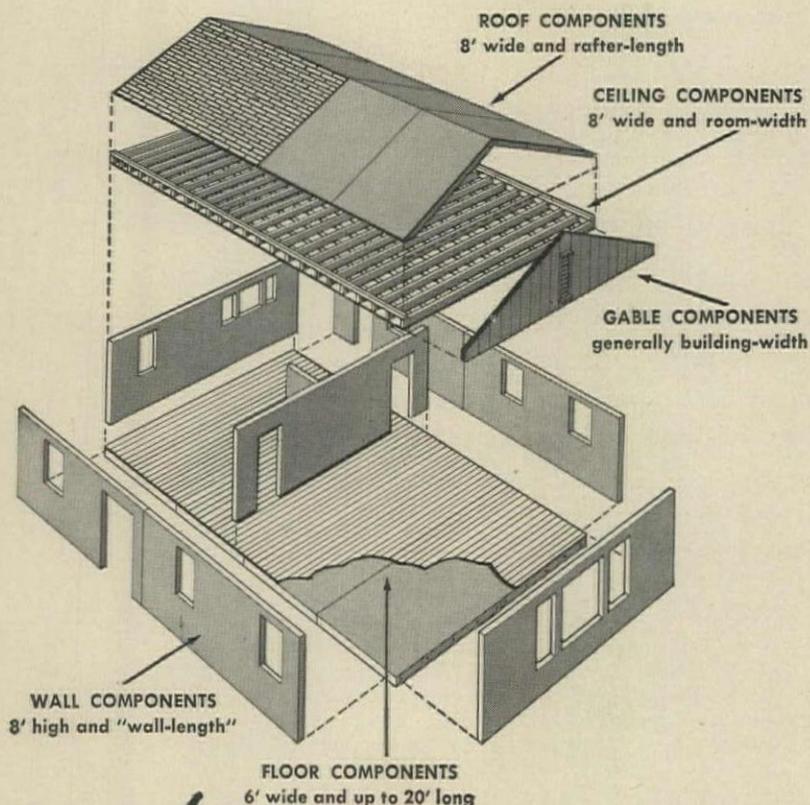
"*Paving specifications* must, of course, vary from place to place depending on climate, soil conditions, etc, but in no case should they exceed the local FHA standards.

"*Utilities* should be underground wherever possible, including electric and telephone lines. At best, utility poles are unsightly and objectionable in any location. Some utility companies are now installing underground lines without any additional cost to the developer. Others ask excessive or prohibitive charges for underground conduits."



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of his building costs!*

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2. At least 200 field-hours are saved—17 working days—saving you a minimum of \$600. You also save your overhead on the parts, while they are being manufactured in the distributor's shop—a matter of at least \$400.

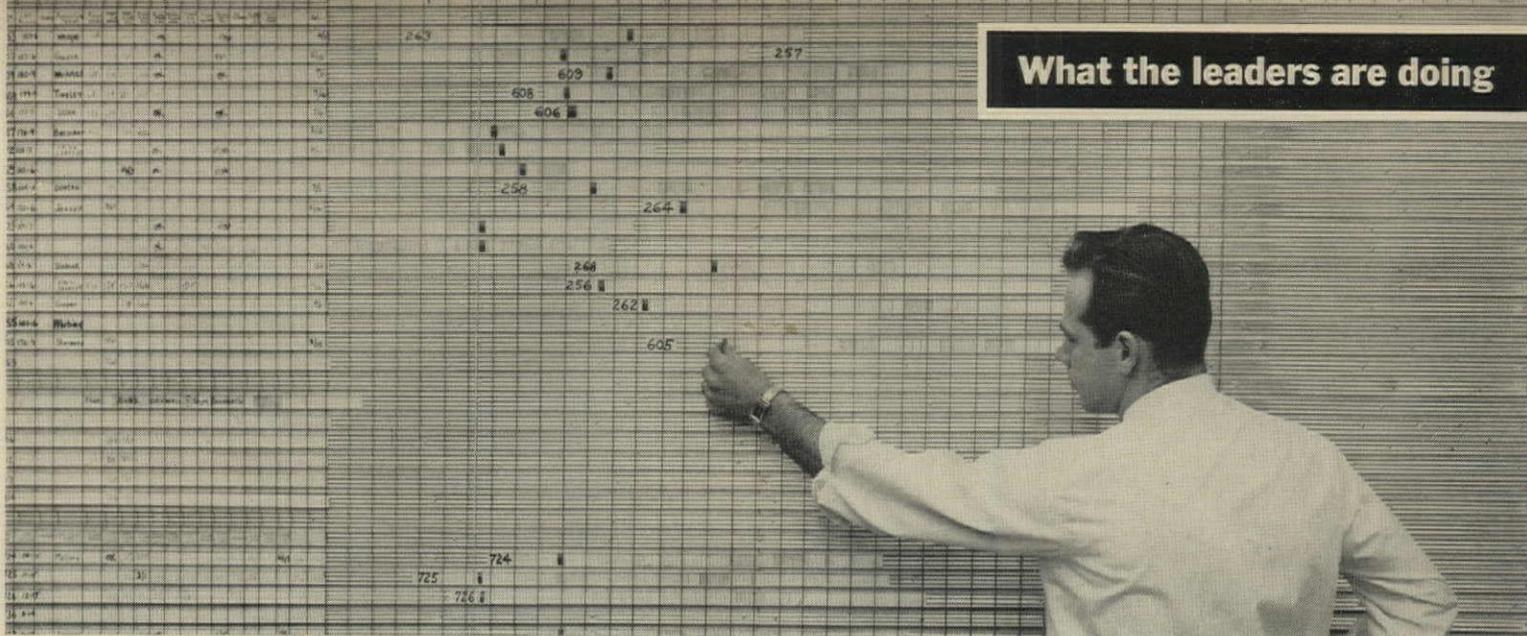
3. Every single component is custom-built to your specifications, to fit your plan. There are no arbitrary "unit" sizes.

4. P-B Components are BIG. It takes four men only 11 seconds longer to put an 8' x 14' component in place—than to position a 4' x 8' "baby panel". But you have completed 3½ times as many square feet! With big components, the average house is enclosed in one day—and you finish out in 3 to 4 weeks. Exterior and interior walls, ceilings and gables are ready for painting, papering or other decoration. Floor panels are covered with 2½" factory-finished oak flooring (which you protect with Sisalkraft paper until owner occupies.) Roofs have 5/8" Homasote sheathing already applied—with all joints flashed.

A house built with P-B Components is a quality house, quiet throughout—free from drafts, dampness, mildew, cracking and bathroom noises. It is cooler in Summer and more economical to heat in Winter.

You get your customer in fast—sell him at a lower figure—make a greater profit.

What the leaders are doing



With this control board, you can tell at a glance where each job stands and what you should do next

You can tell how far each house is ahead of or behind schedule. You can tell how much your total production is ahead of or behind schedule. And you can figure how much labor—in each craft—will be needed every week for three months.

So says Washington Builder Milton Kettler, who devised the system (an adaptation of control boards widely used in manufacturing plants) and has used it about 18 months. Adds Kettler, who builds about 80 houses a year (H&H, June): "The board is also an effective sales tool, since buyers who see it are convinced we can make good on our delivery promises."

Here is how the board is set up:

The board (close up below) is made of 70 strips of aluminum price tag molding mounted horizontally on a 7'-high plywood panel.

On the left side, a cardboard strip is inserted for each job to list preconstruction details that sometimes are overlooked. Items: construction financing ordered, building permit received, house insured, costs analyzed, survey approved, and the like.

A second cardboard strip is inserted at right to set up the 13 week construction timetable for each job. Different pastel colors denote ten building stages (foundation, first floor, outside

walls, frame-out, heat-plumbing-electric rough-in, drywall, trim, paint, floor finishing, and finishing). This strip is positioned so its right end lines up with the promised delivery date.

And here is how the board is used:

Once a week a green plastic tab for each job is moved along the construction strip to show the building stage the job is in. Every day a yellow cord (mounted vertically and seen under March 15 in photos) is tacked up to show "today's date."

If a green tab is at the right of the cord, the job is ahead of schedule. If a green tab is at the cord's left, the job is behind schedule and corrective action is needed.

Once a month Kettler totals the number of days all houses are ahead of or behind schedule. If this total stays constant from month to month, he knows all is well. But if the "net days ahead" figure drops sharply, he knows he has to look for trouble.

At any date, Kettler can quickly find how many men he will need in each craft in any week ahead. By reading down the board for the week, he can spot which houses will be in each stage of construction.

Kettler says it takes only about two hours a week to update the board. He resets it about three times a year.

What the leaders are doing

Center court in a square house offers nine advantagesp 176

How a bottomless trailer saves time for builders.....p 180

															FEB.	MAR.	APRIL	MAY	JUNE
Job No.	LOT Block	STRT	PREPARER NAME	PLANS ORDKD	ESTD REC	PERM REC	INSUR REC	FINANC APPR	SURVY REC	CONSTR PERM REC	Del.								
263	101-4		Wedge												4/1				
257	103-6		Gavin												5/15				
609	180-9		WILKINS	1/29	2/4	2/11	2/18	OK							7/6				
608	177-9		TIMLEY	1-6	2/4	2/5	2/12								7/4				

CLOSEUP OF CONTROL BOARD shows four job strips as of March 15. Stationary dark strings indicate six-day work weeks.

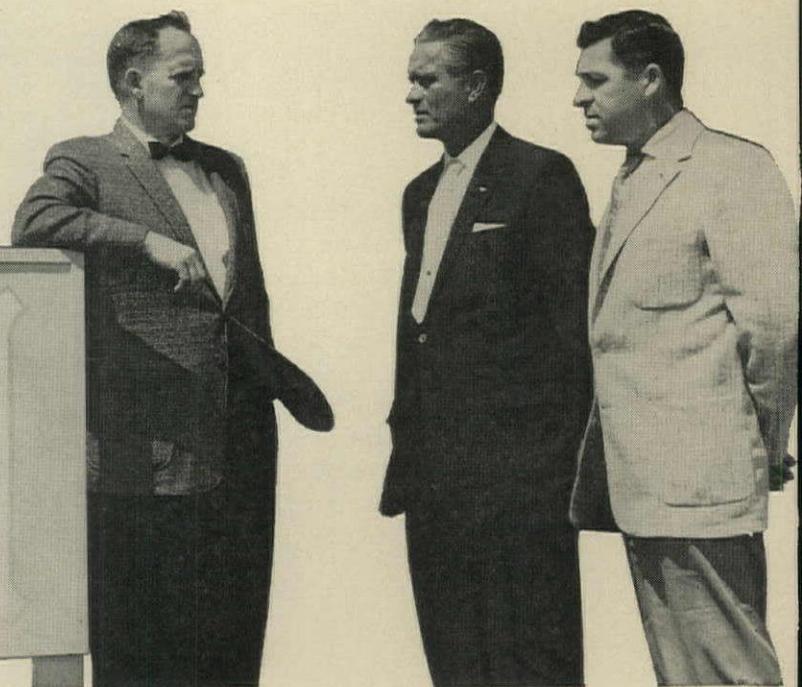
A model home in the Porter-Wagor-Russell, Inc. building project, Palmetto Country Club Estates, located near Miami, Florida. Inside plaster corners are reinforced with Keycorner lath for higher crack resistance.



“Our best selling homes are lath and plaster

Mr. Wagor, in front of one of his firm's model homes, talks over the advantages of Keycorner reinforcing lath with William Duncan, owner of the Duncan Plastering Company, Coral Gables, Florida, (right) and E. C. Faircloth, Keystone Steel & Wire Company building specialist, (center).

THE CYPRESS POINT
2 Bedrooms 1 Bath
FAMILY ROOM, TERRACE, CARPORT
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\$95 MONTH
\$14,700 FULL PRICE
PWR
porter-wagor-russell, inc.





reinforced with **KEYCORNER LATH**[™]

... Porter-Wagor-Russell, Inc., leading Florida home-builders

"Reinforced-lath and plaster interiors are a big sales feature in our homes," reports Mr. F. B. Wagor, partner in the Porter-Wagor-Russell, Inc., builders of the large Palmetto Country Club Estates near Miami. "Best of all, it actually costs less to reinforce inside corners with Keycorner lath. You add value because of the high crack resistance and lower maintenance. Prospects are delighted with the lasting beauty of plaster. The hidden value of Keycorner reinforcement strengthens each sale."

Wherever Keycorner lath is used, it gives stronger corner reinforcement at less cost. Tests show that crack resistance of plaster corners is almost doubled as compared to other corner reinforcement.*

The pre-shaped, 4-foot lengths of Keycorner

fit into corners quickly and neatly. Keycorner can be nailed or stapled. Plaster flows in and around the open mesh design of Keycorner to assure a complete bond. Keycorner lath, packed 1,000 feet to a carton, is galvanized.

KEYSTONE STEEL & WIRE COMPANY

Peoria 7, Illinois, Makers of Keycorner • Keymesh®
• Keystrip • Keywall • Welded Wire Fabric • Nails

**Please send me additional information
and test reports on Keycorner reinforcing lath.*

Name _____

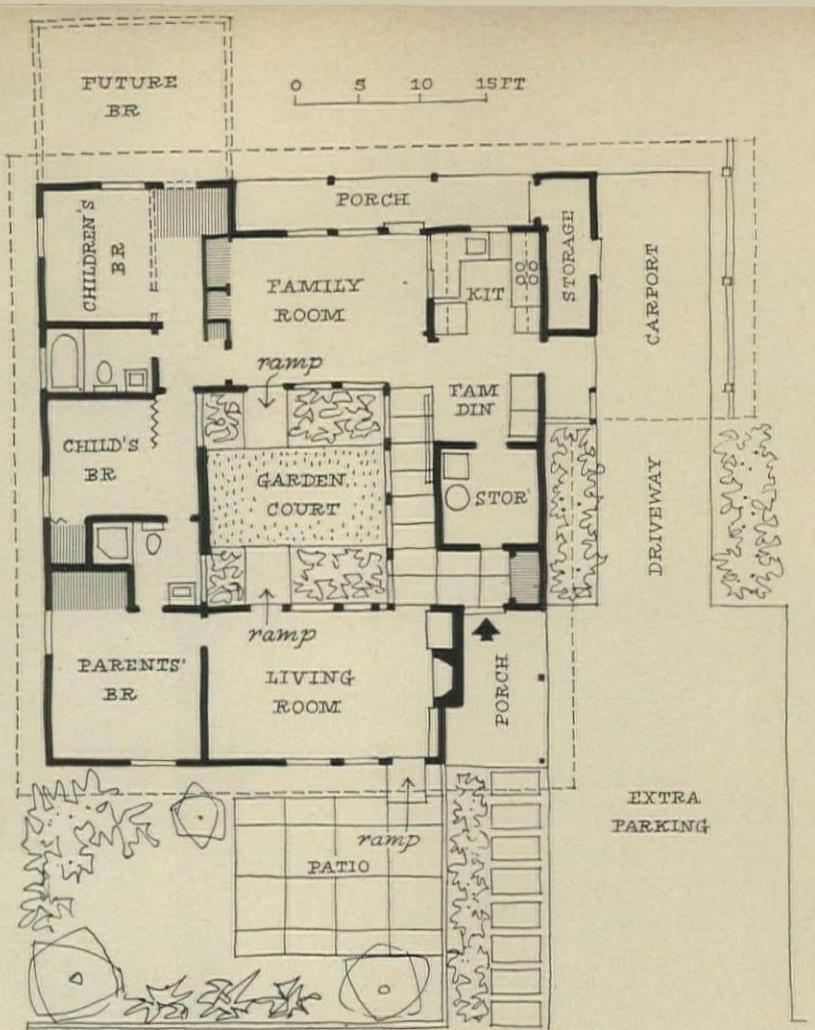
Company _____

Address _____

City _____ State _____

starts on p 173

The center courtyard in this square house offers nine advantages



1. The center garden is large (14'x16') and private—shielded on all sides from street and neighbors.

2. It opens rooms on every side to sun, no matter how the house is sited.

3. It permits cross ventilation in every room, even the middle bedroom.

4. It gives the living and family rooms light from two sides, so neither seems cave-like.

5. It gives both living areas a pleasant view.

6. It makes the house as suitable for a 65'-wide lot in the city as for a big lot in the suburbs.

7. It makes a safe play area for children in the toddling stage.

8. It offers excellent sound isolation between the formal living room in front and the rear family room.

9. And it provides the basis for a floor plan that has many added virtues:

The living room and master bedroom work as a suite (with its own patio in front of the house). While non-related zones like kitchen-family room area and formal living room are far apart, related rooms like family room and children's bedrooms are close together. A fourth bedroom can be added at rear. Parents can reach the children's bedrooms through the adjoining bath. The entrance foyer leads directly to front living room and rear family room. Kitchen and dining area can be closed from family room by 8' sliding door.

The house is co-sponsored by Parents' and the LDRC

The 1,400 sq ft house was designed by Washington Architect Grosvenor Chapman for *Parents' Magazine* (which featured it in June), and adapted for LuReCo construction by Architect Laurence S. Higgins of the Lumber Dealers Research Council. It has been built for sale this summer by builders in 15 cities.* Typical price: \$22,000 plus lot in Joliet, Ill. where New Lumber Co reports excellent reception.

* The 15 cities: Crystal Lake, Joliet, and Mattoon, Ill.; Carroll, Iowa; Clay Center, Kan.; St Paul, Minn.; Huntington Station, N.Y.; Twinsburg and Xenia, Ohio; Beaver Falls and Sunset, Pa.; Lubbock, Tex.; Ogden, Utah; Menomonie and New Richmond, Wis.



COMPONENT-BUILT HOUSE has vertical aluminum siding, interlocking aluminum shingles. Front roof is 42' wide; 57' rear roof extends to cover carport.

WELL LIGHTED DINING AREA is open to the family room (foreground) around corner of center court. Dining area adjoins kitchen, off right behind wall.

Five smart ideas for your "homeowner's manual"

Information for homebuyers—published in booklet, brochure, or mimeographed form—is fast becoming a standard part of a smart builder's post-sales customer-relations program. Here are interesting, helpful, or amusing excerpts:

... on getting along with builders

"Assume your builder is honest and capable. Check before you use him, not after. Avoid making changes after work has begun—few things are as expensive as a Monday morning architect. Try to keep your dealings with your builder on a business basis, that is, in writing."—Goodwin Housing Corp, Haddonfield, N.J.

... on lawns

"Your front lawn will not be installed until you have moved into your home. The postcard you mailed will enable our contractor to contact you as to the time of installation."—Brown & Kauffmann, Palo Alto, Calif.

... on service

"Listed in this brochure you will find the names of subcontractors who handle their own service calls on work they've done for us. By calling them directly, you will secure faster service."—Tom McGovern, San Antonio.

... on painting

"When you repaint your house, please use good judgment in choice of colors—a zebra stripe may spoil an entire block of houses."—Place & Co, South Bend.

... on insurance

"Now that you are a homeowner you will carry various types of insurance. Shown below is a suggested form which will act as a constant reminder of your insurance policies, their expiration dates, coverage, and other data necessary in the filing of claims."—Pearson Bros, Minneapolis.

When buyers help sell, give them a commission

That advice comes from Illinois Builder Leonard Besinger Jr who says: "Whenever the owner of one of our houses sends us a lead that ends in a sale, we pay him a commission of \$75.

"This encourages buyers to act as salesmen. About half of our 400-or-more sales a year are made to people who come out to visit someone who lives in our tract."

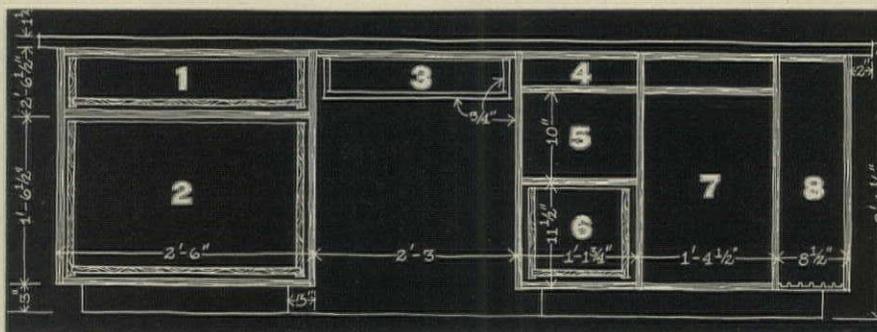
Besinger figures \$75 is "about right," reports: "We tried offering \$200 to induce owners to bring out more friends, but it didn't get us any extra sales. Nobody will high-pressure his friends."

Besinger has sold about 3,500 houses in his 2,800-acre Meadowdale tract (40 miles northwest of Chicago's Loop) since 1954.

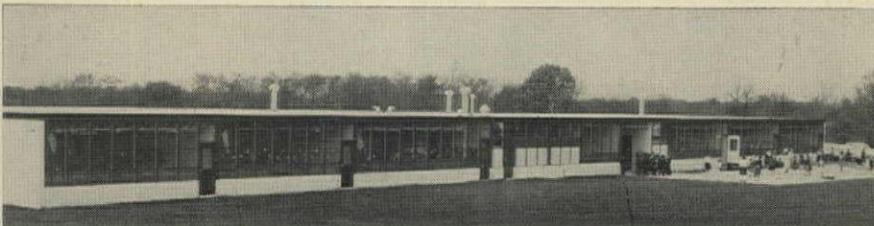


Buyers choose all colors and materials at 4'x8' desk

Its voluminous drawers contain (see drawing below): **1** plumbing color chips, ceramic and mosaic tile chips, decorative glass samples; **2** 76 different brick samples; **3** paint stain samples, color chips for countertops and appliances; **4** roofing samples; **5** wood paneling samples; **6** floor tile samples; **7** wallpaper books; **8** pull-out boards showing over-all color schemes laid out on a floor plan. The desk was designed by Margaret Gale (above, right), design consultant for San Antonio Builder Tom McGovern.



CONSTRUCTION is simple. Desk is made mostly of 3/4" plywood. Top is plastic laminate.



This school was built and paid for by a homebuilder

It is only one of three schools (total cost: \$750,000) that New Jersey Builders Cantor & Goldman have built in their 2,000-house community (Sayre Woods South) and donated to Madison township. Says C&G President Saul Cantor: "New communities cannot be expected to meet school construction costs from taxes alone. Builders should contribute their resources and know-how to upgrade the communities they build in. Also, it's good business—good schools are a great sales attraction."

Construction costs averaged \$21,000 a classroom, or about \$17 a sq ft. Construction is simple: walls are cinder-concrete block painted inside and out, ceiling joists are open-web steel, roof deck is corrugated, perforated steel ceiling is lined with sound absorbing material. Each school accommodates 400 children, kindergarten through sixth grade. No cafeterias are needed (since schools are in walking distance), and no gymnasiums are provided. Architect for the schools: Jules Gregory.

Leaders continued on p 180



“**LOOK** - *the Good Housekeeping Seal*”

new proof of a quality product in your houses

WINDOW-SILL CARD tells your prospects that *Thermopane* has earned the Good Housekeeping Guaranty Seal. Order from your L·O·F Distributor or Dealer (listed under “Glass” in the Yellow Pages). Or write to L·O·F, 980 Libbey·Owens·Ford Building, Toledo 1, Ohio.

Thermopane[®]

INSULATING GLASS



HAS EARNED THE
Good Housekeeping
Guaranty Seal

LIBBEY • OWENS • FORD
a Great Name in Glass



40,930,000 homemakers are influenced in their buying decisions by the Good Housekeeping Seal*. So it makes sales sense to use building products that have earned this seal, whenever you can. *Thermopane*[®] insulating glass is one of them.

It helps you point out that *Thermopane* is truly a quality product. Its patented metal-to-glass *Bonder-metic Seal*[®] has been time-tested. It contains no organic bonding materials. On glass-to-glass units, the sealing grommet is located on the *edge* where the sash protects it. There are over 8,100,000 *Thermopane* units in use.

Thermopane has been nationally advertised for 17

years. Most of your prospects know that with *Thermopane* in *every* window, the house you are offering them will be more comfortable, summer and winter . . . will cost less to heat and air condition. And they won't have to bother with storm sash.

Put *Thermopane* in all of the windows of your next model house. Since the trade-mark is lightly etched in the corner of units, you know what you're getting. And so do home buyers. Listen to the enthusiastic comments *Thermopane* creates. That's why so many leading builders are featuring *Thermopane* in their houses.

*Source: Crossley, S-D Surveys, Inc.

Thermopane[®]

INSULATING GLASS

Made in U.S.A.
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LIBBEY • OWENS • FORD • TOLEDO 1, OHIO

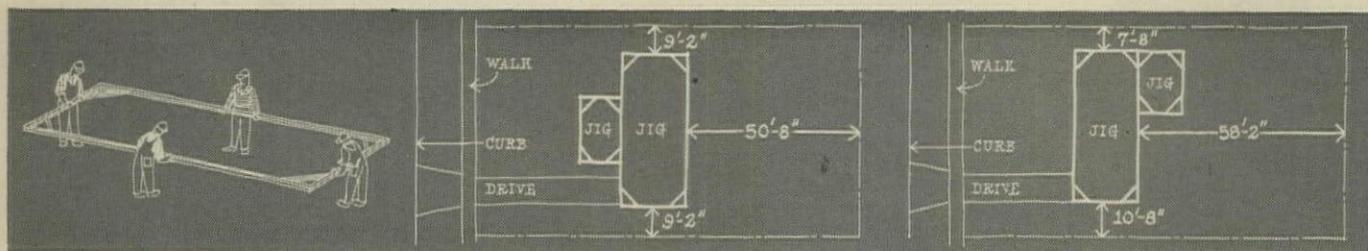


“Street lighting is a must for houses priced over \$18,000”

That is the judgment of Ft Wayne Developer Joe Lebrator, who spends between \$90 and \$110 per house to light the streets in his development though

lighting it not required by the city. Because “it makes the whole streetscape more attractive,” Lebrator puts the street-light wiring underground, puts

power and phone lines (which are above-ground) along back lot-line easements. Lighting poles are Line Materials Co’s Post Top Luminaires.



Easy-to-build jigs act as guide for trencher, save \$25 a house

“If you’re building repeat-plan houses, it’s a lot cheaper to use a jig to lay out foundation lines than it is to stake out the lot,” says Builder Bob Schmitt of Berea, Ohio. The jigs, built of 2x4s,

are carried by four men to the lot to be trenched (above left). They are laid down in correct position as measured from lot lines (above center, right). Since Schmitt’s houses are all L or T

plans built to a standard module, he can lay the foundation for any house with two jigs—one large, one small. (For some houses 2’ wider, Schmitt sets string lines 2’ out from the jigs).



Straddle trailer unloads house package in less than a minute

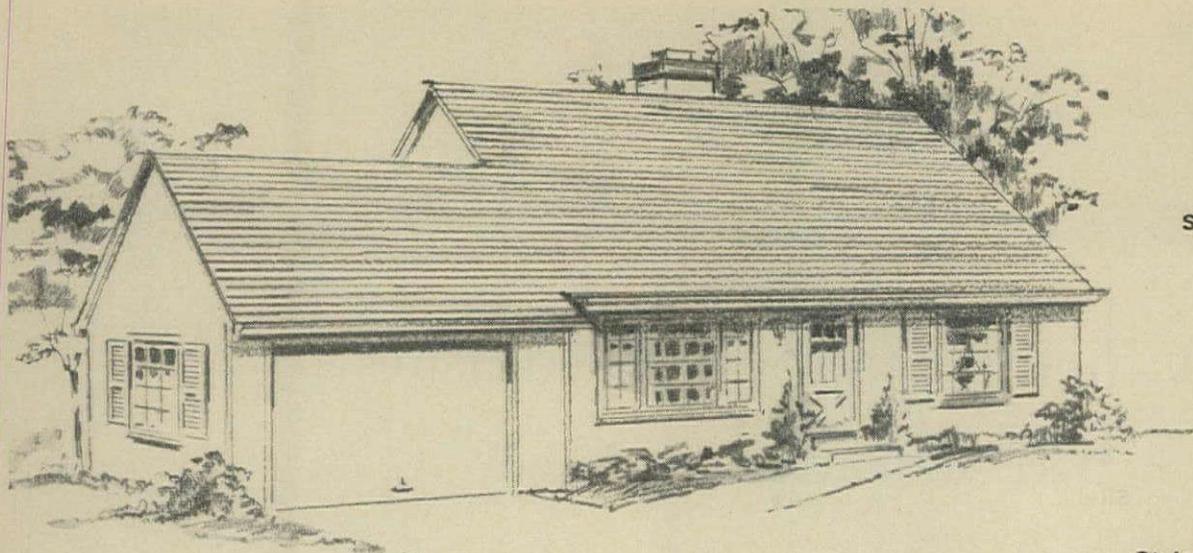
The big trailer has no floor and no rear gate. Hydraulic clamps hold palletized loads in transit. At the building site, clamps lower the load to the ground

(above left), then the trailer pulls away (right). No crew is needed to unload the package. Toledo Prefabber Don Scholz uses this Ryder System straddle

trailer because, he says, “To build fast, you must unload fast.” The trailer can be used to ship any builder’s packaged loads of components. /END

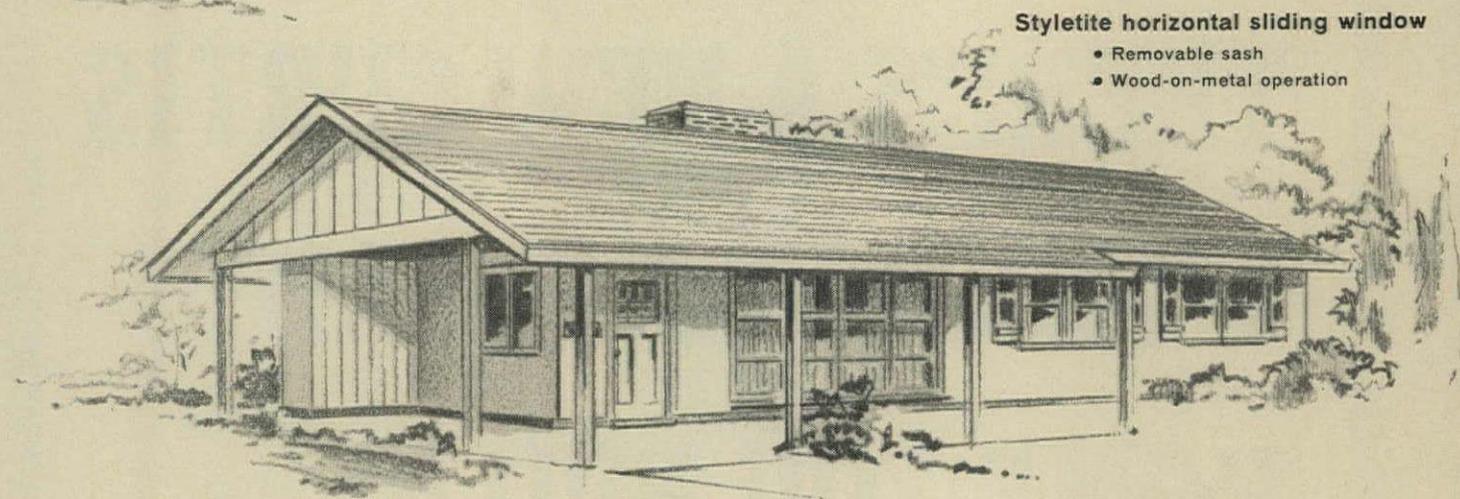
now...with this announcement
of a brand-new line...

**THERE'S A NEW CURTIS
WINDOW TO FIT ANY
HOME YOU BUILD...
ANY SIZE...ANY STYLE...
WIDE PRICE RANGE**



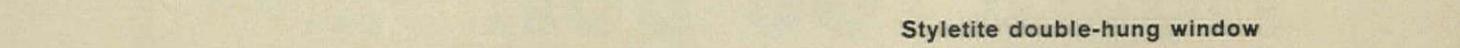
Styletite* double-hung window

- Non-removable sash
 - Wood-on-metal operation
- *Trade-Mark



Styletite horizontal sliding window

- Removable sash
- Wood-on-metal operation



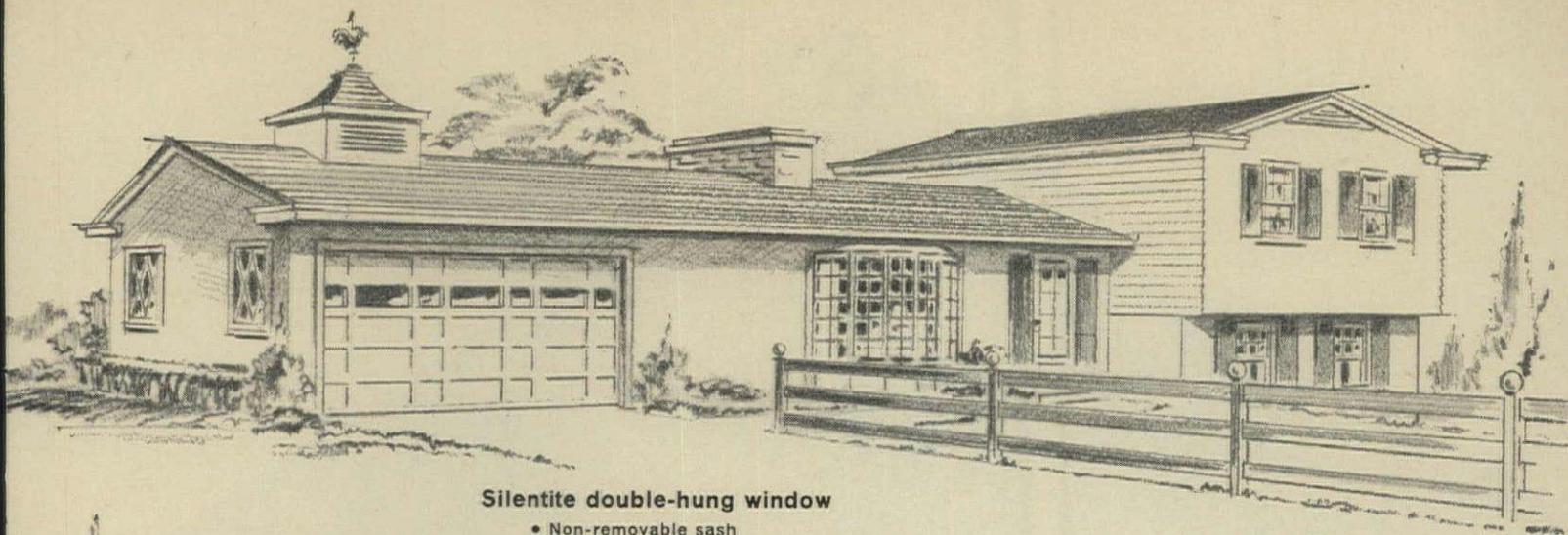
Styletite double-hung window

- Removable sash
- Wood-on-metal operation

from **CURTIS**[®]

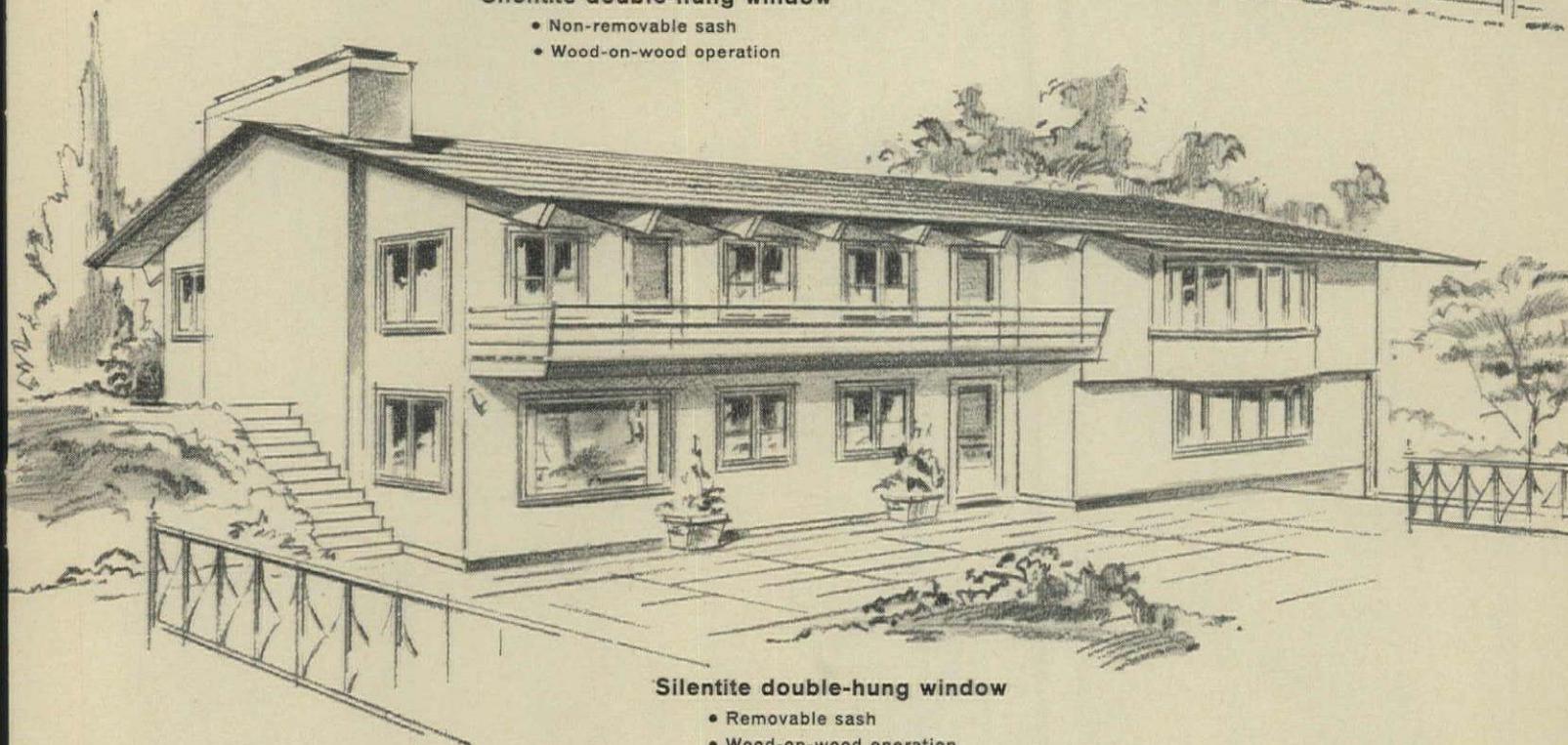
4 New Double-Hung Window Lines Plus a New Sliding Window Line...the Widest Selection Available!

- 1 Select from one of two Silentite[®] double-hung window lines. Completely weather-stripped. Removable and non-removable sash. The finest quality windows available.
- 2 Silentite features wood-on-wood for smoothest, easiest operation with the natural insulating qualities of wood.
- 3 OR—choose one of the three new Styletite window lines. Wood-on-aluminum operation. Completely weather-stripped. Removable and non-removable sash. Double-hung or sliding windows. For high-quality, low-cost window selection.
- 4 Competitively priced to meet today's housing market levels.
- 5 Frames are factory-primed, preservative-treated—saving you on-site labor costs...protecting window while home is under construction.
- 6 Shadow-line casing designs on all five window lines provide pleasing and uniform exteriors.
- 7 Complete weather-stripping—compression side jamb, snug-fitting vinyl at head, meeting rail and sill.
- 8 Sash are easy to operate, balanced on both sides to prevent sticking or cocking in opening.
- 9 Removable bars and grilles now available. Include horizontal, divided and diamond light styles.
- 10 All windows *exceed* the minimum government standards in tests for prevention of wind and water infiltration.
- 11 The complete line available to your building materials dealer through his local Curtis distributor.



Silentite double-hung window

- Non-removable sash
- Wood-on-wood operation



Silentite double-hung window

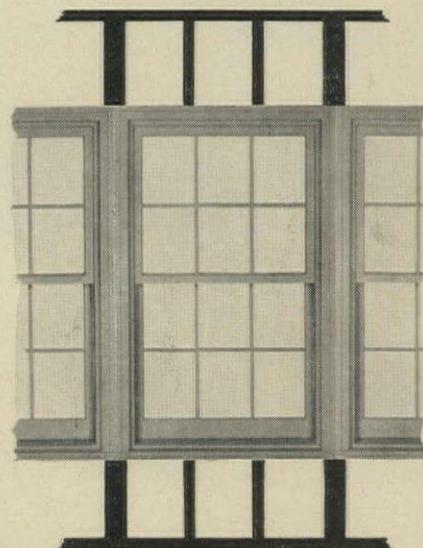
- Removable sash
- Wood-on-wood operation

IF YOU'RE A MODULAR PANEL BUILDER,

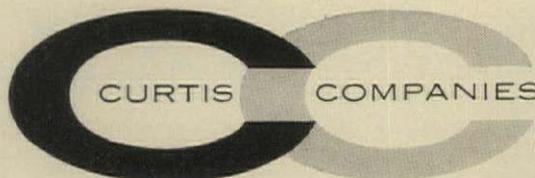
you'll want to take an extra-close look at a wide variety of Curtis window units in each of six basic types—double-hung, slider, casement, fixed sash, awning and hopper—*designed especially to fit modular construction.* These pre-fit units eliminate need for any special cutting, trimming or bracing; fit snugly between studs. This means simplified installation, lower direct costs—lower in cost to you than partly assembled units.

For more information, write for the new Curtis brochure "Curtis Windows for Modular Component Construction," yours at no cost or obligation.

For complete details, contact your Curtis dealer or write to Curtis. Address: Director of Marketing

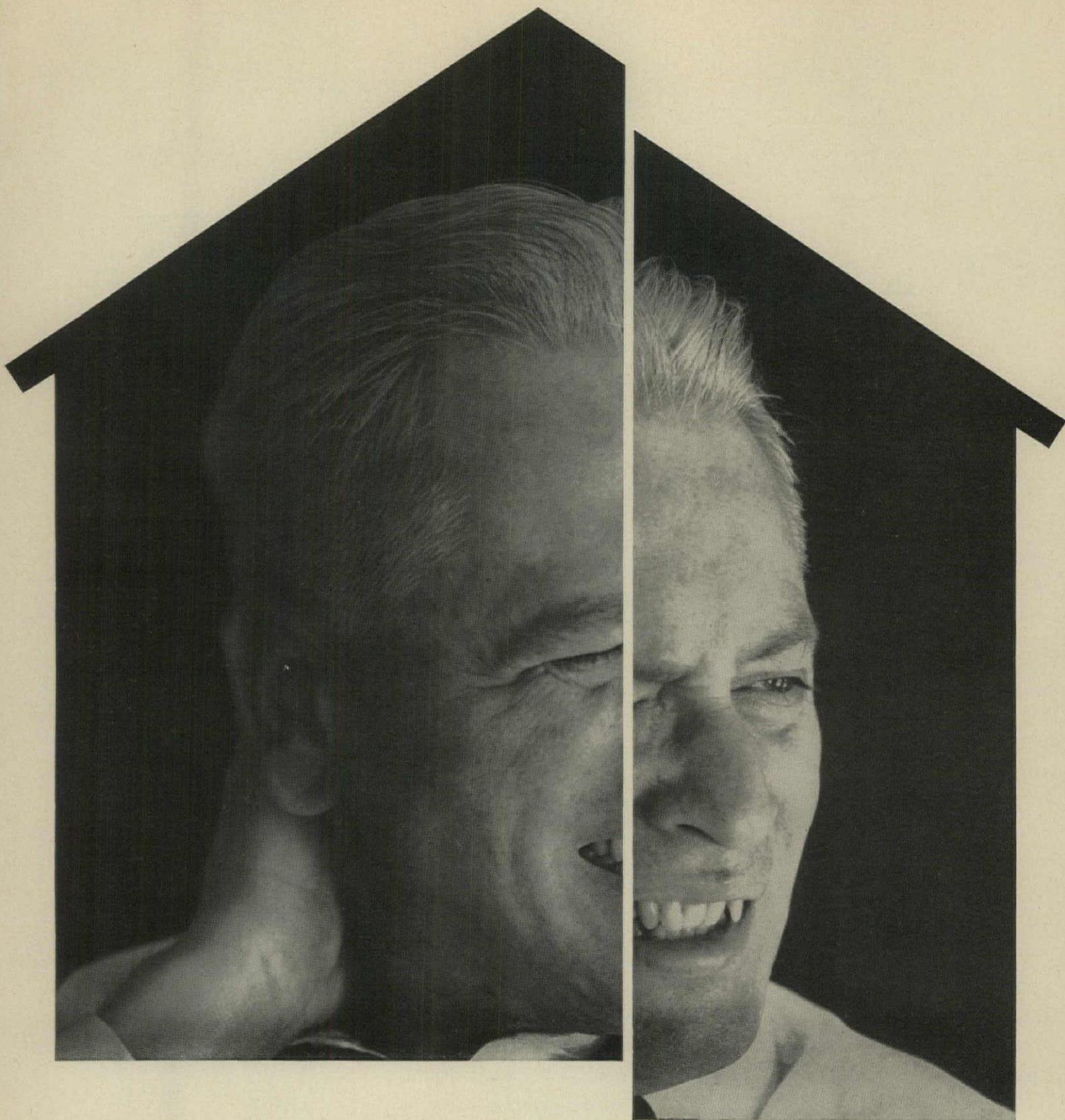


NOTE: Curtis component windows fill out standard 4' panel, requiring no extra filler materials.



CURTIS COMPANIES INCORPORATED / CLINTON, IOWA

Individuality and Quality in windows, doors, cabinets and fixtures



SURE CURE FOR SPLIT LEVEL HEATING HEADACHES... A BRYANT HOT WATER SYSTEM

Split levels present a special problem in heating—as any owner who puts up with hot bedrooms and chilly playroom will tell you. A minimal warm air installation isn't the answer.

By the time you properly engineer a warm air system for truly uniform room-to-room comfort, you can have a Bryant hot water system with all its recognized advantages and buyer appeal.

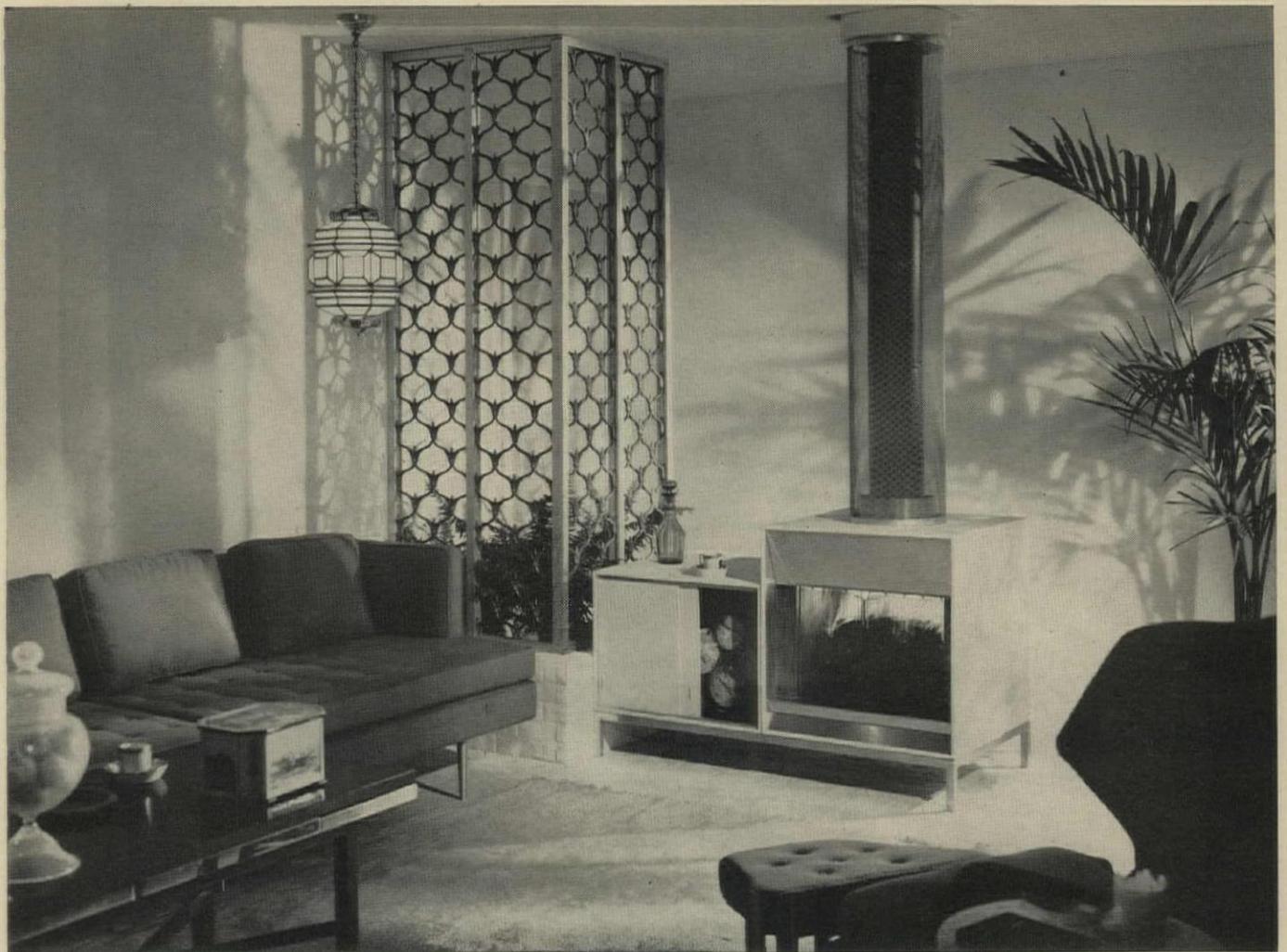
The way to be sure of quiet, uniform, dependable comfort throughout the house is to put in a hot water system with a Bryant boiler—the perfect solution to split level heating. In addition, it is evidence of your good judgment in providing quality heating.

Since your Bryant dealer-contractor installs both warm air and hot water system, gas or oil-fired, he can advise you without “selling bias” on which will work best in any given type of house.

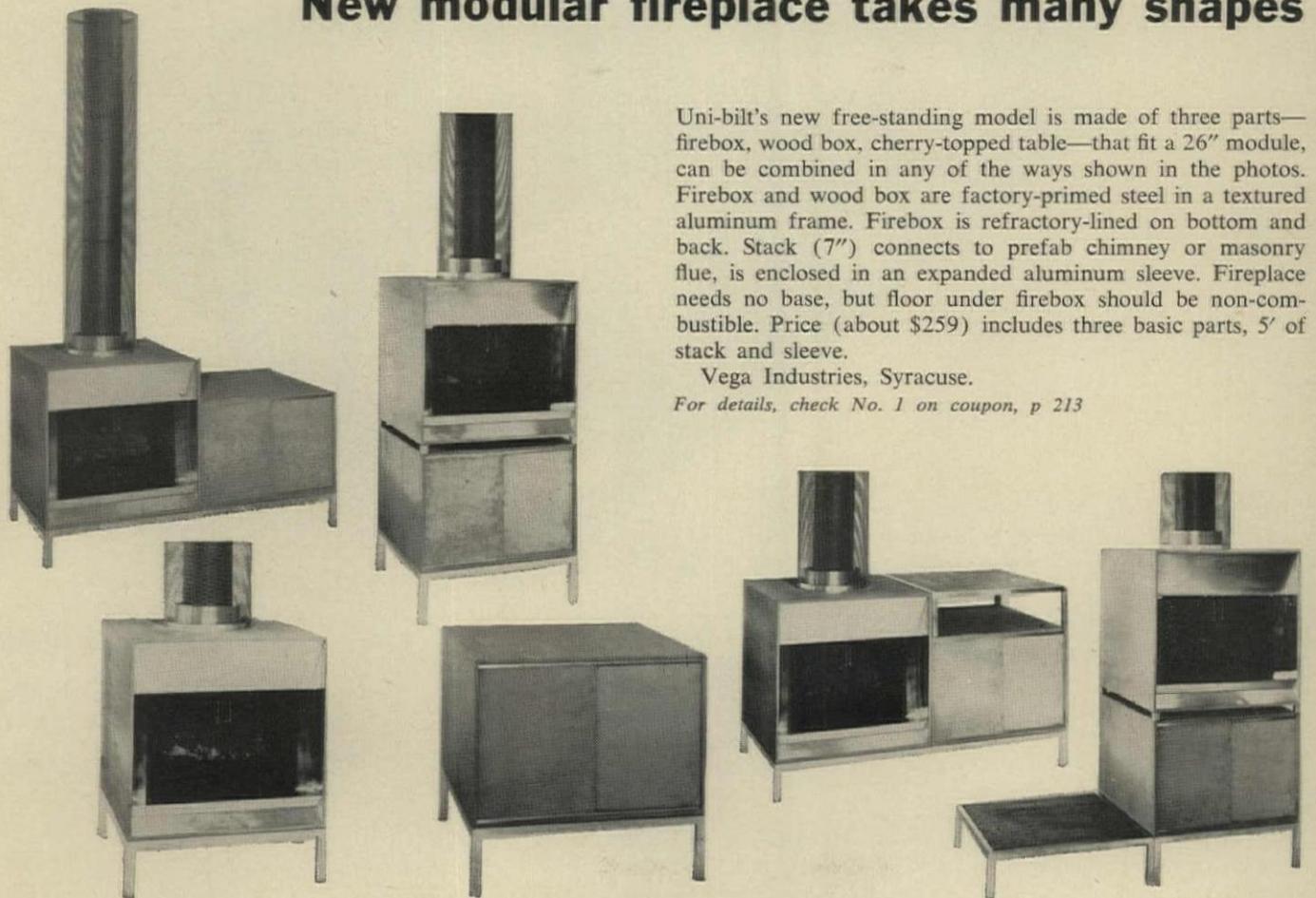
Save yourself money, headaches and buyer gripes by getting him into your planning early. On follow-up service you'll find him prompt and accommodating. Call him. Bryant Manufacturing Co., Indianapolis, Indiana • Bryant Manufacturing Ltd., Toronto, Ontario.



Heating • Air Conditioning • Water Heating



New modular fireplace takes many shapes



Uni-bilt's new free-standing model is made of three parts—firebox, wood box, cherry-topped table—that fit a 26" module, can be combined in any of the ways shown in the photos. Firebox and wood box are factory-primed steel in a textured aluminum frame. Firebox is refractory-lined on bottom and back. Stack (7") connects to prefab chimney or masonry flue, is enclosed in an expanded aluminum sleeve. Fireplace needs no base, but floor under firebox should be non-combustible. Price (about \$259) includes three basic parts, 5' of stack and sleeve.

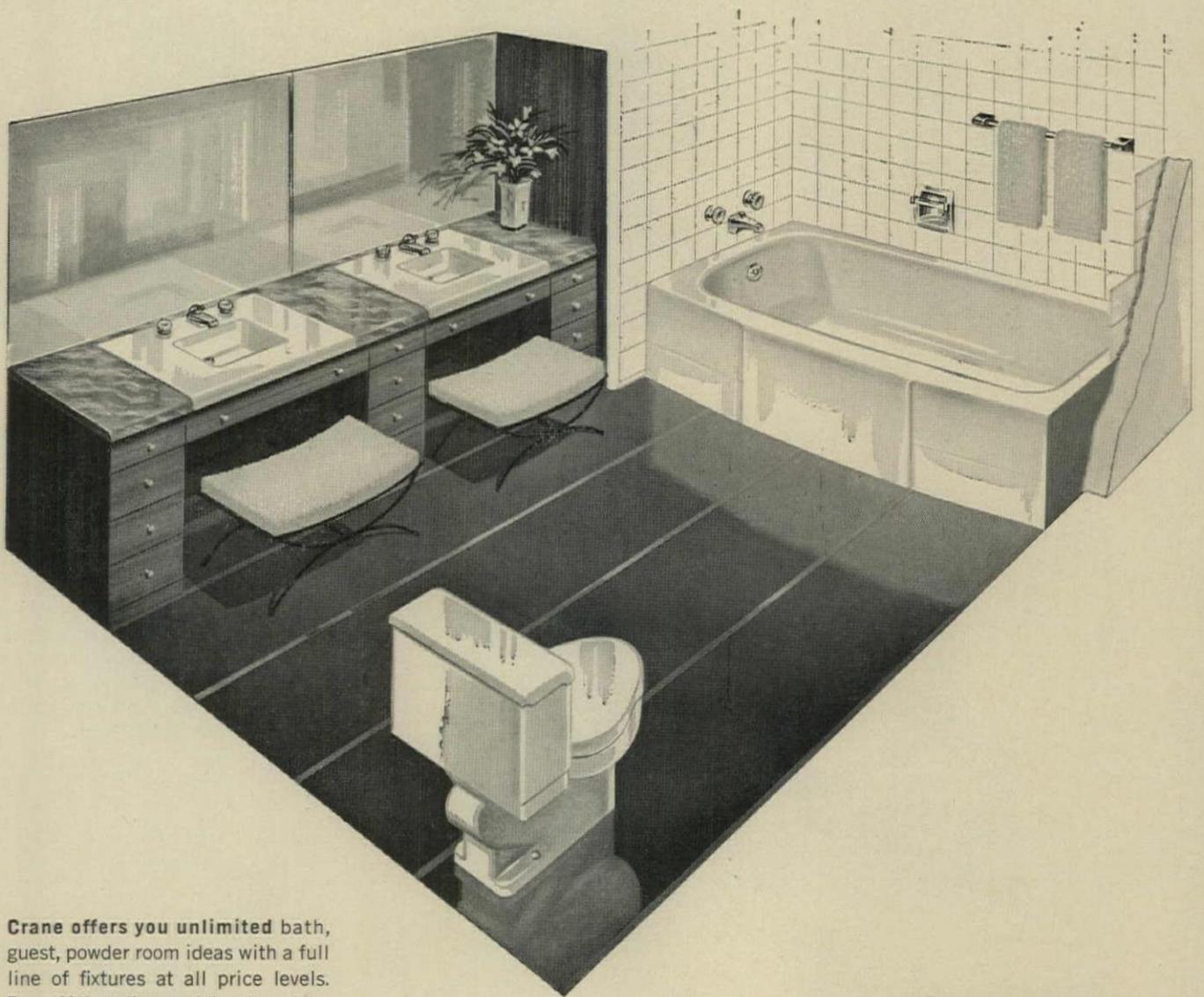
Vega Industries, Syracuse.

For details, check No. 1 on coupon, p 213

New Products continued on p 188

Add Proof of Quality

use Crane all through your homes—



Crane offers you unlimited bath, guest, powder room ideas with a full line of fixtures at all price levels. Beautiful styling and lovely colors. Crane plumbing is proof of quality —and it's completely competitive.



without adding to your costs—

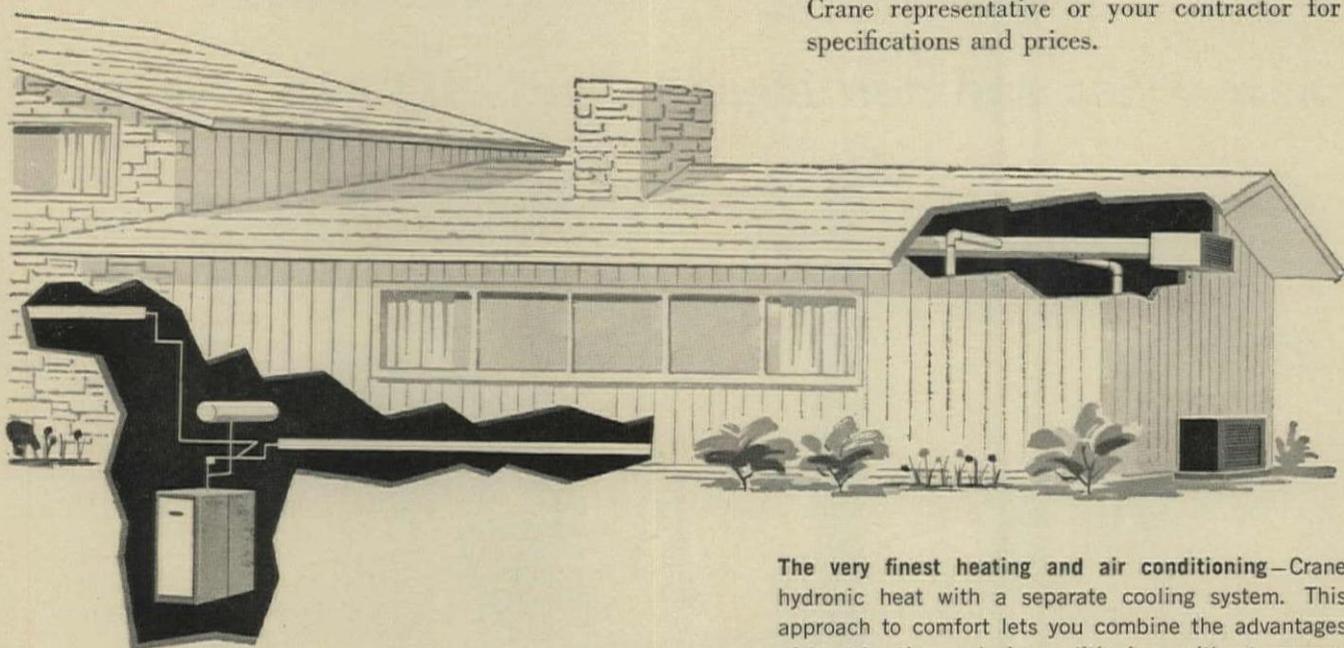
- PLUMBING
- HEATING
- AIR CONDITIONING

When a name can do as much for you as the name Crane, it's good business to play it for all its worth.

Use it all through your homes to add *proof of quality* without adding to your cost. Plumbing fixtures—all types from the finest master bath to strictly utilitarian laundry tubs; heating—hydronic or forced air, oil- or gas-fired; and air conditioning.

All that the name Crane stands for among consumers works for you throughout your homes to lend *proof of quality* . . . to make your homes more desirable. And the completely Crane equipped home makes your selling easy. Single source purchasing helps, too. It narrows your contacts for more efficient use of your time. One call gets action and answers to questions on plumbing, heating *and* air conditioning.

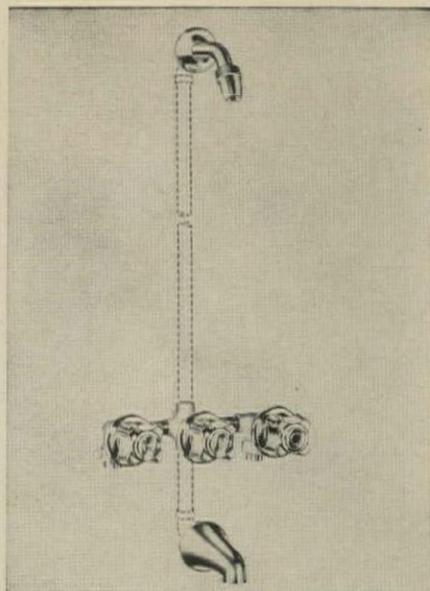
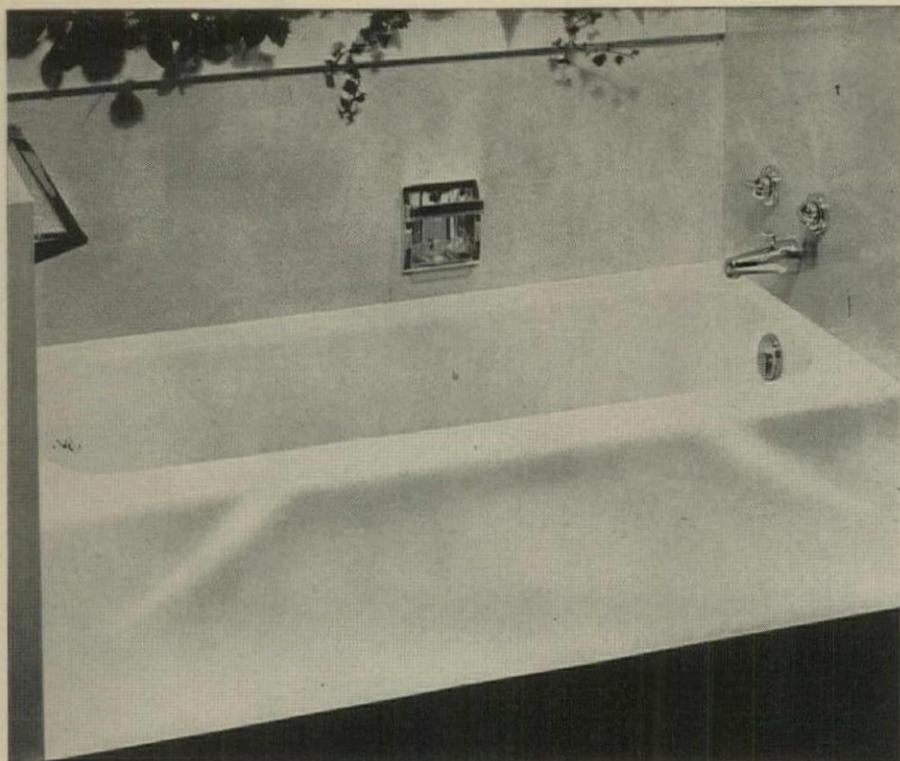
There's a complete Crane plumbing, heating and air conditioning "package" for every home you build. Add Crane and you add *proof of quality without adding to costs*. Ask your Crane representative or your contractor for specifications and prices.



The very finest heating and air conditioning—Crane hydronic heat with a separate cooling system. This approach to comfort lets you combine the advantages of best heating and air conditioning—without compromises on one imposed by limitations of the other. Crane offers a full range of gas- and oil-fired heating systems, hydronic or warm air—with cooling systems to match.

proof of quality—at no extra cost

PLUMBING-HEATING-AIR CONDITIONING GROUP • P. O. BOX 780, JOHNSTOWN, PA.
VALVES • ELECTRONIC CONTROLS • PIPING • PLUMBING • HEATING • AIR CONDITIONING



Crane introduces its new product line

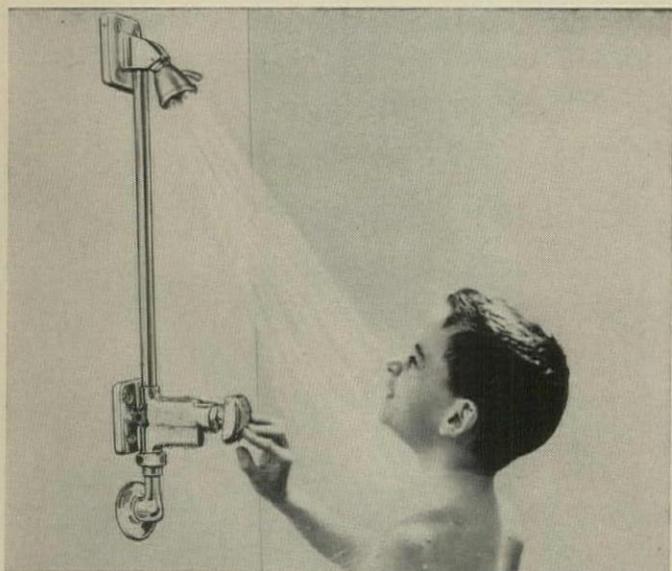
As part of the reorganized company's new face, Crane is bringing out a spate of new products. The first to appear are this tub, lavatory, trim. Designed by Henry Dreyfuss, the wide-ledge Fairfax tub is only 14" high, 30" wide, comes in white or colored acid-resisting or regular porcelain-enameled cast iron. The new Westgate lavatory (lower right) is vitreous china, can be wall

hung or mounted on round metal legs. Semi-oval basin has front overflow and splash lip, panel shelf back. The new Crestmont trim (upper right) for baths, showers, and lavatories is competitively priced, has handles with indexed buttons and concealed screws, renewable sleeves and renewable seats.

Crane Co, Chicago.

For details, check No. 2 on coupon, p 213

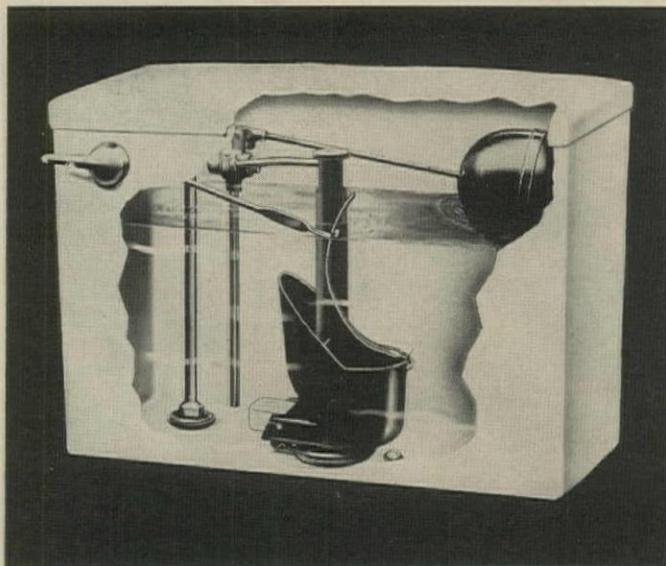
Here are new styles and new ideas in bath fixtures



Metering shower can save up to two-thirds of volume usually used, the maker claims. When valve handle is pushed, water flows at up to 4½ gpm rate, then shuts off. Second push starts flow again. Unit comes in built-in or exposed models, both with self-cleaning head. Operating parts are non-hammering, non-dripping, vandal-proof.

Speakman Co, Wilmington, Del.

For details, check No. 3 on coupon, p 213



New tilting flush valve is feature of Universal-Rundle's Charm water closet. New valve has a plastic cup which fills with water and seals outlet as tank refills. When flush lever is pushed, cup tilts, opening outlet to the bowl. Valve is held open by weight of contained water till tank has drained, then tilts upright again.

Universal-Rundle, New Castle, Pa.

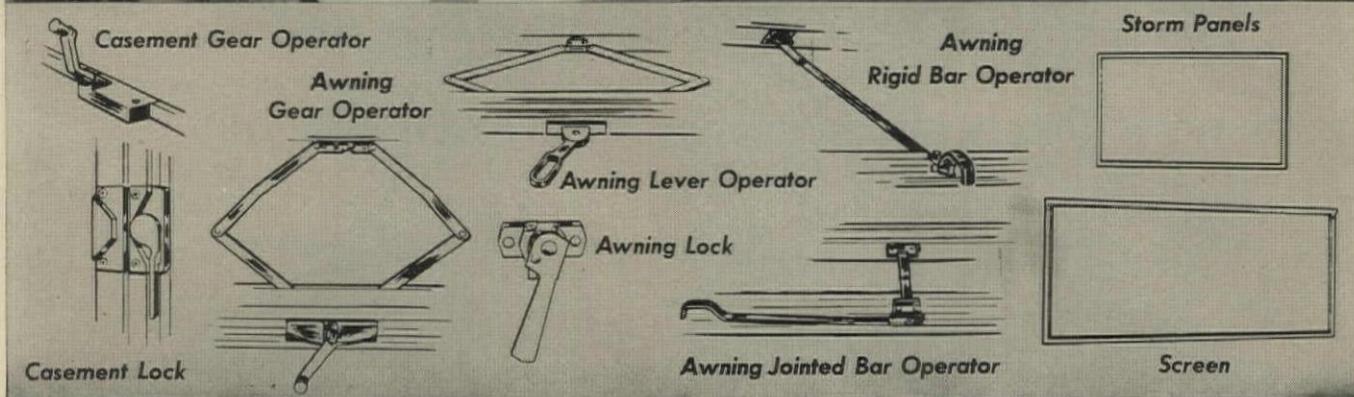
For details, check No. 4 on coupon, p 213

New Products continued on p 190

another first from **Bilt-Well**
by **Caradco**

Gold-Tone Hardware

available on
BILT-WELL
Casement
and Awning
Windows



Distinctive New Brushed Finish Enhances Beauty of Homes of Every Design and Price Range

Special attention to details many times makes the difference between an ordinary house and one that is outstanding. New Gold-toned hardware on BILT-WELL Casement and Awning Windows will provide your homes with just such a plus feature. Overall harmony of appearance is achieved with matching finish on screens and storm panel frames.

Before Deciding on Windows... Compare the Plus Features
Available Only from BILT-WELL by CARADCO

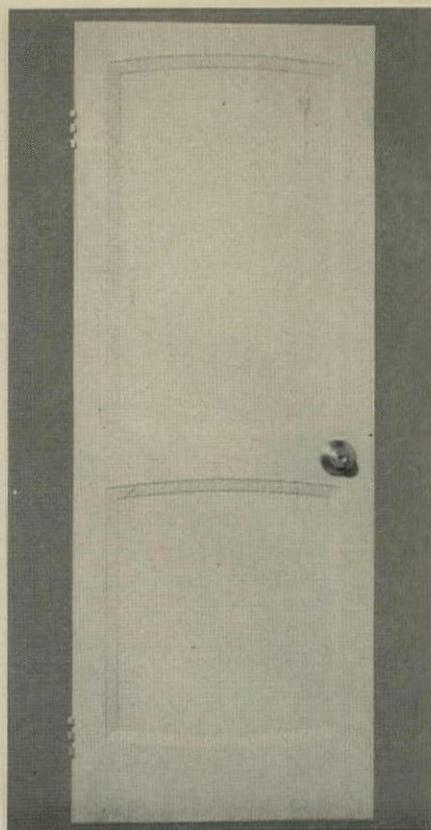
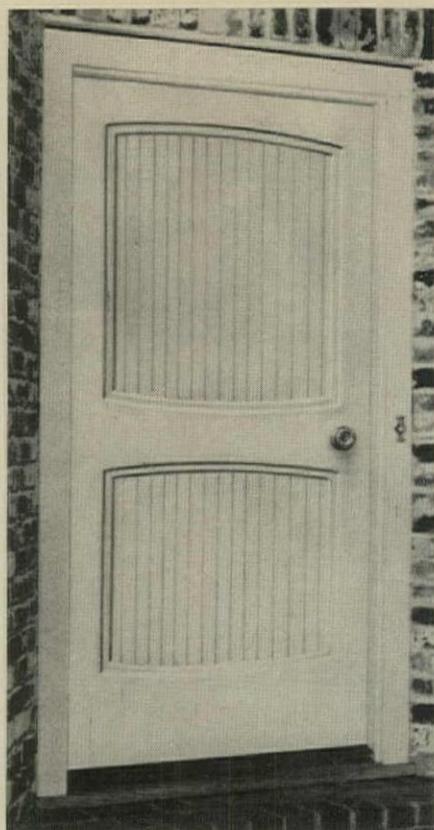
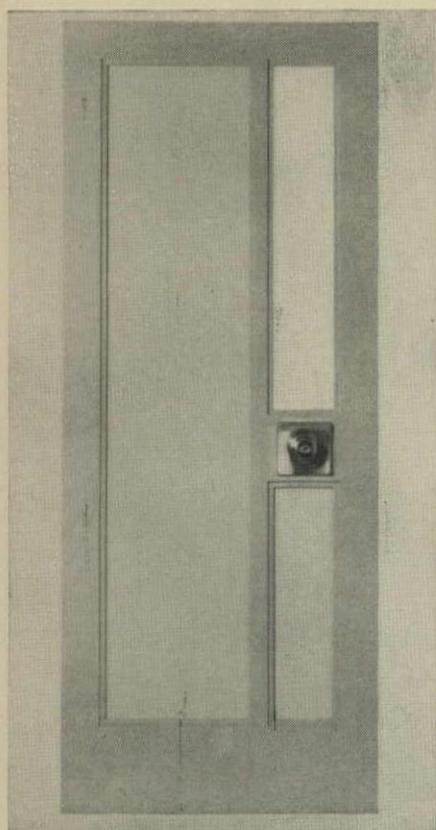
The BILT-WELL Line of Building Woodwork—
WINDOW UNITS, Double-hung, Awning,
Casement, Basement. CABINETS, Kitchen,
Multiple-use, Wardrobe, Storage, Vanity-Lav-
atory. DOORS, Exterior, Interior, Screen and
Combination.

manufactured by
CARADCO, Inc.
Dubuque, Iowa

There's more to offer with



by Caradco



Simpson introduces coordinated door styles

Two new "families" of doors, designed by Walter Dorwin Teague Assoc, make up Simpson Logging's new Symphonic series. Each "family" is made of doors of related style for any residential use—entrances, living rooms, bedrooms,

baths, closets, etc—to give a unified decor throughout the house.

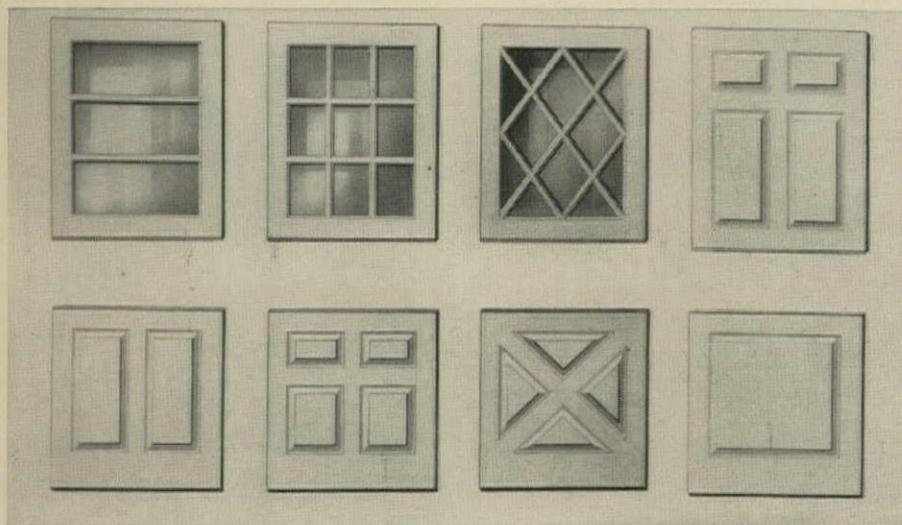
Concerto doors (left) have vertical panels that can be filled with various materials—different woods, colored plastics, textured glass—or painted con-

trasting colors. Sonata doors (center and right) have curved rails to add depth to the modeling, can have solid or glass, planked or plain panels.

Simpson Logging, Shelton, Wash.

For details, check No. 5 on coupon, p 213

Panels of new doors show more decorative styling



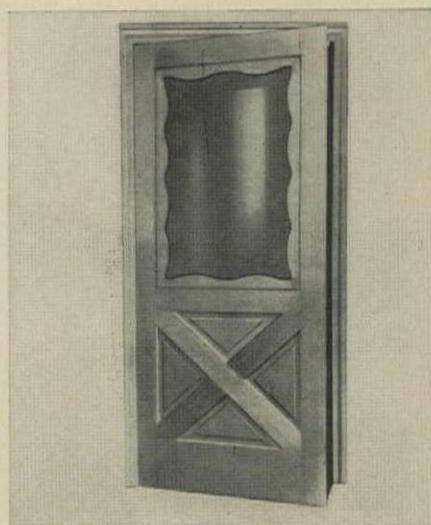
Morgan line makes up to 16 Dutch doors

Here is how to get a big door inventory with minimal stock. Any panel in the top row above can be combined with any bottom panel to make a total of 16 doors. All parts are Ponderosa pine, preservative treated. Rabbet strip meeting rail is weather-stripped on the top

section to assure good seal. Doors are 1 3/4" thick; 2'6", 2'8", or 3' wide; 6'8" or 7' high. They are furnished glazed with sss glass bedded in putty with a wood bead.

Morgan Co, Oshkosh, Wis.

For details, check No. 6 on coupon, p 213

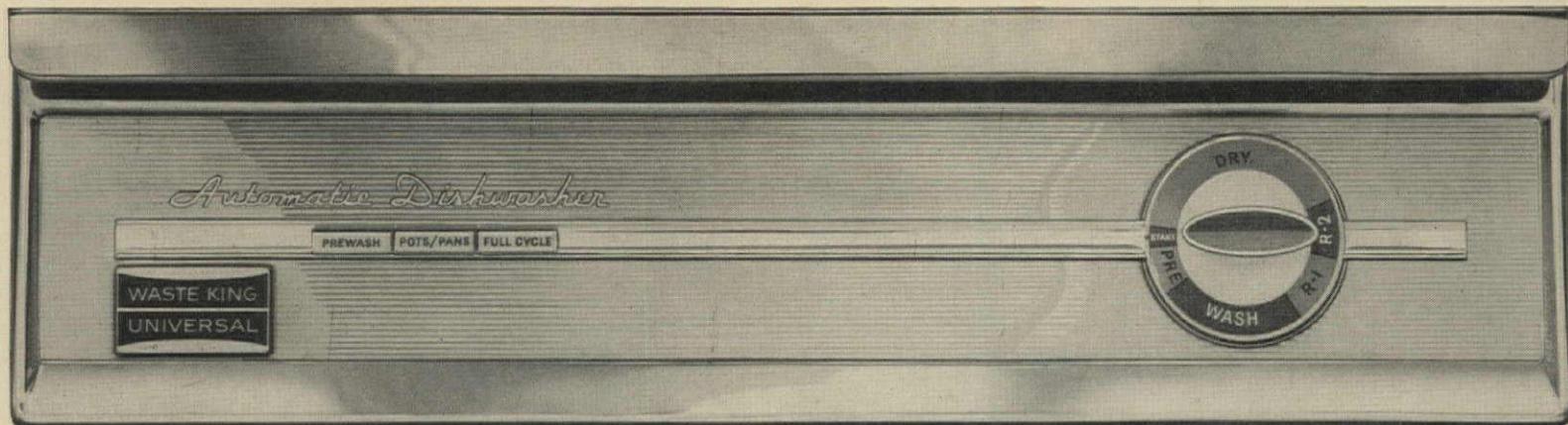


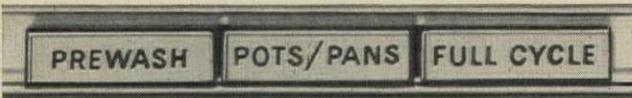
Storm-screen combination from Rimco is styled to complement Colonial design. Upper section has a single glazed light or aluminum screen, in scalloped frames. Lower section is cross-buck design. Ponderosa pine frames are Woodlife treated. Doors come 2'8" or 3' wide, 6'9" or 7'1" high.

Rock Island (Ill.) Millwork.

For details, check No. 7 on coupon, p 213

New Products continued on p 192



It's profitable to install the best undercounter dishwasher made—WASTE KING UNIVERSAL. You get satisfied users. You get a reputation for quality that gets talked about. WASTE KING UNIVERSAL'S Magi-Matic Cycle Selector  has obvious eye-appeal. It push-buttons 3 different

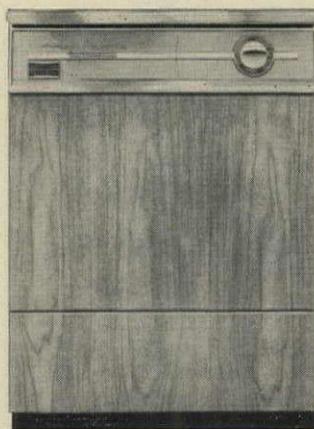
jobs: PRE-WASH soaks off egg stains and grease for full wash later on; POTS & PANS scours and rinses all cooking utensils; FULL CYCLE pre-rinses, washes and air-condition dries a full

service for Dump auto-water at the 28 different



decor idea. And WASTE KING UNIVERSAL quality ample, the tub lining is Triple-X Polyvinyl—a lining that lasts 3 times longer than any other WASTE KING UNIVERSAL speaks clearly for your building. It can help put a "Sold" sign on the

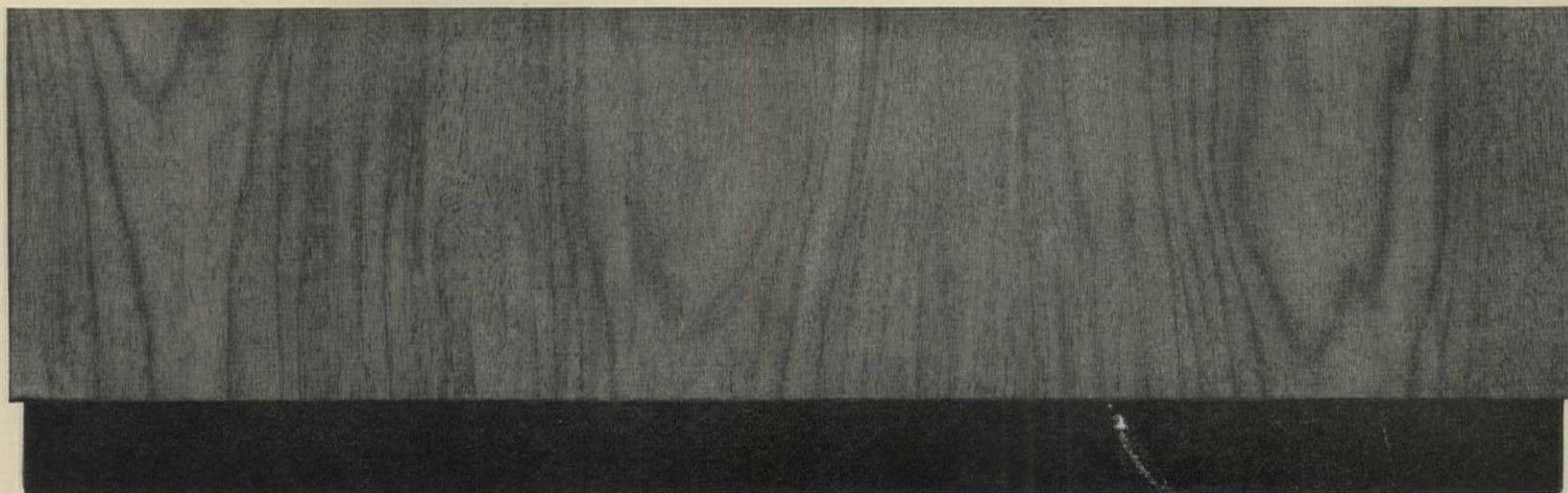
12. A new improvement... the Positive Action Detergent matically drops the right amount of detergent into the wash correct instant. front panels to

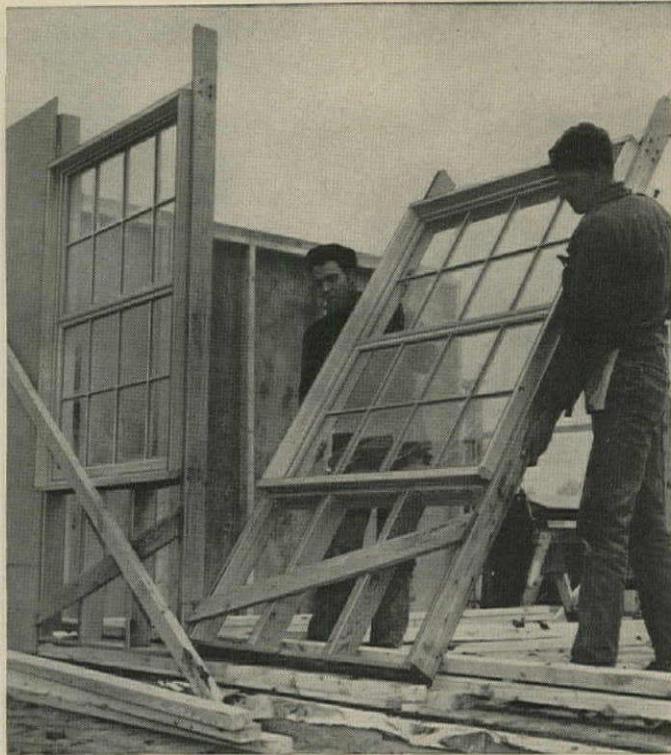
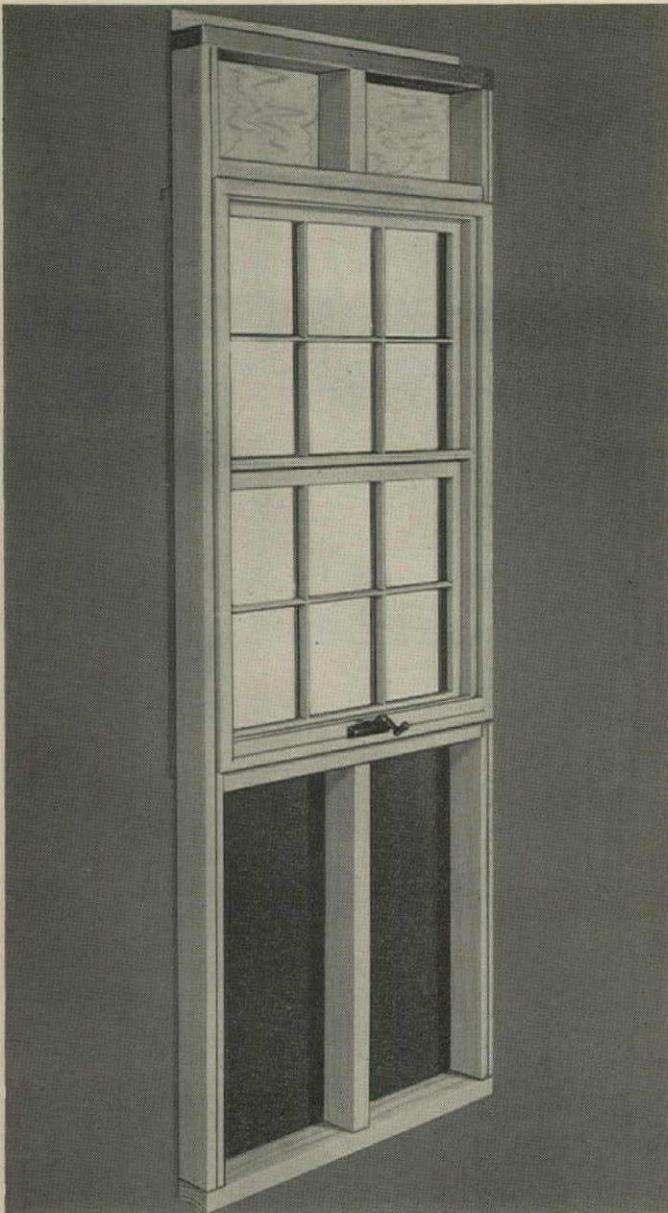


There's a choice from match any kitchen goes deeper. For ex-dirt and rust resistant coating. This quality in quality approach to front lawn. For full

specifications on new automatic dishwashers, built-in gas and electric ranges, the famous Waste King Universal disposer, write or wire to: WASTE KING CORPORATION, Los Angeles 58, California.

**WASTE KING
UNIVERSAL**





Andersen Strutwall is now made with small lights and a box header

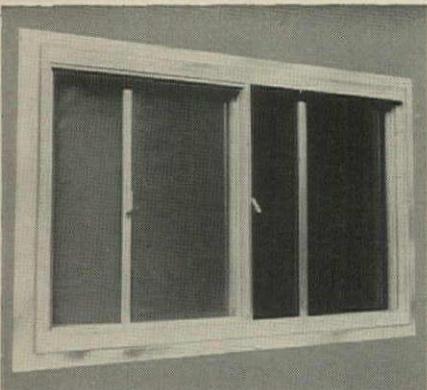
Divided-light windows now adapt Andersen's window-wall component to traditional styling. And a new box header and factory-placed sheathing make it a more complete element for panel construction.

The new small-paned windows are installed at the factory. They are glue-nailed in place, come with hardware, storms, screens, and double glazing on option. The new header is also optional. It eliminates the double 2x6s, can be tied into conventional or LuReCo construction with 2x4 top and bottom plates. Header comes in 3/8", 1/2", or 25/32" plywood.

Andersen Corp, Bayport, Minn.

For details, check No. 8 on coupon, p 213

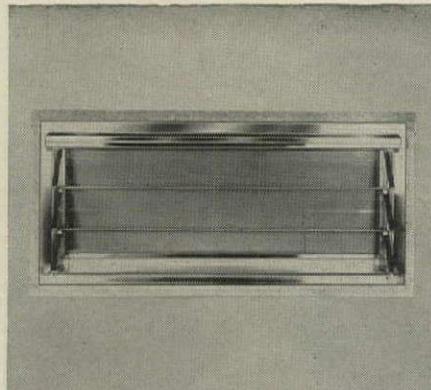
Here are four new ideas in window design



Ualco sliding windows are now being offered with integral storm sash and screens. A double-channeled third track in the deep-stepped sill houses the accessory units. The storm sash is fitted with vinyl bulb weatherstrip. One storm panel slides behind the other to allow summer ventilation. All sash can be installed from inside or out.

Southern Sash, Sheffield, Ala.

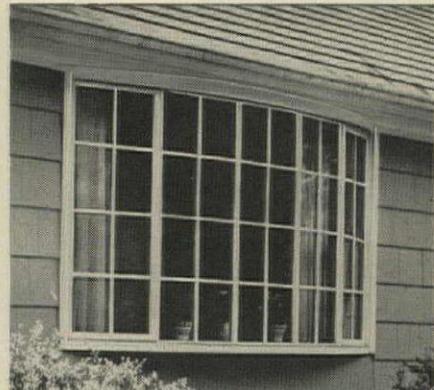
For details, check No. 9 on coupon, p 213



Basement jalousie has glass panels framed in aluminum extrusions and completely sealed with silicone-treated woven-pile weatherstrip. Windows come 33" wide in 13 3/4", 17 1/4", and 20 3/4" heights, are individually cartoned with necessary hardware and screens. Storm sash are optional. Prices range from \$10.95 to \$14.95.

Regal Products, Harrisburg, Pa.

For details, check No. 10 on coupon, p 213



Complete casement bow is made as one unit. All joints are dovetailed for strength, weathertightness, and narrow mullion lines. Top and bottom casing are shaped to bow radius, glued and screwed to head and seat. All wood is Woodlife treated. Hardware includes extension hinges, roto gears, cam-action locks. Screens are alodized aluminum.

Fred Reuten Inc, Closter, N.J.

For details, check No. 11 on coupon, p 213

New Products continued on p 194

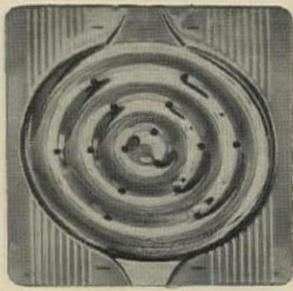


Announcing... a new range of ideas: the new WASTE KING UNIVERSAL Built-In. Dreyfuss-designed to look better... as fresh and new as a spring bouquet. Smart new control panels... a choice of 5 kitchen-fresh colors... smart, new burner grates. And it's WASTE KING UNIVERSAL-engineered to cook better

NEW

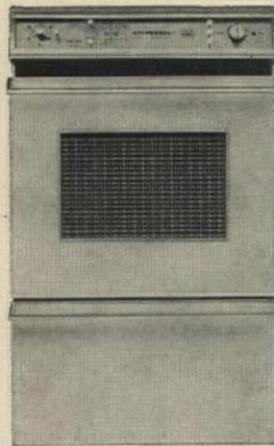
—with the smart-day. Completely controlled oven;

est, work-saving features in ranges to automatic Roast Guide with clock push-button eliminates hot ing with exclu reaching the Duty burners,



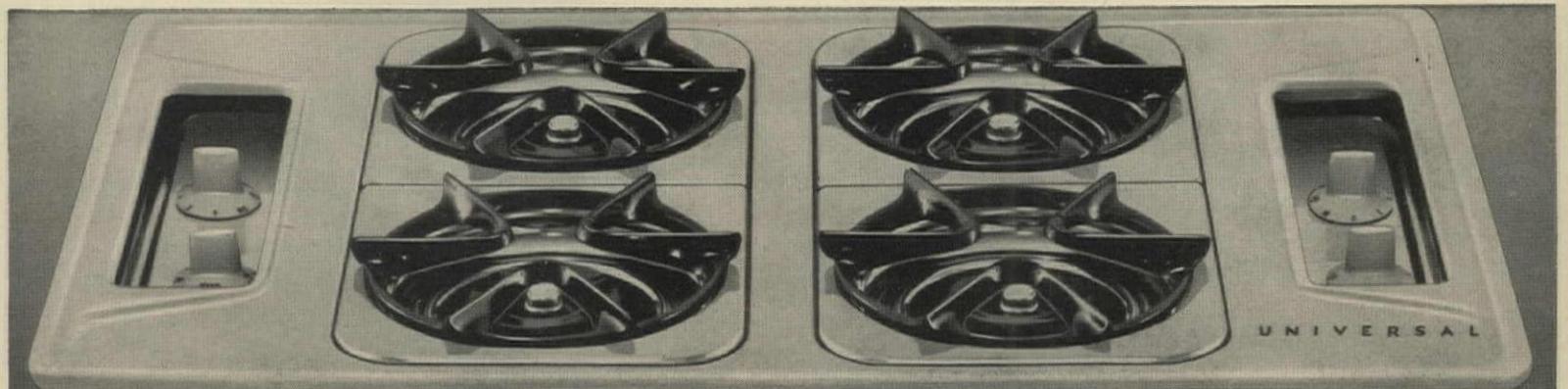
easy, it controls by time, size or type of meat. Oven spots and cold corners. Smoke-Proof and Flare-Proof broil-sive "Swirl-Design" keeps grease from smoking and flash point. A complete choice of burner units: Double-"Burner-with-a-Brain" (A.G.A. trademark); new Obedient

burners. A wide variety of models means Universal line will fit your needs. Gas and interchangeable. Quality is obvious... a approach to building. A fast way to put You can't buy and feature better built-ins fications on built-in ranges, drop-in electric matic dishwashers, and the famous



the easy-to-install Waste King electric units are dimensionally fast way to show your quality "Sold" signs on the front lawn. —at any price. For full speci-ranges, undercounter auto-

Waste King Universal disposers, write, wire or phone today to: WASTE KING CORPORATION, Los Angeles 58, California.



HOMES LIKE THESE...



DEPEND ON THIS...



LOW-COST SEWAGE TREATMENT PLANT

...makes new college and its campus community a reality

One of America's most talked-about colleges—and its 700-home campus community—is rapidly becoming a reality to the people of Oakland County, Michigan. Only 18 months ago, however, both college and community were clearly out of reach.

Michigan State University wanted to build its new branch near Pontiac, in Oakland County. Certainly, the county wanted it. Local developers were eager to provide needed housing. One important deficiency: adequate sewage treatment facilities—and the money to build a city-style central plant.

But where there's a will, there's a way. In this case, the three interested groups—University, county and builders—evolved a plan around "Suburbia," a low-cost sewage treatment plant which can be planned to serve communities of 200 to more than 10,000 homes. "Suburbia's" relatively modest cost made it possible to allocate the necessary funds.

So Oakland County got its college, which promises to become one of the Nation's most intellectual. And just as important, from the standpoint of builders in the area, is this: the "Suburbia" plant serving Michigan State University—Oakland and its campus community is only the first step in a much larger "master plan"... which will eventually provide adequate sewage treatment for the entire Clinton River Basin (about 220 square miles) at very sensible cost.

Because they are individually designed, under the direction of consulting engineers, "Suburbia" units conform to State and local requirements. Because they can be erected in so little time (90-120 days), builders find themselves able to construct and sell homes sooner. Best of all, "Suburbia" involves less initial and operating capital than any other type of conventional sewage treatment plant. Furnished and installed, on a turnkey basis only, by ...

MUNICIPAL SERVICE COMPANY

4623 Roanoke Parkway • Kansas City 12, Missouri • Phone JEFFerson 1-9500

New products

start on page 185



MODULAR UNIT, left, is made to span a LuReCo (or other) wall panel. Frame fits between studs, casing fills area from edge to edge. Older unit, right, falls short of filling panel edge to edge.

Curtis windows go modular

New sizes fit 4' wall panels without extra 2x4s, special cutting, fitting, or bracing; 3" outside casings give an overall width of 4'. And to do it they use fewer parts: four new double-hung units use one basic frame, one sash, four sets of hardware; a new slider uses the same side jambs. One removable and one non-removable double-hung are top-line wood weatherstrip units; others are a new economy metal stripped group. All are factory-primed, can be palletized for quick handling.

Curtis Companies, Clinton, Iowa.

For details, check No. 12 on coupon, p 213



WINDOW PARTS, left, indicated by Chairman George M. Curtis, can be used in any of four windows that formerly required elements at right.



PALLETIZED LOADS for ready handling in transit and in stock are possible with the new standardized parts, can save 75% in storage space.

New Products continued on p 197



TULIP KNOB DESIGN ILLUSTRATED WITH IMPERIAL ESCUTCHEON

How "the Schlage idea" helps sell homes

Here's where prospects get their first impression—and right from the start the sales team can point to *quality*. Both first-time and experienced home-buyers know Schlage locks, recognize that if a builder uses the best *here* he has probably used the best everywhere in the home. So Schlage creates confidence.

And maybe as important as helping the builder sell is freedom from call-backs afterwards. Behind every Schlage lock is this vital idea: "*design it better, make it better, guarantee it to last a housetime.*"

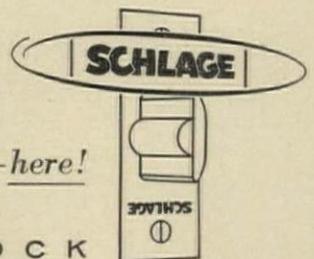
If you build quality homes, say so—by using Schlage locks throughout.

SCHLAGE

SCHLAGE LOCK COMPANY

San Francisco...New York...Los Angeles
Chicago...Vancouver, B.C.

*If it's a quality home
prove it—here!*



AMERICA'S MOST DISTINGUISHED LOCK

"Ideal" for your new homes
and remodeling jobs . . .



Kitchen Cabinets



Here are the reasons it pays to use IDEAL Kitchen Cabinets: They make the kitchen a center of attraction because they look and feel like fine furniture; Made of Western Ponderosa Pine and available with Pine or Birch fronts; Sanded satin-smooth, any type finish goes on easily and smoothly; Easy to arrange and install because units are available in wide range of sizes and connecting units can be cut back to make fitting an easy job; Doors are reinforced with metal strips to prevent cupping.

AVAILABLE IN THE FOLLOWING STATES:
ALABAMA, ARKANSAS, GEORGIA, KANSAS,
KENTUCKY, LOUISIANA, MISSISSIPPI, MIS-
SOURI, NEBRASKA, NEW MEXICO, OKLA-
HOMA, SOUTH CAROLINA, TENNESSEE,
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IDEAL COMPANY, BOX 889, WACO, TEXAS

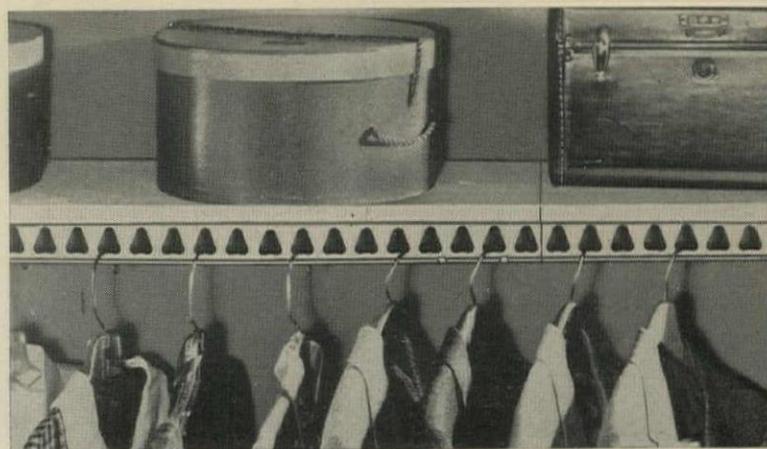
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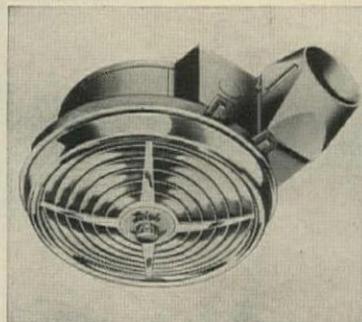


WARDROBE SHELF-VALET combines shelf and closet rod in one heavy-gage steel unit. Shelf is 12" deep, adjustable in width so five sizes cover closets 23" to 84" wide. Prices: \$4.90 to \$9.70. For details, check No. 13 on coupon, p 213.

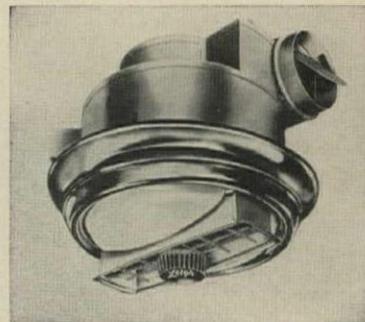
Leigh shows new built-in hardware

The products on this page are all being introduced by Leigh Building Products this summer. All are designed to give built-in convenience at relatively low cost and to go in place quickly and easily. Stocks are available from three major warehouses—Coopersville, Mich., Asheville, N.C., and Los Angeles—and from local jobbers nationwide.

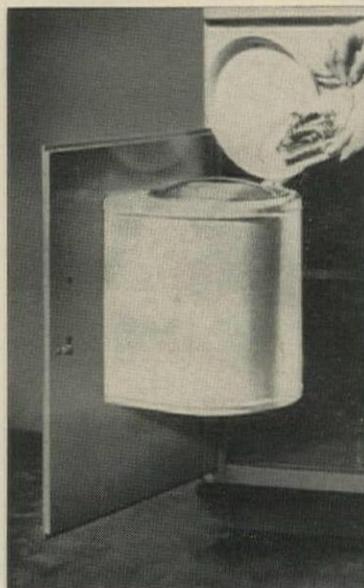
Leigh Building Products, Coopersville, Mich.



BATHROOM VENTILATOR will fit into space 4" deep. Four-pole motor operates 4¾" centrifugal blower for long duct runs. For details, check No. 14 on coupon, p 213.



THREE-WAY CEILING UNIT draws 1,320-w for 4,500 to 5,000 Btu output. Light takes two incandescent lamps. Unit fits between joists. For details check No. 15 on coupon, p 213.



DOOR-HUNG CONTAINER keeps garbage out of sight. Outer can is white baked enamel; removable pail is heavy galvanized steel. For details, check No. 16 on coupon, p 213.



SLIDING TOWEL RACK on four nylon guides rides on steel track, bars are chrome plated. Side-mounting unit: \$4.07; top-mount: \$4.88. For details check No. 17 on coupon, p 213

New Products continued on p 201

MATICO
MODEL HOME
IDEA ROOM #3

Sold on the home with

MATICO TILE FLOORS

"What's **different** about the house?" ... that's what Sunday "lookers" ask themselves. Successful builders know this ... know that rich, colorful, practical floors can make the difference that sticks in the prospect's mind. That's why smart builders feature nationally-advertised Matico Tile ... the tile of dramatic, lasting colors and patterns ... easy to install ... easy on the eyes ... easy on the housewife! And Matico Tile is priced to keep **your** costs down too!

See the results yourself when you install Matico Tile throughout your next project.

This striking floor is Matico Tweed Vinyl-Asbestos Tile #1155

Vinyl Tile • Rubber Tile • Asphalt Tile • Vinyl-Asbestos Tile • Plastic Wall Tile

MASTIC TILE DIVISION The RUBEROID Co.

Houston, Tex. • Joliet, Ill. • Long Beach, Calif. • Newburgh, N.Y.

QUALITY CONTROLLED

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PRODUCTS



Mastic Tile Division
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Please send me information on Matico's Builder Program

Name.....

Address.....

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

New General Electric built-ins — the ranges with all



New! **Sensi-Temp** Unit makes range-top cooking completely automatic

The desired temperature is simply dialed and the automatic Sensi-Temp* Unit maintains proper cooking heat. Pot watching is eliminated.

Pushbutton panel with dial for automatic unit and other cooktop controls can be placed in back or side wall. Roomy 21-inch Custom oven has automatic timer and minute timer, charcoal-type broiler, automatic rotisserie and meat thermometer, floodlight, two shelves and removable door.

General Electric Built-Ins offer so many other features: single and double ovens, two and four-unit cooktops, wide range of Mix-or-Match colors and a choice of several types of controls. Include General Electric Built-In Ranges in *your* plans for 1960!

Plans, specifications and accessory sources for the above kitchens are available from: Range Department, General Electric Company, Building 2, Appliance Park, Louisville 1, Kentucky.

*Trademark of General Electric Company



The Golden Value Line of the 60's

the most-wanted features!



Special all-in-one version of popular new **Mark 27**

Surface units, oven and control panel in one compact, built-in unit. With controls right on the range instead of on a separate panel, you save an extra installation step and you save money.

Features? Unique recessed top with four surface units, pushbutton controls, big oven with removable door and focused heat broiler. Available in coppertone, white and Mix-or-Match colors—and available *right now!* Model J610.

Progress Is Our Most Important Product

GENERAL  ELECTRIC



SLIDES INTO PLACE
SAVES SPACE,
TIME AND LABOR

One piece—one installation. Controls are built right in. For *complete specifications* and installation information, contact your local General Electric distributor or write to—Range Department, General Electric Company, Appliance Park, Louisville 1, Kentucky.



Scored Tile, in new Crystalline Glazes, used in an entrance hall designed by Emily Malino Associates. Walls: 315 Cr. Tan in Scored Design SD-1. Floor: 345 Cr. Cobalt in Scored Design SD-4. Color Plate 82.

This Entrance Hall is a Real Sales Feature!

It's cheery and charming with walls and floors of American-Olean's new Crystalline Glazed Tiles. They have a rich textured surface as decorative as it is rugged. On floors, they'll last a housetime without waxing, scrubbing or replacement.

Architects and builders are using Crystalline Glazes

and Scored Tiles* to create new and different decorative effects not possible with other materials.

Crystalline Glazed Tile is made in thirteen new colors, as well as in four Scored Tile designs—permitting hundreds of different patterns and color combinations. Send for full color booklets which give complete information.

AMERICAN-OLEAN TILE COMPANY, INC.
1552 Cannon Ave., Lansdale, Pa.

Please send me Booklets 1020, "Crystalline Glazes and Scored Tile" and 450, "Color Planning with Ceramic Tile".

NAME _____
(PLEASE PRINT)

COMPANY _____

STREET ADDRESS _____

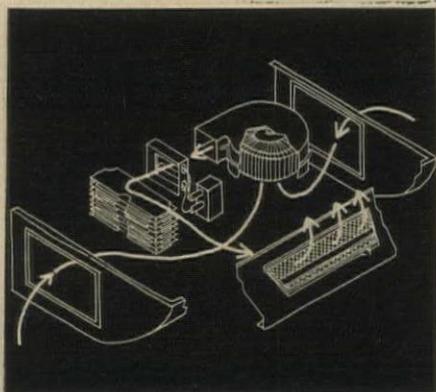
CITY _____ ZONE _____ STATE _____

*PAT. APPLIED FOR

CERAMIC TILE
**American
Olean**

New products

start on p 185



Electronic range hood, new from Caloric, is latest wrinkle in ductless hoods. Filter is a small electrostatic precipitator which pulls dirt out of circulating air. Filter is simply washed in household detergent when cleaning is necessary. Unit comes in stainless steel or colored enamel.
Caloric, Topton, Pa.

For details, check No. 18 on coupon, p 213



New quiet disposer tops Chambers line. Hush-A-Way Deluxe unit has self-sharpening sleeve and blades, precision balanced $\frac{1}{3}$ -hp motor, ball-bearing drive. New hangar makes installation easy. Factory guaranteed for one year.

Chambers Built-ins, Chicago.

For details, check No. 19 on coupon, p 213



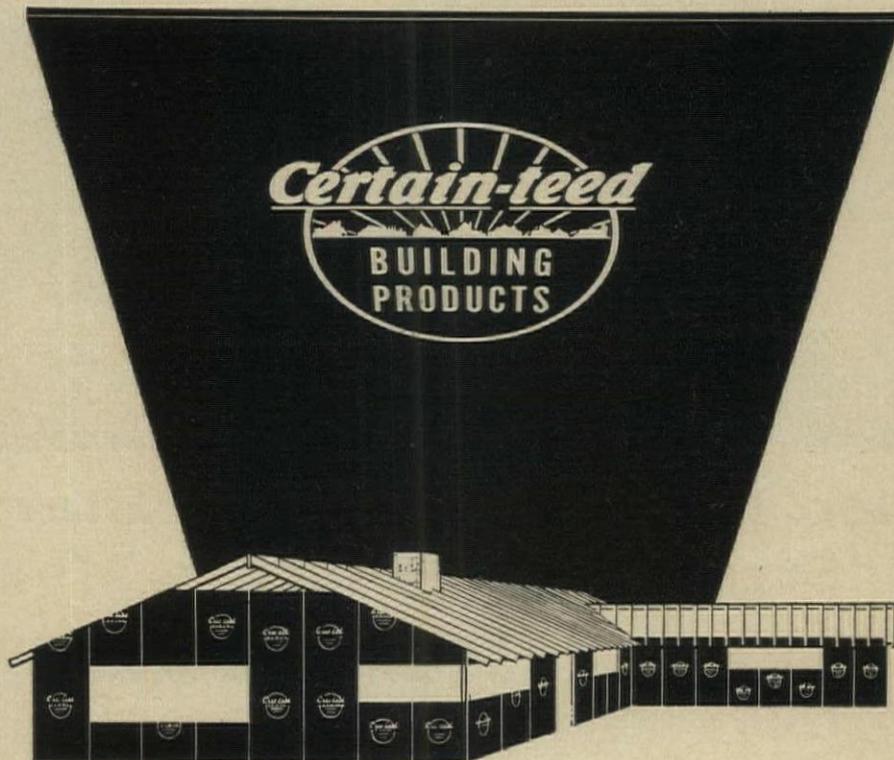
Frostless freezer from Kelvinator uses circulating air rather than shelf coils to cool box. Air carries moisture away from storage area so it cannot pile up. The 14 cu ft box holds 490 lb of food, has door shelves, roll-out basket, removable shelf for convenience.

Kelvinator, Detroit.

For details, check No. 20 on coupon, p 213

continued on p 202

The finest homes deserve Certain-teed Sheathing



Certain-teed Insulating Sheathing provides the excellent quality that a fine home deserves.

Made of select wood fibers asphalt treated and coated, Certain-teed Insulating Sheathing offers:

- Superior strength
- Weather resistance
- Excellent insulation
- Low applied cost

Available in standard $\frac{1}{2}$ " and $\frac{25}{32}$ ", plus the new Hi-Strength $\frac{1}{2}$ ". Both the standard $\frac{25}{32}$ " and the new Hi-Strength $\frac{1}{2}$ " eliminate the need for corner bracing.



Certain-teed®... Superior Products through Creative Research

CERTAIN-TEED PRODUCTS CORPORATION

Ardmore, Pennsylvania

Plants and offices throughout the United States



Rilco Laminated Wood "Stars" In "Strangers When We Meet"

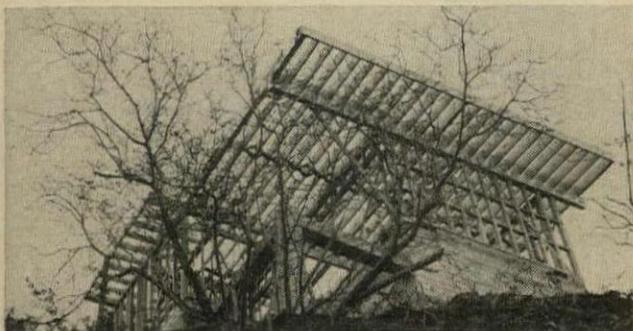
NEW COLUMBIA MOTION PICTURE WITH
KIRK DOUGLAS, KIM NOVAK, ERNIE KOVACS
AND BARBARA RUSH

The natural beauty of Rilco laminated wood beams and posts play a major role in Columbia Picture's new movie, "Strangers When We Meet." The plot is closely interwoven with the design and construction of an all-wood home — and throughout the color production exposed Rilco laminated wood members help to provide the necessary feeling of warmth and character.

The contractor, Kenneth B. Wamsley, Santa Monica, Calif., also discovered advantages in Rilco laminated wood . . . workmen were able to quickly erect prefabricated Rilco products just ahead of the tight filming schedule.

You too will be pleased with the fine workmanship and beauty of Rilco laminated wood structural members. Produced from top quality Douglas Fir, they reflect Rilco's ability to combine structural and decorative advantages in a most economical manner.

Whether it's residential, church, school, commercial or industrial building, Rilco adds natural beauty . . . enables you to build better for less.



Home designed by Columbia Art Directors Ross Bellah and Carl Anderson; engineered by Victor Gruen Associates, Architects, Beverly Hills and New York City.



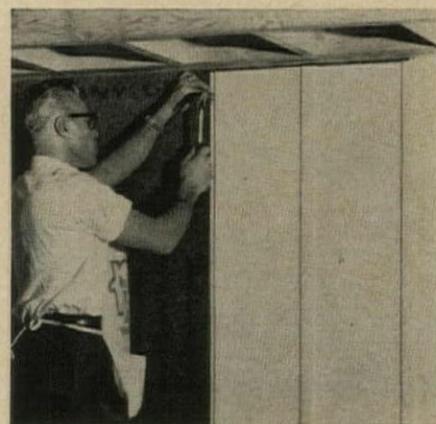
RILCO
works wonders with wood

RILCO LAMINATED PRODUCTS
W843 First National Bank Building
St. Paul 1, Minnesota

DISTRICT OFFICES: Tacoma, Washington;
Fort Wayne, Indiana; Linden, New Jersey

New products

start on p 185



Vertical siding has been added to Alcoa's new line, is designed to match the 8" clapboard introduced earlier. Vertical corrugations 12" oc give board & batten effect. Siding is made of Alclad sheet Alunalure coated in dark and light green, maroon, white, and grey.
Alcoa, Pittsburgh.

For details, check No. 21 on coupon, p 213



Stylonet 12-set is a 3x4-tile sheet of 4 1/4" ceramic wall tile mounted on a paper-mesh backing that allows 70% contact between tile and wall. Sheets will not buckle, handle easily. Mesh is quickly cut with a trowel, is pliable enough to adapt to wall surface.

Stylonet Corp., Milford, Mass.

For details, check No. 22 on coupon, p 213



Random vinyl chips in a clear vinyl grout make Armstrong's latest sheet flooring. Patrician is Hydrocord backed, comes .070" gauge in 6' wide rolls. Introduction colors in five ranges—white, rose taupe, ivory, celadon green, multi beige. Price: about 90¢ a sq ft.

Armstrong Cork, Lancaster, Pa.

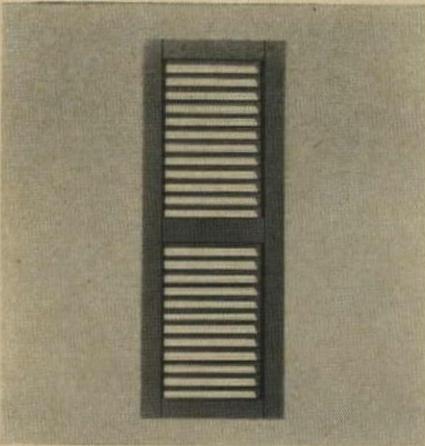
For details, check No. 23 on coupon, p 213

IN LAND DEVELOPMENT:

Faster ACTION with

Ford STYLE

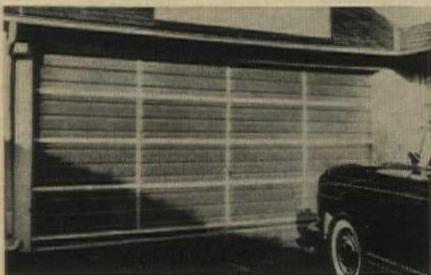
Ford QUALITY!



Aluminum shutters to match its line of clapboard and vertical aluminum siding have been announced by Crown. Shutters of heavy-gauge stock are preassembled and predrilled for installation over wood, stone, or brick. Shutters come in four colors—white, green, black, and gray—16" wide; 39", 42", 47", 51", 55", 59" 63", high.

Crown Aluminum, Pittsburgh.

For details, check No. 24 on coupon, p 213



Fiberglass panels set in tempered aluminum frame make lightweight, low-maintenance garage door. Color is integral with plastic; glass fiber reinforcing makes panels shatterproof. Doors come in all single and double sizes, with white, coral, yellow, tan, or green panels.

Frantz Mfg Co, Sterling, Ill.

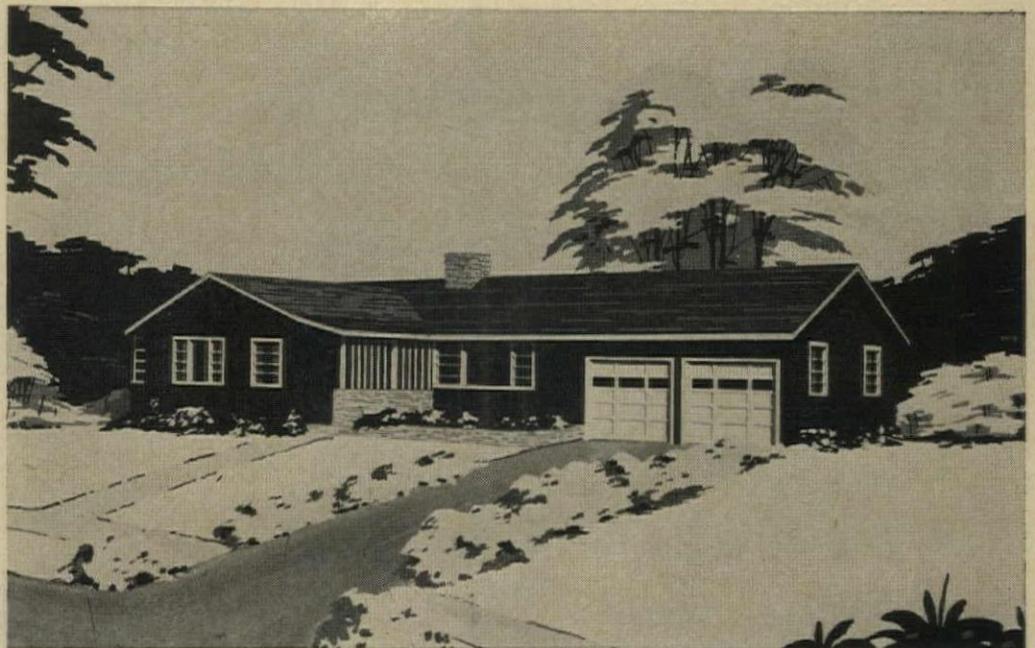
For details, check No. 25 on coupon, p 213



Primed steel door is newest Berry Suburban line model. Preassembled hardware cuts installation time to 20 minutes. One paint coat finishes. Horizontal V grooves add strength without weight, are designed to reject fingers when opening or closing. Five-year guarantee.

Berry Door Corp, Birmingham, Mich.

For details, check No. 26 on coupon, p 213



In land developing, *time is money*—BIG money. Once a development has gotten under way, one thing you want . . . and must have . . . is *action*. Homes must go up on the land *fast* . . . and sell *fast*!

Of course, too, this *action* must result in *profit*. On every count—for fast erection, quick sale *and* profit return—**FORD HOMES** are the right answer. That's why more and more developers today are turning to **FORD factory-built HOMES**.

Here's how **FORD HOMES** fill the bill . . . for action . . . for profit!

- **FORD Homes** go up fast . . . are ready for decorating 24 hours after delivery . . . with big savings in on-site labor costs.
- **FORD style** is right for today's home market . . . styling that is functionally modern . . . tastefully attractive . . . that will live well through the years.
- **FORD quality** sells more homes faster because Ford design combines "engineered-in" efficiency of layout with the strength and economy of production manufacturing methods that deliver "more home for the dollar".
- **FORD** builds with famous brand name materials, equipment and components throughout; solid brass hardware, thermopane windows, top quality heating units and electrical fixtures.
- **FORD** builds in "re-sale insurance" with advanced wiring and outlet installations designed for the appliances and services of today—and tomorrow.
- **FORD Homes** are complete homes . . . Ford does the wiring, applies the dry-wall, completes the trim, lays the finish flooring . . . all in one package.
- **FORD Homes** meet or exceed FHA, VA and conventional mortgage requirements, and are accepted by leading building code authorities.

Quite a deal? You bet! And that's why—by being able to offer more house for the money—you will get *faster action*, get the *profit return* you want with the complete **FORD** quality-home package. For full details, write today on your letterhead to Dept. HH:

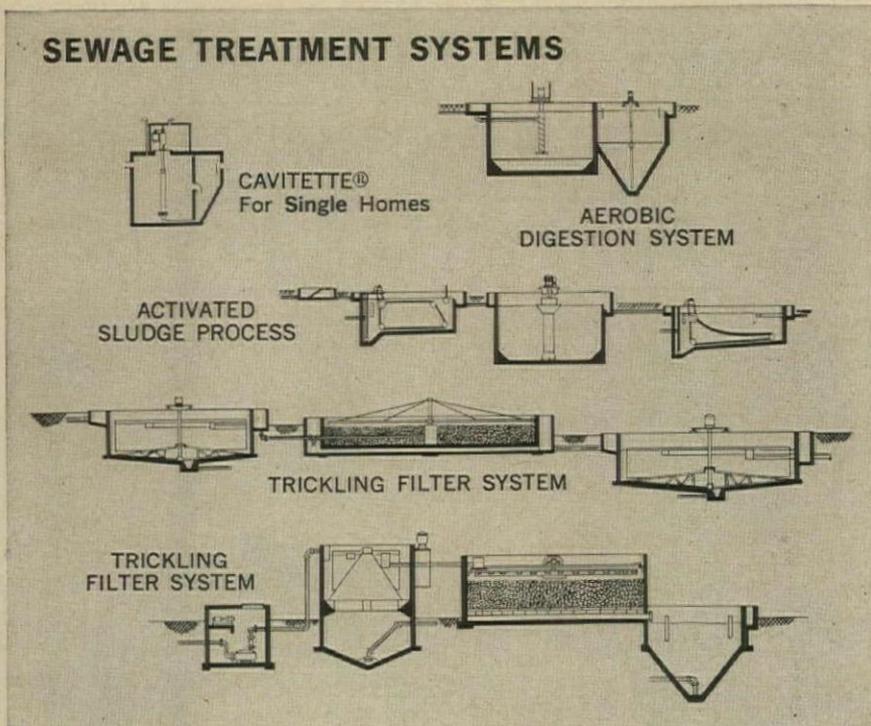
IVON R. **Ford** INC., MC DONOUGH, N. Y.

Manufacturing Franchises available in some areas.

continued on p 204

New products

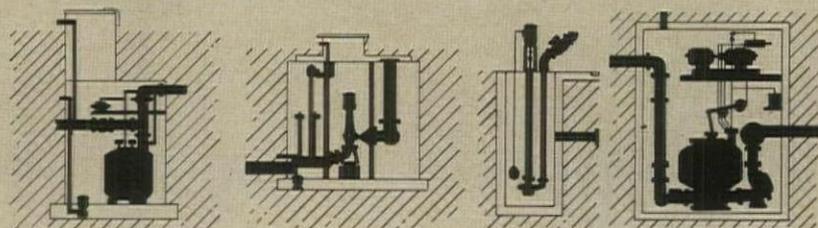
start on p 185



Everything a Builder Needs to Treat and Pump Sewage

For 1 home or 10,000 . . . whatever the economics, degree of treatment required, topographical conditions, expected life of installation or expandability, Yeomans offers you the equipment to solve any sewage-handling problem. It is the world's most extensive line and backed by the experience of a specialist. The booklet offered below brings you some of that experience right away.

SEWAGE LIFT STATIONS



PNEUMATIC UNDERGROUND STATION
"Package" design including structure. Easy to service, sanitary, low maintenance.

CENTRIFUGAL UNDERGROUND STATION
Quality "package" design with short-coupled dry-pit pumps. Nominal cost.

CONVENTIONAL WET-PIT
Low first cost, familiar installation and maintenance. Commercial or residential.

TOPS IN DEPENDABILITY
Shone® Pneumatic Ejector—25-Year Warranty! Maintenance free. Lowest over-all cost.



ALL YOU NEED TO KNOW ON HOME SEWAGE DISPOSAL

Published especially for builders, this fast-reading booklet gives the solution to any problem you might meet in home sewage disposal. Covers single-home systems, central plants, temporary facilities, connection to municipal lines, different types of terrain, lift stations, and health considerations for one to 1500 homes. Not technical! Forty pages, full of helpful illustrations. Fill out this coupon for your free copy of "The Homebuilder's Guide to Effective Sewage Disposal."

YEOMANS

2003-8 N. Ruby St.,
Melrose Park, Ill.
(Suburb of Chicago)

Name _____

Title or Business _____

Company _____

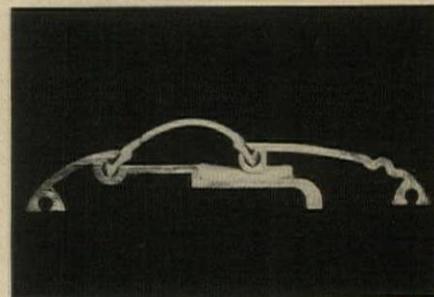
Street _____

City _____ Zone _____ State _____

No. of Homes Planned _____; Scattered Lots _____;

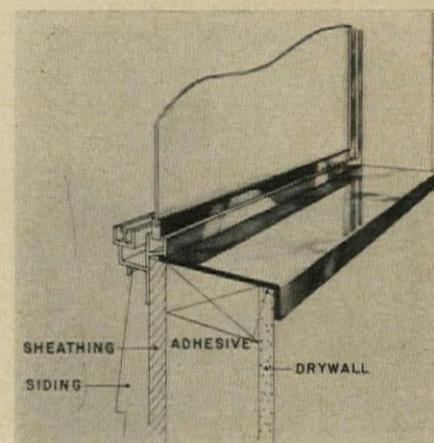
Tract Development _____

TL-6027



Adjustable sill gives a tight weather seal without shimming threshold or trimming door. Either (or both) end of the inner section can be moved in or out to raise or lower the vinyl bubble, or raised or lowered to adapt to floor level. Sill can adjust to overall height of 1 3/16".
Gossen Weather Strip, Milwaukee.

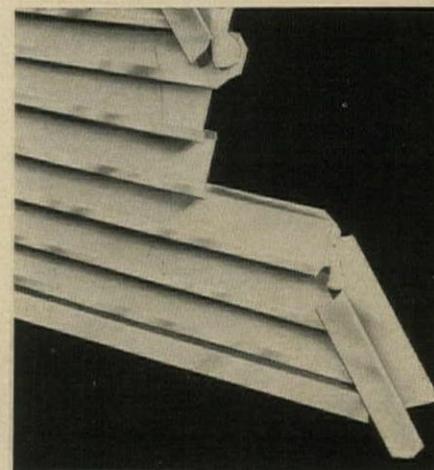
For details, check No. 27 on coupon, p 213



Fiberglass sill forms a low-cost, low-maintenance stool for metal windows. Sill looks like marble, but cost is less than half and sill will not chip, stain, or mar. Glassill comes in 4 1/2" and 5 1/4" widths, 9' lengths; can be cut with hacksaw or abrasive disk.

Glassill Co, Dearborn, Mich.

For details, check No. 28 on coupon, p 213



Adjustable louver will fit all roof pitches from 2-in-12 to 10-in-12—the slot opening widens as pitch decreases to give maximum free area at any slope. Factory-assembled louvers are made of .025 gauge aluminum, with 8x8 mesh aluminum screens. Three sizes (68" base and up) fill most uses.

Louver Mfg Co, Minneapolis.

For details, check No. 29 on coupon, p 213

Publications start on p 208

Bostitch Staplers Save Maryland Builder \$55.13 per House

\$33.75 SAVED ON ROOF ALONE

Stapling a 24' x 48' roof is a three-hour job for four men and a carrier. The same size roof was a six-hour job with hammer and nails. At \$2.25 per man, savings come to \$33.75. Stapler is Bostitch H4 Heavy-duty Hammer.



STAPLING CUTS SCREENING JOB \$4.50

Screening goes up 50% faster using a Bostitch T5 Tacker to fasten it to soffit supports. Hammer and tacks were used before. There's less fatigue with the powerful, spring-driven T5—and one hand is always free to position screening precisely on soffit supports.



ONE-HOUR JOB DONE IN 15 MINUTES—

\$16.88 SAVED. Men in shop staple aluminum vapor barrier in side-walls in a quarter hour. This was a one-hour chore with hammer and nails. At an average of 10 panels per house, builder puts an additional \$16.88 in the profit column on each house.



WHERE ELSE CAN BOSTITCH STAPLERS SAVE YOU TIME AND MONEY?

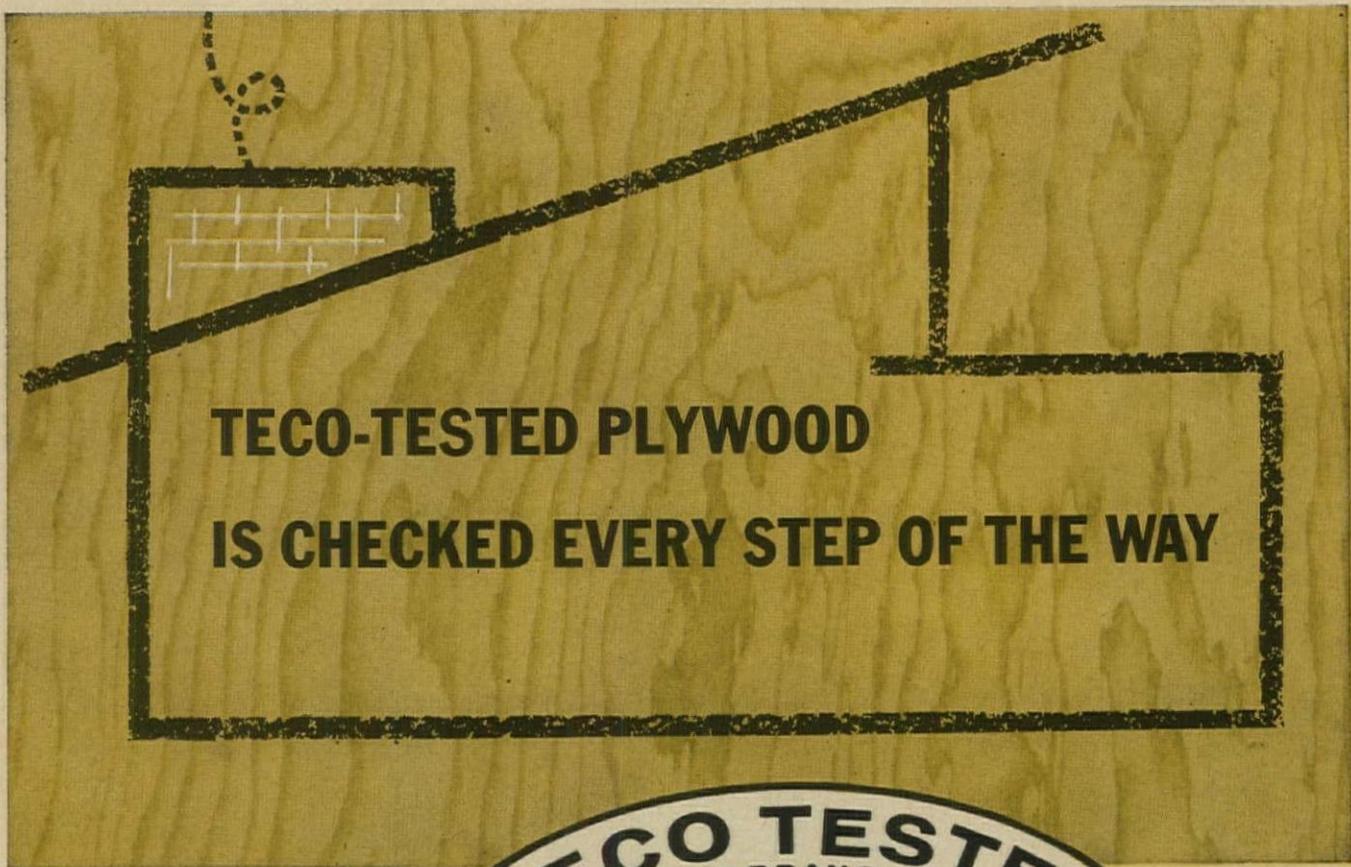
Many places—installing ceiling tile, Cornerite, metal lath, insulation and low-voltage wiring—to name just a few. On a typical small house, your savings should equal or better this builder's. Stapling will save you even more if you use Bostitch staplers and staples on *all* the building jobs that they do better and faster. You'll find them at building supply dealers everywhere.



Fasten it better and faster with



528 BRIGGS DRIVE, EAST GREENWICH, R. I.



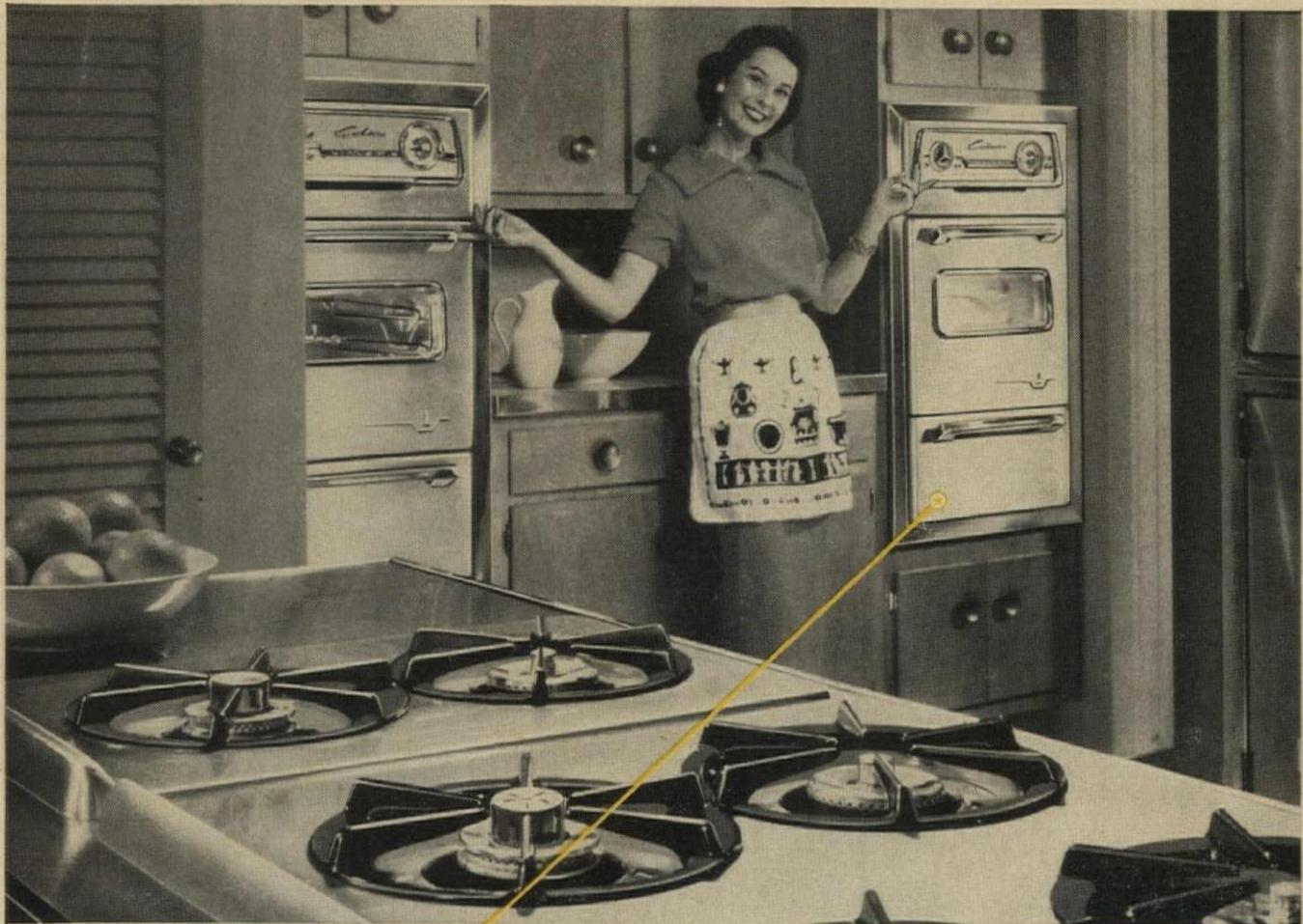
Santiam's New Plywood Grade Stamp Guarantees Consistent Quality

The Teco Grade Stamp is backed by the Timber Engineering Co., Washington, D.C. It is an independent FHA-Accredited Testing Agency. The Teco Grade Stamp means that plywood carrying this stamp has undergone production line inspection and testing by a technician employed by Timber Engineering Co. What this means to you is that this technician is on duty every day watching and checking every step of the manufacturing process. He knows what goes between the two outer plys—the core material, the kind and type of glue, patching, in fact the whole operation from log to finished product. Only when plywood meets Teco's rigid requirements is it given the Teco grade stamp of approval. This is your guarantee of a consistent supply of superior quality plywood when you insist on TECO.

SANTIAM LUMBER CO.

Sweet Home, Oregon
Phone EMpire 7-2121, TWX 315-U

Show you know Quality...



build in a new CALORIC Gas Range that displays the Gold Star Award!



Only top-of-the-line ranges bear this Gold Star. Awarded by A.G.A., it shows quality at a glance—it's a guarantee of 28, or more, of the latest advances in performance, automation and design.

Your customers will spy the Gold Star immediately. Pre-sold by TV, 4-color magazine ads, local promotions—*there's millions of dollars supporting it*—they'll know the home you've built offers faster, cooler, cleaner cooking. There's no better way to impress a woman!



LATEST FEATURES! Caloric built-in Gas ranges offer latest automatic conveniences: rotisserie, clock-controlled oven, meat thermometer that roasts "just right"... then turns oven off. Gold Star standards insure, too, that every inch is a cinch to clean!



TRULY AUTOMATIC! Burner-with-a-Brain* keeps food from burning or boiling over—the Gas adjusts itself to maintain steady temperature. Engineered for easy installation, Caloric Gas built-ins come in 7 beautiful metal and porcelain finishes.

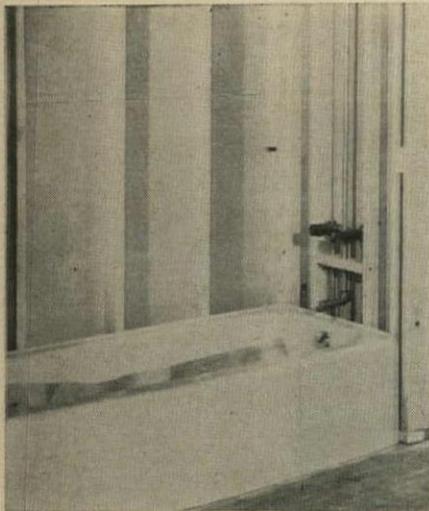
*A.G.A. Mark © Am. Gas Assoc., Inc.

GOLD STAR QUALITY MEANS ECONOMY, TOO! As a builder, you save on installation costs when you put in Gas built-ins. Your customers save, too—Gas burners never wear out, monthly bills are low. These are two important talking points. The dependability of Gas—in all weather—is another. Call your local Gas company for help in planning better kitchens.

AMERICAN GAS ASSOCIATION

Caloric

No wonder...
today more people than ever are cooking with  GAS!



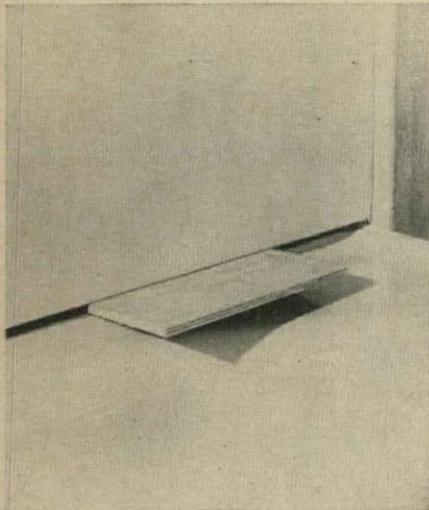
1. Place tub so lip is flush with drywall.



2. Or fur-out the studs to meet tub lip.



3. Use full sheets to avoid butt joints.



4. Allow 1/4" between tub and bound edge.



5. Tape and cement joints and nail heads.



6. Coat with heavy waterproof sealer.



7. Seal all wallboard edges and cutouts.



8. Apply mastic according to specifications.



9. Cover 1/4" gap with tile, caulk joint.

Here is how to apply tile to gypsum drywall

Gypsum wallboard makes a good, sound, and economical base for tile in tub alcoves and showers—with one big If: All precautions must be taken to keep water from getting through to the wallboard. To show you how to do it, the Gypsum Assn has prepared a new color slide film and an illustrated brochure that ask the question: "Why should builders have to spend \$75 more per bathroom to use other

materials, when gypsum wallboard provides a soundly constructed wall accepted by FHA?" The answer is given in the picture sequence above. Film showings can be arranged by writing to the Gypsum Assn, 201 North Wells St, Chicago 6. Brochure is available by checking H&H coupon.

Gypsum Assn, Chicago.

For copy, check No. 30 on coupon, p 213

Publications continued on p 210

INTRODUCING...

THE NEW *Broan* MIXED-FLO RANGE HOOD

it combines the performance you want
with the price that you like

Two important advantages come your way with this new contract winning hood. Both of them help make your bid look best.

Advantage No. 1 is a hood of superior performance. With the Mixed-Flo Fan you can point to an exhaust system that is revolutionary in development . . . that performs more efficiently, runs more quietly than any fan or blower-operated hood on the market.

Advantage No. 2 is cost. You can bid low with the Mixed-Flo because you have an initial price advantage. And you save valuable time and money on every job because this great hood, like all Broan hoods, comes to you as a complete package, factory wired, fully assembled, ready to mount in place. And the Mixed-Flo is engineered to fit your installation with either vertical or horizontal discharge.



MIXED-FLO HOOD FEATURES —

- Unitized Construction — the fan is fully housed within the hood. There is no lost cabinet space whatever.
- Great In Exhaust Power — the new Mixed-Flo Fan provides extra pressure needed for long duct runs and elbows . . . formerly achieved only by blower powered units.
- Remarkably Quiet In Operation — the highly efficient Mixed-Flo Fan is designed for low sound level performance.
- Smooth Inside, Outside Construction — no sharp screw ends.
- Smart Sculptured Hood Design — only 5 slim inches high. Mitered corners permit cabinet doors to open fully.
- Equipped for Twin Lights for shadowless cooking. Recessed lifetime aluminum filters snap out with the greatest of ease. Front pushbutton controls.
- Accommodation For Vertical Or Horizontal Discharge to 3¼" x 10" duct without fittings.
- A Fast Running Installation — comes prewired, preassembled . . . simply remove the outlet box cover to hook up power supply.

See your wholesaler or write for full information



Broan
®

MANUFACTURING CO., INC. • 924 W. STATE ST., HARTFORD, WIS.
(Near Milwaukee)

Specialists in Quality Ventilating Equipment for Over 25 Years

In Canada —
Manufactured by
Superior Electrics Ltd.,
Pembroke, Ontario

INSTALLED IN SECONDS!



**NO Hanging!
NO Painting!
NO Hardware!**

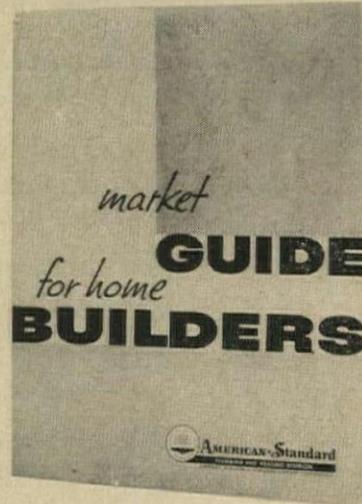
New, unique patented design enables the builder to use construction short-cuts, labor-saving installation procedures never before enjoyed. Available in heights to 8', widths to 4'. Can be installed in pairs. 16 lovely, washable, fire-resistant vinyl colors available.

THE *Columbia-matic*

FABRIC DOOR
Slashes Builders Costs

For complete details write

THE COLUMBIA MILLS, INC.
368 S. WARREN STREET SYRACUSE 1, NEW YORK



BOOKLET shows how to tabulate data. Tables at right show existing land use in Stratford, Conn. and land now available in residential zones.

Table 6 - Existing Land Use in Stratford (1953)
(Town Area: 12,331 acres or 19,599 sq. miles²)

classification	acres	percent of town area
Residential	3,100	25.0%
Commercial	125	1.0
Industrial	700	5.7
Parks and Reservations	400	3.3
Private Recreation	110	1.0
Cemeteries	145	1.2
Schools	130	1.05
Public and Semi-Public Bldgs.	30	.2
Town Streets	750	6.0
State Highways	250	2.0
Main St Parkway	120	1.0
Connecticut Turnpike	100	.9
Railroad	60	.5
Airport	350	2.9
Total-Developed Land	6370	51.7%
Undeveloped Land	5,961	48.3
Total	12,331	100.0%

* Actual land area is 18.5 square miles or 12,800 acres.

Table 7 - Available Land in Stratford By Residential Zone

neighborhood number	type of zoning	approximate number of lots
1	RS-4 7,500 sq. ft.	300
2	RM-1 7,500 sq. ft.	250
3	RS-4 7,500 sq. ft.	100
4	RM-1 7,500 sq. ft.	60
5	RM-1 7,500 sq. ft.	120
	RS-4 7,500 sq. ft.	80
6	RS-3 10,000 sq. ft.	640
7	RS-4 7,500 sq. ft.	300
8	RS-3 10,000 sq. ft.	1,570
9	RS-4 7,500 sq. ft.	225
10	RS-1 40,000 sq. ft.	200
	RS-3 10,000 sq. ft.	80
	RS-3 10,000 sq. ft.	160
	RS-2 20,000 sq. ft.	140
	RS-1 40,000 sq. ft.	1,020
TOTAL LOTS		5,245

1956 Master Plan of Development.

How to start a market survey

American-Standard has put together a 30-page guide to what you need to know before moving into a new area. The first section lists all the local sources of information, what kind of information you can get from each, and how to approach them. A second section uses a typical area (Bridgeport, Conn.) to show how to make an overall study of population and economic factors—growth, density, roads, zoning, utilities, sales climate. Part three makes a detailed analysis of one town in the area, covers land use, population distribution, zoning, topography, sewers, water lines, schools, etc. Part four shows the conclusions that can be drawn.

American-Standard, New York City.
For copy, check No. 31 on coupon, p 213

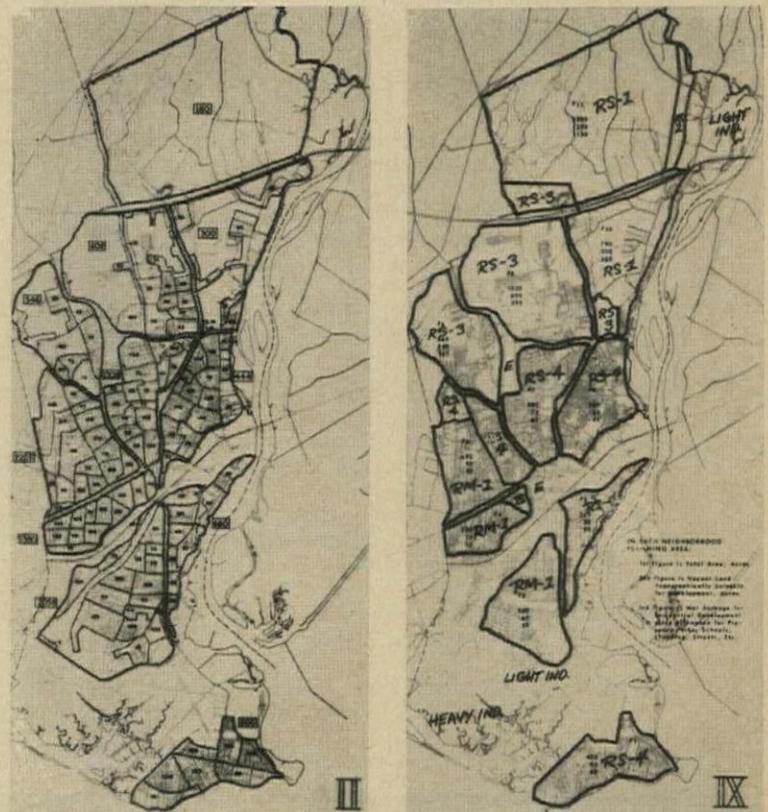
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housing professionals like:

CHARLES B. SHATTUCK, past president of the National Association of Real Estate Boards. Says Mr. Shattuck: "The influence of HOUSE & HOME for good in the betterment of the housing situation in America is unlimited."



INFORMATIVE MAPS from planning or zoning groups can tell you existing and planned road layouts, general land use, population distribution, zoning, available land, sewers, water lines, schools, shopping facilities, new developments, etc.

Publications

All about lawn sprinklers

Rain Jet Corp, a leading manufacturer of underground sprinkling systems, has two new publications that cover the whole field.

A new catalog tells how the Rain Jet system works, then shows the wide variety of spray patterns available in the company's heads, the performance to be expected, the accessories and fittings available. 24 pages.

For copy, check No. 32 on coupon, p 213

A second Rain Jet brochure tells how to plan, layout, and install a sprinkler system. Foldout sheet includes squared plotting paper, sealed templates for spray patterns, engineering data, maintenance instructions.

Rain Jet Corp, Burbank, Calif.

For copy, check No. 33 on coupon, p 213

Insulating for electric heat

The new interest in better insulation for electrically heated houses is reflected in a new brochure from Forty-Eight Insulations. An eight-page manual gives minimum specs for all conditions, special requirements for ceiling heat, variants in glass area, and rate of air changes. Specs cover loose fill, batts, blankets, and vapor barriers for ceilings, walls, and floors.

Forty-Eight Insulations, Aurora, Ill.

For copy, check No. 34 on coupon, p 213

Case for ducted heat

Mueller Climatrol presents the arguments for central system electric heat in a new booklet, "Here's why electric heating that uses air circulation is best for you." Also shown: Mueller's line of heat pumps, electric furnace, duct heaters, cooling units.

Mueller Climatrol, Milwaukee.

For copy, check No. 35 on coupon, p 213

Resilient floor manual

Congoleum-Nairn has put together a 46-page booklet detailing all the relevant factors in choosing floor and wall coverings. Also included: product and installation specs, underfloor preparation, tables of properties, maintenance data. Company's complete line is shown.

Congoleum-Nairn, Kearny, N.J.

For copy, check No. 36 on coupon, p 213

New Virden fixtures

A short catalog of three new lines of fixtures is available from John Virden. One series is styled of reed and brass, another features opaque white globes in gold-flecked aluminum, a third is made up of brass planters. All are shown in four colors and fully described.

John C. Virden Co, Cleveland.

For copy, check No. 37 on coupon, p 213

Structural hardware catalog

Teco has a new comprehensive catalog of timber connectors, framing devices, and installation tools with full specifications on the products. New products covered include U-Grip hangers, Du-Al-Clip framing anchors, Fas-Lok metal bridging. Special tables give recommended working loads.

Teco, Washington, D.C.

For copy, check No. 38 on coupon, p 213



William Brockway
residence, Los
Angeles, Calif.
Burton Schutt,
architect. Reprint,
Sunset Magazine.
H. H. Baskerville, Jr.,
photographer.



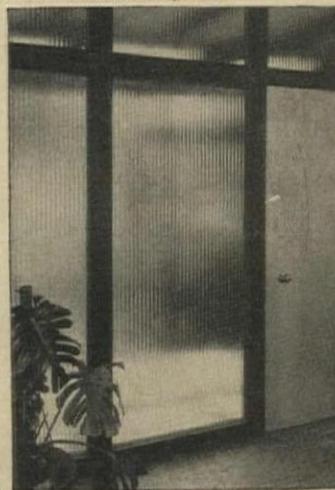
Architects: Kegley, Westphall & Arbogast

THIS FREE BOOKLET...

Shows how decorative glass brightens and beautifies homes. It is filled with dramatic illustrations of the ways translucent glass adds a touch of luxury and smartness to every room. Specify Mississippi Glass. Available in a wide range of exciting patterns and surface finishes wherever quality glass is sold.



Create a distinctive decor with translucent glass by Mississippi that floods interiors with softened, flattering light, makes rooms seem larger, friendlier, important. Write for free booklet. Address Department 9.



FIGURED & WIRED GLASS



MISSISSIPPI GLASS COMPANY

88 Angelica St. • St. Louis 7, Mo.

NEW YORK • CHICAGO • FULLERTON, CALIFORNIA

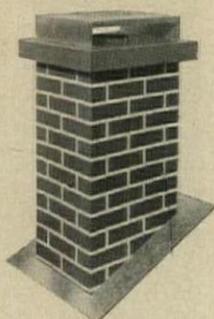
WORLD'S LARGEST MANUFACTURER OF ROLLED,

continued on p 213

METALBESTOS CHIMNEYS...

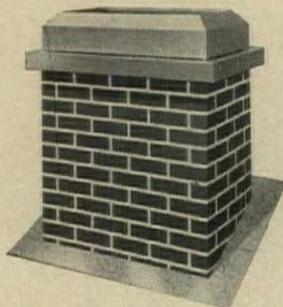
4 PACKAGES GIVE YOU 62 STYLE COMBINATIONS

THE MONTEREY. Attractive in red or buff brick. You select any one of four top styles - Utility Rain Cover (shown). Weather Crown, Top Extension Stub, or plain. Available in three, four and five foot heights.



24
COMBINATIONS

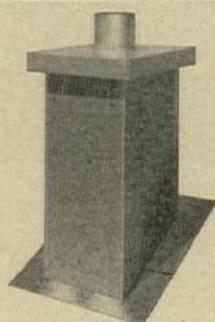
THE MONTEREY TWIN. Big brother of the Monterey - a massive 32" by 18". Accommodates an individual stack or any combination of two stacks. Comes in red brick or buff* brick with your choice of four top designs - Twin Weather Crown (shown), Twin Utility Rain Cover, Top Extension Stubs, and plain. Available in three, four and five foot heights.



24
COMBINATIONS

*Buff color - special order.

THE SUBURBAN. Handsome and economical in durable galvanized steel. Pick any one of four top styles - Top Extension Stub (shown), Weather Crown, Utility Rain Cover, or plain. Three, four and five foot heights.



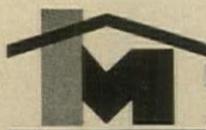
12
COMBINATIONS

THE CONTEMPORARY. Modern round design for contemporary construction. Also ideal for remodeling, farm buildings, industrial applications, etc. Round Top (shown) fabricated from durable aluminized steel, attaches directly to pipe. Chimney Cap is also available where open stack is desired.



2
COMBINATIONS

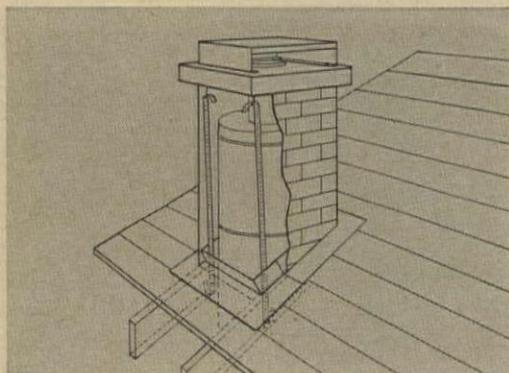
62
COMBINATIONS



METALBESTOS DIVISION
WILLIAM WALLACE COMPANY
BELMONT, CALIFORNIA

MANUFACTURING PLANTS IN BELMONT, CALIFORNIA • LOGAN, OHIO

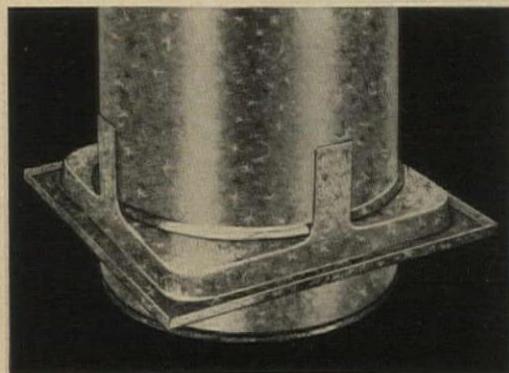
ONE MAN, ONE STOP, ONE HOUR



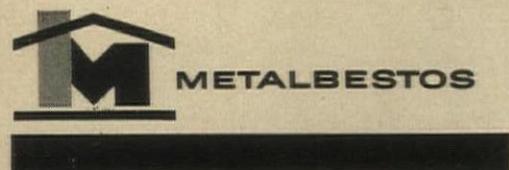
Exclusive: New housings secure to roof framing with metal tension straps. Quick assembly - no metal screws required. Wind tunnel tested. Metalbestos Housings won't shift, buckle or twist in 100-mile-an-hour winds.



Exclusive: Twist-Lock. Light-weight Chimney Pipe sections fit together quickly with same action you'd use to twist lid on pickle jar. No mastic, cement or caulking.



Exclusive: New, Fast, Support Installation. Frame standard 16" on center opening - nail in support plate and insert starter section. U. L. listed.



Decorative clay tile

Malvern Flue Lining has two new brochures showing structural clay tile and tile screen materials. The brochure on Mal-Tex structural tile shows the many variations possible with the eight basic designs and five basic sizes.

For copy, check No. 39 on coupon below

The Sol-R-Wal brochure shows the almost unlimited variations in screens and grilles that can be made from nine basic forms.

Malvern Flue Lining, Malvern, Ohio.
For copy, check No. 40 on coupon below

Sliding door details

Arcadia has new literature on its Series 150 stock-size doors. Quarter-size details sills, jambs, mullions, meeting stiles, etc. for two-, three-, and four-panel doors are given; all dimensions are tabulated; sales features are photographed. Sample spec forms are also included. Series 150 is Arcadia's builder line.

Arcadia, Fullerton, Calif.
For copy, check No. 41 on coupon below

Kitchen cabinet catalog

The three lines of cabinets made by Major Line are shown in color in a new brochure. Featured are two new lines in red alder, colonial and contemporary. Separate specification brochure shows all units, describes special installation features.

Major Line Products, Hoquiam, Wash.
For copy, check No. 42 on coupon below

Applying aluminum soffits

Reynolds' new brochure tells how to use new metal soffit system. Installation details cover work sequence, hip roof soffits, cave sections, gable fascia trim, overhang width, cutting, fitting, fastening, etc.

Reynolds Metals, Richmond, Va.
For copy, check No. 43 on coupon below

Vinyl asbestos flooring

Eight basic floor covering styles are shown in color in room settings in Kentile's newest handbook. Also covered: various Kentile specialties, floor finishes, cleaners. Featured are metallics and terrazzos.

Kentile, Brooklyn.
For copy, check No. 44 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 • August

- 1. Uni-bilt modular fireplace
- 2. New Crane fixtures
- 3. Spenkman metering shower
- 4. Universal-Rundle flush valve
- 5. Simpson Symphonic doors
- 6. Morgan Dutch doors
- 7. Rimco storm-screen door
- 8. Andersen Strutwall
- 9. Ualco sliding window
- 10. Regal basement jalousie
- 11. Fred Reuten casement bow
- 12. Curtis modular windows
- 13. Leigh closet valet
- 14. Leigh bathroom ventilator
- 15. Leigh ceiling fixture
- 16. Leigh garbage container
- 17. Leigh towel rack
- 18. Caloric electronic range hood
- 19. Chambers disposer
- 20. Kelvinator freezer
- 21. Alcoa vertical siding
- 22. Stylon mesh-backed tile
- 23. Armstrong Patrician flooring

- 24. Crown aluminum shutters
- 25. Frantz fiberglass door
- 26. Berry steel door
- 27. Gossen adjustable sill
- 28. Glassill fiberglass sill
- 29. Lomanco louvers

PUBLICATIONS

- 30. Gypsum backing for drywall
- 31. How to make a market survey
- 32. Rainjet sprinkler catalog
- 33. How to plan a sprinkler system
- 34. How to insulate for electric heat
- 35. Case for ducted heat
- 36. Resilient flooring manual
- 37. Virden light fixtures
- 38. Teco structural hardware
- 39. Styles in structural clay tile
- 40. Tile screens and grille
- 41. Arcadia sliding door details
- 42. Major Line cabinet catalog
- 43. How to apply metal soffits
- 44. Vinyl flooring handbook

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I wish to enter a subscription to **House & Home** for 1 year, \$6 2 years, \$8
US and possessions and Canada only

New Renewal

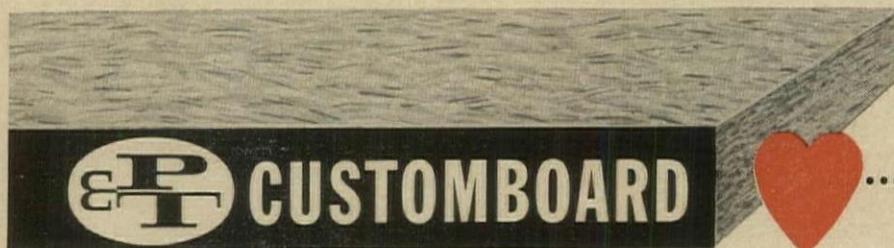
Signature _____

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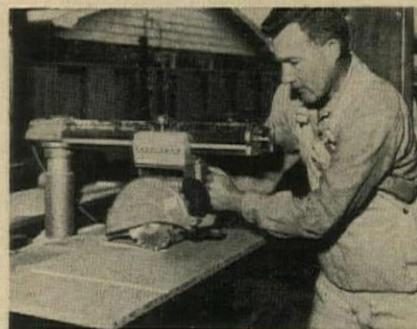
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86, 196W, 4, 210	Hunter Division (<i>Robbins & Myers, Inc.</i>)	70, 71	Weyerhaeuser Sales Co.
29	Ideal Co.	12	Whirlpool Corp.
196	Insular Lumber Sales Corp.	204	Yeoman Brothers Company
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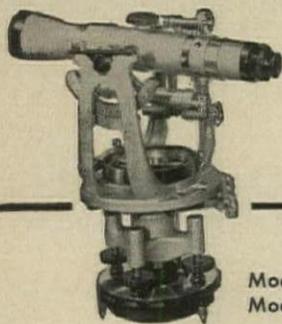
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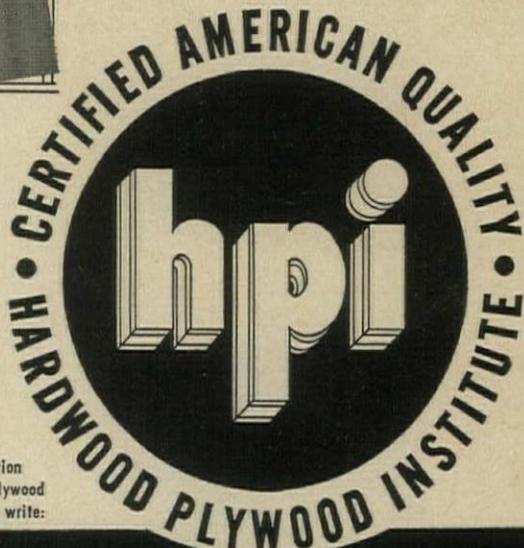


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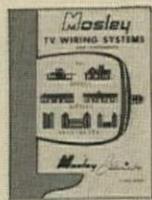
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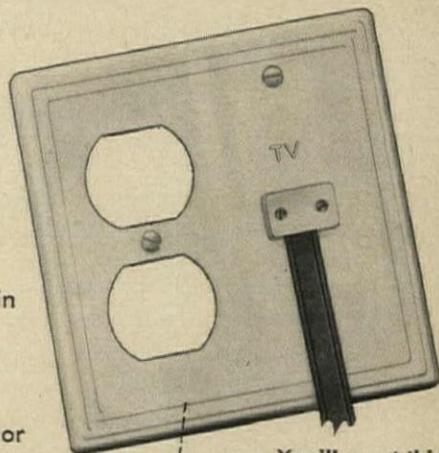
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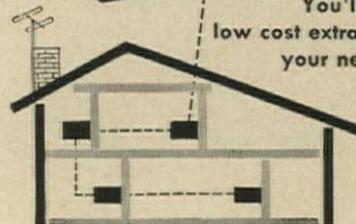
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